

Creation in Re –Invention of Architectural Ornamentation through Digital Production and Fabrication (Architectural Ornamentation between Beauty and Structure)

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Abstract:

The architectural controversy of decoration has reappeared (since it was previously described as a crime and a waste of labor and consumption of raw materials), but in a new innovative dress, with the current developments and under the use of modern techniques in border formation and with the application of computer-based configuration. And a digital aura has developed a new aura of freedom of creativity in design through digital manufacturing and production and has added a new status of decoration in the formulation of internal architectural spaces, so the decoration has already been embodied and rediscovered again. Be the role of production technology and technology advanced digitalization is a clear indication of decorative aesthetics, on the other hand an important emphasis on the logic of the structure of the formation, which in turn leads to a new structure in the design. So that the fundamentals of the new structural theory in architecture and interior design through the decoration and through the development of a new logic for the design of architectural decoration, through research in the concept of designing digital decoration in the form of terrain and superficial forms sudden go beyond what could be imagined by the individual

Research problem: As technologies become more available, as new tool systems are being developed and tested faster to become in new hands, they require considerable skill and knowledge of programs and controls: Does this mean that we are in a digital age in which labor Handmade craft?? Or is robotic manufacturing an alliance between genetic equipment and normal processes? (Combining conscious understanding with digital craft). The lack of awareness of the interior architecture designer often the origins of the decorations of the previous architectural styles and classifications, whether aesthetic or structural, and then rediscovered and reformulated digitally using advanced computer technologies, in the digital age, follows the form of computer, the computer does not design what is new and innovative, but it The mindset of the architect and his cognitive backgrounds in the field are the ones that make digital flow especially in the field of abundance of digital architectural decoration.

Objective of the research: - shed light on the designs of the world with digital decoration go beyond what could be imagined by the individual. By combining computer design and 3D sand printing, a unique architectural decoration can be embodied without any manual intervention, and without any loss of detail or information. Calculations are algebraic since they do not include randomness, but the results are not necessarily fully predictable. Instead, these processes have the potential to surprise the vacuum. Reframing architectural decoration using digital tools and computers that perform the mechanism of repetitive tasks of patterns and re-concept of the motives generated. Studying the role of the robotic plastic thrower controlling the construction of a present rich in formulation and architectural precedents. By producing a faster result with more efficiency than the above decoration.

Research Methodology: The research follows the descriptive and analytical approach by researching the concept of designing digital decoration in the form of sudden topographical and superficial forms that go beyond what the individual could have imagined. When combined with computer design and 3D sand printing, a unique architectural decoration can be embodied without any manual intervention, and without any loss of detail or information.

Keywords:

decoration, architecture, digital craft, digital production, digital manufacturing, robotic arms, 3D printing technology, digital workflow.