

The Impact of folding technology on the design of architectural facades and its relationship to interior design

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Abstract

External and internal architecture is distinguished from all arts in that it deals with the basic three dimensions "length, width, and height" as well as the fourth dimension, which is time. In the art of photography, for example, man deals with two dimensions in addition to the dimension of time, but the person remains outside all these works, looking at and watching them. As for architecture, it represents a huge structural sculptural piece that a person approaches, enters, and walks in enjoying, examining it at all levels in a chronological sequence and within a certain schematic scale.

The design thought shows the possibility of implementing paper folding designs with alternative industrial materials, such as: paper, cardboard, rubber, polyvinyl chloride, polypropylene, polyethylene, fabrics, and natural materials, such as: leather, copper, aluminum, plywood, which led to an expansion Scope of using paper folding technology to form larger, thicker and more intense models. The design process relied on this approach, which was represented in achieving the values of the creative thought of interior design derived from the folding technique, and how to deal with interior design vocabulary dynamically so that it was possible to solve interior design problems inspired by the art of folding through a global perspective consistent with the principles of contemporary thought.

Spectral process means the physics of adaptation in the theory of chaos or disasters, while in architecture, the concept of folding expresses a technique of origami art, which is the process of bending one layer upon another layer, and while the folding process appears as if in its content a process of repetition of the form, it is theoretically considered a subjective process As it does not delete or add any elements that make up the shape, and it is considered a precise process that addresses one of the most quality characteristics of the shape, which is the transition from one dimension to another (the second dimension to the third dimension), and it is also a process that involves changes that expand the geometric qualities of the element while maintaining with its topology.

Keywords

Folding, Architectural facades, Interior design, Digital fabrication techniques