The Rules of Different Types of Lines on Fashion Design  
(Analytical Research)  
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Abstract  
In this period of style and performance, everybody intends to introduce themselves as idealistic to the world. Human self-assurance is the main factor in demand to achieve the standard of life. But several times are what human love the most about a dress won’t be convenient for or acceptable to and look best on the body general feature. However due to human put on or lose weight that might lead to change the body shape and as far as the body becomes different throughout the passing years the self-confidence will decrease. In a different meaning, Unfavourable the body shape will act as a reducer confidence agent. Nowadays the global where situation regarded as unwelcome or harmful and needing to be dealt with body change to overcome every problem exists with its solution. In accordance with accepted rules or standards, body shapes could be illustrated as the required or desirable form, qualities, or characteristics; as good as it is possible as manipulation of lines. By creating optical illusions as an example of the human figure by viewers and will always make it look and feel the best with no matter the occasion and age. Dress style, therefore, will change in accordance to how to inspire visual balance in human body silhouette. The aim of this study is to emphasize the clothing design practices and the works performed on fashion design through the effect of types of lines. A line may be robust, hard or thin, soft or strict, moving in different trends, allowing observers to look upward and downward from one side to another, or to create an illusion of tightness or fullness, to dominate the curvature around the body. The effect of lines is a cornerstone of a designer to be equipped for fashion design. In the present study, we deal with straight, broken, zigzag, diagonal, curved folds and curves, mixed lines such as clusters and mixed lines. All of these lines are discussed with examples of the impressive part in the final image of the body. The effect of the line on fashion design analysed from documents such as pictures and web pages. The findings were analysed in terms of the characteristics of the dress and the design and the effects on the perceived eyes in the design of clothes.  

Keywords: Fashion design, straight lines, curved lines, zigzag lines, diagonal lines  

Introduction  
Zhu Fang (2016) [1] emphasized generally that the line refers to the skeleton or border of a section of clothing and the style lines that specify the space within its parts. It is a very multilateral and beneficial tool which its task for both visually and verbally. It is the line that will be driving to the eye in the direction where the garment line is animated and splits the areas through which it moves. Furthermore, it provides a separate point in space. Line defines the dark shape and outline of a garment and is used to transfer the disposition or the figure. Chen& Peng (2013) [2]; have showed that the line can inspire optical illusions such as width and height and make shapes look light, heavy, thicker or thinner depending on what the figure looks like [3].

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The next figures are showing some of different styles with different types of lines.

Fig (1) Naeem Khan Fall 2011 Ready-to-Wear fashion show on Vogue Runway showing elevated and diagonal line.

Fig (2) Nicolas Jebran Spring-summer 2013 – Couture showing diagonal line.

Fig (3) Matan Shaked showing (pleats). https://www.pinterest.com/pin/25966135338783129/

Fig (4) The Balenciaga Spring 2016 Ready-to-Wear fashion show on Vogue Runway showing gathering lines.

The wonderful issues are that a puffy part of the body can be unobserved with fantasy and overweight could be presented on some parts by adding some sort of construction lines as pleats, tucks, seams, necklines and stripes or even braids. Physiologically, lines fabricate the eyes distortion and monitoring the brain in such a way that the eyes move and confirm what is presented on the design (Mikellidou & Thompson (2014) [4].

Heavy line transmits vigorously and attention while fluffy line reveals stability and constancy in one’s figure. Lines could form an infinite number of concrete lineaments and each person has his own unique combination of these lines. Regarding the principal of conception suggested by Çağlayan & Kıvılcımlar (2014) [5]:

- conception varies from person to another’’;
- in conception, movement is fundamental
- in conception, people gathering information from their ambient in corresponds with their targets and needs” (Çağlayan, Korkmaz, and Öktem, 2014) [6]

In terms of art, the line is beholding as a moving dot. It has an everlasting number of uses in the invention of art. When lines come to assemble, the eyes go or come after and proceed ahead; move or travel behind what the image to the point at which they proceed and become a focal point making that part of a body look different. Conversely, when lines move away or spread from each other, the eyes pursue them to the end, which turns into a central point and fabricates body to appear broad. The concept, therefore, is to possess lines to come simultaneously together or shift away from each other to focus on that point on body deficiency that either seems to be smaller or wider as fig (5).
The sensuality sight, which shapes a human’s effects about the surrounding ambient, is an essential requirement for a person to understand and make a conception of that scenery, and therefore to establish a new relationship (İnceoğlu, 2010) [7]. The human eye has the power to see under the circumstances with light sources whatever strong or weak and to adjust itself to the position (Bayav, 2008) [8].

The problem of research and limits:
The conceptual frameworks with the combination of two different technical styles might produce modern and contemporary artworks.
For organising the experience of the research, the analytical approach should be used in monitoring and studying the concept of the rules of different types of lines on fashion design.

Research question
1. To what extent could be the meanings of life as an input to the integration of the rules of different types of lines on fashion design serve the body shape?
2. Should the field of fashion artworks combine with explaining the atheistic of different type of line could help the elegant of the dress model?

Research Importance
1. The research emphasises the relationship between the meaning of life Apart from analyzing the construction of a dress fashion trend, fashion designers have to understand
2. The fashion design principles for creating aesthetic values.
3. The types of line should meet the needs of the body figure group / occasion and be able to express the individuality as well as the creativity of the designer.

Research Goals
1. The research seeks to draw a shed light on the clothing design practices and the works performed on fashion design through the effect of types of lines.
2. The research supports the field of fashion designers and work in the college specifically in terms of experimental and formative terms that carry the methods of applying the principal design and the aesthetic innovated dimensions.
3. Associated with the meaning of life, the research develops aesthetic taste through the conceptual framework and dimensional types of the body as well as the diversity values.
4. The research opens the students' minds horizons to enter the world of art and its practice to be able to express feelings, thoughts and emotions by knowing the type of each line.
Search Limits
1. The work is meant mainly on student’s ready-made garment specially and the beginners of fashion designers in general.
2. To approve 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.
3. Emphasis on the body shape and Designers need to think about for whom they are designing, what type of garment they are developing and for what particular season(s).

Research hypotheses
1. The integration and synthesis between the different types of lines, renews, and extends the printing field in the college with modern and contemporary designs

Types of lines
It's therefore to define what is the line?
A line is an outstretched mark, the linkage between two points or the influence formed by the border of a something where there is no existing line on the border itself. Lines can be stumpy, lengthy, dense, superfine, stout-fluffy, silky, textured, cracked, influx, inattentive, dusky, illuminate, dark-light, ponderous, fine, robust, cheerful, ordered, even, changeable, calligraphic, trustworthy, tentative, unequal, disorganize, mixed, moving uniformly in one direction only, crooked, discontinuous, ghostly, beautiful and many many more. From the point of Geometrical, lines could be a such:
- A line is a route followed by a moving point.
- The line is an essential component of any artwork.
- Lines are geometrically determined and being a regular and hard or sharp edge.
- Lines seldom exist in nature but almost found in the man-made style.
- Lines transfer a feeling of order, correspondence, and accuracy.

Structural lines: -
- Are the fantasy that supplies the border and basic construction of the dress.
  A-line as fig (6), sheath Fig (7), empire Fig (8), as examples styles.
- Lines not only combine charm and details in the dress, but also their positioning.
- Kinds of lines permit a person to confirm on-demand or hide the puffed part.
- Such structures as tucks, gathers, pleats, princess seams or panels, hemlines, etc. That sort of design compiled to the dress structure as shown in Fig (9).
Structural lines are a paramount or crucial important part of the sketching process or fashion design for both traditional fashion models and high and complicated models and are used to help create balanced, symmetrical figures with proper allocation of weight when viewed from a particular point and to give the right impression of their height, width, depth, and position in relation to each other.
Printed Lines are indicated to the prints of fabric that designate many issues and assist to lookdowns, heavy, tall or short. A line however, is defined by its path and length where the eye tends to follow both of these, sending an impression to the brain. These various types as shown in fig (10) like Straight, Curved, Zigzag lines, etc.

- Straight Lines express the following:
  - Crisp, formal, classic or conservative
  - Stripes and Plaids
- Curved Lines express the following:
  - Circular, waved, softness
  - Gives a feeling of movement
- Zigzag Lines express the following:
  - Excitement, dramatic
  - Can be chaotic

Ruochun (2014) [9] the line not only represented by its shape but also by its size as fig (11A), such thin lines express fragile. They manifest easy to break or push down. They submit crispness and transfer a fashionable quality. They are however, rigorous and step out a fugacious air. On the other hand, a Thick line, fig (11B), seems hard to break. Submit vigor and give assertion to close elements whilst daring and introduce a representation. Wearing the wrong width and or direction, all of the sudden will look entirely too large or too small as not an appropriate image; Stripes, especially the horizontal assortment, have gotten many a deceived side-eye.
Peter and his colleague (2011) [10] explained that long-reviled the thin line can be figure-friendly, so long as to concern to the size. "The key is having a thin line, that's true for stripes going any direction." "Unsuitable or incorrectly stripes, a mix of angular, slanted and thin lines, create a contrast that can represent or bound the shape and reduce curves, Fig (12A, B, C). The line could monitor the viewer's eye as well as to characterize edges. Furthermore, it could specify form as well as movement.

In terms of drawing, it could also articulate the value and a light source. In terms of value or shading, it's extremely and typically visualize it utilize in the form of cross-hatching or hatching. Although these it may be argued, but the most popular forms of using the line for combine value, there is no end or limit number of ways that it could be used.

Tight horizontal and thin lines upon the hips and bust will originate a movement to illustrate what small curves might be there as fig (12D) (Scarboroug [11]. On the dress above fig(12E), the alternate black-and-white blocks will represent as being larger, greater, better, or worse than it really is. These regions start and finish giving the total impression of someone more sensitive .The phenomenon is known as the Helmholtz illusion (Saliha 2015) [12] & (nashwa2015) [13]. To test whether people are fundamentally divers from rectangles, some researchers directly tested whether horizontal thin lines make figures seem puffy. These horizontal stripes won’t make the figure look puffy. In fact, they may even make it thinner.
Hermann von Helmholtz [14] noted that such illusions, in which occupied space appear to be larger than unoccupied space, adding attention that ladies’ dresses with horizontal thin line make the figure look like taller. Another different of the geometric lines patterns with a particular inclination though. The soft and fine lines inspire simple figures on the various background produce some perfect printed patterns for suit jackets fig (13).

**Structural line**

Cornelissen and his colleagues (2009) [15] explained that these sort of lines detect the structure of the shape by representing the various levels where the illustrations promote the feeling of volume and magnitude as well as the arrangement. When structural line situated together in a group they can also illustrate the value or color framework fig (14).

Zhu(2013) [16] & Çileroğlu et al.(2014) [17] explained that the use of structural line as it is a decorative collection of line and practical segmentation. The functional line designed to
assemble the ornamental line design. Structural line difficulty, however, is bigger because it submits the requirements of the designer's aesthetic modeling design. Furthermore, it should also deal with the process application. So, the structural line is to recognize the clothing functional forms as well as its aesthetic. Functional line, however, is the basic establishing of clothing aesthetic.

**Horizontal lines**

Horizontal lines are analog to the horizon fig(15,A,B,C,D). Horizontal lines by their connection to the horizon are associated with earthbound things and idea. They look like recumbent at rest, and calm and quiet, restful and leisure whilst can’t fall over. They accentuate width and stable and secure. The convey an absence of conflict with a restful peace. Horizontal lines can’t fall over with protrude width. They’re steady and safe whilst transfer the absence of conflict with restful peace (Navneetkaur and vikasgupta(2012)[18]. By joining to the horizon as connected with steadfast things and concept. Horizontal lines display landscape as well as the horizon. Because the horizontal line goes from side to side like the horizon. They make the body look shorter or wider. They communicate an emotion of peacefulness, expansion, and stability.

![Fig (A)](image1) ![Fig (B)](image2) ![Fig (C)](image3) ![Fig (D)](image4)

Fig (A) fashion illustration of horizontal line.
Fig (B) Marc Jacobs Spring 2013 Ready-to-Wear fashion show.
Fig(C) Jean Paul Gaultier Spring 2011 Couture Collection.
Fig (D) Giambattista Valli Autumn/Winter 2014 Couture.

**Vertical lines**

The vertical line is referring to the vertical line in clothing pattern is linear. The vertical line is the straight line around clothing especially down the middle or along with the grain position. The front piece of a vertical line indicating the point from the shoulder, breast, and waist to hem, the back piece of a vertical line starts from the intersection between neck and shoulder blade, down to the waist to hem. Vertical lines are perpendicular to the horizon. They are filled with prospect power that could be liberated if they were to fall over whilst are vigorous and immobile. They can submit constancy, especially when dense. Vertical lines emerge height and transmit a lack of
movement, which is usually apparent as horizontal. Furthermore, they stretch from the ground to the sky and are often related to religious sensation.

Fig (16) Salvatore Ferragamo Fall 2016 Ready-to-Wear Fashion Show.
Fig (16B) Reinaldo Lourenco Ready to Wear Fall Winter 2016 Sao Paulo.
Fig (16C) Stylishplus Style. Round Neck Cutout Vertical Striped Belt Midi Skater Dress.
Fig (16D) Marc Jacobs Spring 2013 Ready-To-Wear.

Vertical lines display alert attention, communicate strength, power, and influences. They are loaded with potential vitality that could be released if they were to fall over. Vertical lines are strong and rigid. They can submit stability, especially when intensive. Vertical lines protrude height and transfer a lack of activity which is generally seen as horizontal. As soon as they spread from the earth to the heavens, they are often joined with spiritual emotions. They might give the feeling of respect whenever their heights and official proceeding.

**Horizontal with vertical lines**
Horizontal with vertical lines could be used together to submit stability, reveal durability, rigidity as well as consistency.

- Figure (17A). Shows the phenomena of Helmholtz Illusion; Liesbet 2014) [19,] and others [20,21]. The horizontal squared lines shows to be taller and narrower than the identical vertical squared lines).
- Figure (17 B, C, D, E). Examples of the human figures. Here the outline of the horizontal lines is showing wider than the elevation lines, but the vertically striped pattern makes the hips appear broader.
Actually humans have always animated on a horizontal level and for this reason, to realize the principal hazard zones, their optical capability is fundamentally steered sidelong, as a result of age-old inherited stress, it was found that the domain vision of human is much more overall in the horizontal direction than in the vertical. Bluhm [22] explained that Human motion is almost only horizontal, so it was realizing that the full value of the horizontal completely varies from the vertical. The horizontal is a particular dimensional which can govern, control, and track out. However, applying the Helmholtz illusion to fashionable dress the horizontal stripes won’t make the figure look fleshy.

**Zigzag line**

Zigzag lines are diagonal lines combined together and connected at points. Whilst the lines take on the dynamic and high energy characteristics of diagonal lines, they create excitement and intense movement as fig (18A). However, as they change direction quickly and frequently, they convey confusion and nervousness as fig (18B). Fig (18C) is pretty sundresses seem to the perfect staple and these sundresses can be styled in so many Chevron Printed fabrics. Furthermore, they can imply danger and destruction as they break down as fig (18D).

![Zigzag Lines](image1.jpg)  ![Zigzag Lines](image2.jpg)  ![Zigzag Lines](image3.jpg)  ![Zigzag Lines](image4.jpg)

**Fig (18)**

Zigzag lines therefore are not the vertical or the horizontal and transfer a sensation of motivation. Moreover, due to they are either motivated or to give the feeling of fall, printed lines in a diagonal position give the emotion of uneasy go

**Curved lines**

Curved lines are flexible and softer than straight lines but Stooped and directional changeable as fig (19A). Depending on how much the curve is bent, they express easy movement, giving the impression of calm or animated. The less energetic the curve the calmer the sensation as fig (19B).
Curved lines are Sweep and turn gracefully between endpoints. Although they are predictable but less definite than straight lines. Express sea wave's movement as well as can be calm or dynamic depending on how much they curve. The less energetic the curve is better the calmer sensation as fig (19B).

They extend and transform gracefully between end points as they are less specific and expected than straight lines. Although they bend and change direction but they can be quiet or motivated depending on the value curvature. However, The less energetic the curve the uneventful the sensation as fig (19D).

**Diagonal (Oblique) Lines**

Diagonal or oblique lines are those constitutional lines that proceed diagonally within a garment. They move angularly on a garment and move diagonally from one side to the other around the body, compiling some feeling of movement and optical impact on the design. Garment lines however, can also assemble and separate for another route to fulfill large influential directional.

The characteristics of Diagonal could be observed like: -

- Suddenly moving with sharp points or edge Fig (20A).
- For fun with no sever events Fig (20B).
- Can create an unsteady disorganized feeling if overused at Fig (20C).
Display activity with motivation at Fig (20D).
Transfer vigorous activity with dynamic progress, energy, and restoration.
Whilst the Diagonal lines are filled with restless and uncontrolled energy, they could appear to be either rising or falling and convey action and motion at fig (20E).
Furthermore, at rest against a vertical line or plane, diagonal lines with their kinetic energy and apparent movement create tension and excitement.
As far as Diagonal lines are more dramatic than either horizontal or vertical lines it could appear solid and unmoving if they are holding something up.

Results and conclusion
The line is one of the most basic elements of art. Increase the size and shape of the figure give a soft, gentle, youthful, charming, graceful and flowing feeling. The curved line is rounded, circular and also flattened out. They increase the size and shape of the figure. On the other hand, zigzag lines are a combination of diagonal lines joined at points where they take on it's characterized by constant change, activity, or progress and high strength with the vitality characteristics of diagonal lines. They create a feeling of great enthusiasm and eagerness accomplished with extreme force movement. The types of lines transport lack of understanding; uncertainty and disorder as they change direction quickly and repeatedly. They can strongly suggest the truth lines of the figures and destruction as they break down.
However, the outline of any figures, especially one representing or bounding the shape or form of the body lines will perform its edges, whilst, cross-contours describe form and body size. These lines can follow planes of form, producing strong emotion, especially sadness or sympathy around and across the body as well as through them. Cross body contour lines are very much explaining how much the shape and figure could be approached. Eventually, the lines with its different types could reflect the movement of eyes in and around what is being seen. However, the proceeding of the work, implementation and results has been asserted its hypotheses, objectives and limits.

References
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