

## **Creating 3D designs using derived design elements as an innovative vision for design and molding on the miniature mannequin in the light of the Corona crisis**

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### **An introduction:**

The design consists of vocabularies chosen by the designer with what he/she sees for achieving the goal he/she seeks, then they deal with them and employ them to express what they want (2016-572). The derived design elements were used in various fields of fashion with their various functions, so these elements appeared in many forms, including printed, stereoscopic and embroidered, or through special combinations to bear an atmosphere of aesthetic and functional excitement in many periods of fashion, which proves their success and continuity, and whenever students in the field of design experiment on these elements increase the designer's innovative artistic output (Iman Al-Mihi - 2019-185). A design is a creative process that aims to develop solutions to meet urgent needs under special circumstances that impose specific conditions on us, and those solutions are affected by the cultural and visual inventory and the quantity of knowledge of the designer, taking into account the needs of the recipient as well as the surrounding environment. (Hussein Hajjaj - 2016-570) The concept of design has differed in contemporary arts, so it accepts multiple materials and techniques in order to achieve different concepts, ideas and expressive and plastic values that keep pace with technological progress in our current era. Three-dimensional design is like any work that is subjected to the artists' style and their free artistic thinking, and what distinguishes it from its own philosophy that refers to transformations in societies and technological, cultural and aesthetic developments" (Rajaa Fargh- 2017-187). The design building is a law on the basis of which the component parts of the technical work body are organized, and the designer, during the construction of his designs, searches, analysis, and formulation of its elements to achieve systems and proportional relationships between the elements that operate according to a special law governing them, so they overlap in a multi-level structural system with tight implementation. (Hassan Hajjaj and others - 2016) Confirming that the content of the design is the selection of the idea, the style, the material, the method of implementation, bearing in mind that the idea comes out through the materials used and the technique implemented by the design. Since the mannequin is a source that leads the designer to invent many designs and helps him to highlight his skill in moving and manipulating fabrics and materials to translate what he has in mind of ideas into tangible reality for designs on the mannequin, the mannequin in its shape, surface and rotation is a valuable tool for expressing what is raging in the designer's thought of creations. (Najwa

Shoukry and others-2012-9) The two researchers saw the need to take advantage of the derived design elements in creating decorative designs that suggest the third dimension, with the embodiment of these three-dimensional designs on the fabric of various materials that carry an atmosphere of excitement and give many aesthetic and functional values such as concealing some physical defects, while adapting them to design and formation on the mannequin and in line with the epidemic that left fingerprints on the world of fashion and according to what Micha Prada, chief designer of the Prada fashion house had said in the virtual show in Milan: "Fashion arises as a reaction to reality." The two researchers used the mini-mannequin with a new and innovative idea in light of the Corona crisis to implement it, in order to maintain social distancing and avoid mixing, and from here we can say that we have provided an innovative solution to present many new and innovative ideas in the field of fashion on these mannequins for ease of use and without the need for fashion shows using models while greatly reducing the cost of implementation.

#### **Research problem:**

- 1- What is the possibility of creating 3D stereoscopic decorative designs on fabric from different materials and using derived design elements that give many aesthetic and functional values such as hiding some physical defects?
- 2- How can these designs be adapted to design and shape a mannequin with a new and innovative idea?
- 3- What is the possibility of designing and forming the proposed clothing designs using the three-dimensional decorative design on the miniature mannequin and displaying it on it?

#### **Research aims:**

- 1- Shedding light on the importance of using derived design elements in creating decorative designs that suggest the third dimension.
- 2- Embodiment of 3D designs on fabric from various materials such as foam, gouache and artificial leather.
- 3- Adapting these designs to design and forming on the mannequin with a new and innovative idea.
- 4- Using the miniature mannequin to design and shape the proposed clothing designs and present them to him in light of the Corona crisis.

#### **Research importance:**

- 1- Improving the aesthetic appearance of women through clothing designs that give the impression of the third dimension.
- 2- Enriching the field of design and shaping on the mannequin by using the three-dimensional design consisting of the derived design elements and stereoscopic on the fabric of different materials.
- 3- Presenting a new and innovative idea using the miniature mannequin for design, formation and presentation in line with the fingerprints left by the epidemic in the world of fashion for its ease of use, to maintain social distancing and the low cost of implementation.

**Research hypotheses:**

- 1- There are statistically significant differences between the responses of the specialists in the executed designs in terms of achieving the design elements and foundations, innovative values and technical aspects.
- 2- It is possible to create three-dimensional decorative designs on cloth from a variety of materials and adapt these designs to design and shape on the miniature mannequin, from the point of view of specialists.

**Search limits:**

- 1- Spatial: The practical aspect of the research was carried out in the laboratories of the Department of Clothing and Textiles, Faculty of Home Economics, Al-Azhar University.
- 2- Temporal: The research was carried out in 2021/2022 AD.
- 3- Objectivity: the formation of three-dimensional decorative designs using the derived design elements (point, line, triangle, rectangle, circle, hexagon and rhombus) and embodied them on the canvas with various materials where artificial leather was used, while adapting them to design and shaping on the mini-mannequin with a new idea and displaying it on it for ease of use and to maintain spacing Social in light of the Corona crisis.

Research Methodology: The descriptive method was used in the research by studying the derived design elements and the three-dimensional design with the application to reach the results.

**The research sample:**

- 1- Specialized professors: their number is (11) and they are the faculty members of the Faculty of Home Economics, Al-Azhar University and the corresponding faculties.

**Search tools:** 1- A questionnaire to know the opinions of specialists on the proposed designs.

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