

**A Study of Transformation of Iranian Modern
Architecture: Evolution of Façade Design in Public
Building in Tehran Since 1920s to Present**

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ABSTRACT

The evolution of Iranian architecture has started to emerge from the first Pahlavi era, when Iran was under Reza Khan Pahlavi's reign. Thus, the traditional layout of cities started to change drastically. Iranian architecture has gone through different phases from inspiration from creation of national style, and pure Western architectural style to the contemporary attempts of creating new tendencies in design.

During the early twentieth century, intellectuals attempted to modernize Iranian lifestyle and views. Regarding its process during the 20th century it is possible to define three phases: westernization of Iranian thoughts, Iranian Phase of Western thinking, the dialogue between tradition and modernity. The first Pahlavi era (1924-1941) focused on industrial modernization, while ignoring two pillars of modernity: social modernization and political development. Parallel to the first Pahlavi era, the most apparent characteristic of modernity in second Pahlavi era (1941-1979) was the prominence of industrial development and growth in adaptation of western popular culture. The conflicts between the ideas about secular government of Pahlavi and Shi'a government has been added to the complication of Iranian modernity after the Islamic revolution (1979). This complication is regarded as the crisis of modernity as well.

First Pahlavi was the era of creating a new type of heritage, which is the representation of a Modern Iran, while reflecting the respect to the ancient heritage. By the beginning of the second Pahlavi era in 1941, use of technology in architectural "image" was at its highest. The king was strongly leaning towards "building big" as a part of his plan for national modernization. After the Islamic revolution (1979), new terms were

advertised by the government among which were ‘Islamic Utopia’ and ‘Iranian–Islamic Architecture’. The new state tried to use architecture as a way of supporting its ideology.

Buildings that were designed during the first and second Pahlavi eras represent a period in Iran’s history when architecture was employed as a means to define, represent and negotiate the national identity. After the revolution of 1979, Iranian architects have mainly remained interested in a modernist approach. Likewise, the interest in the application of traditional architecture and Islamic symbols and motifs were appreciated in this era. Façades of public buildings reflect two important approaches during Iran’s modernization: 1) socio-cultural transformations; 2) state prevailing policies. This thesis includes two cases were selected from each era, representing the main features that are used on the facades. These features are categorized as style, proportions, openings, used materials, and symbols and ornamentations. Through case studies it has been clarified that the façade design of public buildings during the modernization of Iranian architecture, has faced a fluctuation in adopting Iranian traditional features and modern style. This transformation represents the socio-cultural changes and state prevailing policies that affect the identity of Iranian architecture.

Keywords: Modernization, Iran, Public buildings, Façade Design, Tehran

ÖZ

İran mimarisinin evrimi, Rıza Şah Pehlevi'nin İran hükümdarı olduğu Birinci Pehlevi döneminden itibaren ortaya çıkmıştır. Böylece, şehirlerin geleneksel dokusunda büyük ölçüde değişiklikler gözlenmeye başlanmıştır. İran mimarisi, ulusal tarzın yaratılmasından, saf Batı mimari tarzına ve çağdaş ve yeni tasarım eğilimlerin denemesine kadar farklı aşamalardan geçmiştir.

Yirminci yüzyılın başlarından, İranlı entelektüellerin, ülkedeki yaşam tarzını ve görüşlerini modernize etmeye çalışmaları görülmektedir. Yirminci yüzyılda gerçekleşen bu süreçle ilgili olarak, üç aşamayı tanımlamak mümkündür: Batılılaşma süreci, İran düşüncesine batı görüşünün etkisi, gelenek ve modernite arasındaki diyalog. Birinci Pehlevi döneminde (1924-1941), modernitenin iki temel ögesi olan sosyal modernizasyon ve politik gelişimler göz ardı edilmiş ve sadece endüstriyel modernleşmeye odaklanılmıştır. Birinci Pehlevi dönemine paralel olarak, ikinci Pehlevi döneminde (1941-1979) modernitenin en belirgin özelliği, popüler batı kültürünün adaptasyonu ve endüstriyel gelişme ve büyümenin öne çıkmasıdır. Pehlevi'nin laik hükümeti ile Şii temelli hükümeti arasındaki fikir çatışmaları, İslam devriminden sonra (1979) İran modernliğine bir karmaşayı eklemiştir. Bu karışıklık, aynı zamanda modernliğin krizi olarak da kabul edilmektedir.

Birinci Pehlevi, eski mirasa saygıyı temel alan, Modern İran'ın temsili olan yeni bir tür mimari miras yaratma dönemidir. 1941'de İkinci Pehlevi döneminin başlangıcında, teknoloji kullanımıyla mimari "imaj" oluşturma gayreti en yüksek seviyededir. Kral, ulusal modernizasyon planının bir parçası olarak "büyük yapılar inşa etmeye" büyük

bir önem addetmiştir. 1979'da gerçekleşen İslam devriminden sonra, hükümet tarafından "İslami Ütopya" ve "İran-İslam Mimarisi" gibi yeni terimler öne çıkmaya başlamıştır. Yeni devlet, mimariyi ideolojisini desteklemenin bir yolu olarak kullanmaya çalışmıştır.

İran tarihinde Birinci ve İkinci Pehlevi dönemlerinde tasarlanan yapılar, İran mimarisinin ulusal kimliğini tanımlamak, temsil etmek ve müzakere etmek için bir araç olarak kullanıldığı bir süreci temsil etmektedir. 1979 devriminden sonra, İranlı mimarlar esas olarak modernist bir yaklaşımla ilgilenmeye devam ettiler. Aynı şekilde geleneksel mimari ile İslami sembol ve motiflerin uygulanmasına olan ilgi de bu dönemde öne çıkmaktadır. İran'ın modernleşme sürecinde, kamusal yapıların cephe tasarımlarında, iki önemli yaklaşım görülmektedir: 1) sosyo-kültürel dönüşümler; 2) etkin politikaların yansımaları. Tezde, her dönemin ana özelliklerini cephelerinde yansıtan ikişer örnek seçilmiştir. Bu özellikler stil, oranlar, açıklıklar, kullanılan malzemeler ve semboller ve süslemeler olarak kategorize edilerek incelenmiştir. Seçilen örneklerin incelenmesiyle, İran mimarisinin modernizasyonu sırasında kamu binalarının cephe tasarımında, geleneksel ile modern tarzların benimsenmesindeki süreç içerisinde ortaya çıkan farklılıklar tespit edilmiştir. Bu dönüşüm, sosyo-kültürel değişimleri ve İran mimari kimliğini etkileyen devlet politikalarını temsil etmektedir.

Anahtar Kelimeler: Modernleşme, İran, Kamu binaları, Cephe Tasarımı, Tahran

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Chapter 1

INTRODUCTION

In the beginning of Iran's modernization during the early 20th century the Iranian intellectuals were in favor of modernizing and westernizing Iranian thinking and way of life. Nonetheless, in more recent times (particularly with the beginning of Iran and Iraq war, which occurred between years 1980 and 1988) because of the decline in the political relations between Iran and the West, Iranian intellectuals obtained a more limited understanding of western civilization; and thus they were enforced to create an Iranian version of western thought or thinking (Milani, 2004). However, Iran has been evolving ever since it entered the modernized phase of its development. Thus architecture of Iran, as an important element of culture, economy and politics, had faced particular transformations during this period.

Westernization of Iranian thinking began with Reza Khan's empowerment in the country, from December 15, 1925 until he was forced to resign in September 16, 1941 as the result of the Anglo-Soviet's invasion. To many of the Iranian nationalists Reza Khan is known as the father of modern Iran (Abrahamian, 2008). Historians have described these urban changes as "a good example of bureaucratic reformism and tedious vandalism," where "the vandals played chaos with life of the community and historic architecture consciously." The 1930s Tehran is also characterized as "a massive unfinished picture created by several artists," and a simple "external Westernization" to "impress foreign observers, who mainly visited just Tehran. The state "ripped down sections of cities," Cottam wrote, "ruthlessly destroyed mosques and other edifices mellow with the

charm of age, and replaced them with broad, tree-lined but incongruous boulevards.” Thus Tehran’s architecture is the demonstration of various changes and transformations during its history. During the twentieth century, modernization of the country transformed Tehran to a Modern capital and one of the major signs of this modernity is the transformation through which architecture had changed its characteristics (Grigor, 2016).

1.1 Background of the Study

Contemporary architecture of Iran is the outcome of the evolution that had started to happen in the Qajar Period during the last decades of the 19th century. The evolution of Iranian architecture has started to emerge from the first Pahlavi era, when Iran was under the reign of Reza Khan. During the first Pahlavi era (1925-1941), the country has started to be industrialized by the construction of railways and roads; and also the social behavior started to shift towards a Western style. Reza Khan created an agenda, under the impact of the West, particularly for education, economy, and culture; and at the same time Turkey was under reconstruction processes by Mustafa Kemal Ataturk, the founder of the new Turkish Republic, and this led to imitation and competition. Many civil projects were executed by the government during the reign of Reza Khan. He invited Western architects to design new buildings; and also many reconstruction plans taken place within a very short period of time. Thus, the traditional layout of cities started to change drastically. Parallel to these new developments, also, factories were built and governmental offices and universities were established. New construction materials were used in architecture such as cement, steel and glass; and new construction techniques were imported that led to new solutions by the use of a combination of Iranian and European styles in architecture (Diba & Dehbashi, 2004).

In the 1920s, the *first* generation of Iranian architects started to work on the western architecture and its adaptation in Iranian architecture at the time. Therefore, modernization of Iranian architecture was the outcome of thoughts and works of this new generation. The use of new technology and new construction materials besides the application of new forms, imitating western architecture, was the beginning of modern architecture in Iran. This generation also was very passionate about merging modernization with Iranian culture (Diba & Dehbashi, 2004).

They started experiencing an eclectic fusion in architecture by emphasizing on Iranian architectural features. At this point many architectural works were influenced by 20th century European neo-classical architecture. It was a style that were commonly used for designing governmental and other institutional buildings such as schools, banks, and many other. On the contrary, the other tendency in this period was towards using pure European architecture without any interpretation. Thus, there were no traditional elements and styles in this type of architecture.

The second generation of Iranian architects (1941-1979), included those who wanted to create a national style for the modern architecture of Iran. The result of this idea was the creation of locality and regionalism in architecture. Due to such conflicts, architecture of this generation is named as a historicist modernism. In other words, these architects started experimenting some style which was a complex of brutalism with the spirit of Iranian traditional architecture. It assumed the traditional architecture as a source of inspiration for architectural design in a modern context. The result of such architecture created one of the most fruitful collections of architectural works in Iran (Bnimasoud, 2009).

The third generation of Iranian architects consists of a diverse group of architects with various perspectives about architecture. They were mostly under the influence of the atmosphere of post revolution Iran. This means that a number of architects started to go back to the roots of traditional Iranian architecture to revitalize their values. Regionalism became more important in this generation; but also Iranian architects started to move forward by bringing technologies and digital equipment in the area of their designs (Banimasoud, 2009).

The change that took place as the result of the socio-political event of 1979 revolution formed a fracture between the architecture before and after this paradigm. Moreover, the Iran-Iraq war that took eight years forced several socio-economic difficulties also affecting architecture and urban planning in the country. Iranian architecture has been transformed from traditional to contemporary in a short period of time from the first decades of 20th century. During the twenty years of Reza Khan's period, the government actively implemented various civil projects. He invited prominent architects from western countries, for design of new buildings. Also, renovation plans were accomplished very rapidly. Therefore, the traditional context of several cities transformed respectively (Diba & Dehbashi, 2004). According to Banimasoud (2009) and many other scholars, the adoption of modernity in Iran had occurred mainly during three historical phases;

1. First Pahlavi: Westernization of Iranian views, from the beginning of the Reza Khan's empowerment until his abdication (1925-1941).
2. Second Pahlavi: Iranian Phase of Western thinking (1941-1979).
3. Post-revolution era: The conflict between tradition and modernity, or viewing tradition from the perspective of modernity (1979-present).

These phases have included particular architectural types with particular characteristics. Facades of the buildings have been the reflection of the opinion of the architects of each generation. As Jahanbegloo (2006) claims, in spite of its cultural background and civilization, contemporary Iran intends to persist on old beliefs and traditions; while at the same time there are universal events, news and innovations affecting the country. Therefore, its connections with its history is weakening; and concerns about the future developments.

Iranian architecture has gone through different phases from pure inspiration from Western architectural style to the contemporary attempts of creating new tendencies in design. The timeline of this change reflects the change in the social tendencies and can be observed in the architecture of public and publicly used buildings in the country.

1.2 Problem Statement

The city of Tehran has faced a wide range of changes since it has become the Capital of Iran. After the modernization of the country that began in the 1920s, the urban façade in Tehran has started to develop with a modern outlook. This façade has been transformed by different approaches of Iranian architects; and in the present time there is a fusion of different trends in design of the building facades that create the urban façade in the city. As the evolution in the use of technology and also the contemporary culture of the country shows, the façades of buildings have transformed that had led to the transformation of the urban façade in general. Although the country has moved forward in its process of modernization, Iranian architecture has faced fluctuations in terms of architectural style. This fluctuation has created an urban façade that does not reflect a chronological evolution of the state from traditional to a modern state in a certain order. The adaptation of ancient Iranian architecture, neoclassicism, pure

modernization, and a return to Iranian traditional and Islamic architecture do not reflect the process of technological advancement and modernization of the society. Moreover, the conflict between modernity and tradition is evident in the process of the transformation of Iranian architecture since the 1920s. Thus in order to understand the reason for this fluctuation it is necessary to first conduct a research about the history of Sate's modernization. In other words, it is not possible to interpret the process of modernization in Iran based on the architecture of the past 100 years.

1.3 Research Questions

Public buildings are placed in a category of the buildings that reflect different aspects of the society and the state prevailing policies. Thus, it is necessary to conduct a study about the changes in this respect; in order to study the impact of the aforementioned changes on the transformation of the façade design as the reflection of architectural transformation in Iran by recognizing the history of cultural changes, as a result of the changes on the state prevailing policies, during the modernization of the country. In doing so, this research is based on a number of fundamental questions as the following:

1. What was the impact of state prevailing policies and socio-cultural transformations on the development of Iranian architecture since 1920s until present time?
2. How the transformation of Iranian architecture is reflected on the façade of public buildings?
3. What are the major components of the façade that reflect the transformation of Iranian modern architecture on public buildings and create their architectural identity?

1.4 Aims and Objectives

This research aims to obtain a realization of the impact of modernization on the façade of public buildings in Tehran since early 1920s until present time. Therefore, it will investigate the transformation of the facades in public buildings in Tehran according to the time-line of socio-cultural transformations of the country and state prevailing policies. The process of its modernization within three main historical periods: First Pahlavi era (1924-1941), Second Pahlavi era (1941-1979, and Post Revolution era (1979-present). Thus, this research will focus on the impact of modernization of the architecture of Iran by specifically studying the façade of public buildings. It will focus on the process of the fluctuation in adaptation of Iranian Ancient, traditional architecture and modern architecture in the mentioned historical periods. Architecture is a representative of the culture, economy, status and many other factors that create the status of the society. Therefore, in order to reach a comprehensive level of data about the transformation of Iranian architecture and its causes and results, the process of modernization in Iran is an important tool in order to support this study.

1.5 Methodology

This research will be based on two main parts. First, it will include a literature review about modernization of Iran since the beginning of first Pahlavi era and the contemporary Iranian architecture. The next step, accordingly, will be examining a number of cases from the modern and contemporary Iranian architecture. There will be two cases selected from each period's architecture among the public buildings in Tehran. Furthermore, the study will conduct an investigation on the features that are mainly applied on the facades in each period. This investigation will be based on the observation, existing images, collection of architectural data such as façade drawings, and existing descriptions of each building. Public buildings such as institutional or

administrative buildings, public libraries, and museums are going to be selected as case studies.

The analysis of case studies will be based on five main factors and features: 1. Style; including the investigation of major stylistic approach in the design of façade. 2: Proportions; addressing the major proportions of the main façade of buildings. 3: openings; marking the shape, size and density of openings on the main façade. 4: used material; investigating the type of materials that are used in the design of the façade of each building. 5: Ornamentations and Symbols; investigating the type of symbols adopted and ornamentations applied in the design of the façade. In the end by analyzing the collected data from all case studies, the study will be concluded by pointing at a number of important issues as the result of this investigation, and a view of the characteristics of the transformation of facades of public buildings in Tehran during the mentioned period as the consequence of the change in socio-cultural and state prevailing policies.

1.6 Layout and Limitations

This research has chosen the city of Tehran as the location from which the cases are selected. Tehran has been the capital of Iran at the time that the modernization of the country begun, thus it contains various types of buildings that reflect this process of modernization in the country. The typology of buildings that is being focused on is public buildings. This category of buildings is the most comprehensive representative of the socio-cultural changes led by the state prevailing policies in a society. Therefore, the buildings are chosen from the three main historical periods of change including: first Pahlavi era (1924- 1945), second Pahlavi era (1945-1979); and after 1979 (post

revolution period). This study will be fully based on literature review and existing visual and architectural documents related to the selected samples.

The thesis consists of two main parts; first part includes a comprehensive literature review on modernization of Iran in general and modern Iranian architecture. It continues by discussing the facade design in the modern and contemporary Iranian architecture. The first part includes chapters two and three. The second part includes case study analyses from the three main periods of Iranian modern architecture. Finally, the study will be concluded in chapter five to explain about the findings and possible suggestions due the results of the research.

Chapter 2

AN OVERVIEW ON MODERNIZATION OF IRAN AND ITS EFFECTIVENESS ON IRANIAN ARCHITECTURE

Tehran has been transformed from a traditional city surrounded with walls to a contemporary metropolis over less than a hundred years. This rapid transformation has begun by the decision of Reza Khan Pahlavi in the 1920s due to his attempt for modernization of the country. During this transformation, and within three main stages, Iranian architecture evolved from traditional to modern; and this evolution was following the political, social, economic and cultural transformation in the country. Architecture as the representative of these transformations reflects the paradigm shift in architectural design under the influence of the westernization and emerging connection with western countries. This chapter is going to explain the process of modernization of Iran and the consequent transformation of architecture in this country¹.

2.1 Modernization of Iran

According to the several researches done by social scientists and other researches within variety of disciplines, modernization can be identified and examined with different indicators. In the beginning, it is more important to examine the experience of modernization by considering social indicators such as groups, classes, and elites rather than concentrating on formal and legal structures and institutions. Secondly, the

¹ See Milani (2004) and Banimasoud (2015)

varying forces and levels of modification specify a need for comparative analyses. Then, development should be defined in economic and physical relationships; likewise in political, social, and human relationships. Finally, development is not a fixed goal, but it is viewed as a continuous process.

According to Bill (1970), modernization requires a society to possess a permanent capacity for generating and absorbing persistent transformation. It implies a deep fundamental and continuous change in every system by which humans organize their lives. Modernization of Iran is one of the most dramatic efforts among third world societies during the twentieth century. It is an example for a society that was confronted dramatically by the revolutionary modernization.

Newman (2005) claimed that Iran among the periods of change in Iran, Safavid Dynasty (1501-1722) was one of the underlined periods. In the time of Shah Abbas, Safavids changed the capital from Tabriz to Qazvin. Later, the capital was moved to Isfahan. Iran has reached its most developed era in aesthetic productivity. As Pirnia (2005) mentioned, during this period the state became centralized and this was the first attempt towards modernizing the military.

After the Safavid Dynasty, during the Afshar and Zand Dynasties, the country was less focused on modernization while it was more involved with expanding its territory. Qajar Dynasty, beginning to rule in 1794, was the starting point for the movement towards modernization and reforms. Amire Kabir, the king's counselor, founded the first modern Iranian institution of higher education; Dar ol-Fonoun was established in 1851. It transformed to the University of Tehran later. But the foundation of Iran's modernization movement was established by the reign of Reza Khan and Pahlavi

Dynasty. Various aspects of modernization were discovered after the attempts of Reza Khan to empower the military by communicating the West. In this regard, students were sent to Western countries, and military and political relationships with Western governments were empowered. Iranian government started to hire scientists, engineers and military advisors to reinforce the foundations of the new state. ²

Modernity in Iran and western world are only similar by name but in their contents they are two distinct concepts. Nonetheless, the mentioned distinction should be in the effect of Iranian culture on modernity in this country. Modernity in Iran was shaped in a socio-cultural and political context (Banani, 1961).

Milani (2004) explained that in the beginning, during the early twentieth century, intellectuals attempted to modernize Iranian lifestyle and views. However, during more recent times as a result of the decline in Iran's political relations with the West, Iranian intellectuals were distanced from western intellectual society. As a result, they started to create an Iranian version of western way of thinking.

Regarding its process during the 20th century it is possible to define three phases:

1. Westernization of Iranian thoughts, from the beginning of the ruling of Reza Khan (1925-1941). This period is known as the first Pahlavi era.
2. Iranian Phase of Western thinking from the fall of Reza Khan to the end of the reign of Pahlavi (1942- 1979). This period is known as second Pahlavi era.

² History of the Iranian Constitutional Revolution, 951 p. Negah Publications, Tehran, 2003. Translated by the author.

3. The dialogue between tradition and modernity; from the beginning of the Islamic revolution (1979) to date.³

Following sections will give a brief insight to each of these periods.

2.1.1 First Pahlavi Era and Transformation of the State

Reza Khan Pahlavi, formerly known as Reza Khan, acknowledged himself as the Khan of Iran in 1926. The overthrow of Qadjar Dynasty was voted by a constitutional assembly in 1925. However, Reza Khan has gained his power in 1921 with a military coup. When he was declared as the Shah of Iran, he established the first systematic ‘modern state’ (Keddie, 2003). However, when Qadjar Dynasty initiated a military reform according to the European concept of a powerful army, in the end of 19th century, the first attempts for modernization have been made in the country. In the beginning of the twentieth century, constitutional revolution (1905-1911) was the other major attempt towards modernization before Reza Khan (Young, 1948). Moreover, ‘modern state’ was a concept that has been identified as Eurocentric. Yet, any country that was not in the path of such development could not simply considered ‘backward’ (Gelvin, 2016). It is worthy to mention that 1920s to 1940s was a period in which Europe was the cradle of enlightenment and also of fascism (Ansari, 2003).

Arguably, Reza Khan was capable of establishing the first modern central government of Iran. However, his compulsory modernization process was followed by neglecting the social and religious background of Iran and elimination of Iranian traditions and Islamic symbols. Therefore, it led to the disregarding of a great population among Iranian people. The first Pahlavi era’s focus was on industrial modernization, while

³ See Abrahamian (2008).

ignoring two pillars of modernity: social modernization and political development. Although a parliament was established, its existence was mostly artificial. Members were already elected by Reza Khan and parliament was not allowed to make independent decisions. Modernization, in Reza Khan's opinion, was only possible through autocracy and absolute power, regardless of traditional structure of the country. Hence, modernization of Iran did not lead to a democratic society. Preventing people from participating in political and economic issues led to lack of a homogeneity of development in culture, politics and economy (Avery, 1990, 164). This situation finally did not work in favor of Reza Pahlavi, and he was confronted for his forceful views.

2.1.2 Second Pahlavi the Era of Rapid Changes

Reza Pahlavi resigned and passed the crown to his son, Mohammad Reza Pahlavi in 16 September 1941. It created an open atmosphere for politics and led to revival of democratic sides of modernity, while traditional institutions began to reopen in Iran (Emamian et al, 2017). The country started a new series of socioeconomic policies, very similar to the West that led to transformation of the country (Kiddie, 2011, P.149). Nonetheless, this revival lasted for around a decade and then stopped by the King's 1953 coup. Subsequently, a new phase of modernization began in Iran that lasted until the Islamic Revolution of 1979. Parallel to the first Pahlavi era, the most apparent characteristic of modernity in second Pahlavi era was the prominence of industrial development and growth in adaptation of western popular culture (Emamian et al, 2017). Later on, Mohammad Reza began a new series of reforms in the 1960s and named it as the White Revolution. It was aimed at land reform, industries' public ownership, nationalization of the forest, women's voting rights, programs of profit sharing, and education in rural areas (Kheirabadi, 2011).

Neglecting the religious roots of the majority of people, creating a closed political atmosphere, and causing high rates of economic inequality were of the elements that led to the gradual dissatisfaction of the public and the eventual occurrence of Islamic Revolution of Iran. According to a prominent theorist of Iranian contemporary history, Ervand Abrahamian, the main reason of the Revolution was that Shah sought economic-social modernization that resulted in the development of a new middle class and industrial worker class, but he could not pursue modernization in the political sphere. This inability led to the erosion of links between the government and the social structure and developed a growing gap between the governance and the modern social groups and forces. Most importantly, this process destroyed the few bridges between the political institutions and the traditional social forces especially the influential individuals in Bazaar and the religious establishment. Thus, the Islamic revolution took place because of the inconsistent processes of development (Abrahamian, 1982, P. 524-525).

2.1.3 Iran's Modernity Since 1979 to Present

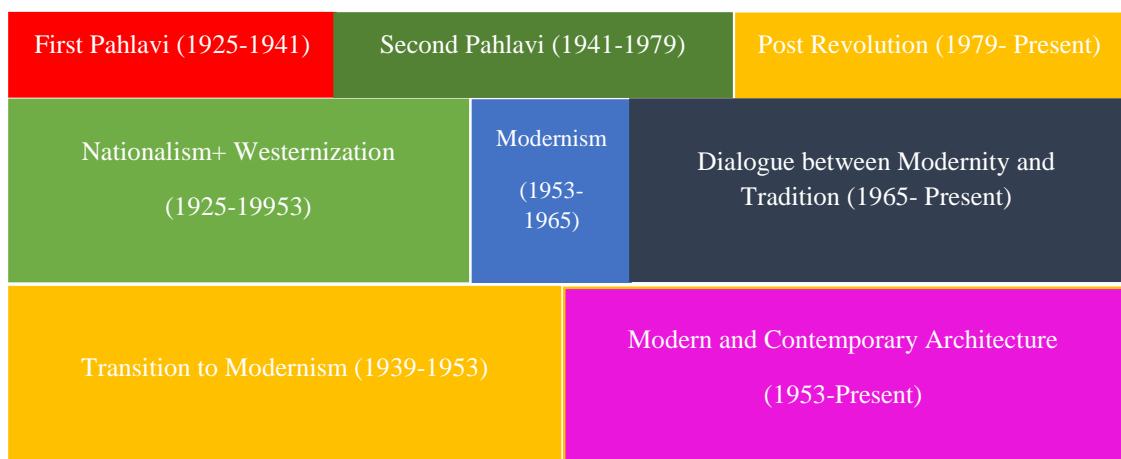
Iran's modernity has taken a new turn after the Islamic revolution. The conflicts between the ideas about secular government of Pahlavi and Shi'a government has been added to the complication of Iranian modernity. This complication is regarded as the crisis of modernity as well. According to Jahanbegloo (2004), there has always been a crisis regarding the acceptance of modernity in the country, and it has a long history. Therefore, there is a conflict between modernity and tradition, which is beyond a simple confrontation. Hence, the crisis of modernity is a fragment of Iranians' heritage. The confrontation towards modernity in terms of its morality has created an agenda for the *dialogue* between "tradition" and "modernity."

The reformist government raised after the revolution by basing on a number of factors including: the expanding body of the middle class society, increasing higher education that led to the growth of the human capital in the middle class, growth of urban culture, formation of fractures within the political structure, and social and cultural pressure as the result of cultural and economic globalization (Bashirieh, 2002).

The complicated history of Iran’s modernization and modernity has always been reflected in the works of intellectuals, artists, and architects in Iran. Thus this information about social, cultural and political shifts during the three main periods of modernization of the country draws a basic map to understand the transformation of Iranian architecture in the same periods.

2.2 A General View on the Modernization of Iranian Architecture

The relationship between Iranian architecture and the objectives of international modernism has been complex. A general look at the process of the modernization of Iran’s architecture since the 1920s, will lead to a timeline of three major periods. However, these periods overlap and within each period there have been evident transformations that have led to coming changes. The graph below demonstrates these transformations since the 1920s to present.



Pahlavi Dynasty, building a new modern country, took architecture and urban planning as the state-controlled platforms for expanding social, political, and economic dimensions of its nationalist movement. Hence, these features provided tools of modernization among the nation (Modarres, 2006). In 1922, Pahlavi Dynasty introduced the notion of cultural heritage, which was of the most important means of modernization in Iran. For Pahlavi, cultural heritage was more than just public monuments and buildings or a way of legitimizing the regime. But, it was an element through which modern Iran was defined amongst other modern nations in the region (Grigor, 2009).

By the starting of modernization of the country, Iranian architecture also faced changes and transformations in different stages. These changes were directly related to the dynamics of the changes in government and its prevailing policies, social transformations, lifestyle changes and so on.

2.2.1 Architecture of the First Pahlavi Era (1925-1941)

During the reign of Reza Pahlavi, the country began to be industrialized; road constructions and railway networks were established and meanwhile Westernized social behavior emerged. Reza Khan put education, economy and culture in his agenda, which was influenced by the West. During his reign, government had actively executed public projects. He invited western architects to design new buildings and plans of reconstruction were executed very rapidly. All of these plans led to significant changes in the traditional context of many cities in Iran (Diba& Dehbashi, 2004).

Factories, governmental offices also developed in this period. Use of new construction materials such as steel, cement and glass became popular. Also, following the arrival

of new construction techniques, various styles or European trends and Iranian origins appeared (Grigor, 2016).



Figure 1: Toopkhaneh Square, western view 1920- 1960, Tehran.
https://www.researchgate.net/figure/The-western-view-of-Toopkhaneh-Square-Tehran-1920-1960-Reza-Shah-Pahlavi-period-Reza_fig2_313821813

It was the beginning of the Iranian contemporary architecture. In this era, there was a tendency towards European modern architecture. Among the prominent figures of Iranian modern architecture during the first Pahlavi era there are names such as Karim Taherzadeh (Behzad), Vartan Hovhanessian, and Mohsen Forughi (Diba, 1991).



Figure 2: Girl's Vocational school (1938). The first building International Style built in Iran. Architect: Vartan Hovanesian
<http://www.caoi.ir/en/projects/item/783-girls-vocational-school.html#description>

The first Pahlavi architecture has gone through its transformation while architects mainly applied two approaches toward their work. These trends were the result of the changes in the new Pahlavi policies in creating a modern state and the relationship with the West.

2.2.1.1 Eclecticism with an Emphasis on Iranian Architectural style (National Style)

The main goal of this approach was to create a national style that represents the ancient power of Persian Empire. On the other hand it was under the influence of 19th century European neo-classical architecture. It was adopted in order to design governmental buildings, institutional buildings and banks. Symmetrical organization, hierarchy and use of rectangular forms in the plan design were the common features adopted from Neoclassical European architecture. The National Police Headquarters (1937) is one of the most relevant examples of this trend; combination of European and ancient Iranian styles. The facade of the entries to Maidan Mashgh (1931) and Hassan Abaad Square (1935) (figure 5) are also great examples of this tendency (Diba & Dehbashi, 2004).



Figure 3: National Police Headquarters (1937). An Example of Iranian Neoclassical Architecture.

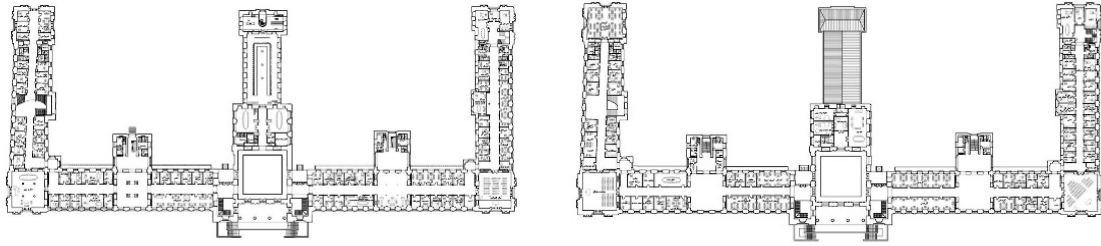


Figure 4: Police Headquarters. Plans. From the archive of Emarat Khorshid consulting office.
<http://www.emaratkhorshid.com/>



Figure 5: Hasanabad Square (1935).
[https://commons.wikimedia.org/wiki/File:Hasan_Abad_Square_of_Tehran_MSH_\(3\).jpg](https://commons.wikimedia.org/wiki/File:Hasan_Abad_Square_of_Tehran_MSH_(3).jpg)

2.2.1.2 Pure European Architecture

This approach to architecture emerged as a consequence of the progressive goals of some intellectual figures. This type of architecture does not carry any sign or influence of Persian architecture. It was often adopted without any adjustments. Tehran Railway Station (1937), the Ministry of Justice (1938) (Figure xx), the Departments of Medicine and Law, and Campus of Tehran University (1934) are examples of this trend. Mohsen Foroughi, Vartan Hovanesian, Ali Sadegh, Kayghobad Zafar Bakhtiar,

Paul Abkar, Gabriel Gueverkian, and Iraj Moshiri were the supporters of this process (Banimasoud, 2009).



Figure 6: Tehran, Courthouse, 1946
<https://en.wikipedia.org>



Figure 7: Tehran University Campus
<https://www.alamy.com>

2.2.2 Architecture of the Second Pahlavi Era (1941-1979)

The beginning of the Second Pahlavi era (1941) coincided with the fundamental changes in the Faculty of Fine Arts in the University of Tehran, founded in 1939. Therefore, architectural education program began following France's Beaux Arts

School of Architecture. Its emergence followed years of openness in politics, publications and initiation of the first Iranian magazine of architecture known as “Architect” in 1946. Two factors can be mentioned regarding to the changes in use of materials and access to building technology (Soltanzadeh& Hassanzadeh, 2017).

First, architecture was approached with creation of modern facades and plan organization. This led to the second factor, which was the necessity for quick and low-cost construction. Fast growing urban population created the need for the rapid production of cubic forms with barrel vault ceilings going through ties and beams. This way of work evolved throughout years afterwards. First Pahlavi’s Nationalism continued during the second Pahlavi era due to its secularism (Soltanzadeh& Hassanzadeh, 2017).

Although second Pahlavi era started in 1941, but 1953 was the departure time for development of the country due to oil revenue. Thus, improvements in various fields such as education, economy, and health care began to grow on speed. Due to the economic consequences of governmental policies development and investment became equivalent. However, cultural dimensions were not take into careful consideration and as a result importing western culture and its features became significant during this era (Diba, 1991). On the other hand, Shabastani (2012) claims that the years between 1953 and 1963 were the years of modern architecture occurring and spreading the International Style; considered as the years of technological advancement in architecture.

“Architecture of this period made fundamental changes in the attitude of interior design, performance and technology and gradually differed from Iranian archeology. This distance in terms of extraversion and high performance was a new measure until that time, the construction of such buildings existed in Iran” (sabastani, 2012:50).

Soltanzadeh and Hassanpour (2017) demonstrated the architecture of second Pahlavi era within three main stages. Accordingly these stages are reflected in the table below:

Table 1: The three Stages of development of Architecture in Second Pahlavi period

Stages	Events and trends in architecture
The Early Stage	<ul style="list-style-type: none"> • French architects’ role in the management of professional training and architecture. • Architectural education according to modern architecture. • Establishing the School of Fine Arts. • Publication of ‘Architect’ magazine (after ‘Baladieh’ magazine) in 1921. • Progression in technology and simplification of the building by the removal of the ornamentations. • Rise of cubic building construction, using barrel vault and steel joints. • Establishment of the National monuments Council and construction of mausoleums of artists and literature elites.
The Middle Stage	<ul style="list-style-type: none"> • Reducing the role of foreign architects such as Godard, and others at the end of the Second World War. • Popularization of International Style in architecture. • Founding Iran’s first Consulting Engineers office by Abdul-Aziz Farmanfarmaiyan. • Practical sociability and erection of high rise buildings in the urban fabric. • Publication of Modern Architecture, Art, and People magazine and the journal of Fine Arts in the 1950s. • Shortage of residential units and urban sprawl. • Promotion of private housing construction • Expansion of urban boulevards • Establishment of National University according to Italian system.
The Final Stage	<ul style="list-style-type: none"> • Increasing cultural, artistic, and architectural activities. • Development of government’s national plans. • Developing metropolises, growth of satellite towns, and design of urban master plans. • Popularization of Iranian Modern Architecture by combining traditional and modern architecture.

	<ul style="list-style-type: none"> • The role of Farah Pahlavi and Seyed Hossein Nasr in raising the intellectual architecture. • Hosting the International Congress of Architecture. • The participation of international architects in the design of some projects together with the growing number of architects and foreign firms within the construction sector.
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Architecture of second Pahlavi era has transformed within two main phases that encompass three stages overlapping. First, applying international style, Iranian architects have established the modern work. But during the development of the country and facing the ongoing crisis of tradition and modernity, architects began to create a dialogue between tradition and modernity. Establishment of modern educational institutions such as the School of Fine Arts invigorated trending towards western architecture. Also, socio-political changes moved the country towards industrialization, and directed to a rapid urban growth. In this regard two trends can be mentioned.

2.2.2.1 The Development of Modernist Style and International Style (1941-1979)

This evolution took place during the years between 1953 and 1963. It was then applied to many more buildings. In this period, several *governmental* and *commercial buildings* were built and a large number of residences were constructed, without considering the local architectural features or climatic issues, in Tehran along with cities such as Tabriz, Yazd, Mashhad, and Kashan (Diba & Dehbashi, 2004).

It is worthy to mention that within these decades a profit oriented approach towards faster and cheaper construction resulted in exclusion of ornamentations and use of the least diversity in materials (mostly brick, steel, and glass). Thus, the road was paved for real estate developers to progressively build and sell identical buildings regardless

of the location's features, climate and traditions. The critical issues that this method created still have an impact on Iran and its architecture.⁴



Figure 8: Toopkhaneh Square, Western view, 1960-1980, Tehran
https://www.researchgate.net/figure/The-western-view-of-Toopkhaneh-Square-Tehran-1960-1980-Mohammad-Reza-Shah-Pahlavi_fig6_313821813

Nonetheless, as Diba and Dehbashi (2004) wrote, besides the group of the real estate developers, monuments like the Old Senate (Foroughi and Ghiaï, 1959) and the Ministry of Oil (Ettahadieh and Farmanfarmaian, 1969) were also built under the impact of international Modernism, which are mentioned as distinctive samples from modern Iranian architecture.

This individual application of international modernism sustained until 1979 in Iran. Its influence has remained in the form of buildings such as the Takhti (formerly known as Amjadieh) Stadium, 1968-1973, the City Theatre (Tehran), 1971, Azadi Sports Complex (1974), and the Ministry of Agriculture (1975). These projects were all designed by prominent architects including these names: Jahanguir Darvish, Ali Sardar Afkhami and Abdolaziz Farmanfarmaian.

⁴ See Banimasoud (2009).



Figure 9: Niavaran Palace Complex (1968). Architect: Mohsen Foroughi.
<http://www.caoi.ir/en/projects/item/235-niavaran-palace-complex.html>



Figure 10: Niavaran Palace Complex (1968). Architect: Mohsen Foroughi
<http://www.caoi.ir/en/projects/item/235-niavaran-palace-complex.html>



Figure 11: Tehran City Theater, 1971
<http://caoi.ir/en/projects/item/52-tehran-city-theater.html>



Figure 12: Shiroodi (former Amjadieh) Sports complex (1973). Architect: Jahangir Darvish.
<http://www.caoi.ir/en/projects/item/283-takhti-stadium.html>

2.2.2.2 Creating of a Dialogue between Tradition and Modernity (1965-1979)

During the second Pahlavi era, the International Style and Modernism were seriously promoted by schools of architecture and architects such as Abdolalziz Farmanfarmaian. On the other hand, efforts have been made to reach cultural identity in Iranian architecture by architects such as Houshang Seyhoun, Kamran Diba, Hossein Amanat and Nader Ardalan. Design of mausoleums for prominent scientific

and literary Iranian figures has become an attempt to reflect Iranian culture and identity by the use of a combination of traditional forms and technology. Avicenna's tomb (Hamedan), or Khayam's tomb (Neyshabur) are good examples designed by Houshang Seyhoun, as one of the first to adopt such approach between 1950 and 1965. By specific attention to pure geometrical volumes and creation of abstract patterns inspired by traditional forms and patterns, he created a metaphoric expression in his architecture (Banimasoud, 2009).



Figure 13: Left: Houshang Seyhoun; Avicenna's Mausoleum, Hamedan; Right: Khayam Neishaboori's Masuleoum

In the mid-1960s, new discourses began to appear in the professional spheres and education circles. Architects such as Nader Ardalan and Kamran Diba were among those people who believed tradition and history are indispensable part of Iran's cultural and architectural identity. As a result projects such as Tehran Museum of Contemporary Art (Diba, 1978), Center for Manegment Studies (Ardalan, 1975), the new city of Shoushtar (Diba, 1974) were exemplary projects designed with such line of thoughts.

The Iran Centre of Management was particularly designed inspired by universal principles while referencing to a specific relation between space and nature among Iranian traditional values. Tehran Museum of Contemporary Art (TMOCA) applied introversion among principles of space organization and design of spatial features, creating high ceilings to be a reminder of the wind catcher, a clear reference to the hot and arid climate's architecture in Iran. Design of Shoushtar Residential complexes was inspired by the typology of Iranian traditional cities and use of local material (Diba & Dehbashi, 2004).



Figure 14: Iran's Center for Management Studies. Nader Ardalan (1975).
<http://www.memarnet.com>



Figure 15: Tehran Museum of Contemporary Art, Kamran Diba (1978).
<http://www.caoi.ir/en/projects/item/53-tehran-museum-of-contemporary-art.html>

Briefly, by the end of Pahlavi era cities were formed inharmoniously by the work of real estate developers and western modern design. During the second Pahlavi era, individual tendencies that revealed in Ardalan's and Diba's architecture, did not develop into steady trends letting the appearance of a genuine Iranian modern architecture (Banimasoud, 2010).

The leading figures of the Iranian architects in second Pahlavi era can be described in the frame of a cultural trio:

- 1) The impact of western culture and civilization;
- 2) Iranian cultural heritage (Islamic and pre-Islamic architecture);
- 3) The rise of architects from both mentioned criteria (Diba & Dehbashi, 2004).

In the second Pahlavi era, developing a strong attention towards nationalism, architects adopted vernacularism and historicism in order to revitalize ethnic identity of Iranian

architecture. This was a form of resistance towards west. However, this approach did not turn around to be drawn from the theoretical discourse of postmodernism and architects like Venturi or Jencks. On the other hand, this approach was the result of the attention to works of architects such as Alvar Alto, James Stirling and Louis Kahn; and also Hasan Fathi's ideas that have been gathered in his book: "The Architecture for the Poor" (Banimasoud, 2009).

By investigating the architectural works of this period, the process towards the formation of second Pahlavi architecture is understood. Architects originated a solid movement towards the 'architecture for Iran', which shaped its identity in the international domain.



Figure 16: Azadi Tower by Hossein Amanat, 1971. Tehran.
<http://www.caoi.ir/en/projects/item/142-shahyad-tower.html>



Figure 17: Sharif Technical University by Hossein Amanat, 1975. Tehran

2.2.3 Architecture of Iran since 1979 to the Present Time

After the end of Pahlavi Dynasty, the foundation of the Islamic state began a new historical phase in Iran. Architects of the post-revolution era created an artistic tendency, moving Iranian architecture toward an independent identity; mostly toward cultural and architectural heritage. However, it is worthy to mention that the major impact architecture had during the first two decades of post-revolution period only derived from the architectural works of the second Pahlavi era. Ideas of these architects created combinations of the influences of postmodern and Iranian traditional architecture of mostly Islamic periods, in order to form an identity that benefited the support of the official government (Grigor, 2016).

According to Banimasoud (2009), political and social events that occurred in the course of the revolution of 1979 formed a rupture between architecture of pre and post revolution. Fresh ideas in regard to culture and national or religious ideas appeared. Furthermore, architecture and urban planning were affected by the social and economic disturbance as the result of eight years of war between Iran and Iraq. Consequently, many architectural firms were closed while education system faced many changes and investments in civil projects broke. Moreover, the main concern in

this period was the creation of an Islamic identity. In the first two decades after the revolution variety of viewpoints created pluralism in architecture, and especially in the 1990s.

“On the one hand, creating architecture and urban planning to correspond with the values and ideals of Islamic society was an essential element in this period. On the other hand, western-influenced trends like Post-Modernism and Deconstructivism, also played a role in Iranian architecture. Several trends can be distinguished” (Banimasoud, 2009).

2.2.3.1 Revitalization of Iranian Contemporary Architecture

Within the 1980s and 1990s rejuvenation of Islamic culture was a priority. Use of materials such as brickwork and tiles, and ornamental features such as molding and calligraphy were among the efforts to create an Islamic spirit in buildings. This tendency was not only limited to Islamic architectural types. Use of forms such as central gardens, domes, and arches were frequent (Diba & Dehbashi, 2004).

Many residential and governmental buildings were erected under this influence in Tehran and other cities. The shrine of Imam Khomeini (1991), the Organization of the Hajj (1988) and the Sharif University Mosque (2000) are of the distinctive samples from this style. Thus, it is sensible to claim that this trend, which consisted of insincere imitation of the designs from the past and forms disconnected from time and place, could not last for long in contemporary Iranian architecture (Banimasoud, 2009).

2.2.3.2 Eclectic Approaches to Postmodern Architecture of West

In the mid-1980s, under the impact of western architecture, eclecticism in architecture appeared with by the adaptation of the features of Iranian architecture by some architects who, then, combined them in a western postmodern manner. Some works exhibited variety of inspirations from postmodernism to Neoclassicism and Iranian architecture, particularly Qajar’s architecture. Architectural features from both domains were added to the façades. The Bureau for the Members of Parliament (1990),

and Allame Dehkhoda University of Qazvin (1993) are precise examples of this trend (Diba & Dehbashi, 2004).

The western school of modern architecture had the major influence on Iranian architecture since the beginning of the Pahlavi era until present time. It is, yet, an important factor of influence on the contemporary Iranian architecture. Since the revolution, modern architecture has been molded in accordance with economic trends and regulations of construction. Fundamental principles of modern architecture have been followed in the design of these buildings include: pragmatic functionalism, simplicity (elimination of ornaments and decorations), wide usage of glass for claddings, and use of materials that were not used in construction by their predecessors (Banimasoud, 2009).



Figure 18: National Library of Iran by Yousef Shariatzadeh and Mohsen Mirheydar. 1996, Tehran.

<http://www.caoi.ir/en/projects/item/229-national-library-of-iran.html>

2.3 Summary

Iranian modern architecture has first gone through the consequences of the transformations the state policies in the country. This was the time that architecture was fully seen as a means to define the power of state and the urge toward modernization of the country that was reflected mostly in public buildings that were erected by Reza Khan's order. After the establishment of the college of fine arts in the

University of Tehran, the need for educating architects in the country begun to be met. Thus, instead of importing architectural styles or just contracting the foreigner architects, Iran started to import the knowledge of modern architecture.

Yet the struggle between acceptance of modernity and going back to traditions has been the subject of a dialogue in the process of development in Iranian modern architecture. This dialogue has made new categories of Iranian architecture until the end of second Pahlavi period. After the revolution also there has been changes in architectural styles due to the regime change. Since the country has become an Islamic state, the attention has been drawn to Islamic and Iranian traditional architecture, in order to find a new identity for the renewed government and country. Therefore, by the present time, Iranian architecture has found its ground in a number of different styles and approaches. This variety of viewpoints has led to a diverse urban façade that represents the timeline of transformations in the cities of Iran and especially Tehran as the modernized capital of the country. The importance of public buildings in representing the state had made them a significant category of buildings in the capital. Therefore observing the transformations of the facades of these buildings will demonstrate a continuous picture of what has been shaping the society of Iran during the recent 100 years.

Chapter 3

EVOLUTION OF ARCHITECTURE IN PUBLIC BUILDINGS IN IRAN SINCE THE BEGINNING OF ITS MODERNIZATION (1920S) TO PRESENT

3.1 Main phases of Evolution in Iranian Modern Architecture

Another perspective towards the evolution of public buildings in Iran shows that since the start of the modern era in Iran there are three main phases of change; and each phase is reflected in significant projects. These phases are detected according to the transformation of the approach that Iranian authorities had towards representing their state through architecture. Public buildings are essentially reflecting these phases with their form, material, patterns and other architectural elements. Accordingly, the design of façade has gone through changes based on the evolution through these phases.

3.1.1 Modernization

Modernization process was accelerated by the vote of the parliament of Iran for Reza Shah's Crowning in 1925. It was a reformist act to bring the new modern regime forward. This act corresponded institutions of modernism including capitalism, militarism, and industrialization. Reza Pahlavi's ambitions, ways and approaches are described by Cronin:

“Modernization was Reza Shah’s ultimate challenge, concentration his medium, and nationalism the ideology or philosophy that justified both...During the reign of Reza Shah, Iran underwent the fastest reforms not only in political and economic sectors, but also in the cultural and intellectual reforms” (Cronin, 2003).

The most powerful correspondence with nationalism through built environment is the nation’s architecture. In a holistic point of view it refers to both modern and inherited aspects of culture of a civilization⁵. Thus, the necessity for the existence of an institution that considers both aspects led to the establishment of SNH in 1922.

This regime followed its theoretical aims within three major themes by the formation of the society. Although, more objectives were integrated in the following years to the end of the Pahlavi Dynasty. First, there was an emphasis on nation’s Aryan roots; secondly, secularizing the country socio-geographically by replacing the values of the society, such as replacing the concept of pilgrimage with tourism; and finally, to reshape the nation’s historical memory through destruction and reconstruction in the cities.

The process that developed following these aims was significant within the coming 58 years of the society’s life. As Grigor (2009) described that the SNH erected about forty mausoleums, executed more than 60 preservation projects, and also established a national museum and a public library in the capital. The artistic and ideological opportunity was, surely, extraordinary in the cultural history of the country. It was reinforced by publications, lectures, exhibitions, and contribution to tourism. Every

⁵ The literature on this subject is very broad that addresses how throughout history architecture has been manipulated to serve the politics. For example: Vale, Lawrence J., *Architecture, Power, and National Identity*. (New Haven: Yale University Press, 1992). This book argues that governmental buildings serve as symbols of the state, and by observing closely what the government builds we can learn much about the political regime.

activity conducted by SNH symbolized the overall project of modernity in Iran and political historians identified it as the ‘New Order’ or the ‘New Iran’.

The Pahlavi’s views were oriented to decrease the role of religion in the traditional culture of building. Thus, nationalism was the source of interval to fill an ideological gap. Iranian nationalism was a blend of traditional tendencies and international modernism that was inspired by the elements of Achaemenid and Sassanid architecture (figures 22 & 23).



Figure 19: Taq Kasra (left) and The Museum of Iran Bastan as an example of the architecture of Modernization phase, imitating Taq e Kasra while attempting to bring it into a modern context.

Modernization was the phase for establishing the new identity for a nation that is about to step into a new era. It was a rapid move that had started from the top towards the bottom. Therefore, significant buildings of this era were mostly public and institutional buildings. First, their architecture represented the trending toward modernization; and second, the establishment of museums and library is a sign of the perspective toward cultural changes.

3.1.2 Secularization

In 1963, the king moved to push Iran towards the future by white revolution. He claimed that he tied his destiny to his country and his people’s destiny in hope to

maintain the independence of Iran. This revolution reflected King's image as a modernist revolutionary king as the forerunner of social change. Significantly, one of the aspects of the White revolution was a substantial investment in modernistic megaprojects as a part of making an avant-garde image. Language of modernity was used to highlight the inferiority of Qajar and also projected a specific secularist, modernist and a nationalist concept of an Iranian nation. In fact, this language was used under the light of disbelieving the immediate past (Grigor, 2014).

That infrastructure under the Pahlavi regime lays in the way it initiated essential strategies of modernization and in the way through which it formulated a discourse about secular national context of temporal 'before' and 'after'. Modern architecture and urbanization became the most powerful and observable symbols of the desire for creating a new systematic modern nation (Bozdoğan, 2014).

Shahyad tower (currently known as Azadi tower) after 1979 was a great example of the perspective of the second Pahlavi about the new Iran and the new nation. As a symbolic structure representing Iran's past, the tower was associated with Centenary Celebrations, its museum displaying ancient Iran's relics. Its physical structure reflected the ancient Iranian architecture. Hence, it became a symbol that was established to represent Iran's future and Iranian modernity.

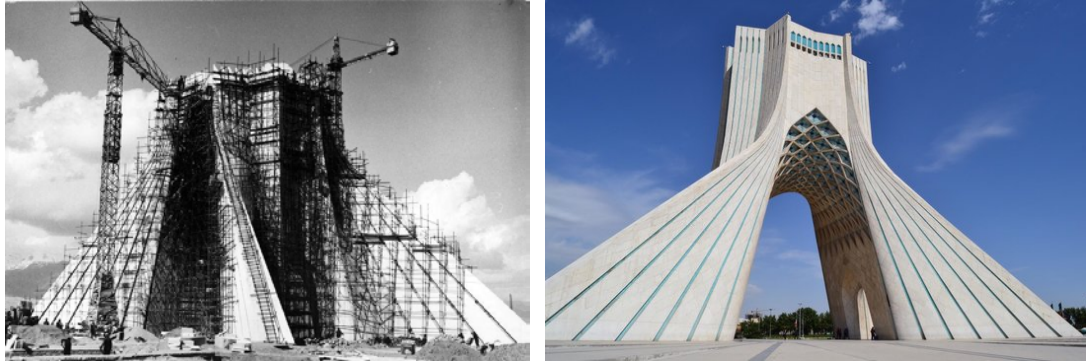


Figure 20: Azadi (Shahyad) Tower Tehran/ Iran.
<http://newsglobal24.com/historical-landmarks-while-under-construction/2/>

3.1.3 Fusion of Islamism and modernism

The Islamic Revolution of 1979 highlighted the Islamic architecture elements while attempted to deprive the Pahvali regime's modernization. According to Khatam (2009), the revolution challenged all the issues associated with western modernity in order to create an Islamic identity. It brought a project of Islamization of city, which promoted Islamic forms and behaviors. It dramatically changed social and spatial urban context. This project put an impact on all aspects of city, such as education, media and architecture. Moreover, it slowly created a rupture between pre-revolution and post-revolution Tehran.

The cities also began to exhibit a more conservative architecture that symbolized revolutionary values by random application of Islamic architecture. it was conservative in the sense that it used Islamic characteristics directly, in order demonstrate the new state's ideology and prevailing policies.



Figure 21: Tehran, Mosalla. The Complex dedicated to the event of Friday Prayers. This project has used an abstraction of Islamic forms with the use of contemporary technology.

Post-revolution Iranian architecture is a combination of Islamic architectural patterns and symbols, and the world's modern and contemporary architecture. In this regard there has been different efforts in use of details, materials and imitation of styles in order to revitalize Islamic values. On the other hand this contemporary architecture continues to apply the global trends.



Figure 22: Holy Defense Museum, Tehran (2010). An example of the contemporary attempt in the design of public buildings in Iran.

3.2 Evolution of the Design of Public Buildings During the Three Main Eras of Modernization

Iran's architecture has been under the impact of the technological advancements since the beginning of Pahlavi dynasty. On the other hand, during its evolution, it has been under the impact of state ideology in each epoch. Contemporary history of architecture in Iran has gone through significant courses before and after the revolution. The Pahlavi Dynasty (1908-1978) promoted architecture that corresponded with the dominant commodification of culture while the state's ideology state was putting the country in the global context, modernization and was propagating a new national identity. As it has been argued by many, Western advancements and modern architecture were introduced to the traditional context of the cities in Iran very rapidly. However, it could be argued that one of the reasons that the Islamic revolution formed was to take action against the intense technological involvement of the former government. But, after the revolution there has been serious support for the technological advancement by a large group of intellectuals (Amirjani, 2018).

Evolution of Iranian architecture since its modernization represents different aspects and approaches of Iranian government, Iranian architects and also Iranian society in general. The changes that have been made since the first quarter of 20th century. As Mirmiran (2004) stated, there are four main issues to be pointed out of a brief review of this timeline:

- 1) During this time span, Iranian architecture has followed the steps of modernism and postmodernism without obtaining enough knowledge about those movements.
- 2) There has been an emphasis, by the architects, on orienting towards the historical and architectural heritage of the county by Iranian architects during this period of time.

3) During the past three decades, the urge towards presenting Iran's architectural projects in the level of world architecture has been intensified.

4) Many of the Iranian architects believe that it is enough to only rely on Iranian architectural heritage with special attention to its principles in order to create a movement with a global attention.

Therefore, the architecture of public buildings have had great importance in order to reflect changes, and quality of transformation and power of the culture, government and society of this country.

3.2.1 The First Pahlavi Era's Changes

At the beginning of the influence of the west, Iran's government had developed an interest in western governments like the USA, France, and Germany in terms of modernization. However, preservation of the heritage has been a great concern in Iran. By this attitude, Iran began to create a new identity by adopting the features of modernization while preserving cultural and architectural heritage. Therefore, Reza Khan, with his political interests, invited orientalist from aforementioned countries, and they helped promoting the concept of preservation and modernization in Iran. Three important figures among the orientalist architects who worked in Iran were Ernst Emil Herzfeld, Andre Godard, and Arthur Upham Pope. It resulted in the formation of preservation as a cultural concept, and brought its importance into an international level. It also helped defining the path of the national style in architecture and preservation related with the activities done by the Society of National Heritage (SNH).⁶

⁶ See Bahr Ol Olumi (1976)

This society found the solution with two major objectives: the first was to employ their knowledge for initiating the essentials of SNH's archeological and preservation actions. The second was to create more possibilities for its connection with the country's archeological sites by sharing the rights amongst influential countries. Also, a third mutual consequence appeared that could be more important than the other two objectives. It is revitalization of national Iranian identity by conducting activities related to preservation and modernization. Consequently, the years between 1922 and 1928 demonstrate political and professional actions in parallel. (Grigor, 2004).



Figure 23: Tabriz Municipality (1935-1939). Tabriz, Iran
<https://www.iribnews.ir>

By the early 1930s, the first the interaction between tradition and modernization led to the construction of Ferdowsi's Tomb as the first modern heritage of Iran's architecture. This manifestation was the result of two main factors: first, the contribution of orientalists to the local concept of modernization and preservation. Second, stabilizing SNH's activities and agendas. Contributions of orientalists and SNH can be seen in the architecture of this mausoleum. As SNH proposed the idea of mausoleum architecture, Herzfeld proposed Ferdowsi and Shahnameh as the subject for the work. On the other

hand, Pope suggested Achaemenid's architecture as the source of inspiration and finally Andre Godard designed the tomb. Therefore, Ferdowsi's Mausoleum was erected in 1933 in the city of Tous close to Mashhad. The mass concept was taken from the Tomb of Cyrus the great who was the founder of the Achaemenid Empire (Azizkhani, 2014).

First Pahlavi was the era of creating a new type of heritage, which is the representation of a Modern Iran, while reflecting the respect to the ancient heritage. In other words, first Pahlavi Iran was in need of Monuments in order to introduce a new age in the country and announce Iran entering the modern Iran.

3.2.2 The Second Pahlavi Era's Changes

Second Pahlavi is the continuation of the first era. It attempts to expand the establishments of a modern society that is also reflected in the approach to the architecture of public and monumental buildings.

By the beginning of Mohamad Reza Pahlavi's reign in 1941, use of technology in architectural "image" was at its highest. The king thought of skyscrapers as flags of modern countries. He was strongly leaning towards "building big" as a part of his plan for national modernization (Arefian & Moeini, 2016). Hence, his administration hired foreign companies capable of building large projects. Moreover, the Association of Iranian Architects-Diploma (AIAD) was founded in 1944 in order to define the future direction of Iran's architecture. Since most of the AIAD members were educated in Europe, they became advisers and contractors of the state in order to fulfil the King's project of modernity. However, these architects witnessed the dissatisfaction of the majority of society who was concerned about the emerging image of Iranian cities.

But, they constantly emphasized on modern architecture as the major way for the cultural reform of the government (Amirjani, 2018).

As Manouchehr Khorsandi, the head of AIAD in 1946, stated:

“The generation of professional traditional architects does not exist anymore, and today, architecture is applied by illiterates and unprofessional individuals who could not develop the existing construction techniques. Since the rise of modern building in Iran, the people have been able to understand the revolutionary power of modern technology and also vernacular architecture weaknesses. Although the society has not welcomed the new trend yet, we could gradually prepare the public opinion for approaching [modern architecture expression]” (khorsandi,1946).

Since the 1970s, the country has gone through a metamorphosis by both cultural and technical features of technology; also a big share of the cities’ traditional fabric together with the local cultures has almost been destroyed by the productions of modern architecture.

3.2.3 The Post-Revolution Era’s Changes

The Islamic revolution opened a new chapter in the timeline of modern Iran. However after a short while Iran was forced to an eight yearlong war with Iraq until 1988. Therefore, society of architects faced its darkest days during this period. Many of the construction sites were evacuated and projects were stopped.

By the time of the hostage crisis in Iran in November 4th 1979, which were followed by USA sanctions, besides, with the outburst of the war in 1980, situation had become conflicted. On the one hand, the local anti-Western movements were fueled, and on the other hand, it totally disturbed the emergence of modern buildings (Amirejani, 2018).

As the war ended in 1988, ‘The Era of Construction’ began. As a result, the post-revolutionary architectonic projects began to emerge increasingly. In this period, new

terms were advertised by the government among which were 'Islamic Utopia' and 'Iranian-Islamic Architecture'. The new state tried to use architecture as a way of supporting its ideology. Though, in reality, it was still the heritage of the Pahlavi determining projects and tendencies toward architecture. By the reopening of universities, and also the start of new projects, three major architectural trends were gradually revived: first, the combination of Iranian vernacular features and modern construction techniques; second, the regional Iranian architecture; and third was the modern style. Architects were forced to follow the Islamic principles by the new ideology. But modern international style became the leading architectural language in the first ages of The Islamic Republic of Iran (Banimasoud, 2009).

Nowadays, a large number of public projects are designed according to the modern language and architectural features that were once rejected by the authorities. On the other hand, many projects are being designed by adopting some characteristics of Iranian traditional architecture.

3.3 Concluding Remarks

Architecture of different eras since the beginning of Iran's modernization reflects the directions that state has been taking during different periods. Since the first quarter of the 20th century Iran's political and cultural orientation towards a modern and westernized life has led to the change in the facades of the buildings that has become representatives of this state. Choice of style, material, and scale of these buildings has been due to the policies of the ruling systems at different times, which have made a timeline of the development and transformation of Iranian architecture.

The willingness of the government to adopt modern style in the design of those buildings that represent the power and status have also influenced the total tendencies of architects in the meantime. Therefore, starting with modernization of the appearance of the main buildings and going through the phase of modernization while preservation of cultural and architectural heritage, Iranian architecture continued a different path after the revolution of 1979. Addition of Islamic patterns and symbols created another representation of the state. This state after the revolution was presented by a combination of modern facades, eclectic combinations and direct use of Islamic patterns. Thus, at this phase the face of the state is presented as a modern Islamic state. Although at the beginning of the post-revolution era the acceptance for modern style was not welcomed to represent the new state, after the 1990s more public buildings have been designed and built in contemporary styles. This approach is to present an Islamic yet global presence of Iran in the global world.

Chapter 4

EVALUATION OF THE PUBLIC BUILDINGS' FACADES AS REPRESENTATION OF THE CHANGE IN STATE PREVAILING POLICIES AND CULTURE

As it is already mentioned in the previous chapters, architecture of Iran Since the first quarter of 20th century has gone through three major phases. Each phase of change is reflected on the architecture and façade of the public buildings. The policies of the state in developing the country have been a major factor in the formation of different approaches to architecture.

Buildings that were designed during the first and second Pahlavi eras represent a period in Iran's history when architecture was employed as a means to define, represent and negotiate the national identity. Iran's 20th-century political stage is marked by a modernist-nationalist government, which celebrated art and architectural heritage of Iran as an indication of its glorious past. From early decades of the 20th century until the last years of the Pahlavi Dynasty (1925-1979), and under the patronage of the state and its political and cultural elite, two generations of architects emerged, who employed the nation's past to render its present and future in an optimistic light. First Pahlavi architecture was mainly about reviving the glory of the ancient Iranian culture. Therefore usage of ancient ornaments and patterns on the one hand, and application of principles of modern architecture, mainly neoclassical, have formed the architecture of this era.

During the second Pahlavi period, pure modernism has been accepted and adopted by the earlier architects of this era. However, later in this period, many architects have considered the value of Iranian traditional architecture. They attempted to create a new approach to modern architecture by using some characteristics of Iranian traditional architecture.

After the revolution of 1979, Iranian architects have mainly remained interested in a modernist approach. Likewise, the interest in the application of traditional architecture and Islamic symbols and motifs were appreciated by this generation.⁷

In this chapter there will be two buildings from each phases of the evolution of Iranian architecture since the beginning of the modernization of the country. These phases are defined as: 1) Modernization; 2) Secularization; 3) Fusion of Islamic architecture and Modernism. These samples are representing the main features that are used on the facades. These categories include, used materials, embellishment and decorative elements, patterns, and architectural style, or the fusion of multiple architectural styles.

It is worthy to mention that the existence of these three phases does not mean that by the end of each phase the next phase began. There have been transitional periods within the timeline of these phases. However, there are two important eras of Iran's contemporary history: the Pre-revolution and Post-revolution eras. This chapter is going to go through samples of each era and phase in a chronological manner; starting from the first Pahlavi period until the present time.

⁷ See Contemporary Architecture of Iran. Bani Masoud. 2009.

Selected cases included in this chapter are going to be investigated in order to analyze the transformation of façade design in public buildings during the three mentioned eras. For this purpose, facades are analyzed based on the following factors: proportions of the building, openings, used materials, ornamentations, used symbols, style of design.

4.1 Façade Design in Pre-Revolution Era: from National Style to Modernism

This is the period that the influence of the western modernity together with the urge for redefining Iranian identity led to the design of buildings by Iranian and European architects, using elements of ancient Iranian architecture and European Neoclassicism.

4.1.1 First Pahlavi Period

First Pahlavi era is the first years of Iran's modernization. Architecture of this era began with eclectic fusions that yet emphasized on Iranian architectural style. It progressed into creating architecture of pure European style. In the beginning of the reign of Reza Pahlavi, Iranian architecture has mainly adopted pure ornamentations and symbols of Achaemenid architecture. This choice was done due to celebrating the ancient civilization and Iranian culture under the name of Nationalism by Reza Khan. Later on in this period, this architecture has moved to an era of neo classicism.

1. The Central Post Office, Tehran (1931)

This building is located in the district of Bagh-e-Melli, which was the most important district during the first Pahlavi era. This building is one of the first works of national style in Iranian modern architecture. Designed by Nikolai Markov, as Banimasoud (2009) describes, this building is currently known as the museum of Post and Telegraph. It is designed as a combination of Iranian ancient architecture, mainly

Persepolis motifs; and Islamic architecture with brick pointed arches. Persepolis motifs are mainly used on the façade of the building and especially on the columns on the corners of the building. Islamic arches are surrounding the courtyard on the porch on the second floor, which is very close to the motifs and details of Safavid architecture (figure 28). It is designed in a symmetric organization.



Figure 24: The museum of Post (formerly Central Post Office). Architect: Nikolai Markov (1931)
<https://way2pay.ir/96440/>

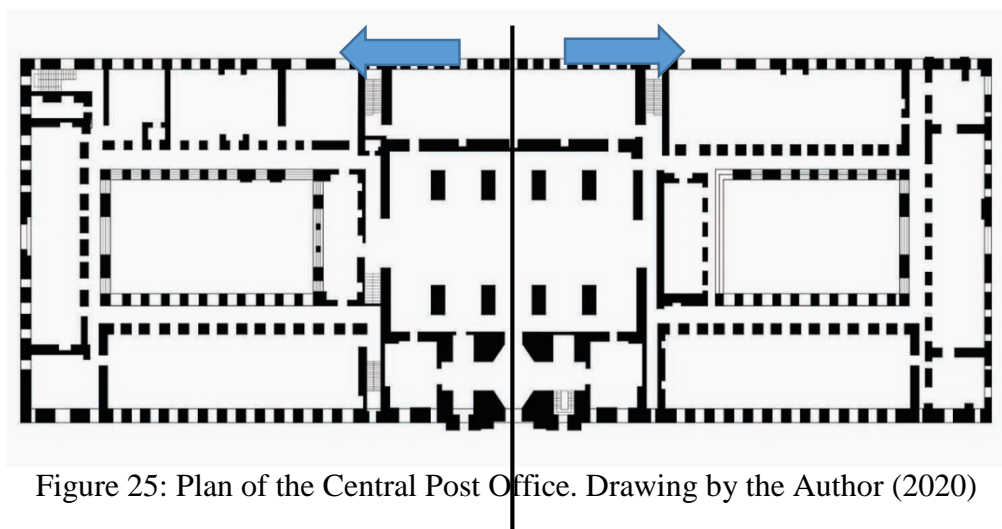


Figure 25: Plan of the Central Post Office. Drawing by the Author (2020)



Figure 26: Broader view of the building
<https://way2pay.ir/96440/>



Figure 27: Inner courtyard.
<https://way2pay.ir/96440/>

Analysis of the Facade

- **Style**

This building is one of the first projects that have been designed in the national style in Iran. The use of ancient Iranian motifs and Islamic arches has created a representation of bureaucracy (administrative governing system) and historicism.

- **Proportions**

This two story building consists of high ceilings and high openings. The heights of the building and openings, are both due to demonstration of power and authority of the new State (Pahlavi). As this building is within the group of buildings that represent the State and its power, such proportions in height would serve that purpose. On the other hand, the surface of this building facing the street is arguably long. This consistency on the body of the urban façade makes the project more dominant on the surrounding. The entrance is slightly higher than the other parts of the building.

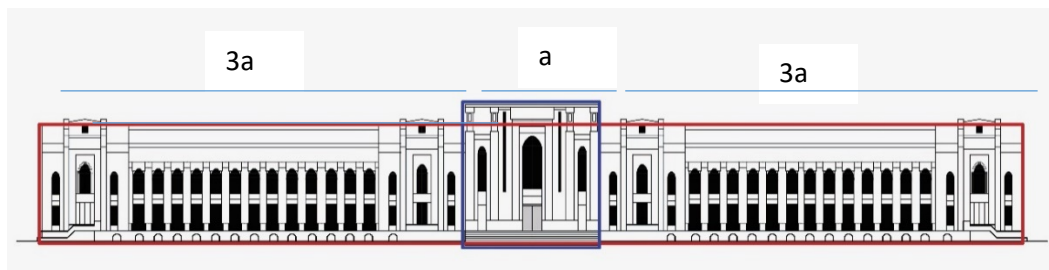


Figure 28: Proportions of the main façade. Central Post Office, Tehran. Drawing by the Author (2020).

- **Openings**

On the façade of the Central post office, openings are designed in a symmetrical manner. On the first floor, windows are in a simple rectangular shape, which represent the Achaemenid form of openings. However, on the second floor openings are within the form of pointed arches, which represent Islamic architecture of Safavid period.

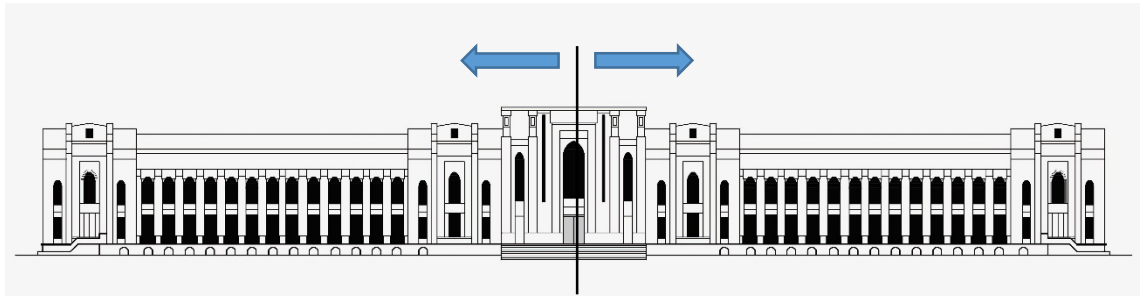


Figure 29: Openings on the Main Façade, Post Office, Tehran. Drawing by the Author (2020).

- **Used Materials**

The building is covered by red bricks. However, other materials such as wood and glass are also used in design of the façade. Wooden window frames, as a popular type of framing, and also doors are in harmony with the ochre brick. On the other hand, there is a limited use of stone in some elements on the façade. Brick is the most used material in Iranian traditional architecture, while stone is the material that has been used in the ancient Iranian architecture.

- **Ornamentations and Symbols**

There are two types of ornamentation and symbols used in this building. Decorative columns on the façade are ornamented by bull capitals resembling to the Persepolis. Also, wood work on the window frames, which are adopted from Islamic traditional architecture of Iran. These windows are embellished with colorful glass (figure 34).

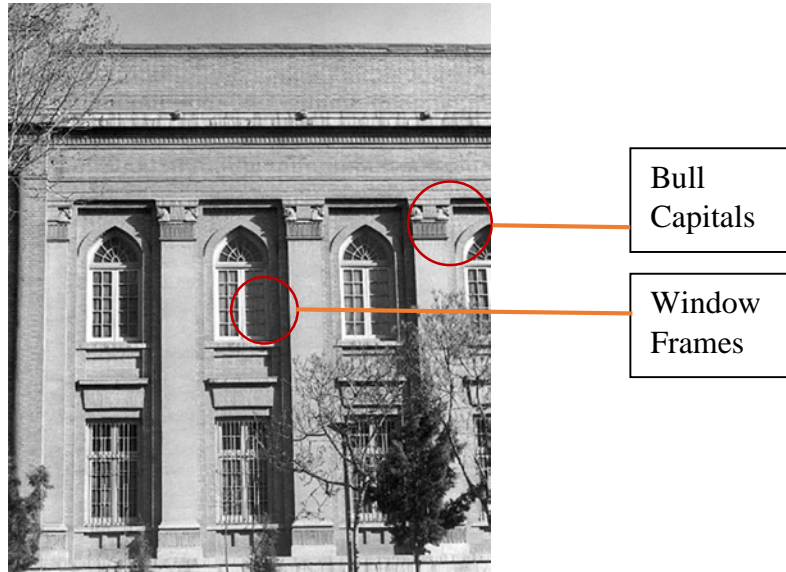


Figure 30: Use of bull capitals and minor stone reliefs on the façade, combined with pointed arches and traditional window frames.
<https://way2pay.ir/96440/>

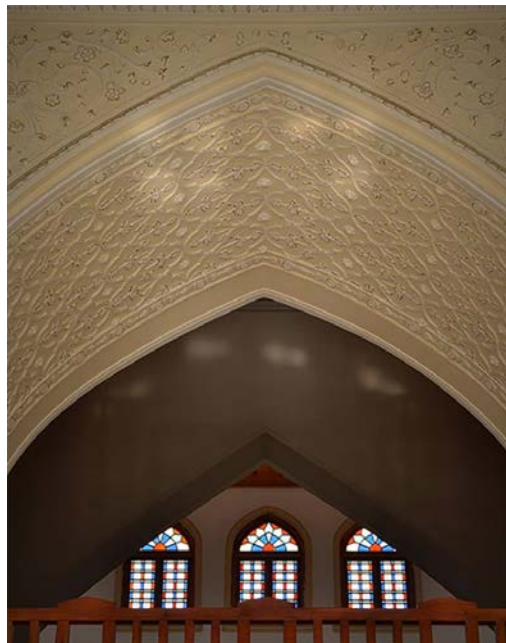


Figure 31: A close view of the wooden window frames and colorful glass from the inside of the building.
<https://way2pay.ir/96440/>

2. National Police Head Quarters, Tehran (1934-1937)

Mirza Alikhan Mohandes was one of the pioneers among the first generation of Iranian architects. National Police Head Quarters- also known as the palace of the police

office, was designed by Mohandes and was built between 1934 and 1937. In 2006, after five years of restoration, this building reopened as the Building Number 9 of the Ministry of Foreign Affairs. The E shaped plan of the building represents the European Neoclassic designs with administrative function (Figures, 36). The building consists of a basement and 2 stories with very high ceilings (Banimasoud, 2009).

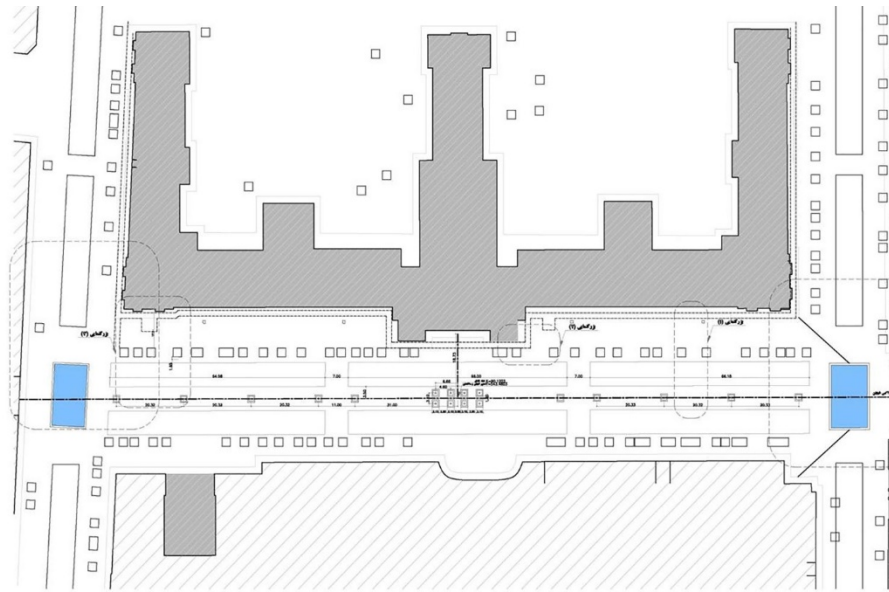


Figure 32: Police Head Quarters, Tehran. Top View.
<http://www.emaratkhorshid.com/>

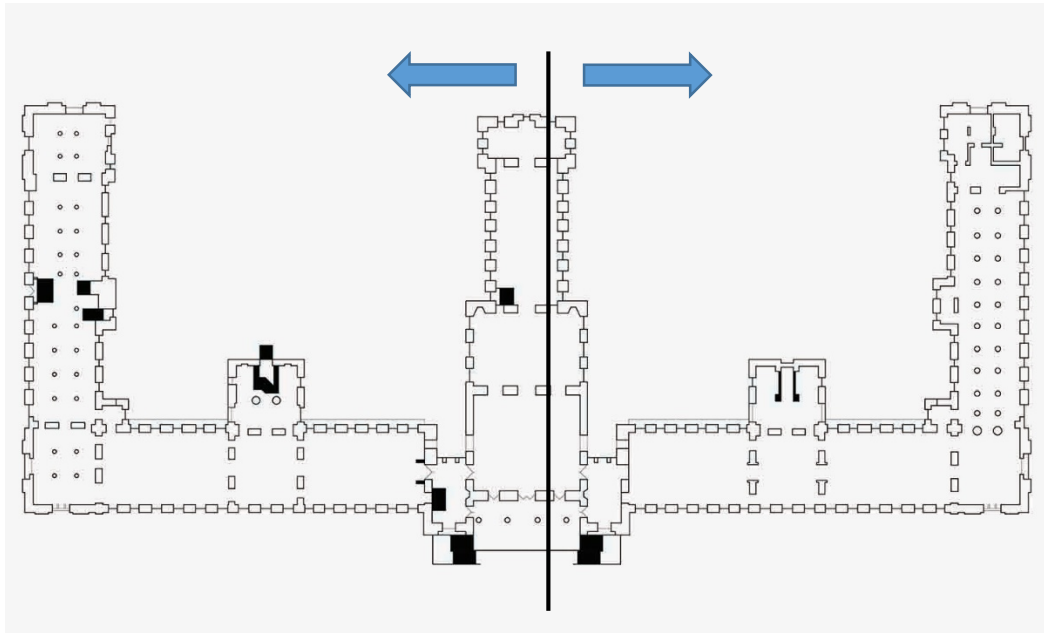


Figure 33: Police Head Quarters Tehran (1937). Schematic Plan. Drawing by the Author (2020)

The main entrance of the building is located on the axis of the symmetry of the building on the west façade. There are two other entrances on the north and south sides of the building. The main entrance is the most glorious part of the building, which has adopted the stairs, columns and capitals of Persepolis. Columns, capitals, and the details of ornamentations of the windows, which are the best examples of the national style in first Pahlavi era, are all made by the use of the ornamentation elements of the palaces of Persepolis (Bani Masoud, 2009).

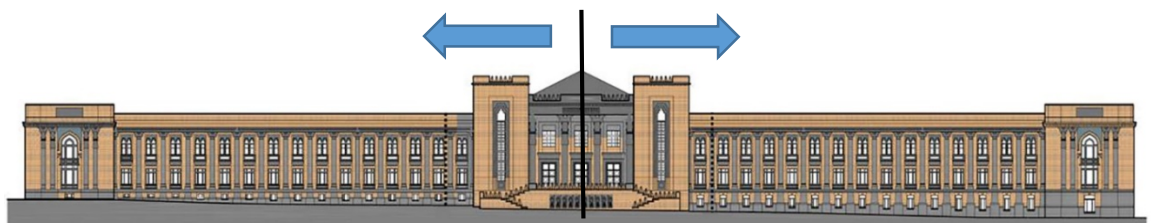


Figure 34: Police Head Quarters, Tehran Main Façade.
<http://www.emaratkhorshid.com/>



Figure 35: Police Head Quarters. Details of the ornamentations on the façade.
<https://www.trekearth.com>



Figure 36: Ornamentations adopted from Persepolis.
<https://commons.wikimedia.org/wiki/File>

Analysis of the façade

- **Style**

This building is designed according to a Neo Classic plan organization. Inspired by the sense of Nationalism and Bureaucracy it represents the power of state with an ancient

historical background. In general this building is known to be designed in Iranian Neoclassical or National style.

- **Proportions of the building**

Remaining documents related to this project do not mention the exact height of the building. *However, according to the images and limited existing documents, this building's height is in a significant proportion comparing to human scale.* Entrance of the building is the most important part of the façade. Staircases that exactly imitate Persepolis in terms of form and ornagements, lead to a high veranda (Figure 43). The building is designed in a symmetric manner. All the elements on the façade- including openings, ornagements and symbols- are symmetric and repetitive. This proportional choice is reflecting the bureaucratic state of Reza Pahlavi.

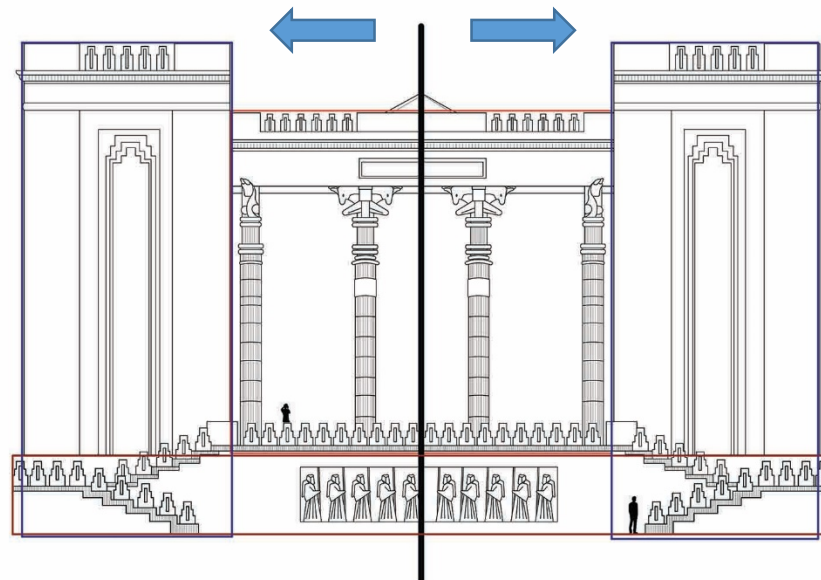


Figure 37: Proportions and human scale. Drawing by the Author (2020).



Figure 38: Police head Quarters (1937), Main entrance. Tehran. Architect: Mirza Alikhan Mohandes.
<http://1host2u.com/?ez=6502>



Figure 39: Persepolis, Tachara Palace. Details of the symbols, reliefs, propositions, and motifs.
<https://www.civitatis.com/en/shiraz/persepolis-trip/>

- **Openings**

There is a main entrance of the building is the most defined and ornamented part of the building. The proportions and ornamentations on the entrance create a reflection of the power of the state and military authority. Other openings, windows, are also in quiet large proportions, which are in harmony with the proportions of the building.

Openings on the main entrance are ornamented by the exact same patterns as the openings of the Tachara palace in Persepolis.



Figure 40: Openings on the main façade of the Police Headquarters, Tehran.
Drawing by the Author (2020).



Figure 41: Main façade of the building, displaying the openings of the building.
From Azar Consulting office Archive (2009).



Figure 42: The openings on the main entrance of the building.
<http://www.emaratkhorshid.com/>



Figure 43: The original reliefs and entrances of Tachara Palace.
<https://www.mediastorehouse.com/>

As it can be seen in figure 48 and figure 49, the exact adaptation of the entrances from Tachara Palace on the building of Police Headquarters is an advocate for Iranian National style.

- **Used Materials**

Materials used on the façade of the Police Head Quarters includes brick, stone, glass, and wood. Use of stone on the façade had emphasized the impression of Achaemenid architecture.

- **Ornamentations and used Symbols**

Ornamentations of the building are directly copied from the Palaces of Achaemenid Palaces in Persepolis. On the entrance veranda columns with Bull Capitals of Apadana Palace, and on the front side of the stair cases there are bas-relief forms of the entrance of Tachara. These reliefs include the human figures and lotus flower.

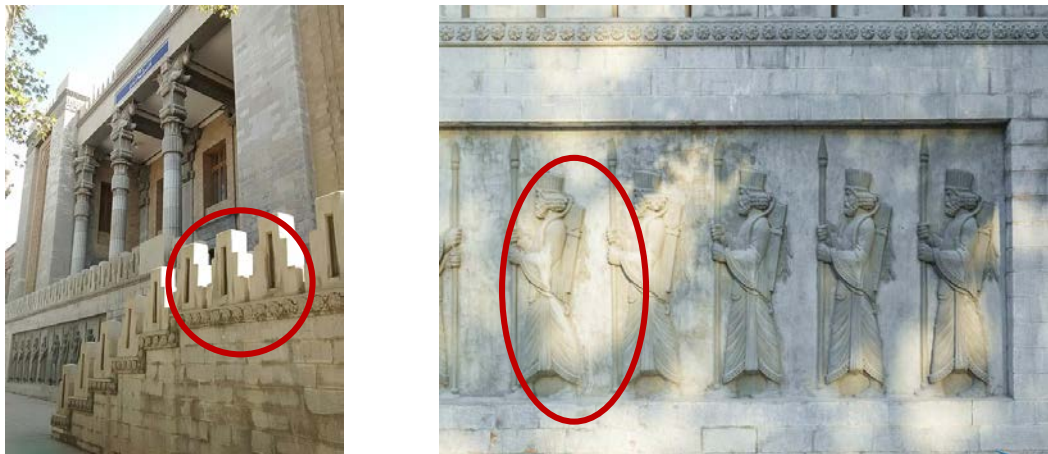


Figure 44: Details of ornamentations and symbols.

www.kojaro.com



Figure 45: Persepolis ornamentation details adopted for the design of Police Headquarters Building

<https://www.messagetoeagle.com/tale-ajori-excavations-in-fascinating-ancient-city-of-persepolis-iran/>

There are geometric motifs adopted from Persepolis palaces, used on the veranda and stair case. Moreover, shape of the front windows are inspired by the same motif.



Figure 46: Tachara Palace. Drawing by Charles Chipiez. Similarity of details and motifs in architecture of this palace is traceable in the building of Police Headquarters of Tehran.

<https://brewminate.com/persepolis-ancient-ceremonial-capital-of-the-achaemenid-empire/>



Figure 47: Details of the ornamentation on the building.



Figure 48: An example of Eslimi motifs in used in Iranian books, scripts and building ornamentations.

However, there are other ornamentations used on the façade of the building. Colored glass is applied in the traditional style known as Orosi. Moreover, there are delicate tilework with Persian motifs of Eslimi, used on top of the openings, covering the pointed arches. The use of Eslimi motifs is visible on (figure 54). Moreover in (figure

55), an example of Eslimi motifs shows the similarity of the existing motifs on the building with this category of ornamentation on Iranian traditional architecture.

This building reflects a National style in the urban scale, which mainly reminds of the Achaemenid Architecture. On the other hand, in a closer look the building includes a number of very well-known motifs that are adopted from Iranian traditional architecture. Therefore, it remains in the memory of the citizens as a bureaucratic architecture.

4.1.2 Second Pahlavi Period

While the works of the former group were more eclectic in nature, borrowing particular elements from pre-Islamic architecture, the second group had a more holistic approach. Particularly active during the last three decades of the Pahlavi regime, they attempted to create a dialogue between traditional and modernist architecture. At the same time they shifted their attention from pre-Islamic architecture to those styles that flourished in Iran after the arrival of Islam. Represented by Iranians such as Houshang Seyhoun, Kamran Diba, and Hossein Amanat, this group particularly tried to employ Persio/Islamic elements and concepts to create a common language which could link modern architecture with traditional Iranian designs. Their style is exemplified by the mausoleum of Nader Shah in Mashhad, mausoleum of Khayyam, and Kamal-al-Molk in Nishabur, as well as Azadi Tower, Museum of Contemporary Art, and Niavaran Cultural Center in Tehran. This period was the starting point for prioritizing the secularization in Architecture.

1. Old Senate (Second Pahlavi's Icon)

This building is an icon of modernization in the period of transition from eclecticism, this project has been designed completely in modern style. Among all of the works of the Second Pahlavi era, the Senate Building (1952-1955) has become a symbol of Mohammad Reza Shah's ambition for modernization (Figure 56 & 57). This project was designed by Mohsen Foroughi in collaboration with Heydar Ghohli Khani Ghiaï-Chamlou, and Andreh Block, a French sculptor (Bani Masoud, 2015). To have a senate building or parliament, as a phenomenon of modern culture, was an effort for changing the former dictatorial system. It was among the first moves towards establishing a Western democracy within the Middle East. The old Senate building demonstrates the Second Pahlavi's ambitions towards modernization of Iran's governing system, architectural image, and also its identity.



Figure 49: the Old Senate of Tehran. Left: main façade: Right: face towards the backyard.

In order to deliver maximum daylight inside the building, its main facade of is covered by glass. However, in order to prevent the overheating of the building, it has utilized an enormous rectilinear concrete frame, reminding of Le Corbusier's modular system in Claude & Duval factory in France. The main hall is cover with Achaemenid decorative features and is surrounded by electrical portable curved walls. Moreover,

its ceiling is covered by a unique transparent semi-dome, which is considered the first suspended cable structure in Iranian architecture. The hanging gold abstract chain-like columns at the main gate inspired by the symbol of Justice in ancient Sasanid art, Anoushiravan Dadgar (figure, 50).⁸



Figure 50: Khosro Anoushiravan, the Sasanid King, known as Anoushiravan Dadgar. Left: In the Sasanid palace at a debate. Right: Relief on the Supreme Court building of the first Pahlavi architecture.

<https://kheradgan.ir/>

Analysis of the Façade

- Style

This building is designed in a pure modern style. Use of simple geometric forms and patterns and the combination of concrete and glass is the major indicator on the modern style of the building.

⁸ Bani Mas'ud, *Iran Contemporary Architecture*, 254-257.



Figure 51: Senate of Iran, as the icon of the modern country (left) was also used in the design of 100 Rial bill after the Islamic Revolution (Right).
<https://fa.wikipedia.org/wiki>

- **Proportions**

Senate building is a massive structure with 4 stories. Comparing to human scale, the building's height is a sign of the empowerment of the nation. Main façade of the building is symmetrical and it is standing on a platform. This platform is reached by the visitors by steps that elevate the massive building from the ground level. The proportions of this building are in close relationship with its function and also a symbolic gesture to picture the power of the nation.

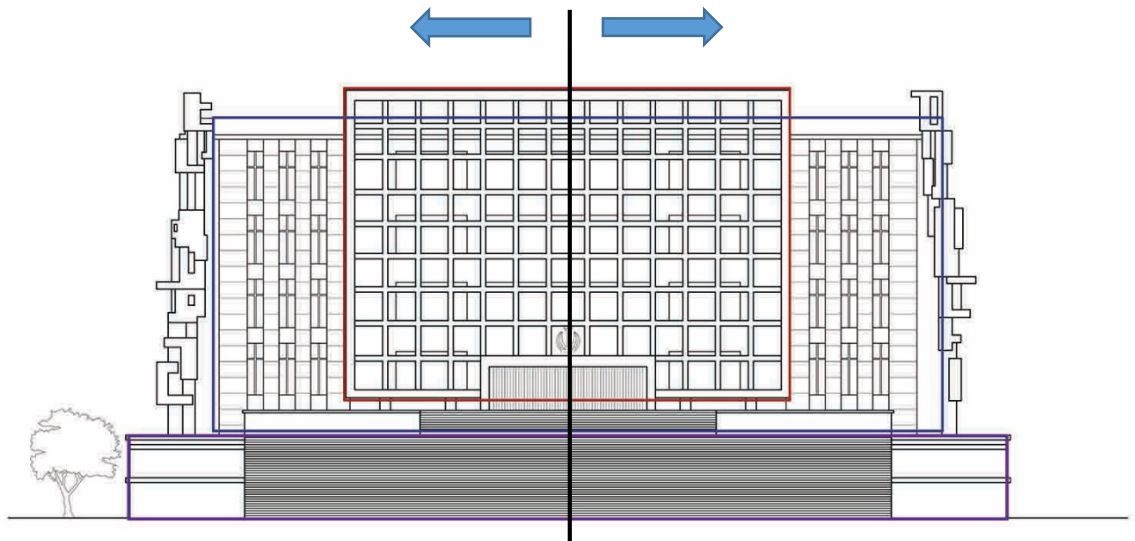


Figure 52: Proportions of the Old Senate of Tehran. Drawing by the Author (2020).

- **Openings**

The openings on the façade are in simple rectangular shape. Pure modernist design of the windows and openings has made the building unified. Mainly, openings are semi-hidden behind a concrete net.

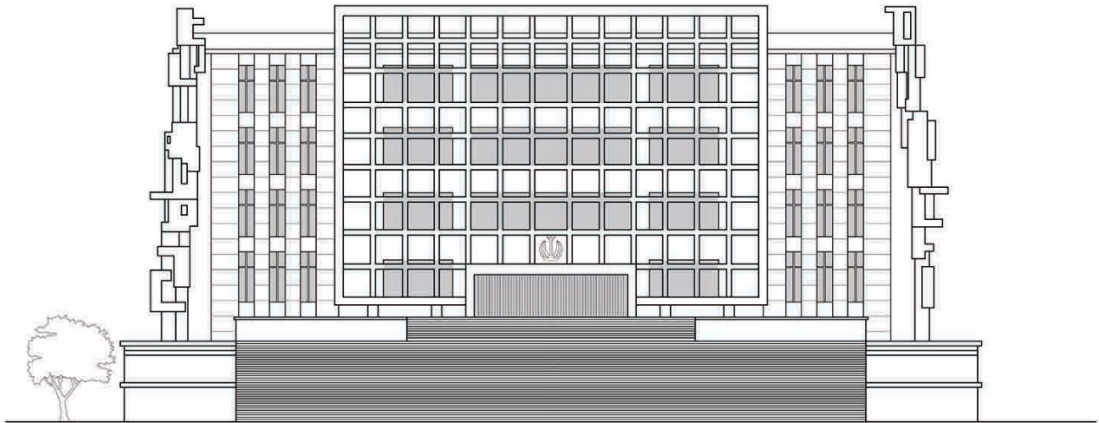


Figure 53: Openings on the main Façade. Old Senate, Tehran. Drawing by the Author (2020).

- **Used Materials**

The main used material on the façade of this building is concrete. Since this building is designed as a purely modern building, the choice of material is based on the design. However, there is glass and also minor use of stone on the façade.

- **Symbols and Ornamentations**

There is no ornamentation on the façade of this building. The only symbolic element on this building is a pair of statues that represent an abstraction of the form of a chain. This chain is referred to be the chain of justice for Anoshiravan Dadgar, the Sasanid King of Iran (figures 64 & 65).

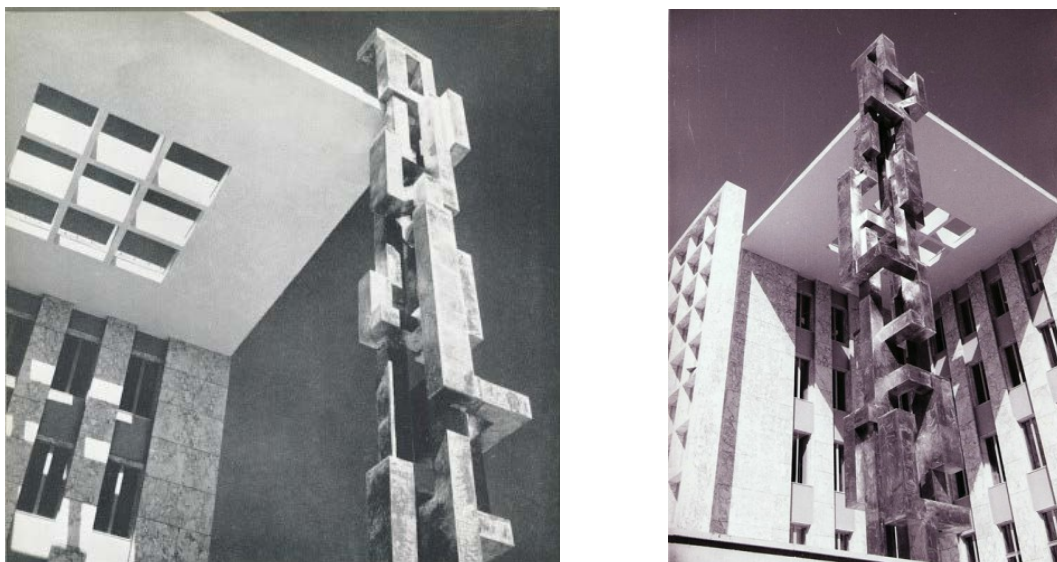


Figure 54: the Statue attached to the façade of the Old Senate, Tehran.

As the figures (64 & 65) demonstrate, the two chain statues that are attached to the building of Old Senate are in harmony with the modern style of the façade. This harmony is to the extent that these statues have become a part of the building.

2. Tehran Museum of Contemporary Arts

Design and construction of this museum has taken approximately nine years. Tehran Museum of Contemporary Arts is one of the significant projects of the second Pahlavi era, because it represents the tendency towards modernization while the architect paid attention to the traditional Iranian architecture as well. As Banimasoud (2009) mentioned, architecture of this building was under the influence of architects such as Louis Kahn, Frank Lloyd Wright, Le Corbusier, and specifically the work of Josep Lluís Sert, and also the inspiration by the roof tops of the Iranian architecture of the hot and arid climate.



Figure 55: an overview of the museum

<https://www.kojaro.com/2016/2/28/117399/garden-sculptures-of-modern-arts-museum/>

Tehran's Museum of Contemporary Art (TMOCA) is located on the west of Laleh Park, facing Kaargar Avenue. The main entrance directly faces Kaargar Avenue while the secondary entrance opens from the park and serves as service entrance. The building mass stretches towards the main street and its volumes is standing on the street side.

The mass mainly stands on a massive base and holds multiple skylights at the top of the building. The stone base created a back and forth movement, providing rectangular solid shapes that are covered by half-cylinders on the top, capped with skylights. The back-and-forth placement of similar volumes creates diversity in the exterior appearance of the museum. The building fragments are clearly visible and make it a 'lavish composition.

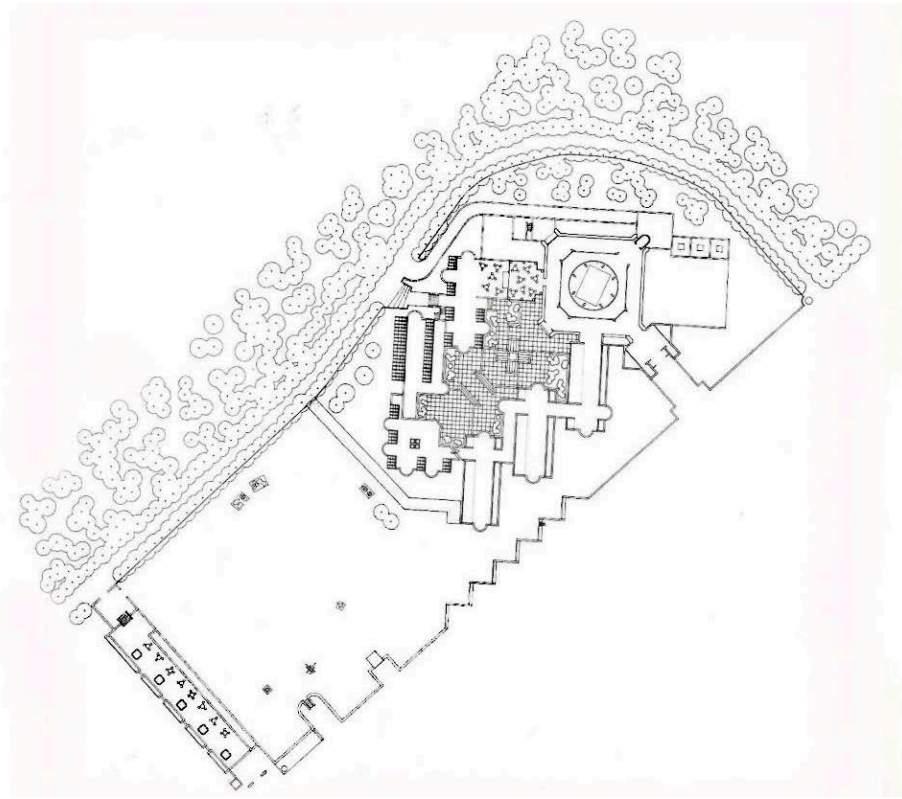


Figure 56: the Plan of TMOCA

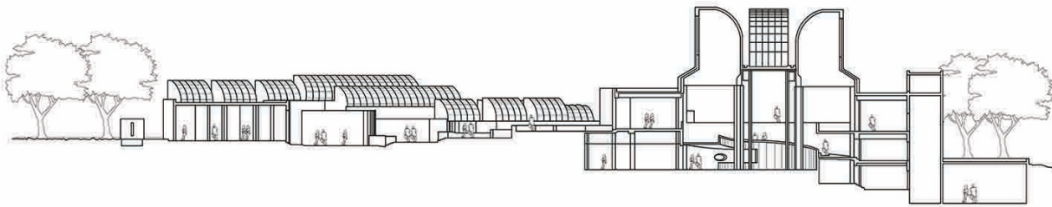


Figure 57: A section-elevation demonstrating the façade and formal combination of the museum. Drawing by the Author (2020).

Analysis of the Façade

- **Style**

This museum was a totally secularized design. The important point is that Diba tried to use an interpretation of Iranian traditional architecture. The design includes

abstraction of the wind catchers. However, this approach does not make his design traditional, he tried to have a regional approach and a modernist style.

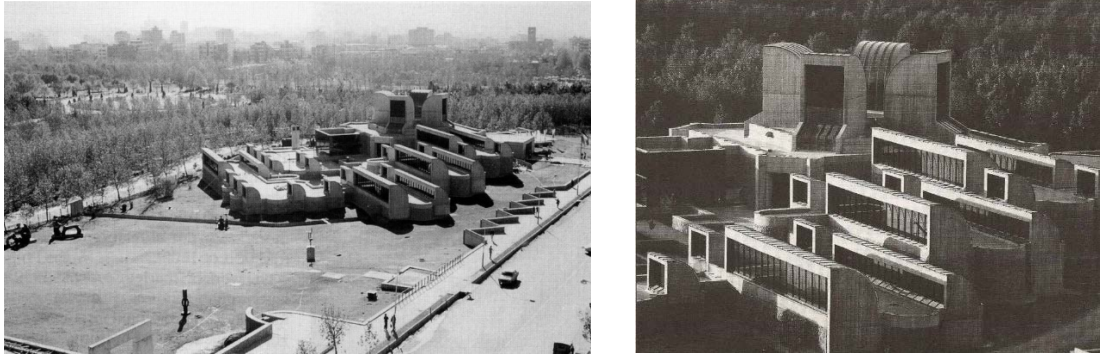


Figure 58: Mass and openings of the Tehran Museum of Contemporary Arts

- **Proportions**

This rotation implies turning from, or backing the main avenue on the west. The western neighbor of the museum—the avenue, or the ‘symbol of the city and society’—is thus ignored in spite of serving the museum better than the park. The building lies unlearned to its adjacencies, looking toward an indeterminate location in the distance.

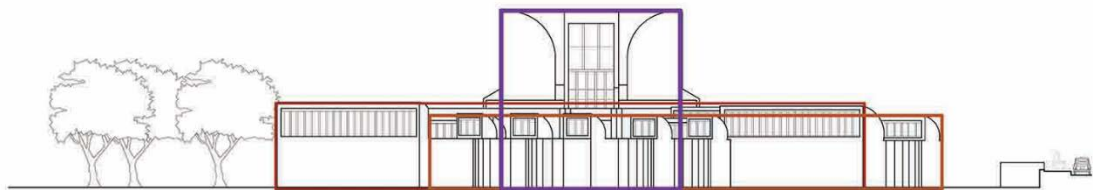


Figure 59: Proportions of the building. Generally building is designed in two levels as visible from the outside. Drawing by the Author.

- **Openings**

All of the skylights face the north-east, like a whole crowd who is watching enthusiastically an interesting display at the far distance. The orientation of the skylights plus the positioning of the rectilinear galleries makes the building seem as

being rotated towards the North-east. The walls of the museum are closed off, mainly without openings, suggestive of bulky and massive walls of a fortress. This gives it a tone of impenetrability, strength, mystery and introversion. Like many of Iranian traditional introvert buildings, the connection of the museum to the urban passageway is only via its main entrance.

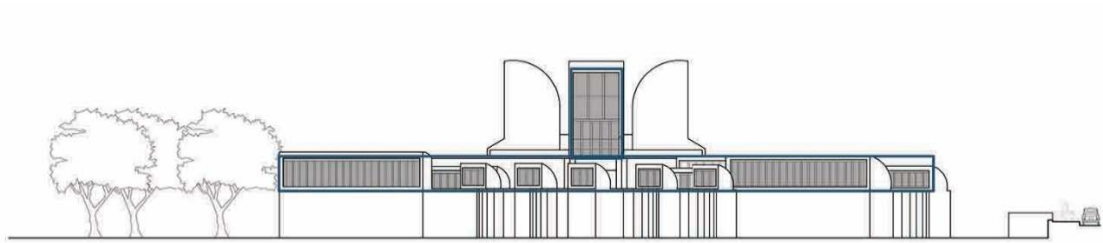


Figure 60: Openings of TMOCA building. Drawing by the Author (2020).

- **Used Material**

The façade is designed with light warm colored concrete and yellow stones. Skylights are covered by dark glasses that give the bulk of the form a slight touch with creating a mild contrast. Moreover, the top of the skylights masses are covered by copper. At the bottom, the façade is covered by stone, which also is in a light warm color range. Use of concrete and glass is a direct sign of a modernist approach to the design of this project. On the other hand, choice of warm colors is in harmony with the major source of inspiration is the design of the form. This building includes abstract forms taken from the wind catchers of the hot and arid climate's architecture in Iran and thus warm colors on the façade are the best choice.



Figure 61: combination of Stone, Concrete and Glass in the design of TMOCA.
<https://ocula.com/institutions/tehran-museum-of-contemporary-art/>

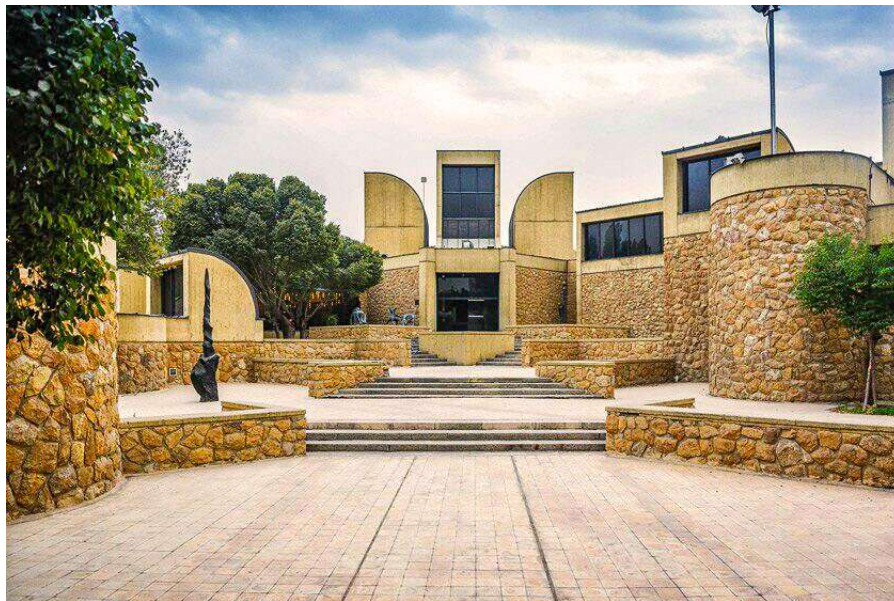


Figure 62: harmony in the choice of color creates visual attraction and harmony with the major inspiration of the abstraction of the architecture in hot and arid climate.

- **Ornamentations and Symbols**

As it is seen in the general form of the building, the most symbolic part of the building is the element that includes an abstract form inspired by the wind catcher (figure 75). This element is repeatedly used in the design of the project. This repetition among the bulk of the building creates a view similar to the urban silhouette of the cities of the

hot and arid region in the country. The main design approach is a modernist look at Iranian traditional architecture. Therefore, ornamentation is not included in the design of the façade.

However, the museum sits on a vast site covered by green grass and plantation, which is the home for numerous sculptures from the works of well-known Iranian and international artists. Known as the Garden of Sculpture, although this site is not presenting specific symbols but it presents art to complete the view to this building more connected with the urban environment.

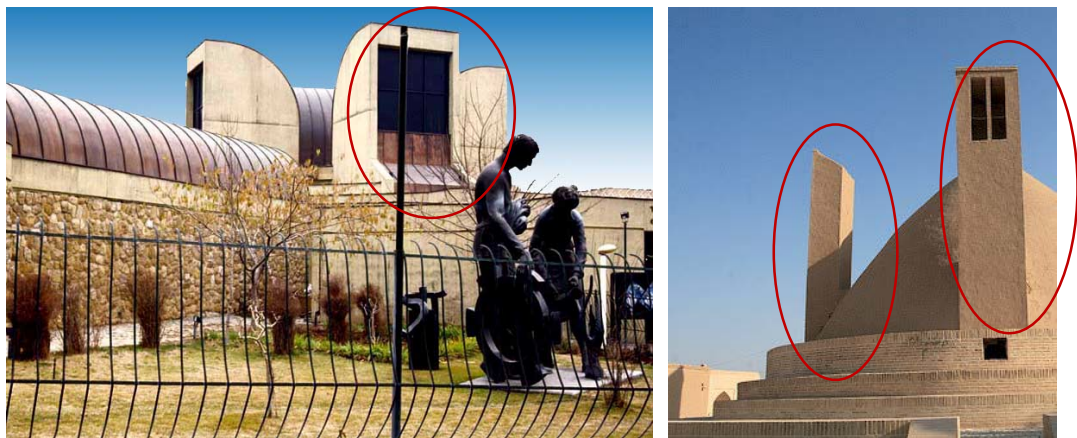


Figure 63: An urban view to the museum and the garden of statues
<https://www.kojaro.com/2016/2/28/117399/garden-sculptures-of-modern-arts-museum/>

Tehran Museum of Contemporary Arts (TMOCA) is considered as one of the best examples of the approach of the second Pahlavi in the design of public buildings. Both function and architecture of this building represents some of the major priorities in terms of the development of the country in line with its modernization and social and cultural evolution.

4.2 Façade Design in Post-Revolution Era: Fusion of Islamic and Modern Architecture (1979- Present)

The pre-revolutionary condition in Iran underlined that architecture can be working as a medium of “display”, which reflects sets of values. Nevertheless, its message is very powerful was also able to create a radical force contributing to social change. Possibly, these events remind of Le Corbusier’s insight towards architecture and revolution:

“It is the question of building which lies at the root of the social unrest of today” (Le Corbusier,1970).

However, as Neil Leach pointed out, a correct architecture would struggle the social discontent and it is capable of preventing revolution. Thus, it could be said that as the modern architecture in second Pahlavi era contributed to the project of modernity, it was one of the advocates of the drastic change in which society had not much favor.⁹

The fusion of Islamic and modern architecture had started by 1979, after the establishment of the Islamic Republic of Iran. Banimasoud (2009) argued that after the revolution, Iranian architecture had faced two parallel phenomena: first, the impact of the works of second Pahlavi architects who intended to create a relationship between modern architecture and Iranian culture and traditions. Second, rooted in the culture and civilization of the West, was the recognition of the postmodern classic movement by the Iranian architects. This movement had begun during 1960s and 1970s in the West. The main concern of this group of architects was to create an independent identity for Iranian architecture. Therefore with their various tendencies such as pure traditionalism, regionalism and localism, high modernism (high rise buildings,

⁹ Leach, "Architecture and Revolution," 114.

commercial and service projects), combination of Iranian concepts with modern technologies, high tech, neo-modernism, and computer aided architecture.

However, in the architecture of public buildings there are lots of examples that emphasize on promoting the elements, symbols and methods of Iranian traditional or Islamic architecture.

1. National Library of Iran (1993)/ Tehran

The original national library building, located centrally in Tehran next to the National Iranian Museum (the Ancient Iran Museum, as it was called before the 1979 Islamic Revolution). The Godard building served until the demise of the Pahlavi regime in 1979 and later, in the revolutionary period, until 2005. When the Islamic Revolution came in 1979, the National Library of Iran was in a rather dismal state.

The idea for an entirely new building to house the national library goes back to the mid-1970s during the short-lived economic bonanza arising from the oil shortage at that time and the King's weakness for all things Western. The new library was no longer to be called the National Library of Iran, but the Great Pahlavi Library. This project extended beyond the provision of a new library to embrace a gigantic city planning project covering an area of 5 000 000 square meters, virtually a city within a city. The aim was to consolidate government ministries in one location and provide a showcase for the Pahlavi dynasty. Also proposed was a massive urban park, the largest in Asia, which was to have areas simulating the five climatic zones of the world.

The new building is described by the architect as an 'intelligent building' because of the level of modern technology employed. While employment of such technologies in

developed countries is a common practice these days, it is a novelty in Iran. A centralized locking system and CCTV cameras have the electrical, water, and gas systems under constant surveillance.



Figure 64: National Library of Iran
<https://safarzon.com/mag/>

National library of Iran is a building designed with a modern outlook. The use of brick and concrete as the main materials is an evidence of combining traditional and modern materials. Islamic and traditional motifs have been used and minimally interpreted in order to advocate the Islamic- Iranian identity of the building as a national and public property of the state.

There is a courtyard that is not identifiable from the outside of the building, around which brick covered surfaces are located. The use of simple geometry in creation of motifs on the ceilings and columns are representations of the carvings in Iranian traditional architecture named as Moqarnas (figure 77).



Figure 65: A view to the inner courtyard displaying the columns and façade details
<https://safarzon.com/mag/>

This fusion gives a message of acceptance of modernity with the state's terms. It represents Iran as an Islamic country with a specific architecture with a historical background that is also open to the advancements of the modern world; using modern and traditional architectural features to create a new identity.

Analysis of the Façade

- **Style**

National library of Iran is designed with a simple and minimal form. On the façade, there are mainly horizontal lines that remind the viewer of a very modern minimalistic form with an international identity. Therefore it can be said that the style of this façade is modern.

- **Proportions**

Considering the general size of this project, the building is modest in terms of its height. It is already located on the height of Abas Abad hills, which gives the building a dominant position. Therefore, the building is reached by stairs on a high level, but it

sits on that level and is spread horizontally. These proportional values will give the visitors a sense of friendliness. Although it is not a high rise building, but it is a large building in terms of human scale. Basically the building is designed based on symmetric portions. But, on the façade it is not perceived as a symmetric building.

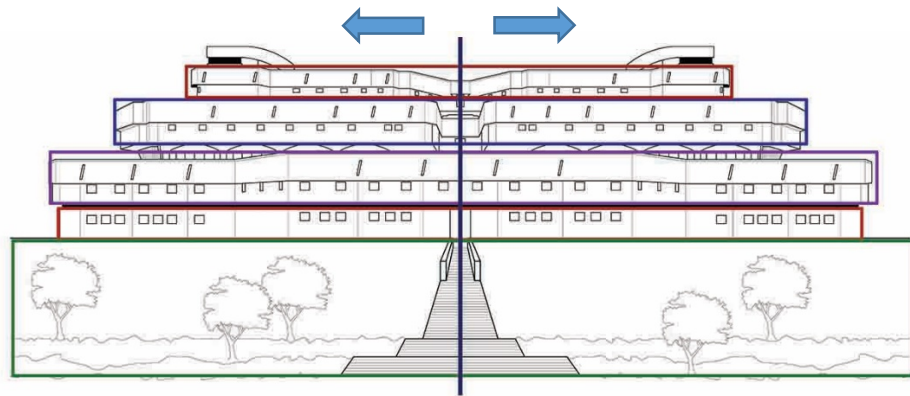


Figure 66: proportions on National Library on the main façade. Drawing by the Author (2020).

- **Openings**

The openings on this building are mainly small in proportions. The size of the openings is a reminder of the architecture of hot and arid climate in Iran. The existing long and linear balconies had helped to hide the openings to be seen on the façade of the building. On the other hand, the main entrance of the building is located without a specific emphasis on its position. This decision makes the building more inviting for the public to feel that no authority or higher position is in control of this place.

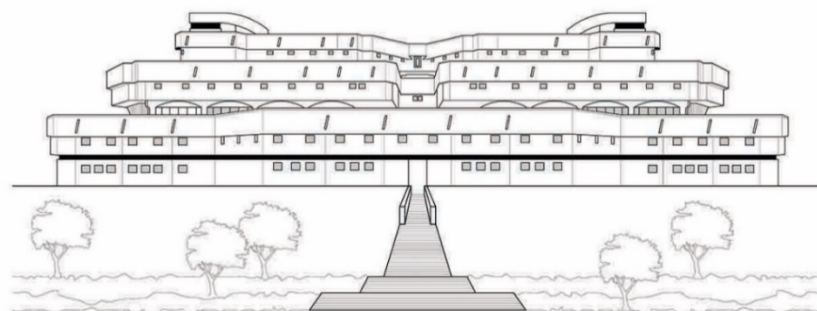


Figure 67: Openings on the façade of national library. Drawing by the Author (2020).

- **Used materials**

This building is covered by ochre brick, Grey Stone and glass. Red brick is directly adopted from traditional Iranian architecture. Although the red tone used in this building is a more modern choice of this material.



Figure 68: Brick and Stone on the façade of the National Library
<https://safarzon.com/mag/>



Figure 69: The dominant element on the façade of this building is the Ochre Brick.
<http://etood.com/NewsShow.aspx?nw=4824>

It is worthy to mention that the general look of the building and also use of ochre brick has given the building similarity to ancient monuments such as Zigurat.



Figure 70: Tchogha Zanbil Zigurat, Khuzestan Province, Iran.
<https://www.tasnimnews.com/>

- **Ornamentations and Symbols**

Ornamentation on this building is not in a scale to be seen on the façade of the building. The main façade is a simple modern design. On the main entrance there is an inscription designed with tiles with simplistic geometric motifs and color combination that represents the tile works of Islamic architecture. However, entrances to the courtyard include abstract forms inspired by Moqarnas, which is very popular in Islamic architecture as a structural and aesthetic element. These elements are performed with concrete in the National Library building.



Figure 71: Tile work on the entrance of national library of Iran
<https://safarzon.com/mag/>



Figure 72: An exterior view of the capitals and columns as an abstraction of Moqarnas from Islamic architecture.
<http://www.caoi.ir/en/>

2. The Center for the Great Islamic Encyclopedia (The House of Love and Faith), 1990-2006/ Tehran

The Center for the Great Islamic Encyclopedia was established in 1983 to realize its goal of spreading awareness of Islamic ideology. This center was founded through the work and management of Seyed kazem Mousavi Bojnoordi (figure 85). It is one of the large scale public projects that represents the Islamic state in the capital.

To accomplish this task a site was selected in Darabad district in Tehran. Since 1991, the modifications of the original structure began. Also, coordination in the creation of mechanical and electrical facilities of the structure was executed through the efforts of the Herampey Consulting Engineers Company.



Figure 73: The initial concept of the project (1990).
<http://archline.ir/>

The project includes two relatively separate buildings. Each building consists of three stories and each floor is designed for a specific function. This house of love and faith looks quite strong and it is inclusive.



Figure 74: Main façade of the Center for the Great Islamic Encyclopedia
<http://archline.ir/>

This project is designed using multiple principles and symbols of Traditional Iranian architecture. As it is displayed in the plan and site plan of the project, these patterns have been used for designing the plan organization that also reflects on the architectural mass. However, the building is not completely presenting a traditional building (figures 86- 88).



Figure 75: Site Plan.
https://archnet.org/sites/4679/media_contents/18693

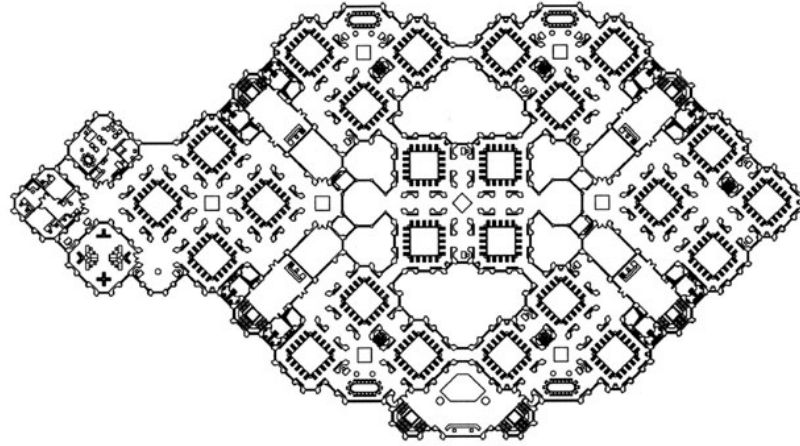


Figure 76: Plan.

https://archnet.org/sites/4679/media_contents/18693

Use of traditional Arches, central courtyards and traditional motifs and ornaments is a contribution to the main function of the project. The most different element used on the building façade is glass. Glass is the material that has not been popular in traditional architecture. Window frames are simple rectangular forms, representing the form of openings within the frames of the traditional arches in traditional buildings.

Symbolic representation of wind catchers is also visible in the design of this project. The most modern aspect of this building is the use of high technology in its construction and facilities. Other than that, the outlook and façade of the building is precisely designed to represent Iranian traditional and Islamic architecture and their features.

Analysis of the Façade

- **Style**

The design of the façade represents Iranian traditional and Islamic architecture. It is a combination of modern technologies and traditional Iranian architecture. Use of the abstract form of the wind catcher in project has also been with abstraction. However,

this abstraction is not extreme and still keeps the characteristics of the traditional Iranian architecture. Façade of the building shows a very dense mass, which regarding the large scale of the project represents an urban view.



Figure 77: a general view on the main façade of the project.
<http://raahak.com/?p=9027>



Figure 78: density in the urban context of Yazd, a city in the hot and arid climate of Iran. Wind catcher is an important element in this climate.
<https://www.wipolo.com/en/destination/1146320/yazd.html>

- **Proportions**

The most significant feature on the proportions is related to the density of this project. This density has caused the creation of several vertical lines on a horizontally wide spread project. Although the building is not very tall, but this density gives a visual power to the building.



Figure 79: Proportions of the building on the Main façade. Drawing by the Author (2020).

- **Openings**

Openings on this building represent both modern and traditional forms of the openings. Some of the windows and doors are placed under pointed arches and the rest, proportionally and formally, resemble Iranian traditional styles. Openings on the main façade are very high and give the impression of glory and greatness. On the other hand, openings towards the inner courtyard is representing a sense of closeness and intimacy.

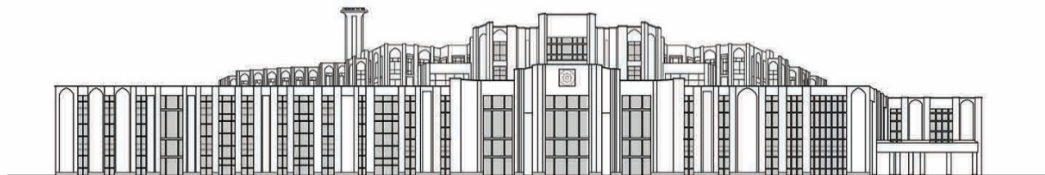


Figure 80: Openings on the main façade. Drawing by the Author (2020).



Figure 81: Proportions and location of the openings on the main façade.
<http://www.caoi.ir/en/>



Figure 82: openings towards the inner courtyard.
<https://cgie.org.ir/fa/news/130155>

- **Used Material**

The main material used in this project's façade is brick. The red color of brick is creating warmth and a welcoming essence to the visual presentation of this building. It also directly presents the Islamic and traditional architecture of Iran. Openings are covered with dark glass, which create a smooth combination with the red color of

bricks. Minor use of stone is also visible at the bottom of the building. This use of stone also simulates the style of traditional Iranian architecture.



Figure 83: Main used material on the façade is brick.
<http://www.caoi.ir/en/projects/item/642-the-center-for-the-great-islamic-encyclopedia.html>

- **Ornamentations and Symbols**

Ornamentations on this building include pointed arches, on the façade, and very basic brick work (Herreh). On the entrance of the building the logo of the encyclopedia is located in the form of an inscription by Persian tiles using colors that represent Islamic ornamentation. There are also some pointed arches on the entrances to the inner courtyard.



Figure 84: Pointed arches.
www.caoi.com



Figure 85: minor tile work (on the left), abstraction of the form of wind catcher (right) in the design.
www.caoi.com

4.3 Concluding Remarks

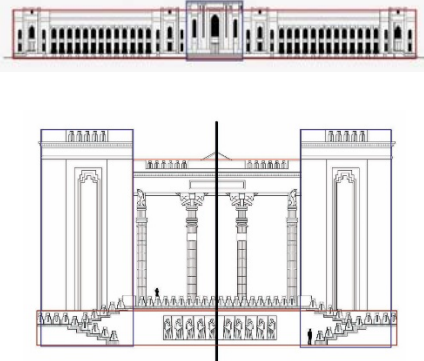
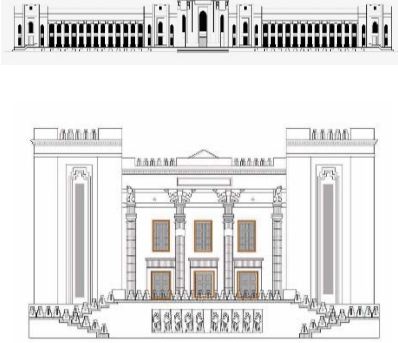
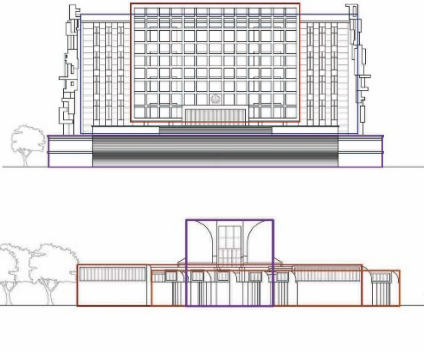
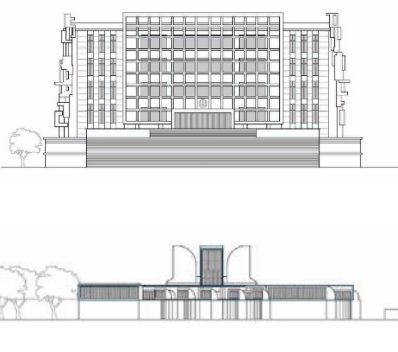
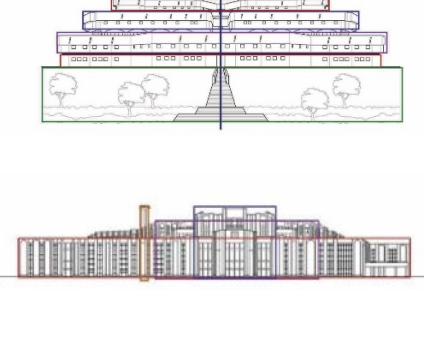
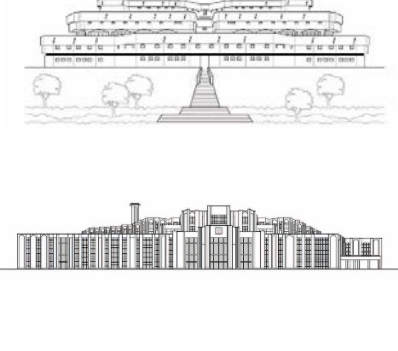
During the past 100 years, which is identified as the timeline of the modernization of Iran, architectural production has faced many changes in order to find its new identity. During each period and throughout each phase of the development of Iranian modern architecture, public projects have strongly presented the state prevailing policies to the nation. Therefore, during each period façade of this category of buildings is a reflection of change in the idea behind each period's prevailing policies and social-cultural transformations. On the other hand, the approach towards using the elements or features of Iranian ancient and traditional architecture is evident for the struggle

between full acceptance of modernity and the tendency towards tradition. The tables below present the extracted results from the case study.

Table 2: Tendencies toward the stylistic features in three periods of modern architecture

Main Phases of Change	Historical Period	Style	Used Materials	Ornamentations and Symbols
Modernization	1 st Pahlavi 1925-41	<ul style="list-style-type: none"> • Adaptation of Elements of Iranian Architecture • European Neoclassicism • National Style 	<ul style="list-style-type: none"> • Stone • Glass • Brick • Wood 	<ul style="list-style-type: none"> • Stone carvings and statues • Tile work • Persian Motifs • European Motifs • Eslimi (tile Pattern) • Colorful Glass
Secularization	2 nd Pahlavi 1941-79	<ul style="list-style-type: none"> • Pure Modernism • Interpretation of Iranian architecture in modern forms and materials 	<ul style="list-style-type: none"> • Concrete • Stone • Glass • Copper 	
Fusion of Islamic architecture and Modernism	After 1979	<ul style="list-style-type: none"> • Modern • Traditional • Islamic 	<ul style="list-style-type: none"> • Brick • Stone • Concrete • Glass 	

Table 3: changes in proportions and openings of buildings in three periods of modern architecture

Historical Period	Proportions	Openings
First Pahlavi		
Second Pahlavi		
After 1979		

According to the tables, modernization of Iranian architecture took place in different dimensions. Adaptation of historic elements and features and combination of tradition and modernity is reflected in architectural style, use of material and adaptation of traditional elements. However, during the early years of the second Pahlavi period pure modernism can be observed in architectural examples. After the white revolution in 1963 architecture had faced a new face of representing Iranian traditional features in a

modern context. Thus, this era was the period of combining modernity and tradition. After 1979 revolution, architecture continued to preserve an identity that included both modern and traditional features. The proportions of the buildings represent the power and greatness of the state in the first Pahlavi period. However, in second Pahlavi period buildings start to emerge with more moderate proportions. After 1979, the public buildings are representing the greatness of culture and integration with the society with proportions.

Chapter 5

CONCLUSION

Since the first quarter of 20th century, as the country was developing, architecture has evolved in experiencing variations of styles and approaches. State has always taken architecture of public buildings as symbols through which the nation and state have been represented. On the other hand, the evolution of the architecture of such buildings has presented the nation with representations of prevailing policies of the ruling state of its time. However, evolution of Iranian architecture during this period is also strongly affected by the pioneers of Iranian architecture in each period.

As it is displayed in the previous chapters, case studies demonstrate a rough timeline of changes in the facades of public buildings. Starting by a transition from adopting Iranian ancient architecture and its motifs, the first Pahlavi era was the time that state began to value the ancient civilization and heritage of Iran as its essential historical background and identity. Therefore, first Pahlavi architecture evolved from presenting the ancient heritage by direct adaptation of symbols, use of materials, and ornamentations adopted from ancient architecture. Throughout this period, architectural design moved forward to use European neoclassical style. The priorities of the state in reflecting nationalism, bureaucracy, power and modernization led to the establishment of Iran's national style.

Moving forward to the second Pahlavi era, architecture had faced a period of secularization. At this point, public buildings are representing the political views of the state; separating religious values from the public face of the modernized society of Iran. On the other hand, during the second Pahlavi period, attentions were drawn to modernization of Iranian society and culture and education. In this stage most of the public buildings such as museums, cinemas, theaters and other cultural and social facilities were designed to promote a society which is modern and is contemporary with other western countries. Pure modernism was adopted in the beginning of this period. However, as many of Iranian architects came back to the country after finishing education in the western institutions they tried to adopt regional and local features and styles in their architectural work. Thus, during this period Iranian architecture was transformed into a more purely non-traditional style. However, during the last decade of second Pahlavi era, national identity of the country began to be represented by the architecture of public buildings. In this phase, architects started applying elements, features and space organizations of Iranian architecture in an abstract sense; and create new projects by the use of modern technology. Therefore, it can be said that during the second Pahlavi period, Iranian architecture still found ways to keep the Local identity alive while entering the international modern platform of design.

By the establishment of the Islamic Republic of Iran, it has become crucial to the state to represent its religious roots and establish its type of architecture. Therefore, during this era many of the symbols, elements, motifs and signs of Islamic architecture resurfaced on the public new projects. This attempt was in order to present the nation with the fundamental views of the state. Direct use of the aforementioned elements indicates the drastic shift towards Islamization in the context of the society. On the other hand, many of the designed projects for public buildings are mostly designed

with a major modern façade. But, existing signs of the Iranian traditional architecture created a specific identity for these projects, which is mostly use of the material that identifies with traditional Iranian architecture.

Considering all three phases and all the periods of transformation in Iranian modern architecture the facades of public buildings create a visual timeline of evolution. This timeline represents state prevailing policies, technological advancement, cultural changes, state's priorities among the aspects of development, and also economy and power. Beginning with the direct use of symbols and signs in the first Pahlavi period, design of facades has evolved in applying more subtle ways to create its message to the society. In second Pahlavi period the priority has shifted from displaying the power of the state to the value for culture and development. Moreover, during the third period, after Islamic revolution, buildings reflect a new identity that is a combination of the reflection of the development of the country to a complete modern society that is recalling its traditional values.

This thesis, as it aimed, is a reflection of all the aforementioned aspects of the transformation in Iranian architecture. This transformation is parallel with the transformation of state prevailing policies that has also led to socio-cultural changes in Iranian society. As this research revealed, there is a fluctuation among all the aforementioned approaches to architecture during the modernization of the country. The reason for this fluctuation has come from a historic conflict between modernity and tradition. This conflict have existed in the society and also different ruling governments. Therefore, the priorities of the state in developing an identity for the country is visible in the façade of public buildings. On the other hand, confrontation

with modernity and the difficulties of the nation in full acceptance of modernity have influenced the approaches to modernity in the country.

The data drawn from this research can be applied in order to do an extensive research about the present situation in Iranian architecture. However, lack of access to all the data related to the case studies has made it difficult to conduct a completely analytical research. Thus, there is a need for the compilation of the accessible documents, including complete technical drawings, descriptive documents about the used material, remaining sketches and related architectural material, either by the responsible authorities or/ and architecture students and professionals.

As the trends in contemporary Iranian architecture have the intention of maintaining and promoting Iranian identity, this research contributes to the improvement of the perspective towards the history of the formation of identity in Iranian modern architecture. The particular focus of the thesis on the façade of the case studies creates a visual time line of the transformation of political and architectural approaches. These tendencies have impacted the modern lifestyle in Iran. However, there is a need for further research about the relationship of the state prevailing policies and architectural work of Iran after 1979. Hence, this research can be extended to study the impact of the conflict between tradition and modernity in the perception of Iranian architects about the identity of Iranian architecture.

REFERENCES

- Abrahamian, E. (1982). *Iran between Two Revolutions*. Princeton University Press.
- Abrahamian, E. (2008). *A History of Modern Iran*. Princeton University Press.
- Afshar, E. (2006). The National Library of Iran: A New Building and a New Future, *Australian Academic & Research Libraries*, 37(3), 221-232.
- Amirjani, R. (2018). Architectonics in Pre- and Post-revolutionary Iran. *Proceedings of the 35th Annual Conference of the Society of Architectural Historians of Australia and New Zealand*.
- Amir, A. (1991). *The Unknown Life of the Shah*. London: Hutchinson.
- Ansari, A. M. (2003). *Modern Iran since 1921: The Pahlavis and After*. London: Longman, 66. 6 Anderson, 2-3.
- Arefian, F, Moeini, H. (2016). *Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments*. Cham: Springer International Publishing.
- Avery, P. (1990). *Contemporary history of Iran*. Mohammad Rafiei Mehrabadi, Tehran: Ataie.
- Azizkhani, M. (2014). *Interactions and Contradictions of Preservation and Modernization: The case of Isfahan, Iran*. University of Texas. Texas, Austin.

- Bahrol Olomi, H. (1976). *Karnameh Anjomane Asare Melli*, ed. Tehran: 13 (21).
- Banani, A. (1961). *The Modernization of Iran 1921-1941*. Stanford, Stanford University.
- BaniMasoud, A. (2015). *Iran Contemporary Architecture*. Tehran: Honar-e Memari-e Qarn Publications.
- Bashirieh, H. (2002). *Dibacheie bar jameh shenasie Iran*. Tehran: Negahe Moaser.
- Bill, J.A. (1970). Modernization and Reform From Above: The Case of Iran. *The Journal of Politics*, 32 (1), 19-40.
- Bozdoğan, S. (2001). *Nationalism and Nation Building: Turkish Architectural Culture in the Early Republic*. Washington: University of Washington Press, 78-79.
- Cronin, S. (2003). *The Making of Modern Iran: State and Society under Riza Shah, 1921 1941*. NY, Routledge Curzon.
- Diba, D. (1991). *Iran and Contemporary Architecture*. Singapore: MIMAR 38 20-25.
- Diba, D., Dehbashi, M. (2004). *Trends in Modern Iranian Architecture*. Agha Khan Award for architecture.
- Diba, D., Dehbashi, M. (2004). *Iran architecture of changing society*. Agha Khan Award for architecture.

- Emaian, S., Nariman, S., Akbari, H. (2017). *The Constant Friction between Tradition and Modernity*.
- Gelvin, J. L. (2016). *The Modern Middle East: A History*. New York & Oxford: Oxford University Press, 211.
- Gluck, J., Siver, N. L. (1996). *Surveyors of Persian Art: A documentary biography of Arthur Upham Pope & Phyllis Ackerman 1881-1969*. (Japan: Ashiya, 1996).
- Grigor, T. (2004). Re-cultivating Good Taste: The Early Pahlavi Modernists and Their Society for National Heritage. *Iranian Studies*, 1 (30).
- Grigor, T. (2009). *Building Iran: Modernism, Architecture, and National Heritage under the Pahlavi Monarchs*. New York: Periscope Publishing.
- Grigor, T. (2014). "Return of the Avant-garde to the Streets of Tehran," in *Rethinking Iranian Nationalism and Modernity*, eds. Kamran Scot Aghaie and Afshin Marashi. Austin: University of Texas Press, 239.
- Jahanbegloo, R. (2004). *Iran between Tradition and Modernity*. Lexington Books, USA.
- Keddie, N. R. (2003). *Modern Iran: Roots and Results of Revolution*. New Haven & London: Yale University Press, 85-88, 102-104.

- Khatam, A. (2009). The Islamic Republic Failed Quest for the Spotless City. *Middle East Research and Information Project*, 250, 44-50.
- Khorsandi, M. (1946). The Association of Iranian Architects-Diploma. *Architect Magazine*.
- Kheirabadi, M. (2011). *Iran, Second Edition*. Tehran. Negah Publication.
- Le Corbusier (1970). *Towards a New Architecture*. East ford: Martino Fine Books.
- Milani, A. (2004). *Lost Wisdom; Rethinking Modernity in Iran*. Mage Publishers.
- Mirmiran, S. H. (2004). *Public Buildings in Iran: 1920 to the Present*. In *Iran: Architecture for Changing Societies*. Philip Jodidio (ed). Torino: Umberto Allemandi & C.
- Newman, A. J. (2006). *Safavid Iran: Rebirth of Persian Empire*, I.B. Tauris.
- Pirnia, M. K. (2005). *Sabk Shenasi, Mi'mari Irani*. Study of styles in Iranian architecture.
- Young, T. C. (1948). The Problem of Westernization in Modern Iran. *Middle East Journal* 2 (1), 50-51.