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A COMPARATIVE STUDY OF THE CONNECTING STRUCTURE OF
OPEN AND CLOSED SPACES OF TRADITIONAL AND MODERN
ARCHITECTURE OF CITIES IN AZERBAIJAN IRAN REGION

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ABSTRACT

Through history, the home has been recognized as the most important place that is compatible with human life. Due to the lack of sufficient knowledge of users and their needs, today there are many changes in the current housing and construction debate, which has led to the anonymity of houses and the move towards standardization in the country, which results in dissatisfaction of users, changing social norms and Going will not have the native identity of the inhabitants. At the same time, approaching an architecture that is based on the knowledge of needs, lifestyle, indigenous beliefs that over time has become the culture of that community and assigns a specific identity to it, can increase the sense of belonging to the space and overall satisfaction of residents to be met. Be your real needs. The transformation of the houses of the past into the apartments of today has transformed the physical, functional and spatial features of the architecture of housing and residential environments. Now the question is what is the difference between the communication structure of the components of the spaces in the traditional and modern architecture of Azerbaijani houses? In fact, this component is the design of the intermediate space. Private open spaces and common spaces as spaces between and outside and inside communication in residential units, both in terms of establishing social relations at the neighborhood and neighborhood scale and in terms of city structure and appearance and providing continuity of residential textures, in the hierarchy of residential spaces. And has created a fundamentally changing environment. The purpose of this study is spatial analysis of the spaces connecting traditional and modern housing in the region of Azerbaijan and its emphasis on the location of the building on the site and spaces. The method of this research is a combination (descriptive and qualitative, analytical and finally logical reasoning) so that it is quantitative and qualitative in terms of research location, library-

internet-field and in terms of data type. In these studies, after examining the traditional and modern houses of Ardabil, Tabriz and Zanjan, desirable solutions have been presented in order to use the connecting spaces of traditional architecture in modern houses in the region of Azerbaijan. What is important is the lack of attention to modern architecture in the region. To the principles and concepts of the past. Concepts that have sometimes been unknowingly replaced by unfamiliar definitions of others. This is while the same audience has raised needs that over time, the responsive spaces of the same needs have disappeared or diminished. In a general view, it can be said that desirable housing is housing that: based on human and human values, the manifestation of cultural values, providing peace and comfort of human beings has been formed.

INTRODUCTION

Attention to Indigenous Architecture In the mid-twentieth century, the problems and shortcomings resulting from the changes brought about by modernity and industrial comprehensiveness became apparent. This interest was created in the study of indigenous architecture, which was formed either in response to the anonymity of its architecture or in finding principles to solve problems; It includes a wide range of different fields such as human dimensions, needs and culture of users, building materials, climate, energy, etc. (Sadeghpi, 2012: 6). Researchers such as Rapaport consider one of the influential factors in indigenous architecture to be discussions of cultural contexts in indigenous architecture based on cultural issues. So much so that Powell has emphasized the need to pay attention to indigenous architecture by studying the houses of Southeast Asia, Halt Semizi of Afghanistan, Abu Turabi of Nigeria, and Pirnia of Iran. According to Paul Oliver's definition of indigenous architecture, indigenous architecture is an architecture that grows from within societies and adapts and evolves over time to social, climatic, and technological conditions, and again to the values, economics, and lifestyles of cultures that They are productive, adaptable, or in short, indigenous architecture is the architecture of the people and architecture by the people and not for the people (Rapaport, 2009: 26).

The cultural identity of architecture is shaped by the same values that are perceived only in the context of traditional buildings, because architecture is formed in order to cultivate values and imagine a body that if not, and traditional Iranian architecture would be worthless, architecture The old buildings did not look more than a handful of bricks and dirt. Iranian art is an art full of genuine Iranian genius, and the nation that creates such art must have its own instinct and genius, and its art can not be just a combination of elements from other cultures. This point means that architecture and urban planning has a mission to preserve the ancient cultural values within itself and therefore be considered an identifying element in the cultural structure, if the similarity of culture and architecture is observed in the architectural works of the world (Bemanian, 2010).). The word architecture belongs to housing more than any other building, and whatever definition or feature it has, its embodiment is seen before anywhere else in housing. Housing has always been considered from two main perspectives, one because it is the main element of the city, and the other because it is needed and considered by all human beings in all places and at all times. In addition, because housing (or home) is firstly the place where the family lives and, secondly, because

of its artistic and aesthetic burden, which are both valuable and cultural, attention to it and the study of recognizing the desirable characteristics of housing has been widespread. (Naghizadeh, 47: 2017). Today, despite the use of modern technologies and high costs in the construction of houses, it is observed that comfort is not provided as it should be in residential houses.

This is due to the identity crisis in today's architecture and the blind imitation of Western architecture. While the traditional houses of Iran with the correct design and correct knowledge of building materials and elements and its proper use according to the climatic issues of the region, the architects have been able to meet the needs of the residents of that house without spending exorbitant costs and at the same time. Unfortunately, in the present century, these principles of traditional architecture have given way to imitation of Western architecture and the Iranian house has been subjected to various challenges and problems.

The transformation of the houses of the past into the apartments of today has transformed the physical, functional and spatial features of the architecture of housing and residential environments. Private open spaces and common spaces as spaces between and outside and inside communication in residential units, both in terms of establishing social relations at the neighborhood and neighborhood scale and in terms of city structure and appearance and providing continuity of residential textures, in the hierarchy of residential spaces. And has created a fundamental internal environment. Mass production of apartment housing and the use of imported design patterns have also added to the ambiguity of the connection between inside and outside residential units. However, in the writings of Western researchers, there has been ambiguity in the logical relationship between outside and inside in the design and use of apartment housing. Christopher Alexander, quoting an English study on the balconies of apartments and small houses, points out two-thirds of people for their own reasons never use balconies in which privacy is not provided (Alexander, 2009). Today, the design of desirable housing throughout the country is essential. But the design of desirable housing in the region of Azerbaijan to improve the quality of life of residents is not only a new aspect of research but also necessary because the development of principles and criteria of Iranian-Islamic architecture in Azerbaijan and its use in designing a building not only in preserving the original architecture And the natives of this region help a lot, but also cause the spread of culture and this native architecture. Intermediate space is associated with concepts such as proximity, privacy, congestion, etc. These words in terms of function; They create personal space, social space, public space and private space. These spaces represent the degree of privacy, in other words, privacy and territory between various spatial areas. "Because respect for privacy is not only a factor in distinguishing the phenomenon from neighboring areas, but also in how it is connected." Therefore, one of the main tasks of the space between control is territory and ownership. Receiving, interpreting, changing and analyzing and combining information and concepts are also among the functions of the intermediate space in terms of meaning. Thus, the space between becomes the encounter of internal and external functions, and as a result of the influence of internal and external forces, it both limits the form that has meaning and allows the interaction and connection of that form with the environment. Therefore, the present article

seeks to identify the most important indicators of the intermediate space and affect the lifestyle of traditional housing and determine how to use these indicators in modern housing and evaluates this perspective in the cities of Azerbaijan, including Ardabil, Tabriz and Zanjan.

THE MAIN RESEARCH QUESTION

- What is the optimal pattern for the transition from open space to closed space and vice versa in residential buildings in the region of Azerbaijan (cities of Tabriz, Ardabil and Zanjan)?
- What are the differences and similarities between the connectors of open and closed spaces in traditional and modern residential buildings in the region of Azerbaijan (cities of Tabriz, Ardabil and Zanjan)?

RESEARCH HYPOTHESES

- It seems that the desired model for the transition from open space to closed space and vice versa in residential buildings in the region of Azerbaijan (cities of Tabriz, Ardabil and Zanjan) taking into account various social, physical, environmental factors, etc. based on traditional architecture of the region and The modern needs and wants of the residents will be formed
- It seems that paying attention to the characteristics and cultural elements between the connectors of open and closed spaces is the main difference and paying attention to the environmental features is the main similarity in traditional and modern residential buildings in Azerbaijan region (Tabriz, Ardabil and Zanjan cities)

RESEARCH BACKGROUND

In the contemporary sociologist Pierre Bourdieu's research on the ideal home, in the higher social hierarchy, more attention is paid to aesthetic features and less attention is paid to functionalist environmental responses (Bourdieu, 2011: 338). This result indicates the need to recognize the distinction between desires. And has human needs by designers. Taghipour et al(2015), studied Risk analysis in the management of urban construction projects from the perspective of the employer and the contractor. Rezvani Befrouei & Taghipour (2015), discussed Identification and Management of Risks in Construction Projects. Taghipour et al.(2015), studied Construction projects risk management by risk allocation approach using PMBOK standard. Taghipour et al(2020), studied Evaluating CCPM method versus CPM in multiple petrochemical projects. Seddigh Marvasti MA et al(2015), studied Assessing the Effect of FRP System on Compressive and Shear Bending Strength of Concrete Elements. Jalili et al(2015), studied Utopia is considered to be the physical form of an ideal human society where the goals are met. Rezvani Befrouie A et al(2015), discussed the design of high-rise building with ecological approach in Iran (Alborz Province). Taghipour et al(2015), studied Seismic Analysis (Non-Linear Static Analysis (Pushover) and Nonlinear Dynamic) on Cable-Stayed Bridge. Taghipour et al(2018), studied the Study of the Application of Risk Management in the operation and Maintenance of Power Plant Projects. Taghipour et al(2020), studied

Assessment and Analysis of Risk Associated with the Implementation of Enterprise Resource Planning (ERP) Project Using FMEA Technique. Taghipour et al(2015), studied Necessity Analysis and Optimization of Implementing Projects with The Integration Approach of Risk Management and Value Engineering. Taghipour et al(2015), studied Risk assessment and analysis of the state DAM construction projects using FMEA technique. Khodakhah Jeddi et al(2016), studied The Analysis of Effect Colour Psychology on Environmental Graphic in Childeren Ward at Medical Centers.

In Iran in recent years, various researchers in the concept of outside and inside with titles such as walls - connected space (Badiei, 2002), border space - link (Mirshahzadeh, 2011) and detailed (Rezakhani, 2013) from a philosophical, linguistic, semantic point of view, etc. they have presented. In these studies, specifically on the subject of external communication and Interior is not covered in housing and residential environments.

Table 1- Background of research related to research; Source: Author's collection, 2019

Brief description	Year	Author	Book, article or research title
It speaks of the types of connections between inside and outside. It speaks of the types of connections between inside and outside.	2004	Grotter	Aesthetics in architecture
On the importance of defining inside and outside for human habitation, Schultz says: "When man succeeds in defining only the title of inside and outside, it can be said with certainty that man chooses habitation. »	1970	Schultz	A new view of architectural space
An examination of the most important values of traditional architecture and evaluates the relationship between this type of architecture with humans and society, and accordingly, the relationship between traditional architecture and the traditions, beliefs and culture of society and the course of historical and global development	1997	Ayvazian	Preserving the values of traditional architecture in contemporary architecture
The main reliance of this study is on developing a model for studying theoretical concepts and deepening it with an in-depth and case study. The result of the study is a two-dimensional matrix proposal in which one ecstasy of those species and flexibility factors includes "diversity" and "variability" and the other	2003	Eynifar	Aim to address a specific case of traditional Iranian housing design concepts

aspect is the three scales "micro", "medium" and "macro" of the traditional house.			
It has been stated that in this architecture, an attempt is made to respect nature and the environment. This is something that has been observed in traditional architecture in a very significant way.	2007	Sadegh Pi	Examining the modeling of traditional architecture to achieve today's architecture
One of the ways to study the identity of society is to pay attention to the spatial elements and its relationship with the culture of society, so to identify the identity of traditional Iranian society, the study of identity-building elements in traditional Iranian architecture seems appropriate.	2010	Bemanian and et al	Evaluation of identity-building elements in the traditional architecture of Iranian houses
Contemporary political and social developments, such as the expansion of Tehran and migration to cities, the policy of governments towards modernism and anti-traditionalism and the entry of modernity, socio-cultural developments as well as the evolution of architecture, tools and techniques in the West	2011	Angbini	The effect of social, cultural, political and economic characteristics on home architecture
Considering the category of culture, considering concepts such as the realm of human scale, privacy and the like, it has studied the characteristics of housing architecture design based on Iranian culture.	2011	Qamari	Explain housing design patterns according to culture
With a case study in the 11th district of Tehran, first we examined the residential houses that have a long history (Amir Bahador House and Anisoldoleh House) through anthropology and then compared them with a house with a new architectural style and their important elements including The input spaces have been studied and analyzed anthropologically, the researcher has studied these elements in relation to the beliefs and culture of the people and then tried to present the ideal style.	2012	Eyni	New elements in architecture that replace traditional architectural elements

<p>In this article, an attempt has been made to show the philosophical foundations of settling from the point of view of phenomenological philosophical thought and then to examine it from the perspective of Islamic-Iranian values. Researchers in this study have stated that settling is a concept beyond having a shelter. From a phenomenological point of view, this category includes not only communication with others, but also communication with the home. In Iranian culture, the home is always a place for the emergence and formation of the family.</p>	<p>2014</p>	<p>Kashfi et al</p>	<p>An analysis of issues related to architecture and the concepts of "housing" and "housing"</p>
<p>After reviewing various articles and books, the results of these studies show that today the architecture and urban planning of Iran is a completely imitation of the type of architecture of Western countries, which is completely foreign and contrary to our values and culture. We should use the orders of the Quran and the rich culture of the country to plan in this regard, so that we can use more local materials that are compatible with the conditions of the region..</p>	<p>2015</p>	<p>Zohani</p>	<p>Analysis of the concept of housing in Iranian-Islamic culture and identity</p>
<p>Islamic architecture is full of points that sometimes a corner of it may be discovered and used. Mysterious architecture whose basis and tradition is dynamism and modernity. The house is a related space that a person has been affected by on a daily basis for a long time, and the house is the first space in which a person experiences a sense of spatial belonging.</p>	<p>2015</p>	<p>Goodarzi Soroush, Mohammad Mehdi and Saeed Yavari</p>	<p>Explaining the principles and criteria of Iranian and Islamic architecture on the design of traditional houses</p>
<p>Cognition has an important place in distinguishing and recognizing the values, ideas, tactics and innovations of architects. Architecture cannot express what lies in the heart, completely and openly. We know that architecture has an artistic nature; And relies on creative abilities and architectural ideas; And we know that this is why we can reach the architect and architecture by knowing the environment that has given them identity; We know</p>	<p>2015</p>	<p>Hayati, Hamed and Vahid Dolatshah,</p>	<p>The place of Iranian-Islamic architectural identity in residential houses</p>

<p>that the cognition on which we will comment is relative and limited;</p>			
<p>Iranian lifestyle is a set of beliefs, knowledge, knowledge, customs and values that are respected by the Muslim community of Iran and are known in the world, which is the criterion and standard of life. Every society has a culture that considers the criteria derived from worldviews and beliefs, its value and rank for the people of that society. Consequently, the principle of Islamic society also has a culture that, if healthy, its principles and criteria should be derived from Islamic teachings. The meaning of the Iranian-Islamic lifestyle is the use of knowledge, beliefs, principles and values that dominate the policy of social and individual life of Iranians and the sources of this style in the beginning are the religious and sacred beliefs of the people, the main principles of which are They have been taken from Islamic teachings, in the next stages, it is the ancient Iranian customs and values, which do not conflict with Islamic values and principles, and the elders of the people have endorsed them and the people have protected them.</p>	<p>2015</p>	<p>Farhadi, Maryam and Kamal Rahbari Manesh</p>	<p>Theoretical foundations of Iranian-Islamic lifestyle</p>
<p>The study of Iranian architecture shows how it has expanded over the past fifteen centuries. An overview of the main lines of Iranian architecture from the beginning of our written history, in fact, opens a highway to the heart of the ancient civilization of this land. The importance of Iranian Islamic architecture becomes apparent when we know that the material and spiritual use of the building has been considered in the constructions of this period.</p>	<p>2015</p>	<p>Valadi Talari, Maryam</p>	<p>Review of Iranian-Islamic architecture in present-day residential buildings</p>

RESEARCH METHOD

In this research, a combined quantitative and qualitative method has been used in the study and cognition. For this purpose, using library methods, articles, researches and dissertations related to research have been studied in order to achieve a suitable theoretical framework for research. Then, using

the field method, traditional houses in the cities of Ardabil, Zanjan and Tabriz have been studied. The analysis in this research is based on a descriptive-analytical approach and qualitative and quantitative methods are used. The technique of interpretation of historical maps and views and content analysis are used.

Existing theories about the relationship between open and closed spaces, inside and outside can be summarized in three categories of administrative factors: semantic, functional-behavioral, physical-environmental. The above factors can be explained in different cultures according to socio-cultural contexts and is a variable that modifies the rules and regulations of urban planning. The relationship between the six factors Explaining the relationship between open and closed space in each social context is shown in the image below.

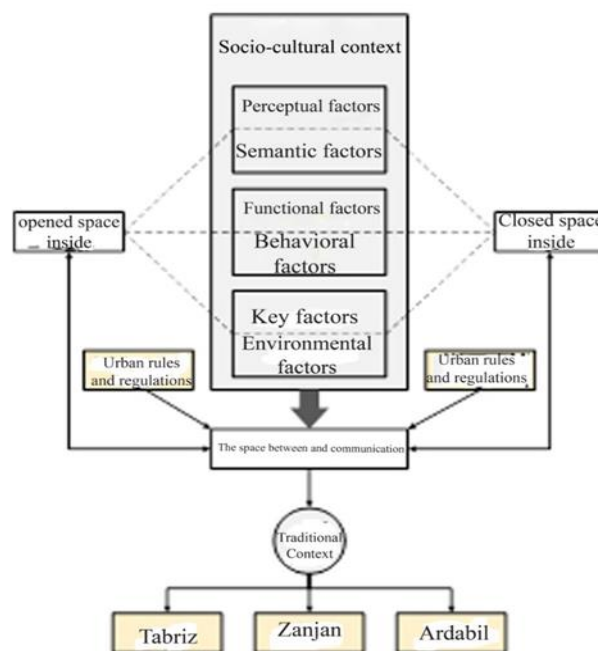


Figure 1- Conceptual model of the relationship between the components of open and closed spaces in the socio-cultural context in traditional buildings of cities in the region of Azerbaijan (Ardabil, Tabriz and Zanjan)

(Source: Adapted from Einifar and Abliya Absolute, 2014: 60)

THEORETICAL FOUNDATIONS OF RESEARCH

Residential architecture as the most important field and architectural space in which 70 to 90% of human life is spent and should be accompanied by peace, security, growth, etc., is of great importance (Evans, 1996,86). In addition to the physical needs of housing, man also has spiritual and spiritual desires and aspirations to feel good and comfortable in his home. Have a worry. At the same time, this being, due to its collective and intrinsic life, needs to be in contact with human beings, neighbors, and groups of friends, just as the social aspect of man has become an inseparable aspect of his existence. The lack and even the lack of residential spaces with the desired

quality in accordance with the needs of residents in today's architecture causes residents dissatisfaction with their complexes.

In order to prevent the ugly face of social anomalies and the resulting problems, it is necessary to improve the quality of life and meet the needs of residents in the design of residential complexes, especially semi-enclosed and communication spaces to develop appropriate solutions in accordance with scientific principles and be presented.

Traditional Iranian housing according to the plan, facade and spaces of the house from a general pattern of formation and construction system of stabilized spaces, adaptation of daily and seasonal life by adjusting the horizontal and vertical relations of the house and using different spaces at different times of the day and in different seasons It was possible.

Spaces such as summer living, winter living, basement, attic and roof allow the house to adapt to different living conditions. Organizer of flexibility in this scale is the central element of the house, ie the yard (Einifar, 2014). The large rooms and courtyards of old houses were always built to make the best use of sunlight, to be protected from bad winds and local storms, and to be exposed to pleasant winds. The construction of these houses was such that it created suitable quality conditions for the residents, both physically and spiritually, and the spatial organization of these houses was in perfect harmony with its structure.

Traditional houses are built in accordance with the climate, culture and materials of the region in question to meet the needs of the people of the region. In an article entitled A Model for Flexibility Analysis in Traditional Iranian Housing, Einifar points out that part of the needs of traditional housing are met by adapting to seasonal and daily changes, and in houses with a central courtyard, during daylight hours and during the seasons. Different spaces of the house were used. Climatic and environmental necessities and the use of the best natural conditions made the residents of the house in need of relocation in the spaces of the house. Perhaps the spaces of today's houses can be programmed for limited movements in the interior spaces of the house and more use of visual capabilities and its external environment (Einifar, 2003). Home is the immediate space associated with human life. A space that is affected and affected by it. This space is understood in connection with a complex concept, namely the family as the main social institution and an integral part of the Iranian-Islamic home.

The connection between the house, the family and the current life in it can create a lasting and eternal concept for the inhabitants of the house (Mehmandoust, 2017). It was used by architects at that time. Relying on the mentioned system, the highest duty of the architect was to recognize, understand and visualize the spatial and current forces in the load-bearing body of the building and with the aristocracy created in the designer, the proportions and dimensions of the protruding parts of the building were determined (Abolghasemi, 1987).

What happened in contemporary homes was replacement rather than restoration. There was no timely intervention in the historical context to harmonize them with the new industrial phenomena, and as a result, the old houses in the old context were replaced by new urban features, such as streets, asphalt, and electric lights. Comfort of small and compact houses today, in the face of the problems of old houses, ie ease of dusting and

cleaning, proximity of bathrooms and toilets to rooms, lighted kitchens with shelves, the emergence of alternative objects in spaces, such as refrigerators that could be easily He kept food in them for a long time and did not occupy much space, and wardrobes and utensils, etc., made the transition from the concepts and examples of home and residence to other alternatives possible in a very short time.

The space organization of the house allows residents to connect with nature, and eating or sleeping outdoors, sitting on the floor in the yard and room or even on the pond, on wooden boards and sleeping on the floor has been quite common. The spatial organization of traditional houses, with its many levels and spaces, leads to unlimited freedom and many discoveries and spatial experiences. (Haeri, 1996). In general, in traditional architecture, attention to housing as a home and human shelter has been so much that not only different identities were considered for home spaces, but also different functions and applications were given to them. This increases the quality of the home space while meeting its small needs. In the meantime, open and semi-open spaces of the house played a key role in increasing the quality of life, some of which can be mentioned:

All houses, whether small or large, have a courtyard or central courtyard and follow a single spatial system. The courtyard is central to all of these houses and serves as the heart of the house;

Three well-defined and distinct spatial groups are present in all of these homes. Indoor group, indoor group (semi-closed / semi-open) and open space group and all closed spaces are arranged indirectly and mainly through indoor spaces with yard;

The presence of water, greenery, sky, sun, wind, night and moon is quite noticeable in the yard;

Architectural elements defining the group of open spaces, floors and walls; Roof and floor indoor spaces group; Closed spaces are ceilings, floors and walls.

The combination of three groups of open, closed and indoor spaces is how they define each other. Open spaces, closed spaces and vice versa. In the meantime, covered spaces take over the transition spaces in continuation of open and closed spaces.

On each side of the yard, the combination of horizontal and vertical layers of space, such as intertwined networks, provides a variety of spaces with different dimensions and heights for a variety of private and public activities related to lifestyle (Haeri, 1996).

In general, private open spaces and common spaces as spaces between outside and inside in residential units, both in terms of establishing social relations at the neighborhood and neighborhood scale and in terms of city structure and appearance and providing continuity of residential textures, in the hierarchy of residential spaces and The environment has undergone a fundamental transformation. Mass production of apartment housing and the use of imported design patterns have also added to the ambiguity of defining the relationship between outside and inside and open and closed spaces in residential units. However, in the writings of Western researchers, there has been ambiguity in the logical relationship between open and closed space in the design and use of apartment housing. Contemporary sociologist Pierre Bourdieu's research on the ideal home has shown a distinction in lifestyle by

completing a comprehensive questionnaire from "luxury" to "necessity" social classes.

According to him, in the higher social hierarchy, more attention is paid to aesthetic features and in contrast to attention to functionalist environmental responses is reduced (Bourdieu, 2011: 338). This result indicates the need for designers to recognize the distinction between human wants and needs. In Iran in recent years, various researchers in the concept of outside and inside with titles such as walls - connected space (Badie, 2002), border space - link (Mirshahzadeh, 2011) and detailed (Rezakhani, 2013) from a philosophical, linguistic, semantic point of view, etc. they have presented. In these studies, the issue of external and internal communication in housing and residential environments in traditional architecture has not been specifically addressed.

SCOPE OF STUDY

The region of Azerbaijan is the name of a geographical land at the northwestern end of Iran. The land is bounded on the north by the Aras River, the Republic of Azerbaijan and Armenia, on the south by the province of Kurdistan, on the east by the province of Gilan and the Caspian Sea, and on the west by Turkey and Iraq.

The atmosphere of the traditional house of Azerbaijani architecture is arranged in horizontal and vertical levels.

At the horizontal level it is based on the hierarchy of access from the outside (very general area) and the layering of light and darkness relative to the central core of the yard, and at the vertical level it is determined by the path and rise of the water. The entrance door, porch, corridor and courtyard are a hierarchy of spaces that allow access to the interior of the house while maintaining the privacy of the inner garden.

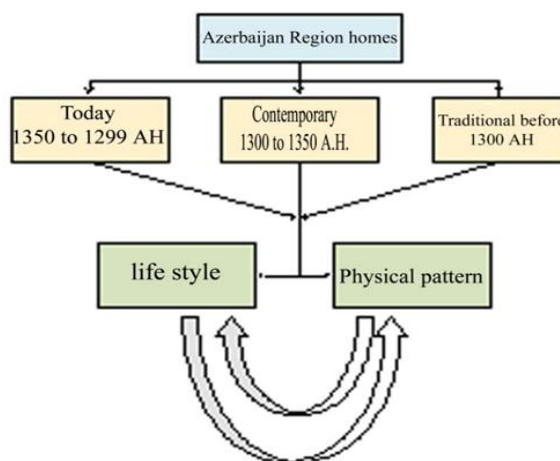


Figure 2 - The effect of physical pattern and lifestyle in time periods in houses in the region of Azerbaijan (Zanjan, Ardabil and Tabriz); (Source: Authors)

The layers around the yard are the locations of the rooms that are in direct contact with light, water, plants, air and generally with the inner

garden. Case examples for the analysis of communication spaces in the traditional architecture of Azerbaijan include residential houses in Ardabil, Tabriz and Zanjan. Recognition of communication spaces can lead to providing a model for achieving the communication structures of open and closed spaces, which is an inseparable principle of identity in Iranian architecture and culture.

RESEARCH FINDINGS

Based on field surveys and research, the libraries of houses in Ardabil, Tabriz and Zanjan in the region of Azerbaijan can be divided into three periods: traditional houses (Qajar period), traditional contemporary houses (Pahlavi era) and modern houses. Traditional houses are houses that have remained completely traditional in their true form. These houses date back to the Zandieh and Qajar eras. Contemporary traditional houses belong to the Pahlavi era and have the general image of traditional contemporary houses, but over time and in accordance with it, they have changed to become contemporary. Today's houses have a western house-building pattern and lifestyle that dates back to the decades after the Islamic Revolution.

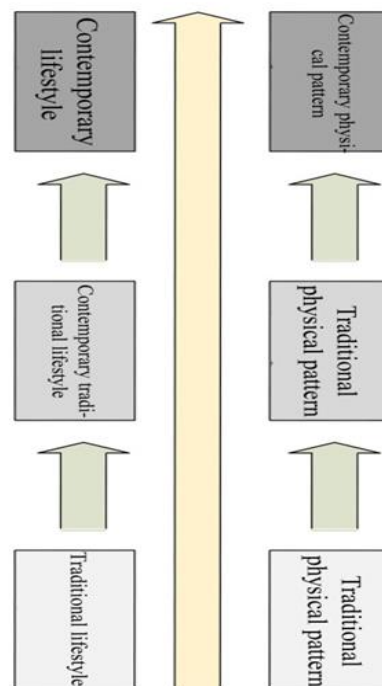


Figure 3 - Changes in physical pattern and lifestyle in houses in the region of Azerbaijan (Zanjan, Ardabil and Tabriz) (Source: Authors)

Traditional houses of the Qajar period

The spaces used in the architecture of traditional houses in region of Azerbaijan related to the pre-Pahlavi period include such things as a plate, porch, corridor, vestibule, etc. In traditional Iranian houses, privacy is the most important factor in providing a special hierarchy. While in the houses of region of Azerbaijan, such as city of Tabriz, after entering the house and

passing through the porch, there are two types of general division, internal and external. Indoor includes family and private spaces such as: three-room and two-room (bedroom) or three-room and five-room (living room) and outside includes public spaces and reception of guests and ceremonies such as: rope or royal (reception) and head and three-room and two-room (Guest rooms or rooms for combining with the emperor at large parties) and more. The following diagram shows the hierarchy of urban spaces in traditional houses in the cities of Azerbaijan region.

In general, based on field surveys and study of plans of traditional urban houses in Ardabil, Tabriz and Zanjan, they are divided into four different models. The way of using connecting spaces in traditional architectural buildings is based on the following patterns:

- Alley at the entrance ← vestibule ← rope atrium
- Alley ← at the entrance ← porch ← courtyard ← vestibule rope
- Alley at the entrance of the courtyard, the vestibule
- Alley ← at the entrance ← courtyard ← porch ← vestibule ← rope stairs

For example, in the traditional houses of Tabriz (Behnam Tabriz House), one has to go through a certain hierarchy to enter the house, which includes passing through the entrance, entrance, porch, corridor, outer courtyard, entrance of outer spaces including the royal and There are steps and stairs to the earrings and inns. After entering the interior through the corridors, which include three-room and two-room rooms dedicated to privacy, sleep and private life of each member or even a family. Service spaces are sometimes located inside and outside, and sometimes in the basement, next to the pool house and basement. In addition, the hierarchy in these houses has been done in various other ways, which are also somehow related to the previous statements, which include hierarchies in dimensions, shape, color, position, decorations and direction, which are also in the facade and Both the plan and the different spaces are represented. For example, the outer courtyard of these houses is in most cases larger than the inner courtyard, or the royal or rope is actually the jewel of these houses. Its location in the middle of the plan and the facade, its more decorations than other spaces, its larger dimensions than other rooms, its more colorful facade than the side surfaces indicate this fact.



Figure 5 - Analysis of the access hierarchy in the houses of Azerbaijan region (Behnam House of Tabriz) Source: Authors)

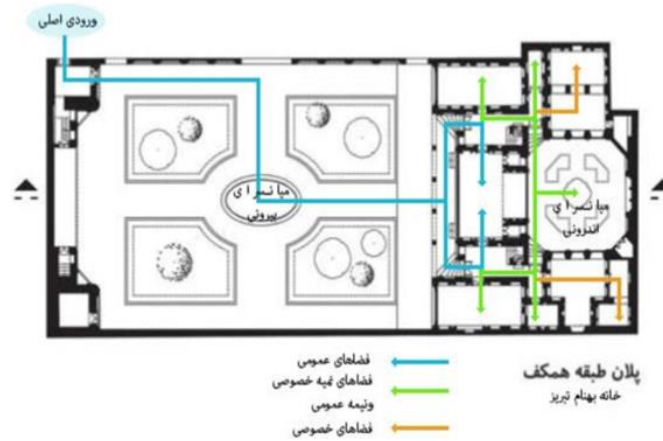


Figure 6- Access hierarchy in area homes Azerbaijan (Behnam Tabriz House) (Source: Authors)

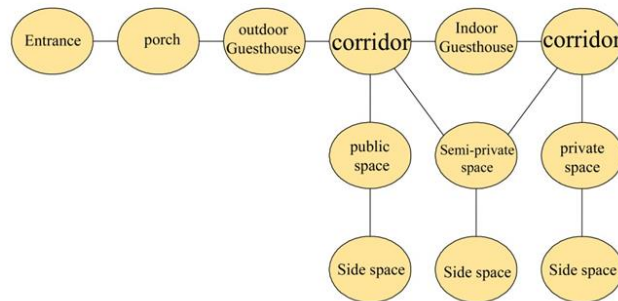


Figure 7- General physical model of communication of traditional houses in cities of Azerbaijan region (Source: Authors)

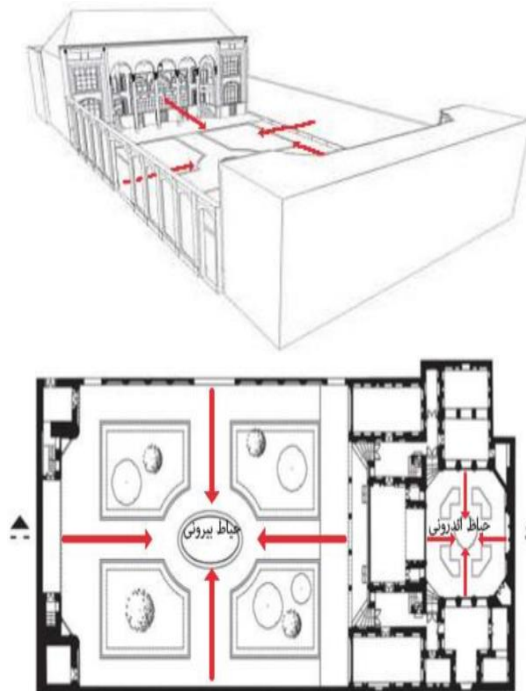


Figure 8- Analysis of introversion in the houses of Azerbaijan region (Behnam Tabriz House) (Source: Authors)

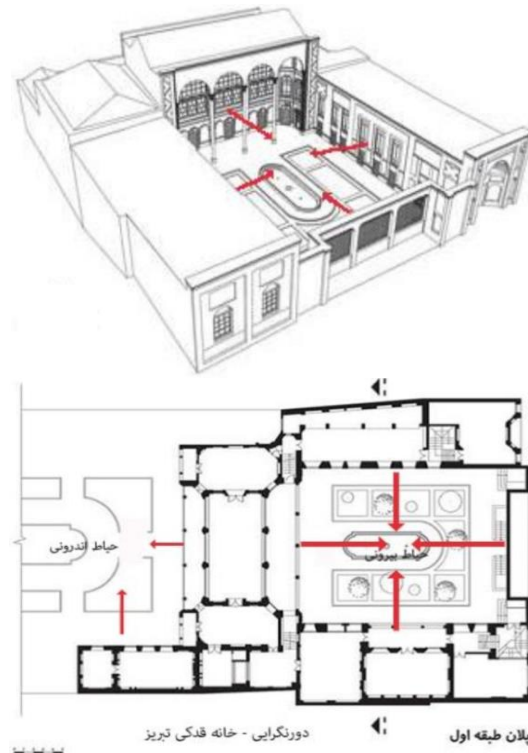


Figure 9 - Analysis of introversion in the houses of Azerbaijan region (Qadaki House of Tabriz)

Connecting spaces in the traditional houses of Azerbaijan region such as entrance, entrance, porch, porch, etc. In these houses, the entrance is a connection and transfer space that connects the passage to the inside of the house. The walls of the house enclose the two sides of the entrance in such a way that the waiting person can deviate from the main flow of traffic inside the alley. It has two platforms in the recess, which are called old. The entrance space of the houses consists of elements such as a porch, entrance, porch and corridor. These elements are designed in such a way that the entrance to the house is not done directly. Of course, in houses with a weaker floor, the entrance space is less complicated and decorated.



Figure 10 - The entrances of traditional houses in the region of Azerbaijan (Source: Tabriz Cultural Heritage Archive, 2010)

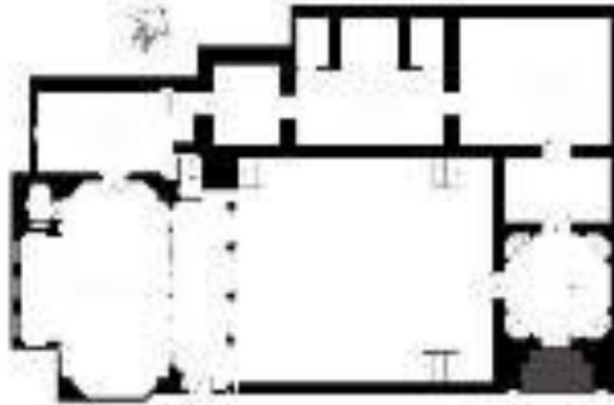


Figure 11- Location of the entrances of traditional houses in Azerbaijan region (Source: Tabriz Cultural Heritage Archive, 2010)

In the traditional houses of Azeri cities, the porch usually leads to the royal room (public territory). The other two sides are connected to other spaces by passageways and arches. The space porch provides a variety of experiences by creating shade and the possibility of direct connection of the landscape with trees and greenery. It is mostly located in the southern part of the building and is located in the main axis of the house in order to get as much winter sun as possible. Porches in the cities of Azerbaijan region are less used for living in the cold seasons and snow and rain are used only for the entrances of the building.



Picture 12- North porch of Qadaki house in Tabriz and north porch of Amirkabir house in Tabriz (Source: Writers)

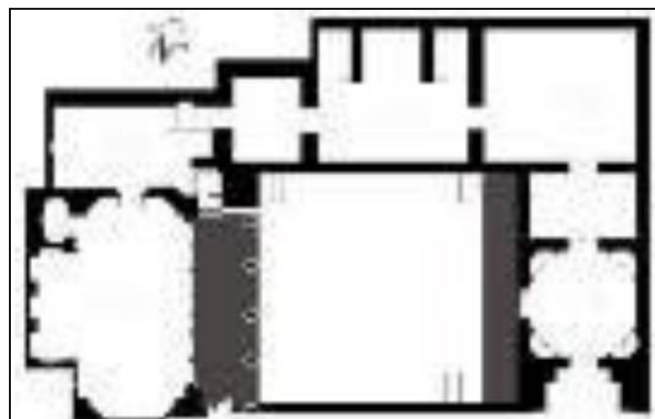


Figure 13 - The location of the porch of traditional houses in the region of Azerbaijan (Source: Authors)

The space porch with the possibility of pausing without entering the house is less light and cooler, which has a pleasant and relaxing atmosphere, and if necessary, two or three people can talk and stay in it.

Corridors and staircases Due to the extreme cold in the cities of the Azerbaijan region, they have a connecting role between the rooms, and in order to move between the rooms, they have to cross these corridors, which sometimes play the role of a foyer.



Figure 14- Porch in traditional houses of Azerbaijan region and their position in the house plan (Source: Authors)

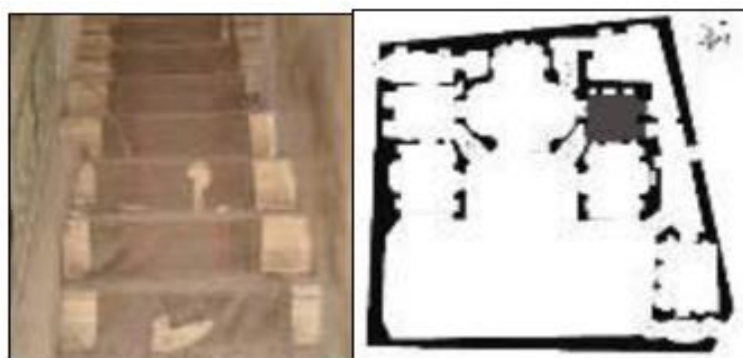


Figure 15- Corridor in traditional houses of Azerbaijan region and their position in the house plan (Source: Authors)

Traditional houses of the Pahlavi era

Traditional buildings built in the Pahlavi period are different from the traditional type before the Pahlavi period and are built in accordance with the modern period. Zolfaghari mansion house belongs to the late Qajar period in the city of Zanzan in the region of Azerbaijan. The façade of the outer mansion consists of an entrance with a truncated arch and two arches with semicircular arches on either side. On the ground floor, the entrance to the building, which has a covered roof with two columns, leads to the porch. In this floor, the administrative, office and accounting department of the mansion is located, and the eastern side of the building was probably an unofficial function and possibly a greenhouse. On the second floor, which has two staircases, there are reception halls, bedrooms, living rooms and toilets. The central core of this building is covered with wooden beams in a quadrangular style. The whole complex has a gabled outer covering, which has not been seen in this city until its construction. Above the central core of the building, there is a beautiful skylight known as a pergola. The hierarchy

of Zolfaghari mansion, as seen in the picture below, is in the form of an alley, entrance, reception, guest room, porch, living room, bedroom.

Khadivi Mansion in Zanjan is one of the buildings that is influenced by the common patterns of the West by preserving the Iranian artistic and decorative traditions and inspired by local methods in the field of Iranian architecture. This mansion is built in two floors. The image below is the plan of the ground floor and the first floor.



Figure 17- Plan view of Zolfaghari mansion in Zanjan city (late Qajar and early Pahlavi period) (Source: Zanjan Cultural Heritage Archive, 2007)

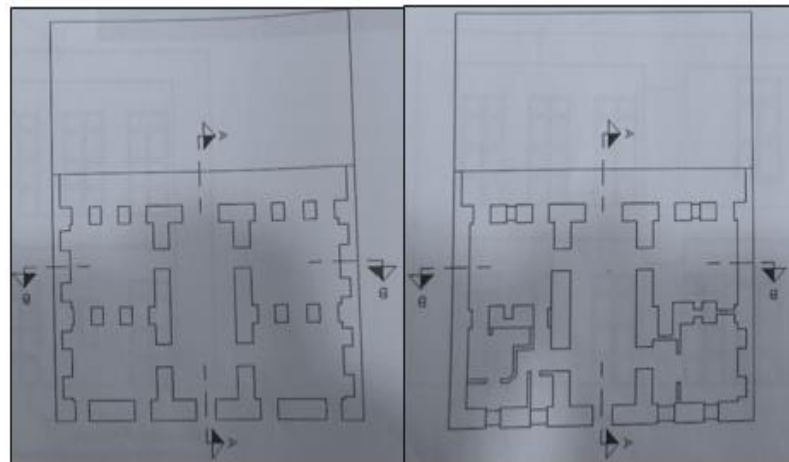


Figure 18- Ground floor and first floor plan of Khadivi House (Source: Zanjan Cultural Heritage Archive, 2007)

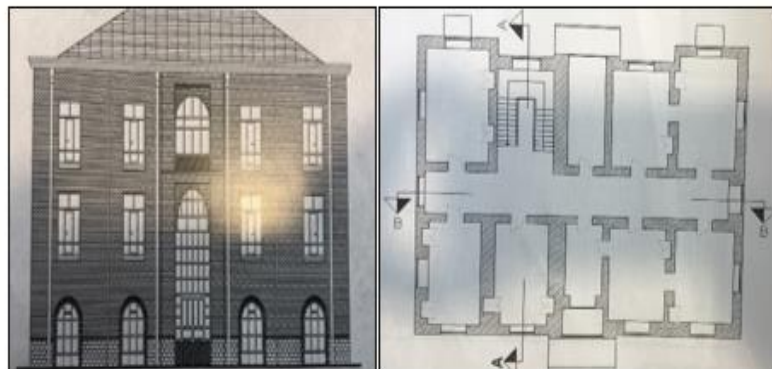


Figure 19- North view and plan of the mansion in Zanjan (related to the Pahlavi period) (Source: Zanjan Cultural Heritage Archive, 2007)

The garden and property building in Zanjan belongs to the early Pahlavi period. This building has 3 floors in a rectangular plan with dimensions of 15 x 22 meters in the middle of the garden and with the characteristics of the Pahlavi period (Reza Khan) such as multiple windows, terrace, corneal construction on the floors. Considering the type of architecture and its prominent features, we can point to the location of the building in the middle of the wooded garden, which to reach the main entrance, you have to travel about 250 meters to reach the entrance stone pool, which is circular.

Haj Soleimani's house in Zanjan is another house related to the Pahlavi period. The house has an entrance from the alley which is directly connected to the square courtyard by a semi-open roof space. The main part of the building is located on the north side of the courtyard and the western part, which is older, is located on the west side, which consists of 3 rooms that are directly connected to the courtyard. The main part of the building includes the basement and the main living spaces and a porch in front of the rooms, which is all facing south. Behind the porch are four interconnected rooms with wooden windows that can be turned into a large hall. Behind these rooms there are other spaces called winter living rooms or bedrooms with light through the front rooms.

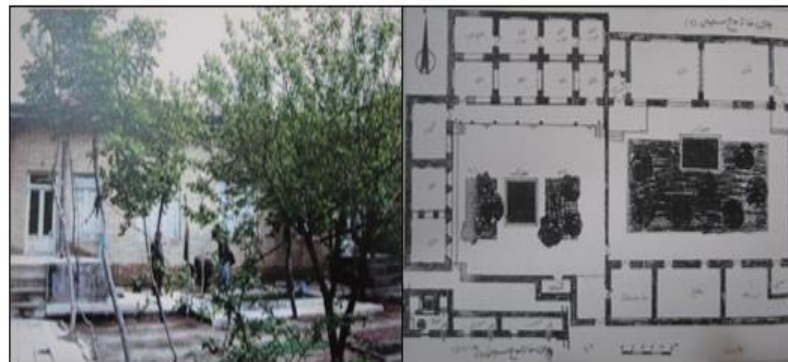


Figure 20- Plan and view of Haj Soleimani house in Zanjan (related to the Pahlavi period) (Source: Zanjan Cultural Heritage Archive, 2007)

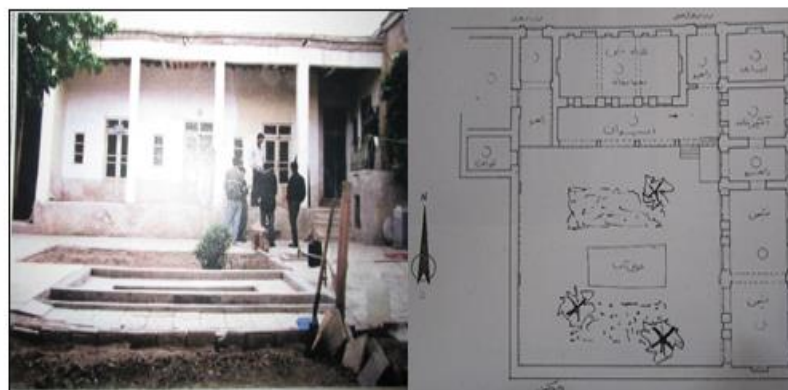


Figure 21- Plan and view of Gholamzadeh Zanjan house (related to Pahlavi period) (Source: Zanjan Cultural Heritage Archive, 2007)

Gholamzadeh's house is about 70 years old and was built in Zanjan during the Pahlavi period. The building of this building with the entrance in the west shows itself with a simple headboard. The yard is below the level of the alley (four steps). Inside is a pond in the middle and two rectangular gardens on either side. The main space or guest house or the emperor is on the north front and the service space is on the west front with a porch in front. The other two fronts of the building are empty and the area is adjacent to the neighbor. The space of the rooms is three steps higher than the floor of the alley, and this difference in height is due to the existence of a basement.

Current modern homes

Today's urban houses (mostly related to the late Pahlavi and post-revolutionary periods. The general pattern of house spaces of this period are generally divided into two categories based on the number of repetitions. In a pattern that still has the shape of a cross and belongs to the early period Gradually, with the fading of the vestibule (as the connection between the open and closed spaces), the spaces stick together without intermediaries. Changes occur in the patterns (Figure 22).

The hierarchy of entering the house in this period is in the following three ways, the first method is related to the first years of this period and is currently less used and most of the second and third cases are used.

Alley ← entrance ← vestibule ← living room ← reception

Entrance alley, staircase, reception

Yard ← Entrance ← Staircase ← Reception

Stair floors have also been added to the vestibule, and as we enter the modern era, the vestibule detaches from its main role and acts as a filter, connecting a space such as a toilet to the vestibule. Of course, in recent years, the reception has been proposed as a communication joint of the spaces and the vestibule has been completely destroyed. The following figures show the spaces associated with the vestibule in traditional (Qajar), contemporary (Pahlavi) and modern (after the Islamic Revolution) architecture.

CONCLUSION

The most important difference between traditional and modern houses based on comparative studies obtained in the houses of cities in the Azerbaijan region is the vestibule. In architecture, the vestibule means the gate and the interior and the vestibule are closed on it. Part of the house connected spaces such as the kitchen, the rope, the room, the courtyard to each other and to the entrance itself. In the contemporary contemporary period (Pahlavi period), the general system of traditional houses has been established and due to the approach to in modern times, one of the problems of human society is the issue of desirable housing. Now, due to the scarcity of land and the high cost of housing, people are forced to make do with small areas for their housing, and of course, home spaces should be used as efficiently as possible. In a general view, it can be stated that the desired housing is housing that:

Formed on the basis of human beings and on the basis of human values.

Be the manifestation of cultural values.

Provide human peace and comfort.

The most important features of a desirable home include the following:

1. In order to achieve perfection, a person should choose a dwelling in which he feels peace and comfort, and therefore a desirable housing should be able to provide comfort and tranquility for a family.
2. In order to achieve perfection, human beings must live in a house where they feel safe and secure, and therefore a desirable housing must be able to provide different degrees of security for its residents.
3. In order to achieve perfection, man must live in a house where he feels confidential.
4. In order to achieve perfection, man must live in a house where it is possible to communicate with nature, to meet human needs and to have access to the resources that meet the needs.

Presenting patterns in accordance with the indigenous culture of the Azerbaijan region can give a desirable order to the structure of these cities, and since these patterns are derived from the mysteries hidden in the architecture of the past, modifications in the field of urban space, culture, structures, materials, proportions, layout and ... It will lead to economic savings and improve the quality of spaces and increase the sense of belonging and comfort of users. The main result of this research is the spatial identity, the spirit of the house and what it is in the cities of Azerbaijan region and the ways to achieve it. For this purpose, the solution is to find a suitable housing model and from the perspective of creating a stable place for the Azeri identity house. Now, by examining traditional and modern houses, it can be understood that the spaces of Azeri houses have undergone changes over time, both in terms of body and way of life and use of space. What is important is the lack of attention of modern architecture in the region to the principles and concepts. Concepts that have sometimes been unknowingly replaced by unfamiliar definitions of others. Erosive changes in the architecture of houses in the cities of the region of Azerbaijan in some cases have led to the removal of a space and its meaning from the houses and minds of the people of the region. This is while the same audience has raised needs that over time the responsive spaces of the same needs have disappeared or diminished. Spaces such as the vestibule (as a connecting space) are among the items that, based on field perceptions, are lacking in the lives of the people of this region. Changes in the communication joints of the spaces, the shape and pattern of the plan, changes in the position and manner of entering the space, lighting and function of the space, and finally the physical adaptation of the house to the lifestyle of the people of the area indicate that the quality of spaces in some cases. It has been declining, changing people's lifestyles.

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