



Fayoum University

## **Formative Dimensions of Islamic Geometric Patterns in Creating New Contemporary Artistic Crafts**

Submitted by

**Nada Mahmoud Mohammed Mahmoud**

Art Education Department

Faculty of Specific Education-Fayoum University

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**Under the Supervision of**

**Dr. Ola Ali El Yamany**

Assistant Professor of

Artistic crafts

Art Education Department

Faculty of Specific Education

Fayoum University

**Dr. Noheir Ramadan El Shoshany**

Assistant Professor of Art History

and its Appreciation

Art Education Department

Faculty of Specific Education

Fayoum University

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**summary**

The research relies on studying the dimensions of Islamic geometries and drawing inspiration from traditional musical instruments and the possibility of benefiting from them in creating contemporary artistic artifacts based on the foundations of Islamic geometric art, in order to produce an applied artwork that combines the values extracted from heritage and self-vision and mixing them in the work of an innovative artistic artifact.

**The study included five chapters:**

### **The first chapter**

It deals with the definition of the research, its problem, hypotheses, objectives, importance, limits, a general picture of the research methodology, its tools and terminology, and then finishes with the previous studies.

### **The second chapter**

#### **Geometries in Islamic Arts**

This chapter includes Islamic art, its emergence, its origins, the impact of previous civilizations on it, the factors that contributed to the diversity of the elements of Islamic art and its multiplicity of forms, an explanation of the types of Islamic decorations according to the elements inspired by them, and the design elements of geometric Islamic decoration, then the Islamic geometric art – the basis of the research – is dealt with extensively. Then he dealt with the elements that the Muslim artist relied on in his formulation of Islamic geometric motifs, lattices and the mathematical foundations

for building these lattices, and the types of Islamic geometric motifs, as well as Arabic calligraphy, its geometries and its various types.

### **The third chapter**

#### **Dimensions of Islamic geometric motifs**

This chapter includes design in its general concept, the various structural foundations that the Muslim artist performs during design, and the aesthetic foundations in Islamic engineering art. It also deals with the elements that were available in Arabic calligraphy, and its aesthetic foundations.

### **The fourth chapter**

#### **Art crafts**

This chapter dealt with the nature of artistic works, and their concept in the light of modern artistic trends, then presented the artistic works in the light of contemporary art, and the factors affecting the artistic work, which are (raw material, experimentation, synthesis, and technical treatments).

### **The fifth chapter**

#### **applicable procedures**

This chapter includes formative procedures that the researcher's self-experiment went through from the preparation stage to the formation and implementation stage, then presenting and analyzing the work of this experiment, arbitration forms for items and works, the results and recommendations of the study, and then the references on

which the research was based.

## **The abstract**

The research aims to benefit from the study of the geometries of Islamic art in the creation of contemporary artistic works inspired by the forms of ancient musical instruments, which relies mainly on Islamic geometric foundations and lattices as decorative units, following the descriptive approach in the framework of theoretical research through a description of selections from Islamic geometric art, The approach is semi-experimental in its applied framework through experimental practices based on the mixing of self-vision with the values extracted from heritage and the mixing of them in a work of art inspired by musical instruments. The research dealt with Islamic arts, their origins, the impact of previous civilizations on them, and the types of Islamic decorations such as floral, geometric, human, animal, and calligraphic motifs. It also dealt with the structural and aesthetic foundations of the motifs of Islamic geometric art, the lattices on which these motifs are based, their elements and types, and the types of Arabic calligraphy, its components, and its aesthetic foundations. It also included an introduction to the artistic works and the factors affecting the work piece, such as raw material, experimentation, synthesis, and technical treatments, and the formative procedures that the researcher's self-experiment went through from the stage of preparation to the stage of formation and implementation, and a presentation of the work of this experiment and its analysis, arbitration forms for items and works, and the results and recommendations of the study.