

Dimensions of Technology on the Alienation of Architecture

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Abstract

In recent decades, the world has witnessed rapid changes as a result of the revolution in technology and its advanced applications, which have become a feature of the modern era to determine its features and its path of development. These features and path have affected the fields and systems of science and different knowledge and are reflected in the field of architecture. These transformations come with the phenomenon of alienation in architecture.

Although many international and local studies and proposals have discussed the topic of alienation in architecture, they did not address the dimensions of technology on the topic of architecture alienation. Therefore, the research problem appears in the lack of a clear vision of the dimensions of architecture technology on the architecture alienation. The study aims to determine these dimensions "and to achieve, an analytical approach is followed according to three axis's :

1. Architecture technology
2. Alienation of architecture
3. Dimensions of architecture technology on the alienation of architecture

The research concludes that the rapid technological development leads to the architectural chaos and the emergence of a state of alienation on these axis's.

1. Introduction

The modern era is characterized by the change in the scientific knowledge and the technological applications. This constitutes decisive factors in determining the parameters of the stage and its path of development, which are characterized by the dynamism and rapid transformation adopted by technology and its advanced applications. This dynamism and transformation affect the fields and systems of science and different knowledge reflected in the field of architecture.

2. The first axis /Architecture technology

2.1 The concept of Technology

When a person aims to accomplish a certain achievement aiming to extend authority over the surrounding environment, s/he uses a set of knowledge and skills, i.e. technological foundations. They also use a set of technological tools, and combine them to make one framework. Thus, it can be said that s/he uses technology.

Mumford states that technology is the means by which the human personality can be enabled to confront the forces in nature and in all directions, and to rationalize her/his life (Al-Majidi, 2004:21).

Technology is the set of accumulated and available knowledge and experiences, the organizational, administrative material, and moral tools and means used to perform a function in the field of daily life to satisfy the material and moral needs, whether individually or socially (Hamdula, 1997:1).

Technology appears in transformational processes on the subject matter of phenomena to show them (Rasul, 2003:51).

According to Al-Aqib (Al-Aqib, 1994:23), technology is a set of tools, machines and methods that determine the necessary path to solve the problems faced by humans. These tools must be designed according to the objective laws (or the divine Sunnah in the term of the Qur'an) that control the movement of nature and the evolution of man to be correct (it here is related to science and represents the practical side of it).

Therefore, technology is a means or an end used by humans to achieve a life function and satisfy a material or moral needs for the individual and the group through its integration with the cognitive and material systems.

And because technology is a means or an end, so how it was harnessed in the architecture and in any side or level.

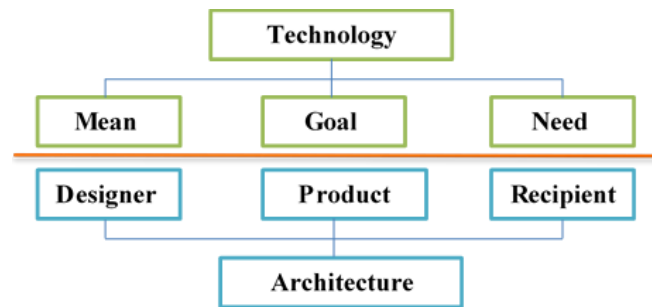
2.2 Architecture technology

Architecture is affected by technology where the performance of the building was combined with its value or aesthetic status, symbolic connotations with the structural system, and meanings with the practical function.

Mumford (1952:23) classifies technological tasks in architecture:

- Technical details include the basic principles, service systems and energy means
- Artistic details are the form, scale of origin and job requirements. Also, the artistic side is a field or space for architectural expression, while the technical side is limited to fulfilling requirements that do not allow space for architectural expression despite its necessity.

Fischer describes technology or non-vital activities by work believing that it is necessary to establish harmony between the self and its environment on a physical and psychological level. Humans seek to complete the foundations of themselves by producing a more comprehensive reality to serve humanities and meet their desires (Agha, 2001:25).



Jenks (cited in Al-Majidi, 2004:21-22) argues that architecture should look at the sciences synchronized with it to participate in showing the modern cosmic codes to the world today, and to preserve its creative energy. Therefore, architecture must observe the sublime laws of those sciences and mix them with the aspect of imagination in reality. In this way, it either tunes the creativity processes or it does not mean anything. In addition, the available technological capabilities give the designer a great freedom and provide various alternatives choices, applications and implementations.

Al-Taha (2002:61) explains that it is possible to express a place through distinctive architectural characteristics, while time is expressed through the employed technology. In addition, the identity of the designer is explained through the stylistic peculiarity in the way they are employed in a unified whole formation.

Architecture mandatorily needs technology and its effects to combine the symbolic performance and functionality of the building with the structural system. Despite the classifications presented to the tasks of technology in architecture, it usually has two main branches, the first relates to the performance of technology for its own sake and the other to the symbolic performance of technology and its functionality.

Therefore, from the above, the role of technology in architecture becomes clear on several levels:

- Architecture technology as a means and an end in meeting the needs and requirements of humanity.
- Technological aspects of architecture (technical, artistic, and functional) are employed.
- Technological features are evident at the production stage or in the production itself.
- It uses technological capabilities to express the designer's privacy, personality and creative powers.
- Technology is a tool to express time.

Through the first axis, the relationships can be identified as follows:

3. The second axis/ Alienation of architecture

3.1 The concept of alienation

Alienation means the person's loss of the self and the personality, which could push them to revolution to regain their being (Contemporary Arabic Lexicon).

Horny clarifies that alienation expresses what the individuals' detachment from themselves, where the individual is separated from the private feelings, desires and beliefs, which is the loss of a sense of active existence (Al-Aqili, 2004:12).

Stokols shows that alienation arises from the experiences of the individual with themselves and with others and it lacks communication and complacency accompanied by isolation, a sense of rebellion, rejection, withdrawal and submission (Al-Maliki, 1415Ah:7).

Malaise (cited in Touzan:17) points that alienation is the feeling of discomfort in the presence of an unfamiliar person, thing, or scene, which comes from the strange sense of not knowing them. This is followed by a feeling of absolute confusion to change relations associated with reality or with the self.

Therefore, the word alienation has a content that is almost fixed which is movement away from its position to reach the stage of separation and disconnection from the self and personality due to the dissatisfaction with reality, which may push them to a change and revolution in order to restore the being.

According to the studies that dealt with this concept, the meaning of alienation changes while the content remained stable in one way or another:

- a. Alienation in the sense of separation
- B. Alienation in an objective sense
- C. Alienation in the sense of lack of power and authority
- D. Alienation in the sense of meaninglessness
- E. Alienation in the sense of vanishing standards

Alienation changes, as it is the inevitable cognitive separation of certain entities or elements in the realities of life, the loss of meaning and the rejection of the group due to the lack of objective standards. This causes a shift away from the correct situation, a detachment from reality, and introversion.

3.2 Dimensions of alienation

Abakar (1989:102-115) proposes the dimensions of alienation through:

- a) Loss of sense of community belongingness with loss of pride of isolation, loneliness, and alienation.
- b) Failure to adhere to society's standards and values, and seeks to achieve the goals legally or illegally to satisfy the aspirations.
- c) The inability to reach the results sought and the inability to control the self or influence others in situations in which the individual interacts.
- d) Insensitivity and not valuing the self or the things that s/he possesses, the goals s/he seeks to achieve, the actions undertaken, and the leading life.
- e) Loss of purpose and lack of clarity with lack of knowledge of the purpose of its existence.
- f) Loss of meaning and the inability of the individual to understand the various aspects related to it.
- g) Self-centered and self-interest become the center of thinking of the individual, and the individual exaggerates the concern for self-interests not others'.

3.3 Alienation in architecture

Critics of literature, art and architecture use the word "alienation" to express the thinking of the modern man about a universal alienation, and the falsity and separation of life. They also use the word alienation in their description of the artistic and architectural which is that this work is related to one aspect of the modern man. Also, the contemporary man has become more separate, whether from nature, society, or the city "architecture" or even from her/himself.

Grodzen describes the concept of the alienation of architecture as a situation in which individuals do not feel belonging to the community or the nation as a result of the loss of privacy. Alienation results from losing criteria to define the architecture identity because of the architecture chaos in which the monuments and West and East appearances are mixed with no controls. They make the invented architecture a random pattern in which factories and dwellings are mixed in various and apparent dissonance (Khairy, 2003).

Also, through the process of connection with the West, importing ideas and ready-made products (thought and product of technology) and applying them to Arab societies without adequate studies of the nature of the place make architecture forms alienated. This also causes the recipient of those forms feel alienated not meeting the requirements of their human needs (Khaled, 1998:131).

Therefore, if the processes of transfer and borrowing, or borrowing and influencing are not studied and selected with a full awareness of the elements of the place and the given society in a way not to conflict with the aesthetic sense in this place, they will make an isolated heritage that does not have the necessary enthusiasm for creative creation or reacting to it. It does not become a successful means of understanding and interaction, and may even backfire with conflict and dissonance.

Bodmagh (1999: 120) states the alienation results from the interaction with the West in the field of architecture. Therefore, importing their ready-made designs and transferring and implementing them in the Arab community lead to a double-edged separation:

1. Architecture separated from its environmental roots.
2. The architect's dissociation from its culture and the memory of the society.

This has led to lose of the architectural identity away from the essence of architecture and the goal of creating contemporary architectural thought.

Frank Lloyd Wright (cited in Clarke, 2003:27) points out that the alienation in architecture is the result of the designer's dependence on their own design, which neglects the requirements and desires of people. This negligence makes the recipients of that product feel alienated.

There are in multiple forms architecture alienation depending on the circumstances and the nature of its appearance (Khairy,2003:27):

- In modern architecture and deconstructive architecture, alienation means the separation of the recipient and the product because of the designer's failure to meet the desires and needs of the recipients, so alienation was negative.
- In postmodern architecture, the meaning of alienation appears in an urgent manner as a result of nostalgia for the past which is internal alienation, i.e. alienation from the current reality (current outcomes) and a return to what it is familiar to the human memory. It also appears as a strategy to follow postmodern architecture to reveal the causes of alienation and then substitute this alienation for alternatives. The alienation in postmodern architecture has advantages and disadvantages. The latter is the result of the recipient's separation from the reality of the situation and going back to the past in order to reconnect. The advantage is the adoption of a design strategy by the designer to persuade recipient and thus push the individual to change the interpretation of the new forms.

We can infer that the alienation in architecture affects different humanity aspects for the designer and the recipient on the one hand and the product on the other hand. It is the separation or shift in the structure of a thing from its reality in the culture of a particular society, intentionally or unintentionally, and the recipient loses the intuition about the design and raises attention because of:

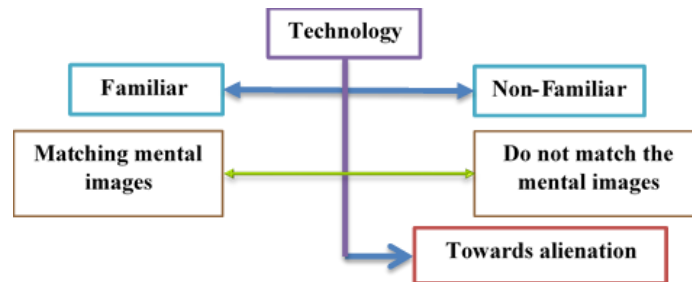
- Importing ready-made architectural forms and ideas separating architecture from its roots and environmental culture, thus the identity, the goal of creativity, and the essence of architecture are lost.
- The transmission and the ill-considered imitation lead to a lack of interaction and to create conflict and disharmony.
- The architectural chaos leads to a loss of sense of belonging, privacy, and architectural identity.

- Internal alienation through nostalgia

Moreover, alienation is of two types:

- Negative alienation between the recipient and the producer because the product does not meet the needs of the recipient. It may cause the detachment of the recipient from the reality and a return to the past.
- Positive alienation is its adoption as a design strategy by the designer to convince the recipients and to cause them reinterpret the new form.

Through the second axis, the relationships can be identified as follows:



4. The third axis / Dimensions of architecture technology on the alienation of architecture

4.1 Alienation in architecture

From what is already discussed, it becomes clear that one of the causes of alienation is technology. The introduction of technology and the use of the odd things from references, as Antoniadis states, are one of the enhancing means of imagining, and going behind or outside the limits of the focal point of the reference in time and place. The oddity may be mental, which means foreign mental values and contents in comparison with the building's own values. It could also be physical, which is the introduction of strange elements into the design, such as the use of architecture "Asuzaki" various Western codes in the urban center (Sokuba). This is to introduce the idea on the identity of the Japanese based on the imitation of infinite texts outside the center of the local community (Al-Dabbagh, 2005:11).

Technology is the fulfillment of a need and a demand of the recipient by the development and change in the means and tools. When the shape of the product matches the mental image of the recipient, the product is familiar and acceptable. However, when this match does not exist, nonfamiliarity and alienation appears.

4.2 Technology and Alienation in Architecture

Brodbent (1990:159-164) deals with the subject of the philosophy of design ideas for urban spaces. Brodbent claims that the advancement of technology and the industrial revolution cause alienation in architecture from the alienation of the architects themselves. This is because human beings are considered as a machine, a tool, or a machine that the architect can control, as they want without taking into consideration the social needs of the users of those buildings. The state of alienation was on two levels according to the ideas of the architects:

1. Industrial alienation: Marx's ideas about the industrial city influenced the rationalists who state that the last industrial city is alienated or profoundly create a sense of alienation. Everything in the factory is lined and prepared according to the rhythms of the machines, not for the comfort of humans at work. Thus, the roles of humans become secondary as they become mere hands operating those machines. So conveyance emerges from nature, from accompanied human beings, and the products that play a small role in making them, each of which is deeply alienated from the other. The rationalists envision a return to the middle Ages i.e. the period before Industrial Revolution to "ideal" states and the role of the craftsman in workshops.
2. The alienation of big cities: Frederick Engels states that industrial revolution causes overpopulation in cities, thus generating a kind of alienation resulting from indifference, isolation and lack of feeling, as each person has their own concern that distracts them from the society.

The methods, techniques and production of modern architecture forms ignore the needs and desires of the users. This has formed a sudden shift to what people are accustomed to from the slow development of traditional architecture. So the Western architects are detached and shocked by the tense, so the response was tense and sudden. They felt they lost balance of architecture identity they adopt after a disappointment of the modern architect (Khairy, 2003).

Al-Naim classifies alienation in two types to technological changes (2001:97):

- a. A lack of knowledge of the transformations taking place on architectural forms that lead to the emergence of new forms causing detachment.
- B. An escape or return to the past due to the separation of the self from the current reality and its inability to adapt to the new developments and new changes.
- c. The ready-import forms and ideas make the recipient feel alienated.

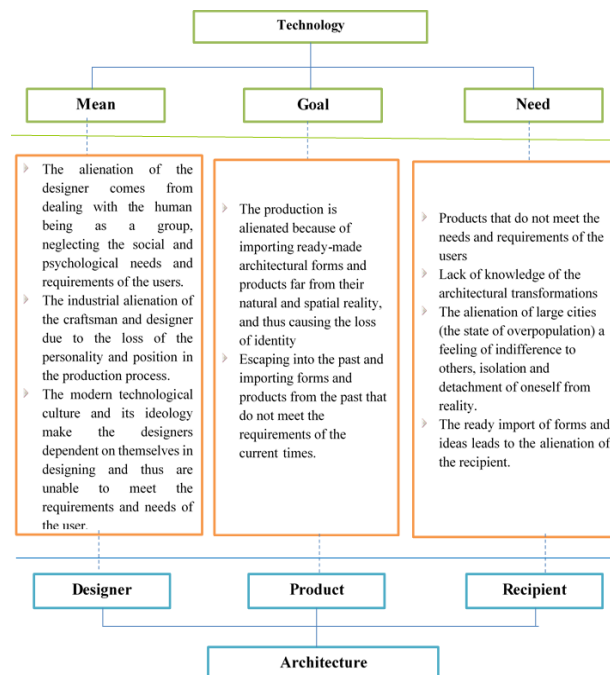
Gibb (1971) discusses architect estrangement, as the contemporary architectural idea has been divided because of the ideology of alienation resulting from the characteristics of the current circumstance. This is one of the causes of estrangement, which is the value struggle created by the technological culture (cyber culture). This means technology is one of the reasons for feeling strange.

The alienation of the designer hinders the creation or development of an architectural idea that meets the needs of a society that is characterized by rapid and irregular change.

Clarke (1994) claims that the designers depend on themselves in the production architectural forms that express their artistic sense. This production causes oddity because they do not meet the needs and requirements of the recipient, and the continuation of this manner causes the fading and disappearance of architecture.

5. Conclusions

Through the research, it is concluded that the rapid technological developments cause the architectural chaos and the emergence of a state of estrangement in three dimensions: -



5.1 Designer

- The alienation of the designer comes from dealing with the human being as a group, neglecting the social and psychological needs and requirements of the users.
- The industrial alienation of the craftsman and designer due to the loss of his the personality and position in the production process.
- The modern technological culture and its ideology make the designers dependent on themselves in designing and thus are unable to meet the requirements and needs of the user.

5.2 Product

- The production is alienated because of importing ready-made architectural forms and products far from their natural and spatial reality, and thus causing the loss of identity
- Escaping into the past and importing forms and products from the past that do not meet the requirements of the current times.

5.3 The recipient and the community

- Products that do not meet the needs and requirements of the users
- Lack of knowledge of the architectural transformations
- The alienation of large cities (the state of overpopulation) a feeling of indifference to others, isolation and detachment of oneself from reality.
- The ready import of forms and ideas leads to the alienation of the recipient.

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