

## Sustainable Architectural Elements in the Buildings of Buiid Period with Emphasis on the Aesthetics Values of Designs

### **Abstract**

The reign of Buiids (322-448 AH) has been one of the most significant periods in the history of Iran in terms of culture and civilization. There are works left from this period that show the architecture of this period. A study of the nature of architecture of this period and its elements can reveal the course of architecture in Iran and its developments in this period. This research has been done based on a descriptive-analytical method and library information collection technique. The research findings indicate that in the Buiid period, the architecture of early Islam with the cultural changes of the Sassanid period and the use of cultural enhancements and social and religious perceptions had fundamental elements in the form of innovation. In a way that is both reminiscent of the past and expresses the phenomenon of diversity in the evolution of Iranian architecture. Early Islamic architectural materials relying on environmental conditions include layers, clay, brick and stone. In most parts of Iran, the use of clay and earth has been constantly used from ancient times until now since the materials have always been ecological and were supplied from the same environment and surroundings. The beautifications of the early Islamic buildings rely on the decorations of earlier periods, in other words, they are a long historical painting, as it was used in the first prehistoric temples. In the Buiid period, there is a combination of architecture derived from Islamic culture and architecture left over from the ancient Iranian period, which can be reflected in the use of decorative motifs along with ancient architectural materials.

### **Research aims:**

1. Recognition of sustainable architectural elements in the buildings of Buiid period.
2. A study of the aesthetics of patterns in the architecture of the Buiid period.

### **Research questions:**

1. What features and elements did architecture have in the Buiid period?
2. What is the place of motifs and designs in the architecture of the Buiid period?

**Keywords:** Sustainable Architecture, Buiid Period, Architectural Elements, Aesthetics.

## **Introduction**

Architecture is one of the most important branches of art in human civilization, which has attracted the attention of many human societies since the first millennia. Over time, efforts have been made to develop and expand it. Architecture is not just a building, but a thought. With the advent of Islam in the Arabian Peninsula, a special and unique style entered the field of architecture, which has been effective and influential in the face of neighboring cultures, so it can be said that along the spread of Islam, architecture and art have the same shape and color. It became religious and widely associated with the religious ideas of architects in the borders of Islamic Iran. This effect is specifically seen in the construction of Islamic buildings. The integration of the features and elements of Iranian architecture with Islamic in architecture in the first centuries of Islam has led to the stability of a number of such works. Therefore, recognizing the elements of sustainable architecture in this period is important. Achieving a comprehensive phenomenology about the stable elements used in the architecture of buildings from the first to the fifth century AH, which leads to creating a source for identifying and introducing the architectural works of this period. Since a large part of the art of Islamic architecture is related to the first five centuries of Islam, any subject that somehow provides information in this field is imperative because these works, in addition to a volume of research included in the field of phenomenology, they also have special techniques of decoration that make them unique.

A review of the researches and studies related to the subject of the present research shows that the researches in this field have paid attention to the phenomenon of architecture in the Islamic period from different aspects. Rice (2014) in a book entitled "Islamic Art", Noor al-Rifa'i (2015) in a book entitled "History of Art in Islamic Lands" Mohammad Yousef Kiani (1398) in a book entitled "Architecture of Iran in the Islamic period" respectively Study: How the formation and growth of medieval architectural heritage; Islamic architecture, painting and pottery have divided Islamic arts and under each title, the changes and developments and works of each field of art in the periods of Islamic history are regularly reviewed and expressed, and finally the architecture of mosques, tombs, schools, Hosseiniyahs, Takayas, mosques, forts, stairs, reservoirs, baths, caravanserais, palaces, minarets and then the formation of Islamic architecture in Iran; Arcs in Islamic architecture; Domes in Islamic architecture; Architects, masters of the Islamic era, artists of the Islamic era. Examining the background of studies conducted on the building, it seems that most researchers have focused on decorations from the perspective of more prominent patterns and have expressed the quality of patterns and their analysis. Therefore, there is a research gap in the field of phenomenology that this research can be useful in obtaining more comprehensive information. The present research has been done by descriptive and analytical method and relying on library data and field observations.

## **Conclusion**

The study of a number of the works and buildings left over from the architecture of the Buiid period indicates the nature of the architecture of this historical period. During the Buiid period, which can be said to be an important stage in the history of Iranian art and culture, many buildings were created due to the interest and support of the Buiid rulers. Due to the fact that the Buiid dynast was a Muslim and a Shiite monarchy, the most important architectural features in this historical period were mosques. Examining the constituent elements of mosque architecture presented that a number of its components are derived from Iranian culture and architecture and some are derived from Islamic culture and its specific requirements. Remains from the fourth century AH, which can be seen today in some Iranian provinces such as Isfahan and Fars, designate the strength of this building. From the aesthetic point of view, the use of herbal, Islamic

and geometric patterns is one of the characteristics of this period, which is undoubtedly the architectural heritage of the ancient period, particularly the Sassanid period. With this change, the elegance of the motifs in the works of the Buiid period originated from Islamic culture. The obvious manifestation is the inscriptions on which the names of God or the verses of the Qur'an are engraved and occasionally is seen in the altars, porches and arches of the entrance or interior and dazzles the eyes of every viewer. Slowly the use of domes, porches and courtyards is undoubtedly taken from ancient architecture. Architecture, part of which has been extended to the Islamic period due to its geographical location and material requirements or the interests of the kings. The remaining plasterwork from the architecture of the Buiid period is a clear manifestation of the continuity of an element of the architecture of the ancient period. In this period, plastering and decorating the exterior with bricks has given a distinct feature and beauty to the architecture of this period, and this issue has created a unique nature for the architecture of the Buiid period. With these interpretations, it should be said that in the issue of architectural phenomenology in any historical period, the recognition of cultural, geographical and political elements bestows an imperative role.

## References

Elhami, Davood (1379), "Cultural flourishing in the era of the alphabet", *Journal of Philosophy and Theology Lessons from the School of Islam*, No. 10, pp. 32-21. [In Persian]

Azami, Zahra, Sheikh Al-Hakmaei, Mohammad Ali, Sheikh Al-Hakmaei, Taher (2013), "Comparative study of plant motifs of Ctesiphon Palace with the first mosques in Iran", *Quarterly Journal of Visual Arts*, No. 56, pp. 24-15. [In Persian]

Ansari, Jamal (1365), "The bed of the Sassanid era and its impact on Islamic art", *Art Quarterly*, No. 13, pp. 373-318. [In Persian]

Imanpour, Mohammad Taghi, Yahyaei, Ali, Jahan, Zahra (2013), "Reflection of Sassanid art and thought in the art of the alphabet: the art of architecture and metalworking", *History of Iran after Islam*, No. 5, pp. 53-21. [In Persian]

Bahmanyar, Ahmad (2004), *Sahib Ibn Ebad, The Effort of Mohammad Ibrahim Bastani Parizi*, Tehran: Tehran Publications. [In Persian]

Parvaresh, Marzieh, Farahmand Boroujeni, Hamid, Lari, Maryam (2015), "Study of the inscriptions of the Nain Grand Mosque", *Quarterly Journal of Islamic Art Studies*, Volume 11, Number 23, pp. 86-75. [In Persian]

Pope, Arthur (2003), *Iranian Architecture*, translated by Gholam Hossein Sadri Afshar, Tehran: Akhtaran. [In Persian]

Pirnia, Mohammad Karim (1964), *Iranian Architectural Methods*, Tehran: Islamic Art Publications. [In Persian]

Pirnia, Mohammad Karim (2003), *Stylistics in Iranian Architecture*, edited by Gholam Hossein Memarian, Tehran: Pajouhandeh Publications. [In Persian]

Tajvidi, Akbar (1345), "The contribution of Iranian architecture in the emergence of Islamic architecture in the early centuries AH", *Art and People*, No. 47, pp. 8-2. [In Persian]

Taghvinejad, Bahareh, Moazani, Maryam (2016), A Study on Plant and Geometric Arrays of the Altar of the Neiriz Mosque, Quarterly Journal of Islamic Art Painting, No. 15, pp. 88-76. [In Persian]

Rahimi Ariaei, Afrooz, Valibig, Nima, Mahmoudabadi, Seyed Asghar (1398), "Typical typology of Mehri banding ornaments in mosques attributed to the Albuyeh period to the Ilkhans in Isfahan province", Nagareh Quarterly, No. 49, p. 69 -55. [In Persian]

Rasouli, Houshang (2005), History and Architectural Methods of Iran, Fourth Edition, Tehran: Pashtun Publications. [In Persian]

Roygar, Mohammad (2009), Fars in the period of Albuyeh, Avand, Andisheh: Shiraz. [In Persian]

Zamani, Abbas (2535), The Impact of Sassanid Art on Islamic Art, Tehran: Ministry of Culture and Arts. [In Persian]

Zakeri, Seyed Mohammad Hossein, Memarian, Gholam Hossein (2005), "The Great Mosque of Neyriz", Fine Arts, No. 24, pp. 71-63. [In Persian]

Khansari, Sheida, Naghizadeh, Mohammad (2014), A Comparative Survey of Arrays in Varamin and Nain Mosques", Nagreh Scientific Research Quarterly, No. 29, pp. 62-45. [In Persian]

Kahan, Claude (1383), "Albojee", translated by Ali Bahrani-poor, The Growth of History Education, No. 15, pp. 37-30. [In Persian]

Kahan, Claude, Kabir, Faizullah (2005), Buheyan, Translator: Yaghoub Azhand, Tehran: Molly Publications. [In Persian]

Kramer, Joule (1996), Cultural Revival in the Alphabet Age: Humanism in the Islamic Renaissance, translated by Mohammad Saeed Hanaei Kashani, Tehran: University Publishing Center Publications. [In Persian]

Kiani, Mohammad Yousef (1997), Decorations related to Islamic architecture, Tehran: Cultural Heritage Organization Publications. [In Persian]

Alian, Alamdar, Sarafranz, Ali Akbar, Javadi, Shohreh (2012), "The motifs of Jarjir gate and its influence on Sassanid art", Bagh Nazar Quarterly, No. 22, pp. 10-3. [In Persian]

Mafrokhi, Mofazl Ibn Saad (2006), The Benefits of Isfahan, by Iqbal Ashtiani, translated by Hossein Abi Reza Alavi-Aavi, Isfahan: Isfahan Municipality Cultural and Entertainment Organization Publications. [In Persian]

Mostafavi, Mohammad Taghi (2003), Pars Climate, Tehran: Publications of the Association of Cultural Works and Honors. [In Persian]

Mollazadeh, Kazem, Mohammadi, Maryam (2000), Encyclopedia of Iranian Historical Monuments in the Islamic Period, Volume 3, Tehran: Hozeh Honari Publications. [In Persian]

Memarian, Gholam Hossein (2005), A Look at the Theoretical Foundations of Architecture, Tehran: Soroush Publications. [In Persian]

Montasheri, Mehran, Habib Shahbazi, Shiran (2016), "Study of the development of brickwork in the architecture of Iranian mosques and why not develop tile art in post-Islamic to patriarchal architecture" F. Jundishapur Quarterly of Ahvaz University, No. 6, pp. 93- 80. [In Persian]

Nazif, Hassan (2013), "Stability of Iranian architectural organs in the transition from the Islamic era", Bagh-e Nazar, No. 2, pp. 68-57. [In Persian]

Naima, Gholamreza (2015), The Evolution of Iranian Architecture, Vol. 1, Tehran: Soroush Publications. [In Persian]

Nowruzi, Azam (2008), "Introduction to the artistic methods of bedding", Monthly Art Book Quarterly, No. 120, pp. 110-104. [In Persian]

Hilland Brand, Robert (2001), Islamic Architecture, translated by Baqer Ayatollahzadeh Shirazi, Tehran: Rozaneh Publications. [In Persian]