Criteria of using Parametric Design for two dimensional Wall surfaces

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Abstract:
In an age dominated by digital technology with all its modern applications, these techniques have been reflected in all fields of science and social life, especially in the field of architectural design. This research sheds light on the theories of modern design focusing on parametric design, a process based on computational thinking and logarithms and the study of its relation to the formation of architectural wall surfaces, through studying the properties of parametric architecture. The research also aims to link the past mural surface design ideas with the present and Future image in architectural surfaces. Research problem: There is the lack of suitable design criteria presence for the decorative treatments of architectural walls surfaces that keep up with the technical developments of the digital revolution. Research Hypotheses: The research assumes that by studying parametric design and the similarities between some other arts and parametric design, especially the Islamic arts, new design treatments can be found to develop the image of Architectural wall surface design while preserving these artistic characteristics. Research Goals: To extract a criteria for parametric design success in the formation of modern mural surfaces, to develop the traditional image of wall surfaces design. Trying to lessen the spacing between contemporary and old traditional architecture in a way that achieves both goals functional and aesthetic aspects in architectural surfaces design. Address the new architectural ideas and trends that emerged with the help of computer and digital media, as well as the technology of those media, to increase the Arab designer's awareness of modern design programs at the academic level and the applied professional level. Research methodology: The Historical Approach: To learn about the origin and development of digital architecture, especially parametric architecture. The descriptive and analytical approach: to introduce some concepts and techniques related to parametric. Conclusion: 1. Modern digital techniques have influenced the way of thinking in mural surfaces design, to take a new modern way either in design or in application possibilities. 2- Parametric design can offer a great possibility to link the community's artistic heritage with the modern design technology. 3- Parametric Design is one of the closest modern architectural trends to our artistic heritage, especially the Islamic art. 4-We can achieve many innovative surface design ideas through parametric design. 5-Increasing the productivity and effectiveness of society through the provision of a suitable environment, aesthetically and functionally, which benefits the members of the whole community.

Keywords:
Criteria, Wall surfaces, Parametric design

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