The Study on the Development of Ornamentation in the Architecture of Safavid Dynasty

N. Utaberta, H. Mamamni, M. Surat, A. I. Che-Ani and N.A.G. Abdullah

Abstract—The architecture of Safavid Dynasty can be considered the epitome of Iranian architectural beauty. Safavid dynasty (1501-1722 AC) along with Ottoman in Turkey and Mughal Empire in India were the three great Islamic nations of their time (1500 AC) often known as the last Islamic countries with international authority up to the 20th Century. This era approximately coincide with Renaissance in Europe. In this era, large European countries begin amassing power thanks to significant scientific, cultural and religious revolutions of that time and colonizing nations such as England, Spain and Portugal began to influence international trends with in an increasing while other non-industrial nations diminished. The main objective of this paper is to give a typological overview of the development of decoration and ornament in the architecture of Safafid Dynasty in Iran. It is expected that it can start a wider discussion to enrich this nation's heritage and contribute to the development of Islamic ornament in general.

Keywords—Ornamentation; Architecture in Iran; Safavid Dynasty

I. INTRODUCTION

THE architecture of Safavid Dynasty can be considered the epitome of Iranian architectural beauty. Safavid dynasty (1501-1722 AC) along with Ottoman in Turkey and Mughal Empire in India were the three great Islamic nations of their time (1500 AC) often known as the last Islamic countries with international authority up to the 20th Century. This era approximately coincide with Renaissance in Europe. In this era, large European countries begin amassing power thanks to significant scientific, cultural and religious revolutions of that time and colonizing nations such as England, Spain and Portugal began to influence international trends with in an increasing while other non-industrial nations diminished. [1].

Dr. Nangkula Utaberta IAI, was a Senior Lecturer and Profesional Architect at the National University of Malaysia, UKM Bangi Malaysia (phone: 60389217035; e-mail: nangkula_arch@yahoo.com).

Hamid Mamani was a PhD student at the National University of Malaysia, UKM Bangi Malaysia (e-mail: Mamani.h@gmail.com).

Ar. Mastor Surat was a Senior Fellow and Profesional Architect at the National University of Malaysia, UKM Bangi Malaysia.

Sr. Dr. Adi Irfan Che-Ani, was a Senior Lecturer and Profesional Surveyor at the National University of Malaysia, UKM Bangi Malaysia.

Ar. Nur Akmal Goh Abdullah was a Senior Fellow and Profesional Architect at the National University of Malaysia, UKM Bangi Malaysia.

Therefore in this era of Iran's and other Islamic nations, as the three aforesaid dynasties diminished, colonizing powers increased their influence in Islamic Nations. Safavid dynasty is often referred to as the first stable dynasty after introduction of Islam to Iran which preserved Iranian nationality and a united and powerful nation with well protected borders, borders which were bravely defended in this era. Safavid dynasty, while having various obvious weaknesses in governance and social affairs, succeeded to reclaim the national honor and heritage of Iranians. In this dynasty, especially in the reign of Shah Abbas I, Iran is a powerful and proud country with significant military and economic power. For the first time, Shiite denomination was declared as the official religion of the country and Iran was introduced as a great power in the region with its own attitudes towards various fields.

II. SAFAVID DYNASTY, ART AND ARCHITECTURE BOOM IN

Art in Safavid dynasty flourished in Iran. Safavid rulers were mostly supportive of arts and sometimes they themselves were a decorative artist¹. Such supportive measures resulted in significant advanced in arts such as calligraphy, painting, carpet making and weaving. Book illustration and decoration was the vanguard of these arts in Safavid dynasty. Painting and book decoration follows a distinctive style from the Timurid dynasty's "Harat" style. There are no significant architectural works remaining from the beginning of Safavid dynasty².

These works, which were often constructed in Tabriz and Qazvin (the 1st and 2nd capitals of this dynasty) has been destroyed due to three reasons. First is mud bricks and low quality of building execution in large buildings. Second reason is the high seismic activities of these towns and the third is numerous Ottoman sieges to the region, especially Azerbaijan and Tabriz. Therefore few works remain from that period, except the Chehel Sotoun and AliQapu buildings in Qazvin. As the Safavid capital was moved to the Isfahan during the reign of Shah Abbas I, so did architecture began to flourish. Shah Abbas I (1587-1629 AC) is one of the sovereign and capable kings of Iran's history. He faced three major problems in establishing and stabilizing his advancing kingdom:

Unrest in the northeast caused by the Uzbeks and problems in west and northwest borders which were always under threat by the Ottoman Empire.

¹ Example of this is Shah Tahmasb I, who was a painter and calligraphist

² From the establishment of the dynasty until the reign of Shah Abbas

Also Portugal begins to invade the southern sea borders of Iran. Shah Abbas was successful in quelling all of these problems and reclaimed the city of Mashhad and reconstructed the Shrine of Imam Reza, returned Azerbaijan to Iran and conquered Karbala and Najaf, thus making Iran a formidable power in the region. He also caused significant progress in military power, prosperity of economic and cultural interactions, architecture, urban development and decorative arts. [2].

As Iran's interaction with other countries, including western countries, began to develop, Iranian artists and craftsmen gained access to the experiences of their colleagues in other parts of the world. During this era, Europe has passed the fundamental changes brought by the Renaissance and various innovative cultural and artistic works would inspire Iranian artists and craftsmen³. When the capital was moved from Qazvin to Isfahan, Shah Abbas implemented his ideas of urban development in this city. In order to establish his authority in the urban system of Isfahan, he moved the city center from an old square to the banks of Zayanderoud River. Construction of Naghsh-e Jahan Square and its surrounding buildings is one of the brightest points in the history of architecture and urban development in Iran. Connecting the Naghsh-e Jahan Square and the old square was a 2 Km bazaar and as one nears Naghsh-e Jahan Square the buildings of Bazaar become more dense and extended, showing that bazaar was more prosperous in this region. [3].

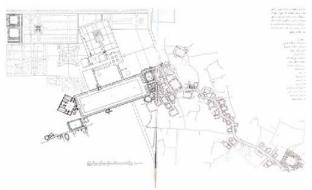


Fig. 1 Plan of Naghsh-e Jahan square

Construction of Chaharbagh Street, establishing a complex of gardens and royal palaces between Chaharbagh Street and Naghsh-e Jahan Square, developing caravanserais and schools, supporting the Ganjali Khan Complex in Kerman, restoring and extending the Shrine of Imam Reza in Mashhad, all depict the generous support of Shah Abbas toward development and prosperity.

These supports continued after Shah Abbas, during the reign of his heirs until Shah Sultan Husayn, the last king of Safavid Dynasty, a considerable complex in Isfahan was constructed along Chaharbagh Street which included a bazaar, a school and a caravanserai and was somewhat reminiscent of Shah Abbas complexes in beauty and grandeur.

The school is known as Chaharbagh School⁴ and the caravanserai as Madare Shah (King's Mother) Caravanserai⁵.

The Afghan's conspiracy ended the Safavid dynasty and after decades of anarchy, Nader Afshar, the brave and great warlord of Tahmasb II, defeated the Afghans and was crowned as the king of Iran. During Afsharid dynasty, because of his obsession with waging war and conquering various countries, practically no advances were made in development, architecture and other arts⁶. Also from the Zand Dynasty, while Karim Khan Zand was a fan of science, literature and art, few architectural works remains, namely Karim Khan Complex in Shiraz.

III. FACTORS AFFECTING ARCHITECTURE IN SAFAVID DYNASTY

Architecture and art in this era, thanks to the support of the Safavid rulers, prospered. The works of Safavid dynasty are known as the symbol of Iranian art and architecture. Maybe the people of Iran consider the most beautiful artistic and especially architectural works of their country from those of Achaemenid and Safavid Era. Many experts think otherwise, they don't consider this era the perfection of Iranian art and architecture, but many of these scholars confirm the beauty of art and architecture in Safavid dynasty.

Three factors affecting art and architecture in this era can be summarized as follows: [4].

- 1. Availability of past eras; rich experiences to the artists and craftsmen of this era, who inherited that experience. They saw various motifs and patterns remaining from their ancestors and preferred to use proven frameworks instead of experience new and untested patterns. Therefore they set upon perfecting the past patterns⁷. The interest Safavid artists shown in Timurid patterns is more evidently clear. Architects of Safavid dynasty properly used this effective factor and shown themselves to be worthy heirs of such beauty. This has been criticized by several scholars, they believe that such clinging to these powerful models prevented innovation in designing and construction.
- 2. Religion is the second factor affecting art in this era. Safavid dynasty is known to have strong inclination towards religion⁸. As said Shiite Islam was declared as the official religion of Iran during Safavid dynasty and therefore Iran became distinctly different form surrounding countries which all followed Sunni Islam. This inclination and

³ Influence of such inspirations can be seen in the paintings of this era

⁴ Also known as Shah Sultan Hoseyn School and Shah School

⁵This caravanserai is now used as a hotel

 $^{^6}$ Maybe the single most important building of this era is Kalat Nader or Ghasre Khorshid (Sun's Palace) in Khorasan

⁷ For example, the painters in the beginning of the Safavid dynasty knew two rich and beautiful old styles. The first is the one formed in Harat and reached perfection with Behzad. This classic style, while seemingly cold and strict, was quite instructive for the painting of this era. The second style was that of Turkmens of Tabriz that with its liveliness and joy seemed an appropriate pattern. Therefore painters in the beginning of Safavid dynasty (during Shah Esmail I and Shah Tahmasb) combined these patterns and created such beautiful works that in turn became a model for painter of Shah Abbas painters and afterwards.

⁸ Whether religious tendencies of Safavid rulers had correct methods or not or whether they really believed in their religion or just used it as a means to an end is an issued which must be considered and reflected upon.

tendency to expand it is evident in art and architecture. In addition to Shiite themed inscriptions, arabesque motifs which replaced geometric motifs (that maybe were considered related to Sunni followersh⁹) are among other examples of these religious influences¹⁰.

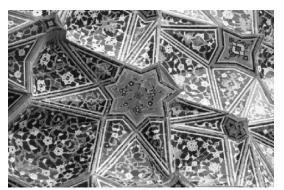


Fig.2 Entrance of Masjid-e Shah (Shah Mosque)

3. Establishing extensive interaction with western countries is the third factor affecting the works of this era. These interactions resulted in Safavid artists coming to know the works of the western world and as was mentioned, Iranian artists were greatly inspired by these, especially in painting. Many of Safavid paintings show characteristics of European styles, such as perspective and shadow and also in choosing the subject of the painting and position of the main subject.



Fig. 3 Painting in Chehel Sotoun

Iran's narrative oriented paintings gained the chronicle properties. Along with traditional narrative subjects, others gained importance as well, such as portraying, recording important events such as kings' battles, depicting real life situations such as a tiger attaching a young man and various social and criticizing subjects such as illustrating Qizilbash soldiers slipping following the changes in military organizations of Shah Abbas.

IV. ARCHITECTURE AND DECORATION

In the architecture of Safavid dynasty practically no innovation is seen. Safavid architects proffered to complete and perfect old patterns instead of innovative new ones. They were especially inclined towards the works of Timurid era. This can be seen in continuing of Timurid methods in decorative systems of Sekonj (like moqarnas). In some of Safavid works, in the connecting location of wall to the roof complex and advanced decorative system was used which is deeply rooted in Iran's architecture. Decorative approach to this transition probably began at Sheykh Abdolsamad Tomb and from then on advanced to various and complex forms. Muqarnas and Patkaneh and the advanced Sekonj system which reached climax in Harat by Qavamedin Shirazi also continued in Safavid era. The complex Sekonj system implemented in the main hall of Chehel Sotoun Palace can be considered as a masterpiece of Iranian architecture. Another approach to this transition, as a dazzling Patkaneh, is located in the central hall of Hasht Behesht Palace. [5].



Fig. 4 Sekonj in Hasht Behesht pales

Constructing large multi-purpose urban complexes, simple and yet proven designs, using clear and understandable geometry and symmetric decorations are among the characteristics of architecture in this era.

Also the buildings of this era are famous to be constructed with haste and this has resulted in numerous faults during construction. These faults, which were mostly technical and implantation, led the architects to completely cover structural elements with decorative layers.

Therefore decorations in Safavid found a more distinct place and practically became a stage in building construction which covered the numerous executive faults.

New conditions of Iranian architecture promoted the decorations and it became an inseparable part of Iranian architecture. From then on, aside from conceptual and complementary role, decoration became a technical requirement. This characteristic has been passed down to Iranian architecture of today and many technical deformities related to construction are covered by decorative layers. [6].

⁹ Nacipoglu, G(1995) believes that Safavid, like Fatimid, preferred arabesque motifs because of their presumed attribution to Ali (which strongly suggests that is fiction) and their rejection of Sunni like buildings.

The street of th

In decoration of Safavid dynasty every decorative patterns are used, such as geometric, arabesque and calligraphy inscriptions. For the first time since the introduction of Islam to Iran, Illustrative motifs became prevalent and were used as a main decoration in Iranian architecture.

A. Calligraphy Inscriptions

Quran Ayah, Hadith, Holy Names, Persian Poetry, names of kings, founders, constructors and also previous eras are among the subject of calligraphy inscriptions of Safavid dynasty. Both kinds of inscriptions, calligraphy and Banayee are seen in the decorations of this era but as calligraphy progressed it was used with an increasing rate in the buildings of this era.



Fig. 5 Calligraphy in Sheykh Lotfolah mosque

Themes of inscription were usually religious and depict the official Shiite religion during Safavid dynasty. Inscriptions were usually implemented above portals, corners of main and secondary verandas (the bodies of balconies), Chakads, gussets above balconies, dome's crater and base, mosque Mihrab and bodies of minarets.

Like previous eras, calligraphy inscriptions in various buildings showed that a high percentage of people were literate. Also the sacredness of calligraphy and the concepts stated in it attracted the support of religious leaders. Also calligraphy inscriptions themed with Persian poetry massively impressed Iranian viewers.

The beautiful combination of the art of calligraphy (or the enchanting geometry of Banayee) along with masterfully done coloring when accompanied by mystical or religious (Quranic) themes can become the most impressive works of art.

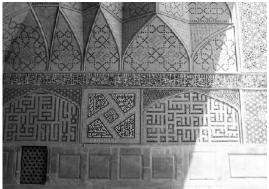


Fig. 6 Iyvan-e Ostad, Masjid jame, Isfahan

Designing and composition of inscriptions, especially in long inscription running through the walls of verandas or portals have impressive accuracy. An example of such composition can be seen in the south veranda of Imam Isfahan mosque.



Fig. 7 Composition of decorations in Sheykh Lotfolah mosque

B. Geometric Motifs

Geometric motifs are used less widely in this era, because as mentioned before the relation of these motifs to Sunni architecture throughout this history can be a contribution to this matter. But it did not mean that they were totally forgotten and these were still used. [5].Geometric motifs were mostly inspired by those of Timurid era but less impressive and cultivated. A special kind of geometric motifs is seen in Safavid era which in addition to be relatively simple has a distinctive appearance. These motifs which are very much similar to Khatam marquetry were implemented using single colored tiles with hexagonal and pentagonal forms. Maybe the most beautiful example of such geometric decoration can be found at the portal of Chaharbagh School in Isfahan (as seen from Charbagh Street). Colors used in these motifs are as lively as those used in Khatam marquetry.

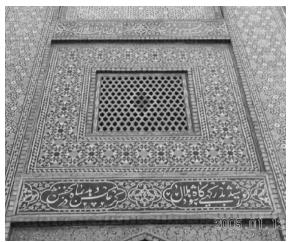


Fig. 8 Geometric motifs in Chaharbagh school, Isfahan

C. Vegetal (floral) motif or Arabesque Motifs

As geometric motifs diminished, arabesque motifs began to flourish in this era. Like the first Islamic centuries, arabesque motifs form the major part of Iranian decorations, with the exception that Safavid arabesque motifs like those of Timurid and IL khanate are slender and tall and the emphasis is more on the background. These arabesque motifs are widely inspired by Chinese flower and plants motifs in addition to having Iranian essence. Arabesque motifs influenced by Chinese motifs, while has made them more lively has reduced elegance when compared to arabesque motifs of first Islamic centuries in Iran. Themes of first Iranian arabesque motifs such as fluid relation of material and spiritual, faded border between background and content are less seen in the motifs of this era. 11

Because the arabesque motifs of this era are related to religious beliefs, these motifs became increasingly important as decorative elements of Iranian architecture and influenced arts such as carpet making and weaving as well. In Safavid era arabesque motifs gradually replaced body motifs.

This inclination towards using flower and plant motifs is also seen in Ottoman turkey and Mughal India. The difference is that these motifs in Iran remain mostly abstract, while the Ottomans and Mughals replaced Iranian decorative styles with semi-naturalist styles of flower and plants motifs.

V.CONCLUSION

Decorations and architecture in Safavid era, supported by rulers, inspired by the patterns of previous eras and influenced by European decorative arts flourished and created various works. Decorations of this era have rarely seen liveliness and diversity which are widely accepted and acknowledged by the public and scholars. While little innovations were used in the architecture patterns of this era, demonstration of new decorative patterns especially illustrative ones has made the works of this era famous and unique architectural masterpieces.

REFERENCES

- Blair, S.S. Bloom J.M, "The Art and Architecture of Islam: 1250-1800", New Haven: Yale University press, 1994.
- [2] Ettinghausen. R, Grabar. O. "The Art and Architecture of Islam: 650-1250", London: Yale University press, 1987.
- [3] Pirnia, M.K. "Familiarity with Iran's Islamic Architecture", Tehran: Nashre Danesh. 2005.
- [4] Burkhardt, T, Art of Islam: Language and Meaning", London, 1976.
- [5] Nacipoglu, G, "The Topkapi Scroll-Geometry and Ornament in Islamic Architecture", Los Angeles, 1995.
- [6] Pirnia, K. M., "Iran Architecture styles", Tehran: Pajohandeh, 2001.

¹¹ For example compare the arabesque motifs of Nayeen Jameh Mosque with that of Imam Mosque's dome.