



## **Demonstrate the characteristics of the tactile values of plastic art in women's fashion designs**

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### **Abstract**

Texture is an important element of the plastic artwork, and the artist paid attention to the value of texture as an aesthetic and expressive value. The research aims to reveal the employment of texture in women's fashion by identifying the expressive and aesthetic aspects of this element in fine art, and identifying the different methods of treating this element and its impact on motivating those interested in the field of women's fashion designs, Hence, the research was directed to study the topic (showing the characteristics of the tactile values of fine art in women's fashion designs), which deals with the research problem based on the imposition of the following question:

What are the characteristics of tactile values that can be highlighted through plastic art?

The aim of the research included employing the characteristics of the tactile values of plastic art in order to enrich the designs of women's fashion.

As for the limits of the research, they were limited to the adoption of women's fashion completed within the time period (2022) and available in the markets of different origin, according to selection considerations and within the limits of the research and its procedures, The theoretical framework dealt with the characteristics of tangible values between women's fashion designs and plastic art.

The research procedures were determined by taking the descriptive approach to analyze the samples of the three (3) models, and their selection was according to what serves the objectives of the research. The researcher reached the most important conclusions as follows:

The tactile variables are realized as a conditional act resulting from the method of printing and weaving with multiple patterns or through the effectiveness of the light values and their effects on the design building due to the contrasts between the dark and light spaces that achieve a sense of the space depth of women's fashion.

### **Keywords**

texture values. Fine Art. Fashion design

- **Research Methodology –**

**1-1- Research Problem: Problem of Research**

The tactile qualities of fine art are a formative feature and a communicative base that highlights the aesthetics of the general composition by controlling the visual perception of shapes and bodies, the type of artistic methods used in their designs, and the aesthetic impact of the formal phenotypic qualities, which constitute one of the most important visual and sensory stimuli that arise from organizing the general context of the composition of the painting in Homogeneous unit (Rishan, 2016; Heiets & Prakittachakul, 2020), Women's fashion fabrics are also consumer products that are indispensable to humans because of their utilitarian value as well as their aesthetic value that expresses through their designs all aspects of society, as they are affected, like the rest of the other arts, in terms of manifestation, aesthetic and utilitarianism to derive their design units from those data. Based on the foregoing and by looking at a group of women's fashion designs, I found a problem in deepening the concept of the relationship between the art of women's fashion designs and the art of plastic art by showing the characteristics of the tactile values of plastic art and its applications in modern designs of women's fashion. Through this, the researcher was able to summarize the research problem based on the following questions:

**1-** Does the fashion design process fulfill the requirements of highlighting the characteristics of the tactile values of fine art?

**1-2- Significance of Research Significance:**

The importance of the research is summarized below

The research may contribute to the possibility of developing women's fashion designs in form and content by showing the overall design context as studied steps based on formal formations and their structural relations and placing them in front of interested and specialists.

**1-3- Research objective: Aim of Research**

Employing the characteristics of the tactile values of plastic art in order to enrich women's fashion designs.

**1-4- Limitations of the search:**

Women's fashion available in the local markets of different origins, according to selection considerations and within the limits and procedures of the research, in line with the requirements of the research. Completed within the time period (2021-2022).

**1-5- Defining Terminologies**

The terms were defined in relation to the search, as follows:

**1-Tactile values:** Texture is “one of the five outward senses, and it is an imparting force in the nerves through which heat, humidity and roughness are perceived” (Al-Zayyat, 2000; Kelleci & Taşkın, 2020). Texture is “the surface characteristics of materials in terms of their roughness, smoothness, hardness or ductility” (Al-Adly, 2011, p. 267), And the effect of tactile values on the surface properties of materials is a result of the nature of the composition of those materials. The texture has a great impact on the artwork, as it gives the artwork a wide innovative diversity, as the perception of texture is also achieved through visual vision. Texture is one of the “important elements in design as it constitutes the desired effect in addition to its relationship with other structural elements in the visual field” (Al-Adly, 2011; Khalaf & Alajani, 2021).

**2- Plastic art:** “The term plastic art, or visual art, refers to the various creations that can be seen, including artistic paintings and others. It was good or bad, and these art forms are very common and diverse, and among the visual arts are decorative arts.” (Rishan, 2016, p. 17). Plastic arts are divided into two-dimensional art such as drawing and photography, or three-dimensional art. Such as sculpture, ceramics, and mosaic arts, which reproduce visual reality with varying degrees of sensory accuracy.

**3 Fashion design:** Fashion design is defined as “an art of applied arts specialized in clothing design, which is an innovative and renewable entity in its lines, color spaces and various raw materials, with which the fashion designer tries to translate the elements of composition into a modern design and coexist with the conditions of reality in a formative manner. It is an additional process, the purpose of which is to create a new work that performs several functions, including the physical and the aesthetic, meaning that the design process is an innovative work that achieves its purpose by adding something new” (Al Yaghi, 1995, p. 23).

### **(Theoretical framework)**

#### **Characteristics of tactile values between women's fashion designs and plastic art:.**

Surface touching is one of the elements of artistic formation with a variable value, as it is characterized by the achievement of contrasting processes between the components of the artwork, and even gives it richness and beauty. The tactile values are one of the pillars that produce the visual illusion, leading the eye movement towards the various visual stimuli and the different forces in the design output, because “the effectiveness of the visual tension resulting from the multiplicity of variations in the texture comes as a high point of attraction towards a part” (Al-Adly, 2011, p. 271). Therefore, we find that the designer's innovative ability to activate the texture and its diversity is in fact creating a state of visual balance for the attractive forces and realizing their objective unity. When research refers to tactile values, it does not refer to a specific level of it, but rather to the

characteristics of those values in which perception is sequential according to the degree and type of texture that occurs in fashion design. "which is an integrated system of structural elements that are harmonious with each other according to the foundations of organization to establish design relationships that serve a specific functional goal" (Al-Sayed, 2004, p. 41), The study of one of the design elements, which is texture, by analysis and dealing with the techniques of its implementation, and then carrying out a process of blending these techniques to reach new and updated formulations of tactile values. The texture is closely related to the material in terms of employment, and what gives it significance and diversity in the use of the material within the artwork. The material and its type is an essential factor in the design process for the differences of the material elements and their final treatment in the tactile manifestation and the extent of suitability "Each type of fabric has a particularity in the weaving composition, the raw materials, the methods of display, and the preparation, to confirm the proportionality of the shape and the external design line and the extent of its suitability with the outfit" (Al-Yaghi, 1995, p. 95), Textiles with a rough texture appear heavier than they are and increase the size of the body and are consistent with their roughness and thickness as well as in a strong texture, despite their ability to hide physical defects, while the soft texture will not have an effect on the appearance of the body as long as it is not shiny. (Al-Ani, 2002, p. 82). Thus, texture constitutes a visual effect through the material and its relationship to color and the light values falling on it. The material and its techniques used in two-dimensional arts, such as drawing or three-dimensionality, such as mosaic art, have an impact on showing the tactile qualities of the shape. The materials used are diverse collections, each with its own effect, and each with its own natural characteristics, and each cell has its own distinct texture. The artist must be familiar with the properties of these materials to benefit from them, as they are an endless source of inspiration, and their colors and tactile value may suggest several innovations. Just as the material and the material are closely related to the tactile values, the expression is linked to the characteristic of the texture and its diversity within the artwork, such as the importance of the material, the shape and the color. And the expressive content of any action is not on what it is except because of the material elements or the formal organization, and the theme, which is the elements that lead to the formation of the special action." (Hosseini, 2002, p. 134). And the technology is one of the important pillars in the research of touch and diversity, like three-dimensional printing, but it is closely related to the presence and diversity of touch. As you know, technology is "the systematic application of scientific knowledge and the systematic processing of art. It is the means that has an additional effect on the content and form and uses it for the benefit of creative artistic work" (Reshan, 2016, page 57). Technology is a formative or design verb that results in a visible artistic effect during execution, as technology is one of the most important means of expression that the designer relies on for the effect of the design work.

**The tactile values of fabric designs are classified into the following”  
(Al-Adly, 2011, p. 249):**

- 1- According to the degree (smooth - fine - medium - coarse)
- 2- According to the regularity (regular - irregular)
- 3- By type (real - illusory)

The real tactile values are those whose physical surface is tested, identified and distinguished by the sense of touch, as well as the clarity of their elements through their visual appearance. It is based on its perceptual effect on the visual appearance only of the areas of flat two-dimensional materials, free of tangible stereotype. Where their characteristics can be distinguished depending on the color and formal features and the interpretation of the light effects they reflect” (Nicholas, 1988, p. 72). Accordingly, the display of tactile values is based on the designer’s knowledge of the capabilities of this element and its relationship with other elements. The basic design of women’s fashion is based on It is proportional to the shape, colour, material and texture of the component The applied fields of plastic art have also varied, as it is an art with expressive, artistic and aesthetic connotations, on the basis of which the integrated design idea is formulated, which takes its way to representation in those fields that are affected and affect each other with the aim of reaching a state through which it confirms that it is an art and a creative activity. "The principle of plastic art is based in general on three-dimensional formations in multiple shapes, such as a human, animal, or any other abstract form, through solid materials such as wood, rocks, metal pieces, even candles, etc., by forming them, sculpting them, welding them, and installing their parts together. some” (Rishan, 2016, pg. 49).

And to shed light on the three-dimensional plastic art that corresponds to the topic of the research. The researcher decided to take mosaic art as a model of plastic art to ensure the delivery of the idea of research without prolonging and pluralism in delving into the details of plastic art. Because the research deals with the tactile properties of this art and its applications on women's fashion (the origin of the research). As the concept of mosaic has become closely associated with tactile values, it requires many artistic and scientific points of view in analyzing the meaning of mosaic and the concept associated with it. The designers have paid great attention to showing the tactile values of mosaic because of its many possibilities that contribute to the display of new techniques that open wide horizons to embody the unfamiliar in artistic designs, whether in the field of architecture or interior design, as mosaic is one of the creative methods in its designs in order to achieve its “physical concept that enhances interaction.” between the essence of the subject, form and matter” (Al-Sheikhly, 2000, p. 117).

And because the shape in the mosaic represents a physical external appearance that affects the visual environment, making it possess certain characteristics, which depend on showing them on techniques and processors related to the directive methods of design. And the technical method on the other

hand" (Al-Adly, 2011, p. 53), Mosaic art is one of the arts that can be included in the formulation of the formation of the shape in the fashion designs, the subject of the research, as the artist embodies his expressive method and his vision of what is on his mind from many meanings, taking from the formal and color elements of that art as his way to bring out the artistic achievement (design). Which ultimately raises the human stimuli that the recipient feels for the aesthetic values resulting from the tactile influences in the design.

Among the most important influences that enhance and activate the parts of the design work in a reciprocal relationship with the design idea resulting from showing the tactile values of the mosaic are:

**1- Color effects:** These effects include the basic characteristics of color, which are the origin, value, and degree of color. The texture is related to the optical properties, so we see that it is an important element among the basic elements that affect the color. "The color of a bright red piece of plastic is different from the fabric of red wool or red silk...even if the origin of the color of both of them is identical" (Nicholas, 1988, p. 207)

**2-Animation effects:** They are the effects resulting from the change in the values of one of the elements, such as shape and size, and represent (the characteristic synonymous with the change from the assembly and slicing process) . (Teresa,2012,p58)

**3-Touch processors.** The tactile treatments are one of the most prominent features of mosaic art, which appears as an attribute (its compositions gain from the type of raw material and from the techniques of implementation that are performed on it) (Elain, 2011, p106). In order to show the characteristics of the tactile values of fine art and their projections in the design process of women's fashion as a visual stimulus leading to the communication process in terms of visual tension and drawing the attention of the recipient, it must be emphasized that these values are organized with color and its qualities and the organization of the form, its positions, distances and lines formed for its visual body, and this requires knowledge of what are the constructive techniques of fashion. For women, which starts from the initial preparations for the raw material fibers to the final preparation of the product, so showing the characteristics of the tactile values of women's fashion depends on the type of fabric, the material it consists of, and the suitability for implementing the design, in addition to the importance of the printing process. Therefore, modern printing is the best technology to show the third dimension, which is the most important pillar for showing texture. And based on the foregoing, plastic art is art and fashion design, both of which are arts, and the fact that the two draw from the same resource, which is art, makes their blending an image of creativity, and creativity needs diversification, insight, innovation and a conjugal ability to achieve the dimensions of the artwork and how to taste it. In order for the designer to be creative, he must choose and invent distinctive elements and organize and arrange them in a new and unique way, making use of all his imaginative abilities, skills, culture and ability to express, and to be familiar

with all the basic foundations and rules for designing women's fashion designs, methods of implementation, and the mechanism of dyeing, printing, or weaving that helps to Understand how designs are implemented and produced in the required final form

### **Theoretical framework indicators.**

Based on the foregoing, the researcher came up with a set of theoretical indicators that can form axes and entrances to the analysis processes that can be used in achieving the research objectives, which are as follows:-

- 1-** The study of one of the elements of design, which is texture, by analysis and dealing with the techniques of its implementation, and then carrying out a process of mixing these techniques to reach new and updated formulations of tactile values, which leads to enriching the surface of the artistic work by combining both the sense resulting from touch and the sense resulting from visual perception together.
- 2-** Material and material are closely related to tactile values, each of which depends on the other.
- 3-** The tactile values of fabric designs are classified according to degree to (smooth - fine - medium - coarse), according to regularity to (regular - irregular) and according to type to (real - imaginary). These values can be extracted from the plastic arts and enrich the fashion designs with them.
- 4-** Mosaic art is one of the plastic arts and represents a physical manifestation that affects the visual environment, making it possess certain characteristics, which depend on techniques and processors to show the characteristics of tactile values in mosaic works.
- 5-** Controlling the visual perception of shapes and bodies are all factors that help to show the characteristics of the tactile values of plastic art in women's fashion designs.
- 6-** Color, kinetic, and tactile effects are among the most important influences that show tactile values and that enhance and activate parts of the design work in a reciprocal relationship with the design idea.
- 7-** The design unit, in terms of its shape and composition, has an effective impact on the effectiveness of showing the characteristics of tactile values, whether they are in brightness and intensity or decrease and darkness to establish high-attraction areas and foci according to the design requirements when compared.
- 8-** The synthetic construction of woven fabrics allows achieving the tactile values of fashion, as there is a close relationship between the texture, the type of material and the method of weaving in order to achieve these values.
- 9-** In woven fabric, the 3D printing method has a great impact in showing the tactile values of women's fashion designs.

- **Search procedures –**

**3-1- Research Methodology:** The researcher adopted the descriptive analytical approach, which “is an important scientific approach, as it diagnoses the researched phenomenon scientifically by analyzing the information, its accuracy, the breadth of its content, and its consistency with the subject of the current study, and its adoption in analyzing the sample in order to achieve results that support the objectives of the research” (Al-Zoba’i, 1988). , p. 48).

**3-2- Research community and its sample:** The current research community consists of women's fashion designs that were obtained from local markets, in line with the requirements of the research. The research community's three (3) design models. The researcher considered the following paragraphs in the context of choosing the research community and its sample

- 1- The epithelial diversity of tactile values.
- 2- Technical of the materials used.
- 3- The show diversity of fashion designs.

**3-3- Research Tool:** For the purpose of reaching the research goal, a form was prepared for determining the axes of analysis, including the most important results of the indicators of the theoretical framework. Make the necessary adjustments.

**4-3- Validity and stability of the tool:** For the purpose of ascertaining the apparent honesty of the research tool, samples of the analysis were presented to a number of experts and specialists in the design and design of fabrics, and it was agreed between the paragraphs of the form for determining the analytical axes and the analytical level by 91% after making the necessary adjustments.

**5.3- Analyze the models**



Model 1General Description :

**Functionality: (women's dress)**

**Material: Mixed (synthetic, natural)**

**Colors: black, blue, green, light brown.**

**Design vocabulary: engineering and**

**animal vocabulary form the building block of design**

**Structural composition of the formation:** The designer relied on arranging geometric shapes (black and green triangles) using the method of repeated paving within the light brown strip as one of the known methods in mosaic design, as these vocabulary were arranged in a way of exchanging directions within the effectiveness of diversity, achieving the effectiveness of cutting. With regard to vocabulary sizes, the design relied on choosing three sizes for small vocabulary, to highlight the subtle features of the point vocabulary and the average one to represent the shape of the geometric word, as well as the large one to highlight the animal vocabulary in the design. The design showed spacing between the geometric shapes and the black points, achieving the effectiveness of spacing and truncation within the mosaic underlining method.

**Characteristics of tactile values:** The model showed the aesthetics of tactile values by showing two types of textures according to their degrees between the soft that formed most of the design and the medium that resulted from the method of deep weaving of the areas of light brown and blue lines distributed irregularly on the outer surface of the design. It also showed The model The interaction of color with shape and space in the woven fabric to achieve illusionary touches that appeared clearly through the overlapping of green and black color, which generated light and dark areas resulting from formal and color relationships that contributed to the general construction of the design in achieving different tactile values that led to a sense of the third dimension or space depth, which Achieved visual pull for design work

**Structural elements - the phenotypical characteristics:** It is noted through the model that the designer relied on diversity in the thickness and color of the line and in dividing the total area, as the design space was divided into areas of varying width to break the monotony resulting from the repetition of the horizontal line, and the designer's dependence on the diversity of shapes and their small size. And their agglutination with each other, and this is a feature of mosaic art, as the geometrical shape of the square, triangle and rhombus is repeated and regular, and the color element appears through the black and green of the geometric shapes. And the attraction of the woven fabric, and the effectiveness of the texture appeared as a result of the act of weaving the prominent cloth within the accidental danger in blue, in turn, the movement and vitality.



Model 2 General Description: Functionality:

**(Women's Dress, Long Sleeve)**

**Material: natural (wool)**

**Colors: blue, yellow, black..**

**Design Vocabulary: The engineering vocabulary constitutes the basic structural unit in design.**

**Structural composition of the formation**: The designer relied on the arrangement of geometric shapes as an expressive medium through which the artistic contents of the mosaic and the effectiveness of the work output and its general form are embodied, as the geometric shapes (circles) of black color were arranged using the paving method as one of the known methods in mosaic design. And the arrangement of circular and axed shapes in a manner of volumetric consistency within the horizontal and longitudinal axis of the design, achieving one of the methods of mosaic art, and separating these design units by lines of yellow color, taking advantage of the space of the cloth, through which the designer tried to show those design units in a single body that together form the general component of the design. The outer surface of the costume is characterized by the multiplicity of levels of the third dimension within the concept of leveling as one of the methods of displaying the mosaic. The design showed spacing between the geometric shapes, achieving the effectiveness of spacing and truncation within the mosaic underlining method.

**Characteristics of tactile values:** The model showed the aesthetics of tactile values by showing the touches according to their degrees between the soft that represents the cloth floor and between the medium and coarse according to the size of the circles that represent most of the outer surface of the design. The designer was able to influence the attraction of the direction of the eye by creating a visual sequence in succession of tactile values that are regular in their type and vary in degrees.

**Structural elements/formal appearance traits:** It is noted through the model that the designer relied on the contrast in the color of the design unit with the cloth floor and in dividing the total space, as the design space was divided into different areas of monotony resulting from the repetition of the horizontal and vertical line, and the designer's dependence on the diversity of its size and its compactness With each other, this is a feature of mosaic art, as circular shapes are repetitive and regular The color element of the geometric and axed shapes has increased the strength of its appearance, the yellow color of the floor on the one hand, and the effectiveness of the optical values on the other hand, in achieving the visual tension and attraction of the cloth. of visual diversity.



Model 3General Description :

**Functionality: (women's blouse, long sleeve).**

**Material: natural (cotton).**

**Colours: white.**

**Design Vocabulary: The (engineering)**

**vocabulary constitutes the building block of design**

**Structural composition of the formation:** This model is a representation of the demonstrative methods of mosaic art, as it is an engineering work that depends on the derivations of primary geometric shapes such as the square and the triangle in the recurring and directional paving style, which results in decorative forms executed in a mosaic style similar to the style (Arab rakes) which the countries of the Maghreb and Andalusia are famous for. Where the effectiveness of the slicing represented by the hollow spaces in the design and the relationship of juxtaposition and frequent paving within the vertical strip becomes clear as a conditional product of one of the well-known methods in mosaic design. Between the geometric shapes, achieving the effectiveness of the spacing within the mosaic underlining method, and the outer surface of the costume is characterized by multiple levels, and the third dimension of the design appeared within the effectiveness of the leveling through the structural techniques of the cloth, as the hollow spaces represent the case of the formal exchange between the shape of the shape and the space it occupies in order to achieve a change in the surface level To design in a creative, artistic and aesthetic style.

**Characteristics of tactile values:** The model showed the aesthetics of tactile values by showing two types of touches according to their degrees between the medium that formed the chest area, the design and the roughness that resulted from the method of knitting the sleeves and the bottom of the blouse. The main characteristic, as there was no need to show delusional textures of the design because it was based on the white color only, as well because the rough texture is the dominant element of the outer surface of the dress.

**Structural elements/morphological features:**

The designer benefited from the effectiveness of the knitting technique to come up with hollow shapes to decorate the space (the blouse) and to show the tactile values through the decoratively modified and hollow shapes distributed on the chest and sleeves area. Longitudinal ornamentation granted straightness and longitudinal extension to the wearer. The designer also benefited from the feature of unloading the design shapes to show the color of the body under the blouse, thus achieving a formal and chromatic diversity according to the background color under the blouse, as the blouse was sewn in one color (white) and taking advantage of The clothes under (the blouse) to achieve aesthetic dimensions of the artwork.

**- Results and conclusions -**

**4-1- Conclusions:**

**In light of the research results, the researcher concludes the following:**

- 1- Women's fashion designs depend primarily on the type of material according to the type of fibers from which the cloth is made, and that the difference in fibers is due to their different sources, which are factors that helped to show the tactile values in those fabrics.
- 2- Most of the designs relied on the familiarity of the shape of the geometric vocabulary and giving it preference to represent the real dimension of the design idea, which made other vocabulary have secondary importance in the proportion of their appearance in the design, due to the dependence of those vocabulary on the standard proportions that are compatible with the techniques of showing texture that depend on regular geometric relationships. It is stable and characterized by stability, symmetry, and direct connection with the color of the dyed thread, which can be shown in a certain location and hidden in another, in order to achieve the geometrical form of the word and to show the tactile values in those fabrics.
- 3- The engineering method, which is characterized by its rigidity and formations, is the predominant method in the designs that have been discussed due to its ease of organization and greater freedom of movement paths and directions among the vocabulary, which gives the work a kinetic diversity distinct from others.
- 4- The method of formal cutting, which is the most important method in showing plastic art in high proportions in proportion to the emergence of engineering vocabulary in the samples, appeared as one of the artistic treatments to preserve the features and characteristics of those vocabulary, which achieves the fragmentation of spaces and shapes with lines of varying thickness and color that give the design the ability to show tactile values. And other visual methods of plastic art appeared in similar or close proportions as a result of the requirement of the slicing method.
- 5- The knitting technique is one of the exemplary techniques for designs of women's fashion, and the knitting pattern (the justice) is the effective pattern as a checker for the technical treatments in forming and employing the phenotypical characteristics of the designs of knitted fabrics, while the other patterns of knitting that appeared in the samples achieve tactile variables and visual effects in the design output.
- 6- The results show the adoption of the linear activity in the form of formal formations or kinetic directional paths that work as a structural composition in dividing the total design space, consisting of closed basic units, which indicates that the effectiveness of the lines has an impact in showing tactile values as a product that corresponds to the possibilities of its employment in woven fabric designs. .

7- The tactile variables were realized as a conditional act resulting from the modern dyeing method and knitting with multiple patterns or through the effectiveness of the light values and their effects on the design building due to the contrasts between the dark and the luminous spaces, which achieve a sense of the spatial depth of the design.

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