Process obstructive variables to take advantage of the aesthetics of heritage models in the formulation of sculpted elements

Prof. Mohamed Shahin

Department of sculpture and architectural formation, Faculty of applied Arts,

University of Helwan d shaheen54@hotmail.com

Assist. Prof. Dr. Marawan Abdallah

Department of sculpture and architectural formation, Faculty of applied Arts, University of Helwan marwan hossien@a-arts.helwan.edu.eg

Researcher. Chayma Saeed

Department of Architectural Carving and Forming - Applied Arts - Helwan University chaymasaeed20@gmail.com

Abstract:

Heritage architectural styles constitute the civilizational value that affects successive generations. They are a mirror of contemporary culture, with all material and moral stocks that embody cultural and civilizational values and reflect a specific social and economic structure at every stage of history. From the historical point of view, the Egyptian civilization is replete with a great architectural heritage that appeared from the ancient Egyptian Pharonic style and Marabal Coptic then ended with Islamic architecture, and this huge architectural heritage includes many interactions that have formed these architectural styles. Through exposure to these models, the Islamic model was chosen, as it is the most closely related to the research objectives, as it is characterized by the beginning of simplification in dealing with the natural elements in an abstract style and conforming to the concepts of modern architectural vision, which led to the simplicity of dealing with these architectural elements, and this is considered one of the most important treatments to overcome the disruptive variables to benefit the aesthetics of Islamic style.

There were obstacles to benefit from these values due to the variables arising from the development of contemporary civilizational conditions and the difference in architectural thinking. This led to several ways to link the elements of heritage architecture with the contemporary one, so that era variables do not constitute an obstacle to retain the heritage style with aesthetic value.

The sculptor designer has a prominent role in addressing these variables to achieve consistency among the constituent elements of the interior architectural space and to reformulate the formation of those elements by shortening the intensity of details while preserving the aesthetic value to suit the requirements of the times. The research seeks to find design solutions to achieve harmony and consistency among the constituent components of the interior space.

Research problem:

How to overcome the obstacles of making use of Islamic esthetics in shaping the components of the internal architectural void?

Research goal:

Addressing obstacles to the use of Islamic esthetics in the formation of internal architectural vacuum components.

Research hypothesis:

By studying the factors that affect the Islamic style in the internal architectural space and its causes, the types of these models can be reformulated carvings.

The theory of the Research:

Islamic architecture was founded on the foundations of the Eastern and Christian arts in Egypt and Levant which had a different style, each of which has its own special character, including Fatimid, Ayyub, Ottoman, Mameluke, and other styles, all of which formed the Islamic architecture. Buildings were built by Muslims in areas such as the Arabian Peninsula, Iraq, Egypt, the Levant, the Maghreb, Turkey, Iran, Khorasan, Mesopotamian and Sindh countries, as well as areas that have been ruled by Islam for long, such as Andalusia (now Spain) and India. The characteristics of the Islamic architecture and its characteristics were greatly influenced by the Islamic religion and the scientific renaissance that followed it. It has varied from region to region depending on weather and the former architectural and civilizational heritage in the region. We also see the evolution of form and function over time and the changing living and cultural conditions of the population.

The architectural styles were diverse and different, although styles varied from one place to another, but these styles were characterized by unity. All architectural styles had constants, either from the architectural layout or from the interior design, but each region had its own environment, character, and unique architectural heritage, as well as its impact of the intellectual and spiritual aspects of Islam, which showed a distinguished mixture of architecture, that continued to be rooted and developed until it rid itself of the influence of the former styles, and the Islamic style became self-contained and influenced by other styles. The Islamic architecture has succeeded in balancing religious feelings and aspects through a set of foundations, rules and constructions reached by both the Islamic artist and the architecture, through which construction problems can be solved by harmonious and effective solutions with religious beliefs. Through it, he also maintained social traditions and values. The architecture of Muslims has brought together all the modern and technical aspects of different former civilizations, from Persian and Roman, a civilizational heritage, to combine spiritual and functional needs. This led to the emergence of new spaces and architectural styles, making Islamic architecture distinguished from all its previous and contemporary features, because it has direct links with Al-Amara and its uniqueness with the formation and unity derived from the Islamic majority.

Interior architecture space and sculpture:

The sculpture is closely linked to the architectural space, and the space is an important element for both of them, as it's the main unit in our understanding of three-dimensional forms. The architectural space is a carving block with internal spaces that may be collected from osteopathic or orthotic roofs with an emphasis on its ceilings that play an important role in defining the exterior and the general effect of the architectural vacuum. The sculpture is not confined to the outside, but extends to the inside to emphasize the identity of the formation the architect.

The Impact of the current era variables to benefit from the Islamic style:

• Cultural variables:

Culture refers to all the material, ethical and religious values that humans gather through the stages of development and represent all that is acquired from other cultures, pre-university education, architectural education and scientific knowledge, the issue of alienation and cultural invasion has become widespread, it is widely known because of the intercultural and, in turn, the evolution of society. The lack of Arab scientific references and publications led to the adoption of Western architectural schools and intellectual trends with the support of a range of Western architectural trends. The tremendous development of software and computer applications has led to a focus on the form without any content, designs must be compatible with the cultural context of all its variables and constants.

• Environmental variables

It is the climate factors and their impact on dealing with the old heritage vocabulary to express local identity and their ability to express the notion of contemporary and changes caused by technological and economic developments and social variables in shaping our daily lives, and the same old heritage vocabulary must not be exploited, but a method was created in order to solve environmental problems in a way that suits the spirit of the times, the term heritage and its main function for which it was found must be considered and then developed to suit its function

• Technical Variables

The problem is that the role of all participants in the process of creativity and design is not only functional, but also artistic such as sculpture can bring about a comprehensive change in the dynamics of the architectural space as a whole. The designer can combine the functional requirements of the space with esthetic enrichment to make it a good architectural formation.

The basic design solutions for addressing the internal space of Islamic style architectural elements:

The design treatments of elements of Islamic architecture have had a direct impact on distinguishing Islamic architectural styles from other styles by using different styles to formulate those elements where there were many values such as:

• Reaching the simplification of the intensity of the details in the design in order to suit the variables in this era, whether from scale or proportions, the final shape becomes compatible with the area of the internal space.

• Sticking to the aesthetic form of the design by knowing the correct proportions when abstracting in the basic form so as not to disturb the general image of the architectural form.

• Demonstrate the interconnectedness of the elements used in the inner blank, whether of determinants that include ceilings, floors, walls, or sculptural blocks.

Models for sculptural design designs inspired by the Islamic style:

1- Punch Ball Mosque (Sydney - Australia):

The muqarnas was taken as a sculptural formation on one side of the walls, with proportions and sizes changing to match the space of the interior space, so that its appearance would appear to keep pace with this era.



Results:

1- Emphasizing the idea that Islamic architecture has the specifications and features required to conform to the needs of this era in all respects.

2- The intellectual, religious and social variables are considered one of the most powerful forces that influence the sculptor designer and determine the design direction in the internal space.

3- The designer, the sculptor, has a great role to play in linking the aesthetic shape and the functional performance without prejudice to either of them.

Recommendations:

1- Study the Islamic heritage in form and content to achieve the best results when designing in the internal space.

2- When formulating architectural elements, you must achieve the desired goal of using them to keep pace with development in this age.

3- Always search for the modern variables that appear at each period of time and affect the sense of the interior architectural space.

References:

Nazif, Abd El Salam Ahmad. "Derasat fe El Omara El Islamia" El Kahera, El Hay'a El Masria El Aama Lel Ketab, (1989): p 44

1- Nazif, Abd El Salam Ahmad "studies in Islamic architecture" Cairo- the general association of books, 1989, p. 44.

Ibrahim, Mohamed Meselhy. "Gamalyat El Fenon Fe El Omara El Islamya" El Kahera, Magalet el Fekr El Eslamy El Adad El Sades W El Tes'on (2017): p 87

2- Ibrahim, Mohamed Meselhy. "aesthetics of arts in Islamic architecture" Cairo- journal of contemporary Islamic intellect- issue no. 96-2017-p.87.

El Refaie, Anwar "El Islam Fe Hadarato W Nozomoh El Edareya W El Seyaseya W El Adabeya El Elmeya W El Egtema'ea W El Ektesadeya W el Faneya" Syria , Dar El Fekr El Moaser , (1997): p 446

3- El Refaie, Anwar "Islam in its civilization and managerial, political, literature, scientific, social, economic and artistic systems" Syria- house of contemporary intellect-1997-p. 446.

نوفمبر 2020

El Shenawy, Rokaya Abdo Mohamed El Sayed "El Me'zana Kamasdar Lel Tashkel El Na7ty Ltolab Kolyet El Tarbeya El Faneya" El Kahera, PHD, Koleyet El Tarbeya El Faneya, Kesm Tasmem Mogasam, Gam'et Helwan. (1995): P 1

4- El Shenawy, Rokaya Abda Mohamed El Sayed "minaret as a source of sculpture formation for students of faculty of artistic education" Cairo- PHD thesis, faculty of artistic education, department of solid design- Helwan university-1995-p.1.

Attia, Omnia Salah El Din Abd El Rahman "Mafhom El Amal El Nahty Fe Do' El Eteghat El Faneya El Moasera" El Kahera, MSc, Koleyet Fenon Tatbe'eya, Kesm Naht W Tashkel Me'mary (2008): P 120

5- Attia, Omnia Salah El Din Abd El Rahman cocept of sculpture in light of contemporary artistic trends" Cairo- master thesis- faculty of applied arts- department of sculpting and architectural formation-2008-p.120.

Hassan, Noby Mohamed "El Faragh El Me'mary Mn El Hadatha Ela El Tafkek" El Kahera, Magalet El Elom El Handaseya, Koleyet Handasa, Gam'et Asiout (2007): P 35

6- Hassan, Noby Mohamed "architectural space from modernity to decomposition" Cairopublished research at journal of engineering science- faculty of engineering- Asyut university-2007-p.35.

Hussein, Ahmed Saeed Ahmad "Ta'ser El Teknolegya El Hadetha Fe Tashkel El Faragh El Hadary" El Kahera, MSc Fenon Gameyla, Kesm Emara, Gam'et Helwan (2011): P 51

7- Hussein, Ahmed Saeed Ahmad "effect of modern technology in formation of urban space" Cairo- master of fine arts- department of architecture-Helwan university-2011-p.51.

Abd El Metwally, Mahmoud Mohamed El Shahat "Ro'ya Mo'asera Letasmem Wehda Athas Mn Khelal Falsafet Fekr El Mofradat El Islamia" El Kahera, Magalet AL Emara w AL Fenoun w AL Elom AL Insania AL adad AL Sany ashr (2018): MN p 7

8- Abd El Metwally, Mahmoud Mohamed El Shahat "contemporary vision for designing a furniture unit through the philosophy of intellect of Islamic vocabularies".