STRUCTURE OF HISTORICAL HOUSES WITH TABRIZ MASONRY STUFF

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Abstract. Most historical houses in Tabriz date back to Qajar dynasty. All valuable historical monuments of Tabriz were destroyed in an earthquake at the last night of 1193 Hijri, the beginning of Qajar dynasty, changing Tabriz to debris and ruins. However, some of the strong and stable monuments such as Alishah Ark, Tabriz Bazaar, Ostad va Shagerd mosque, Jameh Mosque and Kabud Mosque remained in spite of many destructions they faced. Following this earthquake, at the beginning years of Qajar dynasty, construction flourished in Tabriz and the people started building a new city full of beautiful houses and of course, having strong structure, on the ruins of the destroyed Tabriz. Today, these old houses can be seen in the central parts of the city. However, during some decades, these places underwent damages which require reconstruction and renewing. In recent years the trend for mending the historical houses of Tabriz has been resumed. For instance, Mashrouteh house, Sharbat Oghli House and the houses of Behnam Ganjali-zadeh and Sadaghiani and Amirnezam have been converted to cultural spaces after renovation and reconstruction. Even at present, many of these houses are being renewed and renovated. Architecture of these houses is local-Iranian and the wonderful geographical correspondence makes it absolutely appropriate for Tabriz. Considering the fact that Tabriz is located on earthquake zone, the structure of Qajar houses in Tabriz were built using framed and vault constructs, in which the basement usually had vault construct and the next floor had framed construct. In the present article, we’ll deal with the structure and the kind of materials and architectural spaces of these houses.
1 INTRODUCTION

It is not long time after the big earthquake of Tabriz. Around two century which during the long history of the city it is not a long period of time. However during this two century the city is rebuilt and gains its importance again, it seems that it is the continuous trend of the same glorious city which was the capital of Ghazan Khan Empire. Tabriz was very influential in the events of the era for more than two century. But the total destruction of the city happened in the last night of 1854, and ruined all the history of the city. It led everybody to a false belief that the history of the city must be sought in old texts and documents of the past. Although even now we can observe the historical heritages of the past in the city which are live witness to the architecture and urban planning of the city. We do not mean the neither Alishah mosque nor Jami mosque or Blue mosque (Holy mosque) which each of them is valuable buildings. We aim the great bazaar of Tabriz, and the glorious texture around it and beautiful houses which decorate it.

The last destruction of the city happened in Qajarid period. A dynasty which was simultaneous with one of the critical eras of the world. It is the age of revolutions which affected whole the contemporary world; French revolution, industrial revolution, socialist revolution in Russia, the World War I, the collapse of Ottoman Empire, and great changes in communication. In Iran, Qajarid era is affective in the problems of the later ages. (The destiny of Tabriz in the said era is very important. By the beginning of the said era whole the Tabriz is ruined by earthquake, and Tabriz becomes the leader of political earthquake and constitution revolution to end the life of the said era) After all, and without any hesitation, the architecture of the Qajarid era especially the houses are very important

Recognizing the architecture aspect of old houses in Tabriz

Since all the remaining houses in Iran belong to this period in different cities and make a great treasure. Analyzing the architecture of the said era would be invaluable without understanding the importance of architecture in Tabriz or other places. Economic, social and even the cultural lag of Tabriz must not undermine the importance of architecture in this era. Since the impressionability of the architecture especially the architecture of houses are slower than the era and they are resistant. The presence of the Qajarid architecture in old houses of Tabriz even after 40 years is an important point and recognizing the architecture of this era would be effective on realizing the architecture of the past periods.

Rebuilding the city after the earthquake in 1854 and studying he documents shows that even there many buildings that belong to the Qajarid era, however they have been formed according to their former texture and undoubtedly they belong to the glorious period of Tabriz in Ghazan the King era. Their combination along with the bazaar which is the greatest bazaar in the world creates a pleasant complex of residential texture which has maintained their historical values.

The architecture of the old houses in Tabriz is domesticated Iranian architecture. The great climatic conformation has changed it the architecture of Tabriz. Tabrizi old house is similar to houses in Kashan or Yazd, but in other space and relations. But from the point of view of conformation with environmental condition they lack the desert spatial patterns such as loggia or Takhtgah. The coldness of the climate and conformation with the climatic condition has omitted the fronts whose back side is towards sun in warm area's architecture and by correct understanding of the environment and decreasing the open and semi-open, the number of closed spaces increases.

Unlike the desert houses, instead of having corridors in all direction, most of them are vertical, summer used to be passed in basement and the Hozkhaneh, and he winter was spent in the upper floors, however using the spatial patterns never violates the rules. It begins by the over
door which is strange and various in Tabriz. There is no old house without over door. The first law is to respect the elderly.

Figure 1, 2: South Elevation of Mashroteh and Sharbatoghli houses.

Figure 3, 4: South Elevation of Behnam and Ghadaki houses.

2 STRUCTURE OF HISTORICAL HOUSES

If these houses are built aloof, and tall walls separate them from the outside the outer wall has been framed and the over door has been decorated beautifully to respect the pedestrians. This principle has been observed and the decorations and motives in the gutters are surprising. Because of that the over doors show the condition of the owners whether poor or wealthy. After the over door usually the entrance starts with a porch even if it is not octagon. When entering the yard you can feel the intimacy and the symmetry. Everything is placed in the suitable place. The pool, garden, passages, the order, symmetry, and repetition could be seen clearly.
The scene behind could be seen from the decorated façade. The three-doors and the five-doors are located in the axis of the house which the location of the Tanabi and it is shown by a pattern. The decoration of the old houses mostly is made with brick and plant motives, and they affect the house which distinguishes the houses of Tabriz.

The old houses of Tabriz mostly are built by the combination of two frame and arch structure. Usually the basements are made with arch structure and the upper floors with frame structure. In basement stone, brick or a combination of the both has been used and the upper floors are made of wood and the adobe. With a brick façade and without pointing, sometimes stone, decorated or divided plaster could be seen too.

The old houses of Tabriz belong to three eras, the early Qajarid period until the end. The main characteristic of this era is the loyalty of the architects to the principles and concepts of the spaces. There is no European element or motives in the decorations. All the spaces are correctly located and there is no exception. The second era starts form the late Qajarid period until the first decade of Pahlavi government.

Although Tabrizi architecture is loyal to the principles of the house architecture, however the decorations of the house are affected by European motives. Other changes which could be seen and it is the distinguishing feature, is the emphasis on the stairs and their placement in the most important part of the building and the reduction of intention to build the house in the 2 or 3 sides of the yard. There are limited signs of having small windows towards the outer passages in the upper floors. The third era is the second decade to the middle of the fourth decade.

In the houses of the era although the different spaces are built according to the known principles of the past however their relations and placement does not follow the former principles. The interruption of the plan and the façade could be seen in the houses of the period. Behind a symmetrical façade there are some spaces that are not symmetrical. Using the European elements and motives are plentiful and there are many windows to the outer spaces. There are some houses in this period that it is hard to distinguish them from the former ones. There are many jointed parts which we can see them in the houses of the two former periods and some of them are valuable.
3 A SUMMARY OF THE ARCHITECTURE IN QAJARDI ERA

The houses of the said era bear the characteristic of the Qajarid culture and they are the continuation of the traditional house architecture in Iran. Patterns such as three-doors, five-doors, two-doors, etc has been used in spaces such as Shahneshin, Hozkhaneh, rooms, Kalleyi, Goushvareh, Tanabi, … and they are used lawfully. The most important space is located in the center of the building. The entrances of the house from the yard are located in two sides of the spaces which are called Kalleyi or Goushvareh. There is a space in the basement which is called Hozkhaneh. The façade of the building is affected by the plan and in fact the placement of the paternal spaces, forms the plan and the façade. The decorations are simple and usually the frames and the combination of the arches decorate the building. The brick decorations, over doors, the engravings on the façade mostly follow Islamic patterns. Unfortunately there is not so much buildings remaining from the said era and most parts are jointed ones.

4 ARTICULATION OF HERITAGE VALUES AND SIGNIFICANCE

The last destruction of the city occurred at the same tile with the start of Qajarid dynasty, a dynasty which was at the same time with one of the most important and determining periods of the history. It is the era of revolutions which has affected the world today. French revolution, industrial revolution, Russia's socialist revolution, the collapse of Ottoman Empire, and great communication are the products of this era.

In Iran the history of Tabriz is the most important one, at the beginning of the said era Tabriz is destructed by an earthquake.

The architecture of the old houses of Tabriz and its climatic conformation makes it to be Tabrizi one. Summer is spent in basement and Hozkhaneh and winter in upper floors.

![Figure 7, 8: Hozkhaneh of Ghadadi and Heydarzadeh houses.](image)

It starts with the door transom, which is diverse in Tabriz, there is no house in Tabriz without transom, the first principle is to respect the others after the transom, the entrance is through gallery; it is the main entrance which is located after transom, it operates like a joint that divides the movement towards Exterior 1 and Interior 2 parts.

The entrance has architecture decorations and color diversity is outstanding. Then we enter the yard through a hall 3. When entering the hall you could feel the sensation of being present

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1 Exterior: A part of the houses which is considered as the main part and guests are accepted there.
2 Interior: A part of the house which he wife, children, servants and other members live there.
3 Hall: A corridor which is located after entrance.
in a suitable and intimate space. Everything is located in its right place, the pool; paths, symmetry and repetition could be seen. Chaharbagh is like a paradise inside the pool. Perhaps among the world people Iranians have paid the more attention to water. Iranian architectures have entered many elements to the buildings using water such as pools, waterscapes, that has decorated Iranian houses. Thus the waterscapes have been located in places that the next buildings images were reflected in the water. Therefore the perspective of the pool and the building were considered. These pools do not have so free forms and mostly are built in square, rectangle, cross, circle or combination of the geometrical shapes and according to angles and circles. Mostly are shallow but the water is spread. Thus it reduces the danger of children's drowning and since there is low pressure on the floor and side walls, they are made of materials such as stone, lime and mortar. There are many flowers and fruit trees around the pool. The extra water of the pool pours into the terrace besides the pools. Red fish mostly are in the pool to eat the algae and moss. In old houses the background scene could be seen through the decorated façade. Mostly there is a window in the axis of the building that Tanabi is located there using the Shekemderideh pattern.

![Figure 9: Tanabi of Mashroteh house](image)

The decorations of the Tanabi are mostly painting on the walls and plaster in the ceiling along with mirror works, sash(Orsi) windows, colorful glasses and wooden doors. The main characteristic of these houses are the complete loyalty of the architectures to the concept and principles of the spaces.

4 Tanabi: A big room for guests.
5 Sash window: A big wooden window that covers one front of the house and it has opening which can move up and down and has colorful glasses.
5 RELATIONS IN THE PATTERN OF THE OLD HOUSES:

There is an ornamented façade which attracts passengers and its ornaments could be brick work, and stuccos. Also, in the entrance there was a space for sitting and resting. Wooden door had a knocker one used by women and another one used by men. Tanabi (guest room) is the central part and being ornamented. Some of the decorations being done on the dados are beautiful paintings of flowers, and arabesque, that is repeated around ledges. The mirror works and stuccos decorate the ceiling and Orsi windows make the rooms bright.

It could be mentioned that Stuccos on the north frontal, ceramics on the east frontal, constructing a basin in the middle of the yard and a garden around it are some of the characteristics of the Qajarid architecture.

REFERENCES


[4] East Azarbaijan Cultural Heritage Organization Archives