## Investigation of Housing from A Semiotic Perspective; Case Study: Qajar Houses and Contemporary Residential Complexes in Shiraz\*

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## **ABSTRACT**

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The creation of high quality architectural space has always been the concern of architects and researchers of this field and directed their attention to the lingual concepts and theories in terms of philosophical and theoretical dimensions. However, as an instrument for analyzing and evaluating the identity, semiotics has been less frequently applied for housing design. A house is a place where in the individuals feel the most sense of belonging and spend most of their time. For the same reason, knowing its subtle concepts can lead to the creation of a favorable environment. Many of the needs expected from a house are formed based on the human needs in various periods. Considering the two Qajar and contemporary periods in Shiraz, in the present study, the house is supposed as a texture composed of various layers and it is attempted to use a semiotic approach to make it possible to understand the effects of these layers on the house architecture as well as the meanings of various elements and spaces of the house. Accordingly, considering the studies on semiotics, first, the concept of semiotics is described, the relevant data and theories are gathered, and then, applied in an architectural system to create a conceptual model of semiology for reading each architectural work.; afterwards, the Qajar houses and the contemporary residential complexes are analyzed based on the foresaid model. This research is a mixed method research in which data are collected using library study, questionnaire and interview. The results of this study indicate how the architectural elements influenced by the architectural and meta-architectural layers in the two studied periods influence the meanings perceived by users.

Keywords: Semiotics, Housing, Meaning, Traditional Houses, Residential Complexes.

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## 1. INTRODUCTION

Amongst the creatures, human beings are species intensively inclined towards sense-making. Human beings are more important than any homo-significant creatures and create meaning through producing and interpreting the signs (Chandler, 2008, p. 44). To semioticians, reality is always accompanied by a sort of representation. From the perspective of the semioticians, one of the distinct features of signs and symbols is that they are always viewed as the signifier of other things (Chandler, 2008, p. 99). Assuming that architecture is the container of life and that life means how human beings live and communicate that stem from the community culture. It can be asserted that architecture possesses an identity reflecting the cultural identity of its creator. Thus, architecture represents the values governing the society, in the first place, and the values society tends to, in the second place (Bemanian, Gholamirostam & Rahmatapanah, 2010, p. 57).

A house cannot be realized as a mere physical structure. It is a multifunctional entity attending to various aspects. The housing formation is a function of use community's cultural, climatic, economic and livelihood conditions as well as construction techniques used by them. In fact, in addition to providing a shelter, which is considered as a basic human need, housing also serves numerous duties and it is one of the most important factors affecting the residence' lifestyle and cultural pattern (Ansari, 2015, p. 97). The transformation of the past houses into modern apartments has caused evolutions in the contextual, functional, and spatial properties of the houses and residential environments' architecture. Since too much attention to performance in the modern perspective has undermined many perceptual aspects of housing architectural spaces in relation to the audience, the meaning gap is more and more evident in today's housing. Thus, the basics of semiotics can be a ground for the perception of the relationship and quality of the semantic and structural indicators of the architectural space. The present study aims at finding answers to the question as to how to understand the meaning received from the symptoms in housing? And how does the difference between signs in a traditional and a modern house affect the meanings received by the audience? The purpose of recognizing this issue is to investigate the difference between the semantic perception of the audience of the architectural elements and signs used in the houses of the past and today's apartments in order to understand the reasons for the lack of meaning in the architecture of today's houses. The present study uses a mixed research method of qualitative-quantitative type in such a way that after library and documentary studies and following the field visits and creation of qualitative parameters, part of the research that was in interview form was carried out using qualitative analysis and another part which was in the form of gathering statistical data and preparing questionnaire was conducted by investigating the

qualitative parameters of the questionnaire through the use of quantitative instruments for reaching suitable outputs.

## 2. RESEARCH BACKGROUND

Since ancient times, philosophers, logicians, and grammarians have been busy researching the signs and, since romanticism till now, linguists, anthropologists, psychologists, sociologists, and literature researchers have been endeavoring to codify a coherent theory about the implications of communication and cognition and this topic was later on termed semiotics (Zamiran, 2003, p. 11). The term "semiotics" was first applied in its today's sense by John Locke in his book "an essay concerning human understanding" (1960); it is derived from a Greek root meaning the regulations of the signs. During the mid-1960s, the challenges targeting the ideology of the modern movement and the declining modern architecture were speeded up and increased. In this period, thoughts within the format of linguistic paradigms were revitalized and this ended in the change and evolution of the criticisms of the postmodern cultural subjects. Paradigms like semiotics and structuralism that exerted a considerable effect on the 1960's mindset reconsidered the meaning and symbolism in architecture (Nesbitt, 2007, p. 46). Most of the studies and researches performed about the common topics of semiotics and architecture have been within the format of introducing various kinds of signs and their conceptualization using architectural specimens (Grutter, 2010, pp. 501-523). In many of the semiotic studies, it is abundantly seen that the signs have been viewed as being synonymous with symbols. The way of analyzing the symptoms in housing is the motivation for this study and previous studies have been used in this field.

## 3. LITERATURE REVIEW

In dealing with semiotics, housing, and research about it entail some fundamental definitions that are applied in semiotics. Thus, to set the proper grounds in the study, the semiotics is firstly defined and the semiotics' concept in architecture will be subsequently expressed.

## 3.1. Definition of Semiotics

The simple definition of sign states that "it is a dual set comprised of a concept and a sound" (Zamiran, 2003, p. 26). Semiotics not only includes the study of things we call sign in our daily conversations but also the study of whatever the thing that implies another thing (Chandler, 2008, p. 20) and it is the product of the audio image (signifier) and the concept (signified). In a general definition, Eco defines semiotics as the knowledge of "the semiotic system's study". Assuming that all the cultural manifestations are somehow a semiotic system, he realizes semiotic as an area having things to do with the entire human culture in such a way that the culture and its byproducts are considered as

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falling in the domain of the substantial sign-producing factors (Izadi, 2008, p. 11); he also knows the culture's semantic structure as stemming from the position of the sign.

Saussure, the father of modern semiotics, states in his lesson pamphlets during the general linguistic period that "language is a system of sounds expressing the thoughts and wants. Therefore, it can be compared with other systems like writing, deaf persons' alphabet, symbolic rituals, and so on. It is evident that language is the most important of these systems; thus, the science of study is feasible about the signs' living in society. This science can be part of psychology that we call semiotics" (Broadbent, 2009, p. 74). Pearse realizes sign as an element that is equivalent to another thing and becoming understandable thereby or being associated therewith (Banimasoud, 2006, p. 159). He believes that "it is only in the light of sign that one can think". Signs might take verbal, pictorial, phonological, and/or tangible manners; but the clear thing is that these affairs cannot alone have meaning with it being what we add thereto (Zamiran, 2003, p. 40). Expressing the importance of the signs' roles conditioned to the encryption regulations, he deals with this issue. He explains how signs can have multiple meanings or how meaning can be attained from the speaker's ability (Ahmadkhani, 2013, p. 165). Semiotics is a science in the realm of signs and meanings and it investigates various kinds of signs, the factors present in the production, exchange, and interpretation of them as well as the rules governing the signs.

## 3.2. Semiotics in Architecture

The forms made by human beings are the continuation of their process of thinking (Habib, 2006, p. 6). The different orders stemming from the quality of their combinations result from thinking and include the creation of meaning (Froghmandarabi, 2015, p. 209). Based on semiotics, every artwork, including an architectural building, is a text the reading of which includes a rendering of its signs by the users of space; in this regard, architecture is a sort of language (Schultz, 2008, p. 531). And, because language is a system of the interrelated words (Saussure, 1999, p. 114), architectural work is like a text the words of which are volumes, textures, and constituents of a building that, meanwhile being semantically interconnected, convey their message via the aesthetical and social codes. Taking a trip to this text (architecture), the onlooker (passenger) reads (sees) corners of the work based on his or her presumptions and previous comprehensions (Shirazi, 2002, p. 16). The architectural language is built with its signs, symbols, and background forms and expresses the mental life of its users, as well (Shasti & Mirza'ei, 2007, p. 7). Therefore, the constructed forms carry meanings. Architectural semiotics, assuming that architectural elements separate from their function imply beyond meaning, quickly separates its path from functionalism in architecture. Of course, when

Rapaport says: Usually the building is embodied in the form of signs and materials, color, shape, size, furniture, landscaping and the like (Rappaport, 2003, p. 71). It seems as if he sees the sign as something other than architectural elements he lists subsequently whereas, from the perspective of a semiotician, all these elements are signs and build meanings in the grounds of the architectural space's textual structure concerning one another and this is the very process of implication (Nojoomian, 2008, p. 112). It means that every designed environment is in contact with a lot of senses and meaning is the radical human need. As an implicative process, architecture tries emphasizing the properties of human life in addition to the apparent context and form of the environment thereby to assist the human beings' fundamental needs. In between, semiotics is a solution approaching the meaning process and seeks implicit implications and discovery of the semantic layers of the phenomena (Hamejani, Bayzidi, & Sahabi, 2018, p. 45). A text is a physical phenomenon but not a definite one. A text consists of numerous layers each of which is the objective and textual embodiment of a set of codes (Sojoodi, 2012, p.334). Every text (like architecture) is the product of a manufacturing process formed by the interactions of ideas, values, areas, and environmental recognition of the author; upon confrontation with the text (architectural design), the audience tries perceiving the text's message and deal with its processing. Thus, semiotics tries reflecting the thoughts posited on between the lines of any artistic text (such as architecture) and the architecture is also subjected to reading based on this method and semiotics' theories (Ghafari & Falamaki, 2015, p. 2).

To interpret every sign, the need for the achievement of the aesthetical, semantic, and functional scales existent in place-time of every architectural design is inevitable. The designer encrypts every architectural design and text according to the conventions and in the area of its own society's literature. Scrutinizing the numerous layers of a design (functional, economic, aesthetical, social, cultural, and hermeneutic layers) and perceiving the relationships, the audience or readers engage in building meaning. The architecture's hermeneutic layer forms the meaning of the design through the codes existent in the plan and according to the depth and level of perception (Ghafari & Falamaki, 2015, p.7). Table (1) shows the semantic aspects from the perspectives of Broadbent (1980) and Gustafson (2001). In architecture, three series (three system sets) are interlaced with one another: the system settings based on the social expediencies, the system settings based on the architectural form and its related issues. The first set adopts a meta-architectural approach and forms the architecture's communicative layer about the sociological, cultural, and anthropological issues and the two remaining systems are of the architecture and its setting's type. The architectural building of meaning takes place through these three (Dabbagh, 2011).

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Table 1. Aspects of Semantics Based on Gustafson and Broadbent's Ideas

Aspects of Semantics Based on Gustafson and Broadbent's Model of Meaning Construction		
Environmental Factors	Vitality, Leisure Time, Access, Navigation, Symbolisms, and Space's Scale	
Others	Social Interaction, Friend-Finding, and Communication With Others	
Individual Factors	Adaptability to Mental Schema, Security, Satisfaction and Memorability	

In sociology, lifestyle is viewed as a set of common values and daily life and behaviors are meaningful in a given social ground. Activities like the type and amount of the individuals' social communication, type of space and time's use, kind of kinship and familial relations, and others of the type differ in various social and cultural grounds. Lifestyle defines the type of activities performed and their reasons and meanings (Pourdehimi, 2012, pp. 15-16). Life form changes in every period in proportion to the conditions thereof. The shape of life is indeed the form influenced by the human wants and needs under the climatic conditions, existent facilities, social relations, and so forth. However, lifestyle is a method and manner exhibited by the human beings in respect to their perspectives, beliefs, thoughts or, generally, culture and, since it is perfectly dependent on the type of humans' approach to the life and their insights and discretions, it can be envisioned as a sustainable matter in some areas (Abdollahzadeh & Arjmand, 2012, p. 110). Architectural spaces are signs formed in the course of history in adherence to the life method, culture, and lifestyles of the residents of them. Geographical space is not at all neutral and purposeless in social terms or, as Zimmel puts it, a modern city is not a "spatial identity with sociological results but a sociological identity formed spatially" (Bocock, 1993, p. 16). Thus, to reach the elements and factors that shape space with identity and create contexts selected by the mankind based on his preferences and interests, we need a sort of knowledge that makes us aware of the Iranian society in every historical period, the people's lifestyle, and their choices and habits in the course of the daily life's process to be able to engage in a search

for the tangible intra-house signs.

The text has been comprised of numerous layers each of which is an objective and textual manifestation of a code. There is no doubt that some layers or even a layer might be considered more original than the others depending on the text and they may prove a more fixed presence in various textual manifestations and the other layers may be variable. In the course of various periods, architecture has been influenced by social, economic, and cultural factors; thus, the analysis of architecture based on the semiotic knowledge is infeasible without the consideration of various metaarchitectural and architectural factors. In this study, the semiotic approach was defined in architecture in two layers (architecture & meta-architecture). The meta-architectural layer has been drawn on the society and the cultural and social parameters and the architectural layer deals with the architecture's structure. Thus, considering the aforesaid definitions, a system was delineated and investigated for the reading of architecture from the perspective of semiotics (Fig. 1). In fact, in order to read any architectural work, it is necessary to study the meta-architectural layer in order to know the effective way of life from the cultural and social conditions of the time and its effect on the architectural layer and selected signs in each period. Based on Charles Morris's definition of semiotics for the three topics of pragmatics, semantics and syntax, and Broadbent's explanation of these three topics in architecture, these two layers can be read by the audience helping to understand the meaning of the signs used in architecture.

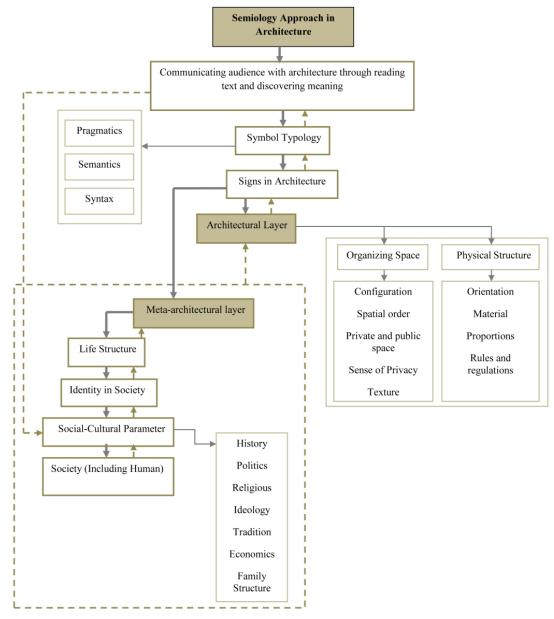


Fig. 1. Semiotics Approach in Architecture

## 4. STUDY METHOD

The present study aims to investigate the houses in the two historical periods in Shiraz with a semiotic approach and line with the achievement of semantics in housing architecture. Based thereon, 15 Qajar houses (1925-1971) and three contemporary residential complexes (Darāk, Chogān, & Asātid residential complexes) were chosen for further studies. In the process of the sample selection, the Qajar houses were seminally investigated and it was observed that this period's houses all have courtyards with constructions on two sides, three sides and/or four sides of the courtyard. So, the samples were

selected randomly in a controlled manner based on two small and large geometrical scales and in regard of the frequency of units in each of the patterns and according to their historical values. In selecting the sample of the residential complexes, three well-known residential complexes were selected from Shiraz in three different geographical positions with three different economic and social statuses as well as according to the number of the residing population (as highly populated residential complexes) following field observations.

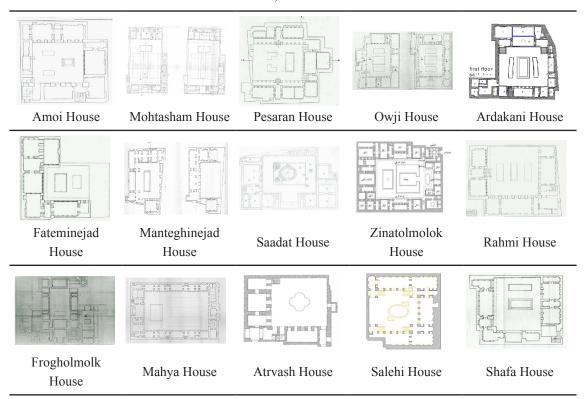


Fig. 2. Shiraz's Qajar Houses

(Documents in the Cultural Heritage Organization of Fars Province, 2019)



Fig. 3. Darāk Residential Complex



Fig. 4. Chogān Residential Complex



Fig. 5. Asātid Residential Complex

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Since the perception of the spaces' meanings and discovery of the codes therein needs the recognition of the society wherein the constructed environment has been manifested, the investigation of the study cases and the study sample volumes enable the discernment of the signs' meanings. Thus, based on Figure (1) as the product of the investigated theoretical foundation, the samples were studied and investigated in the first stage according to the semiotic approach to architecture in two architectural and meta-architectural layers in the form of library research and in respect to the existent documents and the performed researches (each of which has been dealt with in details in the various books and articles) as well as field observations and the results obtained from the comparative studies have been compiled in tables (2), (3) and (4). In this stage, the effect of the architectural and meta-architectural layers on the signs selected from the text/building was investigated from the perspective of pragmatics and syntax.

In the second stage and in order to semantically investigate the applied signs and evaluate the meanings perceived by the users of the architectural spaces in the residential complexes as well as the mental-semantic representations of the traditional houses, closed questionnaire method was utilized. Thus, based on the semantic aspects expressed by Gustafson and Broadbent (Table 1), the evaluation cases were determined and the questionnaire was arranged; then, based on all of the cases, the aspects of meaning in various spaces of the traditional houses and contemporary residential complexes were questioned and the questionnaires were investigated using SPSS software and the obtained results were compiled as shown in figures (6) and (7) (it is worth mentioning that the questionnaire was seminally designed based on Osgood's scale and binary and opposite attributes were designed for each of the spaces within the format of the aforementioned cases and the respondents were asked to respond to them within a 7-point scale. In order to investigate the quality of the designed questionnaires and investigate their content validity, a preliminary test of the questionnaire was carried out and the reliability of its choices was determined. The result signified that the questionnaire lacks the required legibility and understandability for the respondents with the system of Osgood's binary features. Thus, the options were arranged accordingly in a five-point scale in the form of very low, low, intermediate, high and very high). In this stage, the signs applied in the text (building) that had been drawn on the architectural and meta-architectural layers were examined from the semantic perspective. In the third stage and in order to extract and analyze the meaning through semiotics, use was made of deep interview with individuals based on narrative research method in line with the perception of the individuals' relationship with house and their semantic perceptions of the signs existent in the house space. The followings are the main questions asked during the interview:

- 1) How do you feel upon hearing the word "house"?
- 2) How do you see this house's space?
- 3) Is there a special place or object in this house with a special meaning for you?

Respondents to the questionnaire and interviewees included two groups of people:

- 1) Individuals who have had a past history of living in the traditional houses.
- 2) The inhabitants of the residential complexes.

In the process of the investigation of Shiraz's Qajar houses, the vast destructions and the disordering of the social-cultural texture has unfortunately caused the lack of access to and direct observation of the houses. Lack of access to the main residents of these houses to prepare a questionnaire and interview and the vacancy of these houses to review some of the studies has been one of the limitations and problems of this study. Since recognizing the system of environmental meaning of historical spaces at the time of subsequent developments, according to the time interval must be done regardless of the researcher's mind to be able to express the meanings of yesterday's space today, it is necessary for respondents to be in the historical environment. Based thereon, some respondents from the group 1 with past history of life in traditional houses were taken on a recreational tour to Maneghinjead's House (one of Qajar houses in Shiraz that could be visited) so that they can more readily answer to the questionnaire's questions by remembering the memories of the traditional houses and based on the mental images retrieved in their minds; these individuals were also interviewed in the same house. The respondents of the group 2 were questioned and interviewed in their own residential complexes' environments. The questionnaire's reliability rates were 0.9 and 0.894 based on Cronbach's alpha method for the contemporary houses and the traditional houses, respectively; these values are indicative of the good reliability and internal consistency of the questions (Cronbach's alpha coefficients larger than 0.7).

Efforts were made in the semi-structured interviews to design questions in such a way that the deep exploration of the interviewees' minds can be rendered feasible in line with access to what is going on in the individuals' minds and, simultaneously, avoid any sort of prejudgment and prevent the evasion of the respondents. In this regard and in order to gather a higher level of information from the individuals, their voices were recorded and the interview was continued till the emergence of the common phenomena and repetitive assertions by the participants. The interviewees' information was coded in match with their utterances (period of residence, age, and gender and so forth). The interviews were investigated in the form of structural analysis and based on the rate of repetition-number of words, terms, expressions and sayings, and the redundant materials were identified and pruned. The index utterances and the meanings codified based on them were extracted in line with the

achievement of the common concepts and the results were compiled in Tables (5) to (8) and the quality of the audience's relationships with the signs and reading of the text by the users of the space were investigated. Then, using Figure (1), the relationships between the perceived meanings and the architectural and metaarchitectural layers were analyzed as presented in Tables (9) and (10).

# 5. INVESTIGATION OF THE STUDY CASE

Regardless of environmental issues, the values and norms of a society are embedded in the architecture of a society. In the course of history, various architectural spaces have been formed based on these same values and norms and influenced the buildings and the cities' architectures in a macro level. Social, economic, political, religious, cultural and historical factors form in the course of a society's time and cause the creation of norms and values of a society. In a norm-based

society, an individual learns how the behavior and the individual's life structure is shaped. The life structures of the individuals and the ideologies of the society wherein the individuals live influence the architectural designing of the society in their times. These influential factors are apart from the architectural discussions and investigated as layers beyond the architecture. Therefore, the investigation of the architectural designing of a period aside from the meta-architectural layer is useless.

# **5.1.** Stage One: Investigation of the Case studies from the Semiotic Perspective

Considering the field observations of the study cases, the investigation of the architectural plans and documents and library studies, the two architectural and meta-architectural layers were investigated based on the pragmatic and syntactic patterns in all the traditional Qajar houses and contemporary residential complexes:

Table 2. Investigation of the Meta-Architectural Layer in Qajar Houses and Contemporary Residential Complexes from the Semiotic Perspective

Meta-Architectural Layer	House (by Period)	Property	Sign
History	Qajar Houses	- Approaching the house as a permanent place of living	Designing of the houses based on the present and future needs     Large number of rooms     Numerous spaces for holding ceremonies
	Contemporary Residential Complexes	- House as a temporary domicile for meeting the daily needs	Designing of the houses based on the present needs     Limited number of rooms
Politics	Qajar Houses	- Absence of government's role in house-building	Designing the house based on individual methods and traditions     Designing the house based on the employer's needs and architect's idea
	Contemporary Residential Complexes	The effect of governmental policies on the number of children     The effect of the governmental policies on accommodation for every family     The effect of the governmental policies on high-rise building construction and urban regulations based on the lowering of the occupied surfaces	Independent life in apartment units     High-rise building construction and residence in apartment blocks
Religion	Qajar Houses	- Manifestation of the religious values - Attention to the spiritual values - Hiding the houses' interiors in line with the preservation of the privacy	<ul> <li>- High walls and without opening towards outside</li> <li>- Dividing the spaces into internal and external</li> </ul>
	Contemporary Residential Complexes	Manifestation of the corporeal values     Attention to the normative values     Reducing the concealment and exhibition of the self in line with showcasing power	- Stretched windows and transparency in the façade
Ideology	Qajar Houses	Belief based on the religion, tradition and ethnic beliefs     Being aligned with the personal individual properties and social properties accepted by the society	- Designing based on culture and lifestyle - Giving importance to the building's internal space
	Contemporary Residential Complexes	- Under the influence of the contemporary culture and the other countries' culture     - Tendencies towards fashion     - Efforts for enhancing the social prestige more than affordable	<ul> <li>Designing in modern styles disregarding the culture</li> <li>Use of new materials</li> <li>Giving importance to the building's exterior spaces for attracting the passersby</li> </ul>

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Meta-Architectural Layer	House (by Period)	Property	Sign
Tradition	Qajar Houses	- Patriarchy in house - House as the place of performing all the activities and the family members' relations (place of eating, meeting, celebration, mourning ceremony and so forth)	House spaces based on men's rest and women's workplace     Spaces based on individual and social performance
	Contemporary Residential Complexes	- Family's rule in the house - House as the place of family member's rest and transmission of the traditional family functions to the city (translocation of the view and meeting, celebration, mourning ceremony, friendly visits and so forth to the urban spaces)	Spaces based on the resting of all the family members     Spaces based on individual performance
Economy	Qajar Houses	- House based on the employer's budget - Not approaching the house as an economic source	- Space based on the employer's need and taste - Use of vernacular masonries and designing type based on the employer and architect's taste
	Contemporary Residential Complexes	<ul> <li>Improper distribution of the financial resources</li> <li>Construction of the house by capitalists</li> <li>House as an economic goods</li> </ul>	- Space based on the investor's taste - Use of materials and designing type in line with the investor's better cost effectiveness
Family Structure	Qajar Houses	<ul> <li>Houses in multinuclear and tribal forms</li> <li>Increase in the social relations between the family members and companions</li> <li>Various age groups' life in a house along with one another</li> <li>Giving duties to women inside the house and to men outside the house</li> </ul>	- Axial pattern of the rooms - Multiple use of the spaces
	Contemporary Residential Complexes	- Single-nuclear family - Reduction in the social relations and relations limited to the main family members - Various age groups' life in an independent manner and in similar houses - Equal dividing of the men and women's duties both inside and outside the house	- Pattern based on the number o bedrooms to the residents in an independent manner

The relationship between architectural spaces is different in different cultures and uses. Users expect to have a different understanding of the relationships of

defined spaces by being in different environments. The relationship between the spaces and their organization was examined in Table 3 and in the architecture layer.

Table 3. Investigation of the Architectural Layer (Spatial Organization) in Qajar Houses and Contemporary Residential Complexes from the Semiotic Perspective

Meta-Architectural Layer Spatial Organization House (by Period)		House (by Dowled)	Duonoutre	C: an
		Property	Sign	
Configuration	External Wall	Qajar Houses	- Lack of attraction and without opening	<ul><li> Façade devoid of decoration</li><li> Façade without window</li></ul>
		Contemporary Residential Complexes	- Façade as the building shell	<ul> <li>Simple windows in the façade</li> <li>Use of up-to-date and cost- effective materials</li> </ul>
	Entrance	Qajar Houses	-	<ul> <li>Indirect and index entrance</li> <li>Entrance with details like arcade platform, latch etc.</li> </ul>
		Contemporary Residential Complexes	- A path for crossing and access to the residential unit	<ul><li>Entrance for vehicles</li><li>Door separating the units</li></ul>

	tectural Layer	- House (by Period)	Property	Sign	
Spatial O	rganization		Troperty		
Configuration	Open Space (Courtyard, Porch, Terrace, Roof, Etc.)	Qajar Houses	<ul> <li>Paying attention to the cultural and functional role of open space</li> <li>Preservation of the Functional and visual connection to the nature</li> <li>The use of the favorable climatic conditions of the open space</li> </ul>	<ul> <li>Courtyard as the service-providing and movement facilitating space</li> <li>Courtyard as the internal and external hinge</li> <li>Roof (private space) as the sleeping place</li> <li>Courtyard, porch and roof with connective and valuable order</li> </ul>	
		Contemporary Residential Complexes	Open space in random form between the blocks     Open space in common form between the units	Courtyard as the hinge connecting to the urban spaces     Terrace for keeping installations and clothing     Roof as the place of common installations     Courtyard, roof and terrace lacking connective order and in common and random manner	
	Life Space (Rooms-Service Spaces)	Qajar Houses	- Rooms' functional nature - Cooking place as an ancillary space	<ul> <li>Rooms with three, five and more doors</li> <li>Kitchen in the corner of the building</li> </ul>	
		Contemporary Residential Complexes	<ul> <li>Room as the place of commode, instruments and bed</li> <li>Cooking place as the main element of the house</li> </ul>	- Room with furniture standard - Open kitchen	
Spatial	Discipline	Qajar Houses	<ul> <li>Combining open, semi-closed and closed spaces</li> <li>Functional diversity of the closed spaces</li> </ul>	- Courtyard and roof (open space) - Porch (semi-closed space) - Room (closed space)	
		Contemporary Residential Complexes	- Use of maximum space for foundation (urban engineering rules)	- Courtyard and roof (common spaces) - House (closed space)	
Public and	Private Spaces	Qajar Houses	<ul> <li>Paying attention to the hierarchical and indirect relationship from outside to inside</li> <li>Introversion according to religious, cultural and climatic issues</li> <li>Intermediated entry from the house's public spaces</li> </ul>	- Dividing of the spaces to interior and exterior	
		Contemporary Residential Complexes	Modern style without attention to cultural, religious and climatic issues     Ignorance of introversion     Non-intermediate entry into the public space of the house     Use of the inter-building area for solving the access issues	<ul> <li>Window facing the external environment</li> <li>Common open area</li> <li>Closeness of the private and public spaces</li> </ul>	
Pr.	ivacy	Qajar Houses	<ul> <li>Granting priority to the residents' collective privacy</li> <li>Giving importance to the spaces' function</li> <li>Reduction of the life border between the family members</li> <li>Giving importance to the physical, visual and auditory privacy</li> </ul>	<ul> <li>Spaces based on function</li> <li>Use of spaces like backyard, storeroom and closet for increasing privacy amongst the spaces</li> <li>Separation of the internal and external spaces</li> </ul>	
		Contemporary Residential Complexes	Granting priority to the individual privacy     Increasing the border between the family members' lives     Use of common spaces for increasing the units' substructure     Reducing the physical, visual and auditory privacy	Rooms specific to each family member     Weak joints between rooms and service spaces	

Meta-Architectural Layer  Spatial Organization		- House (by Period)	Property	Sign	
		- House (by 1 eriou)	Troperty	Sign	
Rhythm	Compression- Extent	Qajar Houses	- Space's horizontal extension - Expansion of the horizontal view and relations	- Low-height building with horizontal extension	
		Contemporary Residential Complexes	- Space's vertical extension for more units - Vertical relations and corroboration of upward view	- High-rise building with upwar compression	
	Presence- Absence	Qajar Houses	-Existence of meaning in various spaces	- Full and empty volumes - Playing with light and shade	
		Contemporary Residential Complexes	- Performance in space	- Minimum housing or fille volumes	
	Centralism and Decentralism	Qajar Houses	- Attention to the family's gathering place	- Courtyard	
		Contemporary Residential Complexes	- Attention to individualism - Attention to the family's gathering place	- Sitting room and rooms with equal values	
	Unity-Plurality	Qajar Houses	- House as a whole with order	- Decorations, performance an unified materials	
		Contemporary Residential Complexes	- Extreme diversity; excessive dullness	- Decorations and performance is separate and disintegrated form	
	Meagerness, Redundancy	Qajar Houses	<ul><li>Memorability, fancifulness</li><li>Creation of curiosity</li></ul>	- Shade, light and color	
		Contemporary Residential Complexes	- Simplicity, meeting the necessary needs	- Absence of decoration	
	Part-Whole	Qajar Houses	- Giving importance to the building as a whole - Human-environment relationship	- Concomitant form and meaning	
		Contemporary Residential Complexes	- Human and environment as two phenomena outside each other	- Form and meaning apart from one another	

Table 4. Investigation of the Architectural Layer (Physical Structure) in Qajar Houses and Contemporary Residential Complexes from the Semiotic Perspective

the architectural layer.

Qajar houses and residential complexes and their

Meta-Architectural Layer	House (by Dori- 4)	Duonoutre	C: an
Physical Structure	House (by Period)	Property	Sign
Orientation	Qajar Houses	Orientation based on the use of light from northern, southern, eastern and western sides     Orientation of spaces according to the spatial properties     Lattice structure and spatial independence	<ul> <li>Designing spaces according to the favorable use in respect to climate</li> <li>Spatial separation using</li> </ul>
	Contemporary Residential Complexes	Orientation based on the urban criteria     Orientation through objects and furniture     Accumulation of rooms on one side     Lack of space recognition when doors are closed	- Units' light solely either from north side or south side and/or northern-eastern side - Designing spaces according to furniture siting - Spatial separation using doors
Materials	Qajar Houses	<ul> <li>Attention to the symbolic properties</li> <li>Consideration of economic issues</li> <li>Consideration of climatic issues</li> </ul>	- Brick - Mud mixed with straw (cob)
	Contemporary Residential Complexes	- Use of modern materials - Attention to the economic issues	<ul><li>- Brick</li><li>- Cement and nano-paints</li><li>- Washed cement</li></ul>

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Meta-Architectural Layer	H (b D d)	Programme.	G!
Physical Structure	House (by Period)	Property	Sign
Proportions	Qajar Houses	-Importance of geometry, materials and geometrical scale	- Visual order in the whole and parts
	Contemporary Residential Complexes	-Attention to the use of maximum space and building's external shape	
Rules and Regulations	Qajar Houses	- Importance of geometry in designing - Importance of geometrical scale in construction	- Space dimensions based on the geometrical scale
	Contemporary Residential Complexes	- Importance of furniture and equipment	- Space dimensions according to the furniture standards

## 5.2. Stage Two: Preparation of Questionnaire

In the second stage and in order to perceive the relationships between the applied elements and the constructed spaces (signifier) and assessing the meanings perceived by the audience (signified), the individual, social and environmental factors were seminally investigated in all of the sample spaces and the semantic factors were evaluated based on the signs existent in them so as to analyze the questionnaire. In the evaluation of the ideas of the residential complexes and traditional houses' inhabitants about

the individual, social and environmental factors in the whole house space, the residents of Asātid, Chogān and Darāk residential complexes expressed that they are intermediately satisfied with all three factors while the residents of the traditional houses expressed a high satisfaction of all of them. Figure (6) illustrates the ideas of the residential complexes and traditional houses' residents about the individual, social and environmental factors of the whole house space and Figure (7) displays the ideas of the residents about the semantic factors extracted from the signs existent in space.

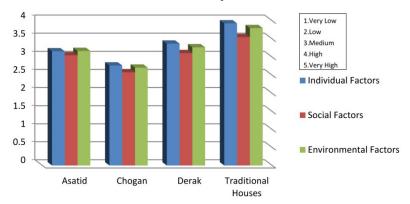


Fig. 6. Comparison of the Ideas of the Inhabitants of the Contemporary Houses and Traditional Houses about the Individual, Social and Environmental Factors Extracted From the Signs of the Whole House Space

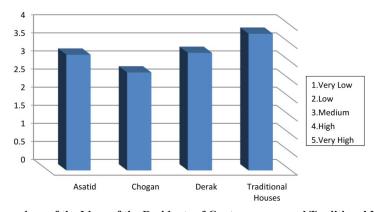


Fig. 7. Comparison of the Ideas of the Residents of Contemporary and Traditional Houses about the Semantic Factors Extracted From the Signs in the Whole House Space

### 5.3. Stage Three: Interview with the Participants and its Analysis

The outstanding utterances of the interviewees were written down and the proposed indices were investigated using semiotic approach drawn on Figure (1) (all the participants' utterances have been quoted with their colloquial literature and the exact words otherwise the structural change of their statements might cause flaws in their sayings' validity and credibility).

## Table 5. Investigation of the Meanings Perceived From the Interview with the Traditional Houses' Residents **Outstanding Utterances** Perceived Meanings 1) Many memories were recalled with my entry into this house; the - A high social communication between the family memories were about the families who lived with us; uncle, aunt, members grandfather and grandmother (F-69-19). - Long times of the members' gathering along with 2) There was nothing like ringing the bell and invitation; the guests creation of memories arrived all of a sudden; we were all together and we would bring pillows - Social interaction between the women in the house and spread blanket for them and played with kids in the courtyard (M-82-25). 3) The houses were built in such a way that more social relations took place between the household. In the mornings, the house's women gathered in the kitchen and each cooked her own food; but the brides and the young girls of the house learnt cooking from the elders (F-79-14). 4) At night, the family of my brother who had just married and our family and my uncle's family spent all the time together; we ate dinner in the courtyard; each family cooked its own food and we all ate food together (F-79-14). 1) The relations were very sincere; the hatred was easily perceived and - Respect to the elders resolved by the elders; everyone respected the elders' words (M-82-25). Observation of the age hierarchy 2) We played with our male and female cousins who lived in our house; - Religious beliefs in venerating the religious elders and we sometimes fought with each other but our mothers did not intervene 3) In the families themselves, the veneration of the elders was very important and if there was an old woman or an old man, they helped him or her with washing and cooking because they believed that "you reap what you saw" (F-79-14). 4) In the past, a person was usually brought to the houses for reciting dirge poems on a weekly basis and he would sit on the edge of the pond and start preaching and expressing the women's canonical issues and read the honorable hadith of Kasa'a to them. The women who were at odd with one another stated it therein and the problem was resolved with the grace of the preacher (F-79-14). 1) Everyone enjoyed the tranquility of the house; kids used to play in the - Existence of various rooms for individuals

- courtyard; men were busy speaking about their jobs; women cooked and weaved carpets and nobody interfered with the others' lives (M-69-19).
- 2) In the middle of our house, there was a pond; it was ornamental and we sometimes put watermelon in it to become cool. The kids played in it during summer (M-82-15).
- 3) Formal and stranger guests were welcomed in the highest part of the house. My father would warn us not to make a sound and we would go in the other rooms; my mother would place the hosting instruments behind the door and call on my father to come and take them (M-75-15).
- 4) Everything had been predicted in the house; for example, they took water from the well that entered the pool and there was a cooking place nearby. There was even a place for pounding the peas and meat and an oven for cooking (M-79-14).
- 1) The door had two knockers; when door was knocked, we could understand if s/he is a woman or a man; if it was a man, my mother called on me to go an open the door but if it was a woman, my sister occasionally went to open the door (M-82-25).
- 2) The neighboring buildings did not have a view to our house; due to the same reason, the women occasionally jumped into the pond while wearing clothes during summers when the men went away and wettened their heads so as to become cool (F-79-14).
- 3) There was a vestibule right after the house's entry and it had a platform for taking a rest. Then, one would enter the corridor and enter the courtyard. I mean that the view of the house's courtyard from the alley had been blocked (M-82-25).

- Spaces' multiple uses
- Attention to the lifestyle in the designing of the spaces

- No interference between the private and public spaces
- Introversion according to the religious beliefs

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## **Outstanding Utterances**

## Perceived Meanings

- 1) Spraying water onto the courtyard's floor and the trees' greenness bestowed a special freshness to the house. When the sun irradiated onto the house, my mother would stretch her legs under the sun and say my knee's pain been soothed (F-79-14).
- 2) We had an orange tree; when it blossomed for the first time, my mother burnt wild rue and said our tree has become a bride; let's make a Lili sound for it; what a serenity (M-69-19).
- 1) I can remember the time that several master workers came to our house and decorated the ceiling of our five-door room with wood and painting; it was the image showing an angel, a flower and a bird. At night, I would keep my eyes on the ceiling until falling asleep (M-75-15)
- 2) There were several master workers in our city that used to compete with one another as well as some painters and plasterers; they artistically approached the houses (M-82-25).
- 3) The colorful glasses and plasterworks of our houses were very beautiful as if we had got accustomed to them gradually in the course of the years we lived in there (M-75-15).

- The house's connection to the nature that caused tranquility and vitality
- Attention to the decorations in the house
- Use of materials with artistic approaches
- Attachment to the house

Attention to the meaning is the most important factor that has to be responded to by the environment. Thus, the outstanding utterances of the residential complexes' inhabitants were compiled in the following tables for finding the perceived meaning. Table (6) expresses the meanings obtained from the utterances of Darāk residential complex's inhabitants.

## Table 6. Investigation of the Meanings Obtained From Interviews with the Inhabitants of Darāk Residential Complex

## Outstanding Utterances

## **Perceived Meanings**

- 1) Since the time that business stores and coffee shops started working in the complex, we sometimes go there for drinking tea along with our families (F-24-5).
- 2) The complex's precinct is serene; in summers, kinds go there for playing because the precinct's security is in a high level (F-47-6).
- 3) We go to the precinct with the mothers of our daughters' friends during summers and we chat until our daughters finish playing (F-47-6).
- 4) Separation of the vehicles' path and the walkway causes peace to our minds about the kid's playing in the precinct (M-32-3).
- 1) The space of the precinct is pleasant and wide but it is not so much usable because we share it with the rest of the neighbors (M-32-3).
- 2) We prefer to go out of the complex for walking; the complex's precinct is shared by all the residents and we do not feel comfortable (F-36-5).
- 1) The access to the house is very difficult for those having no car; we live in the last block and we should walk a long distance (M-73-7).
- 2) The front blocks are better; when we are carrying loads and instruments, we should put them down several times in the distance to the house; the corridor enabling access to the elevator is very long (F-47-6).
- 1) We sometimes host the guests in the complex's coffee shop because our house is very small for doing so (M-32-3).
- 2) It is now for two years that we are living in this house; the first time we had some guests, all of us became stifled after several hours, the children were playing and the house was warm for cooking; and we never invited anyone since then (F-36-5).
- 1) The house's terrace is only useful for hanging the clothes; it is small and others have view thereof; we wished that we could at least eat a breakfast or a dinner in the terrace and open space with the family (M-73-7).
- 2) Thank God that there are at least some plants in the apartment; we cannot do anything in the terrace except hanging clothes (F-47-6).
- 3) Our houses' curtains are always shut-off and it is very annoying to me for I become bored in a house with shut curtains (F-24-5).
- 1) I am stifled in the house; the TV is always on with a loud voice; my daughter plays in the hall and my wife cooks; in practice, I cannot rest in the house during the afternoons (M-32-3).
- 2) The rooms are small and the bed and commode have occupied all the room's area. My son and daughter do their assignments on the dining table in hall; they say they feel suffocation in their rooms (F-47-6).
- 1) The house's angularity and possession of the useless and triangular corners is annoying to me (F-47-6).
- 2) In the past, two towers were built near the city gates with quivering beams; this house's windows make it appear perforated hence reminding me of those towers (M-73-7).

- Existence of various uses in the complex's area
- Security in the complex's precinct
- Existence of green space in the precinct that causes tranquility
- Feeling no privacy in the complex's precinct
- No separation between the private and public spaces in the precinct
- Spatial priority of the vehicles
- Lack of easy access
- Absence of the social interactions due to the improper dimensions
- No appropriate spatial separation between the required land uses for social interaction
- Lack of connection between home and nature
- Elimination of the natural elements from the house
- Elimination of light from the house due to its being viewed from the other blocks and curtains' acting as a barrier
- Absence of various rooms for family members
- Interference of the land uses with one another due to the improper spatial organization
- Lack of attention to lifestyle in spaces' designing
- Improper proportions
- Creation of a boring sense due to the repetition and plainness

In the following table, the meanings perceived from the utterances of Chogan residential complex's inhabitants have been collected in line with the recognition of the environment's meaning.

Table 7. Investigation of the Meanings Perceived From the Interviews with the Inhabitants of Chogān Residential Complex

Outstanding Utterances	Perceived Meaning
1) Practically, we do not have a precinct because it is part of the street and the cars continuously pass by (M-60-10).  2) We have a serene precinct; we take kinds to the precinct for bicycling but they are not safe due to the cars' pass (F-43-11).  3) We make appointments with the female neighbors to walk in the precinct but there is no chair and bench and we have to sit on the entrance stairs of the blocks (F-55-9).	- Lack of security and closeness of the precinct - Lack of proper furniture - Existence of the green spaces in the precinct that causes tranquility
<ol> <li>Blocks are very crowded; the kids are constantly going up and down in the stairways and making a lot of noise (M-38-4).</li> <li>The neighbors make a lot of noise and we can hear them from inside our house; the upper floor's kids run in their house and their noise annoys us (F-9-55).</li> </ol>	- Non-observance of public and private space - Failure to use appropriate materials in accordance with individual privacy
<ol> <li>The used materials in the house is weak; the houses need reconstruction (M-51-6)</li> <li>Parts of the walls are cracked; the house looks older and more depreciated than its age (M-60-10).</li> </ol>	<ul><li>Use of inappropriate materials</li><li>The effect of economy on building's quality</li><li>Non-observance of the criteria and regulations</li></ul>
<ol> <li>We do not have a terrace in our unit; it is a big problem; the clothes always smell musty (F-55-9).</li> <li>Terrace is very small and we can hardly hang our washed clothes; due to the same reason, we cannot even place a flower pot in the terrace (F-43-11).</li> <li>Terrace is overlooked from other building blocks and part of the space has been occupied by the cooler; due to the same reason, we cannot make a good use of it for hanging the washed clothes (M-51-6).</li> </ol>	- Lack of connection between the house and the nature - Elimination of the natural elements from the house - Elimination of light due to the house's being overlooked from the other houses and curtains as barriers - Terrace as the place of installations and clothing
1) Rooms are very small; one of our rooms has a skylight; we are generally either in kitchen or in hall (F-43-11). 2) The house's sitting room is small and we cannot invite guests; we take them to restaurants (M-38-4).	<ul> <li>Lack of various rooms for individuals</li> <li>Limited social relations due to the space's smallness</li> <li>Lack of attention to the lifestyle in spaces' designing</li> </ul>
Table (8) expresses the meanings perceived from the utterances by the inhabitants of Asātid residential	nplex.

another part is closed by a wall (F-45-8).

room (F-64-10).

no view is provided of the rooms' inside even if their doors are left open

3) The sitting room's space is large. We have filled it with furniture in a part for hosting the guest and, in another part, for family as the sitting

Table 8. Investigation of the Meanings Perceived From the Inter Complex	rviews with the Inhabitants of Chogān Residential
Outstanding Utterances	Perceived Meaning
<ol> <li>The precinct's space is large and pleasant; at nights, we walk therein along with several friends (M-60-15).</li> <li>The building's precinct is secure and serene but men usually use it for walking; the kids and women cannot make a special use thereof (M-55-14).</li> <li>Some ceremonies like breaking the fast during the holy month of Ramadhan and/or building sessions are occasionally held in the precinct (M-60-15).</li> <li>The precinct is shared by the neighbors and we cannot make a special use thereof (M-45-8).</li> </ol>	- Existence of green space in the precinct that causes tranquility - Security in the building's precinct - Men's more use of the precinct - Various performances in the precinct - Lack of the sense of privacy
<ol> <li>In lobby, we hold work sessions with friends or coworkers; it is a calm and favorable environment (M-52-11).</li> <li>Library is a good space for the kid's studying of the books; we also occasionally study therein (M-52-11).</li> <li>The existence of a bank, a supermarket and a pool has provided the residents with appropriate facilities. The women use the swimming pool in the mornings and the men use it in the afternoons (F-64-10).</li> </ol>	- Existence of various land uses for various age groups and meeting of the residents' needs
1) There is a good deal of space in kitchen; part of the kitchen is open and	- Existence of privacy and separation of the private from

- Existence of privacy and separation of the private from the public places 2) The rooms' space is separate from the sitting room and hosting room;
  - Proper dimensions of the sitting room that has resulted in its separation

## **Outstanding Utterances**

## **Perceived Meaning**

- 1) We have a view of the peripheral gardens in the terrace and the house has good lighting. We have crawler plants in the terrace and they have beautified the space (F-64-10).
- beautified the space (F-64-10). 2) No building apartment has the view of our terrace and this is a great advantage; sometimes, we place backgammon in the terrace during the afternoons (M-60-15).
- 3) We have a small and serene terrace in the kitchen. I always drink my morning tea in there after sending the kids to the school (F-45-8).
- The house is connected with the nature by the existence of plants and light
- Satisfaction of the terrace's environment due to the preservation of privacy according to the religious perspectives

In the following table, the outstanding indices have been presented based on the interviews with the studied houses and apartments' residents as shown above considering the system of semiotics. The relationship or non-relationship between the abovementioned signs and the architectural and meta-architectural layers (defined in the semiotics system) was investigated and the quality of the signs' selection in the specimens was figured out.

Table 9. Semiotic Analysis of the Indices Proposed for the Traditional Houses

Studied Sample	Discussed Indicators		Analysis based on Semiology
Traditional Houses of Qajar Era	Social Interactions	$\rightarrow$	1. Family structure, cultural-social parameter, of Meta- architecture layer
		$\rightarrow$	2. Configuration, spatial organization, architectural layer
	Traditional Hierarchical	$\rightarrow$	1. Religious, social-cultural parameter, Meta-architecture layer
		$\rightarrow$	2. Family structure, cultural-social parameter, Meta-architecture layer
Existence of Signs with Proposed Indices   Absence of Signs with Proposed Indices	Room with Respect to Different Usage	$\rightarrow$	1. Spatial order, spatial organization, architectural layer
		$\rightarrow$	2. Spatial organizational configuration, architectural layer
	Private and Public Space	$\rightarrow$	1. Private and public space, spatial organization, architectural layer
	Privacy in Order to Religious Viewpoint	$\rightarrow$	2. Religion, cultural-social parameter, Meta-architecture level
	Relation between Home and Nature	$\rightarrow$	1. Rules and regulations, physical structure, architectural layer
		$\rightarrow$	2. Configuration, spatial organization, architectural layer
	Materials and Decorations	$\rightarrow$	1. Materials, physical structure, architectural layer
		$\rightarrow$	2. Proportion, physical structure, architectural layer
		$\rightarrow$	3. Texture, spatial organization architectural layer

Table 10. Semiotic Analysis of the Indices Proposed for the Residential Complexes

Table 10. Semiotic Analysis of the findices (1) oposed for the Residential Complexes					
Studied Sample	<b>Discussed Indicators</b>		Analysis based on Semiology		
	Different usage in area	$\rightarrow$	1.Spatial order, spatial organization, architectural layer		
		>	2. Configuration, spatial organizational configuration		
	Privacy feeling	>	1. Privacy feeling, spatial organization, architectural layer		
	Private-Public Space	>	2. Private and public space, spatial organization, architectural layer		
Derak Residential Complex	On Foot Access and Vehiclet	>	1. Spatial order, spatial organization, architectural layer		
		>	2. Configuration, spatial organizational, architectural layer		
Existence of Signs with Proposed Indices	Social Interactions	>	1. Family structure, cultural-social parameter, Meta-architecture layer		
	Spatial Separation	>	2. Configuration , spatial organization, architectural layer		
Absence of Signs with Proposed Indices	Connection of home and nature	>	1. Rules and regulations, physical structure, architectural layer		
		>	2. Configuration, spatial organization, architectural layer		
	Room with Different Usage	>	1. Spatial order, spatial organization, architectural layer		
		>	2. Configuration, spatial organization, architectural layer		
	Life Style	>	3. Family structure, cultural-social parameter, meta-architectural layer		
	Proportions	>	1. Spatial order, physical structure, Architectural layer		
	Boring Feelings	>	2. Texture, spatial organization, architectural layer		

Studied Sample	Discussed Indicators		Analysis based on Semiology
	Safety in Area On floor Access and Vehicle	>	Spatial order, spatial organization, architectural layer     Configuration, spatial organizational, architectural layer
Chogan Residential Complex  →	Private and Public Space	···>	<ol> <li>Private and public space, spatial organization, architectural layer</li> <li>Materials, physical structure, architectural layer</li> </ol>
	Appropriate Materials	}	1.Materials, physical structure, architectural layer
Existence of Signs with Proposed Indices	The Impact of Economy on the Building	>	2. Economics, cultural –social parameter, Meta architectural layer
> Absence of Signs with	Connection of Home and Nature	>	Rules and regulations, physical structure, architectural layer     Configuration ,spatial organization, architectural layer
Proposed Indices	Room with Different Usage	>	1. Spatial order, spatial organization, architectural layer
	Social Interaction	>	2. Configuration, spatial organization, architectural layer
	Life Style	>	3. Family structure, cultural-social parameter, transnational layer
	Proportions	>	1. Proportions, Physical structure, Architectural layer
	Boring Feelings	>	2. Texture, spatial organization, architectural layer
	Safety in Area	$\rightarrow$	Spatial order, spatial organization, architectural layer     Configuration, spatial organizational, architectural layer
	Privacy Feeling	>	3. Feeling of privacy, spatial organization, architectural layer
Asatid Residential Complex	Effect of Religious on Area Space	>	4. Tradition, social-cultural parameter, Meta-architecture layer
$\rightarrow$	Social Interaction in Lobby	$\rightarrow$	1.Spatial order, spatial organization, architectural layer
Existence of Signs with Proposed Indices	Different Usage in Building	$\rightarrow$	2. Configuration, spatial organizational, architectural layer
>	Private and Public Space	$\rightarrow$	1. Private and public space, spatial organization, architectural layer
Absence of Signs with	Privacy with Respect to Religious Viewpoints	$\rightarrow$	2. Religious, social- cultural parameter, Meta-architecture layer
Proposed Indices	Connection of Home and Nature	$\rightarrow$	1. Rules and regulations, physical structure, architectural layer
		$\rightarrow$	2. Configuration, spatial organization, architectural layer
	Privacy According to Religious Views	$\rightarrow$	3. Religious, social- cultural parameter, Meta-architecture layer

## 6. CONCLUSION

Based on what was posited in the present study, the answers to the study questions can be explained as below: Answer to the first question: According to the studies, it is inferred that housing architecture can be read as a text using semiotic analysis of its different layers and the meaning deduced from it. Based thereon, the present study offers a deductive model as the subjective accomplishment of the quality of such a reading (Fig. 1). The favorable quality can be eased through the defining the semiotic approach to architecture, perceiving of the issues related to housing considering the various layers and finding the meanings applied in them. This method considers architecture as a text drawn on the architectural and meta-architectural layers thereby to decode the signs existent in the houses' architecture and analyze the meanings perceived by the audience of these spaces so as to come up with a scientific method for perceiving the applied science and evaluating their effects on the audience in the course of time.

Answer to the second question: the investigation of the study participants in the traditional Oajar houses and contemporary residential complexes in Shiraz showed herein that the differences in the signs applied in various layers of house causes perception of various meanings. Change in each of the defined layers causes the use of different architectural elements and the result is the different perception by the users of the space which is per se effective in the creation of the users' desired quality, as well, and, it can also cause changes in the cultural and social layers in the course of time to finally end with the architectural designing style of a society. Buildings are currently found an exchange value by the advent of the system of exchange value and the commercialization of the text (building) in addition to the applied value of a house as a place of living as well as the aesthetical and

structural values thereof.

The results of the present study indicated that the semiotic approach to the architectural designing of the houses is a proper solution for the recognition of the architecture of the constructed spaces as well as to the achievement of the favorable space. The tables prepared herein can per se cause the posing of several questions for further and future research about houses; for instance, this that in what

historical periods and in which layers the change ratio has exerted higher effects on the change of the signs and the meanings perceived from them? Or, how the residents' satisfaction rate is related to the elimination or addition of signs? Research about such questions can cause the perception of the housing signs and enhancement of their qualities in line with the users' satisfaction.

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