Technology and Living
(Secondary 4-6)

3 Fashion Design Basics

Fashion, Clothing and Textiles Strand
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3.1 Principles of Fashion Design

The primary purpose of wearing clothes is for protection, e.g. to keep warm, modesty. Nowadays, people wear different clothes for different occasions and identities. They also choose clothes by following their aesthetic sense and the fashion trend.

According to Oxford English Dictionary (2009), one of the definition of “Fashion” is “popular styles of clothes, hair etc. at a particular time and place”. Essentially, it means a style that is up-to-date, it influences what people wear and how they look. Changes that take place in the fashion industry is followed by people everywhere on all levels of society. Fashion carries prominent social significance and impact on human behaviour.

According to Sue Jenkyn Jones, a professional consultant of the fashion industry in United Kingdom, the word “design” refers to an invention of something with a purpose. Design is very much a part of the daily live. Designs are made with different goals such as designs for a special person / function / occasion market. A good design should be functional and carries certain aesthetic values.

Apart from analysing the current fashion trend, fashion designers have to understand the fashion design principles for creating aesthetic values. The design should also meet the needs of the target group / occasion and be able to express the individuality and creativity of the designer. Cultural and social changes affect the fashion trend and how people perceive aesthetic values and related design principles. What is considered to be beautiful one year may not be considered the same way a few years later.

3.1.1 Aesthetic Values

Beauty is a quality that gives pleasure to the sense. It creates a positive emotional reaction in the viewer. Most psychologists believe beauty and aesthetic are essential to human life.

The principles of aesthetic constitute an important part of the Aesthetic Values required in fashion design, which are also the determinants of the effect of any designs. Aesthetic value and aesthetic judgment both play important roles in the success of any designs. These two aspects help to judge any designs objectively. They are usually determinants that help evaluate the viability of any design work. Designers may not be consciously aware of these principles while they are working
on their designs but when something is wrong with a design, they are able to work on the problems to make the design perfect and harmonious by taking into account the principles of proportion, balance, rhythm, radiation, gradation, emphasis, contrast, harmony, unity, repetition and scale.

3.1.2 Principles of Aesthetic

When developing a collection, designers need to think about for whom they are designing, what type of garment they are developing and for what particular season(s). To do so, the principles of fashion design must be properly applied and executed in terms of Proportion, Balance, Rhythm, Radiation, Gradation, Emphasis, Contrast, Harmony, Unity, Repetition and Scale.

Aesthetics is commonly perceived as the study of sensory or sensori-emotional values, sometimes called judgments of sentiment and taste. The encyclopedia identifies the principles of aesthetics as follows:

“Objects are aesthetically valuable if they possess a special aesthetic property or exhibit a special aesthetic form, they have the capacity to produce pleasure in those who experience or appreciate them and they have the capacity to help bring about social or political change. The research also stated the aesthetics of fashion design is ‘fashion designers use a variety of techniques to allow people to express the truth about their unconscious minds by way of their clothing. To create wearable personality designers use fabric, cut, color, scale, references to the past, texture, color harmony, distressing, transparency, insignia, accessories, beading and embroidery. It is also used to find the average size of things, to make a product suitable for a high number of customers.”

Greek philosophers initially feel that aesthetically appealing objects are beautiful in and of themselves. Plato feels that beautiful objects incorporate proportion, harmony, and unity among their parts. Similarly, in the *Metaphysics*, Aristotle found that the universal elements of beauty are order, symmetry, and definiteness.

Some visual aesthetic effects include gradation, repetition, radiation, symmetry/asymmetry, balance, linear dynamic, contrast, perspective, emphasis, scale, movement, rhythm, unity and proportion.

(A) Proportion

Proportion is the comparative relationships between distances, sizes, amounts,
degrees and parts. It can be applied to one-dimensional lines, two-dimensional shapes or three-dimensional forms. Spatial characteristics have little meaning except when they are compared to something else; hence, the main idea of proportion is “in relation to”. Sometimes, a single part of a body may seem to be “well proportioned” but if its size or shape is inconsistent with the rest of the figure, the whole figure still seems to be “out of proportion”.

Clearly, proportion is not just a synthesising principle. Rather, it invites exploration of parts and wholes. It is a question of what makes proportions pleasing or hideous. These, like other ideas of beauty and ugliness, are subjected to cultural preferences but some guidelines have proven acceptable throughout many centuries and in many cultures. Even though some of these guidelines take the form of mathematical formulas, sculptors, artists and architects have traditionally labeled this proportional formula as “golden mean” or “golden ratio”.

Basically, proportion in fashion design is the size relationship of each of the internal spaces within a garment to one another and to the whole design. The most beautiful application of proportion seems to have a slight deviation, a magic touch that defies precise analysis. The most pleasing proportions are those that are unequal. The following example is a sleeve which is so large that it overwhelms the rest of the dress. In this case, the dress is said to be “out of proportion” or disproportionate. Part of an outfit that is too small may also be disproportionate.
**Out of Proportion**

Sleeves are too large for the size of skirt

**In Proportion**

Sleeves are balanced by a longer skirt
Proportion in fashion design is very important to the eyes. If the design is properly proportioned, the design effect will appear to be harmonious and pleasing. Good designs are expected to harmonious and pleasing. In order to understand how to manipulate the appropriate proportion, the application of the “golden mean” is essential to any fashion design.

Unequal proportion can be more interesting than equal proportion. Many mathematical formulas plural have been proposed as guidelines, known as the golden mean or golden ratio. Standards of proportion change with fashion cycles along the evolution of silhouette and line.

In the beginning of the Renaissance, a body of literature on the aesthetics of the golden ratio has been developed. This mathematical golden ratio is considered to be 1: 1.618, which is very close to 3:5 and 5:8.

The golden mean is the proportion rule that pleases the eyes. 5:8 and 8:13 are the standard formulae. Many great works of art in many different cultures have consciously or unconsciously been organized with their linear or spatial divisions in accordance to this golden ratio. Much great architecture is based on it, so are many beautiful clothes. Yet, the golden mean is not the only way. Nowadays, these classical proportions are not always fashionable. “Out-of-proportion” styles have been equally popular. Fashion flips between the orthodox and traditional, the alternative and challenging; because of this, the golden mean should not be adopted as an absolute rule. It is only a general rule that aims to please the eyes.
In Example 1 and 2, the 5:8 proportion is comparatively more satisfying to the eyes.

**Example 1**
Example 2
In Example 3, the 6:8 and 4:8 proportion are too small and too large.

Example 3

<table>
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<th>(6:8)</th>
<th>(5:8)</th>
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<td>Too little difference</td>
<td>Golden Mean</td>
<td>Too much difference</td>
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Golden mean is the standard proportion rule in design, especially in classic collection design. Nevertheless, creative fashion is about breaking rules, following Punk or sometimes Gunge’s element in which case the balance of proportion is often deliberately ignored.

Many beautiful clothes are designed based on the golden mean but it is not the only way to achieve a sense of beauty in proportion. One perception of beauty springs from an informed sense that the linear and spatial relationships are right for each other from an artistic mastery instead of exclusively from a mathematically precise equation. However, relationships slightly off exact ratios are often more interesting to the viewer. In reality, designs wholly by formulae are rarely found.
(B) Balance

Balance is how the internal spaces of a shape work together. The surface of a design may be broken up by structural lines, trims, fabric patterns, textures or colours. Balance also refers to “visual weight” in design. A garment must be balanced to be visually pleasing.

Balance can be symmetrical or asymmetrical:

(i) Formal Balance

Formal balance is symmetrical. Its design details are divided equally to create a centred balance. In other words, both sides are the same, like the way how we have two arms and two legs. A symmetrical garment design must have exactly the same details in just the same place on both sides. Formal balance is the easiest and the most logical way to achieve stability. Therefore, it is also most commonly used in fashion design. Even a design with slight deviations, for instance, when minor details are not exactly alike on both sides, it is still considered to be approximately symmetrical. A sensitive use of fabric, rhythm and space relationships is essential to keep a symmetrical design from being any less exciting. A symmetrically balanced design usually has a more formal or tailored appearance. This kind of design is the simplest and least expensive to produce.

- The buttons are symmetrically placed.
(ii) Informal Balance

Informal balance is asymmetrical. Its design details are divided unequally from the centre. It can achieve a more dramatic and interesting effect through an imbalance of visual impact. Its composition is different arrangements on each side. It is often achieved with diagonal line and off-centred closings. An unusual, slender, eye-catching detail or intense impact on one side can balance a larger, less imposing area on the other side. Striking line, texture or colour can appear to balance larger masses of less significance. Informal balance is usually reserved for fashionable garment for its dramatic and technical effects. Informal balance should not look heavier on one side than the other. If done properly, the design should appear to be balanced, even though its two sides are different.

- A skirt that features an asymmetrical hemline.
(C) Rhythm

In fashion design, rhythm is the flow of lines, shapes, textures and colours of garment. The flow should gently carry the eyes from one area of the garment to another. When all the lines of an outfit work well together, a sense of rhythm is obvious.

The use of rhythm is important in achieving pleasing effects. Rhythm in design results repeating lines and masses. These repetitions can be either of uniform size or of decreasing or increasing size. Referring to the sample shown below, the rhythmic patterns can be generated by superimposing scales. Clearly, rhythm can create a powerful effect, whether it is achieved by the repetition of regular features, by motifs on printed fabrics or by a gradual change of size or colour.

The rhythm effect is demonstrated in this illustration, with the conflicting lines and broken pattern created a strong rhythmic impact.

As long as the lines and patterns are carefully placed, a sense of rhythm will guide the eyes to move from looking at one element to looking at the other. All in all, ‘rhythm’ as a design technique can be achieved through the use of numerous different kinds of techniques.
(D) Radiation

Radiation is the use of design lines that fan out from a pivotal point. Based upon the sunburst effect, the eyes move from the central point of the sunburst to the outer area of the design. The following blouse demonstrates the effect. That is, the viewer is firstly attracted to the center, then to the outer edges of the blouse.

* Lines being radiated from a central point on this parachute blouse.
Gradation is the use of a single colour, shape, size, design detail and motif. These principles featured in any gradating pattern can be done from the darkest to the lightest tone or from the smallest to the biggest size, imparting a rhythmic progression. The eyes automatically move from looking at the darkest to looking at the lightest tones, or vice versa, thereby the whole item is attended. Sometimes, a designer might use a specific shape for accessories in various sizes. The gradation of the sizes or shapes will tend to bring the eyes from looking at one to looking at the other and eventually to looking at the entire garment.

- The buttons and collar gradate in sizes, adding interest to this dress.
(F) Emphasis

Emphasis is a centre of interest that draws attention to the focal point of a garment. This centre of interest must create more visual attraction than any other design elements and should be related to the overall structure of the garment while the remaining elements must support this centre of interest by echoing its design impact.

A good fashion product should highlight the important features of a body and draw attention away from a figure’s faults. ‘Emphasis’ could be accomplished by the use of lines, details, colour accents, shapes, trims or accessories. A combination of these elements gives the focal point added strength, so does placing the decorative emphasis at a structural point. For example, Karl Lagerfeld does that simply by rows of gold buttons in his jackets. Alternatively, colourful leggings would emphasise the wearer’s legs and a bright collar would draw attention to the wearer’s neckline. A well-planned ‘emphasis’ could draw our eyes quickly to the centre of interest in a design.

- Fewer details in the design create a focal point and thereby a centre of interest is emphasised.
A poorly planned 'emphasis' confuses our eyes, so that we do not know where to focus on in the garment. In the following example, too many areas of interest are presented that a viewer’s attention is divided unequally in an unpredictable manner. At last, they do not know where to focus on and this design loses their attention.
(G) Contrast

Contrast is the use of different colours, textures and shapes. It is one of the most powerful design principles, causing the eyes to re-evaluate the importance of one area of focus against another. For example, a blouse is trimmed with a contrasting colour binding. In such case, the use of ‘contrast’ relieves the dullness of an all-over effect. Colours catch our attention and we pay attention to the features and details that they frame. Placement of contrasting features requires thorough consideration; these contrasting features then become a focal point. Contrasts in fabric texture heighten the effect of each material. One example is a glossy PVC jacket worn with a muted woolen skirt. The following example clearly demonstrates the concept of ‘contrast’, a contrasting colour effect between the white soft colour body and the black stiff colour bindings.

Figure 3.1 Leung Man Ying’s collection in 2006
(H) Harmony

Harmony is the pleasing arrangement of all parts of a garment. It is not the exact opposite of contrast but it does imply similarity than differences in areas such as the use of colours or textures that blends well with one another. An example of Tam Wai Yin’s 2006 design is indicated below. In this example, the tone on tone colours and textures are mixed perfectly that a harmony effect to the viewer is achieved. The patterns, colours and textures used in the design all give a sense that they belong together.

![Figure 3.2 Tam Wai Yin’s collection 2006](image)

Clearly, harmony is achieved when design elements work well together. Soft fabrics and rounded forms form a better harmonious design than sharp cutting or pressed garments. Fabric pattern, trims, colours, lines, shapes, texture and proportion all give a sense that they belong together. Although the design is safe when the absolute rules of harmony are followed, doing so sometimes results a conservative design, one that lacks impact. To avoid so, one can add in elements that can create visual impact. Italian and American fashions are renowned for its harmonious use of natural fabrics, matching of colours and the use of non-aggressive silhouette. A harmonious collection is easy to co-ordinate and also easy to achieve good sale figures.
(I) Unity

The repetition of a design element throughout a garment creates a sense of unity. Conversely, the use of too many motifs in one garment is distracting and discordant. When a garment has unity, separate and individual parts work together to create a whole. A feeling of togetherness and oneness are achieved.

For example, the dress indicated on the right is one that lacks unity. The tailored seams are incongruous with the fluffiness of the top.
Conversely, unity is successfully achieved in the following outfit with tailored seams throughout the garment.
(J) Repetition

Repetition is the repeated use of certain design elements, details or trims in a garment. A feature could be repeated either regularly or irregularly. This multiple effect could be used to unify a design.

In fact, repetition is a sense of movement. Repetition is necessary in creating interest in a design and carrying out the central theme. Repetition in design can be achieved by the repetition of shapes, lines and colours. For instance, the repetition of pleats, gathers, tucks or buttons creates rhythm in the form of lines and shapes. The dominant line, shape, colour or detail of a garment could be repeated elsewhere with variation.

Repetition is one of the most useful guidelines in theme consideration. In a design, a re-occurred shape, line or detail helps carrying the theme throughout the whole collection. For example, the soft gathers designed at the neck could be placed also at the cuffs so as to unify the collection.

- The placement of gathers at both the neck and the sleeves demonstrates the use of the principle of repetition.
(K) Scale

The term ‘scale’ refers to the relationship between a garment and its design details. A sense of harmony should be found in the design elements within the whole design, with the design elements not being out of scale such as being either too large or too small or either being too bright or too dark. For example, the dress below indicates a wrong scale in colour and size of the pattern.

- Odd scale in colour and size of pattern is successfully achieved in this dress.
3.2 Fashion Design Elements

Design is a matter of mixing known elements in new and exciting ways in order to create fresh and pleasing combinations. Generally, a successful and good design is achieved when all the elements and principles of design work together harmoniously with the theme of the garment is carried out with nothing overdone or forgotten. Over-designed fashion usually does not sell well.

3.2.1 How to Achieve Good and Creative Design

As mentioned by Gini Stephens, an effective design results from a well-developed idea or theme. For example, if the theme of a design or group is dramatic, the design should have a bold statement of line, an exaggerated silhouette, large space divisions, bright or dark colours, strong contrast, large prints or extreme texture. There are many ways to develop ideas and themes. Well thought out use of the elements and principles on designs is most apparent in an evening gown when the drama of the occasion makes it appropriate to create something sensational. For daily wear, however, garments are simple and practical and the elements used are less noticeable. Good designs should incorporate aesthetic values and functional purposes.

Designers often try many variations of a design before creating one that has the perfect combination of fabric, colour, line, shape and the correct use of balance, proportion, emphasis and repetition. They usually work up their ideas in sketch form to test on their feasibility. Designers must determine objectively whether all the elements work together and create a harmonious and consistent visual effect.

“The formula to create good designs must incorporate a harmonious combination of all the design elements and principles. Design is the plan used to put an idea together, the process of designing is the selecting and combining of the design elements according to the principles of design in order to achieve harmony.” (Fashion, Mary Wolfe 1998)
The design process is illustrated as follows:

When elements of design are used in accordance with the principles of design, harmony is created.

(A) Sample of Good Fashion Design
Good designs must incorporate a harmonious and good combination of all the design elements and fashion principles. It makes the wearer look his/her best. Some good design examples are indicated as follows:-
The design elements and fashion principles are properly applied and effectively used in the above example. A good design have to consider the aesthetic values as well as the functional purposes of the final products: Perfect combination of texture, colour, line, silhouette and the correct use of balance, proportion, colour arrangement, repetition, rhythm and radiation. All the elements work together to create a harmonious, consistent visual effect as well as practical functions.

The informal balance and gradation effect is well demonstrated here, the intense dark
grey border balances the larger, less imposing light grey area. The use of flow lines rhythm is also successful, achieved pleasing visual effects. Rhythm in design results from repeating line and masses. The flow line rhythm and the gradual change of colour create a successful and harmonious combination. Pleasing arrangement of all parts is demonstrated. In this example, colours, lines, pattern, shape and textures are mixed perfectly that achieve a harmony effect to the viewers. Each individual part, unique in its own way, has carefully been placed together with all of the other parts to create a unifying and beautiful whole.

Apart from these elements, the curve lines and round collar also create a sense of unity. When a garment has unity, the separate and individual parts work together to create a whole and balanced effect. There is a feeling of togetherness and oneness. This design has successful created unity and repetition. The repeated flow lines demonstrate the use of the principle of repetition. The pleasing proportion of all parts is well achieved in areas such as the size relationship between shoulder, collar, bottom line and body length. A sense of harmony is found with the design elements and principles within the whole design.
(B) What is Creativity?

According to the findings of Alex Fung, it is a general assumption that the term ‘creative’ is owned by practitioners of design, art, music composition, poetry and literature. In reality, everyone can be creative. Activities like cooking, re-arranging the home and selecting and wearing clothes may be done in new and imaginative ways.

‘Creative thoughts’ can be regarded as an establishment of new mental patterns that are inspired by unanswered questions and redefinitions of values or relationships. Exceeding the dictionary definition of “the ability to create”, Edward de Bono suggests that “being creative means to bring into being something that was not there before”.

Figure 3.4 Leung Man Ying’s collection in 2006
Creativity is regarded as a thinking process that is aimed at originality, generating ideas or devising new solutions for old problems. Creativity makes unusual associations or finds new ways of looking at things, avoids routines, breaks rules, takes risks, is imaginative, has a playful attitude and celebrative flexible thinking. Creativity is not limited to design or any other disciplines but involves scientists, artists, teachers, managers, hospitality, tourism providers, etc.

In this example, the key invention of the design is zipper. The row of zippers are demonstrated a total new look for the fur industry. Zippers are a kind of traditional accessory for sportswear, casual wear or menswear such as Punk’s biker jacket. From a fashion designer’s point of view, zippers evoke images that are rigid, casual, hard and of someone with certain economic status. Conversely, traditional fur garments convey luxury, femininity, glamour, high status for the high-end women’s wear market.

This design is an invention of a total new look for glamour fur garments that do not exist before. It breaks traditional rules and avoids routines. The designer underpins every form of creation but keep the piece of design functional and its aesthetic
values.

In additional, the designer has also devised a new solution for the old problem of zipper manipulation during his design process; the numerous zippers demonstrate the innovative and unusual application method of zippers for the fur industry market. The designer breaks some traditional rules such as “zipper is only for woven fabric”, establishing a new mental pattern for the fur garments and also finding new and imaginative ways of looking at zipper management. The design shows redefinition of glamour value to more casual value for fur regulation.

Figure 3.6  Designed by So Yau Kai
(C) Fashion Design Elements

The main elements of fashion design are Line, Shape, Texture, Pattern and Colour. Awareness on these elements will help to evaluate whether a design is good or not, create fashion illusions and spot trends and changes in the fashion world. In addition, understanding how these elements can be executed and manipulated is essential to good designing.

3.2.2 Line and Direction

A line is an elongated mark, the connection between two points or the effect made by the edge of an object where there is no actual line on the object itself. A line leads the eyes to view in the direction the line is going and divides the area through which it passes, thus providing a breaking point in space.

The term line refers to the direction of visual interest in a garment created by construction details such as seams, fastenings, patterns, tucks, contrast stitching and trims. It is the most basic element of design because it divides areas into shapes and spaces. A line can be hard or soft, either flexible or rigid. It can move in various directions, leading the viewer to look across, look up, and look down or to sweep around the body. Moreover, a line can also create the illusion effect of narrowness or of fullness in the wearer. Balancing the effects of lines is one of the important tasks that a designer needs to tackle in design.

(A) Straight Lines

Straight lines are divided into three types: vertical, horizontal, and diagonal lines.

(i) Vertical Lines

Vertical lines create a sense of lengthiness and elegance as they lead the eyes to view the body in an up-and-down motion. They create an illusion of a longer and slimmer body and a feeling of strength, dignity and formality. The use of vertical lines to create a slimming and lengthening visual effect.
(ii) Horizontal Lines

Horizontal lines go across on a garment. These lines across the body can make the wearer look shorter and plumper. Horizontal lines tend to create a feeling of stability and restfulness. However, the spacing and width of horizontal lines can affect the feeling created.

Horizontal lines lead the eyes to view from side to side and therefore, draw attention to the width of the body and create the illusion of a wider, shorter body. Horizontal lines are the most suitable to use in order to achieve a wider or shorter body image. They can add width to shoulders, chest or hips. Meanwhile, wide collars, full sleeves and large pockets help widen the design effect.
(iii) Diagonal or Oblique Lines

Diagonal or oblique lines are those structural lines that move diagonally within a garment. They move from an angle on a garment and travel diagonally across and around the body, adding some sense of movement and visual impact on the design; clothing lines can also be converge and diverge to achieve great directional effects.

The effectiveness of the use of diagonal lines depends upon whether the line slant in a more vertical or horizontal direction. Generally, diagonal lines combine the vertical and horizontal, seemingly undecided between upright and sideways; thus, they seem restless, busy and unstable but imply powerful movement, vitality and dramatic effect. Too many diagonal lines leaning one way may introduce wobbly directional illusion; so diagonals often need an opposing diagonal to provide balance. If opposing diagonals meet with a downward point, the lines seem to lift up and the effect is lighter, happier and more youthful. If they meet with an upward point and the lines seem to trail down, the effect is heavier, older, more somber and droopier. With a challenging line, the diagonals often seem sporty. With masterful use, the diagonals can also convey elegance.
(B) Visual Effect of Structural Lines

Different arrangements of structural lines within a garment can make the wearer appear fatter or thinner, taller or shorter. Optical illusions may thus be intentionally created by designers who know how and where to place structural lines.

The width of lines and the amount of space between lines affect the illusion created. Widely-spaced vertical stripes may give the impression of an added width, with the eyes moving sideways across the lines. Alternatively, with widely-spaced horizontal stripes, the eyes move up and down instead of sideways. These examples are indicated in the following illustration.

A change in the location of lines can alter the apparent size of an area.
Which of the lines appears longer?

Thick line  Narrow line  Arrow  Y line  T line

In addition, straight lines can also suggest a certain style; they have a formal and crisp nature and are usually used in classic or conservative designs. A majority of executive suits and nautical clothes have crisp vertical or horizontal lines at the shoulders, sleeves, body, cuffs and hems.

Diagonal lines are dramatic and more fashionable in nature; they are often seen in high-fashion clothes.

On the contrary, curved lines can be circular or gently-waved. They can move in a vertical, horizontal or diagonal direction and add a certain femininity and fullness to a garment. Curved lines also add softness and roundness to a garment in order to create a more casual image. A western cowboy shirt with a curved yoke across the chest has a more casual effect than a tailored shirt.
Sample of Diagonal Lines Design

Diagonal lines are dramatic and more fashionable in nature; they are often seen in high-fashion clothes.

Figure 3.7 Designed by Lam Sai Tung
(C) Expressive Quality of Line

A line can be hard or soft, straight or curve, implying rigidity or flexibility. The direction of a line can convey a certain mood. Based on this theory, different lines can move in different directions to express different emotions.

(i) Horizontal lines are calm and quiet

(ii) Vertical lines suggest more of a potential for movement

Examples:

- A line with silence, calm, tidy and simplicity
- Lines with freedom, order and prospect
- A line with movement, strength and hurry
- A line that shows chaos, turmoil and anger
3.2.3 Shape

Another function of lines is to create shapes. In the fashion industry, the term “silhouette” is normally used to describe the shape of garment. “Silhouette” is French for “the general outline or shape of a costume”. Since garments are three-dimensional, the silhouette changes as the garment is viewed in 360 degrees from different angles. It determines people’s first impression of an outfit, meaning that they look at a garment’s overall shape before they examine its fabric, texture or detail. Silhouette is a fundamental consideration in the design process.

Fashion trends influence what kinds of silhouettes are in style during a fashion season. Usually silhouettes in use change from year to year and occasionally a brand new silhouette is introduced by fashion designers. Styles may suddenly swing from tight to tubular if fashion shows, web-sites, magazines, stores or fashion icons promote a “new look”.

(A) Basic Garment Shapes

Throughout the fashion design history, silhouettes tend to repeat themselves in cycles. At times, an hourglass shape is popular. At other times, a tent shape that de-emphasises body contours dominates the fashion trend. A silhouette should match with body structure but some variations are needed to add interesting effects. The majority of garments are in one of the following four basic shapes: natural, rectangular, tent and full.
**Natural shape** is the classic shape that follows the body outline. Clothes of this silhouette emphasise the natural waistline.

**Rectangular shape** is tubular with an emphasis in a vertical sense. In this shape, the dominant lines go up and down and usually the waistline is not defined. Tee-shirt dresses, straight-leg pants and executive suits are examples of silhouettes in rectangular shape.

**Tent shape** is the most popular in recent fashion trend and maternity clothing. It flares out from below the armhole, making an underarm impractical. A-line shift dresses, flared jackets and capes are all in tent shapes.

**Full shape** has more horizontal and curved lines than the other silhouettes. Gathered skirts and dresses, full sleeves and pants with wide legs are typical examples of silhouettes in full shapes.
(B) Basic Shapes of Women’s Wear

- Rectangle/ Tubular/ Cigarette/ Straight/ H-line
- Triangle/ A-line
- Natural
- Full
- Inverted Triangle/ Wedge/ Tapered/ Y-line
- Tent/ Trapeze
In women’s wear, each women’s wear designer chooses few shapes to dominate a collection or a basic shape is individualised by various necklines and sleeves. Hemlines are then either shortened or lengthened. Conversely in the men’s industry, only one silhouette appears in a collection. It is the other ingredients such as fabric and details that differentiates one garment from the other.
(C) Basic Garment Shapes of Menswear

Throughout the fashion history of menswear, especially in men’s tailor-made clothing, there have always been fewer silhouette choices. The majority of menswear includes the following four basic shapes: rectangular/ inverted/ triangle/ square and natural.
3.2.4 Texture

Texture is the surface quality of an object. In fashion design, the texture is the surface interest of a fabric, created by the weave and by light reflection. Our eyes can appreciate the play of light on smooth or rough surfaces and the hands to feel the surface. Combinations of textures such as leather with chunky knit (glossy with scratchy) create excitement in a garment. All fabric textures, from the sheerest chiffon to bulkiest fleece to the sturdiest canvas, depend on the variations of four factors: fibre content, yarn structure, fabric structure and finishes. All these factors affect the visual, tactile, and performance quality of a texture. Nowadays, texture is one of the key elements in the current fashion trend and plays an important role in the whole visual effect of a garment and its appearance.

Texture influences the drape of a garment. Chiffon clings and flows, making it a good choice for soft, feminine styles while canvas has the firmness and bulk suitable for more casual garments.

Texture affects the colour of a fabric by causing the surface to either reflect or absorb light. Rough textures absorb light, causing the colours to appear flat. Smooth textures reflect light, causing colours to appear brighter. A colour that appears extremely bright in a shiny vinyl or satin will become subdued in rough wool or suede.

Texture is regarded as one of the significant components in the fashion history. Wonderful effects can be achieved when texture is introduced to a garment of a single colour. This can be implemented by decoration, pin-tucking, smocking, gathering and embroidery – anything that disturbs the surface.

In fact, a majority of designers select fabrics before making their design sketches; they prefer to be inspired by the texture rather than to find the prefect fit for a design sketch. Furthermore, texture can also create the illusionary effect of narrowness and fullness in the wearer, just as the way lines, patterns and colours achieve other illusionary effects. Texture can affect the appearance of a silhouette, giving it a bulky or a slender look, depending on the roughness or smoothness of the materials. The contrast in texture between the stiff top and the soft drapery chiffon skirt by Martin So creates a strong impact for this fashionable texture outfit.
3.2.5 Fabric Patterns

Fabric patterns are coordinated by lines, dots, shapes, spaces and colours. They are created in endless varieties - geometric, floral, stripes, checkers, dots, abstract motifs and many others. Consequently, patterns always provide interest and visual impact. Printed and dyed fabrics convey new fashion trends easily and comparatively quickly. They help balance collections or ranges and add variety. Their pattern arrangement can be subtle or intense, large or tiny, bright or dark, even or uneven and spaced or clustered. The ideas come from worldwide influences including nature motifs, folkloric, historic, architecture, wallpapers, cartoons and people's hobbies. Designers may shop worldwide for fabric patterns or garments as a source of new idea. The most common and traditional fabric patterns are divided into four categories and are listed as follows:-
(A) Geometric Patterns
Geometric patterns refer to textural patterns, stripes, checks and plaids that are woven, printed or knitted such as Gingham, left-hand twill, striped chambray, window pane linen or pin stripe.

(B) Conventional Patterns
Conventional patterns refer to naturalistic motifs that are stylized. Conventional patterns combine the rhythm of stripes with the soft natural charm of floral in pattern. For example, fancy woven stripe on dimity, woven silk brocade or block print on linen.
(C) Naturalistic Patterns

Principally floral, although other motifs may be used, ranging from leopard spots to candy canes such as paisley on acetate jersey, naturalistic floral on cotton and stylised floral on silk crepe.
(D) Dots and spots

For example, novelty dots on cotton, coin dots on flat crepe, and geometric motifs on jersey.

(E) Printing Techniques

Printing and dyeing techniques are the most significant influence of the whole pattern effect and garment's appearance. It plays an important role in today's fashion design industry. Some of the most common printing and dyeing techniques:

(i) Block Printing

Block printing is one of the earliest forms of printing. It uses wooden blocks that are engraved with the design or, alternatively, the design is hammered into metal strips.

(ii) Screen Printing

Screen printing is based on the stenciling process. A fine mesh screen is created and the areas not to be printed are chemically blocked out. A different screen is needed for each colour required. A squeegee is used to push the printing ink through onto the cloth. This may be done by hand or by a machine, depending on whether the fabric is a sample, a “one-off” or one for mass production.

(iii) Burn-out Printing

Burn-out printing is a technique whereby a chemical is printed onto a fabric constructed from two fibers. The chemical destroys one fiber and creates sheer
areas.

(iv) Discharge Printing

Discharge printing is a light pattern on a dark background created by printing a paste onto the fabric. The paste removes the background colour.

(v) Engraved Roller Printing

Engraved roller printing produces a continuous design on a fabric and has images engraved onto a metal roller. The roller is inked and is transferred to the cloth under pressure. It is useful for designs with a repeating image over a large printed area as this method enables seamless printing so that the joins in the design are invisible.

(vi) Heat Transfer Printing

Heat transfer printing works by passing a paper with the printed design through heated rollers with a cloth that consequently transfers the print. Dye transfer from the paper to the cloth by hand using a piece of coloured paper and a small heat press.

(vii) Digital Printing

Digital printing can be applied directly to fabrics from the computer via an inkjet printer. Very high-definition imaging can be achieved and many colours can be printed without the need of using numerous screens. Laser printers are also used but it is still a relatively expensive process.

(viii) Printing Inks

Printing inks may be added to flat colour or hand-rendered paint effects. Flocking provides a velvety texture which depends upon the fiber that is used to flock. Expanding inks also provide flocking texture and begin to expand after being applied to the cloth.

Fabric patterns, just like fabric texture, can create illusions in design. For instance, small prints in subdued colours usually reduce the apparent size. In contrast, large designs expand the apparent size and largely-spaced motifs will also make the wearer look wider in body size. Prints with wide curves give a feeling of added roundness and size.

Prints, stripes and plaids that are in scale or in proportional size should be selected with reference to body size. Small designs look best on small-to-average individuals but they look out of place and lost on a large figure. On the contrary, large designs are best worn by the average-to-tall individuals as these designs can overwhelm a
3.2.6 Colours

Colours have always been a key element in women’s clothing and a fundamental consideration in the design process as they are the very first element to catch shoppers’ gaze and they are the last thing to clinch a purchase. It is often the first element that is noticed with a design and it influences how that garment or collection is perceived. Thus, colours are often the staring point of the design process.

Historically, colours have been used to denote rank and profession. Golden yellow, for instance, was associated with royalty and in some periods it could be worn only by Chinese Emperor. Black became customary for the apparel of the clergy and for members of the judiciary in the west. Colour symbolism often varies with geographical location. While white is the western world’s symbol of purity, worn by brides and used in communion dresses, it is the colour of mourning in India and China.

Today, fashion colours always change as often as fashion itself. A new season’s colours generally grow out of the existing colour palette. Fashion colour predictions and forecasting companies are set out well before the designers start their collections. These companies develop colour stories from many sources including international fabric fairs where yarn technologists, cosmetic suppliers, trimming merchants and other related industries show their latest development on new colour stories derived from existing popular colours.

The textile industry continually develops fabric technology in order to create fabrics with innovative weave, knits, texture and finishes. It is important to consider colour along with texture as the surface of the fabric as much as the colour presented.

Colour predications, trends and colour stories are shown twice a year in Paris, Milan, New York, Hong Kong as well as other major fabric trade fairs all over the world. Inspirational trade magazines discuss new colour trends in relation to key influences of the moment and give specific colour guidelines for use in textiles, fashion, cosmetic and accessories. They are the outcome of the fashion and colour international consensus. Colour consultants monitor the trends and bring together opinions and conclusions from designers, manufacturers and retailers.

(A) What is Colour?

Colour is the property of an object that results from the reflection, transmission or emission of light waves which causes a visual perception in the eyes depending upon
the specific wavelength involved. For instance, a blue shirt absorbs all light rays except the blue ones, which are reflected back to the eyes. Therefore, this shirt appears to be blue. White combines all colours and therefore a white object reflects all colours. Since black absorbs all colours, no hue is reflected by the back colour. Most artificial lights are like sunlight but some lamps do not give out white light. Mercury vapour lamps, often used for highway lighting, give out light with no red rays in it. Therefore, under this light, red clothes and even red lips will not appear red as there are no red rays to be reflected. They usually appear blue or purplish.

(B) Colour Dimensions
Colour has three different dimensions: hue, value and intensity.

(i) Hue
Colours are called hues. A hue is the name given to specific colours such as red and blue.
(ii) Value

Value refers to the use of darks and lights or the variation of light strength in a colour. The value scale runs from white to black. White is pure light; black is the total absence of light. Adding white lightens a colour and adding black darkens it. The lighter values are called tints and the darker ones are called shades.

(iii) Intensity

Intensity is also called chroma, which stands for the relative saturation, brightness (strength) or paleness (weakness) of a colour. Bright colours are considered to be of high intensity; pale ones are of low intensity. When some paint is paled by adding water, the intensity of its colour is lowered. For example, sky blue is of high intensity and soft pastel blue is of low intensity.
(C) Colour Wheel

The most common organisation of basic colours is shown by what is called a colour wheel. This particular organisation uses twelve segments which are divided into three categories, which are primary, secondary and tertiary. The primary hues of red, yellow and blue form an equilateral triangle are shown within the colour wheel. The three secondary hues of orange, violet and green are shown in another triangle. Red orange, orange yellow, green yellow, blue green, violet blue and red violet are shown in six other tertiary hues.

A number of other terms are used to describe colours:

(i) Primary Colours

Red, yellow and blue cannot be made by mixing other colours.
(ii) **Secondary Colours**

Orange, green, violet are colours made by mixing two primary colours. For instance, yellow and red make orange.

(iii) **Tint**

A pure colour mixed with white. For example, red plus white to make pink.

(iv) **Shade**

A pure colour mixed with black. For example, red plus black to make burgundy.

(v) **Tone**

A general term to describe a tint or shade.
(vi) Complementary Colours (Contrast Colours)

Pairs of colours that appear on opposite sides of the colour wheel. For example, red and green or violet and yellow.

(vii) Warm Colours

Red, yellow and orange as warm colours are classified as they are usually associated with fire and sun. Warm colours are stimulating, aggressive and lively. Red is associated with matters of the heart - valentine, love and romance; exciting, fiery, and dangerous. It is a popular colour for women's wear and it is one of the colours that are frequently used for clothing every season. Yellow is bright, sunny, cheerful, friendly and optimistic. Orange has become popular in the youth market.

(viii) Cool Colours

Blue, green and violet remind people of the sky and the sea. Blue is quiet, restful and reserved. Denim and navy blue have become wardrobe classics. For this reason, most manufacturers include blue especially in their spring or summer lines. Green is a soothing colour, suggesting peace and calm. It is used primarily in a dark value in fall sportswear lines. Violet, historically associated with royalty, has come to represent wealth, dignity and drama.

Colours can create the illusionary effect of narrowness or fullness in the wearer. Colours can also be used to accent or play down certain areas of the body and create illusions in one’s height and size. Colours are perceived differently when they are placed next to each other. Generally, brighter colours seem larger than darker ones.

Colours can be considered to have the strongest visual impact among other design related elements on an object. For example, warm colours and pure colours appear nearer to the viewer whereas cool colours appear to recede. Light colours expand; dark colours contract. Yellow is perceived as the largest colour and black the smallest.
In addition, colours can be used to emphasise a special feature such as the colour of your eyes. Some people with blue-gray eyes appear to have very blue eyes when they wear a blue shirt.
3.3 Fashion Design Presentation

3.3.1 Graphical Skills

Fashion designers create and sketch garments to communicate their ideas to their design teams, pattern makers, sample machinists and buyers. Fashion designers need to be able to draw to make their designs understood but they do not necessarily need to excel in fashion drawing. They usually have very little time to produce fashion sketches and jot down fleeting ideas in order to capture transient movements. For this reason, quick sketches to show ideas are mostly what are required of fashion designers.

(A) Figure Drawing

When fashion designers need to communicate ideas to buyers quickly, the ability of drawing the idea in an attractive manner is a great asset. As designers, one must be able to see a style and analyze the major points that make it visually successful. One must be able to quickly assess proportion, silhouette and strong eye-catching details.

(B) What are Fashion Trend and Fashion Proportions?

Fashion can influence how society sees the human body. In the 18th century, plumpness was seen as a sign of prosperity and health and a thin person was seen as too poor to afford enough to eat. In contrast, today’s obsession with thinness has spawned a $33 billion-a-year weight-loss industry and has led to an epidemic of eating disorders such as anorexia and bulimia among young women (Powers, 1996).

Fashion designers need to spot new trends, emerge phenomenon and the market needs for the tomorrow world. Demographic change, new technologies and new modes of living impact significantly on the future. Today, the world is experiencing a massive population shift; it is indisputable that the global demographic change is the aging population. The infant birth rate has gone down and rates of aging group are increasing.

The aging population has been increasing rapidly since 1995 and such increase has been foreseen to continue until the year 2050. Future elderly make up a huge market segment with a large saving, provident fund and discretionary income. They will like to spend large amount of dollars on fashion apparel that fits appropriately and appeals to them. The apparel industry and fashion retailers who meet those needs will position themselves for success in the future.

Fashion proportions, by the very nature of fashion itself, are subject to change.
depending on the look of the time, and these changes do not alter the structure of the human figure. The easiest way to start to draw a fashion figure is to use the head size as a measurement guide for the length and width of your figure.

(C) Basic Proportions of Female Figure for Fashion Design Drawing

The typical female fashion figure is illustrated as slender with square shoulders, heads drawn smaller, necks and legs longer than in the classical life drawing. In the average female's body the head is about seven to eight times smaller than that of the total height of the entire figure (Figure 3.10). For fashion drawings, this increases to nine to ten times or more (Figure 3.11). Fashion drawings retain the basic proportions of the human form from the head to the crotch. Extra length is added to the legs to give dramatic, stylised look and to give clothing more dynamic appeal.
Figure 3.10
Average Female’s Proportion

Figure 3.11
Fashion Drawing Proportion
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<td>Crotch/ wrist</td>
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**Figure 3.12**
Figure 3.13
Figure 3.14
(D) Male proportions and body shape

Figure 3.15
(E) Children's Body Proportions and Body Shape

As with the adult fashion figure, children's fashion drawings are also measured in heads but the number of heads varies depending on the age of the child.

Figure 3.16 The variation in the number of heads that divides the body from an infant to an adolescent.
(F) What Makes a Good Fashion Drawing?

(i) Composition and Well Planned Layout

The positioning of the drawing on the page and the relationship of one drawing to another are all important because they help create a design image. Relate the sketch to the space and other sketches around it so as to create an interesting, stimulating and harmonious total effect. Individually, sketches can look flat and uninteresting but if all the right ingredients are grouped together in a well planned layout, the theme will be strong and extremely successful.

(ii) Right Purpose

The drawing should consider the purpose and objective of the presentation; it may be for a fashion prediction board or fashion design board displaying the fashion trends. It could also be for a fashion presentation board, forecasting drawing, promotional fashion illustration or advertisement for magazines. The drawing should be created depending on the target market, project brief and the purpose of the drawing board.

(iii) Understanding Construction and Form

A design drawing is often an interpretation of a three-dimensional form in a two-dimensional way. It is important that the structure of the three-dimensional form is clearly expressed and defined by the use of tone and texture.

(iv) Awareness of Body Perspective and Proportion

Good drawings need not be photographically accurate. It is still essential to show how scale and proportion are observed and re-create such factors in your drawings. Understanding body perspective will also help you draw the correct proportion of the figure in various poses.

(v) Rhythm of Line

The mood and shape of the design are developed by the thickness of lines. Drawing figures using one continuous line, avoid the messy broken lines.

(vi) Effective Use of Paper and Media

Drawings should not only be done in pencil, the use of various media should be explored given that these media help to make the ideas more explicit. Work on different coloured papers, use various colours for outlines and experiment with all media and combinations.
(vii) Evidence of Observation

Design drawing should show the ability to observe how a basic garment looks, showing many details and embellishments are observed such as how a collar forms part of the neckline, how a conventional garment looks, its zipper fastening and the proportion of the collar or cuffs to the rest of the garment.

(viii) Evidence of Enquiry

Drawing is a form of exploration and how to explore and record ideas, forms, shapes and emotions.

(G) Types of Fashion Drawing

There are four types of fashion drawing, namely fashion illustration, fashion sketch, stylisation and production drawing.

(i) What is Fashion Illustration?

Richard Surger and Jenny Lidal (2006, pg.49) defined in their book *The Fundamentals of Fashion Design* that fashion illustration is not so much about the design but about capturing the spirit of the clothes. Illustration can be used to express a mood or give the clothes context by setting a scene where the clothes might be worn or representing the kind of person who might wear the clothes through styling, make up, hair and pose. Fashion illustration dose not need to show the whole of a garment unless it is used in a portfolio in which a design has not been made up into a real outfit or garment. With the latter, the illustration takes the place of a photograph, showing how the garment would look on the body.

Mark making and the use of various art materials are much more important in fashion illustration than in design. The best mark making is the one that is fluid and full of movement and this is a skill that can be developed over time. One can also use multimedia art materials for more layered, interesting images. Different types of art materials can also help express different textures of fabric.

As technology develops, fashion illustrators have the choice to work with the craft such as pencil, pen, paintbrush, crayon, collage, paint, airbrush, ink, etc, or computer artistry. The choice of focus and technique is as unlimited as an illustrator’s imagination.
(ii) What is Fashion Sketch?

Richard Surger and Jenny Lidal (2006, pg.49) also defined in their book *the Fundamentals of Fashion Design* that fashion sketch is about communicating design ideas although it can also be about capturing the spirit of the clothes. A fashion sketch is used to get ideas down, and does not need to be fancy. What it does need is to be proportional. If the proportions of the drawing are too abnormal, it will follow through to the proportions of the designs; what looks good on a figure that has too-long legs will not necessarily look good on a real person. It is commonly conceived that anything looks good on a person with long legs, which is why long legs work well on catwalks.

A fashion sketch also needs to be a fairly fast drawing. In an ideal world, creative ideas come rapidly and need to be put down on paper quickly before they are forgotten given that human brain has a habit of moving on to other ideas rather instantly. As one draws on his/her designs, try to put down colour and fabric references on the drawing as often as possible. The designs are not only about silhouette and detail but also about colour and fabric.

(iii) Stylisation

A convention in stylisation is that a figure should be elongated or stylised to give more elegance. However, that elongation should involve only the legs. The term stylisation is understood as the exaggeration of the structure of the body, reducing it to a few essential features.

These are various ways of stylising a figure and one of them is to elongate the height of the model by one or two heads of measure. The proportions remain unchanged while the length of the limbs and principal parts of the body has been modified.

The diagram below has been elongated by one and a half units and the one on the right hand side has been raised by two. The head has more or less the same dimensions, the shoulders are slightly broader in relation to the pelvis and the neck has been slightly elongated. The chest has also been broadened while the pelvic region has been shortened, thereby raising the pubic region. The waist has been reduced in size; the limbs have been elongated, maintaining proportions with the upper body. The feet obviously follow the extension of the body in length.
(iv) Production Drawing

Production drawings, also referred to as flats (US), technical drawings, working drawings, specification drawings and diagrammatics are explicit drawings of garment designs. They are drawn to scale, showing construction lines and styling details. Production drawings are drawings with the front and back views of garments, they are line drawings only but with structure and details and are executed with a black fine-line pen. Thicker pens may be used for outlining seams, darts and details. Finer pens can be used for outlining topstitches and special textures.

The purpose of production drawings is to allow production teams to facilitate the making up procedures which may include the construction of patterns, sewing up of garments, inspection, etc. Thus, the drawings must be clear with all the details well drawn. No colours should be used at this stage because the production sketches may need to be photocopied.

Production drawings should be visually in proper proportion and easy to be understood of their style of drawing to prevent any misunderstanding from the part of the viewers. Any misunderstanding may affect the accuracy during the course of the production process of garments. Besides the front and back views, measurements and analytical diagrams of special features should also be indicated. Any particular request can be indicated by designers through production drawings.

Many companies use production drawings as their primary visual source to communicate and liaise with buyers, clients, sample machinists and pattern makers.
Figure 3.17  Production drawing - skirt
Based on the previous guidelines, start with a straight vertical line to practice to draw a top.

Figure 3.18 Production drawing - top
3.3.2 IT Skills - Use of Computer Aided Design

Today, the industry relies on high-tech manufacturing techniques such as CAD and CAM to manufacture high quality fashion products. Technology can now allow products to be developed interactively among teams that work in different cities in different regions of the globe. Designers, merchandisers, buyers and sales personnel can work together editing new fabrics and new garments; manufacturers can work with retailers, buyers on screen to modify products.

Fashion computing has become a component of fashion designers’ portfolio of skills. Fashion designers, graphic designers and illustrators have long been using computers as a design tool. Computer Aided Design (CAD) systems are rapidly changing the way how apparel designers work. Traditionally, designers would create free-hand sketches of their designs. Then the designer or sample makers would convert these sketches into first prototype. This process could take a long time. If the designer does not like the first sample, the process will start all over again. With a CAD system, designers can create a three-dimensional drawing directly on computer screens. The process begins with a digital or on-screen three-dimensional dress form. This dress form can be modified to correspond to the proportions and measurements of the designers’ master pattern size.

Referring to the book Fashion Computing – Design Techniques and CAD, there are a number of computer software packages that have become universally accepted in the fashion and graphic industries, the most popular software programs used internationally in the fashion industry are as follows:

<table>
<thead>
<tr>
<th>Software Description</th>
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<tr>
<td><strong>Drawing Software:</strong></td>
<td>Powerful graphic drawing programs – excellent for drawing shapes and lines to create production/flats drawings and technical drawings for specification sheets including fashion illustrations and presentation work (import images such as photos and scans, etc).</td>
</tr>
<tr>
<td>Corel DRAW, Illustrator, Freehand</td>
<td></td>
</tr>
<tr>
<td><strong>Creative Suites:</strong></td>
<td>Graphics Suites including Drawing, Page Layout, Web Design and Image Editing.</td>
</tr>
<tr>
<td>Adobe, Corel DRAW, Macromedia</td>
<td></td>
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<tr>
<td><strong>Adobe Acrobat</strong></td>
<td>Excellent for converting large image files into PDFs to send as email attachments – the PDF can attach notes, be edited and emailed back or forwarded. Acrobat Reader (free download) for on screen reading of PDFs.</td>
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### Software Description

**Image Editing Software:**
- **Photoshop**
  - Industry standard software for image editing, a powerful paint and photo editing program – import, edit and manipulate scanned/digital images or create images from the initial concept. Images created in drawing packages can be brought into Photoshop to create impressive fashion and fabric presentations for printing and web publishing.

**Microsoft Office:**
- Excel, Word, Power Point, Publisher
  - Excel creates spreadsheets and tables.
  - Microsoft Word creates spec sheets and text documents.
  - Power Point creates presentations for screen such as slide show, web, video and email attachments.
  - Publisher is a basic publishing, good starting point for the introduction of graphics.

**Page Layout:**
- In-Design, QuarkXpress (Adobe)
  - Industry standard for advertising and publishing to produce quality page layout.

**Winzip (Windows), Stuffit (Mac)**
  - Excellent for compressing files (‘zip’ or ‘stuff’). Then files can be sent as email attachments. Receivers must have Winzip or Stuffit to unzip and open the files.

**Web Design:**
- Dreamweaver (Fireworks, Flash), Front Page, Image Ready (Photoshop)
  - Dream weaver is a powerful software for web design
  - Flash is an excellent for creating animations to create a more dynamic website layout.
  - Fireworks for web graphics is also part of Dreamweaver, Freehand and Flash package
  - Image Ready (Photoshop) creates and optimises web graphics

**CAD Suites:**
- Primavision (Lectra), Artworks (Gerber)
  - Software Suites is designed to meet the specific needs of the textile and apparel industry. Used primarily in fashion companies with long production runs for textile and fashion design, grading, pattern making, labeling, manufacturing, etc.

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The table above describes the software commonly used in the fashion industry. The latest computer technology is having a huge impact on the way fashion designs are being created. Powerful graphic software offers fashion designers simple tools and techniques to digitally produce their fashion designs and the capability needed to communicate with the fashion industry electronically. Consequently, this digital revolution has developed a growing market for enterprising fashion designers and illustrators who also possess creative computing skills.

CAD/CAM was initially developed as an interactive computer design system for the textile industry. It was then introduced into apparel for pattern making and grading and, more recently, for fashion design. There are a number of fashion software programs designed specifically for small businesses and freelance designers. Larger
apparel companies are more likely to use the powerful CAD apparel and textile suites. These suites have been developed to integrate all areas of the apparel manufacturing process from apparel and textile design, pattern making, grading, garment production to merchandising and data management. Consequently, the suites are expensive but they certainly enable large companies to achieve economies of scale.

The apparel industry can configure their software to meet the clients’ needs in any sectors of their apparel business. For example, on the fashion design side, graphic software such as CorelDRAW and Photoshop are compatible with the powerful CAD apparel and textile suites.

Graphic software in areas such as drawing, image editing, page layout and web design offers a multitude of tools and techniques. Designers can use these programs to sketch a simple technical line drawing of a basic sweater or a complicated jacket, creating fashion illustrations.

3.3.3 Presentation Skills

Effective presentations are very important for fashion designers to show their work to buyers or clients. One’s brain may be teeming with innovative ideas and one may produce the most original designs but none of this will matter if one is unable to communicate one’s vision. In the fashion industry, first impressions are really significant. One must ensure that presentations look as professional as possible - well mounted, organized, clean, clear, accurate and creatively appropriate.

Drawing skills and computers are tools for collating images in terms of theme, colour, illustration, fashion drawing boards, etc, for presentations. It is easy to rearrange layouts several times on computers, see the immediately results on screen, print them out and change them if alternations are necessary. Drawing is a tool for fashion designers to communicate their design ideas. Various presentation techniques and mounting methods are as follows:-

(A) Presentation Techniques

(i) Theme

The presentation should have a strong theme to capture the mood and a short title of typically three words. The theme may be determined by the fabrics.

(ii) Pose

Choose the appropriate pose for particular looks you wish to portray such as a
feminine pose for an elegant theme or a funky pose for a fashionable mood.

(iii) Various Figures

The presentation may require several figures to illustrate the final designs. The figures do not all have to be the same size – varying the scale can convey greater visual impact such as one large scale figure in the foreground can be dynamic.

(iv) Impact

Grouping large dynamic images rather than presenting them individually can give more visual impact. One should consider to present groups of figures and how they will work together. There is no rule that all groups have to be all on the same scale or appear to occupy the same airspace. Use contrast, light, shade and texture to enhance interest and dramatic effect.

(v) Enlarge and Crop Figures

Apart from the full length figures, cropping and enlarging the figures in the foreground with a group of smaller full length figures in the background also work well. Crop only if the lower part of the figure does not have any important design details.

(vi) Appropriate Text and Descriptions

When applying written descriptions or text to accompany ideas, plan carefully what shape of block your texts should be in and what style of writing should be used. The style of text should match the theme and/or drawing board. Clothing details, fabrics and colours may need brief descriptions. Handwriting is acceptable if it is legible and suits the presentation. A more professional approach would be to use computerised or transfer lettering.

(vii) Fabric

Prepare swatches to suit the presentation format. For instance, trim the fabric swatches using double-sided tape to prevent edges from fraying and adhere to paper or cut with zigzag shears in order to stop the edge from fraying.

(viii) Collage

Collage conveys a three-dimensional effect to your presentation – use anything from magazine clippings, photographs, various coloured or texture papers, clear film, transparency, computer generated images, feathers, sand, etc. Any elements that match your mood and enhance the spirit of the theme are encouraged to be considered for the presentation.
(B) Presentation Boards

Presentation boards should be mounted professionally and various mounted techniques are as follows:

(i) Window Mount

Cut the mounts out of cards with sharp knives and a steel rules. Fix the drawings at the back of the window mounts with adhesive tape. This is the least popular as the technique needs precision in cutting and extreme care to make a presentation look professional.

(ii) Flat Mount

Place the drawings on complementary coloured card boards and fix them with an adhesive spray or gum. Make sure, before fixing that, the drawings are in the correct position. Mark the cards with light pencil lines as a guide. Light weight cards are ideal for portfolios as they are more portable when it comes to weight. Boards are used more for display purposes where weight is not an issue.

(iii) Manual Drawing

Draw a border using ruled lines, painterly techniques, shapes, etc.

(iv) Plastic Folders (a sturdy portfolio)

Place the presentation boards in folders, displayed and fixed with gum on sheets of colored paper or thin cards. Displaying works in this way means that the works are protected when handled by examiners, buyers, agents or clients. You can display two drawings in one folder as they are double-sided. Sturdy portfolios are the safest and most efficient means of transporting works. Build up a collection of sturdy portfolios with the same sizes to house all your illustrations and presentations, avoid using a combination of different sizes, which can make your portfolio seem messy.

(C) Layout of Presentation Boards

Presentation boards are a professional way to display design concepts in a creative format. While being presented individually, sketches can look flat and boring. However, when all the right ingredients are mixed together in a well planned layout, the theme will be strong and extremely successful.

A good layout can be creative and is carefully planned, concentrating on what is the
The most important aspect of the artwork while secondary information and the mounting must never dominate. Everything that is absolutely vital to the presentation to get the message across should be laid down first. Then the extra follows. Do not overcrowd the presentation. Simple is the best.

The aim of presentation layout is to project the overall image of the fashion designs and to show the front and back view, descriptions and fabric samples of your designs. Before you begin to layout your sketches, make a series of quick sketches to explore the different ways in which the designs can be arranged. Good layout can make your work more interesting and often the layout enhances the mood and style of the designs.

Decide the suitable size, A3 size is the most popular size (L420mm x 297mm), texture and colour of paper that will best suit the purpose. On a separate sheet of paper, experiment to portray the textures and patterns of the fabric you have chosen for your garments. Also try out different colours on this sheet to achieve an exact match with the sample fabrics. For competitions, a particular size of drawing is often required. As a result, it is helpful to practice presentation drawing on a variety of sizes of paper.

Presenting the work in an elaborate way is not strictly required. The design of the presentation board should be explicit and drawn in such a manner that they put over your ideas clearly. Obviously, the better the drawings, the more attractive the design ideas will appear.
3.4 Fashion Design Process

3.4.1 Introduction

For commercial designers, working on a fashion collection involves a series of idea sketches, different themes and inspirations and various experiments of silhouettes, patterns, textures and colours.

Designers surround themselves with photographs that represent different ideas, fabric swatches and anything else that will stimulate creativity. They leave their studios and pay visit to theatres, retail shops and museums to seek for inspiration. They usually carry sketchbooks to jot down ideas whenever and wherever they find them.
Fashion Design Process

ANALYSE THE BRIEF
identifying needs

RESEARCH INSPIRATION
personal inspiration and concepts
(mood board / colour board)

RESEARCH DIRECTION (industrial designer)
trends, fashion forecasting, directional and comparative, trade show reports, retail and market research

CREATIVE PROCESS
- Ideasketch
- Design Development
- Production Drawing
- Presentation Drawing

Silhouette, texture, pattern, fabric, colour and principles of design

PRODUCTION OF PROTOTYPE
flat pattern cutting, toile modeling, structure and embellished

EVALUATION OF COLLECTION
chosen range or collection, decision making

PROMOTION
promotion graphic and photographic styling
3.4.2 Translate Observations into Inspirations

Awareness and perception are the keys to creativity and one must learn most of all to keep his/her eyes open, to develop their skills of observation, to absorb visual ideas and to translate inspirations into designs. Inspiration can come from anywhere and at any time, whether the source is a falling leaf from a tree or a splendid sunset. They must be aware of everything around them that can stimulate fashion ideas. These stimuli include nature, global events, technology, economics, political, demographics and social change. It is impossible to predict what will evoke an idea or which idea(s) may inspire a whole collection.

All designers collect visual images that are very personal. These images can be drawings, magazine cuttings or swatches of material. All designers should develop the habit of recording visual images that inspire them in sketch books. This will develop observation skills and a personal archive of experiment ideas and thoughts.

3.4.3 The Purpose and Importance of Using Sketch Books

It is important for designers to get used to using sketch books to build up their personal collection of creative ideas. Where do designers get inspiration? A good way to get inspired is to look around. Nature is an amazing design resource. Leaves, flowers, trees, snowflakes, ivy, fruits and vegetables can all inspire patterns on fabrics. Animals can also spark designs, like snake skin prints, dog and cat related designs. It is always important to observe things round. No one ever knows to what extent and how these things could influence fashion.

Another good way to get inspired is to visit museums. Styles from the forties might be in fashion in one year; the look of the sixties might be popular in another year. Fashion changes gradually within a slow moving fashion cycle.

3.4.4 First Stage - Analyse the Design Brief

When one starts a collection, one should have a very clear understanding of who one is designing for. Before work is begun, it is very important to understand exactly what is required for the client or a design project. Reading a brief and carefully dissecting it can make the difference between a success and a failure.
(A) Market and Specialties

One of the major considerations when designing is market suitability. There are different markets and specialties in the fashion industry of which the designers must be aware:

(i) Women's Wear

Women’s’ fashions change quicker than men's and children's. Styles and colours alter considerably from season to season, especially in the mass market. The women's wear market is saturated with designers and therefore highly competitive. The reason for this phenomenon is probably because the arena of women's wear is considered to allow not only more creativity but to be crucially more glamorous than other specialties of fashion.

(ii) Menswear

Men’s fashion tends to change more gradually than women’s. On the whole, men’s style and fashion colours are more conservative. Extreme styles can therefore be risky, unless you know your market very well. Men’s wear sales are also less significant. Most men usually will choose to buy clothes that are longer-lasting. In terms of what men and women wear on a day-to-day basis, men normally wear a less diverse range of garments when compared to women.

(iii) Children's Wear

Children’s wear design can be just as sophisticated and colourful as women's and men's wear. In addition, designers must consider safety and health considerations and the appropriateness of the garments in terms of hardwearing, washability and having its price not too expensive as children’s wear is quickly outgrown. Children’s wear includes clothes for newborn, toddlers, kids and teenage boys and girls.

(iv) Casual Wear

Casual wear is defined as everyday clothes that are not typically worn in a formal situation. Casual wear gained momentum in the 50s with the evolution of youth culture. Teenagers in the 50s did not want to look like their parents, so they started dressing up on their own way. Sportswear and underground urban style are the main influences on casual wear.

(v) Sportswear

Sportswear design is different from other areas of design that the design of
sportswear is almost entirely led by function, comfortability and well ventilation. It must perform in relation to a specific sport or activity. This has become an interesting area of design as fabric technology constantly evolves and sportswear is becoming increasingly fashionable in the contemporary fashion market. Sportswear does not simply aim for sports enthusiasts, its trends has the ability to affect mainstream fashion trends. This phenomenon is especially apparent in the design and distribution of trainers. A pair of functional trainers is adopted as a street trend, which in turn is picked up by other fashion products.

(vi) Jeans Wear

Jeans are actually a kind of trousers that are made of denim. Denim is a broad woven cotton cloth is usually dyed indigo blue. Originally worn as clothes for manual work, they became popular among teenagers in the 50s. Today, jeans are a truly international item of causal wear. It can be made to fit almost all occasions, all economic statues, all races, sexes, ages, countries and levels of people who identify with a casual, western lifestyle. Jeans are designed in numerous styles and colours. With developments in fabrics and washes every season, designers are constantly reinventing jeans wear products.

(vii) Eveningwear

Eveningwear is more formal than daywear. Even today, men’s eveningwear remains quite traditional while women’s eveningwear is limited only by the imagination. Eveningwear garments tend to be made of finer, more expensive and exclusive fabrics such as chiffon, silk, satin and taffeta. Eveningwear tends to transcend seasons and it is less easy to identify an evening gown from one year to the next.

(viii) Tailoring and Formal Dressing

Tailored clothes have more structure and fit than causal garments and specific skills are required when constructing the garments. Tailored garments are perceived as being formal and in many places of work, are considered to be the appropriate dress code.

(ix) Knitwear

Knitwear designers are really the only fashion designers that develop the fabric construction of the garment as well as its design as they are responsible for making the decisions about the yarn count, stitch, colours and right weight for season.

Design briefs including full information about the garments to be designed, e.g.
samples of fabric to be used in the production process. If no fabric samples are attached, designers are required to source suitable materials themselves. The information within a typical brief covers the following:

- The type(s) of garments to be designed. For example, women’s wear, menswear, eveningwear, lingerie, casual wear or knitwear.
- The occasions or activities they are intended for. For example, surfing, dancing, etc.
- The season.
- The fashion image required. For example, different age range, formal or informal style, etc.
- The price range.
- Title/Theme.
- Deadline

A designer who is already working in the industry, the clients might be companies of different types whose design requirements may vary enormously. Some fashion businesses may wish to have ideas which will help sell their existing ranges, requiring nothing revolutionary in design but to have their sound ideas renewed – others will want strong new trends.

If the brief is given orally and details are not given to the designer clearly enough or perhaps too vague, it is often because the client does not know what he really wants. Then one might need to ask the questions listed as follows:-

- What “Look” or “Brand Image” is required?
- Which season is the brief aiming for?
- Are there any magazines or labels that the clients need to refer to?
- For what types of outlets or markets are the garments to be designed?
- What limitations does the company or manufacture have with regard to machinery and production methods?
- At what price is the garment or outfit expected to sell?
- What is the deadline?
How much work is expected?

(B) Designing with Costs in Mind
The analysis of a brief should start with deconstruction. Breaking down a brief allows you to try to determine and identify what are the needs of the client. Briefs can often be ambiguous when the client attempts to describe what they may feel the issues are.

3.4.5 Second Stage - Research Inspiration
People often wonder how fashion designers manage to come up with so many innovative ideas. The truth is that these ideas are rarely completely new: designers create by reinventing the world around them.

As a general rule, when working on a new collection, designers need sources of inspiration to develop ideas. Inspiration can come from anywhere and at any time, whether the source is a falling leaf from a tree or a splendid sunset. Good researches automatically influence the development of garments ideas. These ideas can be completely original or they can be influenced by current trends.

Sources of inspiration may be related to designers’ personal experience. They can come from museums or post cards, from the Internet or family photographs. Many areas of research including paintings, flowers, architectures, furniture, raw materials or even films from different parts of the world could be used. They can be forever observing whilst on holidays, shopping, playing sport, in the street, reading magazines, visiting theatres, museum, exhibitions and flea markets, watching shows and films, etc.
In fact, fashion by definition is an expression of the times. For industrial designers, they should always have a finger on the pulse of the time: fashion trend, street style, sub-culture, files, music direction, etc. It is no coincidence that each fashion season has a discernible look; different designers often produce similar colour ranges and silhouettes because they are all aware of the broad trends. The entire industry, be it fabric mills, manufacturers, retailers and media, travels in herds on a prescribed circuit, attending the same trade shows.

**How to create a Mood and Colour Board**

Once the designers have collected sufficient images and ideas, it is then time to start the design development. They might be asked to do a “mood board” or “color board” in their design process. Creating a mood board is great fun and will help them be selective with the research they have gathered. This is the first stage of organising their thoughts and collected images, enabling them to channel their creative excitement towards a cohesive and targeted design outcome. Mood board or colour board are made by arranging images.

This is an important stage of the fashion design process. A “mood” is a state of mind, e.g. pleasure, contentment, sadness, frustration, etc. This state of mind is brought about by responses to a stimulus or series of stimuli. These responses can be on a variety of levels ranging from direct and immediate to slow, subtle and
subconscious. Often these responses are generated through associations including the colours which remind people of previous experiences.

For instance, seeing a group of vivid colours may remind the designers of a grouping of corals, these corals may have been seen in the ocean during a summer vocation. That memory may have been of a happy and relaxing experience, so their response to this group of vivid colours might enable them to create a happy and relaxing mood. Conversely, this group of colours might remind them of a grouping of flowers seen at the funeral of a close friend or relative, so their response might bring about a sad mood.
"A celebration of free-spirited feminine confidence. This trend embraces diversity, from a cultured effete to a pretty-in-casual attitude. For the colour, a bawny, bright palette is balanced by bone white and restrained dark shades of mud pie and walnut.,” from Pocsters Paris 2007S/S.

From the idea of Spirit, the floral patterns here becomes hispanic street art and tattoos, geometric ethnic, and oversized painterly blooms in 2007S/S.

"Punctuate naturals. Prefer a slight worn look, not too clean... Elaborate meshing midway between rustic and contemporary.,” from Pocsters Paris Inspiration 2007S/S.

From simplicity to eden, the combination of colours in blossom is carried from 2007 S/S. Yet, warm and earth tone colours are added. And the pattern turns into eden floral prints."
Mood boards should always present the mood or flavour of the design project as well as reflect the target customers. In the course of grouping the researched images, designers will have to make decisions about editing and prioritising their selection as well as confirming their season and colour palette. Colours also reflect their chosen season such as soft pastels will suggest a summer story but whatever the season, the colour palette should be applied consistently throughout the project.
A successful mood board, like the examples below, has a unique and direct message. It expresses the essence of the design ideas and mood, sums up the theme’s concerns.

Fig. 3.19 shows a distinctive futurist theme has been created in the following mood boards through an elective mix of metallic colour images.

![Mood boards example](image)

Fig 3.19  Examples of theme boards

Mood boards help you narrow down the following processes and develop the ideas. As key ideas become prioritised, a clear thought process evolves and the job of producing designs then becomes much simpler.

### 3.4.6 Third Stage - Research Direction

From the commercial approach, design needs to be informative and take into account the current and forward thinking development in fashion. As a result, it is essential that the content selected is right for that season. There is a variety of sources that can aid this intelligence-gathering process for industrial designers.
(A) Trends and Fashion Forecasting

Trends are affected by the continuing changes of global events, technology, economic, political, social, demographics factors as well as evolutions in lifestyle, media and retailing. They can provide essential design directions for industrial designers.

The success of forecasters relies on pinpointing trends and developing these trends for individual markets at the right time. This information is tapped and recorded by international correspondents and industries that provide up-to-date information from fashion capitals such as Paris, Milan, New York, London and Japan. Fashion shows are the traditional fountainheads of trends. Europe has been the traditional leader but USA has been the driving force in terms of lifestyle changes. Many industries use trend forecasting to predict relevant changes and plan product development. For example the influence of recycle, organic and ecology movement are the popular approaches to the existing fast-moving world.

For professional design teams, a lot of money is invested in fashion prediction information and services. These services are worthwhile business expenditure. They provide written reports on customers' lifestyle and profiles, street style, colour forecast, and accessory direction etc. They also show what new and established designers are presenting in all forms of fashion clothing and accessories. Some forecasting services specialise in predicting the fabric colours for two or four seasons ahead in order to ensure that the designated fabrics can be produced in time for fashion design teams who also work a season ahead.

The fashion design team within a company usually uses fashion forecasts, fabric and
colour predictions for the up-coming seasons. There are two main seasons in a fashion selling year – Spring/Summer and Autumn/Winter.

(B) Coverage of tradeshows and fabric fairs
Predictions can be found in major fabric fairs and trade shows such as the Premiere Vision Fabric Show in Paris, Shanghai and New York, the Interstoff Fabric Show in Frankfurt and Hong Kong, the Pitti Filati Yarn Show in Florence, the Moda In & Tessuto Accessory Show in Milan, etc.

(C) Retail reports and directional garments
Retail reports are conducted all over the world with a view to find “directional” garments in the retail sector. Production drawings of these can inform clients about what is happening elsewhere and how to make adaptation for their own market. The information includes in these retail reports are colour, fabrication, resource, designer, as well as detailed sketches of the updated garment.

(D) Original samples
Apart from fashion forecasting, fashion fairs, retail reports, original samples are bought from all over the world. The garments are analysed and illustrated as production drawings in publications. Prediction companies retain the sample garments so that clients may view proportion, detail, fabrication, colour or manufacture of these sample garments.
(E) Ready-to-wear fashion show

Analysing Europe, New York and Tokyo fashion show collections, looking at the seasonal developments of designers who are currently the most influential.

(F) Market research

All industrial designers are highly sensitive to competition in the market. A majority of designers do research on garments in retail shops in order to see and feel at first hand other designers’ work. This can involve travel to fashion capitals of the world.

(G) Fashion Internet and websites

Technological advances in new media have created a rich graphic resource and the ability to access global exchange in terms of visual information has revolutionised designers’ vision. The Internet is a tool for researching the latest fashions and trends - from fashion runway to street, from music to art movement.

The Internet is the international fashion Yellow Pages, an A to Z that is dedicated to fashion accessories, fashion runways, trend services, famous fashion designers, retail organizations, fabric and trends, stylists, wholesalers, make-up directions, PR agencies, etc, are listed below. Today, countless websites offer information on fashion. Almost every major brand, retailer and manufacturer has an official website of their own. (Fashion Computing – Design techniques and CAD, Sandra Burke, 2006)

- www..cottoninc.com: Great info– research and promotion of companies for cotton.
- www.doneger.com: Doneger Creative Services provides reporting and analysis on a fee basis for industry clients.
- www.fashionangel.com/angel: Fashion designers and magazines on the Net – updated daily, linked with FUK.
- www.fashioncenter.com: The New York City Fashion Center site features an interactive database of over 12 000 apparel-related companies, a map of the garment district and a trade show calendar.
- www.fashionguide.com: News and gossip from the entertainment world and reports from some of the leading names in fashion journalism.
- www.fashionmall.com: An international fashion industry Yellow Pages list from A to Z dedicated to fashion, update on collections, seasonal highlights
and what to wear.

- **www.fashion.net**: Great research site, hypertext links short cuts to other sites, fashion magazines and general industry news.

- **www.fashionplanet.com**: Virtual fashion windows of New York: Madison, 5th Avenues, etc, with weekly updates.

- **www.fashionsoops.com**: A practical tool that delivers professional and information from international runways, trade shows and retail scenes with in-depth analysis on up-coming trends in design themes, colours, key silhouettes, graphic and more.

- **www.fashionwindow.com**: Great site that lists fashion trends, runway shows and a calendar of events.

- **www.fgi.org**: The Fashion Group International's website that lists events and business information for members. The site’s “student center” gives information on fashion schools, internships and jobs. Their newsletters and meetings are another good source of information on current developments that take place in the fashion industry.

- **www.firstview.com**: First View is a fashion publication available on a fee basis with photos of latest fashion collections from New York, Paris, London and Milan.

- **www.fuk.co.uk**: A site with fashion news, shows, art, shopping and what is being worn on the streets in Britain.

- **www.global-color.com**: A forecasting company that provides information and inspiration on colours and trends.

- **www.infomat.com**: Information on services used by the fashion industry worldwide - from designers, publications to retail organisations.

- **www.londonfashionweek.co.uk**: Great catwalk shows.

- **www.modaitalia.com**: Fashion from Italy plus a lot more such as textile, beauty, fashion calendar, etc.

- **www.modeaparis.com**: Lists all members of the Federation Francais de La Couture in Paris.

- **www.promostly.com**: International design agency researching trends, selling
their books and products online.

- **www.thetrendreport.com**: A site on fashion runways, editorial and consumer buying.

- **www.style.com**: A site linked with Vogue and WWD; video and slide coverage of the latest designer fashion shows; celebrity style, trend reposts and fashion news.

- **www.vogue.com**: Vogue Magazine’s website covers designer collections with celebrity and behind-the-scenes features.

- **www.wgsn.com**: WGSN, Worth Global Style Network, provides online fashion news, trade show calendars and reports, ready-to-wear and couture collections and trend forecasts to businesses on a subscription basis.

- **www.wgsn-edu.com**: WGSN, Worth Global Style Network, free of charge version for students that provides news and reviews of the developing fashion and trends around the world.

- **www.widemedia.com/fashionuk**: Great graphics and fashion photography; features articles, profiles, trivia and giveaways.

- **www.wwd.com**: The online version of Women’s Wear Daily, the daily fashion industry newspaper.

### 3.4.7 Creative Process

The design process, which results in translate two-dimensional sketches into three-dimensional outcome, needs to consider all design elements such as silhouettes, textures, patterns, colours and principles of design.

These basic elements provide an initial framework which designers can expand into more complex design considerations.
(A) Idea Sketch

Idea sketches can help form design solution. Drawing is a tool to communicate design ideas. Designers draw sketches during trips, from films or exhibitions, while shopping or researching, from books, galleries or museums, etc. Sketchbooks can form a treasury of ideas to plunder – a “visual diary” of places, events, ideas, patterns, textures, shapes and colours.

Sketches can indicate underlying structure, possibilities, etc. These sketches are the designers’ way of putting ideas on paper in order for them not to forget and fix the ideas for future reference if needed. It is necessary to use proper proportion or special drawing techniques but the sketches must somehow inspire the designers and “spark” off further ideas. The sketches need not be in colour but it is helpful if designers write down the fabrication, colour and details for future reference.

Idea sketches are rough sketches simply for designers to write down the ideas that they think might be useful for further design development.
(B) Design Development

The next stage in working towards a design collection will be to explore the possibilities based on the idea sketches and to find a theme around which to develop. These are to be done on design development sketches. Design development is the selection of rough sketches of the designers to fully expand initial concepts. The process of drawing designers’ ideas not only does it record the thought process but, by constant experimentation, generates new ideas.

Designers will choose one or more ideas that are considered to be worth developing. By changing the fabrics, colours, details and silhouette of the ideas, designers try to explore the best possibilities and combination of different elements for certain ideas so as to reach a good design solution. They need to be able to communicate visually their ideas quickly and accurately. One way to do this is to use templates of figures or garment types which can be roughly traced over given that the designs are being changed and enhanced frequently in the process. This method can be inhibiting, however, as it may limit the development of silhouettes and viewpoints. Freehand design development becomes easier with practice.

Development sketches could be finished with or without colour, depending on the availability of suitable fabric samples.
When designers have confirmed the final design development, the next stage is to do a complete analytical working drawing. This kind of drawing is called production drawings.
(D) Presentation Drawing

After the production drawings are completed, presentation drawings should then be done. Presentation illustrations aim to attract buyers or clients to preview the final collection being putting on figures. The attractiveness of the illustrations much depends on the drawing technique of individual designer or illustrator. The use of colour is vital when presenting drawings; the colours presented on drawings must be as close as possible to the fabrics and textures used in the actual production process to give a life-like representation of the final garments.

Presentation drawings should contain complete figures wearing the garments in a suitable pose and feature showing the most attractive design interest. The figures
drawn should be completed with actual images of accessories to present the whole range of garments and colour coordination. The illustrations should be grouped with other sketches to form a presentation portfolio. Presentation portfolios are packages of the whole of design works. They give a full view of the whole design process. They are used at exhibitions or buyers' meetings for promotion and advertising purposes.
Draping sweater

The tulip skirt

Wool leggings

Skinny pants

The rustic long cardigan

Front zipped
3.4.8 Production of Prototype

In the design process, the translation of a two-dimensional drawn idea into a three-dimensional prototype is the essential procedure in the realisation of a garment design. After the sample room receives the production drawing(s) from the designer(s), the next step in the product development procedure is to make the first pattern, which will be used to cut and sew the prototype. The pattern is made in a sample size, the one used for testing and selling purposes. Pattern makers can use either flat-pattern cutting or toile modeling to make the pattern.

(A) Flat-pattern Cutting

Basic blocks such as bodices, sleeve, pants or skirts are drafted. Drafting is the process of blocking a set of prescribed measurements on paper. These patterns, once tested for accuracy, become “blocks” or “slopers” that can be changed or adapted to each new style through the moving of their darts and seams. The flat-pattern method uses angles, rulers and curves to change existing board patterns.

This method involves the cutting and seaming of fabrics in order to fit the figures. The system of pattern cutting has evolved over time in line with the development of mass production. This method involves the use of card board blocks that provide a well fitting shape. Patterns are then made into first samples or muslin toiles and the fit is
perfected on models. Blocks are developed to suit the prevailing fashionable body shapes and are purpose-built for the products that the companies wish to produce.

(B) Toile Modeling
Pattern makers or assistant designers use the “draping”, also known as “modeling” on the stand, to entail fitting toile fabrics such as calico or lightweight cotton muslin on dressmaking mannequins of the appropriate size or on real bodies. When the shapes and fits are correct, the toiles are removed and copied onto pattern papers or cards. Draping techniques work best with jersey fabrics and generous amounts of soft materials. They are also used to work fabrics ‘on the bias’, which means across the grain so that it moulds to the body shape and moves well.

This method is used mainly for eveningwear or couture dresses. It enables designers to see the proportions and lines of designs exactly as they will look on wearers. The designs are often altered as they develop on the form.

Good toiles save time later on when the garments are made in actual fabric but it is not necessary to make real pockets or put lining in toiles. This translation stage is one of the experimentation and evaluation stages. Prototypes of designs are made and fitted on mannequins or models; traditionally muslins or calicos are used. However, in mass production, this specific stage is usually carried out with intended fabrics and the samples created are called ‘first samples’. In some companies, dedicated ‘toilists’ are specialists whose sole job is to understand the drawings of designers and translate these into first prototypes.

(C) Structure
The next consideration is structure; most garments have some form of interlining in order to reinforce part of the garment such as the lapels, pockets, collars and cuffs. Interlinings are used in many ways to give support to delicate or loosely woven fabrics; they exaggerate the appearance of and create a different handle to fabrics.

(D) Details and Embellishments
Details form the decorative part of design, which include embellishment processes and design details that drift in and out of popularity. Once the fabrications are decided, the silhouette created forms the design. The next stage is to consider the details and embellishments. This stage is extremely important for the finish of a garment as the work done in this stage is often what makes the difference between higher-level designs and those of a lower market value. Embellishments give a more three-dimensional and decorative look than printing. Techniques for embellishment
include embroidery, appliqué, cutwork, beading, smocking and fabric manipulation. Details cover everything from fastenings, flying panels, flounce, pocket, collars, frills and cuffs to lining, piping, binding and gauge of actual stitching.

An outfit can have a dramatic silhouette and good lining but without great details or embellishments. In this case, the outfit may seem amateur and unresolved. Outfits that lack details can survive on the runway but will not bear close scrutiny. Details and embellishments in clothes are often the clincher when it comes to persuading consumers to part with their money.

Detailing is extremely important in men’s wear, where outlandish silhouette, fabric, line and pattern are off-putting to what is a largely conservative clientele. Using an embellishment in one area of a garment or the finishing of an edge can help differentiate garments designed by different designers.

3.4.9 Evaluation of Collection

After completing the individual garment design, the next stage is the consideration of the range plan and evaluation of the design.

(A) Range Plan

In addition to the decisions made on each individual garment, the balance of the range as a whole also needs to be considered. Fashion designers develop a whole range of related ideas to produce groups of garments that work not only as stand-alone outfits but also as a collection. A consistent approach to important factors such as colour, silhouette, fabric, pattern and proportion helps create this cohesion. Moreover, range planning involves the devising of the ratio of garments to be designed in any given collections such as a basic range may consists of two dresses, four pants, eight tops, three skirts, two blazers, four sweaters and two twin sets in four colour choices. Every collection needs to have colour and size breakdown of units so that customers can make right choices and be able to put together a combination of outfits. If more volume sales come from tops or blazers, then it makes sense to provide more of these in a given collection.

(B) Evaluate of the Design

In many fashion companies, the development of each new season’s collection is based upon the last season’s sale figures. Often it is difficult for designers to evaluate what elements of the designs have been successful as the communication between the designers and the end users is blocked by the wholesales in the retail processes. A particular executive suiting may sell well in Central but not in Tuen Mun; it may sell
well in warm weather, only at certain time in the season in certain colours or in particular positions within the store. All these different factors should be taken into consideration when it comes to the evaluation of any designs and collections.

(C) Promotion of the Range

The branding trend in recent years has become central to promoting and marketing fashion goods. The branding process requires the range to have a ‘name’. Producing a name requires some thought regarding the creative ideas of the range and how this can be interpreted into an evocative word or words. As designers, it is very important to stand apart from other brands and designers.
Learning and Teaching
References

1 Family and Lifestyle
2 Consumer Behaviour in Clothing Choices and Implications
3 Fashion Design Basics
4 Fibres and Fabrics
5 Clothing Technology
6 Culture and Fashion Design
7 Textiles and Textile Technology
8 Apparel Industry

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