# The structural values of the art of Indian Kolam and the use of the inventive designs suitable for fabrics printed upholstery

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#### **Abstract**:

Textiles in general are products that come in importance after eating and drinking for humans, as they are in urgent need of clothing that covers their bodies and protects them from weather factors that may affect them, then the need for housing comes next, and in case one gets a good home, he/she finds him/herself in front of the desire for Preparing and arranging this residence in order to be comfortable to live inside, and furniture is one of the most important elements that a person uses in preparing the house in order to be suitable for residence and spending a very large amount of time inside it, a person always seeks to renew and change these furniture from time to time either for the purpose of changing the damaged ones or for the purpose of development and beauty which contributes in opening up to the outside world in increasing consumer aspirations of Egyptians for a diverse and multi-design ideas. Field of textile printing design in the Egyptian market is in dire need for more modern innovations that meet the needs of consumers in the 21 century considering the invasion of external ideas at the local markets. The problem of the research is how to take advantage of the structural values of the art of Indian Kolam art in the Tamil Nadu region? The study aims at emphasizing the importance of searching for new sources of humanities and trying to innovate an aesthetic relationship that are suitable for the inspiration of printed fabric designs. The most important Results of the research are that the analytical study of models of Indian Kolam showed aesthetic values that can be used in the invention of innovative designs for printed fabrics. The study presented several repetitive patterns which are suitable for the design of printed upholstery fabrics.

# **Key Words:**

India - Kolam Art – designs - printed upholstery fabrics

## 1. Introduction

Every design must conform to the product for which it is designed, and it must also consider the production processes that it passes during manufacture, taking into account the order of those processes. Repetition is a serious attempt to simulate nature and its trees, flowers, animals, mountains, valleys, etc., and recently we have found that textile designers have become totally dependent on the repetition at their designs on computer programs and the methods of repetition saved within those programs, which helped the spread of the same patterns of repetition, hence the need to search for new and diverse ideas for repetition and drawing of contemporary units of printed furniture fabric design, by searching for new iterative patterns that suit the Egyptian taste.

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Attempting to link the structural values of Indian Kolam art with traditional repetition methods in drawing and designing iterative units for textile printing design would be an applied approach that would help to obtain ideas for iterative patterns and innovative designs, which could contribute to enriching repeating libraries of specialized computer programs in the field of textile printing design.

## 2. Overview And Background

Each civilization has expressive symbols that have roots rooted in their natural environment, social values, ecological context and economic activity. In India's countryside, the forms and types of rituals vary, and this diversity is due to the different innate characteristics of each of the divergent environments. One of the most important characteristics of this environment is that it expressed those beliefs and rituals through art. A beautiful art known as Kolam has been published that expresses the lives of people and the daily events which are taking place in the Tamil Nadu region.

## What is Kolam?

It is an ancient art form of southern India which is still very popular. It is used to decorate roads, temples and prayer rooms in the Tamil Nadu region during festivals and weddings, and according to Veluppillai, the Tamil people have the same mother tongue which is one of the languages spoken in southern India, and the number of speakers is estimated at about 40 million people in the state of Tamil Nadu alone, while there are number of speakers in some of other countries neighboring India. ((O. Francis, S. Egharevba, 2017, pp. 1-15

Table (1): Kollam decorative elements			
Figure (4): Using	Figure (3): Using	Figure (2): using	Figure (1): using
fish	candy and lighting	flowers and	the sun and stars
	lamps	branches	
**************************************			
Figure (7): Using	Figure (6): Using the	Figure (5): Using	
the elephant	Gift Cart	flag	

#### 3. Problem Statment

The research problem can be summarized in the following points:

- 1- The widespread use of traditional repetition methods for decorative units and repetitive patterns available in computer software without thinking about developing repetition methods based on scientific theories related to the study of aesthetic values of human arts.
- 2- The lack of opportunity for textile printing designers to devise various methods of repetition in the field of designing printed furniture fabrics after the technological invasion that swept the field of design, and majority of manufacturers relying on the use of traditional repetition methods.
- 3- The limited supply of design ideas for Egyptian designers compared to the huge amount of foreign designs for the printed furniture fabric design market.

# 4. Aims And Objectives

- 1- Attention to the results of scientific research related to the features and characteristics of the Indian kolam art and the extent of its use in developing printed fabrics for furnishing to maximize the economic return that contributes to the sustainable development of industrial institutions working in the field of textile print design.
- 2- Analyzing and devising constructive systems and plastic values of Indian kolam art to obtain innovative iterative patterns suitable for textile printing design.
- 3- Legalization of theories of repetition used in the field of textile printing design.

#### The research assumes:

- 1- The application of structural systems that the Indian kolam art relies on in the design of printed upholstery fabrics would help in finding innovative solutions for duplicating and distributing elements within the design space by relying on accurate engineering foundations and standards.
- 2- That the codification of patterns of repetition and distribution of elements within the design of printed fabrics for upholstery is based on engineering foundations that are based on design theories that would assist designers in industrial institutions to invent a variety of repetitive patterns.

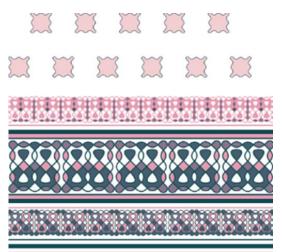
# 5. Hypothesis And Methodologies

The research is based on the descriptive and analytical approach in describing and analyzing the iterative patterns of Indian kolam art and how to build it in addition to the foundations of the distribution of plastic elements with models from the work of the Indian kolam art.

#### 6. Conclusions

- 1. Through the study, it became clear how rich the innovative ideas which can be obtained through the inspiration of the structural systems of Indian kolam art patterns, which helped to obtain innovative design ideas that combine originality and contemporary and are suitable for the design of printed upholstery fabrics.
- 2. The study monitored the various and different methods that the Indian folk artist relies on in obtaining ideas of his/her repetitive patterns of Indian kolam art, as well as the similarities between the methods of repeating kolam patterns and the methods of repeating patterns of textile printing design.

- 3. The study proved that the artistic and aesthetic analysis of patterns of Indian kolam patterns helps in getting more depth and understanding of the structural, plastic and aesthetic values of this folk art and the foundations upon which the ancient and contemporary Indian artist relied on to produce his/her works, which contributes to raising the capabilities of the textile print designer in devising design ideas related to performance career for printed upholstery fabrics.
- 4. Research and exploration in the aesthetics of expression in the traditional and popular arts in general and in the art of Indian kolam are always characterized by suspense and pleasure that end with the researcher in the field of arts reaching a secret of beauty secrets that helps him/her in creating new design ideas.
- 5. Studying and following design movement in the field of printed upholstery fabrics help a lot in reaching the utmost closeness to consumer mind, which contributes in increasing demand for buying locally designed and manufactured products.
- 6. The researchers were able to work on some design ideas that fit the contemporary printed fabrics by using computer in designing of distribution schemes and drawing the main and secondary elements of the design and thus repeating them on purely scientific geometrical basis.



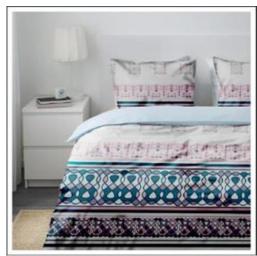


Figure (51): explains the design idea (3)

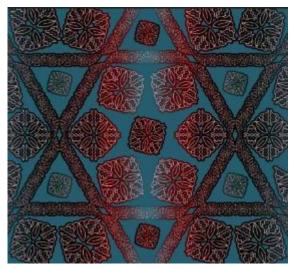




Figure (51): explains the design idea (3)

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