

## Analysis, Typology, and Chronology of Stuccos in the Palace of Kuh-e Khwajeh

Zahir Waqs Abbasi\*<sup>1</sup>

Reza Mehr Afrin<sup>2</sup>

Seyed Rasoul Mousavi Haji<sup>3</sup>

### Abstract

"Oshida Mountain" (Mount Khajeh) has been used intermittently in the Sistan Plain because of its unique strategic position. In the southeastern slope of the mountain, there is a fortress trace that became known as the "Castle of the Disbelievers" after the arrival and conquest of the region. Based on the relative chronology of the pottery specimens of the two settlements in this castle, the first period dates from the third century BC to the end of the Sasanian period, and the second period is from the sixth to the eighth century AH.

In the present study that follows a descriptive-analytical type of research, the stucco casts of the Khajeh Mountain Palace, which are divided into three groups: circular, square and congressional are investigated on the basis of archaeological reports. There is no plausible history for these stucco designs and no comprehensive comparative study has been carried out; in addition to architectural studies, more than hundreds of stucco art from various historical sites have been observed, identified and compared. These artworks were found to be very similar to the plaster castings of Bishapour of the Sassanid era, Hajiabad and Kish. Another point to note is the addition of porches on the north side of the courtyard on which the Khajeh Palace stucco designs are mounted and they were certainly added during the second phase of construction and this embarks the fact that they were added during the Sassanid era.

### Research aims:

1. Identifying and dating the stucco designs of the Khajeh Mountain Palace.

---

<sup>1</sup>. PhD student of archeology in the historical era. University of Mazandaran (Corresponding Author)  
reza.vasegh01@gmail.com.

<sup>2</sup>. Associate Professor of Archeology, Faculty of Art and Architecture, Mazandaran University  
reza.mehrafarin@gmail.com.

<sup>3</sup>. Associate Professor of Archeology, Faculty of Art and Architecture, Mazandaran University  
seyyed\_rasool@yahoo.com.

2. Studying the typology of stucco designs of the Khajeh Mountain Palace in terms of shape.

**Research questions:**

1. What era are the stucco designs of the Khajeh Mountain Palace related to?
2. Are the stucco designs of the Khajeh Mountain Palace created during the erection of the first structure or added during the second construction?

Keywords: Oshida (Mount Khajeh), the Khajeh Mountain Palace, Stucco designs, Typology, Dating, Sassanid Period.

**Introduction**

Oshida Mountain (Khajeh), 30 km southwest of Zabul, is one of the most significant archeological sites in Iranian history. This trapezoidal basaltic lava is about 120 meters above the surface of the Sistan Plain, with a length of 2 to 2.5 km east-west and 1.5 to 1.7 km north-south and is located in the middle of the Great Hamoun Lake. Bearing in mind that modification in the government and central power is one of the most vital reasons in the conversion of the sciences, especially in architecture and decoration; hence, the history of science and art should not be regarded discrete from the history of social, economic and cultural revolutions (Fatahi and Lului, 2008: 151). One of the architectural decorations used in the Parthian and Sassanid monuments is the plaster decorations in the form of stucco designs. The artistic features of the stucco motifs and the style of plaster work were greatly expanded and flourished during this time, and specific patterns emerged during each period. This type of decoration, as a party tradition, entered Iran through Greece and Rome and regained its eastern character over time. The art cautiously developed early in the Sassanid era and peaked during the end of the age. In the archeological excavations and excavations of the Kuh-e-Khaje Palace, exemplary instances of stucco art and painting are exquisitely intertwined and the geometric patterns are skillfully formed and repeated frequently. In the following we will examine in detail the stucco artwork of the area.

Since the purpose of this study is to study, identify and date the stucco artwork of the Khajeh Palace, the research method is based on a descriptive-analytical method and a documentary and library study based on archaeological reports is carried out. In the plaster castings of the Kuh-e-Khaje Palace, we are faced with geometric and plant-based

**Title of article:** Analysis, Typology, and Chronology of Stuccos in the Palace of Kuh-e Khwajeh

patterns that are constantly duplicated and symmetrical and can be divided into three groups of circular, square, and congressed; this categorization is similar to what scholars have applied when studying the stucco artworks of the Sassanid era. As the research progresses, more than hundreds of plaster castings from various sites in the historical period were observed, compared, and typologically compared, and found to be very similar to the stucco artworks of Sassanid sites.

The first serious step in identifying the historic mountain took place in 1915 by Earl Stein, an English-speaking archaeologist; the results of his studies are documented in his famous book: "Deep in Asia" (Stein, 1928). Thereafter, the German scholar, Hertzfeld continued his exploration of Mount Khajeh. He visited the site in 1925 and returned four years later to study and survey it. The final result of his work was published in 1941 in the book "Iran in the Ancient East" (Hertzfeld, 1941). The third scientific work after Hertzfeld's excavations at Mount Khajeh was carried out by an Italian delegation headed by Gullini in 1961, the results of which were published in a book called Mount Khajeh (Gullini, 1964).

The archaeologist "Soror Ghanimati" began to study the ancient palace and documented many findings (Ghanimati, 2001). Mount Khajeh was the subject of a systematic archaeological survey by Sayed Rasoul Mousavi Haji and Reza Mehr Afarin in 2007, during which seven sites were identified from historical and Islamic times (Mehrafarin and et al, 2011: 44; Mehr Afarin & Mousavi Haji, 2007). In continuation of this process, the study of clay pottery for relative chronology was carried out by Leila Bani Jalali in 2008 (Bani Jalali, 2008) and then in 2009 by a team supervised by Korosh Mohammad Khani was established for the purpose of launching a site database and aforementioned examined the site judiciously (Mohammadkhani, 2009).

The excavations of Stein, Hertzfeldt and Mahmoud Mousavi led to the discovery of stucco artwork. The results of which are as follows: In a room in the western part of the painting hall, Stein discovered a plaster fragment with red residues in its holes. This plaster has a circular design and resembles that of Bishopour's plaster cast (Stein, 1928). Hertzfeld also discovered several plaster castings from Mount Khajeh, which unfortunately did not specify the exact location of their discovery. Based on framing and motifs such as swastika and hexagonal flowers, he believed that the obtained stuccos belonged to the 1st century AD and in all respects corresponded to the plaster castings of Babylon and Assyria (Hertzfeld, 2002: 299). Dr Mahmoud Mousavi has also made plaster casts in his excavations, saying: "The porches can be clearly seen inside. According to the similar plastering found by Hertzfeld, who attributed it to the Parthian

**Title of article:** Analysis, Typology, and Chronology of Stuccos in the Palace of Kuh-e Khwajeh

period, these stuccos, which coincided with and worked in the same manner, must also belong to the Parthian period' (Mousavi, 1375: 89). He correctly attributes these porches and stucco moldings to the second period of construction in Mount Khajeh.

## **Conclusion**

Mount Khajeh is an area that, due to its strategic geographical location, has been considered in various historical eras specifically during the Parthian and Sassanid periods. Prior to that, the relatively acceptable history of plaster castings in the Khajeh palace had not been presented. Stein believed that these stucco artworks were executed at a later date than the paintings. Kruger considered the stucco to be of the early Sassanid era, but Hertzfeldt concludes that it was consistent with paintings and at the same time as the Parthian period. Based on drawings such as swastikas, hexagons, and existing framing, he believed that the stucco artworks were from the 1st century AD and in every respect corresponded to the plaster castings of Babylon and Assyria. This idea was accepted year by year by researchers, but over the last century, with the expansion of archaeological excavations at various sites and the introduction of new sites and the discovery of new plaster artworks; basis for comparing the findings of the Khajeh mountain with other archeological discoveries was established; for this purpose, the three plaster board plates were studied separately.

There are several points to be made in this article that adds clarity. First, the history of using the Swastika or broken-cross pattern dates back to the fourth millennium BC in the Iranian plateau, and the presence of this pattern was not influenced by Greek culture. Second, if swastikas were found in the enclosures of the court of Assyria, they were also found in the enclosures of the purely Sassanid lands of Hajiabad and Kish. More interestingly, the stucco artworks of the Khajeh mountain were alike in term of from to their Kish artwork counterparts. Another point to note is the discovery of the stucco artwork of number 3 and the addition of porches. What is imperative now is that the plaster castings are located on the porches, which, according to field studies and typological studies, have certainly been added to the building during the second phase of construction at the Khajeh Palace. The most striking sign of the second period architecture is the creation of a porch on the north face of Mesopotamia, which is fastened to the gallery wall, and the first period decorative half-columns are buried beneath these porches.

Given the similarities of the plaster castings found by Mousavi with the previous plaster casts, it is likely that all plaster casts are related to a specific period. An important feature of these motifs is their continuous symmetry and repetition, which is one of the most important features of the Sassanid art of stucco. In the plaster castings of the Khajeh palace, we are faced with geometric and plant motifs that can be formally divided into three groups: circular, square, and congressional; that is, in fact, the same scholars applied to Sassanid stucco categorization. Placing plaster on second-level architectural extensions and typological comparisons along with absolute dating made it impossible to attribute the stucco artworks of the Khajeh palace to the Parthian period; hence, the plaster works probably date back to the 4th century. Of course, it should be kept in mind that future explorations and discoveries of new discoveries can displace or confirm this dating.

### **Resources:**

- Alaei Moghadam. Javad, 2015, Kooh-e Khajeh Based on Archaeology (Survey and Study of Ancient Structures Existing in Kooh-e Khajeh of Sistan), International Journal of Management and Humanity Sciences. Vol. 4 (1), 4355-4367.
- Azarnoush, Massoud. 1994, The Sasanian Manor House at Hajiabad, Iran, Monography di Mesopotamia III (Florence, fierenze, case Editrice Letter).
- Ayazi, Suri and Sima Miri, 2006, Plastering in Architectural Arrangements and Decorations, Tehran, National Museum of Ancient Iran Publications.
- Bani Jammali, Sayyed Leila, 2008, Relative chronology of the area of Khawaja Mountains on the basis of surface pottery, Master's Degree in Archeology, Zahedan, Faculty of Literature and Humanities, Sistan and Baluchestan University.
- Banijamali, Seyyedeh Leila. Javad Alaei Moghadam. Seyyed Rasoul MousaviHaji. Reza MehrAfarin. 2016, "A Review on Chronoligy of Place of Kuh-e Khajeh (Qaleh Kaferun) Relying on the Surface Potsherd" The International Journal of Humanities, Vol. 23. Number 2. pp. 43-60.
- Bossaili, Mario and Umberto Sherato, 1997, The Art of Party and Sassanid, translated by Dr. Ya'qub Ajand, Tehran: Molly Publishing.
- Chari, Mohammad Jabal, 2007, Research in Sassanid Plastering, M.Sc. Thesis in Archeology, Zahedan, Sistan and Baluchestan University.
- College, Malcolm, 2006, Parthian, translated by Massoud Rajabnia, Third Edition, Tehran: Hirmand Publications.
- Eliade, Mircha, 1993, A Treatise on Religions, Translated by Jalal Sattari, Tehran: Soroush Publications.

- Frey, W, 1995, Iranian Arts, Translated by Parviz Marzban, Tehran: Forouzan Publishing.
- Gearshman, Roman, 1959, Khark Island, First Edition, Tehran: Iranian Oil Company Publications.
- Gearshman, Roman, 1991, Iranian Art in the Parthian and Sassanid Periods, translated by Bahram Faroushi, Tehran: Scientific and Cultural Publications.
- Gearshman, Roman, 1999, Bishapur (Bishapur Mosaics), Translated by Asghar Karimi, Volume II, Tehran: Cultural Heritage Organization of Iran.
- Ghandegar, Javad et al., 2004, Archaeological excavations of Zahak Hashtrood Castle, Proceedings of the International Iranian Archaeological Conference of Northwest Basin, by Massoud Azarnoush, Tehran, Cultural Heritage and Tourism Organization, Institute of Archeology.
- Ghanimati, soroor. 2000, "New Perspectives on the Chronological and Functional Horizons of Kuh-e Khwaja in sistan", Iran, vol. 38, pp. 137-150.
- Ghanimati, Soror. 2001, "Kuh-e Khwaja: A major Zoroastrin Tempel Complex In Sistan' . A Dissertation Submitted in Partial Satisfaction Of The Requirements For the Degree Of Philosophy in Near Eastern Studies. University Of California. Berkeley.
- Gullini, Giorgio. 1964, Architettura Iranica Dagli Achemenidi ai Sasanidi iiPalazzo Di Kuh-I Khawagio. Einaudi. Turin.
- Herzfeld, Ernest. 1941, Iran In The Ancient East. London.
- Hertsfeld, Ernst, 2002, Iran in the Ancient East, translated by Homayoun Sanatizadeh, Tehran, Shahid Bahonar University Humanities and Cultural Studies Institute.
- Kawami, Trudy S, 1987, Monumental art of the partian period in Iran, In: Acta Iranica: 26.
- Khan Moradi, Mojgan, 2006, Yazdgerd castle castings, themes and technology and their effects on Sassanid and Islamic castings, MSc thesis, Tehran University, Tehran.
- Kruger, Jens, 1396, Sassanid Plaster Decorations, translated by Faramarz Najd Samiei, First Edition, Tehran: Humanities Textbooks Publishing Universities (samt).
- Kroger. O. 1978, Stucco in the Royal hunter by Oliver Harper, New York, The Asia society.

- Mehr Afarin, Reza, 2000, Sistan in Avesta, Forouhar, Fourth Section, Year 35, No. 2-1- Mehr Afarin, Reza and Seyed Rasoul Mousavi-Haji, 2007, Systematic Archaeological Survey of Sistan (Phase 1), National Archaeological Research of Sistan and Baluchestan University, 15 vols.
- Mehr Afarin, Reza. Seyyed Rasoul Mousavi Haji. Seyyede Leila Bani Jamali. 2011, Archaeological Survey of Koohe Khajeh in Sistan, The International Journal of Humanities. Vol 18. Number 1. pp. 43-63.
- Mehr Afarin, Reza, 2012, on Cheshad of Oshida, First Edition, Tehran: Received Publication.
- Mehr Afarin, Reza and Davood Saremi-Naini and Marjan Shahraki-Farkhade, 2012, Tombs and Graves of Khajeh Sistan Mountains, Journal of Greater Khorasan, Volume 3, Number 9, pp. 53-66.
- Mohammad Khan, Cyrus. 2009, Report on Archaeological Survey and Formation of Database of Khajeh-Sistan Mountains, Cultural Heritage, Crafts and Tourism Organization of Iran, Institute of Archeology.
- Mohammadifar, Yaghoub, 2008, Parthian Archeology and Art, First Edition, Tehran: University of Humanities Textbooks Publishing (Position).
- Moorey, P. R. S, 1976, Parthian and Sasanian Metalwork in the Bomford Collection, The Burlington Magazine, Vol. 118, No. 879, 356+358-361.
- Mosalla, masoumeh, 2006. Kuh-e khwaja, General Office of cultural affairs, Tehran.
- Mousavi, Mahmoud. 1996, Clay Memorial of Zabul Mountain and Summary of Results of Studies and Explorations in it, Proceedings of the First Congress of Iranian Architectural and Urban History, by the efforts of Bagher Ayatollah Zadeh Shirazi, Volume IV, Tehran: Research Institute of Cultural Heritage.
- Rahimi, Emerald, 2002, Cultural Heritage of Sistan and Baluchestan Province, First Edition, Tehran: Cultural Heritage Organization Publications.
- Rostami, Hooshang, 2011, Examination of Symbols and Symbols in Sassanid Ornithography and Plastering, Master's Degree in Archeology, Zahedan, Faculty of Literature and Humanities, Sistan and Baluchestan University.
- Pope, Arthur Upham, 1938, Sasanian Stucco Figural. A Survey of Parsian Art, Tehran, Soroush Press.

**Title of article:** Analysis, Typology, and Chronology of Stuccos in the Palace of Kuh-e Khwajeh

- Prada, Idet; Robert, 2004, *The Art of Ancient Iran (Pre-Islamic Civilizations)*, translated by Yousef Majidzadeh, Tehran: Tehran University Press.
- Pope, Artem App, and Phyllis Akraman, 2008, *A Survey of Iranian Art, From Prehistoric to the Present*, Edited by Sirus Parham, First Edition, Tehran: Scientific and Cultural Publications.
- Sajjadi, Ali, 1995, *The Art of Plastering in Iranian Architecture*, Journal of Work, No. 25.
- Sarfaraz, Ali Akbar and Bahman Firouzmandi, 2007, *Archeology and Art of the Median Historical Age, Achaemenid, Ashkani, Sassanid*, Second Edition, Tehran: Marlik Publications.
- Shaitesh, Yordis Baltero and Arthur Apraham Pope, 2008, *Sassanid Plastering, A Survey of Iranian Art from Prehistoric Times to the Present*, Translated by Nooshinokht Nafisi, Volume Two, Sassanid Period, First Edition, Tehran: Scientific and Cultural Publications.
- Samanian, Samad, and Mina Hassanzadeh, Summer 2013, *Understanding and Searching for the Role of the Kampa Chain and Its Position in Ancient Civilizations*, Journal of Fine Arts - Visual Arts, Volume 18, Number 2, pp. 64-53.
- Shipman, Claus, 2004, *History of the Sassanid Empire*, Translated by Faramarz Najd Samiei, First Edition, Tehran: Cultural Heritage Organization Publications.
- Stein, Sir Aurel, 1928, *Innermost Asia: Detailed Report of Explorations in Central Asia, Kan-Su, and Eastern Iran*" carried out and Described under the Orders of H.M. Indian Government, 4 vols, Oxford.
- Thompson, D. 1976, *Stucco from Chal-Tarkhan Eshgabad near Ray, Worminister, Asia* Phillips Ltd.
- Zarei, Mohammad Ibrahim, 2013, *Introduction to World Architecture*, 14th Edition, Tehran: Fanavaran Publications.