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THE ROLE OF VISUAL PREFERENCES IN ARCHITECTURE VIEWS♦

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Abstract. Since the biggest part of the human relationship with environments occurs through visual sense, the interests and wills of humans in seeing environment and architecture are important. In fact, these interests give personal or individual aspects of architecture. The role of these visual interests and mental judgments of architecture audience is very important, such that architecture has become a function of the visual preferences of the audience. Therefore, realizing these preferences is important to form architecture and ignoring them results in not providing the desired architecture condition for the audience or the required motivations for producing useful mental images to meet the basic needs of the audience. Accordingly, this study addresses the role of visual preferences in the formation of environment architecture? And which factors in this environment affect this concept? Thus, this study aims to describe the visual preferences paradigm in architecture in order to examine its different aspects in relation to human and environmental behaviors and determine the effective factors, so This study was conducted using Bourdieu's "distinction theory" and the nature of sensory judgment with the help of field studies and descriptive analysis a number of audiences of 62 different residential environments. As a result of this research, natural, memorable, evocative environments along with the combination of open and closed spaces have shown the most visual preferences of the person towards architecture that the mental images of the person with cultural roots have been very effective in judging architecture views.

Keywords: visual preferences, sensory-emotional needs, sensory judgments.

Introduction

Sight is a very important tool for the environmental relationships of humans, such that no communicative process is done in an environment without visual understanding (Wolfe et al., 2009). Human environments require a relationship for meeting needs due to the presence of behavioral patterns. Since all phenomena of the environment are not desirable for meeting human needs, a kind of judgment and distinction is formed between desired phenomena and other phenomena. Sensory judgment is an important notion in using environmental capabilities (Dunning & Balcetis, 2013). Moreover, the desirability of an object in an environment affects its cognitive estimations and sensory judgment. Thus, human behaviors are formed by sensory judgments. The highest sensory judgments are done through visual processes, and the behavioral reactions are obvious signs of positive or negative results of these judgments. The role of the environment is formed based on sensory judgments for a person and it results in desirable behaviors for the environment.

Although the relationship between human and environment is shaped by different senses, that most of this relationship is through sight and the visual appearance of an environment and our general experience of it are humanly inseparable of the environment (de la Fuente Suárez, 2016). Therefore, seeing and understanding a view has an important role in understanding and realizing the environment by the person and the person's satisfaction or non-satisfaction with the environment (Porteous, 1996). On this basis, evaluating people's sight by built environments plays an important role in planning and programming the architecture (Hensel et al., 2009). The image of an environment which is formed in a person's mind may be different from other persons. Thus, an image of an environment can produce different meanings in the minds of different people. Internal wills and tendencies of each person to see what is in an image are based on these meanings that are formed by the environment's images. In fact, desirable images for each person are based on the good and desirable meanings of these images in the mind. Behavioral reactions required for communicating and exploiting the environment are formed by mental images.

It can be concluded that the visual preference paradigm is a notion that justifies sight in selecting desirable phenomena by a human. The quality of architecture

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images depends on the fact that what eye sees or selects or approves. What experts and audience of architecture use is very important to shape human environments. Visual preference paradigm has a high potential to justify and describe personal evaluations of architecture scenes and as a result, human meanings of architecture in order to make desirable places for the audience and meet their sensory-emotional needs.

The quality of architecture images has always been important for humans. This is considered important as environment aesthetics; however, it did not lead to the desired results in human-made environments. Visual preference paradigm relates human to his desirable beauties and provides the conditions for sufficient emotional joy. Thus, the following questions are formed:

What is the role of the visual preference in the formation of environment structure? And which factors of this environment affect this notion?

1. Literature review

There have been no direct studies on visual preferences in architecture, which is a weakness in this field, and given the importance of this issue for the construction of architecture, the reason for this research is the feeling of this vacuum. However, relevant studies have been conducted that are mostly in the field of visual perceptions. So far, a number of studies have followed the concept of visual perception, visual processes, mental perceptions, and sensory gain from the environments, which are the closest studies to the concept of visual preferences (Acar et al., 2006). In this way, the theories of thinkers and researchers can be mentioned in three categories: the first category of theories that consider visual perception to be due to visual and mental processes and, like Aronheim, give psychological values to visual messages. The second category of theories that consider the nature of the environment to be the factor of visual perception and, like Gestalt, consider the components or rules of form as the basis for the quality of visual perception. The third category is causal theories (attracting attention or attention) to people like Gibson or Berline who do not consider the whole environment to be effective, but study the characteristics of the environment and the nature of the message that attracts the observer's attention.

According to the efforts made in this field, researchers agree that the process of visual perception is a complex issue in which both observer and landscape factors are effective in understanding the meaning of the environment and also issues of ecological nature of the environment in perception processes (Junker & Buchecker, 2008). They play an important role. However, in this area, the concept of visual preferences, which determines the quality and scope of the architectural form view for the audience, is quite deficient. Therefore, based on the intervention of observer and landscape in the process of visual perception, these preferences are assumed to be based on these two factors.

2. Sensory judgment of environment

The sensory judgment of the human settlement view is accompanied by a type of understanding and evaluation process that has a big role in forming the internal interests of residents (Gronow, 2003; Lang, 1987). Based on this, evaluating architectural scenes is very important in sensory judgment by residents. Traditional growth systems and habits significantly affect the form or process of sensory judgment (Bourdieu, 1984) and should be understood and analyzed completely to understand this process. People enjoy this kind of judgment and understand the use of a human settlement by this judgment. The advantage of sensory judgment is making a distinction between useful aspects of human settlement which have a stimulating role in sensory-emotional needs and aspects which are unpleasant or neutral for residents.

Information processing theory is one of these theories (Kaplan, 1989). This theory is based on a cognitive or psychological pattern that realizes human as a processor of information and tries to understand the cognitive processes and related variables which determine the preference of person for an environment (Akbar, 1992, 2012). On this basis, a person's judgments about (made) environment scenes are based on cognitive patterns along with information processing.

Sensory judgments along with cognitive patterns result in a comprehensive evaluation of environment which in turn results in a judgment of environment scenes and makes the ground for total enjoyment of environment scenes. This total process of sensory judgment that results from cognitive patterns of understanding and evaluation, provides the conditions for screening environment scenes and finally, results in selecting the scene with the highest emotional joy.

Architectural views based on findings should ultimately lead to motivation and encouragement in order to satisfy one's sensory-emotional needs, which shows that both individual and architectural factors are involved in defining the concept of eye rights in architecture. Because the motivation of human needs (according to Maslow's Hierarchy of Human Needs theory) appears more in the mind through the perception of vision and ultimately the interpretation and meaning of the universe (Schultz, 1971). Thus, what defines the concept of visual preferences in architecture is the objectivity (what it seems) and the mindset (what comes to mind) and the manifestation of the properties of the universe in the architectural phenomenon.

2.1. Habitus and architecture judgment

Design foundations have been considered by all philosophers and theorists of architecture and aesthetics. However, many studies examined the understanding and judgment of people for their environment by using methods of social sciences and psychology since the 1960s. The current study is in the growing field of aesthetics consistent with people's judgments (Gjerde, 2017).

Generally, habitus have a mental quality that is rooted in the experience of different landscapes. However, the main root of the formation of habitus in nature is the tendency of human aesthetics, which varies according to individual, environmental and cultural characteristics. Therefore, the general understanding of the beauty of architectural landscapes is in the nature of human aesthetics, and the specific understanding of these landscapes is determined by habitus. Therefore, environments with desirable and original cultural characteristics create a high ability to create individual habitus.

Habitus play a key role in judging architectural views. The main root of judgment about the desirability of a human nature view is basic and general, but it is guided by the specific cultural and experiential environment of a particular person (Falahat & Shahidi, 2010). Architectural measures will make a difference while having a common ground. Thus, habitus that interfere with the formation of individual judgments about architectural views are created in a desirable cultural environment, valuable environmental experiences, and with a good individual personality.

Judging a scene depends on experiences and habits of residents (Lederman et al., 1990), and accustoming to architecture scenes is affected by beauty or usefulness experience in the eyes of people (Lang, 1987). Generally, the usefulness of a scene results from a personal judgment of architecture by their habits. Making a distinction between desired and undesired scenes is the characteristics of personal judgments which is related to an experience or accustoming level. A distinction and as a result, a personal judgment is based on the kind of experience and resulted habitus. Therefore, having good or desired experiences or accustoming resulted from these experiences significantly helps distinction power, judgment power, and visual preference of viewers in understanding architecture scenes.

2.2. Traditional system in judgment growth

Traditions significantly affect forming and directing the behavior of residents due to their learning and believing aspects (Lang, 1987). Thus, the growth of residence depends on traditions and experience-based methods which are common in that place.

Designers rely on understanding while people believe in the crowd. In other words, what people understand from the environment is a combination of their mental worlds and the crowds they are present in them (Pico, 2018). Therefore, the biggest part of human understanding is formed by the environment and the effect of others (Rapoport, 1982). Traditions are obvious and hidden principles that depend on the crowd and have the role of the connector in the crowd. Moreover, the nature of the environment affects the form and use of these traditions. Peter Zumthor believes that buildings are confirmed and approved when they can attract our feeling and understanding which originate from the past and traditions (Zumthor et al., 2006). Biophilic theory (Wilson, 1984) states that humans inherently depend on life processes, and traditions significantly affect visual environment judgments due to their strong role in these processes.

Growth is an active process of learning and being interested in the experiences of place (Herrman, 1991). Judging the quality of residence depends on this continuous process of growth, and traditions are the results of continuous and active flow of sensory-emotional needs and behaviors that meet these needs. Some conditions of residence lead that people become accustomed over time and become an important part of the basis for judging the quality of the residence. The mentioned conditions are important subjects and chapters of traditions, which gradually result in the formation of judgment for similar phenomena. Therefore, traditional systems play an important role in judgments of the person about the quality of the environment, and in turn, consider the taste and interest of a person about scenes influenced by themselves.

3. Findings

3.1. Visual preferences paradigm

Visual preferences have been accepted as an approach to evaluate people with an understanding of the environment and what they prefer for scenes. Scenes are an important part of daily life experience and thus, visual preferences have been considered in the last 50 years and some theories explain the scenes (Bulut & Yilmaz, 2009). Finally, knowledge of visual preferences is a guide for planners, designers, and decision-makers to design and plan a desired and pleasant environment to manage view for their users. Moreover, it may be an opportunity to better understand the relationships between human preference and characteristics of view to promote the quality of life (Abkar et al., 2011).

Modern research literature shows that individual preferences form cognitive experience. The desired sight that has been shown by these studies can be classified into two classes: what occurs in classifying objects and what appears in recalling the environment. Some theorists believe that the psychological effects of preferences influence the cognitive experience, not the visual understanding, and visual understanding is used in the next steps of visual processing for cognitive judgment. Although people think that their visual experiences reflect the external world as it stands, modern data show that they see the world as they want to some extent. Moreover, some classic paradigms combine interests with familiarity and previous experience (Howes & Solomon, 1950) and therefore, the effect of motivational factors of the environment is related to the person's previous experiences of the environment.

Various studies have been done in order to evaluate people's values for the environmental perception and aesthetic preferences of a scene. The first research in this regard was done in the form of The National Environmental Policy Act (United States Government, 1969). Afterward, various studies have been done on the environmental preferences for natural environments and artificial envi-

ronments such as residential and urban areas (Simonic, 2003). Various theories on preferences and understandings of a scene can be divided into evolutionary theories and cultural preferences. In the evolutionary approach, scene aesthetic is considered as an aspect of human compatibility with the environment and his survival, such that scene preferences are reflections of qualities of view that meet the biological needs of humanity for survival and growth. In comparison to this approach, some believe that visual understanding and its preferences mainly depend on the cultural background and personal characteristics. Of course, it has been shown in recent studies that the cultural characteristics of a person's growth environment have the biggest role in his/her visual preferences following the personality characteristics resulted from genetic-inherent factors.

The visual quality of architecture means the talent or ability in the architecture which creates satisfaction or positive sense in the audience. Therefore, the visual environment of architecture is not an abstract and independent phenomenon and depends on the evaluation of people who experience it in a limited or continuous form. Results of various studies and also the experience of buildings show the difference between the visual preferences of people and architects. Thus, realizing the preferences of people (or general audience) is very important for architectural structure. In the cognitive model of visual preferences, classifying phenomena in terms of meeting a part of sensory-emotional needs results in screening and selecting some phenomena and neglecting or ignoring some other ones.

A person's preferences in the environment are formed based on his/her demand and sensory-emotional needs in that environment. This demand is formed due to the positive reflection and supremacy of stimulators in the person's mind (Townsend & Kahn, 2014). The value of each scene depends on its stimulation power which makes positive sense in the mind. The distinction between these scenes and other scenes is based on the difference among qualities resulted in the mind by competition and evaluation that finally result in selection. Characteristics of each scene provide the ground for competing with other scenes in the human mind and valuing the environment includes the results of this competition and emotional joy. Therefore, the value of personal preferences in the selection of desirable scenes is his/her sensory-emotional needs which is very important for avoiding the personal taste of designers and implementing the visual taste of the residents in making the environment.

Based on the aforementioned, environmental characteristics, in addition to personal and individual factors, have an important role in the quality of visual preferences. Studies have shown six classes of these characteristics in preferences (Table 1). For this purpose, in addition to the questionnaire about their residential environment, the audiences of these 62 residential environments were asked to state their comments about 24 selected images of places with different characteristics and various preferences recall. Information obtained was classified and conclusions were made after analysis. Results showed that characteristics like being natural, being memorable, and being evocative, and the value of space enclosures have a big role and the individual's judgment about these scenes showed that the highest preferences are for natural environments, being memorable, and being evocative (Table 2).

Table 1. Pleasure domain of different environments from the point of view of the audience 62 different residential environments (source: authors)

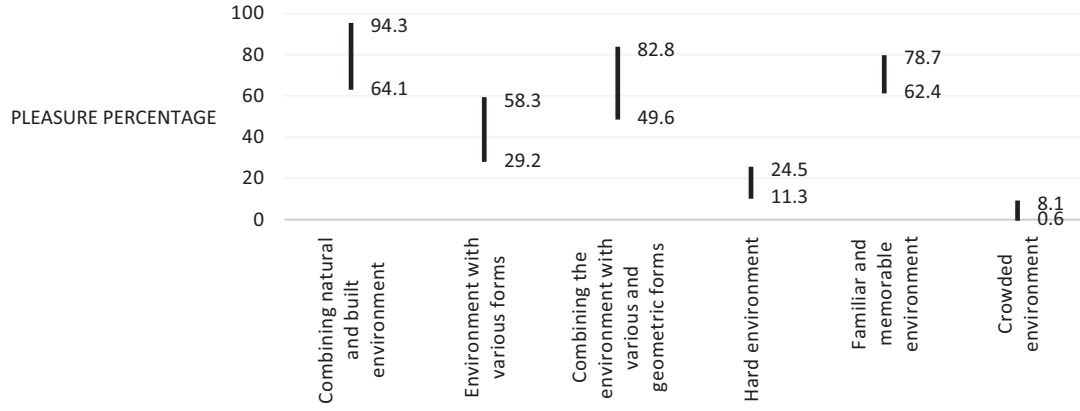

Table 2. People's preferences for made environments (source: authors)

Environment	Natural views	Memorable views	Evocative views	Open views	Semi-closed (semi-open) views	Closed views
Desirable	24.72%	18.46%	17.27%	10.61%	16.56%	12.38%
Undesirable	1.31%	6.23%	8.21%	38.64%	13.14%	32.47%

3.2. Fixed and same preferences of taste

Since basic ground for the formation of visual preferences is genetic-inherent and cultural issues, residents of a place generally prefer to see scenes that think they are beautiful and have become a fixed part of their mind. Thus, they compare and evaluate other scenes with these mental forms to conclude about their palatability.

A person's preferences which have become habitus, affect his/her judgment and selection of scenes of resident place. These preferences have a fixed and determined frame in the mind of a person who judges the visual value of a scene by having a similar form or formal symmetry with the aforementioned preferences.

Although the basis of preferences is fixed in terms of inherent, visual preferences can grow under the effect of genetic, experience, and cultural promotion factors and therefore, present a fixed and determined frame for evaluating desired residential scenes at any period.

Initial and low-experience preferences do not have sufficient evaluation power to enjoy the environment manifestation. The growth of these preferences depends on desired environmental and cultural conditions including qualities of the visual and social environment. Developed preferences result in the advancement of initial preferences. Thus, fixed visual preferences do not mean that these preferences do not grow, but this means that certain and determined criteria are in the mind of a person, that the visual environment is compared with them.

Conclusions

Visual preferences have a high capacity for interpreting the selection processes of architecture scenes by a person and are strongly linked to the quality of sensory judgment. Making a distinction between what is desired for residents and other scenes is the main task of these preferences.

Architecture images are interpreted with a person's mental images in which the visual preferences paradigm performs the processes of distinction, judgment, and selection in line with mental images. What is desired for these preferences is consistent with meanings that the mind receives and all these processes result in meeting sensory-emotional needs.

The relationship between environment (architecture) and humans is based on visual preferences paradigm which is obvious in reaction and behavioral processes after sensory judgments of environmental scenes and is the origin of communicative processes. This notion shows the environmental capabilities in the viewer's view which became clear with the examinations conducted in the current study that such capabilities are more related to natural, memorable, and evocative of architecture. Of course, environmental capabilities are different from the view of different individuals. Although a phenomenon should have the ability to meet the sensory-emotional needs of humans, it provides different capabilities in the view of different individuals which stimulates different interests within them. It is because of this fact that although the environment has an important role in understanding, a big part of understanding is related to the visual preferences affected by learning and growth characteristics resulted from traditions and life experiences. Biological and inherent characteristics that are personal characteristics along with traditions and culture that are collective characteristics determine the basis of the quality of visual preferences and the visual preferences that are formed after the formation of processes of visual perception, are affected by cognitive growth and architecture capabilities and finally, result in screening and selecting desired architecture scenes.

As a result, visual preferences have a strong foundation in understanding and recognizing one's desired architectural views. These preferences are provided in "natural" "memorable" and "evocative" views or a combination of them, respectively. Although the form has many visual attractions, but the pleasantness of the landscapes is achieved by the mentioned visual preferences and to create favorable architectural environments, landscapes with these preferences are given priority over the attractiveness of the form or in other cases the attractiveness of the form with this. Accompanied by preferences.

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