



Faculty of Fine Arts
Décor Department
Interior Architecture

**Recent trends in the design elements of interior architecture
and it's harmony with developed technology**

A Thesis to the Department of Décor Specialization
Interior Architecture
Fulfillment of the Requirements
for Master Degree

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2018

English Summary of Thesis

Introduction:

The subject of this study is the review of the modern trends that have emerged since the beginning of the twentieth century and have clearly influenced the architecture in general and the interior design in particular, and began to evolve until we reached the present age; the era of technologies, computer and electronic design programs, , Which resulted in a lot of changes related to technologies and these developments are clear the emergence of architecture and intelligent internal designs and the radical changes that have occurred in this area, and these developments were addressed through an applied study on the work of the global designer, "Karim Rashid" and solve For a clear idea of his style and contemporary design.

The Thesis has been divided into four consecutive chapters, as follows:

Chapter I, Entitled: A historical overview of the trends of architecture and interior design since the beginning of the 20th century

Chapter II, Entitled: The school of deconstruction and its impact on the style of Karim Rashid in design

Chapter III, Entitled: Modern technological trends and its impact on the development of Karim Rashid's design technique

Chapter IV, Entitled: An applied study of Karim Rashid's work through various sources of inspiration

The first chapter deals with the following:

- The influence of the trends of architecture and design that have emerged since the beginning of the 20th century on the technology of our time. It is considered the beginning of the era of the digital revolution and modern technology, and it was therefore necessary to review these trends before entering the subject of the study.
- A clear shift in the construction sciences in the early 20th century. It was possible to adapt the new applications of the materials that emerged to keep abreast of modern trends in architecture, as a result of the destruction of many residential buildings in the First World War.
- **Characterized architecture at the beginning of the twentieth century:**
 - 1) Towards simplicity.
 - 2) Industry and modern technology.
- The emergence of technology-oriented architectural schools and we will address these schools and trends before entering the trends of our time.
- **Among these schools and trends emerged:** Cubism School, Bauhaus, Futuristic, Structural, Expressionist, Functional, Organic, The Hi-Tech, International Model.
- **The study deals with the effect of technological development on architectural during the second half of the twentieth century:**

English Summary of Thesis

- 1) the shift from the idea of modernity
 - 2) change the prevailing thinking; and then the emergence of two main trends are:
 - 1) The architecture of late modernity
 - 2) Postmodern architecture.
- Late modernity movement is only the movement of development of modern architecture itself by the introduction of technology and modern technology at the time.
 - Postmodern architecture has adopted the same technological approach to late modernity, but with the use of the vocabulary of various historical and heritage buildings.
 - There have been many developments and innovations that have emerged in many buildings.
 - The latest technological development influenced the formation of the world architecture in the second half of the twentieth century; many developments and innovations in many buildings.

The second chapter deals with the following:

- The emergence of the deconstructionist trend in the late 20th century, which caused a series of controversies around it, and this tendency is often the closest to the work of the designer, "Karim Rashid," the subject of the study.
- A fairly detailed explanation of the disassembly trend, and the team of architects who are created according to the concept of deconstruction create a new architecture does not resemble the usual architecture does not depend on any legacies on the history of architecture.
- **Dissenting attitudes from the school of deconstruction:**
 - 1) Disassembly and non-bonding.
 - 2) Madness and folly.
 - 3) Positive - Emotional.
 - 4) Modern construction.

Each direction has a deconstructionist pioneer and designer with different design ideas, as well as features that distinguish his works and designs.
- **This study also addressed the criticism directed to deconstruction architecture, which is represented in the following:**
 - 1) It is an engineering movement that calls for the destruction of all the bases of the Al-Islamidian architecture.
 - 2) Dismantling the structures without cause.
 - 3) Abandonment of heritage and cultural heritage.
 - 4) Crushing and non-symmetry architecture.
 - 5) Difficult to understand.

English Summary of Thesis

- Then we discuss the biography of Karim Rashid the Egyptian Architecture designer (where he was born in Cairo to the father of Egypt and English and then moved to Canada).
- Who is considered one of the most creative designers of his generation, He received more than 300 awards and produced more than three thousand designs and works in more than 40 countries.
- **This chapter on the style of "Karim Rashid" in the design through the analysis of some models of his work and represents this method in the following:**
 - 1) Deconstruction movement and forms of superimization.
 - 2) Forms of digital technology.
 - 3) Parmesan forms.
 - 4) Folded and inspired shapes in origami.
 - 5) Minimalism style.
 - 6) The organic direction.

The Third chapter deals with the following:

- 1) Non-physical spaces Cyber Space.
- 2) The emergence of physical structures with digital components Digital Architecture Digital Elements with.
- 3) Elements of transparent architectural design.
- 4) Fading the border between the inside and the outside.
- 5) Use virtual reality as a design tool.

This chapter also deals with intelligent buildings, which are considered the technological progress achieved by humanity in the field of architecture and design using information technology.

- **The elements of architectural intelligence were identified in the building as follows:**
 - 1) Self-response.
 - 2) Self-decision making.
 - 3) Smart knowledge.
- **And also the technologies available in smart buildings:**
 - 1) Smart lighting
 - 2) Heating and air conditioning systems.
 - 3) Energy management systems.
 - 4) elements of the head contact.
 - 5) Fire protection systems.
 - 6) Security and safety systems.
 - 7) Digital control and communication systems.

English Summary of Thesis

8) Information and communication network systems.

- And then reviewed some of the applications of "Karim Rashid" of the Smart Complex in architecture and design.
- He also explained the importance of sustainable design in energy conservation in addition to providing harmony between the building and nature. It is one of the manifestations of modern technology, as well as reference to the most important principles of sustainable design and how it was addressed by Karim Rashid in his designs.
- **This chapter also discusses the solutions of the smart walls and the extent of the impact of the internal walls of modern technology, which are as follows:**
 - 1) Nano coating for surfaces.
 - 2) Interactive walls.
 - 3) Heat-treated walls.
 - 4) speaking walls.
 - 5) Variable glass inner partitions.
 - 6) Green walls that clean the internal air.
 - 7) Walls as devices to send touches.

Finally, he will review some models that reflect the technology and the digital revolution in the world of furniture and how Karim Rashid influenced this field (industrial design).

The Fourth chapter deals with the following:

- 1) Graphic design as a design.
 - 2) influenced by the design thought of some designers.
 - 3) Confirmation of the origin of the Arab cultural identity.
 - 4) Color.
 - 5) Art.
 - 6) Ring shape and curve.
- This chapter dealt with a number of applied models for Karim Rashid's different designs, whether in commercial, residential or administrative spaces, through which different sources of inspiration were developed.
 - He also discussed the modern kitchen designs designed by Karim Rashid and the methods used in design.
 - Identify the materials used in the design of furniture in our time and what are the most important materials preferred by the designer, "Karim Rashid.
 - **The method of "Karim Rashid" in furniture, which came as follows:**
 - 1) Organic Design Organic Design.
 - 2) Smart Technological Furniture Smart Technology Furniture.
 - 3) Multi-function design Multi-Function Design.
 - 4) compact design.

English Summary of Thesis

5) Rotating or Moving Furniture Rolling Furniture.

- This chapter deals with lighting in interior design by reviewing the models of different lighting units designed by Karim Rashid.

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