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Innovation of the employment of heritage character in Islamic Architecture

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Abstract

The creativity, innovation and diversity of original features and traditional crafts and artistic heritage, as well as an intellectual freedom organization for an artisanal miner is \$150-230 per in what devised by the creative ornamental designs and diverse and sophisticated renewed which earn technical character and heritage of tradition and modernity Various ornamental designs were generally associated with most of these traditional crafts associated with Islamic architecture not undertaken as wood (mashrabia), and metal is like carving on copper, pots, Stone Crafts marbles and stone.

Keywords

Innovation, the Employment, Heritage, Islamic, Architecture



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Introduction

Heritage crafts and traditional industries are considered the cultural, civilizational and human asset. Preserving and developing them will lead to the preservation of the Egyptian cultural and civilizational identity.

Likewise, handicrafts are a method of employing the available human environmental potentials in an artistic style that represents, along with other crafts, a form that expresses the human being and his needs and reflects the features of the place. Manual work through an integrated process.

Handicrafts in Egypt are considered a living and developed folk heritage represented in the production of many distinguished products in weaving, decoration, engraving, upholstery and leather, which is a social activity. The concentration of a large number of craftsmen in Cairo was in the area of al-Gamalia, al-Darb al-Ahmar, then the Caliph, and Sayyida Zainab. Creative crafts flourished in Egypt during the Fatimid era, and this prosperity extended to the Mamluk era as well, where competition between Mamluk princes to decorate their palaces with various artistic decorations.

Traditional crafts are a cultural product of thousands of years of interaction between local communities with their cultural visions and values and their natural environment and between them and other societies, as well as a group of familiarity with hand techniques and configurations of experiences that the craftsmen inherited from their parents and adopt distinct crafts imposed by the raw material and the surrounding environment.





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Handicrafts: are those industries that a craftsman engages in depending on his individual mental and manual skills that he acquired from the development of his practice of handicraft work by using the raw materials available in the local natural environment or imported primary raw materials so that they are dealt with in production manually or using some The number and simple tools. The traditional crafts are the artistic products that have carried out the function of a publisher during the past years and have assumed the responsibility of preserving the spread of thought and culture among successive generations through the innovations of its practitioners that bear the imprint of his time. The foundations on which these crafts are based are aesthetically utilitarian and these crafts depend on collective Artwork.

Research Problematic the research problem is:

- Paying attention to the functional role of traditional crafts in Islamic architecture as well as in the work of turning, woodworking and metalwork, neglecting the aesthetic role that it can play in the field of furniture design in Islamic buildings.
- Some traditional crafts have declined and diminished in the markets since the middle of the last century as a result of the development of the daily lifestyle and the emergence of modern machines.

Innovation in Employing Traditional Crafts in Islamic Architecture:

It was found that for the development of traditional craft methods, it is necessary to distance themselves from everything that is marginal and to go deeper into the essence, as it has an important role in the development of society and leads to continuity, social cohesion and understanding between individuals and societies and the preservation of originality and heritage and its important economic role.





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The concept of craft industries does not necessarily mean that it uses rigid and inherited methods. However, we find in the production methods of metal products that can accommodate advanced technological techniques and modern mechanization, while relying on manual skills, innovative experiences and the creative capabilities of their workers, which are the distinctive features of producing products of high material value that meet an important need in the Egyptian society.

The First Topic: Innovation in Employment Woodworking Craft in Islamic Architecture:

Geometric decorative elements were created in mosques from elementary geometric shapes bearing symbolic aesthetic values from which these decorative designs were formed. Among the most famous of these decorative elements are the so-called (star dishes), which began to appear at the end of the Fatimid era in the second half of the sixth century AH and spread in the Mamluk era in the period (AH 648 - AH / AD 180 - 1712 AD) and in Iraq during the Seljuk era, and its influence extended to Morocco and Andalusia, on the decorations executed on wood.

Star dishes are considered one of the most prominent elements of geometric decoration, which is based mainly on polygonal star shapes and grouped in the form of stars, which were characteristic of Islamic arts and architecture, and designs of star dishes were popular in Egypt and the Levant during the Mamluk era.

Another style appeared in terms of artistic application, i.e. the combined fillings method, in which the constituent units (of the star plate), known as (kinda and amygdala), were adored without using any adhesive material, or by using a screw, and the combined fillings method continued in wood decoration throughout the Ayyubid and Mamluk eras. And the Othmani in Egypt and the Levant, and all that has happened to it in terms of development is to increase the number of units of the star plate and to feed them with ivory and shell.





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The shape of the star differed in North Africa, especially in the city of Marrakesh, in addition to the combined fillings, a method of (etching) appeared in wood decoration, in the Mamluk era as well as the Ottoman, especially in the windows and openings of buildings and residential buildings.

These designs were concentrated in religious buildings such as mosques and reached the height of their development in the Mamluk era, where the roofs of mosques and its various elements were decorated externally and internally, as well as in the Sultan Hassan Mosque, the Qalawun Group, and the Muayad Sheikh Mosque in Old Cairo.

The Impact of Creativity and Innovation on Decorative Designs in Islamic Architecture: The Mamluk style is characterized by the diversity in the geometric decorative designs of the star dishes units with the ornate fillings, as well as the diversity in the treatment and execution methods that formed most of the craftsmanship, as I found designs for the star dishes in mosque architecture such as the qibla wall, pulpit, doors and windows, as well as in other applied arts in the mosque and various ores. Like wood and copper, according to the available technological methods and outstanding craftsmanship. The use of wooden masts and meadows also appeared in reinforcing the ceilings in all ancient Rasheed houses in a longitudinal and transverse manner and decorating the facades of the houses with mashrabiyas, protrusions and windows covered with wooden lathes of all kinds, whether in all degrees, and carpenters in the city of Rashid excelled in the work of turning wood and engaging it without using nails in addition to the use of grafting With ivory and mother of pearl, the fillings are interlocked with the heads of longitudinal and transverse legs that form geometric units.





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The mashrabiya, which consists of three sections and is carried by two men, was used for the first time in Rashid, as is the unique mashrabiya in the Qandili house.

The spaces inside Rasheed's homes were used to make wall cupboards, often with one or two rolls, decorated with different decorations. Often these cupboards were topped by khornqat, which are small decorated openings in which decorative tools are placed. Song cabinets, wall cabinets, galleys and wooden partitions are among the architectural elements that spread in Rasheed's homes during the Ottoman era, and they used wood turning.

Wooden gears were also found in Abu Shaheen Mill, which was built at the beginning of the nineteenth century AD by Othman Agha Al-Tobji. Its function was to grind grain and it was managed by horses.

Types of Arabic Lathes and Mashrabiyas:

- A gun usually with one end: it is used extensively in making frames and making small gaskets and is installed starting from the first transient with a circle (hate) in the shape of the navel and ends with a half circle and in the second transient it starts with a half circle and ends with a half circle and in the second transient it starts with a half circle and ends with a circle of any soul Shape but collects inverse.
- A revolver usually has two sides: it is more beautiful than a onesided revolver and is installed starting from the first transient with a circle and ending in a circle, and the second transient with a half circle and ending with a half circle.
- Urijah lathe (Abu Warda) is used in making small viscera. It is made up of beginning with a circle and ending with a circle in all passes, and it is in the form of squares.



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- Solid cross lathe: It is used in making filler for furniture and frames, and it begins with a circle and ends with a circle for all crossings, but it is a diagonal square shape.
- Solid lathing: it is used in making gaskets for frames and small gaskets on Arab furniture. It is installed beginning with a circle and ending with a circle for all passes, meaning that it is similar.
- Abu Warda is drawn in its composition, but it has two groups in the form of a cross.
- Churches engraving with one cross: it is used in doors, windows, etc. and in some furniture. It is installed beginning with a circle and ending with a circle in all passages and has two groups, one of them is long, resembling a twinkle, and the other is small, normal, so they formthe shape of a liquid cross.
- Churches engraving with two crosses: it is used in doors and windows and in some furniture and frames. It is installed beginning with a circle and ending in its circle in all crossings, and it is similar to the one cross, except that it increases it by two small groups in the form of two crosses with some at an angle of 45 degrees.

How to Work: A number of woods of the required length is prepared and installed on the lathe and repeated with a braid and chisel, and then it is notched by a notch and knitted in particular.

- Method of Installation: The passer is punched with holes as long as the chick's tongue at an angle of 45 degrees. The cross is attached to it, and then it is combined with each other. This type is used in chairs, frames, doors and windows in addition to many types of old mashrabiyas, but they are not widespread for their accuracy and difficulty.



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Employment of Woodcarving in Islamic Architecture:

Rulers in Egypt since the era of the Fatimid state have been interested in planting trees and caring for forests to extract the wood needed for the work of the boats of the fleet. A large part of the wood produced was used in buildings and furniture, and wood had important markets in Fustat since the Tulunid era.

The Egyptians were interested in mastering the carpentry industry, as it dates back to the era of their ancient Egyptian ancestors, who excelled in it, as in the rare wooden statues such as the statue of the Sheikh of the country in the Egyptian Museum. The Copts inherited the secrets of this industry and used wood with carved decorations extensively in church furniture, such as seats, the altar, and Coptic buildings and their decoration.

Muslims used wood carving in pulpits, galleries, doors and ceilings, and in making historical or decorative writing tapes, or in linking up posts and columns to each other, and in making or strengthening domes, and wood was also used in the manufacture of movable niches, such as the three niches preserved in the Arab Antiquities House, and imported to it from The mosques of Al-Azhar, Mrs. Ruqaya and Mrs. Nafisa.

The oldest piece of wood with carved decoration and its origin from buildings or pieces of furniture goes back to the eighth and ninth centuries AD. Where it was found in the ancient city of Fustat, where it was used after it was broken from buildings and furniture - to prevent the collapse of dust in the cemeteries. Innovation and creativity are evident in the decoration of Tulunid woods, and this is exemplified by the style of carving with sideways and the decoration includes a few branches and spiral lines covering the whole floor. The square of Tulunid wood may be covered with a schematic drawing, or the last of its vegetal themes surrounded by strips of small carved discs, round branches, or squares. Or rectangular shapes.



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Results

- Creating various geometric and botanical decorative designs on woodwork, marble, plaster and stone in Islamic architecture.
- Geometric decorative elements were created in mosques from elementary geometric shapes bearing symbolic aesthetic values, from which those decorative designs executed on wood were formed, the most famous of which is the star dishes.
- The metalwork that was made during the Mamluk era was unique to the phenomenon of the disappearance of human drawings and pictorial scenes completely disappeared, as they were replaced by the third Mamluk line drawn on a leafy floor and some modified animal elements may appear sometimes as the decorations Vegetation overwhelms it, especially as it is small in size, which makes it appear as a leaf, flower or vegetable fruit.
- The Mamluk style is characterized by the diversity in the geometric decorative designs of the star dishes units with ornate fillings, as well as the diversity in the treatment and execution methods that formed most of the craftsmanship, as there were designs for star dishes in the architecture of mosques such as the qibla wall, the pulpit, doors and windows.
- The botanical decoration took center stage in metalwork, as it appeared in a variety of form and style used, and the plant decoration was characterized by being intertwined and branching and appearing in another color different from the natural copper color applied to it in order to increase the aesthetics of the shape to express the manifestations of the abstract plant nature in the intertwining of lines with each other Some people do not know the beginning or end of this decoration, and this type of decoration belongs to Islamic art and is used in architecture as the end of this decoration. This type of decoration belongs to Islamic art and was used in Islamic architecture as it appeared in many mosque doors and is called the vase or palmate fans.





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- The architects used marble in cladding the walls of Islamic buildings according to the principle of (hating the emptiness). The ancient Mamluk houses still remain today.
- Star plates are considered one of the most prominent elements of geometric decoration, which is based mainly on polygonal star shapes and grouped in the form of stars, which are characteristic of Islamic arts and architecture, and designs of star dishes were popular in Egypt and the Levant in the behavioral era.
- Another technique appeared in terms of artistic application, i.e. the combined fillings method, in which the constituent units (of the star plate), which are known as (kinda and amygdala), were adored without using any adhesive or using a nail, and the combined fillings method continued to decorate wood throughout the era. The Ayyubid, the Mamluk and the Ottoman in Egypt and the Levant, and all that developed in them was the increase in the number of units of the star plate and fed them with ivory and seashell, as the shape of the star differed in North Africa.

Mosaic was used in mosaics with great skill and it consists of marble pieces and colored stones, and the same method is used with the decoration of the qibla of the mosque by cutting delicate mosaics or by rectangular marble slices in order to give an atmosphere of prestige and holiness in front of the worshipers.

- The stucco decoration was simple and widespread in the Tulunids era, and only two colors were used in the decoration, the color of dark red and white stucco.
- Hollow stucco windows were used with all kinds of plant motifs in palaces and Islamic buildings. The Museum of Islamic Art preserves panels and other models made of stucco with floral motifs of leaves and fruits, as well as arabesque or foliage decorations.





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