

Original Research Article

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Received: 4 August 2022

Revised: 7 December 2022

Accepted: 10 January 2023

DOI: 10.22055/PYK.2022.17859 DOR: 20.1001.1.23224622.1401.11.30.2.2

URL: [https://paykareh.scu.ac.ir/article\\_17859.html](https://paykareh.scu.ac.ir/article_17859.html)

How to cite this article: Kakavand, S. (2023). Analysis of the «Lattice (Lozenge-Band)» Pattern as a Common Design in the Zand Era Rugs. *Paykareh*, 11 (30), pp. 66-83.

The Persian translation of this article is published in the same issue with the following title

تحليل طرح «بندی لوزی» به عنوان الگوی رایج در قالی عصر زندیه

## Analysis of the «Lattice (Lozenge-Band)» Pattern as a Common Design in the Zand Era Rugs

### Abstract

**Problem Definition:** The research in Zand rugs has faced questions and missing links. During the historiography of the art of this period, the lack of resources had convinced the researchers that it is not possible to extract a text related to the rugs in this era. Although the author started to find rugs, over time, the repetition of the images of weavings and rugs with a «Lattice (Lozenge-Band)» pattern created a more important question: Can the «Lattice (Lozenge-Band)» pattern be introduced as a common design of the second half of the 12<sup>th</sup> century? If this is the case, then a more basic question is raised: What components played a role in the formation and prosperity of the Lattice pattern in the Zand period? What are the theoretical and formative foundations in Lattice pattern as a common structure?

**Objective:** The aim of this research is to shed light on the dark part of Iran's rug history, deal with the Lattice (Lozenge-Band) as a frequent pattern in the Zand period, and discover the factors influencing the prosperity of the mentioned pattern.

**Research Method:** This research is qualitative and, based on this purpose, it falls into the category of basic theoretical research. The primary information and analysis materials were collected using a library-based method and virtual observation of samples in national and international museums, and then conclusions were drawn using descriptive and analytical methods.

**Results:** The achievement of this research, in the first step, was to identify the Lattice (Lozenge-Band) at the first place of the patterns used in the weavings of the Zand era. Then, following the four elements of history, mythology, mysticism, and post-Sadraei philosophy and popular culture, the discovery of five components of Indian and Kashmiri motifs in Afsharid art, the ancient pattern of the garden pattern, the flower school of the second half of the 12<sup>th</sup> century, and ethnic and decorative art as the foundations that form the Lozenge-Band pattern, were identified.

### Keywords

Zand Era, Rug, Lattice (Lozenge-Band) Pattern, Second Half of the 12<sup>th</sup> Century

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## Introduction

The history of Iran's rugs has always been devoid of documents and writings in weavings of the Zand era, and it is strange that a forty-six-year government seems short in the eyes of researchers, and until a few years ago, everyone accepted that there are no rugs left from the mentioned period. The only rug with an inscription preserved in the National Museum of Iran and the information about its existence presented in an article entitled «Introduction of a Dedicated Rug from the Collection of the National Museum of Iran» written by «Zohre Rouhfar» in the «Dedicated of Eternal Heritage» magazine, inspired the present study. In order to collect the primary information, all the works of art having rug images, including the collection of lacquers and paintings, were studied. Next, the textiles of the second half of the 12<sup>th</sup> century A.H., equal to the 18<sup>th</sup> century A.D., were searched in most museums of the world. The presence of a dominant pattern in most of the weavings and their images attracted attention. There were many Lattice pattern in rugs. The author organized the present research in order to produce a research related to the Zand period. The Lattice pattern is one of the series of networked and diffuse designs on the surface of the rug, which was a frequent pattern in the Zand period. The research is the feasibility of extracting the effective components in the formation and prosperity of the Lattice pattern in the Zand period. What are the theoretical foundations and forming foundations in Lattice pattern as a common structure? Educational and research sources related to various types of rug patterns have pointed to different classifications. However, the number of Lattice rugs belonging to the Zand period was not enough to make a precise classification. It is very important to find the factors influencing the prosperity of the Lattice pattern. What components have played a role in defining the dominant style in the rugs of a historical period? In the first step, this research seeks to introduce the Lattice (Lozenge-Band) as a recurring pattern in the weavings of the Zand era, and then explore the causes of the increase in the Lattice pattern in the mentioned period. It seems that major factors play a role in changing the style of rugs. Several factors can be considered as effective components on the formation of the Lattice rug structure. The archetype of the garden, ethnic art, Indian elements in Afsharid art, ancient patterns and the flower school of the second half of the 12<sup>th</sup> century are the primary factors shaping the layout of the Lattice in the Zand period.

## Research Method

The primary information and materials for the analysis, including the contents on the papers and pictures, were collected by the library method and by observing the samples in national and international museums, and then conclusions were drawn using descriptive and analytical methods. The statistical population of the research includes the Lattice rugs in the museums of Iran and the world and the paintings. One item is kept in the Museum of the Islamic Era, a piece of rug is in the Victoria and Albert Museum in London, and two rugs are preserved in the Hermitage Museum of Russia. The samples are selected based on the real and virtual access to the rugs. This article results from a qualitative research and, accordingly, it falls in the category of basic theoretical research. In this article, it is tried to analyze the data by understanding the similarity in the study samples and identifying and comparing the collected data.

## Research Background

Zand art has attracted less attention from researchers and written and up-to-date sources are rarely found in this regard. «Adlou» (2021) published a book entitled «The evolution of art (Zand and Qajar periods)». However, the necessary innovation is not seen in the work and

it is a wide collection of previous sources. It would have been better for the author to adopt a specialized approach and instead of multifarious writing, make a detailed analysis of some of the art examples of the Zand era. «Kakavand» (2020) in the article entitled «Comparative study of the dedicated rug inscription and court written sources, with the focus on identifying the personality of Taqi Khan Durrani, the ruler of Kerman in the Zand era (1209-1163 A.H.)», has discussed the dedicatory character of one of the Zand Lattice rugs based on the inscription of the work. «Kakavand and Mousavilar» (2014) published an article entitled «Reading the explicit and implicit layers of writing in the dedicated rug inscription of the Zand period», in which the Lattice rug weaving of the Zand period was studied. Iranian art history (10); Safavid, Zand, and Qajar art is written by «Scarcia» (2011), who has written a summary of the history of Zand art in a part of the book. The article of «Zand Cultural Center», the two-volume collection of «Articles of the Great Congress of Zand» (2010) results from «Pakbaz»'s efforts in a related work that focuses on the history, culture, and art of Zand; However, the topic of any article is not related to rugs. «Maktabi» (2009) in the article entitled «Under the Peacock Throne: Carpet, Felt, and Silk» in Iranian painting, has discussed the rugs of the century which is mistakenly known as the Interregnum in the history of Iranian art, and has introduced the examples and described some of them. «Nasr» (2008) in the book entitled «Research on Zand urban planning and architecture» with the subject of Zand architecture and urban planning, pointed out that Zand art has not received enough attention and only pages 108 to 111 out of the total of 226 pages are allocated to it. The lack of quality and quantity in Zand art has inspired continuous and purposeful research studies, and the present article enjoys the necessary innovation and has tried to make the unknown and mysterious aspects clear. In the field of rugs, several articles have been published, such as «Rahmani, Moghanipour, and Tafakori» (2021) on «the study of the features of design and pattern, color and texture of rugs of Khamsa Arab nomads settled in the villages of Sarchehan city (Case Study: Ghani tribe)». Another source is by «Arbabi, Aiqarlo, Siamak, and Maedeh» (2021), which focused on «the place of color and pattern in the evaluation of handwoven fabrics». Another article results from the research of «Dianati and Kakavand» (2021), entitled «Comparative study of the role of women in two pictorial rugs of Bahram Gur in Haftgonbad (Seven Domes) from the perspective of Irving Goffman's Theatrical performance theory». Finally, «Afrough» (2022) published an article entitled «Analysis of the structural and aesthetic elements of Sarouk rugs of the Clermont Collection». The upcoming research results from extensive studies that acknowledge that there are enough patterns left over from rugs, both in woven form and in other works, to conduct an analytical study. It was also proved that the Lattice pattern is the most frequent among the rug designs of the Zand period.

### **Analysis and Discussion**

Rug interdisciplinary studies are one of the proper ways to understand the various dimensions of weaving as a work containing information. Because of its practical nature, rugs have been used in every historical period by different classes with different intentions such as dedication, decoration of palaces or foyers, or as visual components in paintings. In the meantime, significant changes and definition of style, pattern, and design have happened. The Zand period was no exception to this rule, and one pattern, the Lattice, has been found more than the others. After briefly paying attention to the political and cultural history of Zand, introducing the pattern, the description and analysis of the examples have been discussed.

**Zand era (1163-1209 A.H./1750-1796 A.D.)**

Karim Khan's rise to power in the insecure situation of the second half of the 12<sup>th</sup> century in Iran and the peaceful foundation of this period are indicators of this era. In 1160 A.H., with the death of Nader Shah Afshar, the claimants of power emerged with the ambition of attaining the throne. One of them was Karim Khan, the head of the Lak Zand tribe from the Lor clan. Karim Khan along with two other generals named «Abul Fatah Khan and Ali Mardan Khan Bakhtiari» formed a triangular alliance and agreed that Karim Khan should sit on the throne. Regarding Karim Khan Zand's ancestry, many historians have written: «They (Zand clan) are among the Lak clans. They were shepherds, and perhaps during the time of Shah Abbas I, they moved from the slopes of Zagros to the vicinity of Pari and Komazan near Malayer» (Shabani, 2007, p. 116). Some researchers have also described their conditions in general and some sources have considered the Zand clan to be Kurds. Among them is: «One of the other Zagros tribes that returned to their homeland in the mountain range from Khorasan was the Zand tribe. The Zand tribe was an ethnic minority of stockbreeders who spent the winter in the plains of Hamedan, and their center was in the villages of «Pari» and «Komazan» in the suburbs of Malayer. They are considered, either from the Lors or from the Kurds in different ways: both Lor and Kurdish groups have been noticed recently, but most of the evidence shows that they are from the northern tribes of Lor or Lak, who were probably originally Kurdish immigrants» (Avery, Melville, & Hambly, 2010, p. 109). In any case, despite the existence of various sources, the intention is not to describe the history in detail and further information is not required.

**The cultural situation of Karim Khan Zand era**

«Franklin», one of the English tourists, mentions the cultural situation of the Zand era in his travelogue: «Iranians understand quickly and are very intelligent. Iranians of the 12<sup>th</sup> century were interested in science and art» (Franklin, 1979, p. 169). In this regard, other travel writers have mentioned: «There is no more honorable title in Iran than the title of a scientist» (Olivier, 1992, p. 213). In the book entitled «Karim Khan Zand and his time», «Rajabi» mentions the cultural friendliness of this king: «If Karim Khan himself did not benefit from knowledge, he respected the knowledge of others and provided means to encourage the masters of knowledge and art. He built dignified tombs for the great poets of Iran, namely Saadi and Hafez, and established buildings for the residence of pilgrims and dervishes, and allocated gardens and fields for the tomb, to provide the expenses of the buildings and also travelers and dervishes. This attention to the great poets of Iran, while representing Karim Khan's deep respect for art and knowledge, also caused people to respect him» (Rajabi, 1973, p. 135). In his trip to Iran, Franklin points out the temperament of Iranians in the second half of the 12<sup>th</sup> century: «Iranians, in terms of their appearance, are undoubtedly the «Parisians of the East» ... Iranians have a respectful attitude towards civilized people and are polite, courteous, and friendly with foreigners» (Franklin, 1979, p. 47). The 12<sup>th</sup> century A.H. was a turbulent period despite short-term governments, plunder and war, and the political and economic situation impacted culture.

**Zand era rugs in the mirror of travelogues and related texts**

In his travelogue, «Franklin» mentioned the various uses of rugs, such as using them on bathroom benches to place clothes, rugs in the bride's dowry, hanging rugs as decorative curtains, which shows the wide and varied use of them in the lives of people in the modern era (Rajabi, 2000, p. 150). Iranian rug researchers believe that because of the unfavorable economic situation, the rugs of the Zand period were of inferior quality and ordinary and

did not have the sophistication; While the study of the travelogues of this period points to the existence of exquisite rugs in tents, the temporary residences of noblemen. «The walls of [Jafar Khan Zand's] tent were covered with delicate cloud-colored silk fabrics, and the floor was furnished with an exquisite rug and long felts like the minister's tent» (Rajabi, 2010, p. 150). In a part of his travelogue, «Franklin» mentions hanging rugs to decorate the wall during celebrations - like the description of the circumcision ceremony of Jafar Khan Zand's son (Rajabi, 2010, p. 150). Even if the exquisite rugs are less woven, it does not reduce the necessity of research on the Zand rugs. The rug is connected with the life of the people of the society in every era. «Niebuhr», an English traveler, also writes in his travelogue: «We were led to a large hall that was completely open to the courtyard. The floor of this hall had a large and beautiful rug. Unlike in Turkey, where courts were placed all around the rooms, here you can see expensive felts that were not as beautiful as the normal Iranian rugs» (Niebuhr, 1975, p. 66). Some history writers have considered the rugs of the Zand period to be more effective than those of the Afsharid period: «Nadershah did not find the opportunity to deal with artistic issues in order to maintain the unity and integrity of the country, but he gradually maintained the security and peace created in the courage's shadow and bravery of the Iranians. Art, which continued to live in secret, gained more credibility during the Zand period and was noticed by the rulers» (Yasavali, 2000, p. 4). The author of the rug section in the book entitled «Arts of Iran» writes about this: «Another number of Kerman rugs have been preserved and show that rug weaving continued to execute despite the chaos of the situation after the assassination of Nader Shah in 1160 A.H. It was in 1172 A.H. that peace and tranquility were established at least to some extent in the country's south. This was done by Karim Khan Zand ...» (Housego, 1995, p. 134). Some researchers also believe that the reason for the lack of popularity of a large-cut rug is not economic problems, but Karim Khan Zand's simple-minded spirit. «There is no evidence of significant development or progress in the art and craft of rug weaving during the time of Karim Khan. There is an enormous picture of Karim Khan Zand painted after his death, which shows him sitting on a small rug. The smallness of the mentioned rug should be seen as a sign of Karim Khan's simple life and not the lack of popularity of rug weaving in his time» (Maloul, 2005, p. 46). During his visit to Shiraz in the Zandiyeh era, «Niebuhr», the European surveyor, refers to the use of wall hangings and underlays: «The walls were covered with good marbles from Tabriz. They had laid beautiful rugs on the floor» (Niebuhr, 1975, p. 68). The link between everyday life and artistic productions makes cultural elements survive. In some historical texts of the Zand era, the price of a good rug and kilim is mentioned. For example, a good rug costs 1,300 dinars and a good kilim costs 700 dinars, which also shows the qualitative evaluation and classification of rugs in this period. This kind of description also refers to the mass production and difference in the quality levels of woven rugs (Asef, 2003).

### **Bandi Pattern**

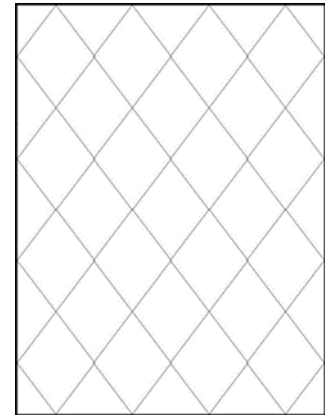
Some of the Bandi patterns have been considered as garden, some as clay, and some as a grid. But in general, it is called Lattice pattern (See Figure 1). «The meaning of using wording is that a small part of a pattern is repeated throughout the rug, either lengthwise or widthwise because these parts join together in the repetition stage, it is called Bandi or Vagire» (Yasavali, 2000, p. 7). According to the naming of each lozenge under the titles of clay and frame, it can also be classified as brick or frame-form. A shrub or flower bouquet is woven in the middle of each frame. This type of arrangement of motifs is like the Iranian garden. The lines of the rug are straight and geometric. The similarity in the definition of



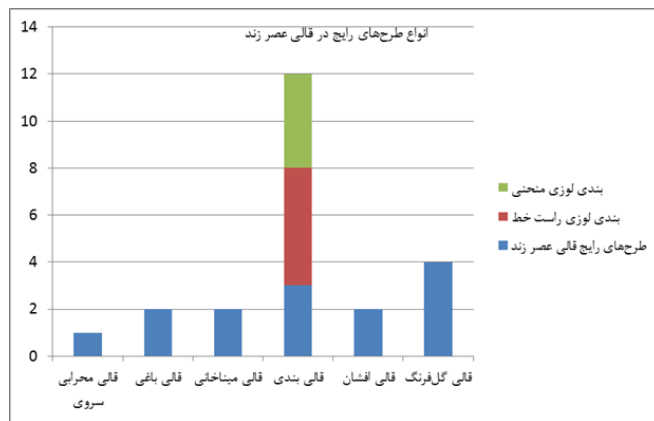
pattern can be seen in all relevant texts: «If a small part of the pattern is repeated in the rug context in the longitudinal and transverse directions and these parts are connected to each other with clips, it is called Bandi» (Nasiri, 2010, p. 86). Another definition is: «the term «Bandi» is referred to the repetitive images connected throughout a pattern, the continuity of the images is achieved through a multi-lobe single flower or Arabesque bands and...» (Vakili, 2003, p. 67). For the layout of different types such as Arabesque Bandi, Ivy Bandi, Shikasta Bandi, Inscription Bandi, Mustofi Bandi, Varamin or Minakhani Bandi, Clay or lozenge Bandi, Medallion Bandi, Tree Bandi, Frame Bandi, Milk and Sugar Bandi or Arm Bandi, Cypress Bandi, Adamki or Molanseruddin Bandi, Bakhtiari bandi, Majlisi Bandi, Grape Bunch Bandi, Deer horn bandi with animals, Shirazi Khatam Bandi and Flower bouquet bandi (Yasavali, 2000, p. 7). Among the rugs found from the Zand period, the Lozenge-Band (Lattice) pattern is more abundant.

**Common patterns among the rugs found in the Zand period**

Among the rugs in the museum and the images of weavings found in all the artworks of the Zand era, a few more patterns were not found: garden pattern, types of Bandi pattern including Minakhani, Lozenge and Arabesque, Afshan, Farang Flower, Potted Altar. Except for Lozenge-Band, the number of samples found from other mentioned pattern was one or two samples and only the repeating pattern of «Lozenge-Band (Lattice)» was detected (See Diagram 1).



**Figure 1.** Linear Lozenge-Band (Lattice) pattern. Source: <https://getcoloringpages.com>.



**Diagram 1.** Types of common patterns in Zand era rugs (the total of museum rugs and available in paintings). Source: Author.

Four examples of Lozenge-Band rugs from the Zand period were found, one example is kept in the «National Iran» museum, two in the «Hermitage» museum, and one in the «Victoria and Albert» museum in London.

**Sample 1. The rug with inscriptions kept in the Museum of the Islamic Era:** The only sample of the rug with inscriptions found is from the Zand era (See Figure 2). The dimensions of the rug are 172×496 cm and it is woven in Kerman. The knot used in the rug is of Persian type and its fiber is wool. The pattern of the rug is of a variety of Bandi, and in particular, a Lozenge-Band pattern. The purpose of weaving the rug is to dedicate it to the holy shrine of Imamzadeh Zaid of Kerman, which was ordered to be woven by Taqi Khan Durrani, the ruler of Kerman during the Zand era. The mentioned rug, with record number 20294, is kept in the National Museum of Iran.

**Sample 2. Lozenge-Band rug in the Victoria and Albert Museum, London:** The rug in Figure 3 is woven from Kurdistan, and compared to Sample 1, it has less quality and

sophistication; However, in terms of its colors and dimensions, it is closer to the Zand culture. There are various similarities in the motifs and Lozenge net of both rugs. The difference in the border patterns of both rugs is completely obvious. In the Kerman rug, the nets are of the crenate leaf type, and in the Kurdistan rug, the diagonal lines are simple. Hassouri writes in connection with garden patterns in Kurdistan: «One of the most famous patterns of Iran until the Safavid era had the same meaning as heaven, paradise, rose-garden or another name, and it was exactly the pattern of Iranians' imaginary paradise. Unfortunately, this pattern was gradually forgotten with the popularization of the pattern of Corner and Medallion, which is a part of Paradise. Its last samples were woven in Kurdistan and Kermanshah until around 1330, under the name of Charbagh» (Hassouri, 2006, p. 30).



**Figure 2.** Lozenge-Band rug preserved in the repository of the National Museum of Iran, dimensions 172×496 cm. Source: Author.



**Figure 3.** Lozenge-Band rug, Kurdistan, Victoria and Albert Museum, London, unknown dimensions. Source: <https://collectins.vam.ac.uk>.

**Sample 3. The rug preserved in the «Hermitage» museum of Russia:** There is no very precise information available about the details of the rug's origin certificate in Figure 4. On the website of the Hermitage Museum, the dimensions of the rug are written as 152×216 cm, and they confirm the weave is knotted. There is no information about the location of the rug.

**Sample 4. Another Lozenge-Band rug preserved in the «Hermitage» museum:** similar to Sample 3, detailed information has been published about the rug in Figure 5. Its dimensions are 230×590 cm and it falls into the category of fluffy (knotted) textures. This Sample also has a Lozenge-Band pattern.



**Figure 4.** Lozenge-Band rug preserved in the Hermitage Museum, 152×216 cm. Source: <https://hermitagemuseum.org>.



**Figure 5.** Lozenge-Band rug preserved in the Hermitage Museum, 590×230 cm. Source: <https://hermitagemuseum.org>.

## Style categories in rugs of the Zand period (Morphology)

The similarities in the visual elements of all the remaining samples with the Lozenge-Band pattern of the second half of the 12<sup>th</sup> century form the intended style. In the studied rugs,





sample has a madder red background and the flowers are white, dyer's weed<sup>1</sup> yellow, blue, pink (face) and cedar (kind of green). The fourth sample is similar in color to the third sample, but its background is darker than the third sample and is close to a dark blue color. It seems that both samples are included in the color spectrum of Kerman rug.

**Table 1.** Characteristics of the studied rugs. Source: Author.

Sample	Pattern	Weaving Place	Size & Dimension	Color	Preserving Place
1	Cmm	Kerman	496×172 cm	Background: dark blue Flowers: blue, azure blue, red	National Museum of Iran
2	Cmm	Kordestan	Unknown	Background: blue Flowers: Light; pink & green, orange & brown	Victoria and Albert of London
3	Cmm	Probably Kerman	216×152 cm	Background: madder red Flowers: white, yellow, blue, pink, green	Hermitage of Russia
4	Cmm	Probably Kerman	590×230 cm	Background: dark blue Flowers: white, yellow, blue, pink, green	Hermitage of Russia

In each historical period, various variables can be considered clarifying the reason for the repetition of common patterns. The Zand period has undergone numerous events, and elements such as myth, history, popular culture, and post-Sadraei mystical and philosophical foundations have shaped its artistic basis. Among them, the factors affecting the prosperity of the Lozenge-Band pattern in the second half of the 12<sup>th</sup> century are listed below (See Table 2).

**1. Myth:** The garden in Iranian art has always been a source of inspiration for artists, and the patterns of rugs, both in mountainous and desert areas, have been full of floral motifs. «Pope defined the garden as one of the main themes in the whole Iranian culture» (McDowell, 1995, p. 162). «Shaygan» introduces «Bagh Behesht (Garden of Paradise)» as one of the ancient and exemplary forms in traditional Iranian art: «rugs in which the richness of composition, the abundance of shapes and the harmony of colors reach the peak of decorative art, represents the eternal form (archetype) precious to Iranians, that is, Garden of Paradise» (Shaygan, 2009, p. 84). Historians and rug experts have considered the background of this interest to the first written document, Bahar Khosrow Sassanid. The prevalence of garden carpets from the 10<sup>th</sup> century and its continuation until the 13<sup>th</sup> century A.H. is a sign of the taste and delicate nature of Iranians, who have taken a lot of effort to make pleasant gardens and weaving garden-rugs. Despite this, the innovation and creativity of the carpet artists has made it possible to avoid the unnecessary repetition of previous patterns. Studying the remaining samples shows renewal and creativity. In the second half of the 12<sup>th</sup> century A.H., the areas of Iran that were skilled in weaving garden rugs started to weave garden-themed rugs, with a new form and shape. «If we organize and summarize the network of Golestan gardens, what will we achieve? Each garden should be a square or rectangle and be marked with a border. In Iran, such a pattern is called multiple-frame

(Kheshti or Qabqabi)» (Hassouri, 2006, p. 30). The presence of Lozenge-Band rugs confirms this claim. In the middle of each frame, a bouquet or three-branched flower can be seen. The grid of the rug is like the grid of an Iranian garden. The author of «Geography of Kerman» deals with the background of the garden and attention to gardening in Kerman and writes about the existence of 25% of all Iranian gardens in Kerman and brings documents from the time of the «Qarakhtaians» showing the importance of gardens: «Garden development in Kerman Province today and yesterday does not rely on mechanical devices of the present era. Seven hundred years ago, during the time of Turkan Khatun Qarakhtai (= died 681 A.H./1282 A.D.), a garden was built and ...» (Vaziri, 1997, p. 30). One of the notable issues in the book's text is the reference to the word «Derakhtkerd», which means a garden during the Turkan Khatun period (Vaziri, 1997, p. 30). On the other hand, in addition to the importance of the garden, the status of spring in the eyes of Iranians has made them always preserve a sign of it in literature and art. Shrubs and floral bushes on Bandi rugs of the Zand era have put a full-flowered garden on permanent display. «In such works, a rose bush or hundred-leaved rose celebrates Nowruz, it is a reminder of May (Ordibehesht) and Heaven, it creates joy, it is a sign of fountains and spring rain, and the goddess of waters is Anahita, the color of the affection is in it, and at the same time, it is the tree of life ...» (Shahdadi, 2005, p. 130). Along this theme, some have considered the presentation of the garden as a flower as a product of the mystical principles of «Flower and Bird»: «In Flower and Bird, the concept of heaven is presented with a flower, and the painter, in his mystical vision, in a new language, shows the truth in the freshness of a flower» (Bagheri, 2011, p. 104). Some researchers have also sought the continuity of Safavid garden patterns in the 12<sup>th</sup> century A.H. Band patterns: «lilies, daffodils, and spring violets, all of which originated in Safavid gardens, were placed in rows next to each other, and the borders and corollas, etc., became spectacular» (McDowell, 1995, p. 169). The summation of the materials related to the eternal form of «Garden of Paradise» in Iranian art indicates the immortality of the mentioned archetype. «This «eternal form», this first image, in general, is the same invisible thread that forms our national memory, it is revived and transformed with each foreign invasion, with each discontinuity imposed by the countless conquerors who invaded the Iranian plateau» (Shaygan, 2009, p. 78). The transformation of the garden pattern from the pattern of four garden rugs to the pattern of gardens enclosed in a Lozenge-Band pattern is one example of the continuation of the eternal form of «Paradise Garden» in Iranian art.

**2. Popular culture:** the expansion of the culture of simple living, the power of the nomadic society and the flourishing of ethnic and decorative art: seeking the change in the style of court art of the Safavid period and the flourishing of the flower and bird school on the one hand, and the tile works and flower-decorated sculptures in the Vakil Mosque and Khalvat Karimkhani in Golestan Palace, the importance of decorations and plant motifs is clear. The court historian of Karim Khan Zand writes under the organization of the city of Tehran: «Gazak Yaraqan [meaning armed in Turkish], a wide-ranging company, that the product of the sea and mine was the smallest capital of his, has been scattered in all directions, and in a short time from gold-made material and bushy silver-embroidered cloth ...» (Mousavi Nami Esfahani, 2011, p. 49). Mentioning plant motifs and flowers and in general under the word «decoration» is regular in various works: «The artists of the Zand era, in order to correct their double emphasis on three-dimensionality, tried to compose the work by introducing temporary decorative elements, like a bouquet of lovely colorful flowers on the robes of figures, fabrics and curtains, frames and floors make the rooms somewhat bright and attractive» (Scarcia, 2011, p. 41). In the Zand period, the form, content, and subject of

the works of art evolved. The desire for mystical themes in the paintings and the prevalence of lacquers in the handicraft industries are proof of this claim. Undoubtedly, the rug also did not stay away from the development and the increase of repeating patterns in this period shows the structural changes in the weaves of the second half of the 12<sup>th</sup> century. «During the Zand period, Shiraz witnessed the development of the tendency to integrate and combine Safavid styles, the style of European court portraiture and folk taste» (Scarcia, 2011, p. 41). The predominance of the tribal culture in the second half of the 12<sup>th</sup> century A.H. transforms the dominant style of Safavid court art with multiple human motifs into a folk and decorative art inspired by nature (See Figures 7A & 7B). «Zand school of painting can still be linked to represent the interesting details of the opinion and its intimate mood and poetic characteristics ...» (Diba, 1995, p. 248).



A



B

**Figures 7 A & B.** The remaining tile from the 12<sup>th</sup> century A.H./18<sup>th</sup> century is preserved in the Metropolitan Museum.

Source:

<https://images.metmuseum.org/>

Another example of ethnic art is the increase of geometric forms, such as lozenges. A Lozenge is a quadrilateral placed on the apex and Square on the base. This has resulted in greater statics of the Square and more dynamics of the Lozenge. A Lozenge like a Square is a symbol of land, garden and field. Creating Lozenge-shaped frames as gardens and plots and planting flowers in them is reminiscent of an Iranian garden. «Bricklike and multiple-frames have been considered part of the garden rugs group in many sources. «A pattern such as a bricklike» has many similarities with the geometrical and architectural system and structure of the garden, especially its plots [of the garden], under a specific planting system, a type of trees and flowers were planted in each plot ...» (Shahcheraghi & Islami, 2008, p. 72). In all Lozenge-Band patterns, the whole text is divided into Lozenge-shaped frames, and in each bricklike frame a shrub, bush or flower branch can be seen. «Simple and beautiful geometric patterns of continuous lozenges, which are among the most common abstract geometric and angular patterns in ethnic arts, are decorations on the outer wall [of Karimkhan Citadel]» (Ghanbari Sultanzadeh & NasirSalami 2018, p. 202). According to the multiplicity of Lozenge forms in weavings, and in general, the art of the Zand era, ethnic art can be considered a solid foundation in the prosperity of Lozenges (See Figure 8). According to some researchers, «factors are imposed on a society or a region in a period and can affect the economy, culture, morale, and spirit of that society and consequently the cities of that society. For example, war, tribal conflicts, the unfavorable economic situation of the country or a certain nation... and other cases affect the art and craft of that society or nation» (Saedi & SeyedAhmadi Zawiya, 2013, pp. 36-35).



**Figure 8.** Types of geometric motifs in the brickwork decorations of Karim Khan Citadel rampart, Shiraz, Zandiyeh. Source: <https://commons.wikimedia.org/>

### 3. History

**A. Ancient and original patterns in the art of the ancients:** In order to recover the basics of flowers and birds regarding the style of the mentioned art in the Zand era, the author of

the book entitled «A Window on Iranian Aesthetics» writes: «During the Afsharid and Zand wars, and the beginning of the Qajar era, the theme of the works «Flower and Bird» and «Flower and Bush», under the influence of mystical concepts (in Isfahan), also moved towards mythological symbols (in Shiraz) and the minds of the painters, both fields approached, one after another» (Shahdadi, 2005, p. 18). Historical texts and works of art are proof of the prosperity of archaism in the Zand era. It is not wrong if ancient patterns are identified as the basis of the Zand rugs. For example, a grid pattern can be seen in the Pazyrik carpet and the Parthians dress (See Figure 9). The dominant school of poetry in this period is also called «Return (Bazgasht)» and the return to national landmarks and memories is clear in all aspects of Iranian culture in the second half of the 12<sup>th</sup> century. Adaptation and inspiration from ancient patterns in Zand architecture is impressive and is one of the basic principles. «Zand architectural elements are mostly taken from pre-Islamic architecture, especially Achaemenid and Sassanid, as well as post-Islamic, Seljuk and Safavid architecture» (Pakbaz, 2010, p. 791).



**Figure 9.** A Lozenge-Band pattern in a marble statue of a Parthian man, Hatra, 2<sup>nd</sup> century B.C. Source: <https://hdl.handle.net/>



**Figure 10.** Stone plinth of the marble throne porch of Golestan Palace. Source: <https://commons.wikimedia.org/>

**B. The Foundations of Indian art reflected in Afsharid art:** Another component that can be checked is the arrival of Indian works and artists to Iran from the period of Nader Shah Afshar and the change of form and content patterns in art. «The painting of Afsharid era was more exclusive to Nader Shah and his power-seeking desires, and the pictures that remain of him show the influence of Indian painting in the first stage and the influence of European painting in the second stage» (Salah, 2015, p. 72). The study of the range of colors in the artworks of Nader Shah period shows the closeness of the color range of Indian art with the mentioned examples. «As it is known, when Nader Shah returned from the victory in the battle with the Indians, he brought many artisans and painters to Iran as required. A portrait of Nader Shah shows him kneeling on a saffron-colored carpet board, the border of which is decorated with a pattern of flowers inspired by Indian painting» (Housego, 1995, p. 134). At the same time, the author mentioned the wall decoration of Kalat Naderi's mansion and wrote that: «The walls of the modern mansion should be decorated according to his desire with the picture of the floral bush adapted from the Indian painting style» (Housego, 1995, p. 134). The visual documentation of the influence of art from Zand by the artists of the Afsharid period from Indian sources is the stone plinths of the marble throne



porch of the Golestan Palace (See Figure 10). Although «Housego», the author of the carpet section of the book entitled «Arts of Iran», does not directly refer to Zand's works in Tehran, he writes: «This important [establishment of peace and tranquility in the country's south] was done by Karim Khan Zand (1163 to 1193 A.H.) who appointed Shiraz as the capital of his established kingdom and in a short time turned it into a beautiful and heartwarming city. Frames made of stone carvings and tiles with flower and plant patterns, which reflected the Indian style decorations used in the Naderi kalat, became more and more ornamental for mosques and palaces» (Housego, 1995, p. 134). The author has mentioned in another part of the text: «Using the pattern of flowers and blossoms was also popular in the weaving of that time [12<sup>th</sup> century]. It can be seen again that the same role of plants was used in the decoration of Indian carpets and fabrics of that time ...» (Housego, 1995, p. 128). Although there is no sign of pure imitation in the works, the creativity and innovation of the artists of the Zand era are visible. Rugs from India and Kashmir with Bandi patterns are kept in the Metropolitan Museum's repository (See Figures 11 & 12). The author of the book entitled «Kerman Cashmere Shawls» quoting the issue 163 of the «Vaqa'ye-e E'tefaqiyeh» newspaper dated 16 Jumadi al-Thani 1270 A.H., writes in connection with the continuity of the cultural relationship between Iran and India and the mutual influence: «Shawl-weaving in Kerman has progressed compared to the past and they weave very well and are distinguished, and in pattern and fabric, it is like Kashmiri shawl ...» (Zakariaei Kermani, 2009, p. 37). In confirmation of the close relations between Iran and India, Diba has stated in her article: «The only extensive relationship between Iran and another country was established when Nader Shah started his campaigns in India, and this was the factor that caused the spread of an aspect of iconography and some decorations of the Gorkan school of India in Iranian painting» (Diba, 1995, p. 248). Based on all the documents and writings, it can be concluded that one of the effective bases in the prosperity and repetition of the Lozenge-Band pattern is the motifs of Indian art, and the common patterns and motifs between Indian and Iranian textiles show the cultural exchanges of the mentioned nations.



Figure 11. Indian rug, preserved in the Metropolitan Museum. Source: <https://metmuseum.org/art>



Figure 12. Indian carpet, Metropolitan Museum. source: <https://images.metmuseum.org>.

**4. Post-Sadarai Philosophical Mystical School: Flower;** It is difficult to address the role of «flower» in the history of Iranian art; Especially, the place of flowers in the art of Kerman and Zand period makes it harder. «Perhaps the Kermani artist can be considered the most eager artist to express his feelings towards nature, and the reason for this claim is Kerman shawls and rugs ... The abundance of patterns such as garden, flowerpot, and vegetable garden in Kerman rugs shows the artist's deep interest in flowers and plants» (Zakariaei Kermani, 2009, p. 146). In addition to the close connection between the geography of Kerman and the role of flowers in textiles, many documents have narrated the prosperity



## PAYKAREH

Journal of Art Faculty, Shahid Chamran University of Ahvaz

Analysis of the «Lattice (Lozenge-Band)» Pattern as a Common Design in the Zand Era Rugs

Volume 11 Issue 30 Winter 2023 Pages 66-83

79

and abundance of flower and plant motifs in the second half of the 12<sup>th</sup> century. Among them, the author of «the history of Giti Gosha» wrote: «The novel painters of this unique art, using their powerful pens, filled the soul-enhancing structures of gardens with all kinds of colored flowers and blossoms» (Mousavi Nami Esfahani, 2011, p. 196). Meanwhile, in the book's text, the historian of the Zand court repeatedly mentions flowers such as sweetbrier, hyacinth, red rose, jasmine, anemone, redbud and tulip and trees such as cypress, pine, Chinese sumach, boxwood and plane tree or words such as Bostan (gardens), azhar (flowers), riahin, shakhsar (branches), plants, parks, grass, lawn, etc. What are the principles of «Flower School» in the 12<sup>th</sup> century or what factors can be mentioned? The author of the book entitled «A window on the aesthetics of Iran; Flower and Bird», after mentioning the names of several Flower and Bird painters in the Zand era, considers them the heirs of the achievements of Safavid artists and the beneficiaries of Mulla Sadra's presence: «The result of the intellectual environment of Isfahan and the contemporary thinkers of Reza Abbasi was the wisdom of Mullah Sadra ... The period of influence of his [Mullah Sadra's] thoughts in the second and third generation after Reza Abbasi seems to be acceptable» (Shehdadi, 2005, p. 26). Following the proof of the influence of Sadra'i ideas, the author writes: «The expression of the new philosophical theory of that era and the examples mentioned along with the works of the painters of this time prove that the resemblance to nature that is noticeable in the art of painting of this time is actually a pictorial representation to explain the theory of «transformation of sense data»<sup>2</sup>» (Shahdadi, 2005, p. 29). In the following, the author concludes: «The spread of various flowers and birds in Iranian oil or lacquer works, with a dreamlike quality, until the Qajar period, shows that the change of ideals started by Reza Abbasi became the collective belief of Iranian painters until the Zand period» (Shahdadi, 2005, p. 29). The writer of «Golestan-e Honar» has given to support this claim: «The Zand school - which is the forerunner of the Qajar school - is very charming, sweet, beautiful, and enchanting, and because it is a diagram of the truth, nature, and life of the people of that time, it has many fans today» (Qomi, 1987, pp. 45-49). The two components of pacification and congruency were the motto of the art of the Karim Khan Zand era, and all the artistic examples are the narrators and representatives of these factors instead of the rest. «This school of art is attractive because it is a diagram of the nature and life of people in that period» (Azimi, 2014, p. 213). In recent years, the researchers who studied Vakil's building commented on the abundance of flower and plant motifs among the common motifs in Zand art; Among them: «What is seen for the first time and in a unique way in the painting of Zand era is the use of many plants in places like bouquets inside the vase ...» (Shafi'i & Esfandiari, 2005, pp. 79-80). The textiles belonging to the Zand period (See Figure 13A) and the lacquer works decorated with «Flowers and Birds» (See Figure 13B) are actual proofs of this claim.



**Figure 13B.** Lacquered pencil case with Flowers and Birds motifs, by Mohammad Baqer, preserved in Malek Museum, Zand.

Source: <http://malekmuseum.org/>








**Figure 13A.** A barber's apron decorated with a flower pattern, preserved in the Metropolitan Museum, Zand.

Source: <https://metmuseum.org>.

Accordingly, the five key and effective components in the boom of flowered Lozenge-Band rug, briefly, are shown in Table 2.

**Table 2.** Foundations of Lozenge-Band pattern in Zand rugs. Source: Author

History		Post-Sadarai philosophy and mysticism	Myth	Popular Culture
Ancient and authentic patterns in the art of the ancients	The basics of Indian art reflected in Afsharid art	Flower motifs	The archetype of the garden	Developing the culture of simple living, the strength of the nomadic community and the prosperity of ethnic art
				

**Conclusion**

The research among the weavings left from the Zand period showed that the Lozenge-Band pattern is a dominant and common pattern in the Zand era. Exploring the influential factors and theoretical bases of the Lozenge-Band pattern showed that according to the samples found in the National Museums of Iran, Victoria and Albert Museum in London, and Hermitage in Russia, the studied items had similarities in shape and structure, and the biggest difference was observed in the color and dimensions. Color analysis in the rug preserved in the National Museum of Iran was difficult due to decay. The colors used in the Kurdistan woven rug were joyful and lively and were chosen from the range of bright colors. The other two, which were woven from Kerman and are kept in the Hermitage Museum, had more mature and muted colors compared to the Kurdistan sample. Focusing on research, literature, religion, social beliefs, myth, and history were hypothetical foundations and then the influence of the relevant components was evaluated. The result was got based on the analytical patterns of the theoretical foundations of the Lozenge-Band pattern in the Zand era rugs. The results of the studies led to the discovery of the effective factors in the prosperity of patterning, network or grid of Zand rugs in the four main categories of history, philosophy and post-Sadrai mysticism, myth, and popular culture, and in their subset five groups: Ancient and authentic patterns in the art of the ancients, the basics of art Indian through Afsharid art, flower motifs, the archetype of the garden, Karim Khan's personal beliefs in Developing the culture of simple living, the strength of the nomadic community and the prosperity of ethnic art. Definitely and with certainty, only these five items cannot be considered as the theoretical foundations of a type of pattern among rugs because more factors have been involved. Research and explorations in documents showed these factors to be more effective. From the lens of myth and based on archetypes, the garden has been represented in various forms in Iranian art. The history of understanding the mentioned pattern is long; However, the anthropological research in the public culture of the second

half of the 12<sup>th</sup> century led to the recognition of ethnic art and culture, especially for the Zands. Suddenly, all ceremonial patterns and human figures and revolving motifs give way to simple, folk, geometric, and plant themes; tribal and ethnic themes. If it should summarize the Zand era art or the art of the second half of the 12<sup>th</sup> century A.H., the dominant discourse and the existing form and its frequent atmosphere show joy, peace, distance from perfectionism and simplicity, and of course the abundance of flowers and vases and lively and spring-like colors. It is the most obvious characteristic of the mentioned period. From the historical point of view, two components of archaism and the relations between Nadir Shah Afshar's government and India can be considered. The political and cultural relationship between the governments of India and Iran during a rare period brought fundamental changes to the art of the two countries. It seemed that despite the transformation of many artistic values of the Afsharid period in the Zand era, some examples remained dominant, among which flower bouquet motifs and patterning are important. Among the effective cultural elements, Kashmiri shawls are noteworthy. On the other hand, many writings have mentioned Karim Khan's interest in ancient Iranian art, and examples of his interest in the architectural model and materials used in Vakil's building testify to this claim. The study of costumes of the past based on the sculptures confirms this importance. In the end, observing the works of art of the Zand era from the frame of mysticism and post-Sadarai philosophy to understand why and how to pattern the frame gives a clue to the "Flower School" and the desire for naturalism based on the theory of "transformation of sense data". Numerous flower motifs, or in other words, the flourishing flower school in the middle of the 12<sup>th</sup> century, is an important and effective factor in shaping the Lozenge-Band pattern and the flower bouquets. Despite the lack of sources from the Zand era, the way of research is clear and there are various cases among the patterns and motifs that require careful study and analysis.

### Appendix

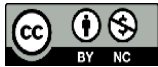
1. Dyer's weed is of wildling plants and natural dyes from which yellow dye can be extracted.
2. «Until this time (the Safavids), in pre-Islamic art and gilding or single figures and Iranian bibliography (even in scientific books), the painter's imagination was used as a theme or ideas as mental rules (which were mostly made before his time) of the form has been giving; However, at this time, the artist wants to show the changing face of the reality that he has observed» (Shahdadi, 2005, p. 29).

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