

Analysis of Iranian Houses in First Pahlavi Period with Architectural Aesthetics Role (Case Study: Amir Asefi's House in Sanandaj)

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Abstract

Nowadays, one of the most influential research bases in the field of theoretical discussions of architecture is aesthetics. Aesthetics is a branch of philosophy and discusses the analysis of concepts and the solution of problems that arise from reflection on the issues of aesthetic perception. Ever since he started architecture, man has paid attention to spiritual, inner needs and aesthetic sense. Today, in architecture, aesthetics is limited only to minor formal factors due to the lack of systematic and practical explanation. Ancient textures have a unique and valuable treasure that can be revived and recognized important factors in them with a new attitude to challenge the presence of rich Iranian architecture and ultimately achieve the restoration of the architectural components of the past. Quantitative and qualitative basics in traditional architecture, which are related to the aesthetic category and visual principles governing the structure and proportions; They lead to aesthetic appearance. The analysis of a house in Sanandaj city was done according to the historical background of that city, where there are many architectural monuments. In this research, using the qualitative research method, the findings in the cultural heritage documents and the views of theorists and philosophers about aesthetics were collected and analyzed and interpreted with the technique of content analysis, and in this research we reached the analysis criteria. Then, using the documents of Amir Asfi's house, which is related to the first Pahlavi period, it was analyzed with aesthetic criteria. The results of the research show that this building was built from the architectural elements of the first Pahlavi period. The building was built with a western-eastern style, and decorations such as a false ceiling and wooden moldings were made by master craftsmen and hamedani's carpenters. In addition, plastering of the type of flowers and bushes, framing and brick facade includes: girih tiles, mass, stringcourse and mortar by Sanandaji's craftsman, and doors, windows and sashes by hamedani's artists.

Keywords: - Architectural Aesthetics; Iranian- Islamic Architecture; First Pahlavi Period; Sanandaj Historical Houses.

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1. Introduction

Architecture is a mixture of all arts, and beauty is an attraction for which art is the bridge to man (Mahdavejad et al, 2014, 4443). The emergence of the city is the second great revolution in human culture, an outstanding social phenomenon that has caused a transformation in the mutual relations of humans with each other. Over the past 50 years, the world's urban population has increased by about 600 percent, and this trend will continue at a faster pace in the coming decades (Ebrahimezadeh and Seyedi, 2012, 2). The historical and cultural contexts of cities are precious works of local culture, knowledge of architecture and urban planning and are considered as a part of the social identity of every nation and country (Hajian Zeidy et al., 2021, 101). With demographic changes in the world, the need for housing in cities has been felt more than ever. Residential use is the main and most important space in the city to provide the most basic needs of the people. In such a way that in small cities more than 60% and in big cities about 40% of the city surface is covered by residential use. Housing is a commodity that has been one of the essential needs of humans since the beginning of creation, and there is no substitute for it (Rafieian and Shabani, 2015, 20).

One of the dimensions of human spirituality is interest in beauty. Man involves beauty in all aspects of life. He likes his face to be beautiful; May his name be beautiful; His street and city should be beautiful, and in short, he wants an aura of beauty to cover his whole life (Ayvazian, 2002, 66).

The aesthetic is originally from Greek and means perception. Aesthetic science, in the broadest sense of the word, deals with the investigation and methods of feeling the environment and the individual's position within it (Grouther, 2009, 94). Topics such as aesthetics have been raised since long ago and have been interpreted in every era. Here it is briefly discussed. "Eisthesis" in Greek means sensory perception and its secondary meaning is aesthetics. Beauty in ancient times means proportion and what is formed based on the geometrical findings of the Pythagoreans. Greek architecture is beautiful as a proportional architecture. From the 18th century, beauty took on a psychological dimension. Beauty is seen in connection with perception, and the viewer was considered a part of this collection (Partovi, 1973, 119).

The necessity of studying aesthetics and specifically aesthetics in architecture can be examined from several points of view: - Man's attraction to beauty is due to the connection he has with the nature of beauty. Because it is a kind of beauty. Some of the great sages of the West, such as Hegel and Heidegger, consider the theoretical debates related to the age of the decline of art and the end of civilization, that human beings cannot identify beauty in a present and internal way, and are forced to turn to such sciences (Alsedigh, 2004, 245). The basis of the argument of the necessity of beauty from the point of view of information theory is the formation of a schema. The specific limit is the amount of information that forces the receiver to form a schema, and in this way, the level of perception is raised to a higher level than perceptual levels, and it can also be said that a beautiful thing is rich in perception. makes it possible for us and this beauty gives us satisfaction (Grouther, 2009, 96).

With the importance of the house in finding stillness, comfort, reference to oneself and growth and movement of a person, on the one hand, and the confusion and wide changes and identityless spaces of today's life, on the other hand, reflection and meditation should be done about this. Today, the use of housing in quantitative terms has the largest percentage of urban buildings, including traditional-historical contexts, and in terms of quality, the type and design of housing architecture has a fundamental effect on the way and quality of life of different social strata has a determinant. Meanwhile, the city of Sanandaj is considered as one of the historical cities of Iran, where a number of architecturally valuable houses have remained in its traditional context.

2. Questions

The current research seeks to answer these two questions;

- 1- What are the principles and criteria of architectural aesthetics in Iranian houses during the first Pahlavi period?
- 2- What are the main and essential aesthetic features of Iranian houses in Amir Asfi's house in Sanandaj?

3. Methodology

The previous article seeks to find answers to basic questions such as analyzing aesthetics in traditional houses; In terms of the objective, it is theoretical and the research method used is qualitative. The working method is interpretive-historical and descriptive-analytical in terms of the type of results. The interpretative-historical research method helps to provide a correct interpretation for any problem related to the known work and to deduce the facts related to life from them; In the case study phase, which was the study and analysis of the historical house of Amir Asfi in Sanandaj; And this is important according to the definition of "the study of historical phenomena such as buildings, people and events" (Grout and Wang, 2013, 138).

4. Theoretical Framework

4.1. Aesthetics in architecture

According to Roman architect Vitruvius (15 B.C.). His definition of good architecture depends on three criteria as *venustas* (beauty), *utilitas* (utility) and *firmitas* (firmness). Recently, these aspects of architecture were interpreted as form, function and construction (Figure 1).

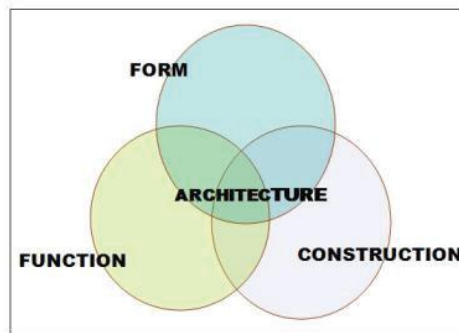


Figure 3. The aspects of architecture (Uzunoqlu, 2012, 92)

Here, form refers to the aesthetic aspects of buildings. Aesthetics is one of the important principles of architecture to be understood by the students and professionals as a philosophy behind a pleasing appearance.

Architectural problems such as unpleasing forms, shapes, and styles which are creating disordered environments have had their impact on the city dwellers visually, mentally and psychologically for centuries. The layout of buildings with monotonous repetition, lacking in characteristic urban fabric and harmony are accepted as the signs of poor aesthetic understanding. (Uzunoqlu, 2012, 90).

As aesthetics is important for the physiologically and psychologically well being of humans, the importance of finding ways to make the environment “livable” and more pleasing through aesthetic approaches should be understood by the architects and designers. The understanding of aesthetics also assists them to discover these ways as considerable factors contributing to the acceptable standard of living for people and how to solve the problems to make the visually pleasing environments (Gabr, 2009).

Architects create buildings and buildings form cities. At the same time, the designer is in the position of a decision- maker about the future of that environment (Figure 2).

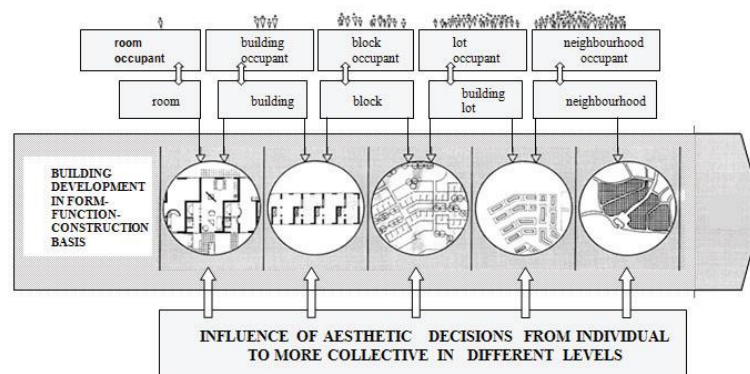


Figure 2. Effect of aesthetic decisions on building developments in different levels (Cuperus, 2000).

There are some rules, principles, guidelines for achieving aesthetic feelings in art and architecture. Architecture makes use of them in order to create effective forms, interesting, exciting spaces, volumes, surfaces and masses. Artistic composition takes place according to aesthetic principles such as; proportion and scale, unity, variety, balance, rhythm, emphasis and focal point, contrast, hierarchy which have large impact on architectural design (Aydinli, 1992 & Ching, 2002).

In the space of traditional architecture, one of the stable principles in understanding, analyzing and recognizing its beauty is proportions, and what is suitable for judgment and enlightened reasoning is geometric proportions in the traditional space; It is a result of the two-way connection of human physical behavior with space and value of the principles using and enjoying the man-made surroundings. Now, the way human behavior affects these proportions and the stabilization of these principles through their visualization in the building's structure made an important topic about human behavior effect on mathematics. This is important of pleasant visual and perceptual experience, which is seriously related to special numbers and their proportions in the architectural structure; It can be proven (Mirkhalili, 2014, 60).

4.2. Architecture in First Pahlavi Period

The first Pahlavi period is a thought-provoking effort of a country that is trying to come to terms with the desire for modernity that it inherited from the Safavie and Qajar periods and enter a new era in line with the global cultural trend. The philosophers and architects who are trying to create a modern Iran in new conditions, along with the ruling power, should step in line with the world thought, and on the one hand, the desire to preserve their identity and sometimes the sense of nostalgia and nationalism will not leave them. These special conditions caused the creation of a special architecture with the subject of the confrontation between tradition and modernity in that era and its manifestation in context of culture and architecture. Perhaps the interpretation and examination of architectural works in a specific time period is not very accurate because the architecture and formation of its material body is created in a continuous flow and hence the way of looking at the contemporary architecture of Iran, which is a systematic approach and frozen in time. It is certain that it is not enough to examine a part of the film separately from its other parts (Ebrahimi and Eslami, 2010, 4).

In general, it can be said architectural trends and styles of the first Pahlavi period are categorized in the following table:

Table 1. architectural tendencies and styles in first Pahlavi period (Haghjoo et al., 2019, 158).

Architecture in First Pahlavi Period (1925- 1941)	Islamic architecture and traditionalism	Isfahani style and integration with performance or new technology
	Integrated architecture	Combining the historical architecture of Iran with contemporary architecture of the West
	Neoclassical architecture	Including neoclassical style and rationalistic neoclassical style
	National style	Modeling the architecture of the Achaemenid and Sasani period with the trend of archaism
	Symmetrical modern architecture	Using modern architectural styles such as art deco and international styles

4.3. View of Philosopher and Theorists

Analytical criteria in this research are based on the views of philosophers and theoreticians as shown in table (2) who tried to explain the aesthetic features of architecture.

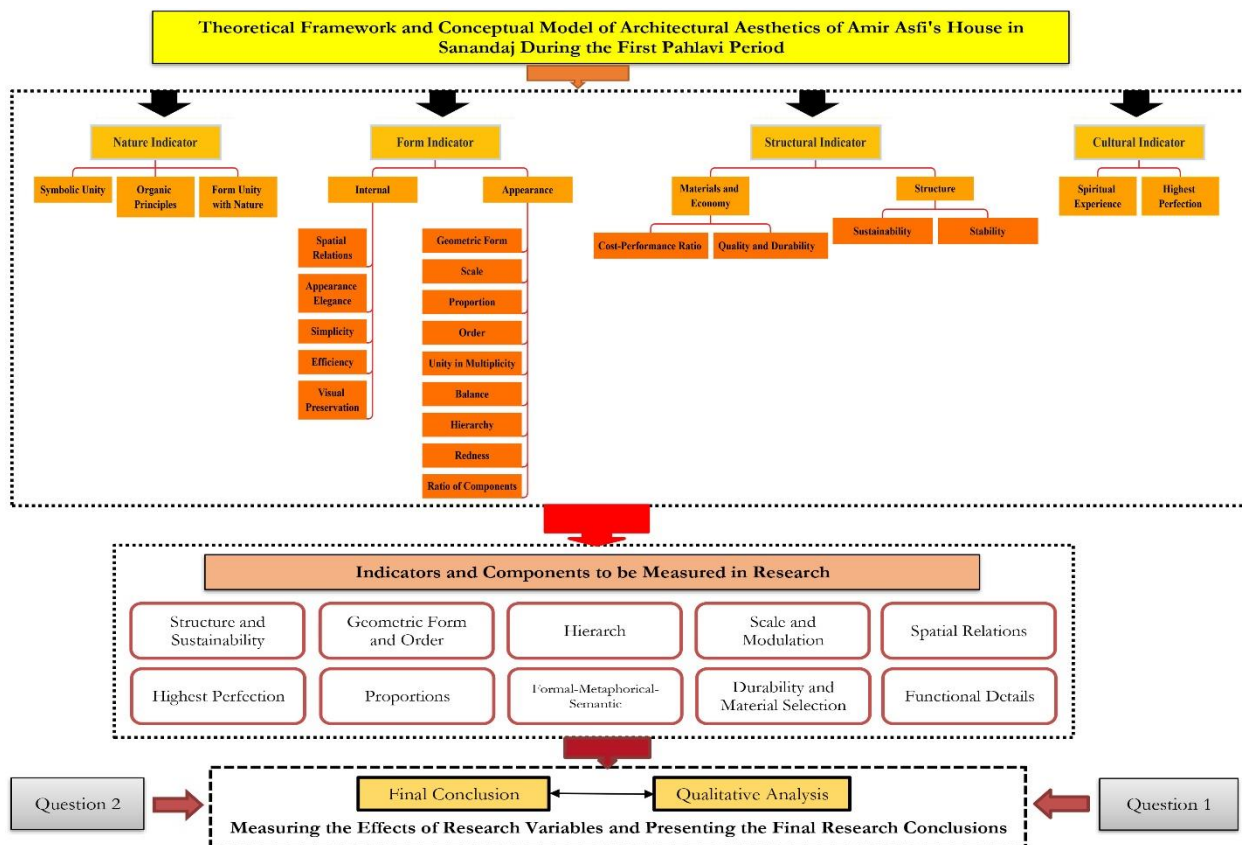
Table 2. Different ideas in defining the aesthetics of architecture and its nature (Sadeghi et al., 2018, 5-6).

Theorists	Theory in architectural aesthetics	Source
Plato (347-427 B.C.)	He believed in two types of natural and geometric beauty: harmony, symmetry, and order.	Groutter, 2009, 99-102
Vitruvius (1st century B.C.)	A pleasant and gracious appearance, symmetry of parts, proportion between parts, apparent elegance between parts, modulated proportion between parts and the whole. Equipping the building according to its type, matching cost with performance and materials.	Groutter, 2009, 99-102
Plotinus (205-270 A.D.)	Spiritual experience and its source is that soul.	Groutter, 2009, 99-102
Augustine (354-430 A.D.)	Beauty = forms that are born of numbers; Similar to Plato's theory of the beauty of geometry.	Groutter, 2009, 99-102
Leon Basta Alberti (1404-1427)	It is the harmony between the parts that leads to a unity based on a specific number, proportion and order.	Groutter, 2009, 99-102

Andrea Palladio (1508-1580)	The source of beauty is the presence of beautiful forms that are in harmony with overall form.	Groutter, 2009, 99-102
Kant (1724-1803)	In general, beautiful is what makes our feelings in a harmonious way.	Groutter, 2009, 99-102
Hegel	He considered two types of beauty: natural beauty and artistic beauty and considered latter superior to former.	Groutter, 2009, 99-102
Frank Lloyd Wright	The concept of beauty in organic architecture is taken from nature. Law and order have evolved as basis of elegance and beauty. Beauty is the lawfulness of order, balance and unity hidden in nature.	Groutter, 2009, 99-102
Le Corbusier	They use from the forms that are the product of modern engineering industries.	Groutter, 2009, 99-102
Peter Eisenman	Beauty reappears in opposition to the sublime = the idea of the ugly, disfigured and seemingly unnatural.	Nesbitt, Kate, 2007, 42
Iranian Architecture	The balance and equilibrium of proportional members in building and the use of decorations that take inspiration from body. Everything has mathematical relationships, in other words, the properties of numerical order are hidden in it; that's beautiful.	Bozorgmehri, 1992, 8 Mirkhalili, 2014, 60
Islamic Architecture	Selection of dimensions according to needs, compact or modular, geometric proportions. Coordination of details of facilities and furniture and structures. Beauty from the two perspectives of manifestation in form, which includes order and proportions, and also from the perspective of mental perception and its effect on the audience.	Hijazi and Mehdizadeh Siraj, 2014, 17

5. Explaining the theoretical framework and conceptual model of the research

As Iranian architects and artists in the past considered art to be a kind of creation and construction, and considered its excellence to be as close as possible to divine attributes, including beauty; Therefore, traditional art has never been devoid of beauty. Iranian's architecture, which has been the crystallization of aesthetics over many years; It can be a rich source for adapting the principles of aesthetics in architecture (Sadeghi et al., 2018, 6). According to the views of philosophers and theoreticians, the main and basic criteria and sub-criteria of architectural aesthetics of research were explained in the form of theoretical framework and conceptual model of research as follows:



6. Historical Background of Sanandaj

Sanandaj, the capital of Kurdistan province, with an area of 6.3688 hectares, is located in the west of Iran and in southern part of Kurdistan province. The most important relic of the old textures of the city is its traditional covered market, which is located in the heart of the city. DarAl-Ehsan Mosque, Wakilol-Molk House, Government Castle, Ghiasi House, Asef House, Moshir Waziri House and Sanandaj Museum are among the other monuments of the Qajar era in this area. This part of the city includes the traditional market and the main streets, and it is actually the beating and active heart and the center of exchanges and social economic developments of the city and the region. This area is divided into 6 neighborhoods named Sartapouleh, Chaharbagh, MianQale, Aghazaman, Ghatarchian and Gendarmerie has formed MianQale neighborhood is the core of the city and the first neighborhood of Sanandaj, and at the beginning of the formation of QaleKhan in the settlement (Sane), agents and friends and AnsarKhan and their dependents settled around QaleKhan and it has developed over time. Aghazaman neighborhood is the only minority-inhabited neighborhood in the city, and most of the merchants have also stayed in this neighborhood. The market row of Sartapouleh neighborhood is the most important feature of it, which has a trans-neighborhood role. Due to the lack of proper planning, this neighborhood has turned into a decaying fabric, so that most of the abandoned and dilapidated lands are located in this neighborhood. The old textures of Sanandaj corresponds to the historical and central cores of the city. The existence of the urban elements of the traditional market, the Grand Mosque, the

historical castle and the house of Asef and Moshir Divan, Vakil ... are among the most important factors of the historical and cultural identity of the region. Today, this historical context has major problems such as the lack of some per capita services such as parking and urban open space, the impossibility of penetration into the organic context, the existence of incompatible uses, the lack of sufficient green space, dilapidated bodies and poor building quality, smallness, the lack of placement of many buildings are located in the privacy of historical monuments. Nevertheless, it is still considered one of the densest urban areas of Sanandaj during the day and the least dense areas at night. (www.ostan-kd.ir).

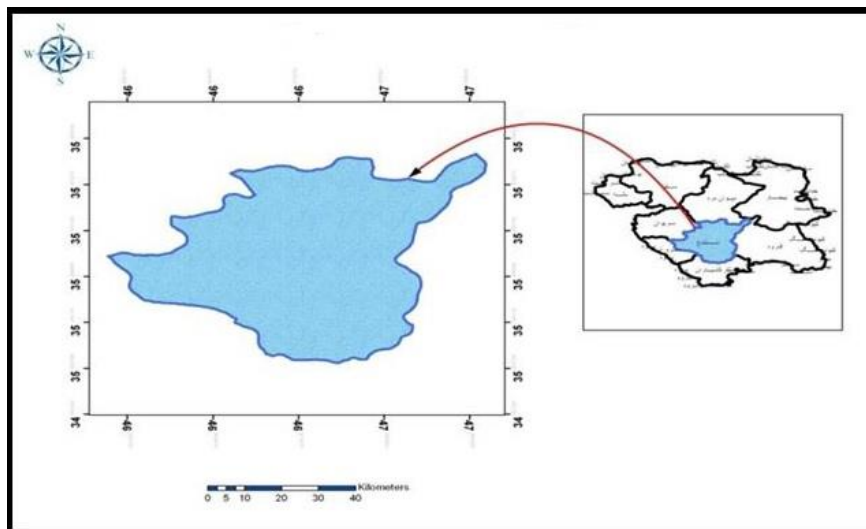


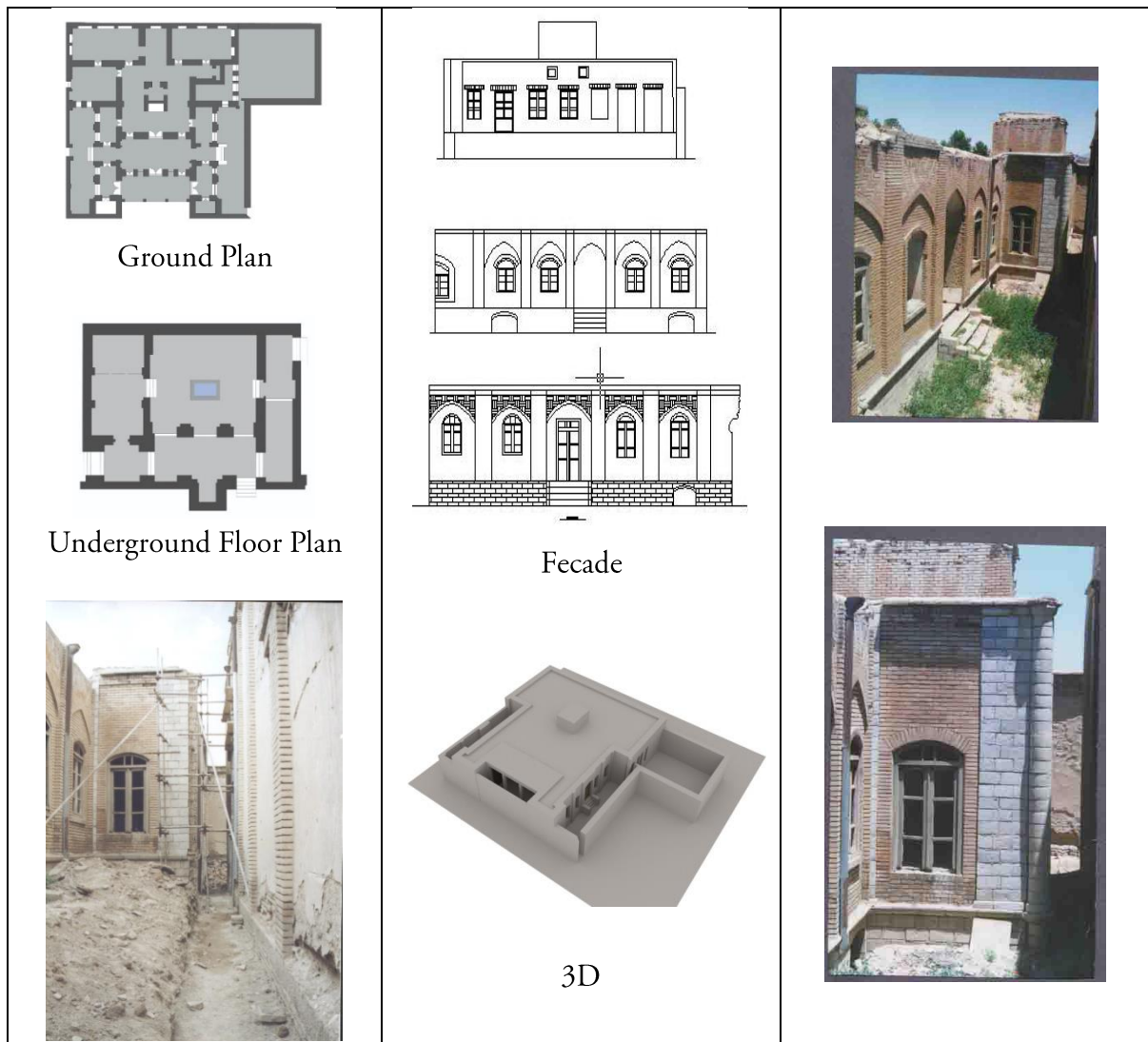
Figure 3. The geographical location of Sanandaj city in relation to Kurdistan province (www.e-sanandaj.ir).

7. Case Study

Due to the cold and mountainous climate as well as some factors, such as imposed war and urban developments in the past years, unfortunately, the destruction and addition of extensions in many houses in practice, achieving the spatial structure of the houses in the time of health, almost made it impossible. Another factor that has caused the structure of a number of houses to have problems is the possession of these houses by cultural heritage in the past years and turning them into an abandoned space without protective measures.

Table 3. Introduction of case study in research (Research Finding, 2022).

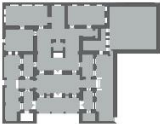
Case Study	Amir Asefi House
<p>Owner's name: Amir Asefi Number of floors: 2 Height (meters): 6 meters Total area (square meters): 4000</p>	<p>Geographical location: Sanandaj city, Imam Khomeini street, Sartapouleh neighborhood Description: It was built during the first Pahlavi era in 307 on the remains of an old house that was built about 200-250 years ago by Mirza Abdul Karim Motamedalayale, Asef's great grandfather (Amir Khan's great grandfather) for one of the sons of the Asef family named Amir Khan Asefi. In this building, the architectural elements of the first Pahlavi period, including: the porch, the hall, the rooms, the basement, etc., were built by native and non-native craftsmen and the materials that were mostly imported.</p>



8. Research Findings

In the sample table, the research case of the selected house in Sanandaj city is defined. In these definitions, the type of placement of the spaces around the courtyard and the number of courtyards, as well as physical characteristics such as the number of floors, height, area, and material of the facade and structure, have been examined and categorized. According to the investigations, Amir Asefi's house has 2 floors. And the basement can be seen. It should also be noted that the entry in this course is designed directly. The direction of the house is east-west, which has enough light all day long, and due to the cold and mountainous climate, the warmth of the pleasant light is fully and optimally used.

Table 4. The ratio of full and empty space in case study (Source: Research Finding, 2022).

Spaces	Percentage
Closed	65
Open	33
covered	2
Form of Placement	

According to the information in Table 4 and the filled and empty spaces in Amir Asefi's house, the following diagram can be drawn.

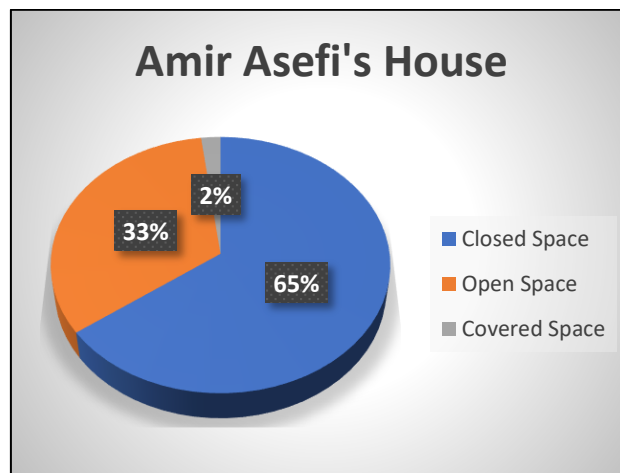
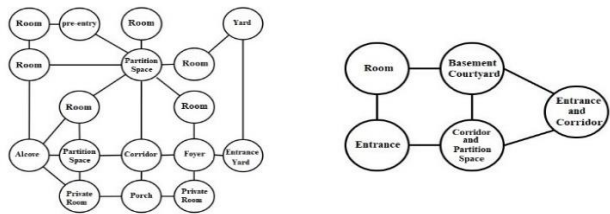
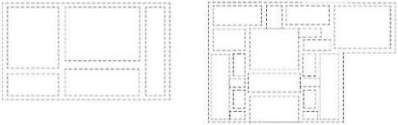


Chart 2. Percentage of open, closed and covered space in Amir Asefi's house, (Source: Research Finding, 2022)

Table 5. Analysis of Amir Asefi's house in Sanandaj (Source: Research Finding, 2022)

Criterion	Subcriterion	Component	Analysis
Fermi	Internal	Spatial Relations	
	Appearance	Scale and Modulation	

		Hierarchy	
		Geometric Form and Order	
		Proportions	
		Redness and Balance	
Structural	Structure	Structure and Sustainability	<p>Wooden roof - bearing wall - Materials: tiling – raw clay Chinese knots, jeremi, harze and mortar by Sanandji masters, and doors, windows and sashes by Hamedani artists.</p>
		Functional Details	
	Materials and Economy	Durability and Material Selection	
Relationship with Nature	The Method of Exploitation	Formal-Metaphorical-Semantic	

9. Conclusion

Basically, beauty is subjective for humans and is part of their natural and high-level needs. But like other qualities, it cannot be defined with words and must be received by direct perception. In the comparison of every aspect of Kant's aesthetics and Islam, the effect of Kant's beauty-sublime opposition was manifested in architecture with pure beauty and its peak in Eisenman's architecture. It is lofty, beautiful, imperfect, distorted, and simple, which aimlessly aims to show the nobility of pure beauty and form. This point is the difference between this view and Islamic and Eastern mysticism. As stated, according to Islamic and philosophical sources, man is inclined towards beauty and always tries to consider the appearance of beauty in his life and living space. Therefore, it is very important to identify the criteria of the beauty of architecture. In order to have an architecture that has meanings, the architect and designer must have cultivated the spirit of truth-

seeking and perfectionism. In order to review the architectural work, it is not enough to know the dimensions and construction of the architecture, but the need to discover and recognize the beauty, from the clay to the whole, is unavoidable.

The architecture of the valuable houses of Sanandaj was formed in harmony with the climatic and social conditions, and the main factors of interest were the use of maximum sunlight in winter and reducing the effect of adverse winds in winter.

In the Amir Asefi's house in Sanandaj, the architectural elements of the first Pahlavi period, including: porch, hall, rooms, basement, etc., were built by native and non-native craftsmen and materials that were mostly brought from canvas. The building was built with a western-eastern style, and decorations such as false ceiling and wooden moldings were executed by Hamedani's craftsmen and carpenters. Other decorative elements related to the architecture of this building include stucco of flower and bush type, framing and brick facade including: girih tiles, mass, stringcourse and mortar by Sanandaji's craftsman, and doors, windows and sashes by hamedani's artists.

In general, in the discussions related to spatial relations, the placement of spaces, the existence of hierarchy to connect open and closed spaces, as well as the joints in connecting private and public spaces, the use of vestibule and hallway all correspond to aesthetic criteria, and this indicates the continuation of the historical course of Iranian's houses.

On the other hand, the use of definite module, golden proportions both in the plan and in the facade, the presence of decorations that are structural and have shown the aesthetic aspect. In addition to maintaining the firmness and stability of the previous era, new forms have entered the field of architecture, which are superficial. The sizes are completely accurate and the proportions are higher than proportions of previous era. We can conclude the speech in this way, that by striving and relying on the knowledge and architectural achievements of the predecessors, aesthetics with philosophical solutions, geometrical body programming, proportions and modulation and the five principles of Professor Pirnia, with the body and the connection of form and feeling. It realized the inner life of people and the pleasures of life in architecture, which is also an important step towards achieving the spiritual perfection of aesthetics in architecture.

Footnote

- 1- Other houses were built in first Pahlavi period in Sanandaj city and still remain, which are of great value and can be examined in terms of aesthetics. The houses are: Mohammadi House, Mesri House, Seyed Younesi House, Arabzadeh House, Ghiyasi House, GeleDari House, Memarbashi House, Hadi Khan Sanandji House, Jasem Najar House.

References

- [1] Alsedigh, H., (2004), "Aesthetics and art issues from the perspective of Abuhian Tawhidi", translated by: Gholamreza Tahami, Tehran, Al-Hoda International Publication.

- [2] Aydinli, S., (1992), "Mimarlikta Görsel Analiz", i.T.Ü. Mimarlik Fak. Baski Atölyesi, 66 pages.
- [3] Ayvazian, S., (2002), "Aesthetics and purpose in architectural criticism", *Fine Arts*, No. 12, pp. 64-69.
- [4] Bahmani, E., & Gudarzi Soroush, M.M., & Zarei, M.E., (2015), "Investigating the recognition of contextual factors in the body of houses and the ancient texture of Sanandaj with a look at the characteristics of Vakilol-Molk mansion", *Iranian Islamic City Studies Quarterly*, 7th year, No. 26, winter, pp. 55-69.
- [5] Bozormehri, Z., (1992), "Geometry in Architecture", Jahad Daneshgahi Publishing.
- [6] Ching, F.D.K., (2002). "Mimarlık - Biçim, Mekan ve Düzen", Yapı Endüstri Merkezi yayınları, Istanbul.
- [7] Cuperus, Y., (2000), "An introduction to Open Building", Delft University of Technology, (y.jcuperus@bk.tudelft.nl), OBOM Research Group, Delft.
- [8] Ebrahimi, S., & Eslami, S.Gh., (2010), "Architecture and Urban Planning in the Transition Period", *Hoviate Shahr Magazine*, 4th Year, No. 6, Spring and Summer, pp. 3-14.
- [9] Ebrahimzadeh, I., & Saidi, M., (2012), "An analysis of informal settlement and determination of the influence factor of the factors using the path analysis model; Case Study: Shaterabad, Kermanshah", *Scientific Journal of Geography and Planning*, Volume 16, No. 41, pp. 1-22.
- [10] Gabr, H., (2009), "The Behavioural Study of Aesthetics in Architecture", Course notes, Cairo University, Faculty of Engineering, Department of Architecture.
- [11] Ghaemifar, Sh., (2016), "The model of aesthetics in architecture based on the viewpoint of Islamic Philosopher", Shabak Publication, Second year, No. 6 (consecutive: 13), Volume 4: art and architecture studies.
- [12] Grout, L., & Wang, D., (2013), "Architectural Research Methods", Translated by Alireza Einifar, Tehran, Tehran University Publishing.
- [13] Groutter, J., (2009), "Aesthetics in Architecture", Translated by Jahanshah Pakzad and Abdolreza Homayoun, Tehran: Shahid Beheshti University Publishing.
- [14] Haghjoo, A., & Soltanzadeh, H., & Tehrani, F., & Ayvazian, S., (2019), "Trends and theoretical approaches to the architecture of state and government buildings in the first and second Pahlavi period", *scientific-research journal of Islamic art studies*, 15th year, No. 34, Summer, pp. 154-170.
- [15] Hajian Zeidy, Mehrdad., & Ghadarjani, Raziéh., & Zaheri, Mohammad., (2021), "Sustainable Urban Reconstruction in Historical Texture", Jahad Daneshgahi Publications, First Edition, 154 pages.
- [16] Hejazi, M., & Mehdizadeh Seraj, F., (2014), "Relationship, meaning, beauty, form and structure in the architecture of the Islamic era", *Islamic Architecture Research*, 2(1), pp. 7-21.
- [17] Jafari, R., (2015), "Landscape aesthetics in urban design", Ph.D's thesis, Tarbiat Modares University, Tehran.

- [18] Keith Nesbit., (2007), "Postmodern theories in architecture", Translated by: Mohammad-Reza Shirazi, Tehran, Ney Publishing.
- [19] Mahdavinejad, M.J., & Bahtooei, R., & Hosseinikia, S.M.M., & Bagheri, M., & Aliniaye Motlagh, A., & Farhat, F., (2014), "Aesthetics and Architectural Education and Learning Proces", 5th World Conference on Educational Scienc- WCES (2013), Procedia - Social and Behavioral Sciences 116, pp. 4443 – 4448.
- [20] Mirkhalili, M., (2014), "Revision of Iran's past architectural technologies and the design of Iran's pavilion at Expo 2015", Master's thesis, University of Tehran.
- [21] Partovi, M., (1973), "Ten essays on modern aesthetics", Tehran, Naghsh Jahan.
- [22] Rafieian, M., & Shabani, M., (2015), "Analysis of urban creativity indicators in the residential system of Mazandaran province", Quarterly Journal of Geography and Regional Urban Planning, Volume 5, No. 16, Fall, pp. 19-34.
- [23] Sadeghi, S., & Ekhlasi, A., & Kamelnia, H., (2018), "Investigating the role of architectural aesthetics in Iranian houses, case study: historical houses of Mashhad city", Islamic Architecture Research Quarterly, No.21, 6th year, winter, pp. 3-17.
- [24] Sadeghi, S., (2016), "Design of cultural center with the approach of analyzing the principles of structural aesthetics in architecture, case study: Mashhad", Master's thesis, Iran University of Science and Technology.
- [25] Uzunoglu, S.S., (2012), "Aesthetics and Architectural Education", Procedia - Social and Behavioral Sciences, 51, pp. 90-98.
- [26] Zarei, M.E., (2014), "Sanandaj Old Houses", Kurdistan University Publications, Sanandaj.
- [27] www.ostan-kd.ir
- [28] www.e-sanandaj.ir
- [29] www.sanandaj-city.blogfa.com
- [30] www.farsnews.com
- [31] www.kare1.ir