COMPARATIVE ANALYSIS OF THE LATE QAJAR AND THE EARLY PAHLAVI HOUSES OF RASHT

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ABSTRACT

In passing through from the late Qajar to the early Pahlavi era, we encounter significant changes in Iranian architecture. In this period for the first time modernity is introduced to Iranian society. The author wants to analyze the idea that encounter with modernity caused some non-significant changes in architectural elements of Rasht in private houses and significant changes in public buildings. In this essay the changes of structural elements of the houses of Rasht are analyzed. The statistical society includes some of the houses that are coded as the cultural heritage. The results of the research are shown in descriptive and comparative forms.

Keywords: Private Houses, Late Qajar Era, Early Pahlavi Era

INTRODUCTION

Iran experienced many changes in passing through from Qajar dynasty to Pahlavi dynasty. These include changes in architecture resulted as a consequence of the introduction of western architecture to Iranian society. Connection to the west and using western technology for turning into a modern society accelerated with the beginning of the Pahlavi reign (Ghobadian, 1392). As a result the physical structure of Rasht changed radically (Shokouhi Rad, 1393).

The houses of Rasht which resembled the village architecture changed greatly. The late Qajar and early Pahlavi eras were contemporaneous to architectural changes in Europe. The effect of these changes on the main structural elements of the houses of Rasht are analyzed and compared with bringing for some examples. With following this method we can identify the architectural elements in the period which somehow is a passage between two eras. The main concern of this essay is putting emphasis on the importance of the main structural elements of the houses of Rasht in the cultural environment of Rasht as a main capital of a province of Iran. Did the main structural elements of Rasht in the early Pahlavi era change significantly in comparison with the same elements in the late Qajar era?

MATERIALS AND METHODS

The method used in this research is descriptive – analytical. First, the changes, alterations and other studies are analyzed and then the field study is undertaken. At last, the analysis and the comparative study are shown in tables.

The Qajar Period in Rasht

Qajar dynasty reigned in Iran since 1158 to 1304 Solar Hijri (1193 to 1344 Lunar Hijri), the total for 146 years. During this period, great developments was in the many different aspects of the country. Traditional Iranian society was faced with the breeze and the occasional cyclone modernity and many social norms, political, cultural and artistic changed. Architecture was also not out of the changes and sculpture of traditional Iranian architecture and theory and its practices were against the new conditions (Ghobadian, 1392). During the region of the Qajar dynasty, witnessed significant changes transpires in Iran, in particular, a stable central government re-established and formidable powers of European encroached to Iran. The long nineteenth century saw the original reforms and strengthen itself against future threats as well as social and economic changes, including modernization and various types of unrests and turmoil's. Despite internal diversity and transformation in the context of time, perhaps about structures and internal developments during the Qajar can be noted succinctly, that some of them were rooted in the previous period and also some were new (Bani Mas'ud, 1391).

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At the beginning of the region of Nassereddin Shah in Iran in 1254 lunar AH (1277 solar AH, 1848 AD) many fundamental changes had occurred in the west region. European half of the 19th century with medieval Europeans both mentally, socially and technically were very different. 19th century Europe-renaissance, enlightenment and the Industrial Revolution was passed and the use of science and new technology was announced attempt to overcome nature and the world around them.

In the past here was the east and there was the west, here was the adobe of Islam and there was the adobe of disbelief. Adobe of the disbelief in anyway could be our inspiration. Our dress form, building form, food, language, politics, government, art, literature, literature, life's tools and generally treatment and social institutions and way of life was independent of the way of life in west.

During the eighteenth and specially the nineteenth century, territorial European countries by best technology took the world and the struggle spread for influence and domination to other areas spread between them. In Iran czarism rule from the north and British Empire from the east and the south added the scope of its influence and gained several economic, politics and military privileges from Iran court. At the same time the breeze of modernity affected the country's political system.

Iranian travel, especially rulers and nobles and the king to Europe at the same time continuously and consistently carried out. In journey to the west, they were faced with civilization and culture that was rapidly changing and advancing. Modernization completely was changed the appearance of towns, village and the European community. These sites for the Iranian who still lived in the world Of tradition were awesome and stunning. If in the past, only west military superiority were prove to us, now academic, technological and social welfare superiority were explicit (Ghobadian, 1392). During this period architecture of Iran influenced by European architecture and also the architectural style of the previous period became variety of techniques and styles. The beginning of the modern architecture is from the time of Nassereddin Shah which combines the traditional architecture of Europe and Iran.

Farahani, writer and researcher of the court of Nassereddin Shah in his newspaper on 1302 lunar AH about Rasht city is written: Rasht city is not old building. The length of the city from one side leads to this Haji Mohhammad Baghger bridge that is on the Kelaseh river of Rudbar (Manjil bridge) which from here go to Iraq and on the other hand leads to the Chomarsara bridge, that is bridge on Goharrood river which from there go to Foman and the width of the city on the one hand go to Naserieh desert and from there go to Kochesfahan and Lahijan. The neighborhoods of Rasht city are Rasht Kyab neighborhood, market, Seighalan, Chomarsara, Khamiran and Khamiran Kyab. Two important neighborhoods of the city, one is Kyab neighborhood where is government building, artillery, home telegraph and England consul home and another is Zahedan neighborhood that in this neighborhood is lettered of former European Jewish.

This city has about five thousand houses in every houses two families sitting and every family is 4 person and it population is forty thousand and market and it neighborhoods nearly there are two thousand shops (Created the city around consulting engineers design and build, 1379).

In the late Qajar period, because of the way by attitude of the Constitutional Revolution and its effects on Europe, was seen modernistic enthusiasm and new ambitions which their manifestation of the city body , in the form of create baladieh (The first municipality), the first new school (Sharaf Mozaffari in the southern corner of field Sabzeh), the first city public theatre (on a piece of cemetery professor Abojafar near the Armenians neighborhood), the city development measures for example the creation of brook round the square Sabzeh, covered open ditch, hard surface main routes and... was thanks to the interest of own house from achievements of the constitution. In this period the city had 10 famous school, 17 bathroom, 17 old-fashioned, about to mosque, 36 mosque and 12 shrine. The location of capital, government support, police, England Console Home, first schools and theater around city hall and the square Sabzeh, in face was the government poles strengthening. Also location seminaries and religious schools and bathrooms near the shrine of Imam Sister, also means a strengthening of city religious and cultural hub that they had been closed the bud during the time of Safavieh. Market also served as the city's commercial hub. Apart of ceramics and pottery cooking workshops on the edge of the Rasht neighborhood, also there are other workshops around Chelekhaneh and Khomeiran Sharifieh

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marketplace. Khomeiran neighborhood that reflects the city growth in the manufacturing and crafts. Tannery (slaughterhouse) which attributed to this period, (Created the city around consulting engineers design and build, 1379).

In general Rasht was composed of three main segments that consist of part the wealthy and famous stay a city, part of established of administrative units, military and political with immigrant khans and other political and administrative personnel and the third part, which was scattered throughout the city, was including lower classes of society (Partov, 1379). In addition Rasht Khomeiran, Kyab Khomeiran neighborhoods and the bottom neighborhood Kyab and Chomrsara more were accommodation for low-income classed and the north axis was accommodation of influential and wealthy family (Safardoust, 1384).

The Pahlavi Period in Rasht

The new government after the coup in 1299 solar AH (1920 AD), flag modernization and transformation of organization environment and manufacturing, in the first encounter, changes the city contracts on the agenda, with the belief that physical and from transformation, will lead to basic and content changes. All though the nominal change later extended to other areas, at the start, was in the form of meddling and preformation in context and the space frame structure of city. Order of the day after the coup, was the city transformation, the city that is a symbol of interruption new area with old era and symbol of progress and development. To intervene more in cities old tissue, law baladieh 1286 solar AH (1907AD) in 1309 solar AH (1930 AD) found new power, intensify interference domain and by it approval, implementation of streets plan had in process on the agenda. Create street as the symbol of modernity, was the first reflects the type of urban development and completely influenced by the views of extremists Europe approval low widening and development (Safardoust, 1384).

The first Pahlavi era was strengthened by following domination changes of European fascist dictators, especially during Hitler Germany (Hak: 1933-1945 Birth/1312-1324 solar), attention to nationalism, fashioned myths and Zoroastrianism which the French and German archaeologists channels that in Iran worked to explore the perspolis and other archaeological sites. During this period, with warming relationship between German experts in Iran which often government building was implemented under their comment, we are witness formation of ancient neoclassical architecture. What Rector in Germany was followed by, Reza Shah searched in Iran and it result was the presence of foreign guests that had been invited by the government to participate in construction of government buildings. Another cases that during formation Reza Shah architecture shouldn't forgot is the presence of pervasive and active foreign companies - mainly German companies worked generally within buildings government construction and most police buildings and municipality of various cities in Iran amongst Tabriz, Orumieh, Qazvin, Rasht, Gorgan and etc. has been built with designed and supervision of this companies (Bani Mas'ud, 1391). One of the most important events in architecture of the first Pahlavi is pervasive presence of Europe companies and engineers architect which had been invited by the Iranian government to king party commanding, co-operative in the construction of new Iran. Mass construction works from one side and emergence of new functions and lack of experts in Iran on the other hand had made that most construction works this period placed in the hands of foreign engineers especially European and Russian and few Iranian architect and engineer (Bani Mas'ud, 1391). At the beginning of first Pahlavi government, Municipal square was commence in Rasht city center and five major urban buildings was built around this square in the style of neoclassical rational: this 5 buildings included: Rasht municipality, sick home baladieh (later Guilan governorate and now 2 number municipality building), Iran hotel, post office and Rasht national library (Ghobadian, 1392). The developments of the structure of space-skeletal in Rasht, which took place in available context of the city, caused virtually the structure of Oajar era in city preserved and in many cases follow of rules the organic growth that among them can pointed out following:

• The main street has been drawn in the city that Lahijan road connect to Foman, to widen or damaged previous road route, was not go with. But was established in parallel to it.

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• The streets of made less was impact on the center of neighborhoods.

• New schools and even training-college, constructed vicinity of neighborhoods centers and equip axis that was formed in Qajar period, not only did not weaken, but also remained in force. During the first Pahlavi, city government hub was strongly boosted and its trade centers and religious still remained as before. In addition city markets and market place also in terms of performance were strengthened.

• Summing up more general the structure of space-skeletal Rasht city during the first Pahlavi, it must be said that the city in terms of developing and expanding remained at the late of Qajar period and new elements were added to previous elements.

• The most important developments in the structure of space-skeletal city, was in structure of urban roads network and new elements that now parade in city center, like the current mayor, post building, governorate, cinema (the current central), Shahid Beheshti (former Shahpour) and urban facilities and equipment and industrial and workshop units, military and low enforcement within the content of Qajar period was added to it (Safardoust, 1384).

Rasht Houses Architecture

Rasht to a few decades ago as a city with a roof earthen ware was famous and foreign passengers and tourists when talking Rasht architecture, always in their writing described the roof sloping earthen it houses (Shokouhi Rad, 1393).

The Architectural Structure of Rasht Houses in Qajar Period

Since Rasht had rural structural at the last centuries, so the main structure houses also following from rural architecture. Thus that the structure of a typical house the so-called local room-porch had formed as room was used for winter residence and porch was used for summer residence and this structure already has rather main training its originality and as a structural pattern used as a model for people and in the past with little change it is also used in urban points. Tourists and passengers which traveled to Rasht in the old centuries, in their books had noted the village features of Rasht, unlike the central cities of Iran that houses stay together, Rasht houses also like Guilan rural houses had been separate (Nikouye, 1387). By study was performed in the physical structure of these houses and by observing the houses left by the past find out the more these elements these were from Qajar period before and to Pahlavi period also had been going.

Skeletal Elements

The Wall Fencing and Entry: In the northern cities of the country, residential building located in an area open and subscribe room walls is minimal, the border between the two housing units is enclosure wall that is main determinant of privacy protection of each house. Of course as expresses existence of corridor, deadlock and streets door, somehow starters privacy that building are separating from public transit. But enclosure wall has overview cause of the interruption visibility of streets to the residential unit, except in a few cases, in all passages only through residential areas and general areas is yard door. Area wall in most of buildings have simple external appearance, but from inside have decorations including roof, face, shelf and ledge which in that use from brickwork and brick cut. These decorations create rhythmic geometry and of course own also introduce property wall (Ansari *et al.*, 1389).

The Houses Exterior: Unlike modern exterior of Guilan that decorated with stone and cement and glass and etc., the exterior of old houses was simple, when brick and without special decoration and if had sights and luster more was internal than external. Aside from that because most of the houses was in the middle area and so-called central, there was no need for external decoration. Walls were also mainly brick and without decoration and cover and in the some cases mud. Middle class and poor houses had also hedge tube and cotter like rural house walls (Payande-e Langaroudi, 1375).

The Houses Interior Space: Unlike modern apartments, Rasht old houses, were houses with a large paved yard, with variety of trees, wells water, pool and building in the middle and mainly two ranch. By the late decade of the forty before Rasht-Anzali plumbing, all of Guilan houses had one water well that was erected at depth of 2 to 15 meters, which area people of its water used for washing and drinking. To lift water from the wells used of the device by the name of Karteh Khaleh or rope and occasionally windlass. Some explicit houses had also Russian hand pumps named Nasous.

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Toilets (as today), lavatory (toilet) was installed that was outside the main area of the building and in the yard corner and away from wells and as far as possible try that the sewage water didn't sagged into the wells bank. However, in some houses due to the short distance between the toilet and wells, pollution has penetrated into wells, and was causing parasitic and intestinal disease. Most houses had a pond, with blue tiles and sometimes pebble tiles, some with pictures of Iranian kings. In some houses, vat was buried in the ground which was used for salted fish. Yard of manor houses was mainly large and wide, with garden of flower by various fruit trees and outside the main building, rice store, employee's room and carriage parking, stalls, coachman room, aviary and probably dedicated bathroom (Nikouye, 1387).

Iwan (Local Iranian Porch): Porches in the country north architecture have important role in the daily lives of house people. This element with at least closed, is space for maximum ventilation and Curran. So in the warm time of year, place move activities of family residence. Apart from porches application for spring and summer life, this element is average outside cold weather and inside warm weather in winter and filter for separation of wet and dry spaces in rainy days. About 90 percent of Rasht city old tissue building in addition to the southern porch have also the northern, eastern and western porch. These porches have role of building guard in front of rain, of course are effective in building breath and in create of the draught by wind.

Also these porches at wealthy person's houses are main direction of the servant's traffic. Because of these porches category have just Circulation role and like main porches are not important, called Gholamgard. Gholamgard width and porches fender rain slant was about 80cm, however main porches that is place of the behavior of the daily residents has width gto2/5 meters (Ansari *et al.*, 1389).

Room Placement: The main components of residential units that is for security in winter, is room. Room space is form to important person activities and without room, house is not significant. Important point in this study is count, proportionality and physical system of room. At 90% of the Rasht city old tissue houses count of rooms is not more of 4 and minimum number of rooms is 2.

Because of in summer, move person activities are in porch, room is less use, but in winter this limited and closed space, have more applications. In the middle of rooms have length between 3/5 to 5 meters and width between 3 to 3/5 and human echelon by 11 to 14 meters size. Placement rooms in front of the southern porch mean at second stage building is common. But in kind of 2 floor buildings, rooms are creating at the south of building. Place that in another kind is the southern porch. Then the north porch was built in building that by own wooden and glass, is introduced special element in the architecture of the country north. At these building, roof overhang is block of permeation have summer sun to building inside (Ansari *et al.*, 1389).

The Yard: Yard in terms of performance divided to 3 main, service and mediator parts. Classification yard performance is more based on its position relative to house and geographical direction. In this way the southern yard of sunshine, main yard is clear and by elements like pool and garden is comparison. Form and order of these element by geometric divisions within the walls of the yard is completed. These yards define the axis movement of the area entrance to building. Usually gardens in yard is very simple. Perhaps the reason is the diversity of automotive plant and mass plants that grow every inch of land. In yard of the old houses, walls brick decoration and row niche that embedded in the wall is glaring (Khakpour, 1386).

Spray Pond: Due to high humidity area, there is a pond in most of the old houses in Rasht far exceeds expectations, but considering the people importance of this region to water and cleanliness, existence of the pond is essential. At this region pond is not only a waterfront, of course its function is important. Thus, the possibility of placing the pond is in the southern yard and usually in the main courtyard and between the entrances to the building. In most buildings, pond has a geometric shape that its symmetry axis is aligned with the main axis building and its geometry and proportion is match to arch views of wall yard (Ansari *et al.*, 1389).

The Tile Roofs and Galicover (Local Material): Rasht city from distant past was famous to city rain, due to this weather situation and pour harsh and barrage rains. Architecture of houses roof cover in this area is require roofs with a fast slope and wide ranges that prevent from water stagnation on the roofs and its

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damage to the side walls of and its erosion. So in rural, Galicover roofs with steep slope and in cities, tile roof by wide range was common and emerged important characteristics of Guilan architectural (Shokouhi Rad, 1393).

The Building Materials and Structure: Although the reasons Rasht and its especially importance as a regional center, the first town houses adjacent to the rural residential areas are most robust and literature remains of travelers and history books suggests the use of the red brick in walls, pottery half jug in buildings roof and also too much wood in porches, floor and columns. This is due to the commercial center of the city in the past and the relative wealth of people living in it, is justified; whereas in the rural vernacular architecture of Guilan especially in plain logic, wood of the trunk tree, branches of trees and plant fibers are the main materials of building. Also because of the numerous fires in Rasht several large fires in the past, from 1320 in order to Baladieh (the time mayor), use of clay in buildings roof was forced.

Residential buildings in the old tissue of Rasht city were with the use of the brick and wood, based on carrier walls, Due to financial indigent buildings owners that in addition to the use of materials desirable, in the repair and maintenance of buildings were diligent, few houses on the left in old tissue of city are these buildings.

But is interestingly in walls inside, were applied to wood vertical and horizontal coils internal 70cm to 1 meter. This type of the wall in terms of canvas called Are Kasma.

«Are Kasma a wall of wood and brick that were between 2 columns (left hand) and lay it put brick and were filled with thatch» (Payande-e Langaroudi, 1375). The rooms' brick walls like heat storage by gain radiant energy in day and back to this energy at night were causes adjustment inside building temperature. The much thickness of these walls not only is cause time delaying return the heat, but also in system of carrier wall, is cause the leading static.

Buildings by seats and create cat track are out of the ground and seats and foundation materials general were brick, stone and lime. Lime concrete foundations in the construction of these buildings were common and main walls building with the brick and much thickness and maximum were built on two floors. Tile roof on the wooden crate packing was the building's roof of the old town.

The porches material was from wood and in some buildings, the porch was wall of wood and glass that enclosed porch space increases especially the northern and western porches.

Also in the buildings were harvested materials of all doors and windows were from wood that due to wealthy of this element in area and its characteristic of plasticity in view of buildings had a large variety. Decorative wooden buildings is one of the features of houses in Rasht. This element in many buildings as door-window has caused the separation of two adjacent space (Ansari *et al.*, 1389).

RESULTS AND DISCUSSION

The main structure of the houses of Rasht is based on the structure of village houses. In the houses of Rasht, most of the building materials are those of local sources e.g. wood, and because of the special climatic situation, the roofs are covered by big tiles.

In these houses all the spaces and parts (entrance, yard, chambers...) are placed in an order that emphasizes on the priority of the center.

We put all these constant elements of the late Qajar and early Pahlavi houses in the table 1,2,3,4 to get the following results:

1. All the main elements of the late Qajar houses are the same as those of the early Pahlavi houses. No significant change can be seen in the houses of these two eras. The only little changes can be seen in offices and public spaces.

2. In Rasht most of the spaces are a combination of dwelling places with business places or offices. The houses on the main streets usually have two floors that the second floor is a dwelling floor while the ground floor is a business place or an office.

3. Considering the interiors of the late Qajar houses of Rasht one can see that the entrance leads to the guest room first and the private chambers come next ; The semi-private spaces come first and the

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totally- private spaces are reached next . In the early Pahlavi houses –which resemble the office spaces – the directly-attached chambers are replaced by corridors that connect the entrance to the chambers. **Table1: Analysis of Several Qajar Houses In Rasht (Reference: Author)**

N.	Name of House		Plan	Characteristics	General Characteristics	
1	Shirazi House	Qajar		 Vestibule Wooden material Variable opening light Corridor in middle Iranian tinted glass window Iwan (local Iranian porch) 		
2	Abrisham i House	Qajar		 Adobe yard wall Vestibule Wooden material Variable opening light Corridor in middle Iranian tinted glass window Iwan (local Iranian porch) Spray pond Ornament (mirror and stucco decoration) 	 Adobe yard wall Vestibule Iwan (local Iranian porch) Material and structure Opening light Room placement Ornament 	
3	Pour Abbas House	Qajar		 Adobe yard wall Vestibule Wooden material Variable opening light Corridor in middle Iranian tinted glass window Iwan (local Iranian porch) Spray pond Wall niche 		
4	Eshkevar i House	Qajar		 Adobe yard wall Wooden material Variable opening light Brick elevation made of plaster and lime Corridor in middle Iranian tinted glass window Iwan (local Iranian porch) Wall niche 	 8. Spray pond 9. Wall niche 	
5	Avansian House	Qajar		 Adobe wall as yard wall Wooden material Variable opening light Brick elevation made of plaster and lime Corridor in middle Iranian tinted glass window Iwan (local Iranian porch) Wall niche 		

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N.	Name of House	Period	Plan	Characteristics	General Characteristic s
1	Momayyez i House	Early Pahlavi		 Adobe yard wall Wooden material Variable opening light Corridor in middle Iranian tinted glass window Wall niche Spray pond 	1.Adobe yard wall 2.Material and 3.structure
2	Ghadiri House	Early Pahlavi		 Adobe yard wall Wooden material Variable opening light Corridor in middle Iranian tinted glass window Wall niche Spray pond 	4.Openinglight5.Roomplacement6.Ornament7.Spray pond8.Wall niche

Table 2: Analysis of Several Early Pahlavi Houses in Rasht (Reference	ce: Author)
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Table 3: Comparison of Several Qajar Houses in Rasht (Reference: Author)

		House name				
N.	Characteristics	Shirazi	Abrishami	Pour Abbas	Eshkevari	Avansian
1	Adobe Yard Wall					
2	Vestibule					
3	Wooden Material					
4	Variable Opening Light					
5	Corridor in Middle					
6	Iranian Tinted Glass Window					
7	Iwan (local Iranian Porch)					
8	Spray Pond					
9	Ornament (Mirror and Stucco Decoration)					
10	Brick Elevation Made of Plaster and Lime					

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House name N. Characteristics Momayyezi Ghadiri 1 Adobe Yard Wall 2 Wooden Material 3 Variable Opening Light 4 Corridor in Middle 5 Iranian Tinted Glass Window 6 Spray Pond 7 Ornament (Mirror and Stucco Decoration)

Table 4: Comparison of Several Early Pahlavi Houses in Rasht (Reference: Author)

Conclusion

In the 19th century the West experienced some important changes in architecture and practically the era of modern architecture began. In the meantime the traditional society of Iran was shaken by mighty European powers' interventions and the Iranians' travels to Europe.

In the late Qajar and early Pahlavi eras Iranian architecture experienced radical changes in public spheres but only small alterations in private houses. Rasht as the capital of the province Guilan was not an exception to this process.

Buildings of Rasht did experience changes only when they belonged to the high-leveled aristocracy or when they belonged to the bureaucratic sector of the monarchy. The only change that can be attributed to the plans of buildings of the early Pahlavi era compared to those of the late Qajar era is the replacement of the corridors in the Pahlavi interiors instead of the directly-attached chambers of the Qajar era.

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