Benefiting by sculpture glass in architectural beautification. Dr./Marwa Ahmed SadekMourssi Teacher at the high institute of applied arts-6th October

Introduction;

Architecture is considered one of diversiform fine arts, but it is characterized than other arts (drawingsculpture) by being functional and beneficial. Some even identified it as the mother of all arts as it contains all other arts in its subjects. Sculpture is a manifestation art that relies on building 3 dimensions statues.

Architecture is directly related to sculpture by its manifesting the shapes that are taking abstract forms with multiple special significances in expressional ways. Sculptural architecture appeared recently through the born of new pure sculptural shapes with exaggerated and high technical qualities, where architecture becomes a carrier of symbolism and code system in a way that is extreme, in the field of the structural frame, and technological development of the building, as an attempt to realize visual pleasure. From here appears the research problem which is the absence of a clear view about the nature of the used sculpturing mechanisms to create contemporary sculptural architecture.

Sculptural architecture is the result of the unique capabilities of the human mind of the designer and the sculpture to create that connection between the basic skills in the formative, technical and expressional relations. Where integration between architecture and sculpture to create and understand the most advanced form of the human activity.

Sculpture works are the ones which take abstract forms with special significances in expressional way.

Sculpture is considered one of the oldest, most spread and diverse type of art, it can be small piece or huge one like statue of liberty. Though the word sculpture means cutting or digging but sculpture is much more and includes all works that are built or constructed, its role in architecture wasn't inclusive on decoration but it has practical role in transferring the previous civilizations and their ideas and life style through the sculpture works. It was used as well as a dogmatic use at many ages by many communities. Artists used it to express their point of views and recorded their history. Greek, Egyptian, Babylonian and Assyrian civilizations reached us through sculpture.

It is the best art that can be used in memorial because the artists use long lasting materials like rocks and metals, this is known as memorial art, where many civilizations kept statues of persons who played major roles in the history of those civilizations.

Many artists produce their works to fulfill their need to create or to communicate or to reconnect or express their thoughts and emotions or just to make something that is beautiful or to try new materials that highlight the aesthetical side to the art of sculpture as in contemporary sculpture which uses plastic, glass, aluminum, etc...

Glass is one of the material which witnessed a huge development in the modern age especially in the field of internal and external architecture, to realize aesthetical, functional and beneficial purposes that are connected to the environment of the architectural building.

Architectural creation demands developed lines that are related to artistic, scientific and technological specifications, that allow the designer to achieve new solutions with untraditional thoughts that realize the aesthetical qualities and the functional uniqueness of the mass and space in the design.

The research problem;

The contemporary architecture requires the availability of the sculptural glass as it has technological qualities that meet the demands of the modern architecture.

The research aim;

The aim is to specify the technological considerations that are affecting the production of the sculptural glass, to be able to use it in the architectural beautification.

Hypothesis;

It is achieved when we specify the technological considerations to produce the sculptural glass, which has the suitable qualities for the Egyptian environment.

DOI:10.12816/0038047