Examining relief stucco decorations of the Abbasi House of Kashan

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Abstract: The Abbasi house is one of a set of aristocratic houses of Qajar Dynasty in Kashan. This house is built on a land of about 5,000 square meters with a 7,000 square-meter building area. This house is a good example of very detailed architectural handicrafts, especially stucco; stucco is applied in this house with a lot of precision and great diversity, so that the spaces and different parts of this house enjoy from appropriate ornaments depending on their function and the type; the ornament of stuccos are also different accordingly. Plaster was prevalent in the architecture of Iran from prehistoric era as plastering or plasterwork. Haft Tepe in Khuzestan, Iran which goes back to the Elamite era has some traces of plasterer; this decorative art was, also, of great importance in the Qajar era. In these series of buildings, lattice form stucco is applied for Rozaneh (opening) spaces. In addition to arabesque, angelica, and animal traceries, pentas wild flower, rose wine, and lily flower traceries can be seen in this building, all these traceries are retrieved and adapted from designs of the Qajar era and all are influenced by European art and culture.

Keywords: stucco, the Abbasi House, architectural decorations, opening, Qajar

Introduction

According to archaeological excavations, ancient city of Kashan has long been the cradle of the oldest civilizations and later was titled as the bride of Iran due to brilliant records of social system, good governance, urban cleanliness and adornment, majestic and magnificent monuments and famous and important industries.

There are about 600 houses with historical value in Kashan. These large and magnificent houses with unique features were built by prominent people and in particular by merchants in the Qajar era in Kashan. Gorgeous and luxurious decorations including mosaic faience, stucco, carvings, mirror work, stalactite, Yazdibandi and karbandi (which are complex dome structures), dome and lattice windows and so are among elements used in these buildings.

Although, historic houses in Kashan possess a harmony in its spacing and decorations, they have completely different and diverse kinds of architecture. Plaster can be observed as an ornamental element in the architecture from before the arrival of Islam in some monuments; stucco decorations reach their peak during Qajar era, in this era, modern traceries, patterns, and colors are used in addition to old ones.

Historic house of the Abbasi is renowned as the world’s architectural masterpiece due to its integrated architecture; beautiful and wonderful stucco which is present in this building amazes visitor. Stucco traceries and patterns of this house are in flat from and in white-gray color.

Methodology

The method of collecting this research is historical-hermeneutics. Historical research is very close to the totality of qualitative research. In both types of research, the researcher attempts to achieve the required documents for the analysis of a complex social phenomenon as much as possible. This process requires inquiring, collecting and organizing documents, evaluating and forming a holistic and believable narrative out of documents. In this process, data interpretation is imperative and important. In hermeneutic method of research, findings must be manifested in a narrative form alternatively, and in the process of research, findings must be organized according to an analytical mind and in a narrative manner. Recorded history consisted of narrative statements that describes the nature of thinking and recorded history.

The architecture of houses in Kashan

Although monuments and in particular historical houses in Kashan enjoy a harmony in spacing and decorations, they have completely different architecture, as ancient architects had tried to consider diversity in all areas to prevent two identical buildings, thus diversity and innovation has been important to them. There are about 600 houses in Kashan that have historical value and most noble houses settled around Alavi Street, for several reasons:

Seven aqueducts had entered the city and according to the map of ancient Kashan, this street was the entrance for five of them and certainly the first water of these aqueducts was clean and intact.

This street was cooler that the other parts of the city, so that the glaciers mostly located in this place (Khorshidifard, 2008:11-12).
History of the Abbasi House

This house has been built in Sultan Amir Ahmad Kashani neighborhood and it is a very rich and attractive house in terms of architecture and decoration. This house is composed of a series of different buildings which are related together from different ways. According to reports of Iran Cultural Heritage 1997 and based on the inscription found on the basement of this house, these series of buildings are expanded in 1836. The building area of this house equals five thousand square meters and it consists of five floors: the cellar, the basement, the ground, and the trass. Architectural handicrafts of this house such as stucco, mirror work, karbandi wooden openings with different (plant, arabesques, angelica, landscape, animal and so) motifs and traceries as well as geometric designs, Chinese knot, Yazdibandi and others in the Abbasi House of Kashan match the most beautiful examples of the Qajar style. (Reports of Cultural Heritage, 1997)

Appellation

About a hundred years ago, the outer courtyard was sold to a famous merchant of Kashan called the Abbasi for one thousand tomans; because this price was high at that time, for a long time people of the town talked about the high price of this house and as a result, the complete series was gradually called the Abbasi and the heirs lived in this place until some forty years ago (Khorshidifard, 2008:13).

Stucco

Plaster is a material which is flexible and soft compared to wood, stone, brick and many other materials, so the form of it can be changed easily. This is an opportunity for an artist to represent his power and ability. Plaster is obtained after annealing and grinding gypsum.

In addition to flexibility, plaster has many other important properties which makes it suitable not only for decorating but also for plastering.

In addition to the two major properties of plaster which are fast curing and an increase in volume when cured, plaster has other properties including its (acoustic) silencer property and its resistance against fire and it also has a white and pleasant color (Kebari, 1994:23-22).

Plaster has been prevalent in Iran since prehistoric era as plastering “Haft Tepe in Khuzestan belonging to the Elamite period has some traces of plastering” (Ansari, 2007:319).

In the Achaemenid era, plaster is used both as an ornament and as a coating: in this period, plaster is used as the coating for wooden beams (e.g. well-known hall of Treasury of Darius in Persepolis). Moreover, some piece of stucco of tulip is obtained from the palace of Susa which belongs to Achaemenid era (Sajjadi, 1995:195).

Stucco was common during the Parthian period and some examples of it have been observed in Khajeh Mountain. Monuments remained from Sassanid period in the palace of Kish and other buildings are in such number that it can be said the most widespread form of decoration has been done with plaster. After Islam, stucco has retained its place and enjoyed of the finest and most versatile of its kind until the late patriarch. Throughout the course of history, plaster has been combined with tile, stone, and mirror and, thus, its efficiency has been grown much higher.

Aljativ niche located in Isfahan Mosque is considered as one of the most amazing examples of stucco in the architecture of Iran (Zaki, 1984:56).

The best kind of stucco belongs to the Qajar period. Iranian artists who did the petite work performed the stucco work without the use of advanced tools. Iranians brought such elegance and diversity into the style and techniques of stucco that no other nation can compete with them in the use of this substance (Naraqi, 2003:208-207).

Decoration of buildings in the Qajar era

143-year old rule of the Qajar accompanied multiple political, social, and cultural events, such as the presence of the Russians and the British in the south of Iran and the entrance of the Westerners to Iran for various purposes, other events of this era included the development of the photographic industry, Iranians departure to Europe, textile and cloth printing. Reforms have influenced the art of this period, especially painting, architecture and related arts, directly. Hence, the Qajar period architecture enjoys a dichotomy: on one hand, it wants to stick to its previous Iranian traditions, and on the other hand, it is influenced by western architecture, and so Iranian traditional architecture is in decline. Compared to harmonious and clever architectural ornaments of the previous period, Architectural ornaments of the Qajar period were in lower proportion and rank.

In the Qajar era, architectural decorations were of great importance. Mosaic faience, stucco, stonework, plaster painting, mirror work, and painting on wood were the main ornaments and decorations of the Qajar period, most of the decorations of this period, such as the decorations of other fields are, in turn, influenced by western decoration. However, relative changes occur due to color and variety. The main decorative traceries of the Qajar period include abstract, arabesques, angelica, rose wine, landscapes and hunting ground, flower pots full of flowers and birds, pictures of kings and courtiers and princes, and the tracery of the lion and the sun and the angels. Luxurious and naturalistic aspects of the traceries and images of this period are combined with strong colors and they creat a world which is completely different from the previous editions and spiritual conditions fade in the decorations of this period (Ayatollahi, 2001:299).
Beautiful paintings which are in harmony with stucco and colorful mirror works are considered as two prominent arts of the Qajar period. Mosaic faience of this course of history has a special characteristic which makes it different from the mosaic faience of its previous and next period. In the Qajar period, tile was considered as a canvas on which natural, floral, fruit, feast, lyrical and epic traceries and motifs were painted (Makkinejad, 2008:49).

Common types of stucco in Iran
Milk and sugar: its maximum relief against the field equals 2-3 mm.
Relief: has the relief of about one centimeter.
Zebreh (filler): this type of stucco is called coarse because finishing is not applied. The angles are 90° and represent a relatively coarser view.
Berhashteh: is the most relief type of stucco (Pirnia, 2002:149).
Alvan (colors): consists of colored layers of plaster which are put after another based on the taste of the artist. Designer designs each layer and he not only completes the tracery, but he also provides a variety of colors.
Faience mosaic is of two types;
Flower parts or any other part of tracery are prepared separately. Then, when faience mosaic has grout and is integrated, different parts are installed in their own places.
They empty some parts of stucco and fill it with colored plaster. In this type of stucco, parts such as the little seed of flower or the stem of flower are selected and painted in different colors. In most cases, this type of stucco is smooth and flat; one example is the niche of the mosque in Saveh.

Lattice stucco
This type of stucco functions as a lace on the walls and sometimes the artist performs and represents other traceries behind the lattice plaster; one example is Mosque Jame in Urumieh. The stucco of openings (fixed windows) of the Abbasi House is of this kind, with this difference that the lattice stucco of the Abbasi House is performed on the empty space of wall is rather on the gron of wall, thus it can exchange the light. Color is used in lattice stucco, but in openings, colored glasses make harmony and complete the tracery and pattern (Pilehforoosh, paper).

Decorative plaster coating
Decorative coatings are produced in the thicknesses of 13 and 16 mm. Vinyl is stuck on one side of these patterned sheet coatings. Different wooden patterns or patterns made out of other materials are embedded on these sheets. These coatings are produced in three types. First, edges are finished and in square form, second, edges are beveled and chamfered, third, the width of vinyl is slightly larger than that of the sheet of plaster (Shahnavaz and Motamed, 2000:127).

Stucco decorations of the Abbasi House
In this series, wonderful stucco is performed beautifully and amazingly. The walls of yard have a special form of stucco and rooms possess appropriate decorations depending on their function.
The outer courtyard is decorated with arabesques and Shah Abbasi flowers as well as bird, falcon, the sun and so; traceries which show off on the walls in a pleasant manner.
The stucco of the inner courtyard has a black background (a mixture of compo and soot) gives a special beauty to the yard.
The stucco pattern in the form of candlesticks is over the portal of the entrance to the inner courtyard, represents the occupation of the homeowner who was a merchant of glassware and porcelain. There is also some stucco (of samovar, mirrors and candlesticks, frames) over the portal of the Boroujerdi House which represents the occupation of the homeowner.
After stucco was finished, architects brush a thin layer of tragacanth on it to make it resistant to rain; tragacanth penetrates into the plaster and as it is oily, it prevents the destruction of plaster with rain.
But in modern reconstructions, atrocil which is a new strengthening material and is the product of Germany is applied; this material has more strength and durability compared to tragacanth (Khorshidifard, 2008:45).
In the Abbasi House, traceries are in flat form and in white-gray. In this house, traceries of the sun and the cat and Shamsheh (ornamental loop) can be seen obviously. The stucco of the sun and the cat on the portal of the laundry room and kitchen indicated that the sun and the cat have no place in these locations.
In the stucco of the houses in Kashan, pentas wild flower, rose wine, and lily floral traceries are observable, all these traceries are from the traceries of the Qajar period and are influenced by European art and culture.
The stucco of lily floral tracery of the house is in a new color that was not common before, it can be said that there was a relative reform in the color and pattern of stucco in the Qajar era. The use of red color is among the innovations of this period. However, red color is mostly observed in the mosaic faience of this period (Porter, 2002:11).

Implementation of stucco
First, the master drew the desired design and pattern on a piece of paper such as parchment; then he gave each part of pattern to one of his apprentices and they did the needle work, after the needle work was finished, they drew the
pattern on the wall with duff, that is they fixed the design and pattern on the wall and drew the pattern by spraying duff and carved the space by brushed canvas and cut and carved the given pattern using cam.

In ancient houses of Kashan, white-gray stucco relief was made to decorate walls, columns, and pillars located outside and around the building; this stucco was resistant against the scorching summer sun and the wind and rain. Another type of stucco was a mixture of cob which consisted of soft clay and sieved and screened straw and sometimes some acer flowers were added to for its light pure purple and interesting color, this color was used merely to decorate the small stalactite arches of tall porticos, basements, and vestibule of the house.

First, they made various geometric designs visible using plaster lines, and then they lined them up using pure red cob pulp (Naraqi, 2003:208).

The stucco style of the openings of the Abbasi House

The stucco of lattice opening is one of the most prevalent types of the stucco of ancient houses of Kashan during the Qajar period. In general, lattice window was built using a variety of materials such as brick, tile, stone, plaster, and so in Iranian architecture. This kind of openings was decorated by various motifs that adorned the groin surfaces and bright spaces inside the building.

Before the building was repaired, all openings collapsed and none of them were in their place, therefore, all openings needed to be repaired. Their design and pattern was reconstructed on the basis of pictures or the debris of openings that was shed on the ground. In documentation carried out by Cultural Heritage Organization, the collapsed parts represented the motifs and traceries.

It seems that past methods have not changed. Motififar is one of the master workmen who continue to apply this method; Motififar had the responsibility to carry out the stucco of the openings of the Abbasi House.

Here, Motififar describes how he created this masterpiece. In the Persian version of this paper all words of Motififar are quoted directly.

To do this job, first, the plate glass is cut using bow arc pattern of openings, this glass is installed behind the opening, and they fix it close and tight with plaster from the back or yard side. They polish the most important side of glass (that side of glass which faces the room) and they cover the polished side with one 8 mm thick layer of (live) soft fine plaster, they put reed equipment into it (and, in fact, they reinforce the plaster so that it does not collapse). Then they separate tora arc from the border and context and in fact, determine the territory and borders of opening by means of instrumentation. For example, they use three instruments. That is they flaten the corner side of the wall with arch tools. The recessed groin makes a good harmony with the relief groin. Then a 5 cm width tora and a 10 cm border and then the context are implemented. (It is obvious that the mentioned sizes vary according to pattern). These sections are in the form of triangles with curved sides. The reed equipment is put into the sides of triangles so that they become more resistant to wind and other factors. In this stage, the cuts are done according to the pattern. (First, the pattern is drew on paper. The lines of the pattern are pierced using ramrod. Then they do the Grete press using duff and the pattern will be coppied on plaster surface).

After the work is dried, the plate glasses are removed and colored glasses are replaced. The glasses are cut based on the pattern. And the artist selects colored glass and adds to the beauty of design. So every petal and every leaf is filled with certain colored glasses. Sometimes some little seeds and some leaves remained unfilled with no glass so that air can move inside and outside the rooms because these openings are fixed. It is noteworthy that the glasses should be cut according to the shape of petals and so. In past, glasses were attached to the back of stucco opening using a mixture of paste and plaster.

But today, silicone glue is used. This glue does not collapse, it is colorless and resistant to moisture and heat, and so master workmen of stucco prefer to use it instead of a mortar of paste and plaster (Pilehforoosh, paper).

Conclusion

Stucco is a handicraft belonging to architecture, which has been prevalent in the history of Iranian architecture as an exquisite decoration. Stucco monuments in the Abbasi House are considered as a very rich kind of art. The Stucco applied in this house can be classified in 6 categories including geometric, plant, abstract, inscription, animal and western patterns. These valuable designs adorn the roofs, heaters, niches, columns and walls. All these 6 categories are applied in the stucco of the houses of the Qajar era. Geometric motifs were applied the least and western designs have been most widely used in these houses.

Qajar artists were influenced by western art, thus, they represented a naturalistic tendency in their works so that their stucco was similar to that of the Sassanid era. The increasingly ubiquitous influence of the west and of the vast size of new arrays did not permit the artists to have the opportunity to attract and combine elements of western art with the Iranian art and thus, some new tendencies was formed in society which confirmed and proved the presence of these foreign and borrowd elements in Iran. However, during this time, some creativity and remarkable innovations appeared in the works and buildings of stucco artists that most of them are unique in its kind and are considered as exquisite paintings, but foreign motifs and traceries which were an immition of western art and applied in these works never could replace the traditional Iranian motifs.
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