DOI:10.21608 /mjaf.2020.21264.1434

سبتمبر 2020

## Activation of the repetition feature in the design of glass spaces for the architecture

Assist. Prof. Dr. Rasha Mohamed Ali Hassan Faculty of applied arts- glass department- Helwan University. <u>rashazenhom@gmail.com</u>

Assist. Prof. Dr. Ola Abd Ellattif Sabbah Faculty of applied arts- glass department- Helwan University. <u>Osabbah4@gmail.com</u> Assist locturor, Ibrahaam Mahamad Taba Ell/hatab

## Assist.lecturer. Ibraheam Mohamed Taha Elkhateb Faculty of applied arts- glass department- Damietta University

Ibmimt82@gmail.com

## Abstract:

The mashrabiyat is one of the prominent signs of Arab Islamic architecture, as its appearance represented a model of urban response to environmental changes and natural conditions, and the history of mashrabiyya in Arab Islamic architecture does not only reflect the relationship that the architecture woven with nature and geography, but rather provides an image of the construction and artist's treatment from the Abbasid era to the present with the figure. The aesthetic of the exterior and interior building, and the influence of other visual arts on architecture.

The modern architectural vents are an extension of that artistic and cultural heritage in which the old artist was exemplified in originality while adding the spirit of contemporary through the materials and modern techniques

Repetition also revolves very important in those vents, it is this structural feature that transforms simple unity in the pattern into more units of aesthetic value, and repetition is a unique feature in Islamic art to escape from the void, and this has led to the repetition of decorative themes on Islamic buildings and artifacts noticeably Attention to a beautiful art style out of boredom.

As for emptiness, it is considered a basic element in the architectural spaces, and it is a flat or sized space, sometimes it looks like a flat floor surrounding the shapes, and at other times it appears as voids that the shapes contain in different ways depending on their structural method. It is related to the nature of the place and affects the activities of the sizes and the relationship between them, as it is affected by the way of building the different sizes, and also varies between voids that surround the work or permeate it or execute from it or result from the assembly of its parts.

Therefore, the research tended to study some of the vent glass units as a design study that relies on activating the feature of repetition, showing its importance in obtaining multiple design alternatives from repeating the same unit with multiple iterative methods

## **Keywords:**

glass vents, Architectural glass, the repetition feature.