



# The impact of time/emotion factors on the interpretation of meanings of Iraqi architecture, and its transformations

Ghussoun Fadhil Abd Al-Jabar <sup>a</sup> and Ghada Musa Rzouki Al-Slik <sup>a</sup>

<sup>a</sup>Department of Architecture Engineering, College of Engineering, University of Baghdad, Iraq

Email: [g.abduljabar1304@coeng.uobaghdad.edu.iq](mailto:g.abduljabar1304@coeng.uobaghdad.edu.iq); [Ghada.alslik@coeng.uobaghdad.edu.iq](mailto:Ghada.alslik@coeng.uobaghdad.edu.iq)

DOI:10.52113/3/eng/mjet/2022-10-01/17-26

## Abstract

According to Modern Semiotics, the perceiver is the main factor in interpreting the meaning, in general, and in architecture in particular, the thought is that the perceiver's cultural and personal background would affect the formulation of his/her interpretation of architectural meanings, and then affect the transformation of these meanings in time. This research assumes that (Emotion) influences the interpretation of meaning, especially in architecture as it is linked with the memory of place, where memory interacts with the "Sensory Diffusion" and "Knowledge" in the process of thinking and interpreting the research discusses the time factor in the transformation of the interpretations as well. This argument is clarified in theories of appreciation, aesthetics, and perception, with the semiotic triangle. Different types of various groups in society have been chosen according to variety of cultural background, a questionnaire has been designed to investigate this in the interpretation of Iraqi architecture, to interpret six samples of Iraqi architecture varying in time and function. Main findings showed the connection between meanings and emotional responses, in the interpretation, but mostly in transformation of the interpretation over time for Iraqi architecture.

**Keywords:** Various Groups, Culture, Interpretation, Meaning, Emotion, transformation

## 1. Introduction

Thinkers throughout history have raised issues of human's understanding of his/her architectural surroundings. Fields of thought at the beginning of the twentieth century focused on semantic theories and theories in linguistics and meaning, while architectural studies took this approach in the last quarter of the twentieth century focusing on the subject of meaning in architecture, raising the issue of the interpretation of the perceiver as main element in architecture.

## 2. Previous Literature

In the nineteenth century, Charles Sanders Peirce (1839-1914) presented an expanded concept of semantics - which scholars considered the beginning of a contemporary semiotic science. On human and creates an effect, and this effect is called the Interpretant, and accordingly he presents three elements of the meaning system, namely (the sign or the representative, or the meaning), and the (object, or the sign vehicles), and the third is (the perceiver). Interpretant is the person receiving it) and it is the active element in the relationship. (Gerard de ledalle,1977). Through this perspective, Peirce emphasized that the meaning is related to the human being, and he is the one who interprets the things and features that surround him. The "meaning triangle" appeared in the book "The Meaning of Meaning" 1938 by Charles Kay Ogden (1889-1957) and Ivor Armstrong Richards (1893-1979), in which they presented a diagram of a triangle It became called the triangle of meaning and they presented the linking relationship of the three sides, the signifier, the signified, and the perceiver, as shown in Figure (1-1).

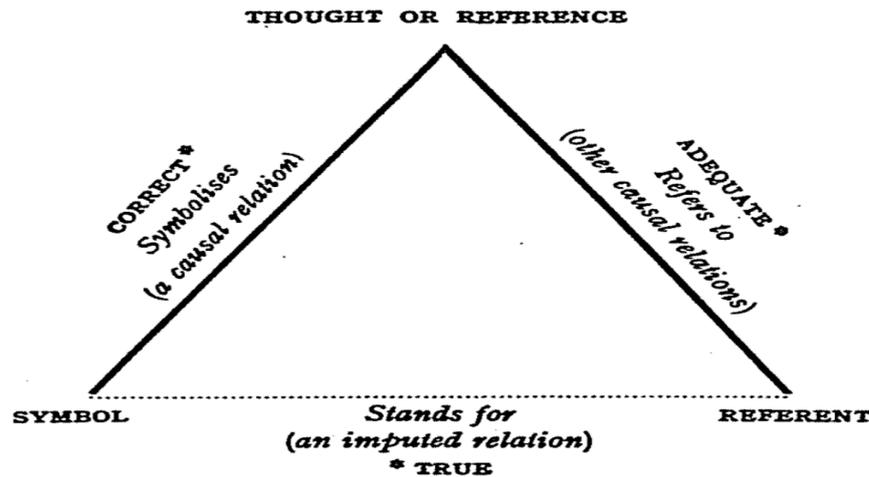


Figure 1. The triangle of meaning as put by Ogden and Richards in (Ogden and Richards, 1938)

Ferdinand de Saussure (1857-1913) in his book (Course in General Linguistics, 1916) discussed ideas in the subject of semiology and clarified the relationship between (signifier and signified). We can see that both Peirce and Saussure have made it clear that the interpretation of meaning is not one, but it belongs to a third part (the perceiver), which interprets the relationship between the signifier and the signified. According to this perspective, the interpretation of the perceiver (the human) is affected by several factors (in time, place and culture).

In architecture Juan Pablo Bonta discussed the concept of interpretation in architecture, in his book "Architecture and its Interpretation: A Study of Expressive Systems in Architecture." He considered that meaning and interpretation are one and the act of interpretation is a cultural act concerned with meaning. He explained that the interpreter is the one who associates the meaning with the form, and accordingly the form can have several meanings according to the perceiver (Bonta, 1979).

Amer Mustafa in his study "Architectural Representation and Meaning," quoted Arthur Child's definition of interpretation which is "the system of thought and words that presents itself with sensory or mental perception." In other words, interpretation is the process of translating into words or concepts of something apparent by the perceiver (Mustafa, 1988).

In his discussion of interpretation, Brindle indicated that human consciousness is what allows us to acquire understanding and think about impressions, He also pointed out that the experience of receiving begins with attention (Brindle, 2015).

According to Malone, the interpretation of meaning is established through the relationship between human and the built environment, and it can be placed under the framework (cognition) or meaning (Malone, 2018). Malone believes that all environmental experience falls under the (meaning flag) and thus refers to the ideas of Merleau-Ponty in emphasizing (the whole) and the physical nature of human as a basis for the experience and also reflects the ideas of Henri Lefebvre.

In emphasizing the individuality of the experience as it exists for a practical human body, and for this he sees all the built space (constructed architecture) as having a meaning. As human beings, we have an intimate emotional relationship with the nature of daily environmental experience and academic theories may fail to clarify the reality of the interrelationships between human life processes. These concepts have been studied in a number of disciplines according to each specialization and interest, as in urban design and planning, Psychology, Urban Sociology, Human Geography, Philosophy and Political Economy, Behavioral theories also took care of this by studying the factors associated with behavior, its patterns and basic sensory responses. Environmental psychologists have also been interested in linking meaning and physical space and mental maps to define the elements of urban space structures (Malone, 2018), while the philosophy of beauty is interested the impact of the values of shape, color, texture and scale.

### 3. Factors affecting interpretation of meaning

#### 3.1. General Culture

When Bonta raises the understanding of what any architecture means for people, he sees that this is related to the nature of the cultural environment of each individual and also at the his/her background (Bonta, 1979). He also confirms that perceivers cannot be discussed in isolation from the social culture in addition to the individual own experience of the perceiver (Bonta, 1979). Anthropologists and sociologists put forth the nature of the influence of culture in any society on the formation of people's ideas and opinions. Clifford Geertz defined culture as: the way of life of people, the social heritage that the individual gains from his/her society, the way of thinking, feeling, and believing (Geertz, 1973).

Here, culture becomes a phenomenon specific to the human being, and it represents a set of behavior acquired from the society in which the perceiver lives in all these represent an (expressive systems) for a particular society.

Rapoport points out the importance of discussing how this system is acquired and decoded in the process of (Enculturation), especially with regard to the built environment, gradually since birth and during the individual's living within his surroundings. But this differs with regard to individuals who move (or migrate) from a particular society to a society with a different culture, and where the process of acquiring culture occurs later in acquired a process of (Acculturation) through

(Enculturation) with contact with the new environment (Rapoport, 1990, p.65). So, he considers the society is composed of many groups of people with different ways, life and behavior that represents their culture. The culture of society is transmitted from parents to children according to the Verbal Language, meaning what children hear from parents or teachers, and it is reinforced according to the nature of their responses in educational aspects (Rapoport, 1990, p.65).

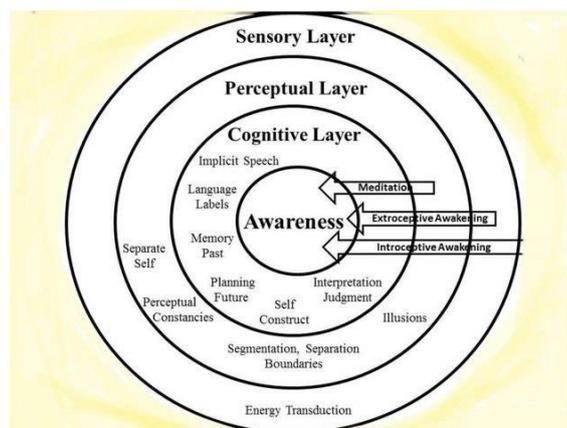
Rapoport quotes Mary Douglas a1973 as saying that there is a special organization shows the hierarchy of people's relations with space, at the level of gender (men, women) as well as the different groups, and that this in a social system of people. It is clear that the individual's emergence in a traditional house makes him/her understands the environment in a different way from the individual's emergence in another urban environment in which he does not deal with social customs and traditions. and its urban gradations and its social activities. It is also clear that the one who comes from another environment, such as the rural environment, for example, will not have his interpretation of the meaning of architecture (traditional or otherwise) like the interpretation of the urban individual will not have occurred for him since his birth and growth, but must be acquired from the environment according to what Rapoport put forward with (Rapoport, 1990). Sociologists point out that perception and understanding of tall buildings, for example, differs between the most knowledgeable and educated individuals and depends on the nature of the surrounding urban environment for these individuals and the heights of the buildings (Ali Abdul Razzaq Chalabi, 1989).

Shaker Abdel Hamid points out that there are differences between individuals according to age, as young people differ from others and in the proposal to perceive and appreciate artistic work (Shaker Abdel Hamid, 2001). We can notice the difference between the components of the educational space, for example, for children, and what it contains of formations, elements, colors and symbols (such as the symbols of cartoon characters) that are understandable and influential for the age of children, and between university educational spaces, for example, in which the formative and symbolic influences are at another level.

According to sociologists also, the concept of (Social) appears, which is the position occupied by a person or group of people within their society and is linked to age, gender, profession and income. Researchers refer to the difference in the categories (totals) of partial (various) cultures between specialists in a certain activity, such as artists and other people in interpreting the meaning of artworks (Shaker Abdel Hamid, 2001). Sociologists refer to these partial cultures as qualitative, generational, occupational or spatial groups, and sociologists use the term reference group similarly, though not identically, to refer to semi-uniform mental images of the specific group. (Ali Abdul Razzaq Chalabi, 1989, p. 128).

### 3.2. Individual Experience

After investigating the level of the general cultural and societal influence on the interpretation of a specific meaning of architecture for the individual, we move here to discuss the individual personal level and what affects it. According to Hugh J. Foley and Margaret W. Maltin, sensation is a direct and basic experience that is generated by a simple, independent stimulus (stimuli). As for sensory perception, it relates to and is related to the interpretation of the sensations resulting from the experience by giving them meaning and organization. Sensation and sensory perception are physiological and natural processes, but the mental or cognitive awareness is associated with interpreting the meaning of architecture as a process with deeper dimensions than sensory perception only (Maltin and Foley, 2010, p.6-7). Researchers in this field have presented various illustrative schemes that illustrate the human experience of perception and interpretation. Here is what John de Castro presents in the scheme shown in Figure (1-2), which shows the sequential layers from sensation, to sensory perception, and then the layer of mental cognition up to awareness/knowledge.



**Figure 2.** A model of the layers of processing producing adult human experience (De Castro, 2015)

The study of mental cognition belongs to the specialization of Cognitive Science, but we can see that the intellectual studies associated with appreciation overlap with it, as well as the psychological study, and also semantic studies and theories of architectural criticism. The philosopher Dived Hume referred to the process of appreciation as representing a group or series of mental processes (Shaker Abdel Hamid, 2001, p.86). The researchers link Hume's thought with the philosopher Kant's thought in describing the principles of taste as being general. Among people, except that there is a difference between individuals in the act of appreciation and giving judgment to a specific work of art as well as an interpretation of a

certain meaning associated with it, as he sees that there is what can be a personal (emotion) associated in obtaining an opinion. In his discussion of the nature of the act of appreciation. Stephen G. Pepper points out what it means to have a vivid pleasant experience, and explains how it occurs, and what is the nature of people getting the (like and dislike) for the same thing. He believes that from the perspective of the (Individual Relativity Theory), the individual is in a purely subjective position. When a majority of people have a similarity in the nature of admiration or lack of it for something, this only means that this majority share culturally certain traits, as the cultural relativity. Researchers consider that the existence of these differences in the individual experience is due to human nature, which is distinguished alone without the rest of the organisms in the act of taste (Pepper, 1949, p.118), Pepper also believes that the role of emotion in obtaining taste and interpretation comes in three aspects within the aesthetic field, which is (sensory fusion), (instinctive drives), and (moods), and he believes that the essence of emotion there are blocks of feelings fused into one feature, which is the feature of emotion and is a feature of a state of mind that cannot be analyzed. These fusions come in two types, the first type comes from associations in the external stimuli of the human nervous system within the human presence in his environmental surroundings and space, and these are (Sensory Fusions), and the second type comes from internal sensations that is form the feeling that a person possesses according to his instinctive motives, which can be called a (Drive Emotion), and the two types have great importance in the field of taste. In the first type, sensations come from outside, and in the second type, the human body is an influential substance in aesthetic taste, but sensory fusion acts as an organizational system in the process of collecting many external sensations and linking them in to one feature, which is emotion. (Pepper, 1949, p.118-119). It we can conclude that the cultural background of people interact with the personal experience and specific experience in the act of interpretation and then the transformation of this interpretations as the personal experience grow, and certain age\culture inputs are development.

### 3.3. The Factor of Time

Time affects society and culture. So, it affects the (Enculturation and Acculturation), in the same time it affects the individual as he\she gets older, or gets new Knowledge and life experience. Bonta refers to the affection of time on the spirit of age in explaining the transformation of interpretation of a certain building (Mies van der Rohe's pavilion in Barcelona) in 40 years of its life, first critics neglected it, then it became one of design expressing minimalism thought then, It was considered as an Icon of modern architecture. (Bonta,1979). So, both general culture and individual experience is affected by the factor of time.

We find Umberto Eco explains architecture as a system of semantics (meanings). He put forward in detail what he saw as ways of transforming meaning (in architecture), naming physical entity (Primary Functions), expressive entity (Second Functions). It indicates that these functions are transformed in multiple ways, including the change in the functional use of the building or the demolition of parts of it or its rehabilitation or expansions and additions that it obtains, which affects the transformation of the interpretation of the meaning of this building by society and individuals, as follows:

First: The value of the first functions has been lost and the second functions remain, and he sees them in the case of the Parthenon, as it is no longer used as a place of worship, but it is still there as a place of symbolic content, the nature of Greek origin and the sensitivity of its aesthetics

Second: The first functions remain, the second functions have been lost, and Eco presents the example of the traditional lamp that is still working, but if it is described in a different context, its second functions will be lost. Here we can pose the example of the doors of heritage or historical buildings displayed in museums, the door can be used, but it has gone out of the context that was integrated with it, and therefore the original second functions have been lost, and Eco indicates here that new second functions can replace the first, the second functions in the case of the traditional lamp or door, this thing is heritage and has value from this perspective.

Third: The first functions have been lost, and most of the second functions have also been lost, and the second functions have been replaced by enrichment rules such as the pyramids, for example. Today, the pyramid is no longer a tomb, and it no longer means the value of immortality as it used to mean, but its new second jobs are tourist.

Fourth: The first functions have become a subject for the second functions. Echo presents a painting of women's tears. The painting no longer means women's tears, but it has become meaning "how art presents women's tears".

Fifth: The first functions have been lost and new, first functions have taken their place. The second functions were modified by the rules of fortification, and Eco put forward the example of the cradle, taken from the Mexican tradition, which was used as a holder for magazines.

Sixth: The first functions are ambiguous; the second functions are inaccurate and subject to change. Eco gave an example of the government building in Brazil to Oscar Neymar. The halls do not suggest its function, while the officials offer a lot of interpretations about it.

Here we see the affection of time on the buildings themselves, So, their interpretation will transform as the building themselves went in to certain transformation.

So, we can conclude that the factor of time may transform or not the interpretation of meaning according to:

- Historical Buildings without interference of man almost the same interpretation according to the degree.
- Traditional Buildings, and modern buildings the factor of time may affect the interpretation of meaning according to certain intervention done to the building (change of function or affect of certain events)
- The interpretation of meaning may transform according to the decay in the traditional buildings.

### 4. Extraction of Factors affecting interpretation of meaning

#### 4.1. Various cultural groups

The general culture factor (Enculturation, Acculturation), as shown in figure 1-3 perceivers from different cultural backgrounds give different interpretations.

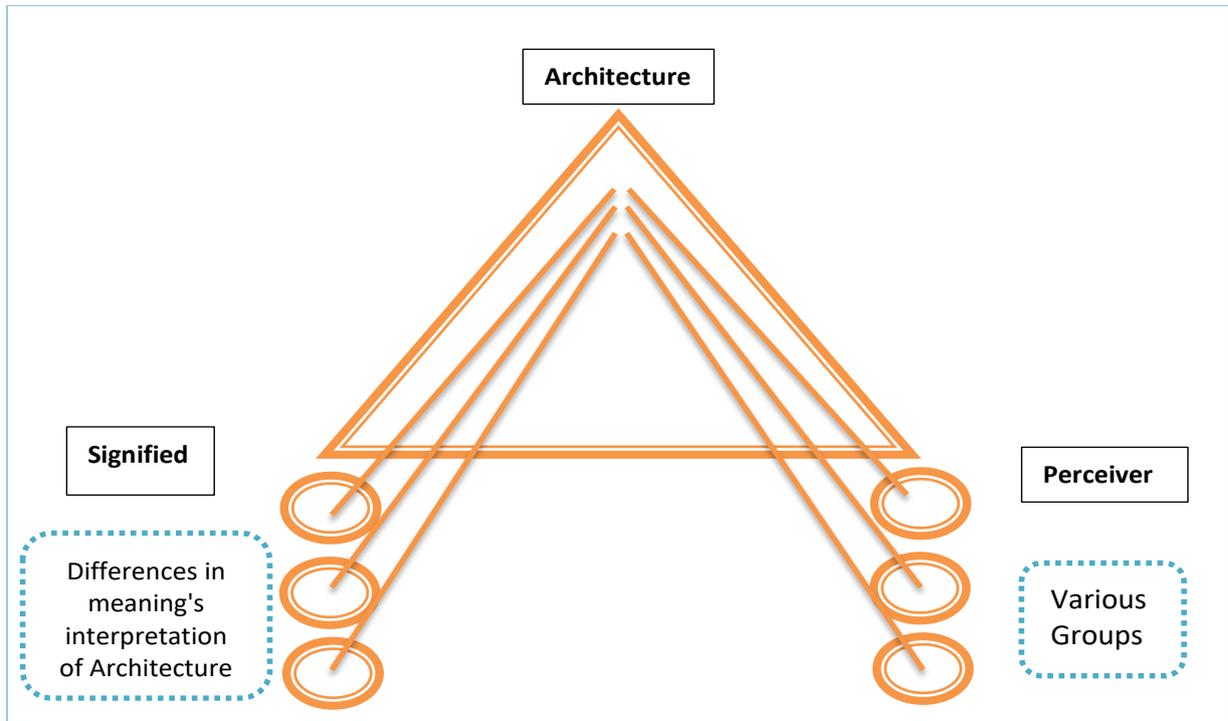


Figure 3. Differences in meaning's interpretation of Architecture according to Various Groups (prepared by: researcher)

#### 4.2. Personal individual experience

(Perception\Cognition, Emotion, Memory), as we can see that emotion and memory of the individuals has an impact on understanding and interpreting the meanings of architecture or the built environment.

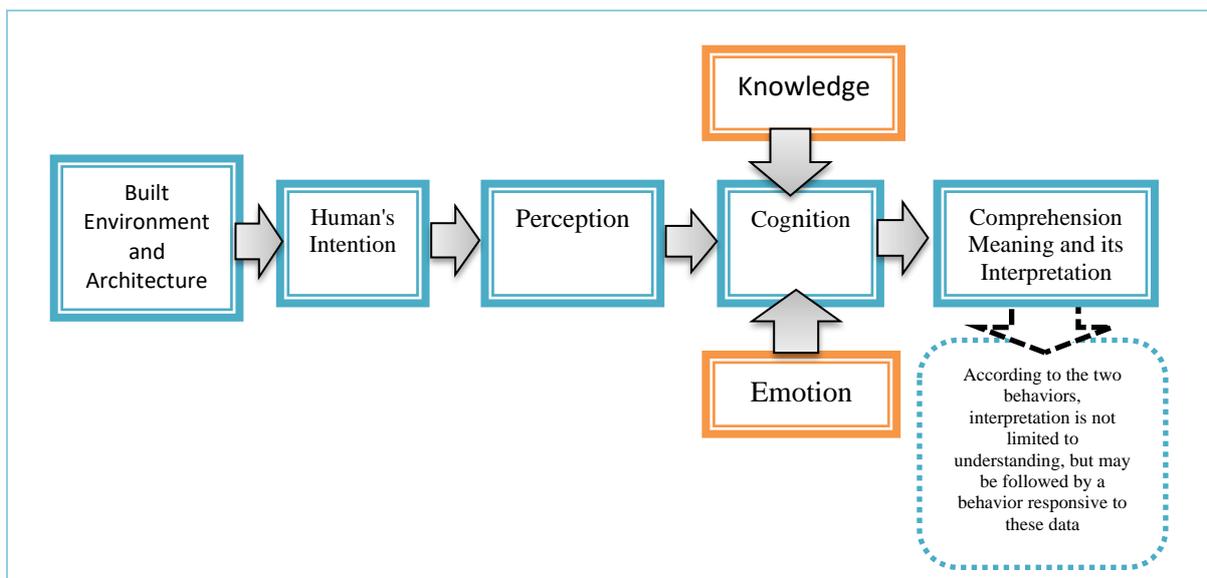
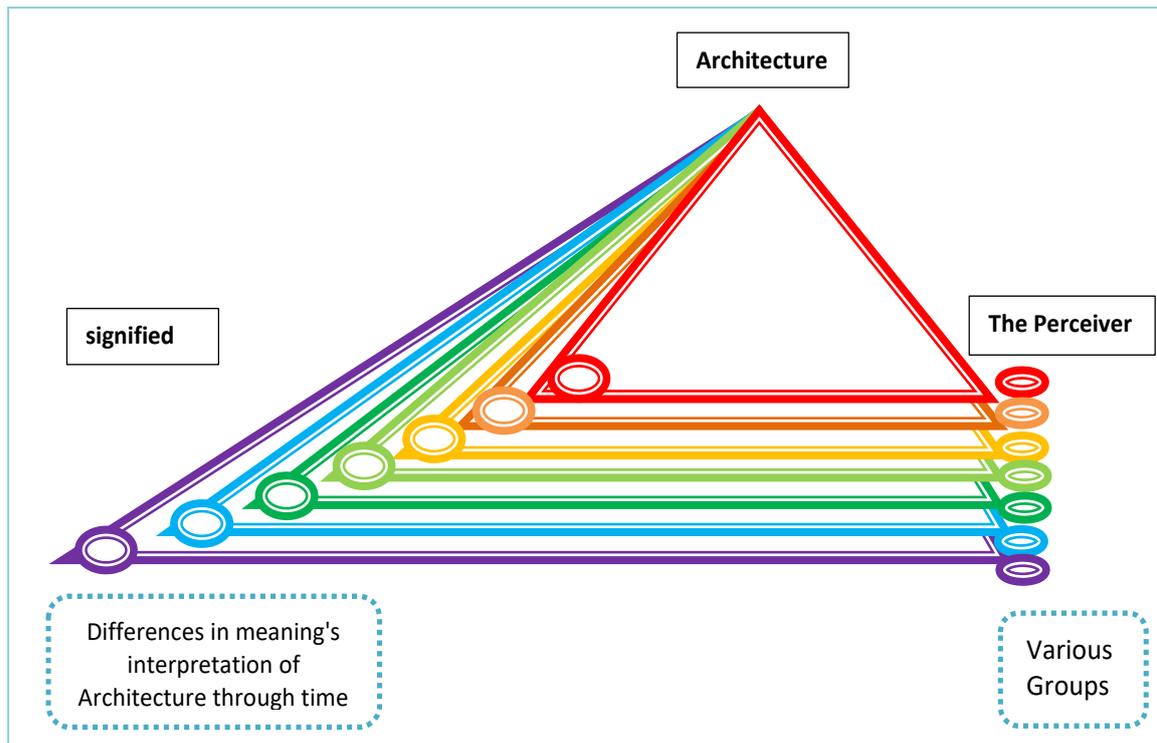


Figure 4. The link between emotion and Knowledge through perception in reaching interpretation in personal experience (prepared by: researcher)

#### 4.3. Time affecting both general culture

Individual experience from one side, and affecting the situation of architecture from another side, as we can see in figure 1-6 that the perceiver's interpretation is influenced and transformed over time, as this is true for people with different personal and cultural backgrounds.



**Figure 5.** It shows the effect of time on the Perceiver and the difference in his\her Perceive over time (prepared by: researcher)

## 5. Case study

### 5.1. Architectural samples

The case study consisted of questionnaire to determine the interpretation of people towards. Six buildings in Iraq which are different in time and function have been chosen for the interpretation of their meanings and transformation of the interpretation:

They are:

- Dur korigalzo Ziggurat\Kishin era (North west Baghdad) (1400) B.C.
- Erbil Citadel\ Assyrian era (884-850) B.C.
- The Right Side of the city of Mosul\Old Mosul (1700 years old)
- Al Qishlah Building in Baghdad (Ottoman administration building)
- A modern building\Engineers Union building in Baghdad – designed by Hisham Munir 1960s.
- The Presidential Palace in Babylon in the historical area 1980s.

**Historical Buildings:** Dur korigalzo Ziggurat\North west Baghdad, was chosen to test the continuance of the same interpretation. Erbil Citadel\City of Erbil, was chosen to test the transformation of interpretation in a rehabilitated historical building. (historical but with human intervention).

**Traditional Buildings:** The right side of the city of Mosul, was chosen to test the effect of the events mainly here the effect of war. Al Qishlah Building in Baghdad, was chosen to test the transformation of interpretation in a rehabilitated traditional (not historical) buildings.

**Modern Buildings:** Engineers Union in Baghdad, designed by Hisham Munir was chosen to test situation when no intervention happened, and also to test the knowledge of people about modern buildings designed by architects. Finally the presidential palace in Babylon historical area, was chosen to test the transformation of interpretation due to change of function according to change in political situation.

The six selected samples of Iraqi architecture are shown in Figure 6.

					
Dur korigalzo Ziggurat\North west Baghdad  Mesopotamian	Erbil Citadel\City of Erbil  Assyrian era	The right side of the city of Mosul  1700 years old	Al Qishlah Building in Baghdad	Engineers Union in Baghdad  60s of 20th century	The presidential palace in Babylon in the historical area  80s of 20th century

Figure 6. The six selected samples of Iraqi architecture

5.2. Various groups have been as samples for questionnaire

- 5.2.1. Specialist people (architects) 40 samples, 20 for the most experienced(critics), and 20 for those with less experience and it was measured according to age and experience,
  - 5.2.2. Bachelor's degree or above + Have working 40 samples
  - 5.2.3. Bachelor's degree or above + Nonworking 40 samples
  - 5.2.4. High school diploma or less + Have working 40 samples
  - 5.2.5. High school diploma or less + Nonworking 40 samples
  - 5.2.6. Seniors group (above 60) years old 40 samples
  - 5.2.7. Juniors group (12-18) years old 40 samples
- as shown in figure (7-14) below.



Figure 7. Specialist people (architects) 40 samples

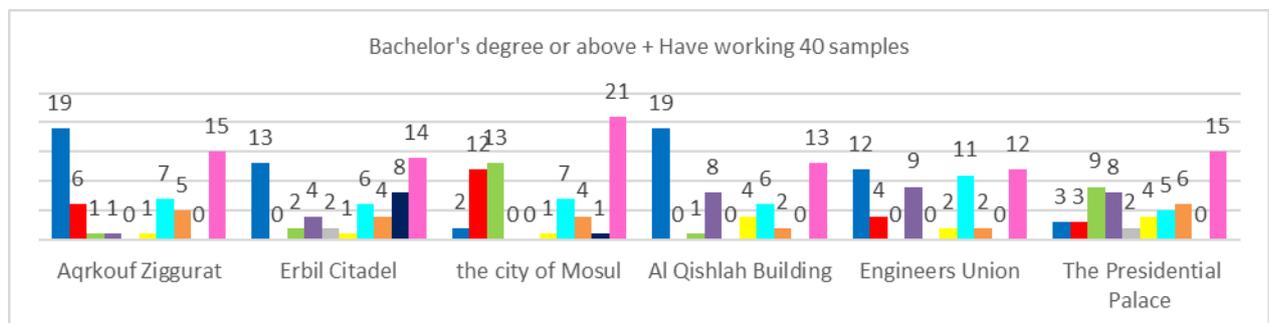


Figure 8. Bachelor's degree or above + Have working 40 samples

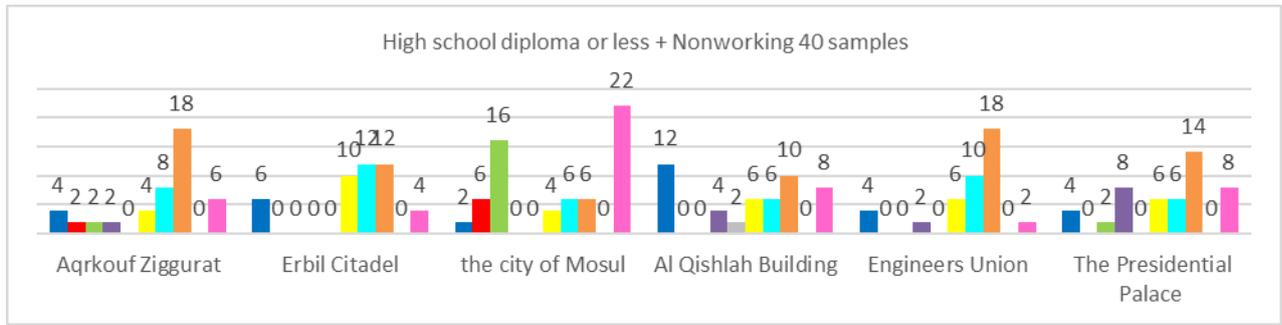


Figure 9. High school diploma or less + Nonworking 40 samples

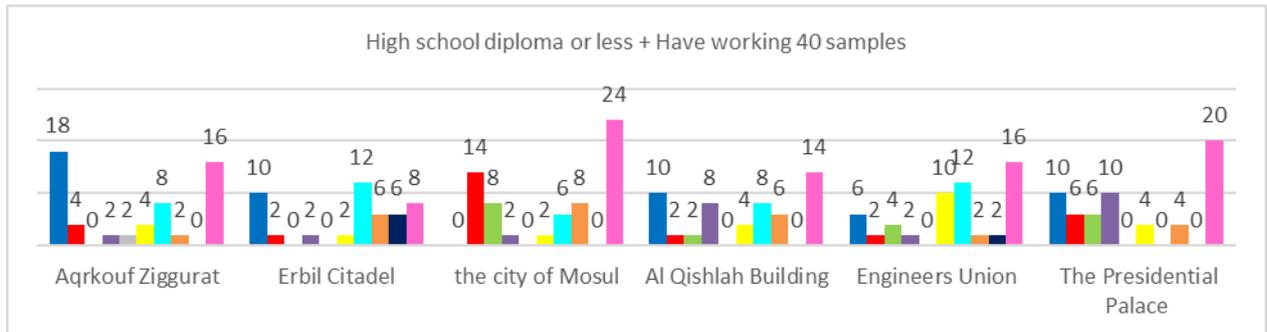


Figure 10. High school diploma or less + Have working 40 samples

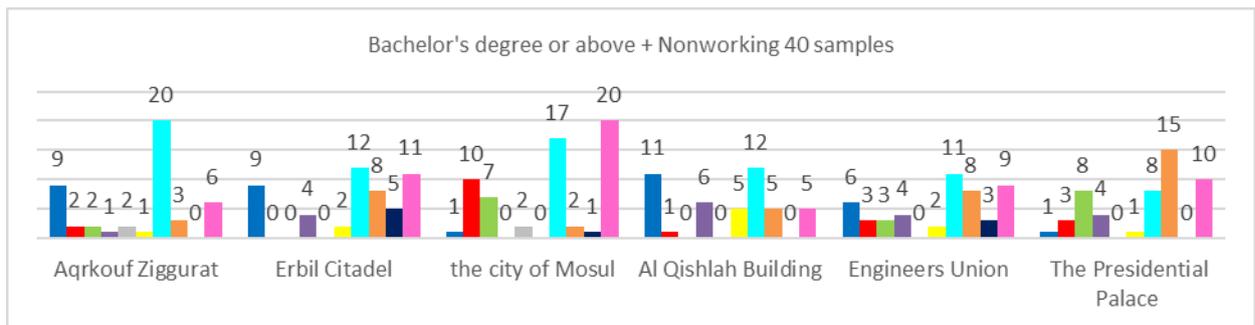


Figure 11. Bachelor's degree or above + Nonworking 40 samples

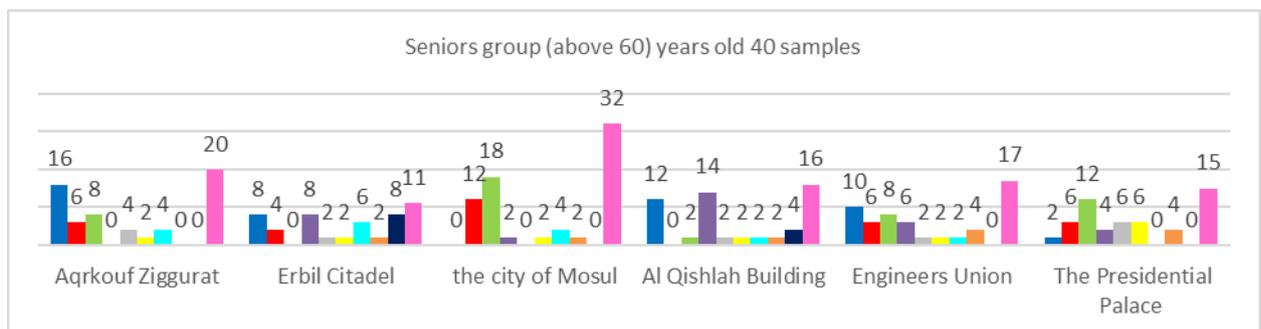


Figure 12. Seniors group (above 60) years old 40 samples

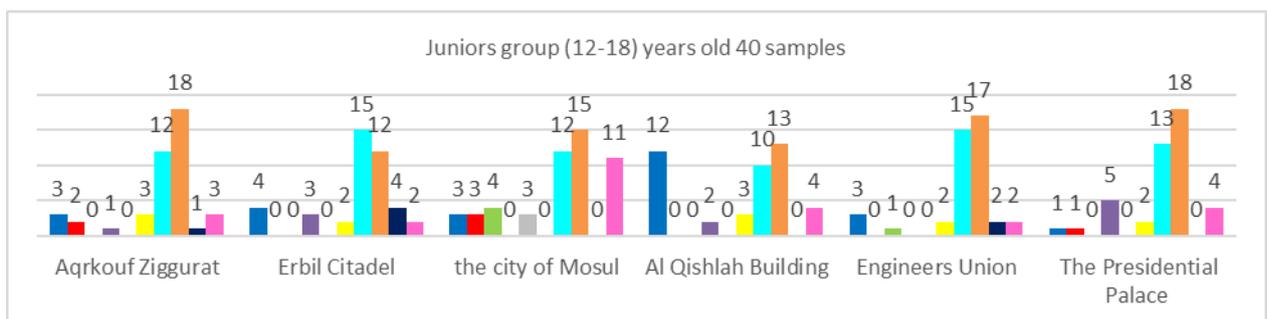


Figure 13. Juniors group (12-18) years old 40 samples

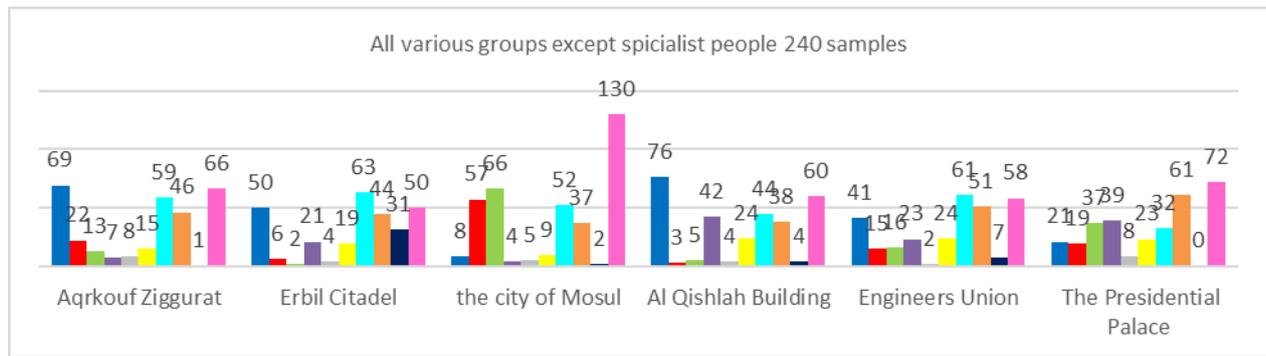


Figure 14. All various groups except specialist people 240 samples

## 7. Discussion

1. Results showed difference in culture and knowledge groups, architects Could answer with real interpretation of meaning, understanding the change of function and the kinds of continuation of the interpretation of the meaning and transformation to opposite interpretation of meaning, Yet, the emotional side is there specially in the sever damaged traditional Mosul.
2. Other groups, the interpretation of meaning was not clear yet emotional response was clear specially with senior people, But, also the cultured people could interpret the transformation of meaning from positive to negative, and the continuously of meaning mainly in historical building.
3. In Less cultured groups, not knowing the buildings even historical one, not being able to interpret the meaning was clear and that is larger the young group, Yet, we could see the emotional response in all groups except younger age. And here we can see the affection of enculturation and the luck of verbal knowledge about these buildings at home and school.

## 8. Conclusion

1. Generally, within society, people don't interpret the meaning of architecture, in the same time vary architects do, do and discuss. People are more concerned with their relationship with buildings and places.
2. We can conclude Semantic interpretation of meaning is related to theories and architects more than Ordinary people, who actually don't give time to understand architecture and its complicated certain meanings.
3. We can conclude Enculturation in recent situation in Iraq is limited in case of architecture as people were not able to visit and experience and appreciation culture by themselves. Yet general verbal knowledge is limited as well as we could see a lot of responses showing ignorance about known historical buildings.
4. It was possible to conclude the effect of time on the occurrence of interpretation and its transformation in the comparison that appeared in the results of the field study that prevailed in the transformation of interpretation from the previous positive state to the subsequent negative state, starting from the impact of the events of wars, neglect of buildings and the deterioration of historical and heritage buildings.
5. We can confirm that the semantic and structural three-dimensional subtraction can be linked, with a multiplicity of interpreters based on qualitative groups in culture, as well as the difference in personal experience that presented meaning proposals in the built environment for clarification and at the level of sensory and mental perception and what is related to them. And since the interpretation of the meaning of architecture is related to the human being who carries both the semantic structural aspect as well as the emotional aspects related to emotion and the act of taste. Accordingly, it was possible to deduce the association of emotion and taste with the perceptual, sensory and mental aspects in the act of interpreting the meaning of architecture, where the memory of the place and its events are linked to the emotion. People's interpretations were also linked to the nature of society, social phenomena, and criticism of public and private behaviors for a number of buildings, especially historical buildings.

## References

- [1] Abdul-Hamid, S. (2001). Aesthetic preference: A study in the psychology of artistic appreciation.
- [2] Aslaksen, E. W. (2018). The Social Bond: How the interaction between individuals drives the evolution of society.
- [3] Brindle, Kurt: "Meaning and aesthetics in architecture", ISBN: 9780984727117, Publisher: Brindle Publishing LLC , January 1st, 2015.
- [4] Broadbent, Geoffrey ; Bunt, Richard & Jencks, Charles: "Signs, Symbols, and Architecture", John Wiley & sons , 152796 , New York , 1980).
- [5] Chalbi, A. A.-a. (1989). studies in society , culture and individual. Egypt.
- [6] De Castro, John , " A Model of Enlightened/Mystical/Awakened Experience " , Article in Psychology of Religion and Spirituality , DOI: 10.1037/rel0000037, <https://www.researchgate.net/publication/281807307> , January , 2015 .
- [7] De Saussure , Ferdinand , "Cours de linguistique Générale" , 1916 .

- [8] ECO, Umberto: "Function and\_Sign:\_The Semiotics of Architecture", Article in "Signs, Symbols, and Architecture" for Broadbent, Geoffrey ; Bunt, Richard & Jencks, Charles ,1980) , this paper is a revision of six chapters of la struttura assente: Introduzione alla ricerca semiologica, Bompiani, Milan, 1968. Reprinted from VIA Magazine of Graduate School of fine arts, University of Pennsylvania, Vol. 1, 1973. A further revised version of this paper will also appear in a collection of essays by the author, to be published by Peter de Ridder press. Article in "Signs, Symbols, and Architecture" for Broadbent, Geoffrey ; Bunt, Richard & Jencks, Charles ,1980).
- [9] Geertz, C. (1973). *The Interpretation Of Cultures: selected essays*. New York: Basic Books, Inc.
- [10] Jencks, Charles: "The Language of post-modern Architecture" ,the sixth edition, published in Great Britain by Academy Editions , Academy Editions London , 7 Holland Street, London W5 2AN , 1991.
- [11] Maltin, Margaret W. and Foley, Hugh J. , "Perception and Sensation" , First Edition published by Pearson Education Inc , published in 2016 by Routledge , Fifth Edition , 2 Park Square, Milton Park , ISBN 9780205579808 (hbk) , 2016 .
- [12] Moustafa, A. A. (1988). *Architectural Representation and Meaning: towards a theory of interpretation* . The Massachusetts Institute of Technology.
- [13] Pepper, C. Stephen , " Principles of Art Appreciation" , Printed in the United States of America, Harcourt, Brace and Company , New York, 1949.
- [14] Whyte, W., 2006. *How Do Buildings Mean: some issues of interpretation in the history of architecture*. s.l.:s.n.
- [15] Rapoport, Amos, "The Meaning of the Built Environment", *A Nonverbal Communication Approach* , The University of Arizona Press , ISBN 0-8165-1176-4 (alk. paper), Tucson, 1990.