The Effect of Artificial Intelligence on Urbanism, Architecture and Environmental Conditions

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Abstract : Nowadays, design and architecture are being affected and underwent change with the rapid advancements in technology, economics, politics, society and culture. Architecture has been transforming with the latest developments after the inclusion of computers into design. Integration of design into the computational environment has revolutionized the architecture and new perspectives in architecture have been gained. The history of architecture shows the various technological developments and changes in which the architecture has transformed with time. Therefore, the analysis of integration between technology and the history of the architectural process makes it possible to build a consensus on the idea of how architecture is to proceed. In this study, each period that occurs with the integration of technology into architecture is addressed within historical process. At the same time, changes in architecture via technology are identified as important milestones and predictions with regards to the future of architecture have been determined. Developments and changes in technology and the use of technology in architecture within years are analyzed in charts and graphs comparatively. The historical process of architecture and its transformation via technology are supported with detailed literature review and they are consolidated with the examination of focal points of 20th-century architecture under the titles; parametric design, genetic architecture, simulation, and biomimicry. It is concluded that with the historical research between past and present; the developments in architecture cannot keep up with the advancements in technology and recent developments in technology overshadow the architecture, even the technology decides the direction of architecture. As a result, a scenario is presented with regards to the reach of technology in the future of architecture and the role of the architect.

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