



Alexandria University
Faculty of Fine Arts
D cor Department

Interior Architecture Future Between Machine Dominance and Creative Standards

" Application of Collective Intelligence Mechanisms"
In interior architecture "

Thesis Submitted to the Faculty of Fine Arts,
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Submitted by
Lauaa Habashy Kamal abas Rady
TA, Faculty of Arts and design, pharos University

Supervised by:

Prof. Dr. Heba Samy Mansour
Professor, Former Head
of D cor Department
Faculty of Fine Arts - Alexandria University

Prof. Dr. Hussein Ahmed Mohamed Azab
Professor Emeritus at Decor Department,
Vice Dean for Community Development
and Environment Affairs (formerly)
Faculty of Fine Arts - Alexandria University

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Summary

The Fourth Industrial Revolution brought many changes to the human race. These changes not only took the form of machinery and architecture, but also appeared in the structure of society. The great technological transformation that will be unlike what humanity has experienced by artificial intelligence, ubiquitous automation, mobile supercomputing, intelligent robots, auto-driving, Internet objects, technological neural improvements, genetic editing. The evidence of dramatic change is what is happening around us, and it occurs so rapidly that the God has come to dominate our lives and our ideas.

The ramifications of the Fourth Industrial Revolution and its impact on the nature of the design of the interior architecture in the future, where the machine has become a major impact on the process of creativity. Which is a threat in the future if the machine is making progress at different speeds, the development of God has become linked to the development of our artistic production we humans.

This future is called "age of perplexity" in the face of changes in which we have no knowledge of its nature or guidance, and which work with the impact of globalization and technological progress. This course will determine our future, in the sense that it will determine our ability to meet the challenges and take advantage of the opportunities offered by advances in science and technology. The uncertainty will remain between an uncertain future in an over-technical world, or a world codified by laws and assets.

The concept of God has been extended since it was part of the Western architectural discourse from Vitruvius to Michelangelo, and at the time of Le Corbusier , he meant the embodiment. He considered the house to be a living machine. "The methods of expression and the use of machinery in the architectural context were varied with a metaphor for machines such as Dinari,), Or movable buildings with machinery or mechanical components (Condég, Colhas House Bordeaux), or machines as a mythical intermediary of Libeskind. This long alliance of architecture and machinery in Western culture produced a range of practices, Or parachute The hardware or devices to entire systems, installations or buildings, and it is impossible to define the term "architectural machine" categorically because of the wide range of ideas that are explored and expressed through machines.

In the era of the Fourth Industrial Revolution, artificial intelligence is the most important output, and it is expected to open the door to unlimited innovations and lead to more industrial revolutions, which will radically change the future of interior architecture. The artificial intelligence mechanisms dominated the interior architecture through technical, physical, and biological techniques. All this may have been to realize the concept of intelligent city conscious. With the use of this huge technological scale, trying to reach the

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highest levels of intelligence in the internal spaces through technology and matter, but the study proved that intelligence may not be achieved even with the use of all this amount of technology.

So we have sought to find a larger and deeper concept that may bring a more subtle meaning to intelligence called CI. It means the crucible of the universal brain capable of absorbing the abilities and energies of all. It is about combining human and mechanical intelligence to make the most of our collective knowledge and develop innovative and effective design solutions of social challenges. Many of the greatest gains are believed to come from better approaches to combining human intelligence and intelligent intelligence, known as "intelligence design," which would qualify as the future of the superpower in the global economy and industry. Open source programs may be one means to achieve collective intelligence in the interior architecture.

Then we moved to a deeper sense of collective intelligence and contemplated nature through an association that might achieve greater intelligence based on the simple principle of combining the efforts of many units to produce higher intelligence by a process of natural transformation known as emergence, namely the intelligence of the SI swarms, colonies of ants, bird flocks, Bacterial, and fish populations.

Simulating this natural collective behavior in complex syntactic algorithms produced a set of syntactic robots that may form the future of internal architecture that are capable of shaping and moving. They are self-assembling structures for the creation of architecture. "Work is looking to develop an environment of self-aware elements, self-structuring, and aggregation that can create collaborative spaces," says Spiropoulos. "Future directions for an advanced partnership through active links to information, materials and machinery." Designers are no longer designers, but programmers and system designers.

But throughout the research we try to reach a more humane design of the technology of God, it is still rigid rigid form a dimension and separation and communication with the human, tools against nature does not achieve integration with the ocean. We have shifted the search from the concept of solid machinery to more compatible machines with natural structures. The integration of the machine with the softness of the natural structures inspires integration with nature, in an attempt to resolve the opposition between what is organic and what is artificial, and learn from it.

Soft machines are inspired by the abilities and sensitivity of human bodies, but they are formed in inhumanity. The introduction of soft machines in the interior architecture creates conceptual proportions that connect the ideas of technology with ideas of the human body, which is a continuous communication of the machine. The internal architecture of the future meets our need as an extension of our bodies. The typical change in architecture will be recorded at the level of behavior rather than form, Throughout the research we try to find a

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meaning for the concept of how the technology of God is "human technology". A higher level in an attempt to achieve true collective intelligence.

In the study of soft machines, we propose not only the reasons for resorting to the "softening" of architectural machines but also suggest the design and development of theoretical strategies to inspire the sense of human and physical sensitivity within the architectural field. The architecture will turn into a structure that tests its body, recognizes itself and is embodied. Building structures in the future are characterized by dynamism, intelligence and the ability to interact with each other, communicate, learn and evolve within a larger structure - self-conscious and capable of acting. The building of the future will be to build a feeling - a soft, soft, non-solid structure - nourishes itself, recovers itself, adapts to the environment, and achieves the concept of conscious cities.

The seamless integration of automated systems in our buildings promises to improve the active and interactive environments that will help us to efficiently use our energy and improve user comfort.
