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# The art of traditional embroidery of Siwa Oasis as a source of inspiration for the design of innovative woven women's clothing fabrics''

### Dr. Doaa Mohammed Mahmoud Ahmed

Lecturer, Department of Apparel Design and Technology, Faculty of applied arts, Benha University, doaa.ahmed@fapa.bu.edu.eg

#### Dr. Marwa Yassin

Lecturer, Department of weaving, Spinning and Weaving, Faculty of applied arts, Benha University, marwa.yassin@fapa.bu.edu.eg

## Abstract:

Undoubtedly, the textile industry and the clothing industry are interdependent sectors and one entity. The textile industry is considered one of the oldest industries throughout human history. It has witnessed a great development over time, perhaps the most prominent of which are the developments of the industrial revolution in Europe, which doubled production and the digital revolution, which paved the way for pressure on production costs. From the textile industry to the fashion industry to clothing retailers. The preservation and development of heritage is one of our basic duties in all fields in general and the field of textile and clothing in particular, which is what the subject of research has come to due to the technological development, the digital revolution, and modern methods and technologies that opened the way for innovation and creativity. The research tended to use modern technology, where modern digital and mechanical technology was used in the applied side by designing 10 proposed designs for various pieces of woven fabric for women's clothing using the Ned graphic program, one of the digital programs for designing woven fabrics, and it was designed to suit the design of women's clothing and is characterized by innovation and contemporary while preserving The source of inspiration is the traditional art of embroidery of Siwa Oasis, and 5 designs were implemented using the mechanical jacquard loom to produce a double cloth. The designs were built on two axes: (the first axis: the extent to which innovation was achieved in the design), the second axis: the extent to which it relates to the source of inspiration). It was concluded from it that the axes were verified in the designs, and the implemented designs were selected accordingly, and tests were conducted on the implemented fabrics at the National Research Center and the National Institute for Measurement and Calibration to ensure their suitability for the implementation of women's clothing. These tests included: (tensile strength and elongation knitting - friction - topper - hardness - weight per square meter). The most important results of the research included the design of 10 proposed designs of woven fabric for women's clothing using the Ned graphic program, one of the digital programs for designing woven fabrics using a mechanical loom. The design and manufacture of clothing is an integral part of each other, as it is an interconnected sector. Weaving fabrics is the first stage through which we reach the design and manufacture of a clothing product. It means and refers to the weaving process by quantitative production, so what if this fabric was inspired by Egyptian heritage motifs and woven using the means And modern technology methods with designs of a contemporary and innovative nature and suitable for use in the design, implementation and manufacture of women's clothing.

**Research problem**: Despite the importance of using modern technology to draw inspiration from the Egyptian heritage in the field of textile and clothing, by creating designs for woven fabrics using the mechanical loom to be used in designing, implementing and manufacturing clothes for women inspired by the art of embroidery in Siwa Oasis, to create innovative and contemporary designs that carry the Egyptian heritage, It is considered one of the forms of creativity, but it did not receive sufficient specialized academic attention.

**The research problem** summarized in the following questions: 1- 1- To what extent can the aesthetic dimension of the art of embroidery be enriched for the decorative units of Siwa Oasis by drawing inspiration from them to design woven fabrics? 2- What is the best way to use modern technology to design woven fabrics inspired by the traditional heritage of Siwa and suitable to produce women's clothing?

**Research aims:** 1- Enriching the aesthetic values of the decorative units of the art of embroidery in Siwa Oasis by making designs for woven fabrics. 2- Designing woven fabrics to be used in the design of women's clothing, inspired by the art of embroidery in Siwa Oasis, characterized by innovation, suitable for contemporary arts, suitable for mass production, and achieving the longevity of the clothing product.

**Research importance**: 1- Highlight on the importance of drawing inspiration from the Egyptian heritage and preserving it in an innovative and contemporary manner. 2- Enhancing the role of textile and clothing design to design products using modern technology that are characterized by innovation and contemporary.

**Research hypothesis**: Fashion design by creating designs for woven fabrics executed on a mechanical jacquard loom, inspired by the traditional art of embroidery in Siwa Oasis, helping to create designs suitable for designing and manufacturing clothes for women and inspired by the Egyptian heritage and characterized by innovation and contemporary.

Research Methodology: The experimental approach, the applied approach, through:

Theoretical study: by conducting some tests on the fabrics to ensure their suitability for the implementation of women's clothing.

Research results: The research hypothesis included fashion design through making designs for fabrics woven from the

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mechanical loom inspired by the traditional art of embroidery in Siwa Oasis, helping to create designs suitable for designing and manufacturing clothes for women and inspired by the Egyptian heritage and characterized by innovation and contemporary. It has been achieved through: 1- By designing 10 proposed designs of woven fabric for women's clothing using the Ned graphic program, one of the digital programs for designing woven fabrics using a mechanical loom.

2- Designing woven fabrics suitable for designing and manufacturing clothes for women, characterized by innovation and contemporary, with inspiration from the traditional embroidery art of Siwa Oasis.

# Keywords:

Motifs of Siwa embroidery - inspiration - woven fabrics - clothing design

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