The evolution of industrial architecture in Iran

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Introduction

"Industrial Architecture" is an endangered species on the road to perdition. This is not only because the meaning of industry has changed so much during the course of the last three decades, which have brought about the age of digitalization, but also because industrial building as a genre never amounted to much. James Stirling is reported to have said that there are only two kinds of architecture: good and bad. Mohammad Beheshti, the head of the Cultural Heritage Organization of Iran during the Khatami presidency (1997-2005), and one of the few luminaries of the Islamic Republic of Iran, said the same thing, but slightly differently: "Architecture has two modes of being, one is construction, which produces functional buildings, and the other is real Architecture, which is concerned with art and higher purposes."[1] Invariably, industrial architecture in Iran has mostly ended up in the "bad construction" category.

Industrial building is intimately intertwined with capitalism. Consequently, industrial buildings are most often built as inexpensive utilitarian sheds to help maximize profits from the manufacturing process. The widespread integration of industrial design in the industrial production process only dates back to the last two decades. In the past, manufacturers did not usually give much attention to the aesthetics of the goods produced, and even less to the aesthetics of the place of production. One rare exception is the German company, AEG, which hired Peter Behrens as architect and artistic consultant at the beginning of the 20th century. Behrens is an important figure in the history of Modern architecture who mentored three of the most seminal architects of the 20th century: Walter Gropius, Mies van der Rohe, and Le Corbusier. Architectural historian Stanford Anderson devoted a substantial monograph to Behrens' work, which explores his abilities not only in the design of industrial architecture, but also in many other architectural domains.[2] For example, Albert Speer, Hitler's architect and the Third Reich's Minister of Armaments and War Production, hired Behrens during the 1930s to design vast governmental monuments in Berlin. Behrens in fact was a Nazi party affiliate and an ardent German nationalist.

Another fervent Nazi sympathizer, albeit in Iran, was Reza Khan (1878-1944), the stable-boy Cossack soldier who rose through the ranks to become the Shah of Iran and establish the Pahlavi dynasty in 1925 (fig. 1). Reza Shah was enamored of German precision and discipline, as well as overall achievement in various fields, particularly industry. With German help, he jumpstarted Iran's industrialization as part of an overall program of modernization. This brief chronolog-

1 Comments made at a presentation for a seminar entitled "Architecture and Cinema" that took place at the University of Tehran in June 2003.

2 Stanford Anderson, *Peter Behrens and a New Architecture for the Twentieth Century* (Cambridge, Mass.: MIT Press, 1999).

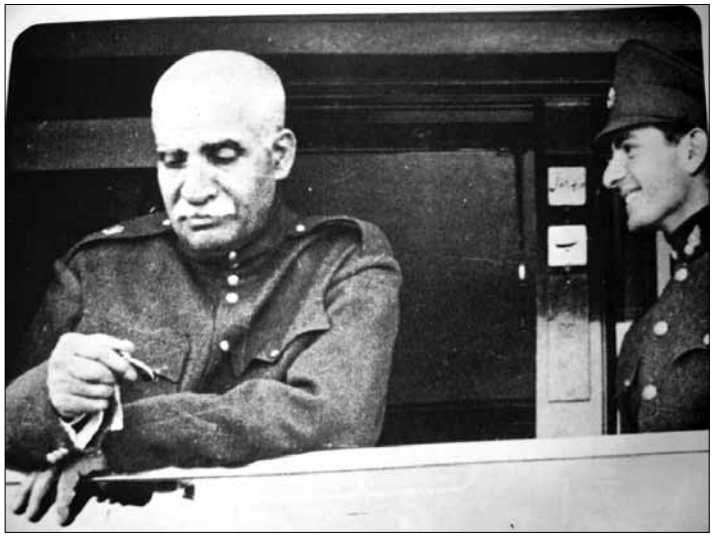


Fig. 1: **Reza Shah, checking the exactitude of a train departure, and his son Mohammad Reza Shah.**

ical presentation of the industrial architecture of Iran will accordingly emphasize the architecture of his rule, but also will provide a cursory review of the periods leading to and extending from it.

The Qajar period (1794–1925)

With the founding of the Qajar dynasty at the end of the 18th century, the industrialization process was launched in Iran. Because of the more or less continuous state of warfare with neighboring states in which the Qajars found themselves, they deemed it necessary to build factories that served the needs of their armies. A good part of this industrialization process took place in the city of Tabriz, which was the residence of the Qajar crown-prince and also Iran's second largest city, while the newly-proclaimed capital, Tehran, was still a town of only 25,000 inhabitants. Many of Iran's earliest modern industrial undertakings appeared in Tabriz, beginning with the country's first printing press with movable type in 1811.[3]

Agha Mohammad Khan, the founder of the Qajar dynasty, chose Tehran as his capital in 1795. But various Qajar princes exercised considerable control over other provinces and often had as much power as the king himself. For instance, Crown Prince Abbas Mirza (1789-1833) invited French engineers to build artillery and gun-powder factories, known as *ghourkhanehs*, in Tehran, next to the royal palace complex, the Arg. Records indicate that a French engineer named Fabvier built a *ghourkhaneh* in Isfahan. He was part of the French mission led by General Claude-Mathieu de Gardane that was sent to train the Persian army in 1807-1808.[4] Other *ghourkhanehs* were built around the same time in Mashhad and Shiraz, which unfortunately are not documented. Many also were built in Tehran, and these are fairly well illustrated (figs. 2 & 3).[5]

Iran's first sugar refinery was built under the Qajar ruler Mohammad Shah in 1845 in Kahrizak, a suburb of Tehran (figs. 4 & 5), and the first felt factory was completed at that time in the northeastern city of Khoy using Russian machinery.[6]

A turning point in Qajar industrialization took place during the prime ministry of Mirza Taghi Khan Amir Kabir, which covered the first three years of Naser al-Din Shah's long 51-year rule (1848-1896), ending with Amir Kabir's dismissal and subsequent murder by Naser al-Din. Amir Kabir initiated the mining of coal and metals, bringing in English and Prussian engineers and technicians, while sending Iranians to Russia to specialize in engineering. He initiated a process through which machinery was imported on an extensive scale and numerous factories were constructed; and this process was continued throughout Naser al-Din's reign. The list of factories built across the country during this period includes two sugar refineries in Babol; glass factories in Tehran, Qom, and Isfahan; porcelain factories in Tehran and Qom; the paper factory in Tehran known as the Amiri Factory; a printing press in Tehran; textile factories in Kashan and the Tehran suburb of Shemiran; a carriage factory in Tehran; and numerous *ghourkhanehs.* Moreover, Napoleon III sent the machinery for three metallurgic foundries as a gift for Naser al-Din's 1860 crowning (he organized a coronation ceremony during every year of his rule).[7]

In addition, the Belgians built a coin mint, or *zarrabkhaneh*, in Tehran.[8] Iran's first gas-lamp factory was built in Tehran in 1879 but was soon eclipsed by an electric-lamp

3 Samad Sardarinia, *Tabriz Shahr-e Avvalinha* [Tabriz, City of Firsts] (Tabriz: Akhtar Press, 2007), p. 28.

4 See, Hossein Mahboudi-Ardakani, *Tarikh-e Moassessat-e Tamadoni-e Jadid,* [History of New Civil Institutions] vol. 1 (Tehran: Tehran University Press, 1991).

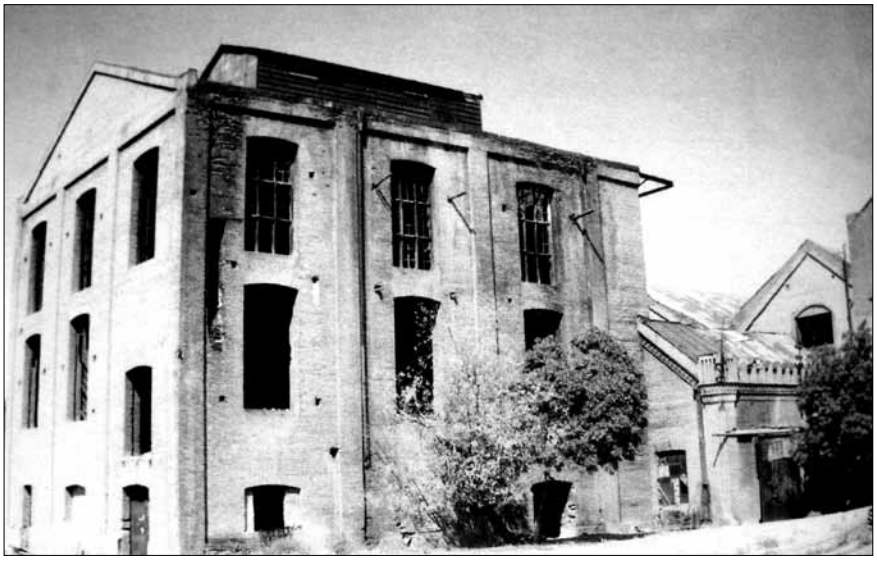
5 Although efforts have been made to identify full documentary data regarding the names of architects or dates of construction for the projects presented in this study, such data is not always available.

6 Mahboudi-Ardakani, *Tarikh-e Moassessat-e Tamadoni-e Jadid*, pp. 91 & 341.

7 Sardarinia, *Tabriz Shahr-e Avvalinha*, p. 47.

8 Abdolazim Rezai, *Tarikh-e Siassi va Ejtemai-e Iran* [The Socio-political History of Iran] (Tehran: Elm Press, 1977), p. 999.

Figs. 2 & 3: **Tehran, Artillery and Gun-powder Factories (*ghourkhaneh*), early 19th century.**



Figs. 4 & 5: **Kahrizak, Sugar Refinery, 1845.**

factory. The Qajar prince Amin al-Dowleh built the country's first electrical power plant in Tehran in 1882 to serve the royal complex of Kakh-e Golestan, soon after such plants first appeared in the United States. A plant serving all of Tehran was built in 1885, and another one was built in Mashhad in 1901 to illuminate the shrine of Imam Reza, Iran's most important center of pilgrimage.[9] The first match factory was also built during the reign of Naser al-Din Shah, this time by Prussian engineers.[10]

These factories present an important architectural corpus, if not heritage. Unfortunately, most of them could not compete with foreign manufacturers and they went bankrupt, one by one. Their buildings became derelict and the majority of them disappeared. One of the rare examples to have survived is the sock factory that the Prussians built in Beryanak outside Tehran in 1917. This factory continued to be operational until the recent war with Iraq (1980-1988), and was renovated in 1997 into the Natural Museum of Wildlife (fig. 6).

The industrial architecture of the Qajar period generally conformed to the traditions of Persian architecture prevalent at the time. There is little innovation to be found. Instead, the *ostad-memars* (master builders) who built the factories adapted the traditional typologies of central court, *iwan* (vaulted space that is enclosed on three sides and open on the fourth), arcade, and *shabestan* (underground space) as

9 Mahboudi-Ardakani, *Tarikh-e Moassessat-e Tamadoni-e Jadid*, p. 348.

10 *Ibid.*, p. 41.

Fig. 6: **Beryanak, Sock Factory, 1917; the factory was renovated into the Natural Museum of Wildlife in 1997.**

much as possible to these totally new functions. This changed completely with the advent of Reza Shah in 1925.

The First Pahlavi period (1925–1941)

Although Reza Shah's rule only lasted sixteen years, the degree of industrialization he accomplished for Iran is truly impressive. He built over 270 factories and made the country seventy percent self-sufficient in terms of industrial production. He was more interested in the physical aspects of modernization than its philosophical ones. He wanted to bring to Iran items such as planes, trains, and cars—or what on a certain level may be considered gadgets—but he also wanted Iran to have other symbols of modernity, whether city planning, architecture, universities, or factories. In this context, Reza Shah looked to Germany as a model and worked on strengthening ties between the two countries. He was convinced that the Germans were the best at just about everything and thus invited German professionals to carry out his ambitious plans for Iran. Because the Germans were at the avant-garde of industrial architecture in the West, they had a great deal to offer in terms of realizing Shah Reza's industrial ambitions. Besides factories, the Germans also built Iran's railroad lines, bridges, and most of its road network.

The influence of German architecture on Iran's industrial architecture of that period cannot be stressed enough. For example, a good number of Isfahan's factories built during the 1930s were by two German engineers identified as Nieminger and Schunemal. They collaborated with traditional Iranian *ostad-memars*, two of whom are known to us: Ostad Motamedi and Ostad Maheronaghsh.[11]

One of the factories to have been constructed in Isfahan during that period is the Risbaf Spinning Factory. The influence of contemporary European architecture on this building is clear and strong. Its main entrance bears a heavy debt to Peter Wilhelm Jensen Klint's Grundtvig Church in Copenhagen (1921-1940; fig. 7), and its massing to Hans Poelzig's Grosse Schauspielhaus (Great Theater) in Berlin (1919; fig. 8). It also has some resemblance to Tony Garnier's Halle Tony Garnier in Lyon (1905-1924; fig. 9), which was originally designed as a slaughterhouse. Although a modern factory showing strong Western influences, it is interesting to note that the factory's *ostad-memar* incorporated the detail of "the jug of water of life," which often adorns mosques, into the corners of its cooling tower. The building was among Isfahan's most prominent landmarks during the First Pahlavi era (fig. 10).

These Isfahan factories as well as a few other industrial constructions were the subject of an exhibition for the opening of the Tehran Museum of Contemporary Art in 1977 (fig. 11).[12] The best documentation available on these factories from the First Pahlavi era is for the tobacco factory in Isfahan, the Dokhaniat, which Reza Shah inaugurated with great pomp in 1927 (figs. 12-17). These factories were considered the pride of the nation and were therefore situated in prime locations in their cities. In Isfahan, most of them, including the Dokhaniat, were located along the Zayendehroud River.[13]

Another factory located along the Zayendehroud River is the Zayendehroud Textile Factory, which was Isfahan's most extensive industrial complex. It unfortunately has recently succumbed to the greed of the speculators to make way for an apartment complex (figs. 18 & 19).

An additional factory in Isfahan dating from this period is a 1937 wool factory, the Karkhaneh-ye Pashm. Its architecture reflects a Qajar residential vocabulary more than that of

11 *Ibid*., pp. 91 & 341.

12 *The Architecture of the Early Iranian Factories*, exhibition catalogue (Tehran: Tehran Museum of Contemporary Art, 1977). Nasrin Faghih curated the exhibition, and I was the assistant curator. I was responsible for selecting the factories, drafting their elevations, designing the presentation of the plates in one gallery, and preparing the layout of the catalogue. The catalogue was printed by the Hamdami Editions printing house, which the architect Laleh Bakhtiar owned.

13 Architect Iraj Kalantari carried out a study of five of these factories after the Zayendehroud Textile Factory was demolished in an effort to have them registered as historical heritage buildings worthy of being renovated to accommodate new uses. In addition to the Zayendehroud factory, these are the Risbaf, wool, tobacco, and Bagh-e Borj factories.

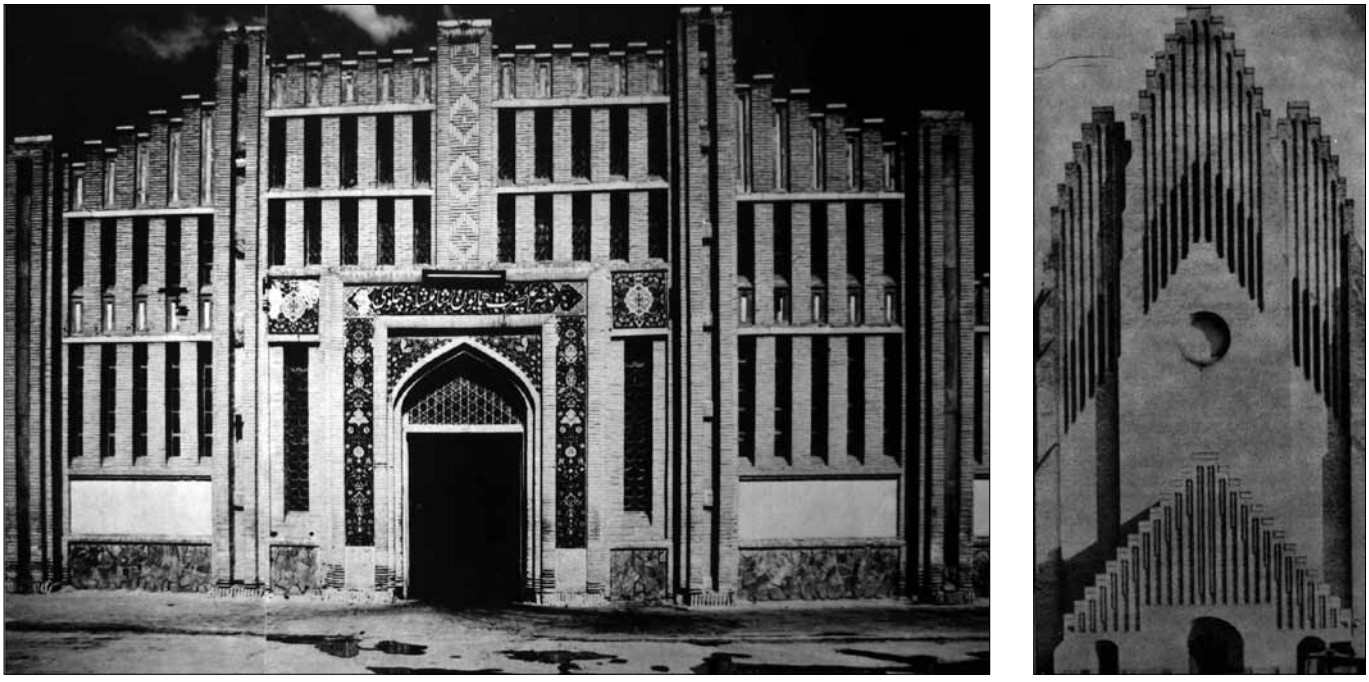


Fig. 7: **Pair of images comparing the main entrance of the Risbaf Spinning Factory in Isfahan, c. 1935, to Grundtvig Church in Copenhagen, by Peter Wilhelm Jensen Klint, 1921–1940.**

the newly emerging industrial architecture (figs. 20 & 21). It also is speculated that Ahmad Hossein Adle, an avid antique collector and art connoisseur who was the Managing Director of the Risbaf Spinning Factory, the Director of the Industrial Syndicates of Isfahan, and later a Minister under Reza Shah, might have influenced the design of the wool factory's entrance hall and director's office.

The textile factory of Shahreza, a small town located about sixty kilometers outside Isfahan, was built between 1930 and 1938. It is typical of that period, and is one of its most beautiful examples (figs. 22 & 23). The word "Maheronaghsh," which is the name of one of the two *ostad-me-*

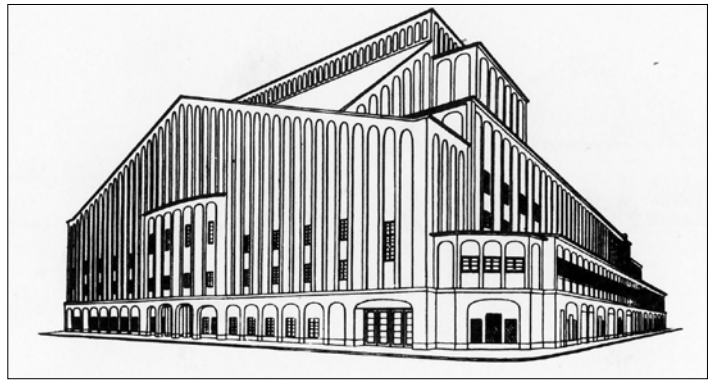


Fig. 8: **Berlin, Grosse Schauspielhaus (Great Theater), Hans Poelzig, 1919.**

Fig. 9: **Pair of images comparing the Risbaf Spinning Factory to the Halle Tony Garnier, Lyon, 1905–1924, by Tony Garnier.**

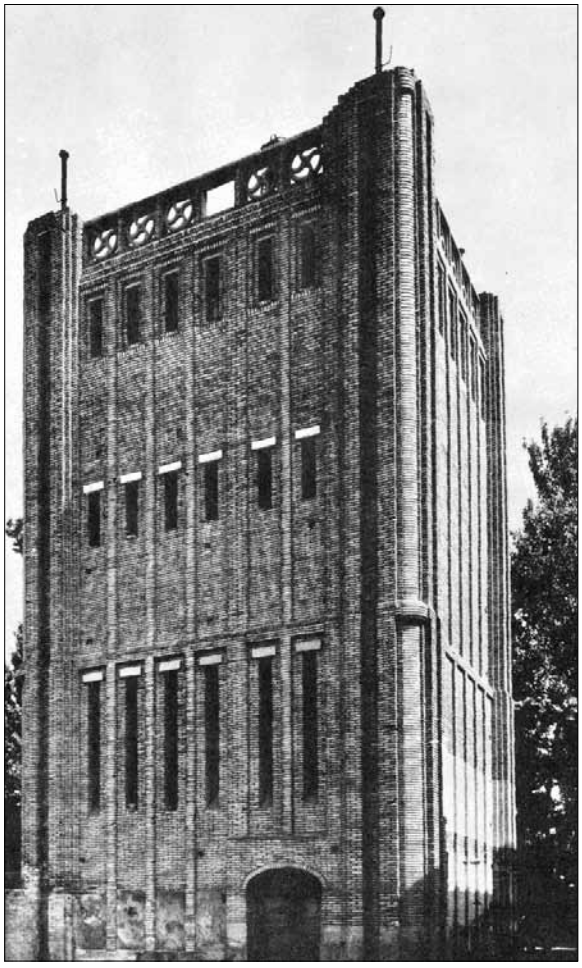


Fig. 10: **Risbaf Spinning Factory, cooling tower.**

mars who worked with German engineers on the design of numerous factories in Isfahan, is inscribed on one of its corners. The German engineers usually designed the factory's skeletal structure and workspaces, while the Iranian *ostad-memars* were responsible for filling in the façades as well as designing the cooling towers, offices, and all non-industrial spaces.

Two textile factories in the city of Yazd are also worth mentioning. Both incorporate the same traditional architectural vocabularies prevalent in the city. For example, the cooling tower of the Eghbal Textile Factory is reminiscent of the wind towers of Yazd, but its mud domes are perforated with square windows (instead of the traditional Yazdi circular windows) to provide light and ventilation (fig. 24). In contrast to the building's traditionalist exterior, the interior is defined by steel trusses covering expansive spaces to accommodate modern machinery (fig. 25). The second textile factory is the 1934 Harati Factory, which was built by a Zoroastrian family and is very similar to the Great Adorian (fire temple) of Yazd, built in 1935 (fig. 26). It incorporates exquisite details as evident in its column capitals (fig. 27).

In Tabriz, the most prominent factory of the Reza Shah period is the 1932 Khosravi Leather Factory, a huge compound with four very tall chimneys that served as landmarks in the city for a long time (figs. 28 & 29).

All the factories so far reviewed were clad with a brick

Fig. 11: **Cover of the *The Architecture of the Early Iranian Factories* exhibition catalogue.**

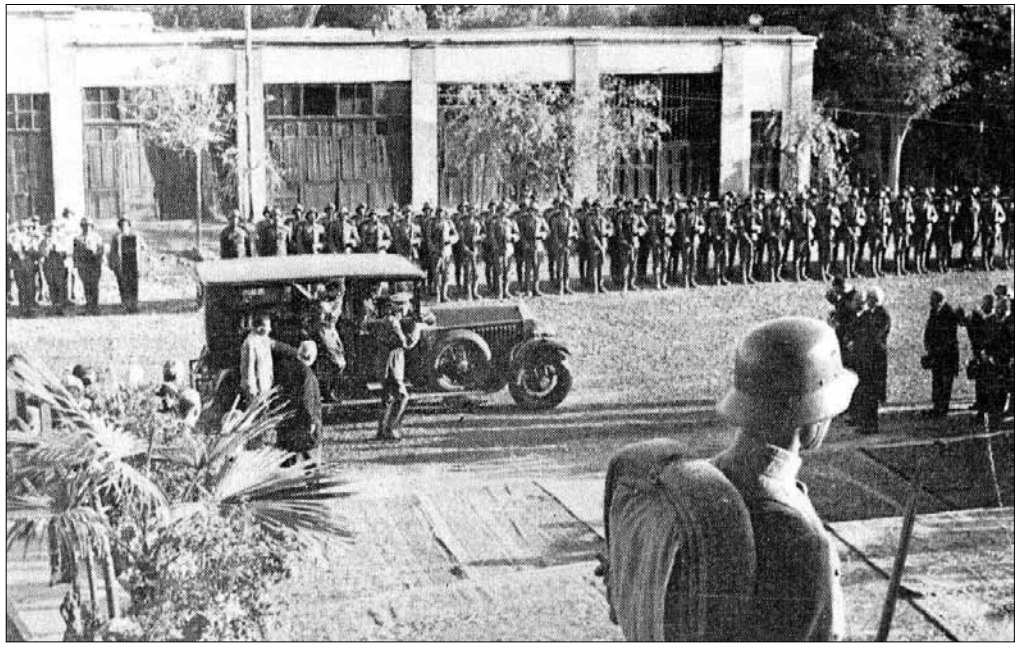
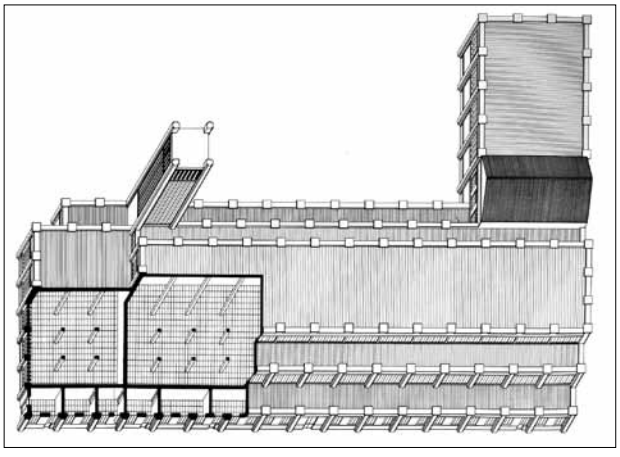
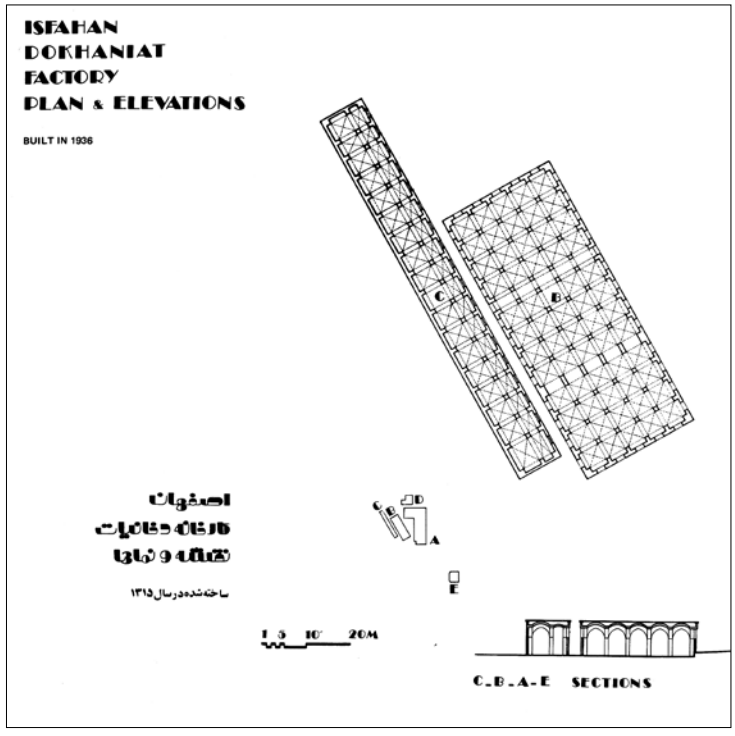
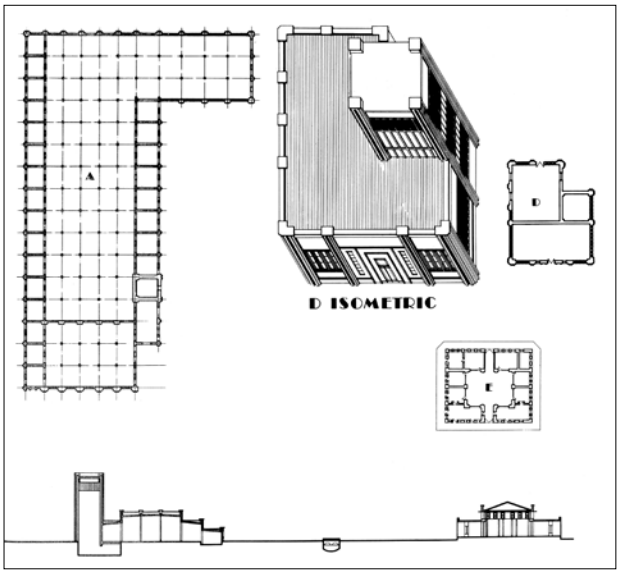


Fig. 12: **Inauguration of the tobacco factory (Dokhaniat) in Isfahan in 1927.**







Figs. 13–15: **Dokhaniat, architectural drawings.**

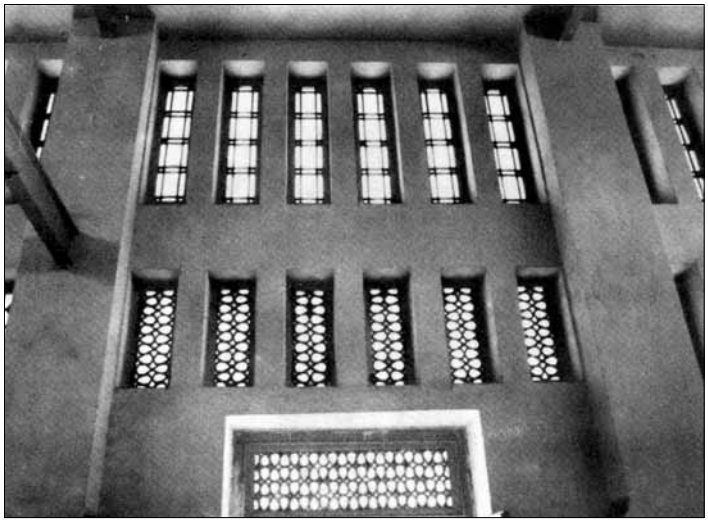


Fig. 16: **Dokhaniat, interior view.**

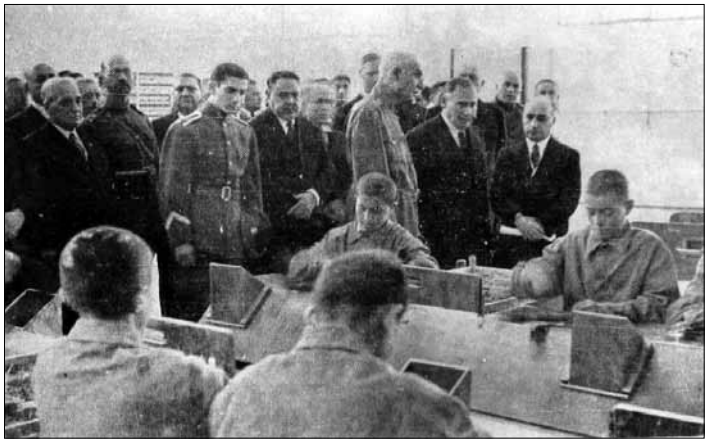


Fig. 17: **Reza Shah inaugurating the Dokhaniat in 1927.**

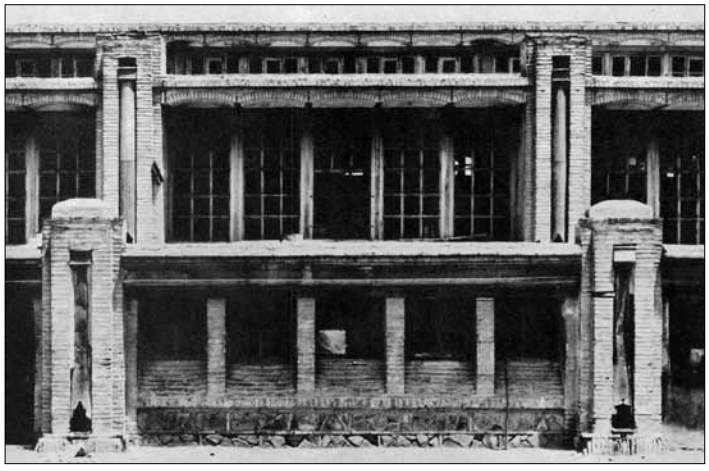


Fig. 18: **Isfahan, Zayendehroud Textile Factory, c. 1935.**

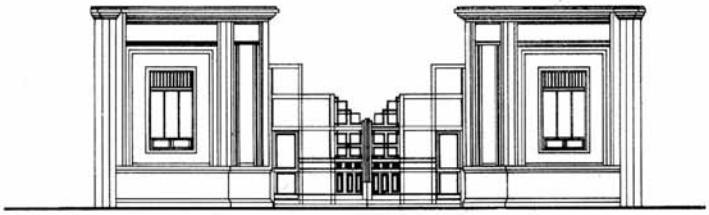
skin. The *ostad-memars* went to great lengths to express their craftsmanship, creating a continuum with traditional architecture even though something totally different took place on the inside. While the main construction material in cities such as Isfahan and Yazd is brick, there historically have been very few brick kilns along the Caspian coast, and cement and concrete are much better adapted to the humid climate of the Caspian Sea. The Harirbafi Factory in the city of Chalous accordingly has a cement skin and a vocabulary that is rather reminiscent of contemporaneous German architecture rather than local traditions (figs. 30 & 31). This silk factory was inaugurated in 1937 and had 1,600 workers, most of whom were women and children. Child labor, unfortunately, was very common in these factories.

Also worth mentioning is the Karkhaneh-ye Cimen, or cement factory in Rey, located to the south of Tehran (fig. 32), which the Germans built in 1933. In addition, work on the oil refinery at Abadan, located at the southern extremity of the country's border with Iraq, was begun during the First Pahlavi period and continued under the Second Pahlavi period.

Before ending the discussion of the Reza Shah period, mention should be made of Nikolai Markoff, a personal friend of Reza Shah who had served with him in the Cossack brigade. Markoff was one of the most prolific designers of industrial buildings in Iran. He trained at the Academy of Art and Architecture in the Imperial College of Saint Petersburg,

Fig. 19: **Zayendehroud Textile Factory, various views.**

Figs. 20 & 21: **Isfahan, Wool Factory, 1937.**



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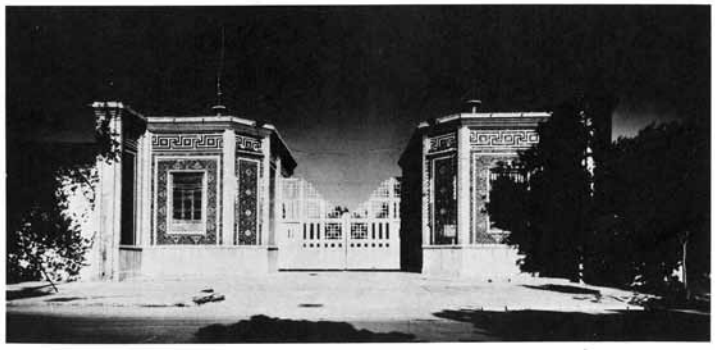
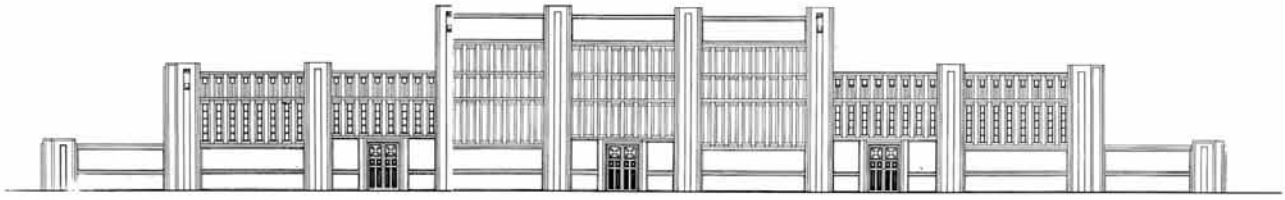
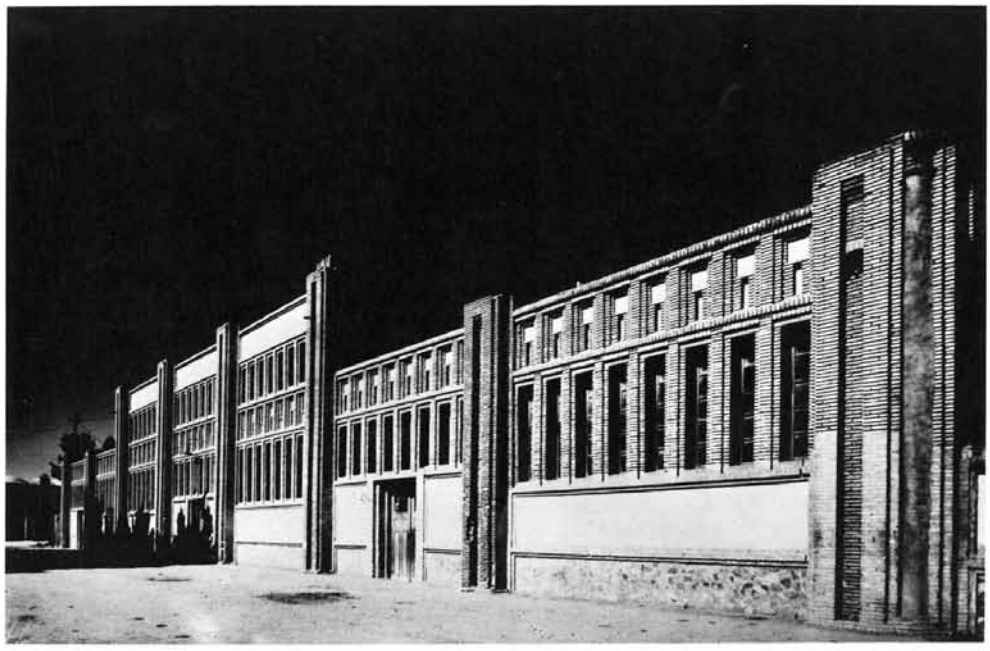




A FRONT ELEVATION



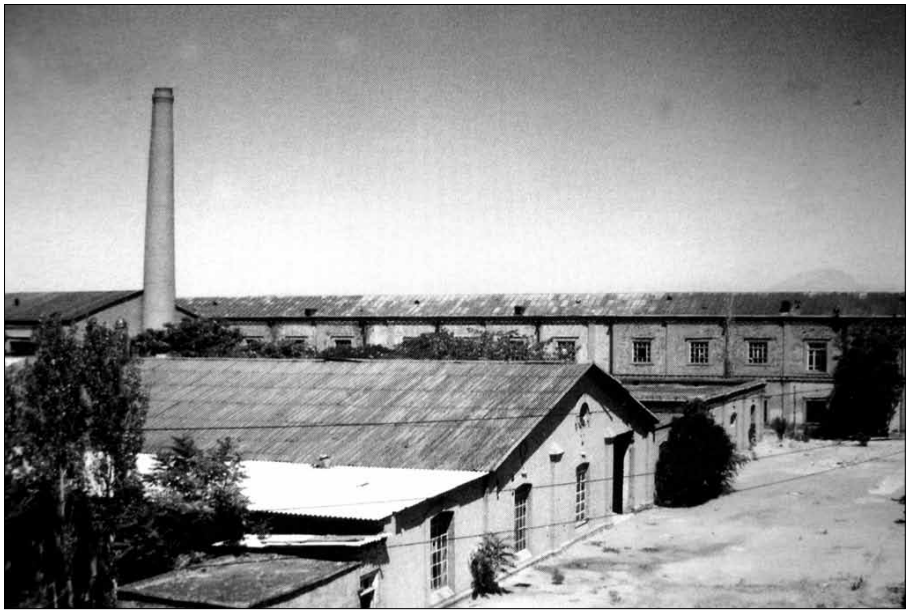
Figs. 22 & 23: **Shahreza, Textile Factory, 1930–1938.**

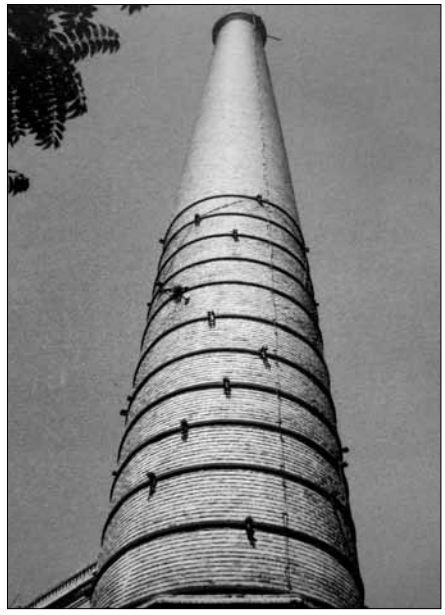
Fig. 24: **Yazd, Ehgbal Textile Factory, c. 1935.**

Fig. 25: **Eghbal Textile Factory, interior view.**

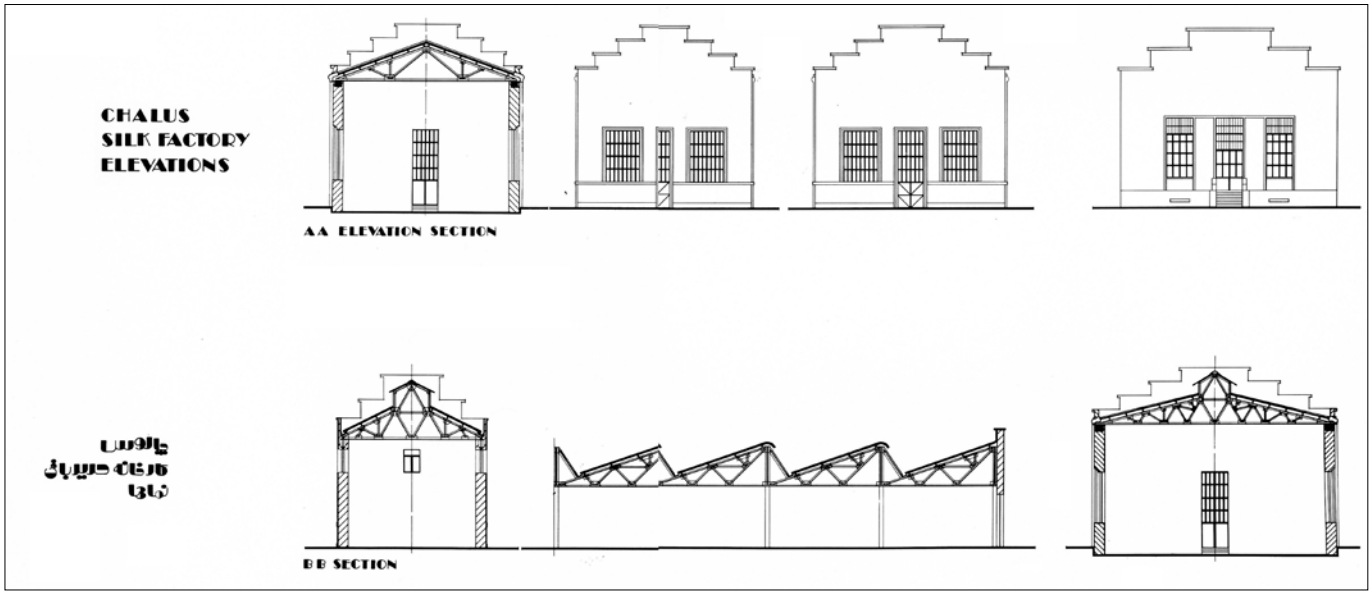
Fig. 26: **Back Left: Yazd, Great Adorian (Fire Temple), 1935. Back Right: Yazd, Harati Textile Factory, 1934.**

Fig. 27: **Harati Textile Factory, column detail.**





Figs. 28 & 29: **Tabriz, Khosravi Leather Factory, 1932.**



Figs. 30 & 31: **Chalous, Silk Factory, 1937.**

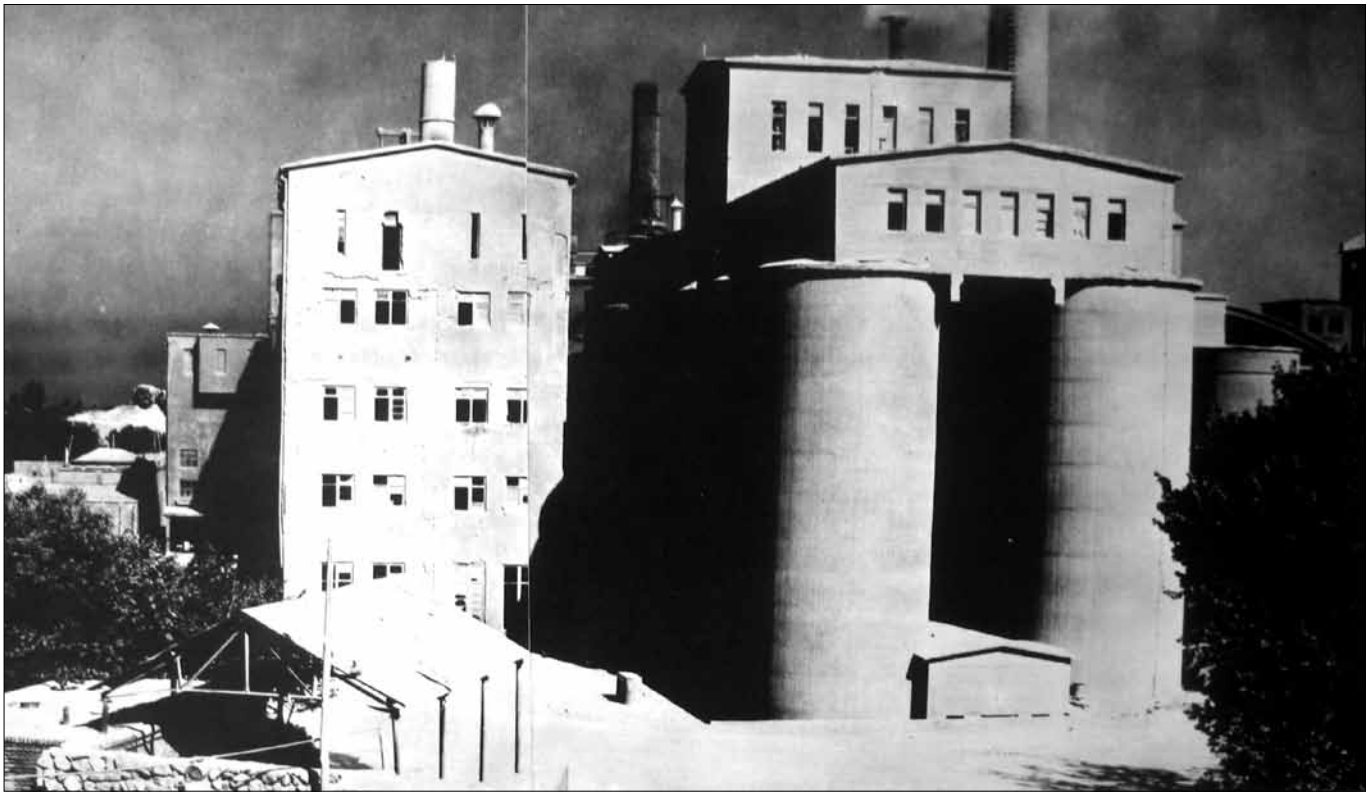


Fig. 32: **Rey, Cement Factory, 1933.**

graduating in 1910. He came to Iran in 1915 to serve in the Cossack army and stayed after the Russian revolution until he died in 1957. In Iran, he had an active teaching career and a flourishing architectural practice. His industrial buildings include two sugar refineries built in locations close to Tehran— one in Karaj, built in 1933 (fig. 33), and the other in Varamin, built in 1935 (figs. 34 & 35); and a 1934 pharmaceutical factory in Hesarak, a far suburb of Tehran.

One of the few renovations and re-utilizations of factories from the First Pahlavi era involves the 1938 Gheysarieh Spinning Factory in Qom. In 1995, the Qom municipality renovated it to serve as the city's television and radio station (fig. 36).

Before moving on to the industrial architecture of the Second Pahlavi period, two points should be made about the architecture of the First Pahlavi period. The first is that it is characterized by the evolution of hybrid architectural solutions that evolved through combining Western functionalism and Iranian traditional architectural detailing, although this hybridization never reached the level of total integration. The second is that Reza Shah's industrialization programs were much more successful than those of the Qajars. He had a comprehensive vision for Iran's industrialization, and, until the advent of the Second World War, also had full support for this vision from the British, Russians, and, most importantly, the Germans. Most of the First Pahlavi era factories, however, eventually became derelict. This was less the result of architectural obsolescence or competition from foreign products, and more the result of changing methods of industrial production in the West as well as in Iran. As industrial machinery became smaller, those large spaces became increasingly inefficient.

The Second Pahlavi period (1941–1979)

Because of Reza Shah's sympathy to the Germans, the English and Russians forced him to abdicate in 1941, during the early years of the Second World War, in favor of his 22-year-old son, Mohammad Reza Shah. With that, the Second Pahlavi period was initiated. It generally seems that architecture became increasingly functionalist throughout the world following the war, being reduced to meeting minimal utilitarian standards to accommodate the urgency of rebuilding. Industrial architecture in Iran followed the same pattern. Kamran Afshar-Naderi has re-

Fig. 33: **Karaj, Sugar Refinery, Nikolai Markoff, 1933.**

Fig. 34: **Varamin, Sugar Refinery, Nikolai Markoff, 1935.**

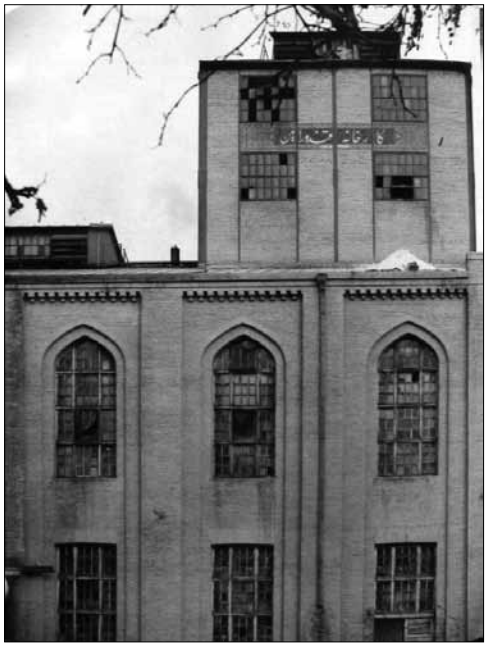


Fig. 35: **Veramin Sugar Refinery, façade detail.**

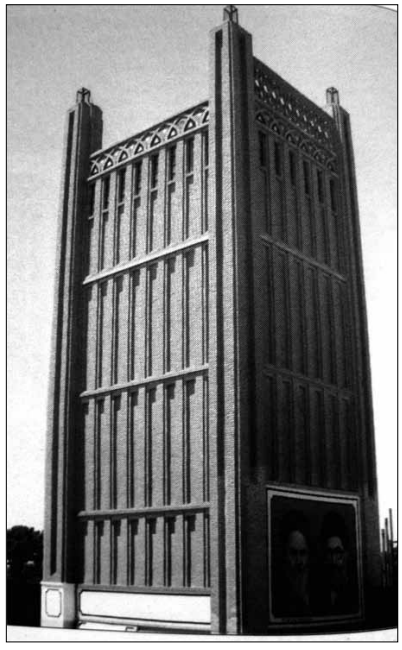


Fig. 36: **Qom, the 1938 Gheysarieh Spinning Factory after being converted into the city's radio and television station in 1995.**

ferred to the industrial architecture of Iran from that period as "Rationalist," but I do not believe it even deserves this terminology. Many factories were constructed during this period, including the steel mills of Isfahan as well as the Bushehr nuclear plant, which the Russians built. None really are worth mentioning from an architectural point of view, except perhaps the 1940s Abjosazi Brewery in Tehran (fig. 37), which Seyyed Hamid Nourkeyhani renovated in 1993 into the Komeil Cultural Center (fig. 38). Nourkeyhani had previously worked with Kamran Diba, one of the period's most prominent architects.

The Islamic Republic period (1979–present)

I would refer to the architecture of the Islamic Republic as "charette architecture" because it is very hastily designed and even more hastily built. At the same time, Iran is undergoing a process that may be identified as the "glorification of the ugly" since the main decision-makers in all realms affect-

ing the architectural and urban landscape have a pronounced kitsch taste. For examples of this one only needs to look at the plastic trees and stucco animal statues that adorn city squares!

Several industrial towns have been built or completed since the Islamic Republic was founded thirty years ago. One example is Poolad Shahr, near Isfahan, where the main steel mills were constructed by the Russians during the Second Pahlavi era, with the work completed under the Islamic Republic. There also is Parand Industrial City near Tehran as well as numerous other industrial zones that have emerged around Tehran. But the country's main industrial efforts have been concentrated in Assalouyeh, where Iran's oil and gas industries are being relocated, replacing Abadan, which was destroyed extensively during the Iran-Iraq war (fig. 39).

The architecture of these industrial complexes is less than mediocre, but there are exceptions. One example is the Gas Company headquarters in Shiraz, designed by Mehrdad Iravanian in 2001. Although an office building rather than an industrial one, it projects a "High-Tech" "industrial architecture" aesthetic and makes no pretense at linking to traditional architectural vocabularies (fig. 40). Moreover, the two projects that won first and second place for the 2007 Memar Award (organized by the Iranian architectural magazine *Memar*) surprisingly were factories. The second-place prize was awarded to the Ehsan Poud Textile Factory in Ehsan Poud (fig. 41), located along the Tehran-Qom Highway. The project was designed by three architects barely in their thirties, Abbas Riahi Fard, Kamran Heyrati, and Houman Balazadeh. If it were not for the 120-meter-long canopy, reminiscent of Zaha Hadid's work and gratuitously hanging there for decoration, this project would have won the first-place prize, which went to Bahram Kalantari and Kourosh Dabagh for the Peykar Bonyan Wood Paneling Factory in Parand Industrial City (fig. 42). The simplicity of the Peykar Bonyan scheme, the Mondrian-inspired façade, as well as the glass bridge joining the factory and administrative building, all make this complex the most appealing contemporary work of public architecture in the Islamic Republic of Iran.

At the beginning of the Islamic Revolution, all factories were nationalized, and no new factories were built until after the war with Iraq ended in 1988. The production of industrial architecture generally remained under government control until the Khatami presidency, when the government encouraged the creation of private banks and industries, and a

Fig. 37: **Tehran, Abjosazi Brewing Factory, c. 1945.**

Fig. 38: **Abjosazi Brewing Factory after its conversion into the Komeil Cultural Center by Seyyed Hamid Nourkeyhani in 1993.**

Fig. 39: **Bandar Abbas, Bandar Abbas Refinery, layout of pipe racks.**

Fig. 40: **Shiraz, Gas Company Headquarters, Mehrdad Iravanian, 2001.**

Fig. 41: **Ehsan Poud, Ehsan Poud Textile Factory, Abbas Riahi Fard, Kamran Heyrati, and Houman Balazadeh, 2007.**

Fig. 42: **Parand Industrial City, Peykar Bonyan Wood Paneling Factory, Bahram Kalantari and Kourosh Dabagh, 2007.**

few private factories slowly have begun to be built. At the same time, a new generation of young architects have emerged who are active Internet users and are fully computer literate. For them, the issue of integrating Iranian traditional architecture into their designs is irrelevant. Although the regime's main aim is to revive "Islamic Architecture" in all architectural endeavors, the industrial architecture produced for the private sector generally has not complied.

Concluding remarks

The industrial architecture of the Qajars and the First Pahlavi era, when Iranian master builders and European engineers collaborated, never resulted in an integrated and homogenous architecture because these two groups did not share a common knowledge base. The large industrial spaces of production were defined by the steel structure and by the technical know-how of Western engineers. The appearance of the buildings, however, was the result of the work of Iranian craftsmen, and an Iranian identity consequently was bestowed on the buildings of those two periods. During much of the Second Pahlavi period, no attempt was made to give any Iranian "flavor" to industrial buildings. This began to change in the 1970s, primarily under the influence of Mohammad Reza Shah's wife, Farah Diba. She initiated efforts that placed great value on Iran's cultural heritage, and with that, the idea of returning to Iran's pre-Islamic and Islamic architectural heritage achieved considerable acceptance. This trend has been continued by the Islamic regime, which stresses Iran's Islamic heritage, but the results have been mediocre for most building types. The factories recently built in the country provide one exception to this trend.

The evolution of the industrial architecture of Iran has not been a continuous process. A prerequisite for such continuity is political stability, a phenomenon that has eluded many parts of the Middle East during the course of the last century. We instead are presented with a disrupted process: sparkles of industrialization are undertaken through individual efforts but are later abandoned. There are several reasons for this disruption. Each new regime has had a tendency to deny the accomplishments of previous ones. Each has been keen on creating its own works, relegating what came before it to the historical dustbin and stressing that its own accomplishments supersede those of its predecessors.

Iranian culture is prone to stifling its geniuses—referred to in Persian as *nokhbeh koshi*—and petty rivalries often ended up aborting their accomplishments. Some of them even

lost their lives, as was the case with Amir Kabir, the Qajar Naser al-Din's prime minister.

Moreover, little value is given in Iranian society to maintaining, preserving, and restoring past monuments. On the contrary, there is a propensity to destroy the old and value the newly built. Iranians have a rather disrespectful attitude towards their inherited patrimony. For instance, as soon as the father of a family dies, the paternal house is often sold or torn down. Historical continuity in architecture is difficult to maintain under this state of mind.

Finally, achieving sustainable economic development has not received much emphasis in Iran's political history, especially since the pumping of oil began in the early 20th century. Subsequent governments have spent generously on building anew even though many older facilities should and could have been kept up and updated. Oil money has always been there to pay the bill for new construction, denying, as a result, any sense of architectural continuity and evolution.

Industrial architecture in Muslim countries will achieve a coherent synthesis between Western technological know-how and indigenous architectural practices when architects have mastered a profound knowledge of Western architecture as well as a thorough knowledge of their own local architecture. Iran unfortunately has been isolated from the rest of the world during the last thirty years. Moreover, young Iranian architects have only been able to obtain a superficial knowledge of Western architecture, mostly through magazines and the Internet. Efforts are being made to carry out in-depth studies of Iran's architectural past, but even in this field, we have often relied on Western scholars. Only recently have a few Iranian scholars started attempting to fill in the vast lacunas in our architectural history.