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Architecture versus pandemics and climate change, work mechanism, outputs and the new common standards

Mohamed Abdo Mahmoud Edrees

Department of Architecture, Faculty of Engineering, Sinai University, Qantara East Branch, Egypt, mohamed.abdo@su.edu.eg

Abstract:

Architecture currently reflects many of the components and capabilities made possible by the technological revolution. Architecture also plays a major role in containing most periods of a person's life and activities, and represents the middle or intermediate environment for these activities with the surrounding nature. It also plays a fundamental role in producing and developing many of human behaviors and activities. Since architecture has an essential role in combating climate change, which has been scientifically proven to have an important role in accelerating the emergence and spread of epidemics and viruses. Therefore, the research assumed that architecture has a vital role in confronting the accelerating emergence and spread of epidemics, which it's frequency has now increased. Accordingly, the research monitored the changes and developments that have occurred in architecture in the recent period due to the Corona pandemic As well as those that occurred due to climate change As well as the developments, variables, tools and mechanisms added by modern technology that could be employed in these two axes The empowerment it has provided can be exploited in this field. From the study and analysis of these developments and the standards that were applied and relied upon, it was possible to extract a set of permanent, main, common general standards that can be relied upon and must be applied in future design processes to address the acceleration of the emergence of new epidemics and limit their spread in the future. As well as reducing climate change at the same time The research reached the nature of the relationship between the application of architectural standards to reduce and adapt to climate change and the standards for confronting epidemics and pandemics, which could be described as a direct circular relationship. The research recommended expanding the application of these standards and continuing to study the role of architecture in limiting the emergence and spread of pandemics and details the impact of architecture on the relationship between both axes. The tools and mechanisms provided and advanced by modern technology and the greater empowerment it has provided can be relied upon in this context.

Keywords:

Global architecture, Confronting pandemics, Climate change, Communications and Information revolution, Design standards

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