

## Statue of Sign in Promoting a Sense of Architectural Space Place (Case Study: Khan School in Shiraz City)

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**Abstract:** One of the most important criteria for quality architectural space is “sense of place”. Which means understanding people’s subjective sense of environment so that understanding and feeling with the semantic environment context are linked and integrated. This causes a sense that change of space to place with a sensory characteristics and special treatment for specific individuals. But today the vacuum of meaning in many architectural monuments more glaring. So, one of the most effective means of dealing with the human and environmental factors are discussed. The designers must consider important architectural spaces in order to create a sense of place. In this regard, semiotics root in many cognitive science, it can make use of signs based on the concept of connotation, causing the audience better relationship with the architectural space. Signs can be factors applied in various aspects of semantic, structural and simultaneously in the architectural space shaping progresses. The use of the sign is influence in architectural spaces, creating a space and a sense of belonging to the place. Khan school in Shiraz (1004-1024 AD) is made by Hossein Shirazi Shamaei in the Safavid period which is one of the schools that adopted the design and manufacture of signs and numbers are sacred. So based on this, Khan school in Shiraz were selected as a case study in terms of impact syndrome factors were used in the analysis. Therefore, in this study the library and field data collection of signs is used in architecture school in Khan school.

**Key words:** Sign, sense of place, meaning, Khan school, structural, simultaneously

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### INTRODUCTION

Semiotics is the science study of the of sign systems such as languages, codes and justice systems and etc. So, we can design a science that examines the life of signs at the heart of their social life, the science of social psychology and therefore be part of general psychology. One of the most comprehensive definitions is the definition of semiotics by Umberto Eco, he defined semiotics: “semiotics is concerned with what is seen as a sign” (Eco, 1976). In the eyes of semiotics, words, images, sounds, gestures and postures and things can be signs (Chandler, 2002). Theorists and scholars have done in the definition of the sign in Table 1. It was found that with the definition of a sign of disagreement but in a summary of the definition of semiotics with an additional explanation are taken so that semiotics in the broadest sense, it makes sense to study the formation and exchange have taken on symbolic systems (Riahi, 2015).

The meaning of the spatial database solutions for quality architecture and architects working in this field. Thus, in terms of concepts such as sense of place is effective and it is very interesting, “place” is where the person in their internal communication and leads to a better understanding of the environment and themselves provide.

Different places make “mental images “in different people. Human perceptions are rooted in meaning, through interpretation and mental associations received and can be grounds for a “sense of place”. Mental images are created by the sign. So can signs can be factor in promoting a sense of place that raised the issue with the researchers death after reading something creative and get to know the signs, the importance of semiotics in art and architecture is ever revealed. Knowledge which bases “semiotics “based on the “significance” and is interpretation based can be the basis for understanding the relationship between semantic and structural elements of architectural space perception. Since, the semiotic

Table 1: Definitions and indication of perspective in views of experts (Riahi, 2015)

Definitions and perspectives of the sign from the view of experts	Authors
Any sign has tangible aspect that we call it sign and a hidden aspect that we call it signified. Saussure believed signs is physical and thematic meaning that of the combined signifier and signified and between these two natural and essential relationship is not established but also the relationship between it and the base through contract or agreement be accepted by the community. sign is general concept between the signifier and the signified and the relationship between them is called "signifies"	Ferdinand de Saussure
The continuous sign of a sign is another sign that delays fact of the differentiation of symptoms associated with delayed principle Symptoms deal with signs. The Eco believes that the semiotics is not the "symptoms" but also talk about the role of sign, the sign of a contractual relationship between expression and content is established which made her realize that is culturally determined	Jacques Derrida Umberto Eco
The sign from the perspective of a motivator look at human behavior, behavioral science deals with the development of symptoms in the context of how this knowledge can play a role in unify social and psychological life sciences. Mauris divided signs into 3 parts: the syntax of semiotic (the study of signs combined to form a composite sign), semantics (the study of signification), Pragmatics (study the origin, use and impact of symptoms)	Charles William Morris
The father of the famous American tradition of semiotics and calls semiotic studies project "semiotics" and puts special emphasis on the implications. The main elements of his theory of the signs is the subject and the interpreter that is 3 side in comparison to her of the semantic forms (here sign has the duty of representation that is responsible for the interpretation and the subject is anything that allows comments or discussion about it)	Charles Sanders Peirce
Semiotics can be knowledge to understand the world's phenomena through reading and reading signs in every phenomenon be achieved	Mohammad Zamiran
Sign is everything, other than themselves to the other thing (the phenomenon, the concept of the subject, object) denoting the sign. Signs of artistic creation and is alphabet of art	Mohammad Naghi zadeh

decoding of meanings associated with the foundations so the role of interpreting these concepts is important in understanding (Riahi, 2015).

## MATERIALS AND METHODS

**Factors shaping the sense of place:** The sense of place in phenomenology approach to truth and nature of the place that address the importance of meanings and messages in place. Meaning that people on the roles, expectations, motivations and other factors decode and understand the process (Rappoport, 1990). According to this view, judgment is based on decoding the meaning of the perception in the mind takes form, leading to the creation of a sense of place (Relph, 1976). In fact, phenomenologists, considering the three components of form, function and meaning, in a location component identity, sense of place as an aspect or another of the three components of identity in relation to the works (Relph, 1976). According to the sense of place in a different perspective and different levels of sense of place, sense of shaping cognitive and physical locations can be found in the two groups was as follows. Cognitive and perceptual factors: as mentioned before, the sense of place is a complex mixture of meanings, symbols and quality of that person or group consciously or unconsciously perceive the space or region specific (Shamai, 1991) meaning that after the perception is decoded by a sense of place are the cause. The sense of place is only in the sense of a feeling or affection or any regard to the specific place but rather a recognition that the system and its structural issues, people, objects and concepts finds a sense of belonging to a place. In this way, different places, different people, making them feel part of the human personality and past experiences in

receiving this sense is effective. Sense of place and belonging in a space that is not creates the space for him and change to place. A sense of place and connection with the environment so that people understand and feel a sense of integrity in the environment (Hummon, 1992). Fritzsteele believes in a sense of place depends on how the relationship between man and the environment (Steele, 1981).

**Physical factors:** The physical factors affecting the perception and the sense of place Fritz steele, size, location, degree of closeness, contrast, scale, proportion, human scale, space, texture, color, smell, sound and visual diversity (Steele, 1981). He also has features such as identity, history, fantasy and illusion, mystery, joy, surprise, security, vitality, passion and cause memory intensive relationship with the place he knows. Salvasen said in the sense of place of interaction between the three components of position, perspective and tightness can occur individually, each of them alone is not enough to create a sense of place. Various factors such as boredom, monotony of buildings and of the digital age are considered a threat to the sense of place (Salvesen, 2002). For him, the physical characteristics, ownership, authenticity, residents and comforts, nature, water, plants, sky, sun and private and public spaces are component locations which effective in creating a sense of place. For Yanzoo the semantic structure of space and the built environment to create a set of specific quality and to create a sense of place and role (Xu, 1995). In terms of Norberg-Schulz sense of place can be found in places that are distinct entity and environmental character of the tangible things made with armed combat, shape, texture and color (Norberg-Schulz, 1997). Also, in terms of the sense of place is also a linch factor between man and

communicate location and brings unity to be identity and should have a significant psychological transitions and to warm up and be observed and a sense of place. This kind of sense of place can have a sense of belonging to the cell (Lynch, 1997). Janifar cross is also the location of the effective factors on the quality of the relationship with a sense of place and a sense of community and in conjunction with the location for a letter, spiritual life, idea, narrative, material and the required dependency category with factors such as dromit and the identity of the five different level of satisfaction the creation of a sense of place (Cross, 2001). So, evaluation indicates a physical characteristics of the environment with the creation of the implications and provision of specific activities, in the sense of place is effective (Riahi, 2015).

## RESULTS AND DISCUSSION

**The importance of a sense of place to improve the quality of architectural space:** With the development of human societies and void of meaning in built spaces, the quality of the components of the conceptual role in shaping spaces and different areas were interest of the architects. Spaces that induce a sense of belonging and identity, followed by relaxation and enjoyment in mind and the feeling of being in a place in his presence and makes alive. Of factors affecting the quality of architectural space sense, it can be pointed to a sense of place. Sense of place by “meaning “and many psycho-social behavior contracts. From the perspective of phenomenology, sense of place to connect with places by understanding the meaning of symbols and everyday activities (Relph, 1976). Individual and collective values effect on how a sense of place and a sense of place is also on the values, attitudes and especially social and individual behavior of people in place is effective and people of social activity is usually given how the sense of their company location (Falahat, 2006).

**Check the sense of place in relation to the concepts of semiotics:** Concepts such as “place of friendship” and “belonging to a place”, the concepts are in the concept of sense of place, could by the concept of “implication” iconic landmarks rooted in personal experiences, social and cultural teachings and mental associations is realized. “Value” of other concepts in the theory of Saussure’s semiotics, negative and differential expression of the relationship between symptoms associated with other signs in the structure (Chandler, 2008). Saussure says: “the concepts of positive and positive manner and are not defined only by virtue of their content but also through interaction with other components such negative and the

value of the find. What determines each sign is in other word being not something that other symptoms. This symbolic signs feature can create” a character “and to strengthen the spirit of the “place” that the most important concepts in promoting a sense of place can be considered. Places that is feature unique character of each place is due to the subjective meanings and associations of symbols and current activities in those places is formed. Saussure with a socially to check symptoms and believe in the influence of subjective factors in shaping the signs, symptoms and Pierce in the review process, it is studied both to the influence of “context “and interpretation of the signs that a significant factor in the context of “meaning” which features signs is considered. Art also relying on “meaning” to pay spatial space, rooted in many factors related to the context and thus influence by the audience. Thus as mentioned earlier, the symptoms emerged as one of the richest architecture are the defining factors that influence the cultural, social, religious and the many users of the built environment affect activity patterns. Component manufacturer of architectural space with image and perception of the signs, the spiritual signified by signs Saussure matches, pointing through the understaning of space and architecture and sense of place corporately. The closest view of semiotics as a sign examined in connection with the audience by Mauritius comment. In this view, emotions associated with the architectural space and the physical and semantic factors were taken into consideration. So sign of the impact on the sense of place, the three functional way, syntactic and semantic cues provided by him is important. Functional aspects and symptoms that are associated with the activities of loading space with Influence the physical structure of architectural space are effective in promoting a sense of place. Semantic aspects of physical symptoms that are sometimes in the form of outdoor architectural elements (icons, indexes and symbols) find that by influencing feelings of aesthetic, social identity and create a sense of place have a significant role (Falahat, 2006).

**Place of signs and meanings perception of architectural space:** Now a days with the development of human societies and the vacuum of space made sense, the role of perception in shaping the quality of spaces and different areas of interest were the architects. Pay attention to how the cross-impact the environment and spaces built on human behavior and one of the consequences of the semantic gap in these spaces can be considered that might induce a sense of belonging and identity and it’s looking relaxed and it’s been a pleasure and feeling in the mind of the audience attendance and being on location in live, he added. Perceptions of the case which is affected

Table 2: Sign used in architectural







Signs	Architecture	Content	Expression of sign
Signs that convey God's message (creation of planets and galaxies, all creatures, the Qur'an and miracles, etc.,) all these signs are from unique creator		God	How the signs shows the content and expression them in architecture space
Signs that are made by man in words, symbols, either (verbal and non-verbal) to the maximum. The man himself is also a sign of God on earth		Man	
Symptoms that occur in nature are: the living, plants and trees and other secrets hidden in it		Nature	
In historical landmarks can be used in monuments at a time when the phenomena are learn. Usually in the form of text or image documents that are the first to include a visit to the archaeological data, images and so on. Each of these data types can be included signs and indications. Semiotic method can be relief, search and connecting these help finding to other elements of a particular culture or period of study		History	
The existing signs in the community includes a variety of codes and meanings are very political, social, cultural, religious, etc. That includes any of these type of symptoms and rather analysis and talk a lot		Society	
Geometry and symmetry in architecture creates an appropriate relationship between the components with each other and the whole implies which is why architecture creates its visual beauty (the view from the Ali Qapu palace and Imam mosque in Naqshe Jahan Square in Isfahan)		Geometry and proportion	Language
The colors are bright forces that can cause the spirit of the place in space (Boroujerdi's house)		Color	
Direct use of natural light within an architectural space can have the sense of place (Sheikh Lotfollah mosque)		Light	
Using special form that is associated with the view (Tabatabai's house)		Form	
The use of natural elements such as water and a sign of Iranian garden style is rooted in the old patterns to instill a sense of place (central courtyard Daralfonoon school)		Natural element	
These materials are key contacts for uninformed and informed participants to be decoded ..Induce a sense of cold and heat using concrete sense of space as well as the use of wood (Library and Community of Flip Dakster, architect: Louis Kahn )		Use of special materials in order to make special sense	

Table 2: Continue

Signs	Architecture	Content	Expression of sign
The importance of mobility and circulation within the museum space design based on function, common activities museum (Museum of contemporary art, Diba)		Shaping of architectural space in order to create a certain sense	
Muslim architects and artists inspired by the Hadith: "Allah is beautiful and loves beauty", tried to express the beauty in all the arts and professions. Islamic architectural decorations include ( calligraphy, geometric and plant motifs, light and water). The first Iranian architectural decoration is timeless and without location (aisle of Sheikh Lotfollah Mosque)		Decorations	
This password can be rooted in archetypes (Mosque and school of Martyr Motahari)		Encryption	

by many inherited and acquired knowledge, based on different approaches are discussed and the replication of these approaches can be achieved, social learning, sensory associations and logged. So by extension, structuralism theories of Saussure in the architectural foundations (signifier) and semiotic meanings in different sensory quality is the quality of form and qualities associated with the study contract. This symbol (signifier) with commentary (signified) that are all rooted in the cultural associations of knowledge, concepts, psychology, cognitive radio concepts (Gestalt principles) and behavioral characteristics and work environment considering the role of the audience and interpreting it. So by understanding the symbolic meanings of the most fundamental issues in the debate is semiotics. The concepts in the theory of de Saussure, the concept of "significance" is actually an expression of the relationship between signifier and signified is jabi. Saussure believes that "although, the meaning (signified) and form (signifier) each separately, only the differential and stripping, its composition will be a positive event" (Chandler, 2008). The positive relationship that is addressed to a field of perception and interpretation in interpreting the characteristics and personal experiences and different cultural backgrounds, social, religious and community roots. In other words, the signifier and some of the defining factors in architecture in the form of various sensory qualities, qualities associated with the form and qualities manifested. As mentioned, one of the most important factors in the quality of the architectural space, creating a sense of belonging to the place. Umberto Eco believes in the sign and its contractual relationship between expression and content Table 1, Who knows the specific cultural relationship constructed. So, we had the signs used in the architectural space of the two states in the quality and content of data are examined (Table 2) (Riahi, 2015).



Fig. 1: City position of Fars province ([www.abfa-fars.ir](http://www.abfa-fars.ir))

**Survey the case study: (Khan school of Shiraz):** Khan School in Fars Province is in Shiraz City, Fig. 1 and 2. This built by Hossein Shirazi Shamaei in 1024 by the Safavid period. Around it there are rooms that are all small porchs. Each cell space is suitable for one person with a closet, library and mezzanine  $0.3.62 \times 3.3$  which is close enough to easily heated in the winter and in the summer because of the large garden (now disappeared) and is cooled. The garden around the school has been a niche for study and circulation (Pire Nia, 2008).

Outdoor upstairs of back porch is suitable to talk. "portray of great teacher of Mulla Sadra was made on school entrance. One of the characteristics of the school plan, the number of organs that are based on sacred numbers. It has 92 rooms that are in Jamal case number, the name of the prophet comes. Five teachers and a dozen



Fig. 2: Map of Iran (barnamenevis.org)



Fig. 3: The exterior of the school Khan, Shiraz (Riahi, 2015)

galleries that equal to five and twelve Prophet. Space corridor that leads man to hand. Two rooms and outside the lecture room on the 14's with the addition of some of these organs can be obtained on the 110 number. In addition, there are four other room, the room chronology, servant room signalized room and muezzin room that overall achieved on the 114, the number of chapters in the Quran. Thus the building, its function were also well reflected such beliefs (Fig. 3) (Pire Nia, 2008).

**Effective factors and creator the sense of place in the Khan school:** A key factor in the quality of and creators sense of place in the Khan school have been used to have divided into two categories: perceptual and cognitive factors: that the text cursor between the contact factor or the interpretation of architecture and affects that interpretive puts on it and the second factor and also physical factors, the second factor is: physical factors which create the effect of an impact. Each of these factors

**Table 3: The elements constituent the sense of place (Riahi, 2015)**

The constituent elements of place sense	Sense of place
Perceptual and cognitive factors	Interactive relationship between humans and place Image for psychological and interactive place The impact of space on the human spirit of the place
Physical factors	The size and location Degree of closeness Conflict Human scale Geometry and proportion Form Color Smell Voice Visual diversity The natural elements (sky, sun, water, wind, plants, light)

creates text layers like architecture and then create a sense of place in the school are addressed Table 3 (Riahi, 2015).



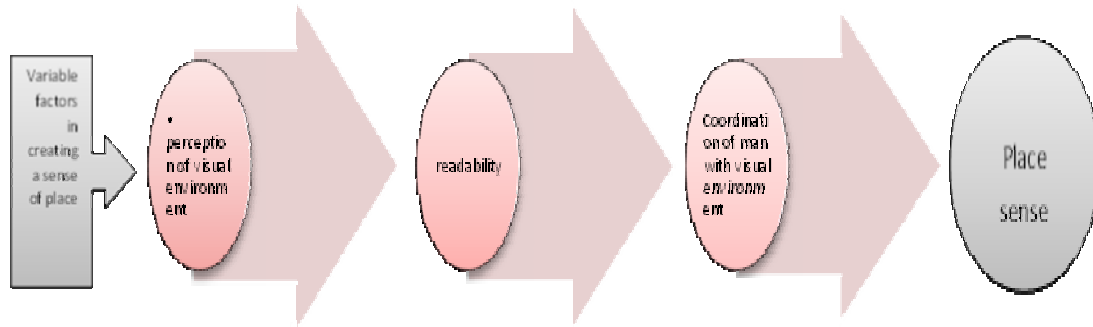


Fig. 4: Variable factors in creating a sense of place (Riahi, 2015)

Table 4: The role of agents in the creation of a sense of place in making signs in Khan school of Shiraz (Riahi, 2015)


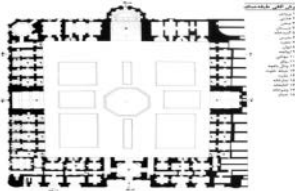
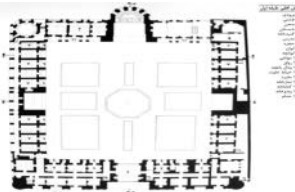




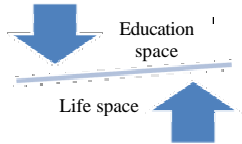
The results of the elements used	Khan school in Shiraz	View type used in school
<p><b>Signs role in creating a sense of place in the Khan school, Shiraz</b></p> <p>Powerful geometry creation as the driver's mind to thinking. Design the school converge, central courtyard and a sunken garden. Compliance with the principles of ecological and human needs (fitness, people liking)</p>		<p>Strong geometry in space design school</p>
<p>The codes and signs are taken from the sacred numbers. Fluidness and circulation in design school space based on function and common activities. The importance of school space and layout based on desired performance</p>	 <p>The ground floor of Khan School in Shiraz</p>  <p>First floor of Shiraz Khan school</p>	<p>Shaping the school environment based on signs and codes</p>
<p>The common factor and linker of spaces</p>		<p>Being hierarchy of space and connective elements of nature</p>
<p>Natural elements (in water, air, plants) to create a sense of place. The use of the sign such as water and garden in Chahar bagh Iranian style is rooted in the old models in induce a sense of place</p>		<p>Strong geometry in the use of natural elements used in the Khan school</p>

Table 4: Continue

The results of the elements used	Khan school in Shiraz	View type used in school
This element creates the sense of balance, coherence and objectivity, visibility, transparency and peace of space		Coordination of the components (order, rhythm and associated components) in the Khan school
One place of living space and training to create sa and without stress		Conjunction of living and education space in Khan relaxed school
		

After the constituent elements of a sense of place, we summary all factors in Table 3 for a variable factors in creating a sense of place. In Fig. 1, these factors are as follows: the perception of the visual environment, readability, visual human harmony with the environment. Visual perception of space in the school environment designed to be easily perceptible to the interpreters and the necessary transparency. This makes it better and easier readability school spaces is Khan school. The spaces in the school has arrangements in terms of (discipline, rhythm, communication components, visual clarity and readability). So, the above factors have caused one commentator visual environment created by better communication in order to create a sense of belong obtain (Riahi, 2015) (Fig. 4).

At the beginning we have different definitions and theories of theorists who have an important role in the development of semiotics and views from different angles studied and evaluated (Table 1). The impression was made the definition of Table 1 demonstrated that the theorists of semiotics has different views. But in a general conclusions on the definition of semiotics have one point and share that view. So by considering the above, it can be get the broadest sense to study the formation and exchange of meaning based on a system of signs are used.

In fact, one of the most important factors in the environment quality of the school Khan which lies in the creation of meaning and codes that cause a sense of place. So, the signs in terms of content and expression have been identified in in the school in terms of content and expression. That's how these symptoms in the school environment both developed. Factor in the quality of and

creators have used Khan school sense of place have been divided into two categories: perceptual and cognitive factors: this factor effect on the audience or the interpretation of the text of the architecture and the effects on a interpreter and the second factor: the physical factors that affect creating a something. Each of these factors creates text layers like architecture and then create a sense of place in the addresser of school environment (Table 3). After the constituent elements of a sense of place, we summarized all factors in Fig. 3 for a total of three variable factors in creating a sense of place, these factors include: Perception visual environment, readability, human harmony with visual environment.

Visual perception of space in the Khan school environment designed to be easily perceptible to the interpreters and has the necessary transparency. This makes it better and easier readability spaces of Khan school. The spaces in the school have arrangements in terms of (discipline, rhythm, communication components, visual clarity and readability).

The above factors have caused one commentator visual environment created by better communication in order to create a sense of belonging (Fig. 1). Then a summary of the factors that influence how we have signs in creating a sense of place that the proposed model have to be in Table 4.

## CONCLUSION

The results show that the presence of symptoms in the school play an important role in creating a sense of place in it.



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