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Original Research Article

A Review of Evolution in Façade of Contemporary Houses in Iran Inspired by European Architecture (Case Study: Houses of Pahlavi Period in Urmia)*

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Abstract

Architecture is a factor in society that reveals the evolution process. Like any other discipline, architecture in Iran has experienced many changes relying on the evolutions that occurred in various aspects of the society. Such changes are more highlighted in the contemporary era after modernity found its way to Iran and influence of the Europe during the Pahlavi era. Architectural evolutions in residential buildings, especially in the houses built during the Pahlavi period have been shaped and adopted from European architecture. The façade of buildings is one of the dimensions of architectural design its visual components have been considerably changed. This study reviews the evolution process in the façade of contemporary houses in Iran under the influence of European architecture with emphasis on the residential houses of the Pahlavi period in Urmia. This paper also addresses the influence of European architecture in changing the structures and detailing of studied houses' façades. The descriptive-analytical method was used in this study for literature review and examination of elements and patterns adopted in the façades of residential houses in Urmia during the Pahlavi Period. The statistical society comprised 16 façades of residential houses in Urmia that were selected for analysis through purposive technique. According to the results obtained from analyses, building form and decorations have been more influenced by European architecture among the investigated components of building form, decorations, and materials. The most significant changes include conversion from symmetric to asymmetric façade, change in the central location of the entrance gate, size and shape of windows and change in materials, the existence of a columned porch in early periods and its removal in the next years, change in the type of buildings' ceiling, location of balcony in the wall of street-facing façade in late buildings as a symbol of extroversion.

Keywords: *Evolution, European Architecture, Pahlavi Architecture, House, Façade.*

Introduction

Like any society and government, Europe also influenced Iranian architecture during the Pahlavi period. One aspect

of this influence is seen in the façades of buildings. In the urban field, the façade of buildings, including residential houses, offices, and service and cultural buildings each

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plays a significant role (Golipour et al., 2021, 122). Many factors are effective in forming the façade of a building, which shapes the details of the external shell of the building (Shafiee et al., 2022, 148). Conversion from introversion to extroversion was one of the first changes that occurred in the façade of buildings at that time (Fardpour et al., 2021, 156). The mentioned changes led to the elimination of some identity and visual features of past architecture and many fundamental evolutions occurred in contemporary architecture in Iran during the Pahlavi Era when modernity was expanded and European elements considerably influenced the society. Along with the modernity wave and the formation of progress ideals at that time, some traditional value systems, institutes, and social and art norms were influenced by European culture and were gradually destroyed or changed. This period of architecture is called the “transition period.” A disconnection occurred in the architecture and architectural designs of Iran at that time due to a mismatch between existing and future conditions, so that the imitation of Russian, German, and European architecture continued up to the end of Pahlavi I governance (Hagh Jou et al., 2019, 155). Architecture and urban development in Urmia also experienced considerable changes that occurred due to modernism, modernization, modernity, and the availability of new technology and construction materials. The new builders like those in the capital of Pahlavi paid no attention to the urban, historical, identity, and architectural fabric of Urmia (Abedini et al., 2017, 675). Therefore, this study tries to review the evolution process¹ in building façades of Iran’s contemporary houses with emphasis on European architectural adaptation. To reveal these changes and impacts, case studies of houses constructed during the Pahlavi period in Urmia were examined. These houses indicate the confluence of Iranian and European architectures. Under such circumstances, not only the façade of houses but also their architectural structures and details have been influenced.

Research Question

What changes the European architecture create in the

design and façade of houses constructed during the Pahlavi period in Urmia?

Research Methodology

The method of this study is descriptive-analytical. In the descriptive phase, the studies on contemporary architecture’s history of Iran and common techniques used during the Pahlavi period are reviewed. In the second step, the data related to residential houses of Urmia City are collected while an analytical method is used to analyze the façade designed in Urmia during this period. In the phase of analyzing and examining the façade of residential buildings of the Pahlavi period in Urmia, architectural elements and patterns adopted from the European culture and art were extracted, determined, and introduced through the studies conducted by architecture authors and scholars. The root of relevant components and their impacts on the contemporary architecture of that time is analyzed in each case of the façade of houses constructed during the Pahlavi period in Urmia regarding the physical aspect of these houses. Most studies in this field have been reviewed through the available architectural documents and maps in the archive of the Cultural Heritage organization and field observations in houses located in Urmia City. Finally, the samples are selected based on purposive sampling, in which 16 façades of residential buildings in Urmia City are chosen. It is attempted in this study to select these buildings from areas in the city that are near to each other although few buildings remain from the Pahlavi period due to demolitions. To achieve the evolution process in the façade of contemporary houses in Iran, architectural elements in the façade of these buildings are examined and summarized in one table. The obtained results allow us to provide an image of the evolution process in the façade of contemporary houses in Urmia adopted from European architecture (Fig. 1).

Research Background

The contemporary architecture of Iran has been influenced by various attitudes about Iranian and foreign designs and styles over the past 100 years. Fardpour et al. (2021) carried out a study titled “Reading the

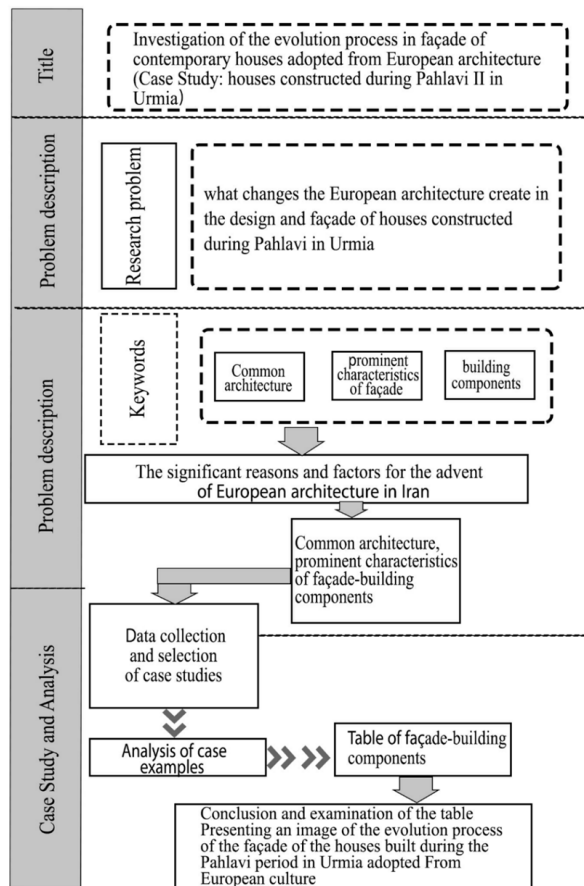


Fig. 1. Research Process. Source: Authors.

Schema of the Contemporary Urban Building Façade of Tehran in the First and Second Pahlavi Eras” to examine the contemporary architecture of Iran during the Pahlavi I and II periods. Their results show that façades selected from the modern architectural heritage would create a sense of richness for people so most respondents can deeply understand this topic when they see façades. Khatami & Boujari (2022) conducted a study titled “The Analysis of Buildings Façade’s Challenges and the Role of Effective Groups in its Formation in the City of Tehran” to find why there is a gap between current urban façade and proper circumstances in practice, so they identify the identity challenges in the process of designing and implementing urban façades in Tehran. According to the results of this study, four main groups are influencing the identity of urban façades: citizens, investors, designers, and urban managers. Moreover, various studies have been done on the concept of authenticity and its relationship with architecture and urban façade among which, the paper titled “Contemporization of the Concept of Semantic Authenticity in Tehran’s

Architectural City Scope” (Fardpour et al., 2022) can be mentioned. This paper has designed a framework for creating and reading authentic meaning. The results of this study show that an authenticated urban landscape is directly related to the creation of important prominent elements that are continuous historically through time. This topic has also been investigated in European studies and papers published in Iran’s neighboring countries. For instance, Soltanzadeh & Hassanpour (2015) investigated “How Traditional Ottoman Houses Affect Contemporary Architecture in Turkey”. Moreover, Akman (2006) examined the modernist nationalist ambiguities in the culture of architecture and construction in the early years of the Republic of Turkey. In this study, the author studies identity factors and their impacts on the construction during the establishment of the Republic of Turkey after the collapse of the Ottoman Empire. Bozdogan & Akcan (2012) also studied the history of architectural establishment in Turkey during the modernity era in their book. In their paper titled “Ornamentation and Modern Architecture in Iraq,” Hussien & Al Slik (2019) studied the formation of modern architecture in the contemporary history of Iraq while investigating the details and ornaments in contemporary houses. In addition to the mentioned studies, some studies have been done on how to provide modern solutions and executive approaches for buildings’ façade as a part of urban public façade. For example, Pourjavadasl & Beyti (2022) carried out a study titled “Applying Approaches Driven from the Facades of Historic Houses to the Facades of New Buildings (Case Study: Historic Houses of Tabriz)” to examine the patterns used in façade of newly constructed buildings and provide new patterns for newly-structured facades. The results of this study are presented as practical indicators for the façade of new buildings. In the study titled “Toward finding the comparison between evolution in contemporary and historical home in Sanandaj,” Aghalatifi (2022) reviewed the evolutions that occurred in the contemporary houses of Sanandaj County to compare the changes occurred during the modern era of Sanandaj City with traditional and old houses in this city. In this paper, the author reviews the characteristics of old buildings in the city and after extracting a list of unique characteristics

compares them with contemporary houses in Sanandaj (*ibid.*). Some studies have been also conducted on the Pahlavi architecture in the Azerbaijan region, including Urmia, Tabriz, Khoy, Salmas, Maragheh, etc. For example, Khojasteh Ghamari & Soltanzadeh (2021) carried out a study titled “The effectiveness of Nazi Germany on the Reflection of Power Building in the Architecture of Governmental Buildings in Azerbaijan of the first Pahlavi period (Case study: Tabriz & Urmia)” to examine how Nazi German architecture on the architectural body of Iran in two Tabriz and Urmia cities. According to the results of this study, the relationship between Iran and Germany and the presence of German architects and their role in the advent of governmental architecture and power structure have had a considerable effect on mimicking the concepts and foundations of German neoclassic architecture. In another study, Shafiee et al. (2022) conducted a study titled “Investigation and Analysis of the Developments of Tabriz City and Its Impact on Urban Spaces from the Pahlavi Era to the Present (1401)” to examine the changes occurred in the urban façades of Tabriz during various periods. The results of this study have pointed to the use of introverted plans, full-length windows, and composite plans in the façade of the mentioned buildings, which is the result of architecture in the 1990s, and changed lifestyle, enhanced communication, and increased population have led to greater attention to high-rise buildings rather than one or two-story residential buildings. On the other hand, blind imitation of European architecture from the Pahlavi era to the 2010s has been expressed as the main factor that has eliminated Iran’s architecture (*ibid.*). Although many studies have been done on the impacts of European architecture on the contemporary architecture of Iran, no study has been done on the evolution process in the façade of contemporary houses of Iran adopted from European architecture in Urmia, so this is new research in this field.

Theoretical Foundations

• Causes for entrance of modernity and European architecture to Iran and its impacts on the architecture

After continuous conflicts between Iran and Russia² that led

to the Golestan and Turkmenchay contract in the late years of the Qajar Era, some Iranian princes went to Russia to apologize. Naser al-Din Shah Qajar then traveled to Europe and the Iranian community got familiar with modern European thoughts at that time. Hence, the mentioned incidents provided the field for the entrance of European elements to Iran, and influences of European thoughts on the Iranian community were subsequently started (Mirza Hosseini & Soltanzadeh, 2019, 114). The Iran-Russia war and European progress after the Renaissance and Industrial Revolution led to many contradictions in Iran due to several centuries of backwardness in Iran. Iranians were surprised when saw the military forces of Russia. At that time, Iranians found their positions after understanding their backwardness (Montazer et al., 2019, 76). Iranian architecture was considerably influenced conceptually and physically by European architecture during the Qajar period, and such progress led to the integration of Iranian architecture patterns with European architecture patterns (Chaleshgare et al., 2023, 35). Regardless of cultural changes, the Qajar era had a more traditional nature rather than the Pahlavi period, so the changes occurred in intellectual foundations led to the advent of new life during the Pahlavi period (Asgari et al., 2023, 42). Therefore, it can be stated that the influence of European architecture on the Iranian one began in the Qajar era and continued until the Pahlavi II period (Mirza Hosseini & Soltanzadeh, 2019, 115). Iranian architecture students who studied in European and American universities and institutions returned to Iran in the early years of the Pahlavi I period, which led to many evolutions in architecture and changed the expectations and demands of people from the architects and buildings they used at that time. On the other hand, the Pahlavi II period- from the early 1960s and 1970s- is mainly one of the periods in which European and Iranian architectures were connected (Pouretesami, 2020, 55). Intellectual consequences of the Constitutional movement and the presence of a new generation of graduates from Europe in cooperation with the government led to the advent of a cultural approach during the Pahlavi I government. Iranian graduates adhered to the European model at that time and believed that the political community must be developed

through democracy based on the evolving traditional culture and shaping modern culture. The mentioned process created the glory and magnificence of ancient Iran. All measures done in Iran were influenced by the requests and ideals of a group of Europe-influenced scholars that introduced the elimination of traditions and religious culture ruling the society as the solution for achieving the modern civilization of Europe. In total, cultural measures done by Pahlavi I included three fields of nationalism³ and archaism, modernism, and secularism. Reza Khan established an academy and renovated the ancient and historical monuments to promote archaism emphasize the superiority of the Aria Race and show the power of the kingdom (Amini & Abolhasan Shirazi, 2006, 272). Two prominent strategies, i.e., archaism and compulsory modernism were adopted by the society during the Pahlavi period, especially during the governance of Reza Khan. To achieve these approaches, the cultural and identity fields of the Pahlavi era shaped cultural stresses, identity conflicts, and gaps in Iran. Although Iranian civilization has influenced its neighbors and also has been influenced by them through centuries and millenniums, Iran

has tolerated these influences within the historical contexts on a single basis and continued its identity. However, a wide gap appeared in the identity elements of Iran during Pahlavi II due to the excessive attention of the government to the appearance of European modern civilization (Zariri, 2005). Fig. 2 indicates some factors and events resulting in the introduction of modernity manifestations and its mutual influence on the architecture from the Qajar to the Pahlavi period.

• **European architecture during the Pahlavi I period**

Construction in Iran was like its previous traditional process in the early 13th century until in late years of the 1930s when, modern construction entered Iran (Bani-Masoud, 2021, 63). In the Pahlavi era, political thoughts, and cultural and architectural approaches were changed after industrial and modern products entered Iran, and these changes led to considerable evolutions and changes in the appearance of cities (Shirazi & Younessi, 2011, 61). According to Abrahamian, the construction of a railway and cement factory after World War I led to a small industrial revolution in

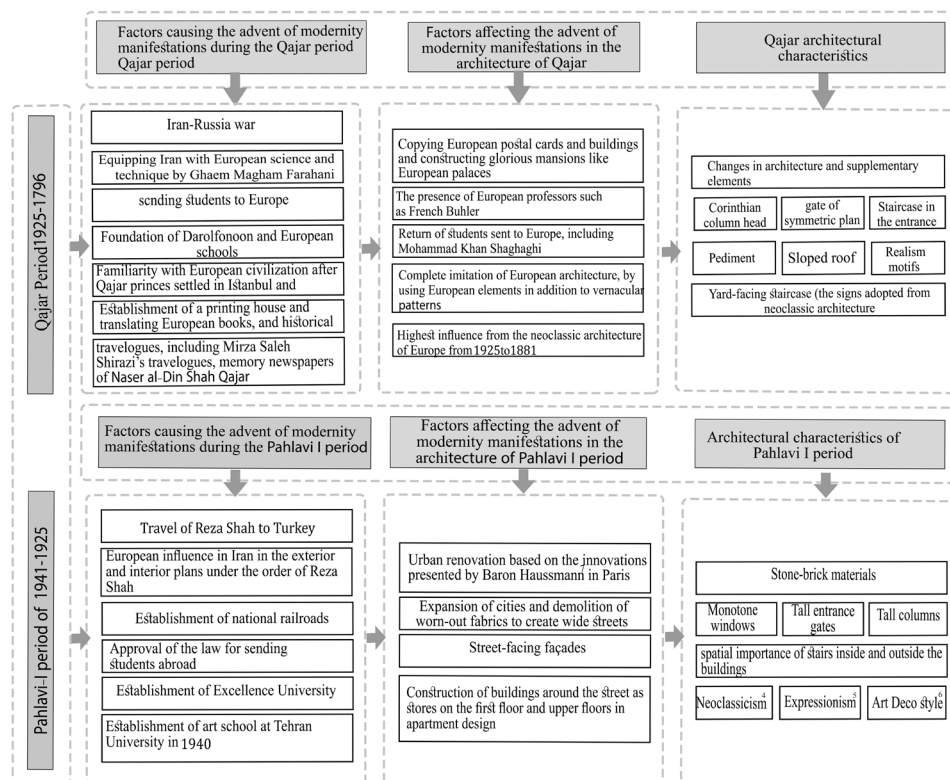


Fig. 2. Factors providing the field for the advent of modernity manifestations and their influence on Iran. Source: Authors.

Iran, which positively contributed to the improvement of architecture in Iran (Etemadifard & Eftekhari, 2022, 65). In the early years of the 13th century, Iranian urban development faced extroverted architecture, and this architectural technique was one of the common strategies for urban development and architecture (Kiani, 2004, 183). Iranian buildings had no openings and windows towards outer urban spaces in the past while street-facing windows were deployed in the external walls of buildings and houses during this period. Hence, this renovation and urban design and architecture place resulted in a change in common architectural techniques and made society interested in this technique (Bani-Masoud, 2021, 63). Table 1 reports summarized characteristics of the styles that became common at that time.

There were three common architectural styles in the construction industry of Iran during the Pahlavi I period. The most outstanding one was the eclectic style focusing on the architecture of ancient Iran, which was a nationalist method for returning to the past; decorative elements of ancient Iran's architecture and art especially from the Achaemenid era were used in this style. The second technique was the eclectic architecture style focusing on European architecture and characteristics of European architecture such as symmetry and rhythmic façade were seen in it. The third common construction technique of that era was the European architecture style that was shaped based on modern thoughts and imitating European architects in the formation of form and volume of building and combining indoor and outdoor spaces.

• Development of European architecture during the Pahlavi II period

House has been something beyond the shelter for humans, and its spiritual dimensions are observed in all steps from construction to establishment and utilization; however, inattention to the qualitative and psychological needs of residential space users has led to the minor role of housing in giving identity to the human community (Hasani & Nourouzborazjani, 2018, 37). Modern architecture was also begun in the Pahlavi I period (Kamelnia & Mahdavejad, 2012, 320). Modern architecture was developed during the Pahlavi II period after architects who graduated from the fine arts faculty abroad returned to Iran and foreign architect researchers came to Iran (Hagh Jou et al., 2019, 158). Architects educated in West such as Vartan Hovanessian, Paul Abkar, Gabriel Guevrekian, Mohsen Foroughi, and other foreign architects, including Maxime Siroux, André Godard, Nikolai Markov, and Roland Marcel Dubrulle worked in the public and private project from 1941 to 1951 (Etemadifard & Eftekhari, 2022, 65). The Pahlavi II period is divided into three intervals in terms of architecture and urban development activities, and each interval has certain economic, social, cultural, and political conditions, as well as specific demographic plans that affect architecture and urban development. Premodern and modern architecture continued from 1941 to 1953, the interval of 1953-1954 was the peak time of modernism, international style, and build-sell architecture, and an attitude is seen in architecture

Table 1. Characteristics of common styles of the Pahlavi I period. Source: Authors based on Ansari, 2020, 53-56.

Title	Characteristic	Architectural components
Eclectic architecture focusing on ancient Iran	-Nationalism and return to glory and magnificence of ancient Iran -Specific attention to pre-Islam architecture especially Achaemenid, Sassanid, and European neoclassic eras	-Use of decorative elements inspired by Achaemenid architecture in the façade (battlement, capital) -Order, symmetry, and geometric hierarchies adopted from the neoclassic of the 19th century in Europe
Eclectic architecture focusing on European architecture	-Orientation towards two European and Iranian architectural styles (a combination of these two architectures in a way that European architecture found specific features and manifestations.)	-Symmetry, rhythmic façade, numerous columns in the façade
European architecture	-Based on purely European architecture, inspired by the modernist ideas of intellectuals and students educated in the West.	-Application of volumes and forms, diverse shapes, lack of symmetry, composition of indoor space, free plan -Use of some materials such as glass, use of cement as façade coating, concrete in roof and staircase, wide surfaces with full-length glass

during 1965-1978 that tried to mix various styles and use the heritage of architecture and urban development of Iran to create an Iranian architecture identity. This style is known as “revival or national bond.” Architects were inspired by elements of the traditional architecture of Iran at that time and tried to revive it in modern architecture. Moreover, two other architectural flows existed in addition to this style: eclecticism and classicism. Furthermore, the modern architecture movement and international style⁷ existed during this period and were introduced as a flow corresponding to revival or national bond. This movement was willing to use contemporary technology and new materials in architecture and adopted simple and practical design. Also, build-sell architecture continued at that time with an emphasis on constructing and selling residential buildings (Goodarzi et al., 2022, 104). The spatial configuration of the house has somehow changed and privacy has been reduced over time (Karbasi, 2023, 5). Fig. 3 depicts the factors resulting in the introduction of modernity manifestations to the Pahlavi II period and Fig. 4 expresses the viewpoint of some theorists about Pahlavi architecture.

• **European façade construction in residential houses of the Pahlavi period**

Some theorists in the architecture field believe that culture is one of factors affecting the architectural design, particularly housing design. Hence, the configuration of residential building space in all areas, including city or country is matched with the general culture of that region. Therefore, the house has its identity concerning others (Mohebbi Gerami et al., 2021b, 519). Design and construction of buildings were done based on an approach before the formation of the architecture of the Pahlavi period in the Qajar era when the traditional house was built with some symbols adopted from Western culture, including the advent of extroversion that converted the traditional introverted house to extroverted villa-house. These impacts were increased in the house of nobles who were more influenced by the culture and architecture of Europe during the last half of Qajar governance. Some of these influences can be seen in the use of plaster works, mirror ornaments, and decorative columns inside the house and in the façade of the building (Mohebbi Gerami et al., 2021a, 409). Space layout in the

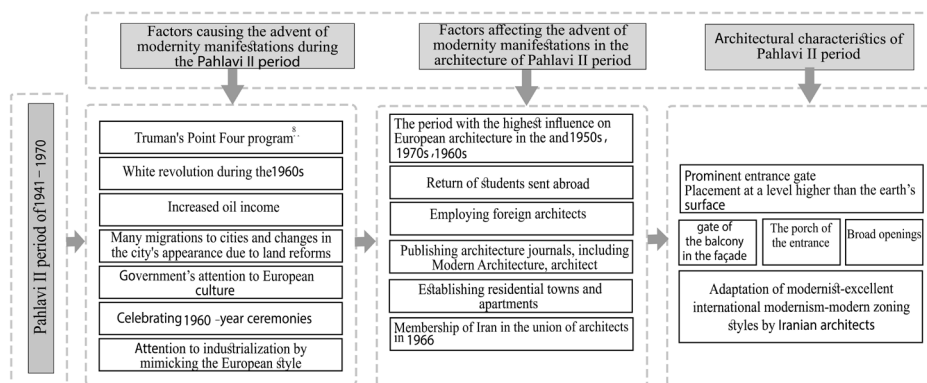


Fig. 3. Factors causing the advent of modernity manifestations during the Pahlavi II period. Source: Authors.

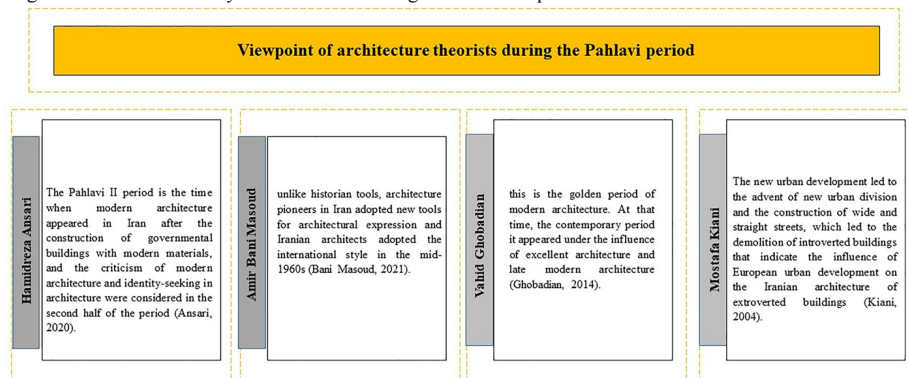


Fig. 4. The viewpoint of theorists about the architecture of Pahlavi II. Source: Authors.

architecture map is indeed based on the map of residential buildings, which expresses the practical schematic pattern of the identity and culture of each historical period. The use of each architectural element can be found based on the human needs of each period by examining the residential maps (Kooti et al., 2023, 41). Changes and evolutions seen in façade construction in Iran are not matched with the process done in Europe at that time. The shape and body were obvious before the formation of modern architecture in Iran but visual elements appeared in the design of the building façade after the familiarity with Europe during the middle period of the Qajar era especially due to the presence of European architecture in Iran during Pahlavi period. During the 1960s and 1970s when the prepared achievement of Europeans for Iran was confirmed and religious beliefs were eliminated by the government, the façade design also forgot its traditional and indigenous way and followed the architects who were educated in Europe. The outcome of this action was the incidence of identity crisis and cultural confusion in Iran during the Pahlavi period (Zorza & Motiei, 2022, 7). Villa construction influenced by European culture occurred after 1959, so the 1960s and 1970s were the main decades through which Iranian and European architectures were mixed during the Pahlavi period. In residential houses of the Pahlavi period, the emphasis was on simplicity and decreased semi-open space so that the main façade indicated the position of indoor space that this façade created a harmonious and symmetric complex with diverse details and components (Pourjavadasl & Beyti, 2022, 89). Traditional and vernacular architecture in Urmia County was introverted in the past due to climate conditions, and the opening of various spaces was mainly south-facing and latticed. The formation of introverted architecture during the modern period in this city led to the advent of the construction of various facades during the Pahlavi period (Rajaei, 2016, 8). The entrance gate is one of the main elements in architectural design that has a considerable impact on the plan and façade construction. Like other old houses in Iran, great attention has been paid to the design and deployment of entrance gates in houses located in Urmia. Most entrance gates are made of wood with a

rectangular shape during the Qajar era. Unlike religious and governmental buildings, however, Marquetry and Enamel are not observed in residential buildings, and some components such as Girih tiles or inscriptions are seen on the door or entrance gate of nobles' houses, such as Heydari House and Moayedi Lashkar (Urmia) House. However, entrance gates were made of metal during the Pahlavi period, so most of them have simple geometric bold motifs (Oshana Shirabad et al., 2022, 9). There are some characteristics of façade design considered in designing the façade of Ansari House in Urmia which is a residential building that remained from the late Qajar and Pahlavi I period: geometric and regular shapes in the design of building façade and courtyard's wall-façade and land as single elements-axial definition of view elongation and axial symmetry of curved and flat portico (Alemrasi & Khorasani, 2023, 6).

Analysis of Findings



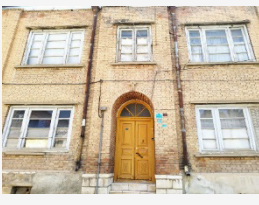
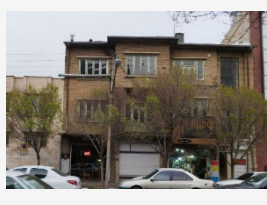
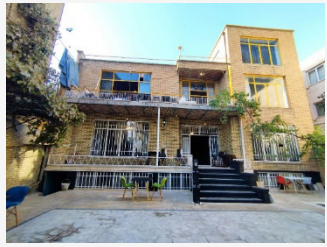
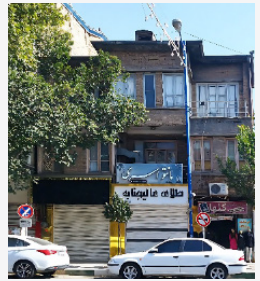


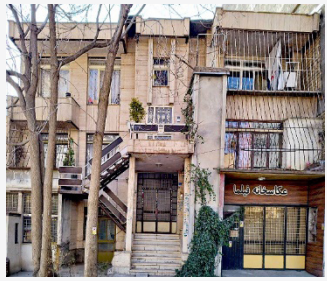
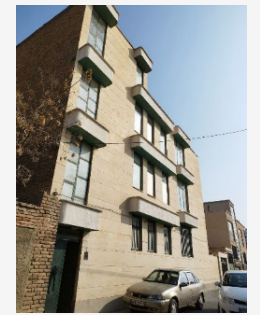
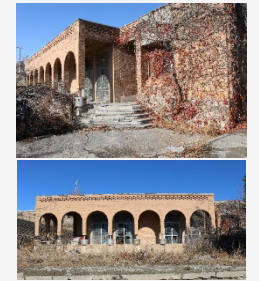

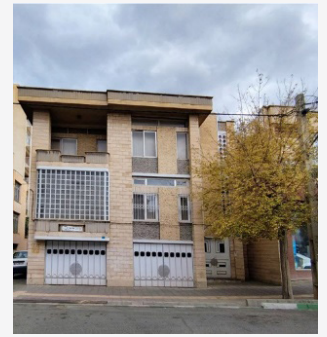



Sixteen samples of residential houses in Urmia constructed during two periods of late Qajar and almost early years of Pahlavi I and II periods are selected in this part of the study to examine their architectural characteristics. Among these houses, two buildings belong to the late Qajar (early years of Pahlavi I), three houses belong to the Pahlavi I period, and 11 houses belong to the Pahlavi II period. The houses are photographed and field studies are done through the investigation process to analyze the influences of European architecture on changes that occurred in the façade of residential houses in Urmia as the case study (Table 2).

Table 3 examines the outstanding characteristics in the façade of case studies. In these analyses, the glass surface, entrance gates of buildings, symmetry or asymmetry, shape and form of openings, and kind of roof including flat or sloped have been examined and shown separately. Moreover, the presence or absence of a balcony in street-facing façades or courtyards of houses, and the type of available arches are determined. In addition to the mentioned points, volumetric-cubic lines and surfaces or curved forms are determined in designing the façade of each case study. It has been investigated to find whether

diverse materials are used in the façade and dados. The façade of buildings is one of the aspects of architectural design, in which their visual components and body

have been considerably changed within various periods. Visual elements of buildings having the type of Pahlavi period indicate the deep influence of modern style with

Table 2. Introduction of Pahlavi period houses in Urmia. Source: Authors.

		Case			
					
House No.	1 (Majidi afshar,s hause)	2 (Ansari,s hause)	3	4	
Antiquity	Late Qajar_pahlavi	Late Qajar_pahlavi	40s	40s	
Location	Kashani st	Madani2 st	Dezhbani alley, Imam st	Kashani st	
					
House No.	5	6	7	8	
Antiquity	50s	40s	60s	70s	
Location	Danesh st	Emam st	Kashani st	Shektape st	
					
House No.	9	10	11	12	
Antiquity	60s	60s	60s	70s	
Location	Shaektape st	Dezhbani alley, Imam st	Pol goyon	Takti st	
					
House No.	13	14	15	16	
Antiquity	70s	70s	70s	70s	
Location	Ostad barzgr st	Takti st	Amar st	Pol goyon	

authenticity and effect of Iranian architecture in the appearance of the building; however, some differences have been seen since the middle of the Pahlavi period through diversities.

Table 4 indicates the extracted components of residential buildings constructed during Pahlavi period in Urmia City that comprise asymmetric façade, symmetric façade, deployment of building above land surface, level entrance, balcony in entrance gate, bold entrance gate in the middle of building, asymmetric entrance of buildings, wide and vertical arcades, balcony in the façade, staircase outside the building, vertical-horizontal lines, and rectangular cube forms, column in the façade, and arched forms.

Table 3. Analysis of views of the Pahlavi period. Source: Authors.

Facades of 16 residential buildings in this city are selected and analyzed physically and bodily and are presented in the frame of a table and diagram.

The roof forms of the studied buildings are examined in Table 5 Among 16 residential houses in Urmia, four cases have a sloped roof, and 12 cases have a flat roof. Table 6 reports the position of windows and doors of these houses during various periods. Curved forms in the windows are used only in one building, while 15 houses have rectangular windows except for one case. Most materials used in windows and doors are metal and few case studies have wooden windows (five buildings) and doors (three buildings). Also, wrought iron decorations used in the

	Façade	Geometry of the facade	Plan
1	<p>Sloped roof Window with rectangular surface Symmetric façade Brick façade Non-level entrance The balcony located at the entrance gate entrance gate Cement plinth</p>		
2	<p>Flat roof Symmetric façade Asymmetric entrance of the building Window with rectangular surface Wide and vertical corbel arch Wooden windows Window with curved surfaces</p>		<p>First floor plan SC 1/100 Ground Floor Plan SC 1/100</p>
3	<p>Flat roof Window with rectangular surface Wooden windows Vertical-horizontal lines and rectangular cube forms Asymmetric faced Non-level entrance The balcony located at the Cement plinth</p>		<p>First floor Plan SC 1/100 Ground Floor Plan SC 1/100</p>

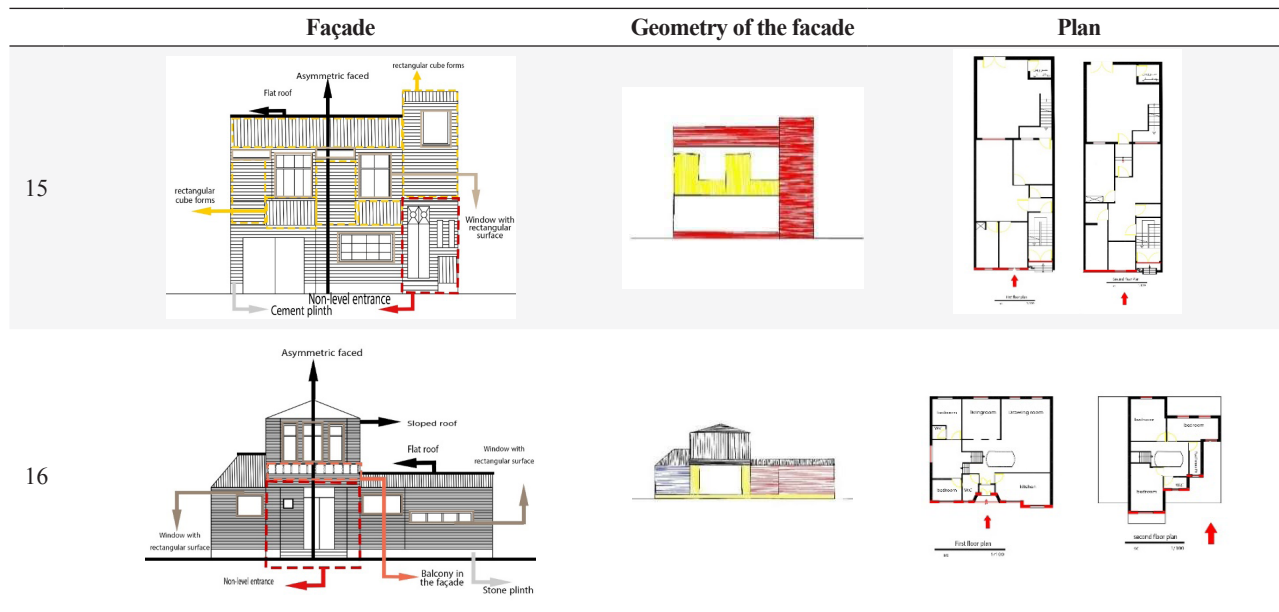
Rest of Table 3.

	Façade	Geometry of the façade	Plan
4			
5			
6			
7			
8			

Rest of Table 3.

	Façade	Geometry of the façade	Plan
9	<p>Window with rectangular surface Flat roof Asymmetric faced rectangular cube forms Stone plinth Staircase outside the building Non-level entrance Column in the façade</p>		<p>First floor plan SC 1/100</p>
10	<p>Window with rectangular surface Asymmetric faced Flat roof Level entrance gate rectangular cube forms Cement plinth</p>		<p>Ground Floor Plan SC 1/100</p>
11	<p>Window with rectangular surface Asymmetric faced Arched forms Metal windows Arched forms Non-level entrance Cement plinth</p>		<p>Ground Floor Plan SC 1/100</p>
12	<p>Asymmetric faced Flat roof Window with rectangular surface Level entrance gate rectangular cube forms Cement plinth</p>		<p>Ground Floor Plan SC 1/100</p> <p>1st. floor plan SC 1/100</p>
13	<p>Asymmetric faced Flat roof Balcony in the façade Glass faced surfaces Vertical-horizontal lines and Stone plinth Level entrance gate rectangular cube forms</p>		<p>1st. floor plan SC 1/100</p> <p>2nd. floor plan SC 1/100</p>
14	<p>Asymmetric faced Window with rectangular surface Flat roof Stone façade Vertical-horizontal lines and Stone plinth Level entrance gate rectangular cube forms</p>		<p>second floor plan SC 1/100</p> <p>1st floor plan SC 1/100</p> <p>Ground Floor Plan SC 1/100</p>

Rest of Table 3.



balcony's parapet are seen only in five buildings among 15 case studies.

Most materials of these buildings are metal and stone (Table 7). Guillotine stone has been used in five cases out of 16 houses and the facades of seven buildings are made of brick, while nine buildings have stone façade. Two cement and stone materials with 3:10 ratios are used in dados of buildings, and glass-made surfaces are seen only in one of the case studies during the Pahlavi II period. Table 8 evaluates the patterns and parameters of contemporary houses in Urmia city that are adopted from European architecture. The presence and absence of parameters are shown with “+” and “-” in this table, respectively. One can evaluate three four-component patterns relatively in this table. According to this table, parameters of building form and decorations obtained scores of 45 and 44 showing the highest influence of European architectural patterns on the contemporary buildings in Urmia City. Also, Table 8 indicates three patterns that have influenced all three dimensions of the building including building form, decorations, and materials. Fig. 5 depicts the graph of changes in building form, decorations, and materials in houses constructed during the Pahlavi period in Urmia. Most materials of these buildings are metal and stone (Table 7). Guillotine stone has been used in five cases out of 16 houses and

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Discussion and Conclusion

A review of case studies during the Pahlavi period in Urmia City indicates that many changes have occurred in the appearance of buildings on both the street side and the courtyard front. One of the components that changed over time is the transition of buildings with symmetric façades

Table 4. Extracted components of façade in houses of Urmia. Source: Authors.

Components	Extracted components																
	Houses	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Asymmetric faced																	
Symmetric façade																	
Building located above the land surface																	
Level entrance gate																	
The balcony located at the entrance gate																	
Outstanding entrance in the middle of the building																	
Asymmetric entrance of the building																	
Wide and vertical corbel arch																	
Balcony in the façade																	
Staircase outside the building																	
Vertical-horizontal lines and rectangular cube forms																	
Column in the façade																	
Arched forms																	

Table 5. Extracted components of the roof. Source: Authors.

Components	Roof																
	Houses	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flat roof																	
Sloped roof																	

Table 6. Extracted components of the Decorations. Source: Authors.

Components	Decorations																
	Houses	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Window with rectangular surface																	
Window with curved surfaces																	
Wooden windows																	
Metal windows																	
Wrought iron decorations on the balcony																	
Metal door																	
Wooden door																	

into asymmetric facades. Moreover, the entrance gate of buildings also lost its centrality and prominent axially over time, which has been located in one of the façade fronts asymmetrically over recent years. In early periods, columned porches were used on both sides of the entrance gate which were removed from the architectural design

of houses in this city over the next few years. In terms of materials used in these houses, brick was less used and replaced with marble and travertine stones. Moreover, the wood used for doors and windows was replaced with metal, and curved forms were deleted from the design of windows. The buildings were mainly constructed the

Table 7. Extractive components of the materials. Source: Authors.

Components	Houses	Materials															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Guillotine Stone																	
Brick façade																	
Glass faced surfaces																	
Stone façade																	
Use of metal in façade																	
Cement plinth																	
Stone plinth																	

Table 8. Evaluating buildings of Pahlavi houses in Urmia adopted from European architecture. Source: Authors.

Parameters	Houses	Building form				Decorations			Materials				
		Asymmetric faced	Asymmetric entrance of the building	Balcony in the façade	Flat roof	Window with rectangular surface	Metal windows	wrought iron decorations on the balcony	Metal door	Glass faced surfaces	Stone façade	Use of metal in façade	Stone plinth
Late Qajar, early Pahlavi	1	-	-	-	-	+	-	-	-	-	-	-	-
	2	-	+	-	+	-	-	-	-	-	-	-	-
	3	-	-	-	+	+	-	-	-	-	-	-	-
40s	4	+	+	+	-	+	-	+	+	-	-	-	-
	5	+	+	+	+	+	+	+	+	-	-	+	-
50s	6	-	+	+	-	+	-	-	+	-	-	+	-
60s	7	+	+	+	+	+	+	+	+	-	+	+	+
	8	+	+	+	+	+	+	-	+	-	+	+	+
	9	+	-	+	+	+	+	-	+	-	+	+	+
	10	+	+	-	+	+	+	-	+	-	+	+	+
70s	11	-	+	-	+	+	+	-	+	-	-	+	+
	12	+	-	+	+	+	+	+	+	-	+	+	+
	13	+	+	+	+	+	+	-	+	+	+	+	+
	14	+	+	+	+	+	+	+	+	-	+	+	+
	15	+	+	-	+	+	+	-	+	-	+	+	+
	16	+	+	+	-	+	+	-	+	-	+	+	+
The sum of each component		11	12	10	12	15	11	5	13	1	9	12	10
Sum of pattern		45				44				32			

above land surface. However, level entrances are seen in some cases although staircases are deployed in the back of the entrance gate. The staircase on floors is placed in the external façade of the building within a certain interval,

while such design is not seen in the previous and next periods. The location of the balcony on the wall of the street-facing façade of buildings confirms the extroversion in many late buildings. In terms of the roof surface of

buildings in Urmia City, most buildings have flat roofs but sloped roofs have been common during a certain period these roofs were gradually eliminated and replaced with flat roofs. In the façade construction of late buildings, various stones with certain colors are used which is a new feature. Fig. 6 depicts the process of changes in building, decorations, and materials in the façade of houses constructed in Urmia during the Pahlavi period.

Endnotes

1. Evolution means a change in an object from one to another state that is more general and different.
2. The war between Iran and Russia began within two 11-year and 2-year periods in 1800. Many areas were separated from Iran at the end of this war (Ziviyar, 2017, 145).
3. The core of nationalism is based on the general culture and political symbolism, and finally is based on a political collective culture that tends to encourage citizens to love their nationality, obey rules, and defend the territory (Asef, 2005, 80).
4. Neoclassical: historians used this movement to describe the art and architecture of ancient Greece in the second half of the 18th century, which consists of innovation in the architecture of ancient Greece. The origin of this movement was France and Italy.
5. Expressionism is one of the schools that was founded during World War I from 1910 to 1924 in Germany. Expressionism tends to express a subject and concepts that include implicit values of a phenomenon, artwork, or society (Haghir, 2008, 65).
6. Artdeco is a style in the design of interior decoration that was common in the 1930s. In 1925, this term was adopted by the Paris decoration arts exhibition.

7. After the international Modern architecture exhibition was held in The Museum of Modern Art of New York in 1932, a group of architects thought about new expressive intermediaries, which the term international style appeared finally and characteristics of this style were emphasized in the construction space and volume that is surrounded with some surfaces (Bani-Masoud, 2021, 153).
8. Iran’s government signed a contract with the USA to meet civic needs in the fall of 1948, known as Truman’s 4 Principles (Salemi et al., 2020, 165).

References List

- Abedini, A., Karimi, R., Ardalan Eftekhari, S., & Mollazadeh, F. (2017). Investigation about the Role of Modernism in Old Texture of Cities (Case Study: City of Urmia). *Geographical Urban Planning Research (GUPR)*, 4(4), 673-690. <https://doi.org/10.22059/jurbangeo.2016.62201>
- Aghalatif, A. (2022). Toward finding the comparison between evolution in contemporary and historical home in Sanandaj. *Iranian Islamic City Studies*, 12(45), 17-30. <https://iic.ihss.ac.ir/fa/Article/21065/FullText>
- Akman, A. (2006). Ambiguities of modernist nationalism: Architectural culture and nation building in early Republican Turkey. *Journal of Turkish Studies*, 5(3), 103-111. <https://doi.org/10.1080/1468384042000270344>
- Alemrasi, M., & Khorasani, E. (2023). Barresi-ye asle-mahramiyat dar me’ mari-ye khaneha-ye Irani-ye dore-ye Qajar dar shahr-e Urmia (Nemone-ye mored-e motale’e: khane-ye Ansari) [Investigation of privacy principle in architecture of Iranian houses of Qajar Era in Urmia City (Case Studt: Ansari House)]. *The Second International Conference on Architecture*,

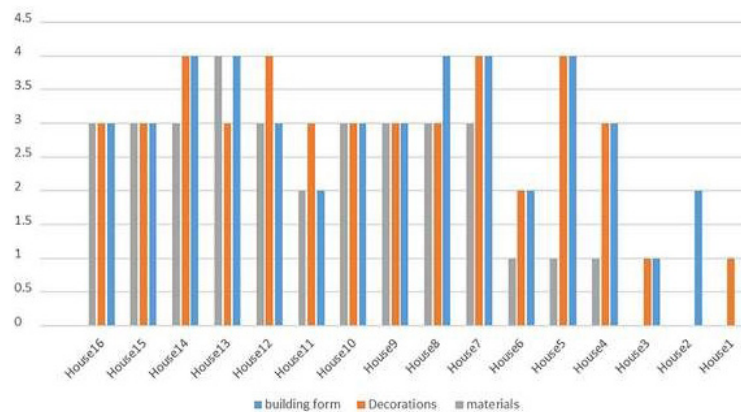


Fig. 5. Usage rate of European elements in houses constructed during the Pahlavi period in Urmia City. Source: Authors.

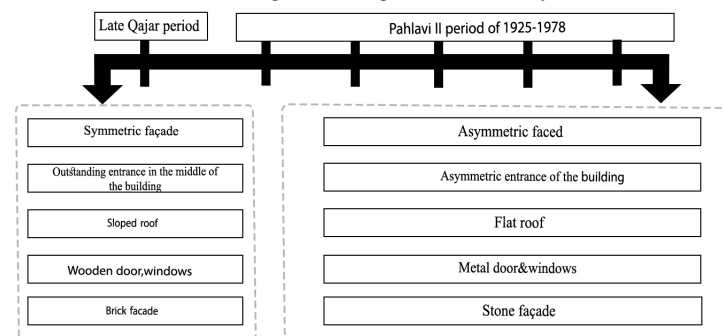


Fig. 6. Changes in building forms, decorations, and materials in the façade of houses constructed in Urmia during the Pahlavi period over time. Source: Authors.

Civil Engineering, Urban Planning, Environment and Horizons of Islamic Art, Tabriz.

- Amini, A., & Abolhasan Shirazi, H. A. (2006). *Social and political development in Iran from Qajar to Reza Shah*. Ghoomes.
- Ansari, H. (2020). *An introduction of contemporary architecture of Iran*. Sabzan.
- Asef, M. (2005). *Mabani-ye ideologic-e hokomat dar doran-e Pahlavi* [Ideologic foundations of governance during the Pahlavi period]. Center of Islamic Revolution Documents Press.
- Asgari, A., Fadaee Mehrabani, V., & Fathi, R. (2023). The Growth of Empty Space in the Architectural Anatomy of Tehran Houses (From Late Qajar Period to the Beginning of the Islamic Republic). *Journal of Art and Civilization of the Orient*, 10(38), 41-54. <https://doi.org/10.22034/jaco.2022.366244.1268>
- Bani-Masoud, A. (2021). *Contemporary architecture of Iran from 1925 to now*. Kasra Publishin.
- Bozdogan, S., & Akcan, E. (2012). *Turkey: Modern architecture in history*. Reaktion Books.
- Chaleshgar, P., Khakpour, M., & Asgharzadeh, A. (2023). An Analytical Approach to the Architectural Arrays of Qajar Houses (Case Study: The Qajar House of Faiz Mahdavi in the City of Kermanshah). *Journal of Art and Civilization of the Orient*, 11(40), 35-54. https://www.jaco-sj.com/article_172532.html
- Etemadifard, M., & Eftekhari, M. (2022). Identity and Architecture of IRI Academy of Persian Language and Literature in Abbasabad, Tehran. *Sociology of Art and Literature*, 14(1), 59-83. <https://doi.org/10.22059/jsal.2022.346245.666176>
- Fardpour, S., Dolatabadi, F., & Mahdavi Nejad, M. J. (2021). Reading the Schema of the Contemporary Urban Building Facade of Tehran in the First and Second Pahlavi Eras. *Armanshahr Architecture & Urban Development*, 14(35), 149-164. <https://doi.org/10.22034/aaud.2020.204911.2018>
- Fardpour, S., Dolatabadi, F., & Mahdavi Nejad, M. J. (2022). Contemporization of the Concept of Semantic Authenticity in Tehran's Architectural City Scape (Case Study: facades of Pahlavi I and II periods). *Hoviatshahr*, 16(2), 5-16. <https://doi.org/10.30495/hoviatshahr.2022.17740>
- Ghobadian, V. (2014). *Styles and concepts in Iranian contemporary architecture*. Royal Architecture Science.
- Golipour, M., Shahabian, P., & Aminzadeh Goharrizi, B. (2021). Reading The Factors Affecting The Promotion of Residential Facades In Tehran from the perspective of activists. *Quarterly Journals of Urban and Regional Development Planning*, 6(17), 119-146. <https://doi.org/10.22054/urdp.2021.63069.1374>
- Goodarzi, Y., Matin, M., & Ghobadian, V. (2022). Barresi-ye tatbighi-ye shakheseha va moalefeha-ye me; mari-ye banaha-ye dilati-omomi-ye doran-e Pahlavi dar shahr-e Tehran [Comparative structural analysis of public buildings in Pahlavi period]. *Journal of Interdisciplinary Studies in Architecture and Urbanism Development*, 1(1), 102-119. https://journals.iau.ir/article_694843.html
- Hagh Jou, A., Soltanzadeh, H., Tehrani, F., & Ayyvazian, S. (2019). The Trends and Theoretical Approaches of Public and Government Buildings Architecture on the First and Second Pahlavi Era. *Islamic Art Studies*, 15(34), 154-170. <https://doi.org/10.22034/ias.2019.95820>
- Haghbir, S. (2008). Stylistics of art-nouveau in the contemporary architecture of Iran. *Journal of Fine Arts: Architecture and Urban Planning*, 35(1000279), 63-73. https://journals.ut.ac.ir/article_27122.html?lang=en
- Hasani, K., & Nourouzborazjani, V. (2018). A Specification of a New Pattern of Shape Grammar in Architecture of Today's houses; Case study: Qajar houses in Tabriz and Tehran. *Bagh-e Nazar*, 15(63), 29-40. <https://doi.org/10.22034/bagh.2018.67365>
- Hussien, F. I., & Al Slik, G. (2019). Ornamentation and Modern Architecture in Iraq. *Journal of Engineering*, 25(6), 124-117. <https://doi.org/10.31026/J.ENG.2019.06.09>
- Kamelnia, H., & Mahdavinejad, M. (2012). *Explanation of contemporary architecture from east to west, introducing principles, meanings and roots*. Royal Architecture Science.
- Karbasi, A. (2023). The Developmental History of Space Configuration in the Last Hundred Year Houses of Najafabad. *Bagh-e Nazar*, 20(118), 5-22. <https://doi.org/10.22034/bagh.2022.333782.5151>
- Khatami, S. M., & Boujari, P. (2022). Analyzing the heritage of Tehran's urban façades in the recent century. *City, Territory and Architecture*, 9(1), 1-15. <https://doi.org/10.1186/s40410-022-00166-1>
- Khojasteh Ghamari, M., & Soltanzadeh, H. (2021). The effectiveness of Nazi Germany on the Reflection of Power Building in the Architecture of Governmental Buildings in Azerbaijan of the first Pahlavi period (Case study: Tabriz & Urmia). *Scientific Journal of History Research*, 16(63), 15-19. <https://sanad.iau.ir/Journal/history/Article/942197>
- Kiani, M. (2004). *Me'mari-ye dore-ye aval: degargoni-ye andisheha, peydayesh va sheklgiri-ye me'mari-ye dore-ye bist sale-ye mo'aser-e Iran 1299-1320* [Architecture of Pahlavi I era: evolution in thoughts, creation and formation of 20-year contemporary architecture of Iran]. Institute for Iranian Contemporary Historical Studies.
- Kooti, J., Sabernejad, J., & Matin, M. (2023). The Use of the Spatial Arrangement Method for the Hierarchy of Entry in the Houses of Tehran Over the Late Qajar and the First Pahlavi Eras with Emphasis on Privacy. *Bagh-e Nazar*, 20(123), 31-42. <https://doi.org/10.22034/bagh.2023.352847.5232>
- Mirza Hosseini, M., & Soltanzadeh, H. (2019). Explanation of Facade Patterns in Buildings Constructed by German Architects in Iran (Pahlavi Period). *CHS*, 10(38), 113-155. <https://chistorys.ir/article-1-1018-fa.html>
- Mohebbi Germi, H., Farmahini Farahani, R., & Ghiai, M. M.

(2021a). An Amplification on the Semiotics and Solutions of the Semantic Theory of Ferdinand de Saussure in the Historical Houses of the Qajar Period in the Cities of Ardabil, Tabriz and Urmia. *Islamic Art Studies*, 18(41), 406-416. https://www.sysislamicartjournal.ir/article_131996.html?lang=fa

• Mohebbi Germi, H., Farmahini Farahani, R., & Ghiai, M. M. (2021b). The Course of the Influence of Symbols and Signs in Explaining the Meaning of Architecture in Qajar Historical Houses; (Case Studies: Cities of Ardabil, Tabriz and Urmia). *Islamic Art Studies*, 18(43), 517-529. https://www.sysislamicartjournal.ir/article_137545.html?lang=fa

• Montazer, B., Soltanzadeh, H., & Hosseini, S. B. (2019). The Effect of 18th and 19th Centuries Russian Neoclassical Architecture on the Architecture of Iranian Administrative-Service Buildings (During Qajar and First Pahlavi Eras). *Bagh-e Nazar*, 16(70), 73-86. <https://doi.org/10.22034/bagh.2019.84971>

• Oshana Shirabad, B., Akbari Namdar, S., & Najafgholi Pourkalantari, N. (2022). Naghsh-e moalefeha-ye hoviatsaz-e ,e'mari bar hamgeraye-ye aghvam va adyan ba takeed bar bazshoha-ye khaneha-ye ghadimi-ye Urmia [Role of identity-making component of architecture in the convergence of tribes and religions with an emphasis on openings of old houses in Urmia]. Publish place: *The second national conference of Islamic wisdom and art*, Yazd.

• Pouretesami, Z. (2020). Moghadame-ee bar tahlil-e tasir-e nofoz-e farhangi-ye gharb bsr me'mari-ye maskoni moa'ser-e Iran dar doran-e Qazar & Pahlavi [An introduction to the analysis of the cultural influence of Europe on contemporary residential architecture of Iran during the Qajar and Pahlavi periods]. *Journal Of Research in the Arts and Humanities*, 5(26), 51-62. <http://www.rahs.ir/post.aspx?id=655>

• Pourjavadasl, B., & Beyti, H. (2022). Applying Approaches Driven from the Facades of Historic Houses to the Facades of New Buildings (Case Study: Historic Houses of Tabriz). *Bagh-e Nazar*, 19(107), 85-98. <https://doi.org/10.22034/bagh.2021.296407.4953>

• Rajaee, F. (2016). Sheklgiri-ye khaneha-ye sonati va jadid-e Urmia, ba tavajoh be eghlim-e mantaghe [Formation of traditional and new houses in Urmia regarding the climate of the area]. *International Conference on Architecture Engineering and Urban Development*, Tehran.

• Salemi Ghamsari, M., Yazdani, S., Farhadi, M., & Momeni, F. (2020). Truman's Principle Four and the Possibility of Development in Iran. *Social Development & Welfare Planning*, 11(43), 161-197. <https://doi.org/10.22054/qjdsd.2020.53614.2014>

• Shafiee, S., Shagagi, S., & Ziban, F. (2022). Investigation and Analysis of the Developments of Tabriz City and Its Impact on Urban Spaces from the Pahlavi Era to the Present (1401). *Interdisciplinary Studies of Iranian Architecture*, 1(2), 147-160. <https://doi.org/10.22133/isia.2023.374315.1026>

• Shirazi, A., & Younessi, M. (2011). Impact Of Nationalism On The Architecture Of Government Buildings During The First Pahlavi Period. *Journal of Iranian Islamic City Studies*, 1(4), 59-69.

• Soltanzadeh, H., & Hassanpour, N. (2015). How Traditional Ottoman Houses Affect Contemporary Architecture in Turkey. *Bagh-e Nazar*, 12(36), 51-64. https://www.bagh-sj.com/article_11991.html?lang=fa

• Zariri, R. (2005). Tajadodgaraee va hoviat-e Irani dar asr-e Pahlavi [Modernism an Iranian identity in the Pahlavi period]. *Zamaneh*, 6(40), 24-29.

• Ziviyar, F. (2017). Bazshenasi-ye anasor va moalefeha-ye hoviat-e melli dar jangha-ye Iran va Russia [Recognizing elements and components of national identity in the Iran and Russia wars]. *Jostarha-ye Siyasi-ye Mo'aser (Contemporary Political Studies)*, 7(21), 143-163. https://politicalstudy.ihs.ac.ir/article_2578.html

• Zorza, M., & Motiei, B. (2022). Barresi-ye tahavolat-e tarahi-ye nama dar khaneha-ye shahr-e Urmia [Investigation of evolutions in façade design of houses in Urmia City]. *6th National Conference on Sustainable Architecture and City*, Rajee University, Tehran.

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