

## Employing the technique of projection associated with architectural surfaces in the development of modern mural methods and display

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### **Abstract:**

The philosophy of post-modernity, digital arts, and the emergence of interactive technological developments has brought a dramatic transformation of the visual image and its impact on various visual fields, as well as the field of design and architecture as is related to a huge part of these changes and innovations. As a result, artists and contemporary designers are using the computer and associated digital software as a new artistic medium and built digital technologies and tools to create a high-quality artwork as an integral part of the creative process, offering a vision that has not been easy to execute before, and innovating all the new features and features of technology to help it dazzle the recipient by connecting elements, ideas, and techniques to produce rich, valuable, and dazzling artwork. It is worth mentioning that each of these technologies has its own forms, characteristics, advantages, disadvantages, and strengths in application in the field of modern architecture and murals. For example, projection mapping technology takes the lead among modern technologies, which has led to a dramatic development in the field of wall imaging and methods of implementing modern murals. As a result, this attracts the pleasure of the viewer or recipient and contribute to the rich visual image of contemporary murals. The problem lies in research on the extent to which optical projection technology and its possibilities can be used to implement modern and contemporary murals that achieve the aesthetic and functional dimensions of architectural spaces. The problem lies on the extent to which optical projection technology and its possibilities can be used to implement modern and contemporary murals that achieve the aesthetic and functional dimensions of architectural bodies. The research followed an analytical-descriptive approach and an applied approach to access applied solutions that enrich the field of modern murals and apply them through projection mapping technology. The research concluded through study and experimentation that the use of digital technologies such as projection art installation techniques can It is considered one of the ways of developing and enriching the mural using traditional raw materials that can be used in architectural bodies, such as those with an educational role. Museums provide effective and well-established entertainment. Modern art museums use complementary digital technologies that can interact with human senses to increase expertise, facilitate the transfer of information, and create a fun, interactive, and educational environment that stimulates visitors' vision to enrich the museum experience. This experience is achieved by recognizing the works displayed by visitors with the help of different digital interfaces or murals based on modern technology that can provide a visual account of the pieces displayed by adding a different event to the museum experience in that they allow the user to form his own experience and provide flexible and alternative experiences.

**Research Problem:** The problem of research revolves around the extent to which optical projection technology can be used to implement modern murals that fall under the term media architecture (Mediatecture) and contribute to the creation of design ideas for architectural spaces within the Grand Egyptian Museum

**Research Objective:** Introducing a new design vision for murals by digital technology and displaying them with optical projection technology and creating structural relationships in which light plays the primary role in integrating the surface with the space depth of the architectural surface

### **Keywords :**

modern murals, projection, media architecture, museum projections, Contemporary Mural

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