CHAPTER II

REVIEW OF LITERATURE

The present study deals with the drape properties of textile and their influence in clothing styles. The review of literature is therefore presented to explain how the drape characteristic was earlier used without being aware of textile properties, and how it is used presently with the knowledge of textiles to develop several styles in garments for people to wear. The review of literature has been divided into three parts :

2.1 Drape in early costumes.

2.2 Drape as textile properties.

2.3 Drape in clothing style.

2.1 Drape in early costumes

According to Motichandra (4), the skirt was worn in the Mohenjadaro and Harappa times also. The Indian skirt style has its origin in sari and was adopted mainly by Hindu women in the Western and West Central parts of North India. The skirt had a number of pleats and was tied together by draw-strings. The skirt extended upto the anklets and was pretty wide at the lower end. Plain skirts without any pleats or horizontal folds, too had been worn.

The first stage in the making of the skirt in India, was the stitching of the ends of the waist cloth which previously used to drop down freely along the limbs or at times overlap each other with the restricted length of the waist cloth in its original form, the roll formed by its stitched ends must naturally have been too narrow in circumference to allow complete facility in walking. Its shape was however amended easily by extending the length of the cloth. This innovation added new pleats to the dress and accommodated a swinging fall (11).

The Mughals in the 16th Century brought with them the costumes of Turks and Persians. The foundation of Mughal costume in India was laid during the time of Akbar. Differences appeared in the width and length and so also in the nature of fabric. Particularly in North India, where the Muslims took firm hold, the conquest brought cumbersome concealing garments to replace the more revealing dress, like Dhoti and Sari of the Hindu and Buddhist societies. The robe and trousers were worn of white muslin. The Angarkha was cross closed high up at times, the neckline was deeper and curved. Further waistline was delineated with a seam and skirt position was flared.

The 16th Century Mewar rulers wore a garment called 'Jhagga' of white sheer fabric with a full skirt (31). Such an intricate skirt was made of six panels, the front centre panel was straight upto the knee length and its pleats were

DRAPE EFFECT PRODUCED IN A GARMENT DURING 16TH & 17TH CENTURY

FIG. 1

DRAPE EFFECT PRODUCED IN A GARMENT DURING 19TH CENTURY

FIG. 2

DRAPE EFFECT PRODUCED IN A GARMENT DURING 19TH. CENTURY

FIG. 3

smaller. The side panels were made of wide pleats facing the sides and these were cut in such a manner that the inner pleats were almost upto the ankle length and the side pleats were higher than the front panel. The three pleats tiered upon the side (Fig. 1). This indicates that for obtaining flare, pleats were used. Allover pleats at the waist create fullness. A sheer fabric was used to obtain such an effect. This style was found till the end of 17th Century. In the beginning of the 18th Century, the style of the skirt was changed all together. The skirt reached upto the ankle. The lower edge was kept plain and the skirt become circular and evenly pleated throughout the lower edge as well as at the waist (Fig. 2). This style continued till the latter part of 19th Century (31).

In the last quarter of 19th Century, the garments were made of thicker material and were differently designed for fashion. The skirt part of the garment was without any pleat around the waist and one inverted pleat was placed in the centre front of the skirt (Fig. 3). The length of the skirt was upto the ankle. Slowly this style of skirt was converted into a circular skirt due to British influence (31). Due to the Western cultural influence, short dresses, skirts and blouses came in fashion of upper class people in India and soon became common dress in India for girls.

The origin of skirt in Western countries is very similar to skirt developed in India. In Western countries also from

the earliest times the men of the higher class wore a short simple skirt which was the beginning for all later developments. The skirt was usually a straight piece of white material and was wrapped about the body from right to left so that the edge came in the middle of the front as explained by Lester, Johnansen and Evans Mary (34, 21, 16).

2.2 Drape as textile characteristics

The drape property of fabric is looked differently by different people.

Encyclopedia of textiles (14) defines the term 'drape' as the tendency of a fabric to hang in a graceful form, a term to describe the way, fabric falls when hung.

ISI handbook on textile testing (20) gives a method for assessment of fabric drape. Drape is one of the subjective performance characteristic of fabric that contributes to aesthetic appeal, it is a complex property involving bending and shearing deformation. The Indian Standard (No:8357) provides a simple method for the objective estimation of the extent to which a fabric drapes, draping quality is expressed as drape coefficient which theoretically varies between 0 and 100. Drape measurements can be employed for study of the effects of fabric geometry.

Chu et al (6) have done a study of the factors affecting the drape of fabrics and development of a drapemeter.

TYPICAL DRAPE DIAGRAM OF FABRIC

SCALE - 1/2

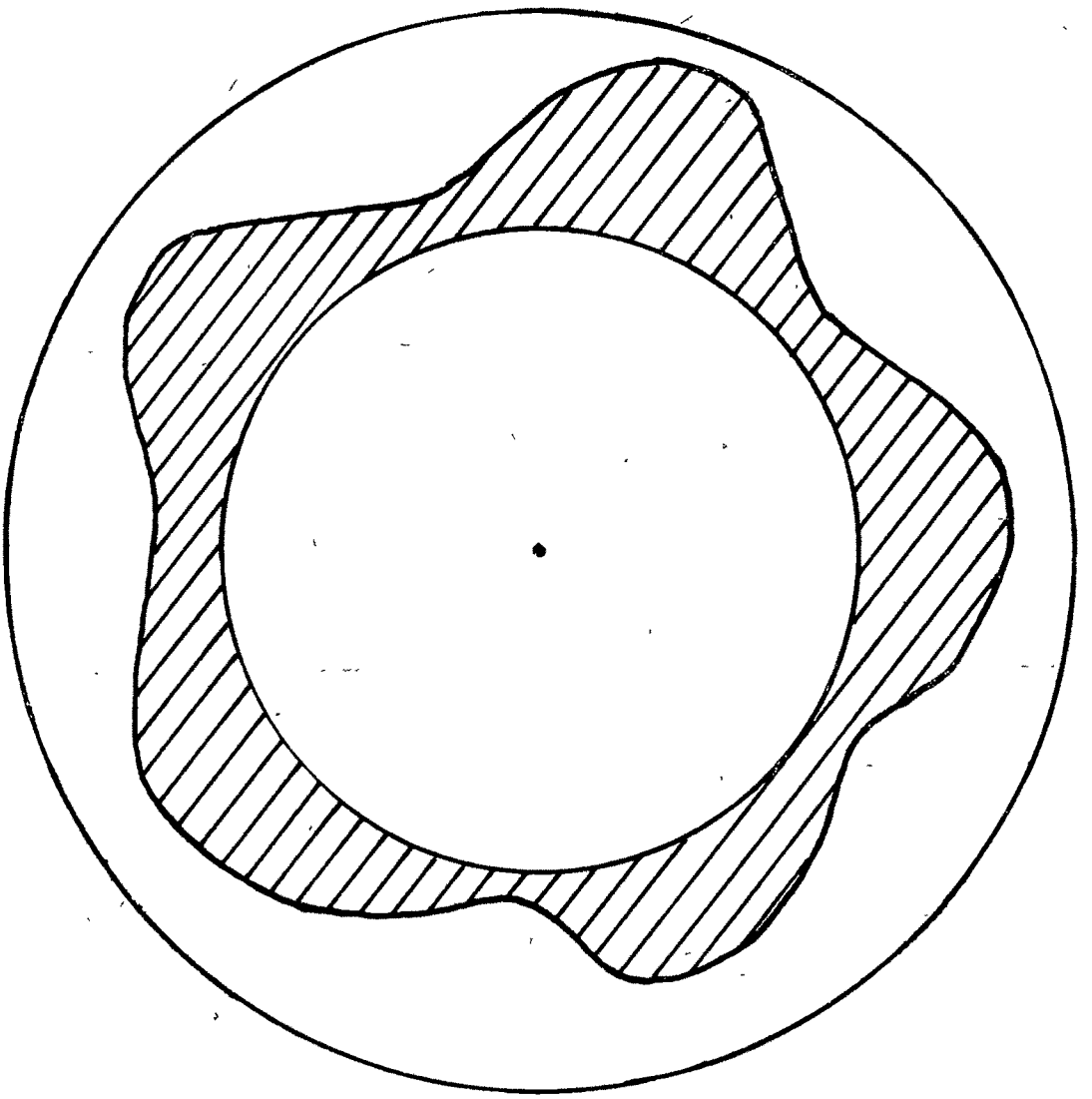


FIG. 4

They have stated that a test instrument which is capable of distorting the sample in all three dimensions is necessary if drape is to be evaluated quantitatively. The drapeability of yard goods is usually displayed in store windows by draping the fabrics over circular pedestals. This stimulates service conditions, in which a cape, for example, is draped over the shoulders or a skirt around the hips and in the front of the wearer.

Figure 4 show typical drape diagram traced from the ground glass sheet. The smaller circle indicates the position and size of the supporting disc and the larger circle indicates the original size of the sample. The shape and size of this shaded pattern is governed by the draping qualities of the sample. The term 'drape coefficient' is defined as the per cent of the annular ring area covered by the draped sample. This area is indicated by the shaded portions in the Figure 4.

$$\text{Drape ratio } F = \frac{\text{Area under the drapped sample}}{\text{*Area of the annular ring}}$$

* where the area of the annular ring is the difference between the area of the circular sample and that of the sample disc.

Since the draped sample will form pleats, its circumference can no longer remain in only one plane. As a result, the traced image is not necessarily the true projected one.

Chu et al (7) investigated the factors affecting the drapeability of fabrics. These investigations included (a) a

subjective evaluation of drape correlated with drapemeter measurements, (b) interpretation of some aspects of the mechanism of draped samples by references to classical theories of mechanics, the flat-plate theory of deformation, (c) evaluation of experimental drape data under a variety of test conditions, (d) examination of the geometry of draped fabric, (e) discussion of factors influencing the stiffness of fabrics and (f) measurements of the drapeability of cotton fabrics and of a series of fabrics with systematically varied geometric parameters produced from cellulose acetate yarns.

The subjective evaluation of the drapeability of ten selected fabrics was performed by 57 respondents who represented a spectrum of backgrounds from housewives to textile college professors. The resultant correlation coefficient of 0.778 between the ranking of the subjective evaluation and the drape coefficient was considered excellent validation of the F.R.L. drapemeter.

A reasonably good correlation was also observed between the monoplanner bending characteristics measured by Peirce's strip bending tester and the multiplanner bending evaluated by the drapemeter for those fabrics approximately square with respect to stiffness. However the strip bending tester cannot assess the influence of trellising and buckling of draped specimens and would therefore classify papers and fabrics as equivalent in drape whenever the stiffness in corresponding

directions are equal, whereas their draping qualities as given by the drape coefficient and by subjective classification are significantly different.

While this research was essentially an experimental study, it did include analyses of the effects of variations in test conditions on drape. It was demonstrated that the drape coefficient varies with sample size as well as the diameter of the support, but the resulting data were readily converted to the standard conditions for comparison and evaluation.

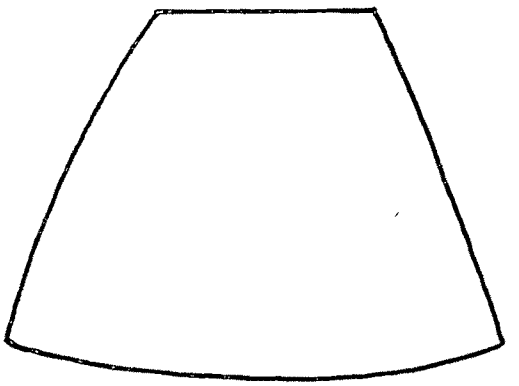
One of the most important aspects in the understanding of the mechanism of drape was the study of drape geometry i.e. the configuration of the draped sample. The drape diagram, a projected two-dimensional simplification of the three dimensional draped sample, contains three items of significance, the area, the number of nodes and the shape of the nodes. The area is the basis of the drape coefficient. The nodes or pleats are formed in a draped sample by virtue of the buckling of the material, the phenomenon of buckling, the type of load application and the boundary conditions. It was observed that the number of nodes within any particular sample correlated directly with the drape coefficient for a given test condition. Assuming that the nodes in a drape diagram are uniform, the drape diagram becomes a cyclic function in polar coordinates. Transferring the polar into rectangular coordinates simplified the analysis of the relationship between the shape factor and

the drape coefficient. Agreement between calculated and experimental shape factors, for such model configurations as semi-ellipses, for example, was found to be excellent, indicating this aspects of drape geometry to be easily predictable from the drape coefficient.

In the testing of a range of cotton fabrics, Hamburger and his colleagues (32) found a correlation coefficient of 0.78 between fabric stiffness measurements and drapemeter readings. The ratio of the draped area to the circular area is termed the 'drape coefficient' and an integrator arrangement evaluates this automatically. The drape characteristics of the fabrics are determined by the number and shape of the folds.

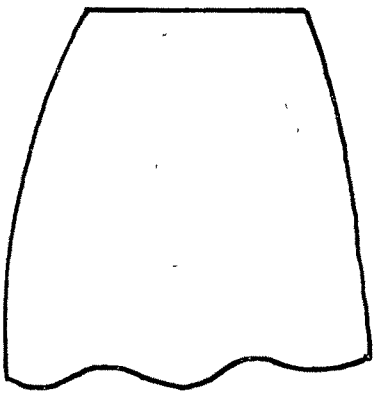
Cusick (8) has studied the dependence of fabric drape on bending and shear stiffness. He has carried out tests with eight fabrics in the form of half circular skirts. The method of paired comparison was used and the judges were asked to select the fabric that draped to the greatest extent. The rank correlation between the subjective rank and the drape coefficient was found to be significant at a level higher than 5%. In the same test, the rank correlation between subjective rank and bending length was also significant at the same level. However in the work reported, the drape coefficient is used as an objective measure of the deformation of the fabric under the conditions of the test, and the study of the correlation between the drape coefficient and subjective tests is not persued further.

DRAP BEHAVIOUR OF FABRICS



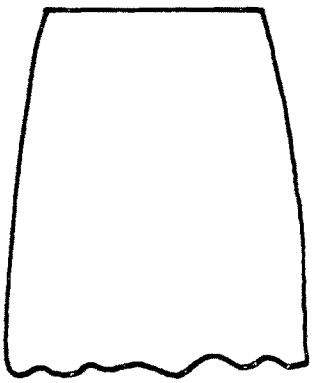
NON-WOVEN CLOTH

FIG. 5



NON-WOVEN CLOTH

FIG. 6



WOVEN CLOTH

FIG. 7

Cusick (9) has conducted a study to find out the resistance of fabrics to shearing forces. He has stated that shearing properties of fabrics are of importance in many practical applications. The changes of angle between the yarns is used to produce flexibility or extensibility. However such an extensibility is not always an advantage, when a circular skirt is cut from material and hung, the lower edge of the skirt is often found to be unlevel. The reason for this is that the fabric has dropped in the bias direction.

Cusick et al (10) studied physical properties of some commercial non-woven fabrics. In woven fabrics, it has been found that the drape coefficient increases as the bending length and shear modulus increases. On both counts, it can therefore be expected that the drape coefficient of the non-woven fabric will be high. Experimentally, it was found that all the non-woven fabrics give drape coefficients of 96% compared to 71% for the woven cotton fabrics and 39% for the woven viscose rayon.

Another view of the draping qualities is shown in Figures 5, 6 and 7 in which fabrics in the shape of a half skirt are mounted on a display stand. The non-woven fabrics cover a range in which the draping is much less than in the range for woven cotton and rayon fabrics. However, considerable differences between the non-woven fabrics were seen. It may be noted that the woven fabric has a drape coefficient of 95% -

another indication of insensitivity of the drapemeter test for stiff fabrics.

For some uses, such as the lining of flared skirts, the stiffness of non-woven fabrics is an advantage, but for more general textile purposes, greater draping would be an asset. A closer study of the bending and shearing behaviour of non-woven is desirable to give more knowledge of its draping behaviour.

Hearle (17) has stated that drape of fabric is the way in which a fabric hangs down in folds. Examples are how curtains hang, the appearance of skirt or hanging of cloth over the table edge. The curtains are bending only in one plane; which is two-dimensional term, whereas in the other examples, the folding takes up a complex three dimensional form. The objective study of drape is done on FRL drapemeter and described by Chu et al (6). A circular piece of fabric is held between two smaller circular plates, so that its free edges drape down under their own weight. For ordinary textile fabrics, a satisfactory spread of differences in drape behaviour is obtained, when the diameter of the fabric specimen is 30 cms and the disc diameter of 18 cms. Illumination of the draped fabric by vertical parallel light gives a shadow, its outline is the projection on a horizontal plane of the edge of the fabric. A quantitative measure of drape is defined as -

% drape coefficient = D = Percentage of ring between diameter 30 cms and 18 cms covered by shadow

$$= \frac{*A - \pi (9)^2}{\pi (15)^2 - \pi (9)^2} \times 100$$

* A = Area under the draped panel.

He has also stated that the drape coefficient does not give a complete description of drape behaviour, there are many other aspects of the detailed form of drape. One other parameter which can be easily measured is the number of nodes. Cusick (8) confirmed this experimentally. Very stiff fabrics merely sag slightly without forming any definite nodes. The number of nodes increases as the fabric stiffness decreases and has been reported by Booth (2) in the reference work.

For the subjective assessment of drape Chu et al reported a correlation coefficient of .788 between the order of ranking of drape coefficient and subjective evaluation of drape. Another interesting study of a limited number of fabrics and has been reported by Cusick (8) as well. Semi-circular pieces of white cotton and rayon fabrics were mounted on a model stand to give the appearance of a skirt. The subjective evaluation was carried out by the method of paired comparisons. The 'drape preferred' ranking is very close to the drape coefficient ranking.

Table-1: Comparison of Drape Tests by Cusick (8)

Subjective drapes most rank	Fabric code	Drape coefficient		Bending length		Drape preferred rank (reverse order)
		%	rank	cm	rank	
1	A	41.6	1	1.26	1	1
2	C	70.3	4	1.76	3	4
3	G	57.5	2	1.69	2	2
4	B	88.1	6	2.55	7	7
5	E	66.5	3	1.82	4	3
6	F	72.5	5	2.03	5	5
7	H	88.2	7	2.47	6	8
8	D	95.3	8	4.06	8	6

Sudnik (43) has conducted the objective measurement of fabric drape. His paper is concerned with the evaluation of an improved version of an instrument originally described by Chu et al (6), and is also concerned with the factors which were found to affect or to be related to drape. These are bending length, fabric weight, and shear properties.

He has taken three different diameter of drapemeter - 24 cms, 30 cms and 36 cms, and different fabrics were tested. It has been noted in the course of conducting laboratory tests that there usually seems to be correlation between the bending length and drape coefficient.

Several garments and curtains were made from the fabrics undergoing evaluations and people were asked to classify them for drape. Three main reasons for selecting fabrics as having good drape emerged. Selection of typical reasons are given below:

Category - 1 : Firm, symmetrical folds, large, full symmetrical folds, folds with good flare, distinct folds, heavy pronounced folds, folds falling evenly.

Category - 2 : Numerous soft folds, limp, even folds, small regular folds.

Category - 3 : Graceful folds, folds attractive with every movement of the model, good recovery of fold for motion with every movement of the body, fabric more suitable for style, folds are round the model, folds do not stick nor cling on movement, round folds, not too limp, pleasing.

These comments were interpreted and summarized to mean that the observer's choice appeared to depend on the style of the garment and the fashion of the day. The reasons given in Category-3 relate to more sophisticated aesthetic considerations. Sudnik has also mentioned that the observers ideas of good drape vary and that they tend to relate drape characteristics to the demand of fashion or garment style. This means that to obtain a correlation between the drape coefficients and the appearance assessment of garments, in use, is extremely difficult.

The best that can be achieved therefore is a measurement of some parameter such as drape coefficient which determines properties affecting drape and classifies fabrics into groups of merchandise in which they are likely to be successful.

Hoffman and Beste (19) have studied some relations of fiber properties to fabric hand, and have noted that the quality of drape refers to the ability of the fabric to form curves which are pleasing to the eye. A fabric with a low bending length value will hang straight down when unimpeded and will bend sharply around obstructions; a fabric with high bending length value will not conform sufficiently to the curves of the body. For these reasons, fabrics with intermediate values of bending length should be the most attractive. The factors responsible for the bending length are precisely those which give rise to the flexual rigidity, plus the rather obvious factor of fabric weight per unit area. The actual draping at any point in a garment depends upon one other factor namely, the total weight suspended from that point.

Chaudhari (5) has conducted a study to predict drape coefficient by weaving parameters, and has stated that drape coefficient of a fabric is mostly dependent upon warp count, weft count and weave structure of that fabric. Drape coefficient is closely related to the weaving parameters but yet it is not possible to predict drape coefficient of a fabric to the full extent, due to the differences in the rigidity of textile

materials themselves. The fineness of the fibers or filaments, yarn, twist in the yarn contribute to the material rigidity.

Latzke and Hostetter (23) have stated that the texture of a fabric determines the quality, known as 'hand', that is, a characteristic as felt in the hand. The terms used to describe hand thus relate to the feel of the fabric, its resilience, flexibility, crimpness, compressibility, stretchness and compactness and the like.

The hand of a fabric influences its use. A beautiful effect is created when the fabric influences its use. A beautiful effect is created when the fabric has a body, that is consistent with the idea of the design. For a bouffant effect, where the fullness starts at the waist and is controlled by gathers or soft pleats, a stiff, crisp fabric is required, such as taffeta, organza, organdie, moire, or slipper satin. For a draped effect, a heavy crepe will lend itself to manipulation on the bias, as well as on the straight of the fabric, because of its great flexibility. Only when the lengthwise and the crosswise yarns in the fabric are well balanced, the deep curves will be formed.

According to Mansfield (30), of all fibers, wool is the most plastic and therefore wool fabrics are the most easily shaped to fit smoothly the contours of the body. They are flexible enough to be eased along edges and they respond readily to shaping. They resist wrinkling but are capable of

holding a press, they are very satisfactory for tailored garments.

2.3 Drape in clothing styles

Picken (36) in his fashion dictionary has described 'to drape' as 'to hang fabric in folds' or 'to cover the fabric in loose folds'. It also includes to design garments by this method. Different authors have given different methods of adding fullness so as to obtain a drape effect and a look. Fabrics suitable for a particular style are also suggested.

In the present study, dressforms were made as per measurements to study the drape effect of a garments. Different studies and reviews related to drape are also included herein.

2.3.1 Methods of preparing dressform:

Strickland (42) has explained the making of a dressform with adhesive tapes. A knitted shirt is put on the person whose form is to be made. Adhesive tapes are pasted on the fitted knit shirt first vertically in the front and back and diagonally in the sides and then diagonally allover. Thus two layers of adhesive tape are pasted on the shirt when on the person. Armscye and neck are finished with another set of tapes.

To remove the dressform the person, it is carefully cut by a blade down the front and back on marked line. The fabric with layers of adhesive tapes is cut by a sharp pointed shears.

The two pieces are removed from the body, then put together and refix with small strips of adhesive tape on outlines. Armscye and neck are trimmed and finished with adhesive tapes. The form is shellacked and dried to prevent the tapes from curling. Another top shirt, (tightly and smoothly fitting type) is placed over the padded form and stitched on the sides. The important lines from shoulder, bust, waist, hip, centre front, centre back are marked with coloured tape.

Roberts et al (39) wrote about the dressforms of rigid polyeurathene foam as reasonably quick-and-easy to make, easily punctured by pins, light weight, portable and inexpensive. The first part of their project consisted by the development of a four step method for making the foam form. The steps were (1) making a mould of an individual body, (2) Removing the mould from the body and closing the neck and armhole opening, (3) mixing the two liquid components of the foam and filling the mould and (4) removing the mould from the solidified foam form.

The mould was made of a cotton jersey tube covered with narrow strips of cardboard and masking tapes. In the upper portion of the mould most of the cardboard strips were placed on the pieces of masking tape before the tape was applied to the jersey. In the lower part of the mould, many cardboard strips were laid against the jersey and held in place by one strip of masking tape until the entire area could be covered with tape.

The foam was as two separately packaged liquid components which were mixed in equal parts for about 30 sec. When the mixture turned opaque and began to foam, it was poured rapidly into the mould, which was held upside down. The foam expanded 30 times its original volume and filled all the cervices of the mould. Approximately two cups of each component were needed for a full length dressform. After the foam had set for 20 minutes, the masking tape and cardboard strips were removed. The cotton jersey was welded to the foam and left as a protective covering.

To adjust the jersey, it was put on the individual and for the small person, a fold of extra jersey was pinned all the way along the back. Darts were then pinned at the waistline and the jersey was removed. The folds and the darts, as pinned were stitched on the machine.

2.3.2 Drape in skirt style:

Pepin (35) has explained in detail about the skirt. The skirt as a garment is essentially physical in character and covers the hips and limbs of the wearer. The silhouette and the length of the skirt has been a vital point in changing styles. It has been said that the skirt will 'date' the garment style. The meaning of common terms for skirts are given below:

Sweep - is used to describe the width at the hemline.

Movement - refers to the fullness or bulk of the silhouette.

Break - is the point where the fitted area of the skirt breaks away from the body, into movement.

The skirt is suspended from the waistline and falls naturally. A well hung skirt is the result of the proper placing of the grain of the fabric. In the design of pattern, the texture of the fabric is taken into consideration to give the degree of movement and sweep. A skirt design to be used for a tweed fabric would give a skimpy look when used for light weight silk or chiffon and so on.

As the fashion changes, the level of the break may be raised or lowered but the proportion established through the vertical seams may remain the same and so the principle of cutting remains the same. The limbs move forward and backward with the figure, and so, more fullness is added to the sweep of the front and back of the skirt, than at the sides. The fabric movement depends upon the draping qualities of the fabric.

The design of a skirt which gives pronounced interest to front fullness in the silhouette has a flat effect at the back. The added flare introduced at the points of the yoke and centre front seam gives the focal point of interest to the skirt. For a extreme effects, subject to the figure permitting, the normal side width would be left out. The fabric is the most important consideration in design has been emphasized by Pivnick (37). It affects both style and function. The same style will not always look the same in different fabrics. The colour, texture, yarn and weave of the fabric affect the drape of the skirt. One flared skirt may look much fuller and wider than another skirt,

cut in the same way, because fabrics differ; one fabric may be heavier and bulky than the other.

A skirt is usually cut with the centre front and back on the straight grain (i.e. lengthwise grain). The shape of the garment holds better on the straight grain. Pleats remain pressed longer. Gathers, folds and flares fall more softly on the straight grain. The bias grain, being the softest of all, is also used to give weight to loose folds, pleats and drapes. The cross grain (i.e. widthwise) cut is not generally used.

Godets, (pronounced "go-day") means a section of fabric set into a skirt area. Pepin (35) has stated that godets may be set into seams to introduce more movement. A godet being a separate section of fabric set into the skirt to increase the sweep of the skirt only at that particular place has been mentioned by Pivnick (37). Godet is cut on straight grain, when it is less than a quarter of a circle. When it is more than a quarter of a circle it can be cut on any grain. The fullness produced by the godet depends upon the fabric and the length of the skirt itself (35). According to Mainsfield (30), godet insets, shaped like segments of a circle, add fullness to the edge of a skirt. They may be set into slash or seams. The centre length of a godet falls on the lengthwise grain, making the side bias.

Chamber and Moulton (3) have stated that certain factors must be considered for fitting. These are the hang and drape

of the garment, grain and grain control, control of fullness for the type of material, body proportions and silhouette. They have noted that these points are concerned with the design of the garment. For the proper fitted garments, one must be aware of the effect the designer wants to create in the construction of the design. Fabrics with different textures will drape differently. The weight and body of the material will also affect the hang of an outfit, a stiff fabric such as taffeta will drape differently than will a soft jersey.

2.3.3 Methods of draping and adding fullness:

The skirts are put into different groups. The first group (basic skirts) includes straight fitted skirt similar in silhouette to the sloper. A wide range of skirts can be made with no more than minor style details added to the basic skirt. It is important to see the design idea in three dimensions and life size. The design grows out of the function of the garment, the type of person, who will wear it, and the characteristics of the fabric used (37).

Draping a skirt differs from draping a blouse in several respects. A skirt fits the figure from waist to hip but from there down to the hem, it swings free from the body. To be beautiful a skirt has enough freedom below the hipline to swing easily with the motion of the figure, and to do this it must widen as it lengthens and provides fullness (18).

Fullness is usually introduced within skirts by (a) straight-hanging fullness, (b) circular fullness and (c) gored fullness.

(a) Straight hanging fullness holds as much width at the upper edge of a garment section as it provides at the lower edge. Thus in thick fabrics the effect created along the line of gathering or pleating is one of bulkiness, but in shear and soft filmsy materials, the vary abandance of the folds lends richness and needed body to the texture (30).

(b) Circular fullness is the flare created by the natural falling down of the straight grain or horizontal threads, the flare may be spaced or not. Such a flared fullness begins at the top with no extra width, but reaches its maximum with width at the lower edge. It appears less bulky than gathers. The folds being off the straight grain tend to follow body lines in skirts and thus gives a slimmer effect than straight hanging fullness (30). The hem sweep is also determined by the intensity of the arc or by the curve of the waistline of the circular skirt in relation to the waistline curve of the body (18).

(c) Gored fullness is controlled by vertical seams. The depth of each flare depends on the amount of outward slope at the seamline of each gore. The position and extent of flare depends on the position and number of gores. Unlike the straight hanging or the circular flare fullness, flare in a

gored skirt may begin at any point between waistline and hem, and can be more exactly placed to give width where it is most flattering. They can widen the lower edge of a skirt without adding bulk at the waist or hips (30). The gored skirt generally flares from the hip level or lower (18).

Variations, in posture as well as in figure, affect the balance of a skirt. The balance line is the hip level. If vertical measurements, from waist to hip, at centre front, at sides and at centre-back differ from those of the pattern, the skirt will not balance. A skirt, in balance at the hip level, hangs properly from hip to hem, when viewed from front, back and sides (30).

The Woman's Institute of Domestic Arts and Sciences (45), London in their book on Skirts has mentioned that the principle point to observe in the designing of a skirt pattern is that the hipline be kept in correct position in order to maintain the balance of the skirt. The variations most frequently brought about in skirts by fashion are the location of the waistline, (as high, low or normal) the fitting over the hips, (whether smooth or with gathers) the variation in width at the lower edge, the cutting of the skirt in a few or more pieces, the addition of over skirt and flounces and the favouring of straight or circular lines.

It is not well to have fullness directly in the centre front unless this happens to be a seasonal style feature, as

reported by W.I.D.A. and S. (45).

Shelden (40) has mentioned about the radiating pleats. These pleats widen as they run toward the hemline. These pleats, pressed or unpressed, give softer, more fluid lines and a more graceful appearance to a skirt. Erwin (15) has mentioned to observe lines in fitting. These are the basic silhouette seam-lines, the circumference seam-lines and the style or design lines. Graceful folds from gathers, pleats, ruffles occur in skirts if they follow the heavy threads. Designers can create interesting spaces, since the lengthwise grain is not always at right angles to the floor, so the parts that are on bias tend to flare or ripple. Inverted pleats are frequently used to add width when it is desired to have an appearance of straight lines. The pleat may be an inverted box pleat, a single box pleat on the outside of the skirt, as at the upper right, or a group of tiny knife pleats (known as fan pleats) at the lower right. Such pleats are often used only in the front section of the skirt, and such a placing of the pleats is desirable to give greater fulness there and in fashionable now (45).

The silhouette of the entire costume is largely determined by the cut of the skirt. The texture of the fabric provides assistance to the cut of the pattern in obtaining the silhouette. Soft bulky fabrics like velvet require folds rather than ripples or folds voluminously not one that is pleated, flat or worked into straight warp round styles. Firm crisp linen responds

PRESENT TREND IN SKIRT STYLE

(FIG. 8 TO 19)

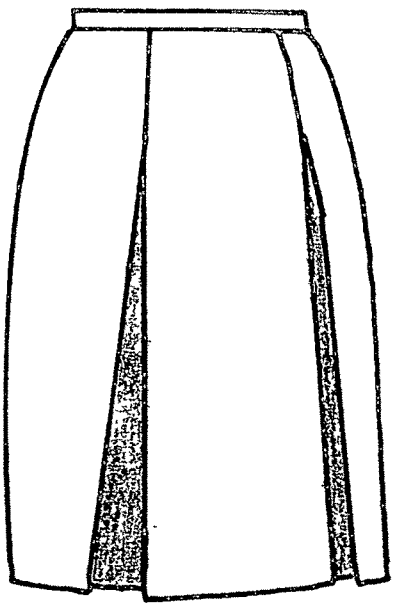


FIG. 8

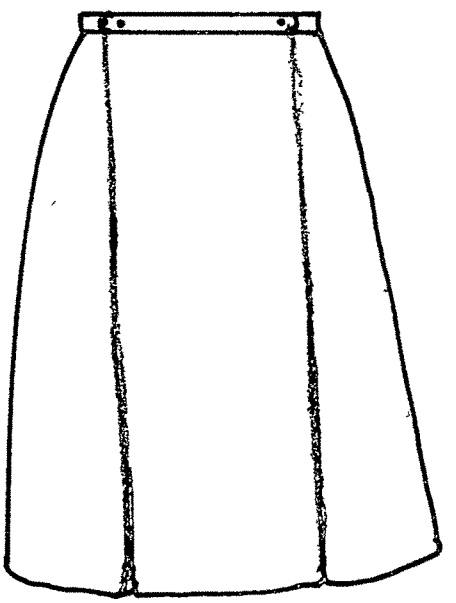


FIG. 9

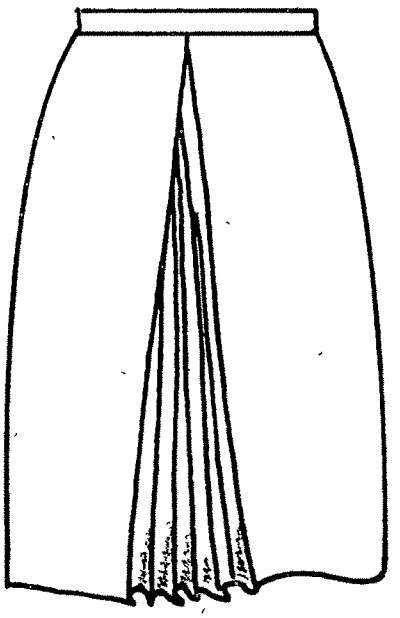


FIG. 10

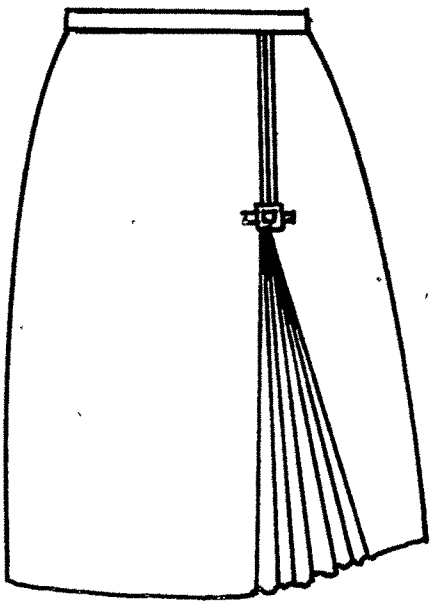


FIG. 11

to straight, neat tailored lines and pleats rather than gathers or folds. Stiff bulky woollens, felt require a few seams no top stitching and just some gores to avoid waistline bulk, with not too much flare, in the thicker fabrics. Soft satins, velvets and prints loose their effectiveness in too many seams, while soft light weight or sheer fabrics like voile and flat crepe lack texture so need fold lines that hang straight and plenty of fullness to avoid a skimpy look. Stiff fabrics like damask look best in straight skirt.

2.3.4 Present and future trends in skirt styles:

For the study of present trend in skirt styles, different magazines were referred. Some of these styles are presented in Fig. 8 - 19 and described below:

The skirt (Fig. 8) is having two inverted pleats, stitched upto hipline. The inside fabric of pleats can be of different colour. So when the wearer moves, the colour is seen. Colour combination gives a different look to the style (44).

Two knife pleats are placed on either side of centre front in this skirt (Fig. 9). These pleats add fullness at hem, while walking (25).

In this skirt style (Fig. 10) knife pleats are placed, in the centre front, from the waistline. These pleats spread out to give an appearance of a fan at hemline and can be considered imitation of sari-pleats (38).

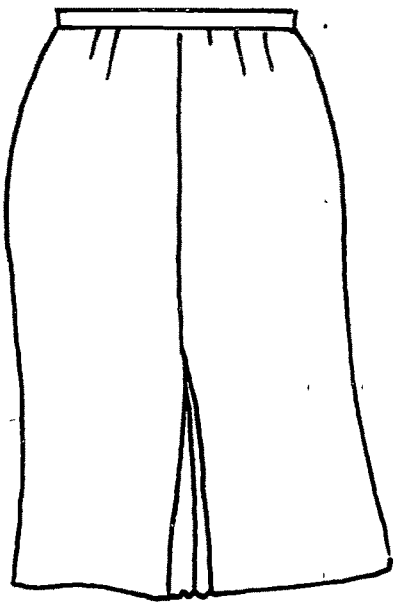


FIG. 12

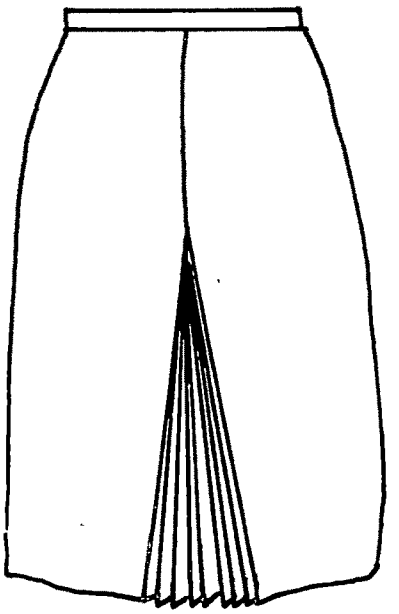


FIG. 13

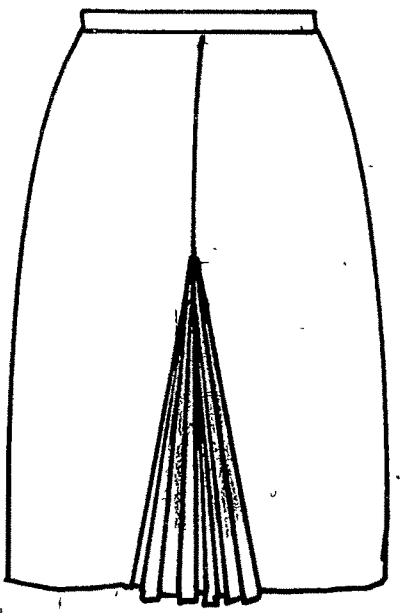


FIG. 14

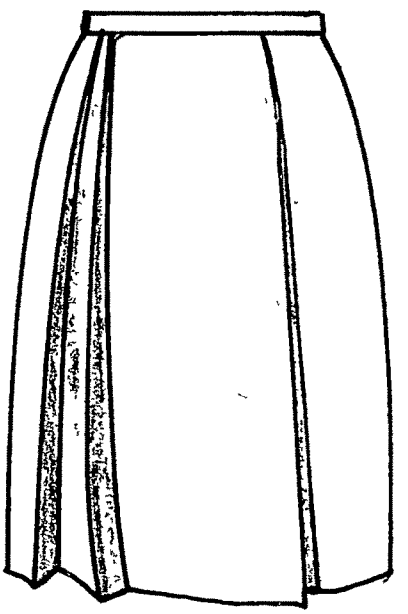


FIG. 15

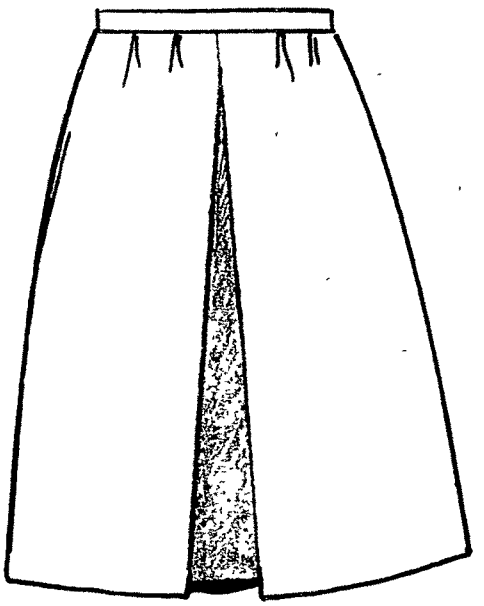


FIG. 16

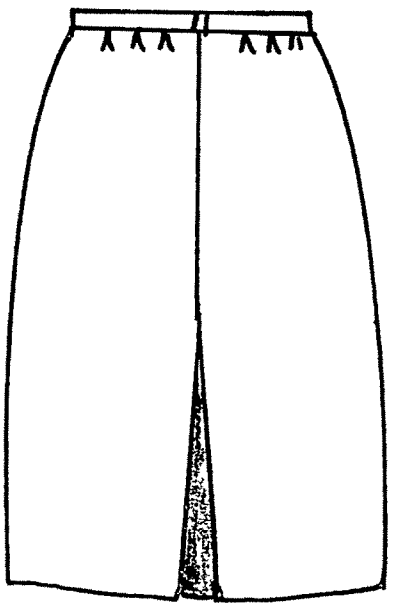


FIG. 17

In this style (Fig. 11) a few knife pleats are placed on oneside of front and overlapped at one place and closed with a strip at hipline. These pleats drapes like a fan at hemline (26).

In this style (Fig. 12) an inverted pleat is placed in the centre front. The pleat is closed upto 2/3rd length of the skirt and the remaining pleat is kept open. The pleat remains in its position, due to the stitchline (41).

This style (Fig. 13) is having pressed pleats in the centre front, closed upto 1/2 the length of the skirt. The pleats spreads like a fan in the centre front of the hem which enhance the aesthetic appeal (41).

Unpressed knife pleats are placed in the centre front in this skirt style (Fig. 14) forming ripples in the centre front at the hem (41).

In this skirt (Fig. 15) two knife pleats on one side and one knife pleat on other side of front are placed. The pleats open while walking. Differing emphasis is created by unequal number of pleats (41).

A skirt (Fig. 16) is having an inverted pleat, stitched upto abdomen and of a different colour in the centre front. The skirt is also having a few gathers a couple of places on both sides. This gathers-pleats combination helps to give somewhat straight drape (27).

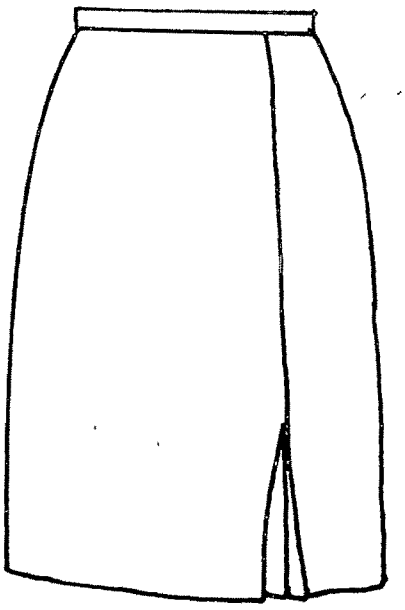


FIG. 18

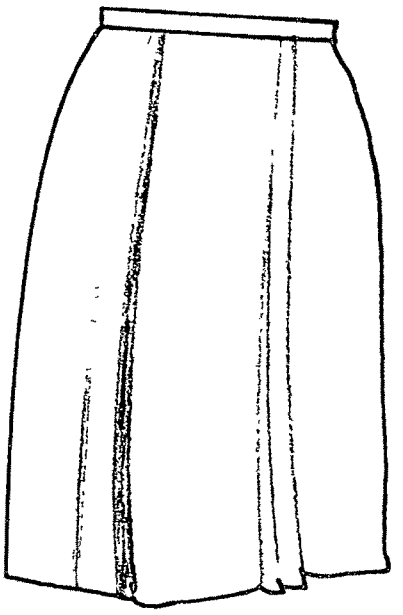


FIG. 19

In the skirt style of Fig. 17, the pleat is stitched upto 1/2 the length of the skirt, the straight drape is thus down from hipline-to-hem (27).

A skirt (Fig. 18) is having an inverted pleat on one side of the front, which is stitched upto 2/3rd length of the skirt. The skirt as such drapes straight from hipline (25).

In this skirt style (Fig. 19), two knife pleats are placed on either side of centre front, the pleats drape in a folded form (26).

Fashion designer John Weitz (47) sees a century ahead, "what's going to be the look, between now and later. For women, skirts will stay short and may even get shorter. Skirts will widen to allow easier sitting. They will be 'A' shaped or pleated or circular. In the same mood, dresses will be short but wider at the bottom, probably A-line.

Thus from above it is observed that the present trend in skirt style is of isolated decoration by use of pleats, gathers in different form. The study present herein, deals with such aspects especially with the use of godets for isolated decoration.