



EXTRACTION AND STUDY OF SUSA POTTERY MOTIFS FROM 7TH TO 13TH CENTURIES

Kouros Samanian¹, Mahnaz Mohammadzadeh Mianji² and Masoumeh Karimi³

¹ Department of Conservation, University of Arts, Tehran, Iran

² Faculty of Arts, Alzahra University, Tehran, Iran

³ Department of Handicrafts, University of Arts, Tehran, Iran

Received: 14/5/2012

Accepted: 29/5/2012

Corresponding author: samanian_k@yahoo.com

ABSTRACT

Susa is a city in Khuzestan located in the Southwest of Iran. This city was the capital of ancient Elam and then became the capital of the Achaemenian dynasty afterward. One of the significances of Susa in this period, is that it has been the beginning of the Royal Road, the one that led Iran to Aegean sea. Susa hill has been one of the most important issues for researcher and archaeologists and continued excavations in the area from 1850 up to the present show its importance. Susa potteries have clarified this area's ambiguous culture and civilization since around the fifth millennium BC and continued their life despite the restless history of the Susa city. The arrival of Islam introduced a new era in Susa pottery, and the new forms and decorative designs revived the pottery of this city. Despite its increasing popularity at the time, Islamic Susa pottery has been almost completely ignored by authors and researchers and rarely remarked upon by most Islamic sources. Susa potters were hard working, and most of the decorative techniques were done professionally. In this paper pottery motifs were extracted in a linear form by Rhinoceros 4.0 software and have been studied in four groups of geometric, floral, animal and inscription motifs separately in order to discover not only the design styles, but the importance and status of each genre, in addition to considering the influences of other centers or eras. The quantitative study on objects in this paper indicates that most of the motifs are geometrics, while the fewest are animals; the most common composition of motifs in a material is geometric-floral. Despite the considerable influence of previous periods and other centers of Persian pottery, as well as, the influence or imitation of contemporary centers and the significant importance of the "religious" factor, this paper also shows that Islamic Susa has best manifested its prehistoric traditions, and has deliberately used them along with specific Islamic styles.

KEYWORDS: Islamic Art, Susa, Pottery, Motifs, Royal Road, Aegean.

INTRODUCTION

Among the outstanding motifs for definition and recognition of Iranian pottery are Prehistoric Susa pottery motifs and the Gian and Sialk hills as well as other archaic area's materials. About one century after Susa was ruined by Ashurbanipal (640 B.C) Dariush arrived in Susa, choosing it as one of the Acheamenian capitals around 521 B.C. Establishing the Royal Road which made possible connections between Persian and Aegean cities was a great measure taken by Dariush. This road was begun from Susa and ended in Sardis. The most important potteries in this period are the decorative bricks of the Susa palace. The arrival of new and various forms restarted pottery in the Parthian period and this continued under the Sassanid period, but without any traces of the Prehistoric motifs. Susa was occupied by the Arabs in 638AD and it continued a restless life until the time of the Mongol conquest. Susa's status is not so clear historically and it seems that Susa held no important cultural and political position in Iran in the Islamic era.

Historical sources also are evidence for this city's repeated destruction and prosperity. Describing early Islamic Susa, Negahban states that the richness of agricultural production enabled prosperity to continue, despite its minor political importance, and Susa became a religious center only after Muslims occupation (Negahban, 1996). Perhaps this religious centralization is the most remarkable factor in early Islamic centuries as Razavi Dezfuli believes that Daniyal Nabi's Tomb was the only survivor after destruction of Susa in the 10th and 11th century (Razavi Dezfuli, 2001). According to Rashidian the reason for this isolation was neglect of construction by the local governments after 10AD (Rashidian, 1990). Pope refers to centuries before this collapse as a renaissance era in which expensive luxury goods were being imported to Susa. He

believes that, according to the tails of glazed potteries, Susa produced them itself. It was also an important city in Khuzestan in 12AD, but it was completely ruined in this century before being revived again for a short time in 15AD (Pope, 1939). According to Witcomb, contemporary Susa follows the Shaur River and contained only three constructions at the beginning of this century: Daniyal Nabi's Tomb, the Shrine located 750 meters north and the castle of the French Archaeological Delegation (Witcomb, 1985)

In a survey of pottery in early Islamic centuries, pottery centers such as China, Iraq, Egypt, Syria and Iran and their artistic and commercial interactions, forms and motifs were studied. There have been numerous debates regarding the dating of these potteries, finding their origin and the transposition of a common technique or decoration. Following the Sassanid traditions, imitating Chinese materials, establishing and abandoning Samarra in a short time, potters arrival to Susa and the continuation of pottery production there, are the most important among these debates. What is undoubted is the importation of elements and techniques along with Tang Chinese ceramics to Iraq and Iran midway to Africa and the Middle East. However, as Dimand says, it is difficult to identify the origin of a specific motif because different types of the motif can be seen in different centers (Dimand, 1944)

It is certain that regardless of these imported elements and previous traditions each region has its own motifs. The important issue regarding Islamic Susa is the concentration of studies on the production and decoration techniques and other centers' influences, in addition to also introducing potteries as a set, despite their quantitative and qualitative importance. Islamic Susa has presented many painted potteries; most of them are full of motifs which have not been studied. Susa potters have preferred to focus on decoration by

geometric motifs, calligraphy and flowers instead of focusing on technically trimming the body, glaze or shape of vessels, which is what Hillenbrand believes about all Abbasid ceramics (Hillenbrand, 1999)

This paper aims to study and analyze the pottery motifs separately to find out these features in Susa from the 7th to 13th centuries. Most of these found potteries are related to the 8th and 9th centuries while a few date back to the 11th and 12th centuries. Previous studies on Islamic Susa pottery are:

1. Reymond Koechlin, in a volume of MDP (*Memoires de la Delegation Archeologique en Iran*) has studied a number of Islamic ceramic objects located in the Louvre museum in which remarking on the samples, has categorized them by decoration technique (Koechlin, 1928). 2. He has also allotted another study in the same year to Chinese Influences on Islamic Susa potteries. (Koechlin, 1928)

3. Y.M. Unvala in one paper has described the lustered ceramics of Islamic Susa. (Unvala, 1935)

4. The next study was Jean Lacam's work on Islamic Susa potteries. (Lacam, 1949). He then published Islamic ceramics excavated in Susa from 1946-48 in his other study. (Lacam, 1950)

5. In another paper, David Weill has studied two numbers of Islamic ceramics. (Weill, 1951)

6. Yoland Crow has also studied some techniques of Susa pottery. (Crow, 1974)

7. Myrim Rosen Ayalon in another volume of MDP has presented a large number of Islamic ceramics located in different museums. She has categorized them in 21 groups. The most important factor in her categorizing is technique, but she also attended to some forms of objects. (Rosen Ayalon, 1974)

According to Witcomb the first precise research regarding Islamic Susa was done by Rosen Ayalon on Royal city potteries. It was started in 1969 and published in 1974 (Witcomb, 1985)

8. Y. Michael Rogres in another study has reviewed Rosen Ayalon's information. (Rogres, 1976) Alastair and Kennet believe that Rosen Ayalon's studies should be treated cautiously, as a number of potteries reported in his study have not been recorded as Susa materials. He says Kervran's chronology of Susa pottery is precise and logical (Alastair and Kennet, 1994)

9. Kervran's study on the chronology of Susa pottery, as mentioned previously, was published in 1977. (Kervran, 1977)

MATERIALS AND TECHNIQUE

In this paper, 105 decorated potteries of this era have been studied. 80 of these items are perfect or have been repaired, 18 items are broken and the other remaining objects include 7 items which are in fragments. This study is based on designs on potteries of related images which are gathered as a collection in the following resources:

1. *Les Ceramique Musulmanes De Susa Au Musee Du Louvre*, Reymond Koechlin, Librairie Ernest Leroux, Paris, 1928

2. *LaPoterie Islamique*, Myrim Rosen Ayalon, Librairie Orientaliste Paul Geuthner, Paris, 1974.

3. *Islamic Pottery Art of Iran*, Fatemeh Karimi, Mohammad Yousof Kiani, Archaeology Center of Iran, 1985. (In Farsi)

In addition, Complementary images have been extracted from the Louvre Museum website, National Museum of Iran archive, and also some images of Susa potteries in Louvre Museum photographed by Marie-Lan Nguyen and Jastrow have been used here.

Because of the poor quality of images in some of these resources, only the images with recognizable motifs are used in this paper; they have been extracted by Rhinoceros 4.0., a software capable of three dimensional design used to draw different shapes and volumes and also Product design modeling. For extracting the motifs

after opening each image of pottery in Rhino, the lines of the motif have been drawn again by curve tool. So, they are separated from other motifs of the object.

The base of coding objects is as follows:

The images of the Louvre Museum website and those photographed by Marie-Lan Nguyen and Jastrow are shown by 'L' from 1 to 20. All of them are located in the Louvre Museum.

The Images of Rosen 'Ayalon's book are

demonstrated by 'A' from 1 to 36, those of Reymond 'Koechlin's book are demonstrated by 'K' from 1 to 40, those extracted from 'National Museum of Iran archive by 'N' from 1 to 5, while the images of Farsi resources are demonstrated by 'F' from 1 to 4.

Coding of motifs differs according to classification and type in each section, which is explained in this table:

Table 1. The data base of coding motifs

| Group | Subgroups | | Code | Description | |
|--------------------|------------------------------------|---|-----------|---|------|
| Geometric motifs | A. The singular motifs | 1. The Linear designs | GA1 | Geometric motifs are presented by code G in Table 2. Letter A is added to G in subgroup A (GA) and letter B in subgroup B (GB) and so forth. So, all motifs coded by G in Table2 are geometric and their subgroups are specified by other letters or numbers as A, B, and 1, 2, | |
| | | 2. The Simple geometric shapes | GA2 | | |
| | | 3. The secondary motif composed of the geometric shapes | GA3 | | |
| | B. Compound and complicated motifs | 1. The Spread (scattered) motifs in the circle frame | | | GB1 |
| | | 2. The Space divider motifs for placing other designs | Pattern A | | GB2A |
| | | | Pattern B | | GB2B |
| | | | Pattern C | | GB2C |
| Pattern D | | | GB2D | | |
| Pattern E | GB2E | | | | |
| Inscription motifs | Inscription motifs | | I | Inscription motifs of Susa potteries are presented in Table3. All motifs coded by I in Table 3 are Inscription and motifs coded by PI are Pseudo-Inscription. | |
| | Pseudo-Inscription motifs | | PI | | |
| Animal motifs | Subgroup A | | AA | Animal motifs are presented in Table4 and for coding the letter A refers to Animal and letters A, B, C, D specify the subgroups. | |
| | Subgroup B | | AB | | |
| | Subgroup C | | AC | | |
| | Subgroup D | | AD | | |
| Floral motifs | Subgroup A | | FA | For coding the Floral motifs in Table5, letter F refers to Floral and letters A, B, C, D, E specify the subgroups. | |
| | Subgroup B | | FB | | |
| | Subgroup C | | FC | | |
| | Subgroup D | | FD | | |
| | Subgroup E | | FE | | |

RESULTS

Islamic Susa pottery motifs can be studied in four groups of geometric, floral, inscription and animal. The results of this extraction are shown below:

I. Geometric motifs

Geometric motifs are the most common motifs on Susa potteries. These motifs can be placed in two main groups:

A. the singular motifs

1. The Linear designs
2. The Simple geometric shapes
3. The secondary motif composed of the geometric shapes

B. Compound and complicated motifs

1. The Spread motifs in the circle frame
2. The Space divider motifs for placing other designs

A-I. The singular motifs

Some geometric motifs have been applied on the pottery as a singular motif, and these are placed in the composition of the vessel related to other composition elements logically. This element can be a geometric or other motif. This group is classified in these subgroups:

1-A-I. The Linear designs (coded by GA1 in Table2)

With regards to some of the geometric motifs, it is noticeable that the main factor in their drawings is the lines. Designs such as water, ground and mountain lines were common and continuous on potteries from ancient times. Artists in these motifs have implied this concept only by using of a line. Moreover, compositions of lines have made a new geometric design in some cases. It is also remarkable that these designs have been applied on pottery chiefly by incising technique. The main motifs in this group are: Wavy, Jagged and Curve lines

Wavy lines in this table are among the most common designs in prehistoric

objects; design code GA1 on the vessel A8 is similar to Persepolis pottery designs. However, lines on those of Susa are smoother (Tazhibi, 1995)

2-A-I. The simple geometric shapes (coded by GA2 in Table2)

Designs of the second group are made from simple geometric shapes, repeated or reshaped on the vessel. These designs included circles, triangles, concentric and repetitive diamonds and chain designs composed by the mentioned shapes.

3-A-I. The secondary motif composed of the geometric shapes. (Coded by GA3 in Table2)

The third group has more developed motifs created by composing or reshaping geometric shapes, resulting in a specific motif. Some, such as rope and star motifs, Sormedan and a motif like a row are familiar but the rest are complicated and unknown. The motif like code GA3 on the vessel L4 can be seen on Sassanid metal works. Row motifs date back to Parthian history, but Sormedan (K11) and the six-prong star (A10 and K12) are Islamic motifs.

B-I. Compound and complicated motifs

1. A number of geometric motifs on pottery have been used as a framework, meaning that they are the basis of composition. Philon claims such early dividing of the space of vessels by motifs originated from the center can be seen in two groups of pottery, one is Susa and Fustat and the other is Neyshabur

(Philon, 1989)

Two main subgroups are as follows:

1-B-I. The Spread motifs in the circle frame (Coded by GB1 in Table2)

Most of the cases in this group are intertwined and winding, which originate from a main geometric element in the center and continue to the edge. They usually finish with a floral element in this

movement. Molding technique is often chosen for applying these motifs.

2-B-I. The Space divider motifs for placing other motifs:

These geometric motifs have surrounded the whole interior space. They have made the presence of other motifs possible by dividing the vessel's space into several parts. The subgroups are as follows:

A. This pattern is used mostly on jars and is made on a horizontal line. The spaces are created by a curve frame finishing at the horizontal line. The frame can be a perfect circle, a semicircle or a quadrant. (Coded by GB2A in Table2.)

B. A large geometric form is placed in the center of the vessel in this structure and other motifs have surrounded its outside and inside. The main form might be cover the whole context or it can be placed in a







central circle. Samples of the main form are a star and a reshaped polygon (Coded by GB2B in Table 2)











C. In this group the spaces are made by use of a central circle or square along with several of the same or different smaller or equal forms. Jenkins refers to the similarity between motifs in the object of code K18 and the Qairawan Mosque monochrome luster tiles motifs in the use of thick border lines in basic shapes. (Jenkins, 1968) (Coded by GB2C in Table 2)











D. Checkered lines are what is creating the spaces in this pattern. (Coded by GB2D in Table 2)









E. Putting together two or three of the previous structures has made a new pattern in some vessels. For example, in K16 the D and B methods have been presented. (Coded by GB2E in Table 2)




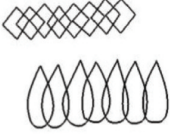
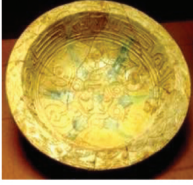




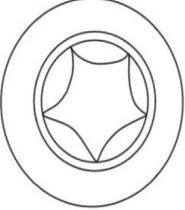
Table2. Geometric motifs on Susa pottery





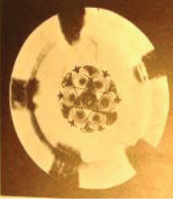
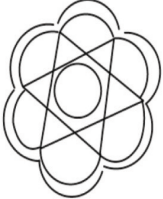
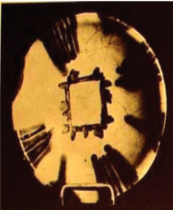
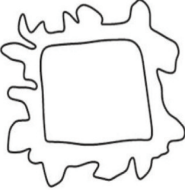
| Material's code | Illustration | Motif | Motif's code | Description |
|-----------------|---|---|--------------|---|
| A1 |  |  | GA1 | Unglazed pottery with incised decoration With the linear geometric motifs Current location: Louvre museum (Rosen Ayalon,1974:39) |
| A2 |  |  | GA1 | With the linear geometric motifs Current location:? (Rosen Ayalon,1974: XXVIII) |
| A3 |  |  | GA1 | Pottery with monochrome glaze. With the linear geometric motifs Current location: national museum of Iran (Rosen Ayalon,1974:XXXIV) |



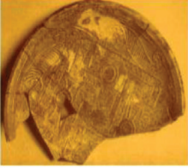
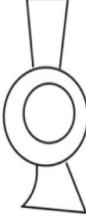
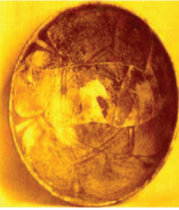
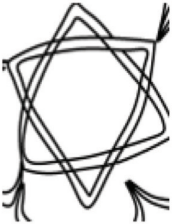




| | | | | |
|----|---|---|-----|--|
| A4 |  |  | GA1 | With the linear geometric motifs (Rosen Ayalon,1974:XV) Current location:? |
| A5 |  |  | GA1 | With the linear geometric motifs Current location: national museum of Iran (Rosen-Ayalon,1974:XXII) |
| A6 |  |  | GA1 | With the linear geometric motifs Current location: Louvre museum (Rosen –Ayalon,1974:XL) |
| A7 |  |  | GA1 | With the floral and linear geometric motifs Current location: Louvre museum (Rosen –Ayalon,1974:LIII) |
| A8 |  |  | GA1 | With the linear geometric motifs Current location: national museum of Iran (Rosen –Ayalon,1974:LVI) |



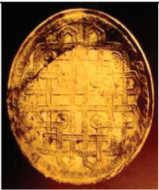


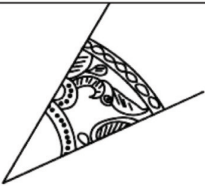


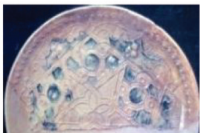

| | | | | |
|----|---|---|-----|---|
| | | | | |
| K1 |  |  | GA1 | With the linear geometric motifs Current location: Louvre museum (koechlin,1928) |
| K2 |  |  | GA1 | With the linear geometric motifs Current location: Louvre museum (koechlin,1928) |
| K3 |  |  | GA1 | Unglazed pottery with incised decoration. 9 th century. With the linear geometric motifs Current location: Louvre museum (koechlin,1928) |
| K4 |  |  | GA1 | With the linear geometric motifs Current location: Louvre museum (koechlin,1928) |
| K5 |  |  | GA1 | Unglazed pottery with incised decoration . 10 th century With the linear geometric motifs Current location: Louvre museum (Koechlin,1928) |



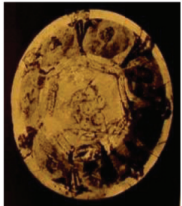

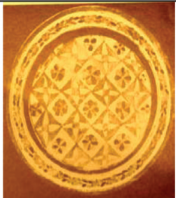
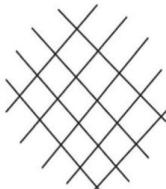

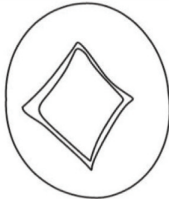
| | | | | |
|----|---|---|------|--|
| L1 |  |  | GA1 | <p>Water jug. Earthenware with combed and openwork decoration, 10th-11th centuries</p> <p>With the linear geometric motifs</p> <p>Current location: Louvre museum</p> <p>(Photographed by Jastrow)</p> |
| K6 |  |  | GA2 | <p>With the geometric shapes and motifs.</p> <p>Unglazed ovoid jug with barbotin decoration. 10th century</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| | |  | GA3 | |
| K7 |  |  | GA2 | <p>With geometric shapes and space divider motifs.</p> <p>Barbotine decoration under turquoise blue glaze. 8th century</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| | |  | GB2A | |


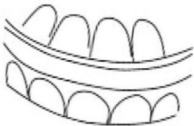
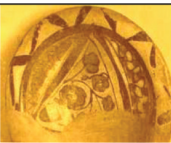



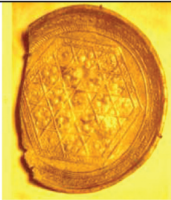
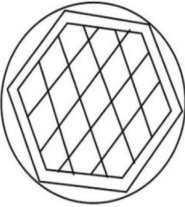
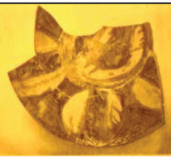
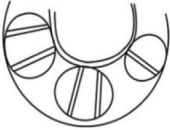


| | | | | |
|----|---|---|------|---|
| K8 |  |  | GA2 | With geometric shapes Current location: Louvre museum (Koechlin,1928) |
| K9 |  |  | GA2 | With geometric shapes Current location: Louvre museum (koechlin,1928) |
| L2 |  |  | GA2 | With geometric shapes, inscription and the spread motifs in circle frame. Cup with geometric decoration. Terracotta, transparent glaze, under glaze molded decoration, 9th century |
| | |  | GB1 | Current location: Louvre museum (Photographed by Jastrow) |
| L3 |  |  | GA2 | With geometric shapes and space divider motifs. Cup. Earthenware with metallic lustre and opaque glaze, over glaze painted, 9th century. |
| | |  | GB2B | Current location: Louvre museum (Photographed by Jastrow (2005)) |

| | | | |
|-----|---|---|--|
| N1 |  |  | GA2 With geometric shapes 5 th century Current location: National Museum of Iran (National Museum of Iran Archive) |
| A9 |  |  | GA3 With geometric and floral motifs. Current location: museum of fine Arts Boston (Rosen Ayalon,1974:LVII) |
| A10 |  |  | GA3 With geometric motifs. Current location :Courtesy Cleveland Museum of Art (Rosen Ayalon,1974:LVI) |
| A11 |  |  | GA3 With geometric motifs. Current location: Yale university , Art Gallery, New York (Rosen Ayalon,1974:LIV) |
| | | | |

| | | | | |
|-----|---|---|-----|---|
| K10 |  |  | GA3 | With geometric motifs. Current location: Louvre museum (koechlin,1928) |
| K11 |  |  | GA3 | With geometric and animal motifs. Current location: Louvre museum (koechlin,1928) |
| K12 |  |  | GA3 | With geometric motifs. Current location: Louvre museum (koechlin,1928) |
| L4 |  |  | GA3 | With geometric and animal motifs. Jar fragment. Earthenware with barbotine molded decoration, 11th century Current location: Louvre museum (Photographed by Jastrow) |
| L5 |  |  | GA3 | With geometric motifs. Strainer (probably to filter water), 8th–9th centuries, Earthenware, openwork and wheel-cut decoration. Current location: Louvre museum (Photographed by Jastrow) |

| | | | |
|-----|---|---|--|
| N2 |  |  | <p>With geometric motifs.</p> <p>Current location: National museum of Iran (national museum of Iran archive)</p> <p>GA3</p> |
| A12 |  |  | <p>With geometric motifs spread in circle frame.</p> <p>Current location: Metropolitan Museum. New York (Rosen Ayalon,1974:XLl)</p> <p>GB1</p> |
| A13 |  |  | <p>With geometric motifs spread in circle frame and floral motifs.</p> <p>Current location: Louvre museum (Rosen Ayalon,1974:XLl)</p> <p>GB1</p> |
| K13 |  |  | <p>With geometric motifs spread in circle frame and floral motifs.</p> <p>Current location: louvre museum (koechlin,1928)</p> <p>GB1</p> |
| F1 |  |  | <p>With geometric motifs spread in circle frame and floral motifs.</p> <p>Pottery with polychrome luster glaze</p> <p>Current location: Louvre museum (karimi and kiani,1985:215)</p> <p>GB1</p> |

| | | | | |
|-----|---|---|------|---|
| | | | | |
| A14 |  |  | GB2A | <p>With space divider geometric and animal motifs.</p> <p>Unglazed pottery with barbotin decoration</p> <p>Current location: National museum of Iran (Rosen ayalon,1974:XVII)</p> |
| A15 |  |  | GB2B | <p>With geometric motifs.</p> <p>Current location: Louvre museum (Rosen Ayalon,1974:LII)</p> |
| A16 |  |  | GB2D | <p>With space divider geometric and floral motifs.</p> <p>Current location: cincinnati museum (Rosen Ayalon,1928:LVII)</p> |
| A17 |  |  | GB2B | <p>With space divider geometric and floral motifs.</p> <p>Current location: National museum of Iran (Rosen Ayalon,1928:XLIX)</p> |
| | | | | |

| | | | | |
|-----|---|---|------|---|
| A18 |  |  | GB2A | <p>With apace divider geometric motifs.</p> <p>Current location: Metropolitan Museum New York</p> <p>(Rosen Ayalon,1928:XL)</p> |
| K14 |  |  | GB2B | <p>With apace divider geometric and floral motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| K15 |  |  | GB2C | <p>With apace divider geometric and floral motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| K16 |  |  | GB2E | <p>With apace divider geometric and floral motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| K17 |  |  | GB2C | <p>With apace divider geometric motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| K18 |  |  | GB2C | <p>With apace divider geometric and inscription motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |

II. Inscription motifs

A number of 24 Susa potteries have been decorated by inscriptions, some of which have real writing and, as a result of the precision in the writing of Kufic letters and words, it is possible to read them. But some inscriptions are only somewhat readable. It seems that the artist's purpose is only a shallow imitation of calligraphy in the rest and the letters have only been drawn for decorative aims. Kuhnel believes that perhaps these motifs' creators were not capable of reading and writing and they used to draw words according to their own taste only to make wares more decorative. Kufic inscriptions on potteries have mostly religious and benedictory concepts (Kuhnel, 1970).

As mentioned above, some inscription motifs on potteries are so unlike writing that they cannot imply a concept. As Hillenbrand states, persistence on decoration is contradictory to informing, and it seems that these inscriptions play decorative role as they are not readable clearly (Hillenbrand, 1999). There is only the early inspiration of inscription here like potteries in which letters are more similar to animal or floral motifs than inscription.

Rafii says some motifs in this group which have been applied by dark brown decorations on an ivory white background are similar to those of the Northeast of Iran (Rafii, 1998).

Inscription phrases on Susa potteries include a verse or artist's signature, and also benedictory phrases such as "Blessing to its owner". Remarking such Iraq wares, Fehervari says they were usually applied by azure blue on white opaque glaze. He also says some inscriptions in the Iranian cases have been painted by copper green. (Fehervari, 2000. (Table 3).

III. Animal motifs

Animal motifs in Susa potteries are represented by the specific drawing style of

this region. Different animals and birds have been used as the main element of composition in some cases and they are subsidiary elements in the other objects. Different patterns of using this genre contain a row of animals or birds walking in the margin, replicating animals as a decorative element that are related with other geometric and floral motifs and one or two animal motifs composed with geometric, floral or another animal motifs. According to Kuhnel these motifs such as a row of different beasts, walking or flying birds, flying in group in the margins, animal conflict and different scenes of natural or abstract prey and hunting are the most common animal motifs in Islamic art, and can be followed to 14th century in the Iranian pottery (Kuhnel, 1970).

Animal motifs on Susa pottery in this era include motifs like goat (like on A29), dog (like on K22), camel (motif AA on vessel K27), fish (like on K25) and squirrel (like on A30) and small and large birds such as kingfisher (like on A30), birds with opened or closed wings (like on L4), and their applying patterns on potteries are:











A_III. Serial motifs contain: replication of the same motif like a camel that resembles convoy movement, the walking birds that differs decussate by changes in wing drawing styles and their painting and a walking animal with little differences in the design. In this group the motifs position in the margins and edges is noticeable. (Coded by AA in Table 4)





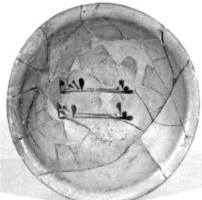
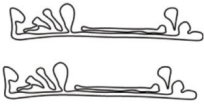
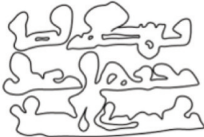
B_III. Replication of one motif: in this pattern an animal motif or its composition with other motifs are repeated exactly. The replication can be seen on shoulders, edges and on the inside of plates. (Coded by AB in Table 4)










C_III. Symmetrical motifs: there are animals in symmetrical composition in some Susa potteries. Motifs placed in symmetrical composition can imply a storied concept. (Coded by AD in Table 4)









D_III. The rest of motifs including fish,








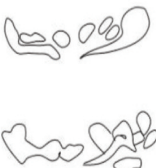
Table 3. Inscription motifs

| Material's code | Illustration | motif | Motif's code | Description |
|-----------------|---|---|--------------|--|
| A20 |  |  | I | With inscription motif Current location : Baltimore Museum of Art (Rosen Ayalon,1974:LX) |
| A21 |  |  | I | With inscription motif Current location : LA Mayer Memorial, Jerusalem (Rosen Ayalon,1974:LX) |
| A22 |  |  | I | With inscription and floral motifs Current location : LA Mayor Memorial, Jerusalem (Rosen Ayalon,1974:LIX) |
| A23 |  |  | I | With inscription motif Current location : Brookline museum. New York (Rosen Ayalon,LIX) |
| A24 |  |  | I | With inscription motif Current location : Brookline museum. New York |

| | | | |
|-----|---|---|---|
| |  |  | <p>Earthenware ; molded decoration 7th century-8th century</p> <p>Current location: Louvre museum</p> <p>(photographed by Marie-Lan Nguyen)</p> |
| L8 |  |  | <p>Lid with inscription and geometric decoration. 11th–12th centuries. Earthenware with engobe decoration, under glaze painted.</p> <p>I</p> <p>Current location: Louvre museum</p> <p>(photographed by Jastrow,2007)</p> |
| F2 |  |  | <p>With inscription motif.</p> <p>Under glaze decoration.9th century</p> <p>Current location:?</p> <p>(karimi and kiani,1985:112)</p> <p>I</p> |
| A25 | |  | <p>PI</p> <p>With Pseudo-Inscription and floral motifs.</p> <p>Current location :</p> |

| | | | | |
|-----|---|---|----|--|
| |  | | | L.A Mayer Memorial, Jerusalem (Rosen Ayalon,1974:LV) |
| A26 |  |  | PI | With Pseudo-Inscription motif. Current location: Louvre museum (Rosen Ayalon,1974:LXII) |
| A27 |  |  | PI | With Pseudo-Inscription motif. Current location: Louvre museum (Rosen Ayalon,1974:LVIII) |
| A28 |  |  | PI | With Pseudo-Inscription motif. Current location : Metropolitan Museum New York (Rosen Ayalon,1974:LIII) |
| A7 |  |  | PI | With Pseudo-Inscription and floral motifs. Current location: Louvre museum (Rosen Ayalon,1974:LIII) |

| | | | | |
|-----|---|---|----|---|
| K19 |  |  | PI | <p>With Pseudo-Inscription motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| K20 |  |  | PI | <p>With Pseudo-Inscription motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| K21 |  |  | PI | <p>With Pseudo-Inscription motifs.</p> <p>Current location: Louvre museum</p> <p>(koechlin,1928)</p> |
| L9 |  |  | PI | <p>Lid with an Aramaic magical script. Earthenware with ink decoration, 8th-9th century.</p> <p>(Photographed by Jastrow)</p> |
| L10 | | | PI | <p>Bottle , colored glaze on earthenware With Pseudo-Inscription motifs., 8th</p> |

| | | | | |
|-----|---|---|----|---|
| |  |  | | <p>century-10th century</p> <p>Current location: Louvre museum</p> <p>(Photographed by Marie-Lan Nguyen)</p> |
| L11 |  |  | PI | <p>With Pseudo-Inscription and floral motifs.</p> <p>Current location: Louvre museum</p> <p>(www.Louvre.fr)</p> |
| L12 |  |  | PI | <p>Cup with pseudo-epigraphical decoration. Terracotta, painted over glaze decoration, Susa, 11th century. . .</p> <p>Current location: Louvre museum</p> <p>(Photographed by <u>Jastrow</u>)</p> |
| F3 |  |  | PI | <p>Small pot of buff past . With Pseudo-Inscription motifs.</p> <p>9th century</p> <p>Current location:?</p> <p>(karimi and kiani,1985:94)</p> |

bird, peacock eye and feather and goat are occasionally placed in the center of the composition as a singular motif and they are also presented along with other motifs. Grobe refers to some of them being applied on hanging medallions as a relief (Grobe, 1976). (Coded by AE in table4)

IV. Floral motifs

Floral motifs are among the most usual on potteries from ancient times. There are different flowers and leaves as a singular motif or on the branches in Islamic Susa potteries. They are direct adaptations from nature and, in some cases, were inspired by Islamic abstractionism. 8-petal, 16-petal flowers and lotus are among the most common motifs of these potteries. Their leaves are drawn on spirals as a Pichak in some cases and a number of them also represent branches full of flowers and leaves. Small leaves on a stem are another floral motifs used in borders or contexts of wares. Two-winged and symmetrical motifs are other examples of Susa floral motifs in this era whose origins seem to be sought in the Sassanid period.

Susa floral motifs are:

A-IV. Leaf: among the most usual motifs

in very different contexts are leaves drawn on single or multi branches. (Coded by FA in Table 5)



B-IV. Flower: there are flowers with different numbers of petals. These unequal petals and irregular applications contradict Achaemenian cases. Totally flower motifs are smoother and out of their old regulation in this era. Pomegranate flowers and Khataee buds (motif code FB on K32 and L7) are also in this group. (Coded by FB in Table 5)





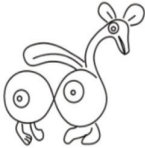


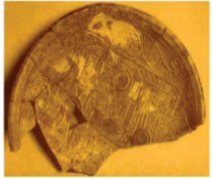



C-IV. Two-Winged: some floral motifs in Susa potteries are exactly the same Two-winged as seen in Sassanid metal works and stucco. Occasionally the same motifs are smoothed, reshaped and applied. (Coded by Fc in Table 5)





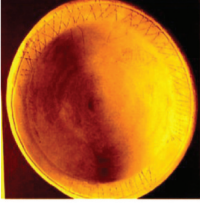


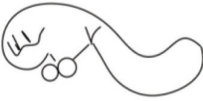



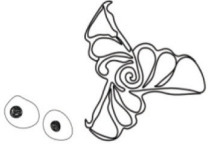
D-IV. Different palm motifs having a common form which is a central core like Tears surrounded by branches and Congress; there are also trees in this group. (Coded by FD in Table 5)

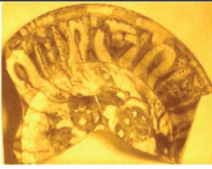




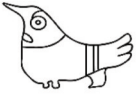

E-IV. Fruit: fruits on a branch such as vines and pomegranate are the same. Lane believes that these motifs are a reminder of the presence of Greek-Roman naturalism and its composition with Sassanid style in early Islamic centuries. (Lane, 1971) (Coded by FE in Table 5)

Table 4. Animal motifs

| Material's code | Illustration | motif | Motif's code | Description |
|-----------------|---|---|--------------|---|
| A29 |  |  | AD | With Animal motif Current location: : , Jerusalem museum (Rosen Ayalon,1974:XIV) |

| | | | | |
|-----|---|--|----|--|
| A30 |  |   | AC | <p>With Animal ,space divider geometric and floral motifs</p> <p>Current location: National museum of Iran (Rosen ayalon,1974:XVII</p> |
| A14 |  |    | AC | <p>With Animal ,space divider geometric and floral motifs.Unglazed pottery with barbotine decoration</p> <p>Current location: National museum of Iran (Rosen ayalon,1974:XVII)</p> |
| K11 |  |  | AD | <p>With Animal and geometric motifs.</p> <p>Current location: Louvre museum (Koechlin,1928)</p> |
| K22 |  |  | AD | <p>With Animal motif.</p> <p>Current location: Louvre museum (Koechlin,1928)</p> |

| | | | | |
|-----|---|---|----|---|
| K23 |  |  | AD | With Animal motif. Current location: Louvre museum (Koechlin,1928) |
| K24 |  |  | AD | With Animal motif. Current location: Louvre museum (Koechlin,1928) |
| K25 |  |  | AD | With Animal and linear geometric motifs. Current location: Louvre museum (Koechlin,1928) |
| K26 |  |  | AB | With Animal motifs. Current location: Louvre museum (Koechlin,1928) |
| K27 |  |  | AA | With Animal and floral motifs. Current location: Louvre museum (Koechlin,1928) |
| K28 |  |  | AD | With Animal motifs. Current location: Louvre museum (Koechlin,1928) |

| | | | | |
|-----|---|--|----|---|
| K29 |  |  | AB | <p>With Animal motifs.</p> <p>Current location: Louvre museum (Koechlin,1928)</p> |
| L4 |  |  | AB | <p>Jar fragment. Earthenware with barbotine molded decoration, With Animal and geometric motifs.11th century</p> <p>Current location: Louvre museum (Photographed by Jastrow)</p> |
| N3 |  |   | AA | <p>Ceramic object maybe a musical instrument. With Animal and geometric motifs.10th century</p> <p>Current location: National museum of Iran (national museum of Iran archive)</p> |

The above shows that geometric motifs are the most common on Susa pottery in the Islamic era and the floral is in the second place. Inscription and animal motifs respectively are arranged in the next levels. It is necessary to explain how these motifs are composed in one object. Their statistics are presented in Table 6. In some vessels only one genre can be seen. 27 items among 105 shreds are exclusively decorated by geometric, 19 items floral, 16 number inscription and 7 items are animal motifs. By considering the overall frequency of each motif, it can be said, usage of inscriptions in isolated form has been more than other motifs. In about 70 percent of the vessels decorated by inscription, it is the only motif on object. The geometric-floral composition is the most common type of composition used in one object. In vessels consisting of two or three types of motifs,

there are no animals composed with inscriptions that are meaningful.

DISCUSSION



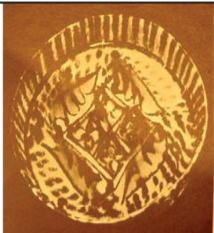

Susa pottery motifs in the Islamic era are a rich pictorial source of Iranian-Islamic motifs that are a representation of the continuance of artistic life in the Islamic era of this region. According to Khazae, motifs are the appearance of the cultural and religious potential of an artist's society (Khazae, 2002). In this regard and according to this research, what seems noticeable at first glance about Islamic potteries is the lack of human motifs. It seems that except in very few works, Susa artists did not use human motifs from the prehistoric era. Harper says the figurative motifs have appeared only on 4 vessels in the pottery of Susa I (Harper, 1992). It can




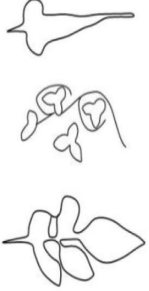
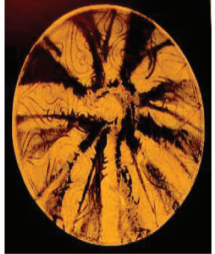



be indicative of the Susa pictorial tradition, which means they were reluctant to use this genre.









In most of the early Islamic pottery centers, animal motifs were widely used, especially the large symbolic and prey animals which have been placed

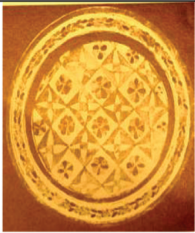
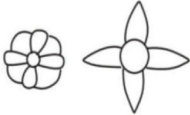






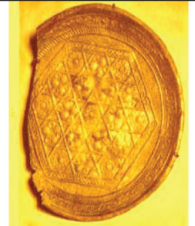
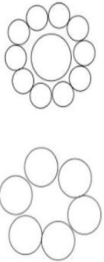
prominently in the center of the vessels. The motifs of this genre were usually in the center, were the main motif and have been drawn in Syria, Egypt, Iraq and also Neyshabur. But the animals in Susa potteries have been applied in very small size, along the adages and corners. As can

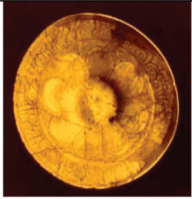
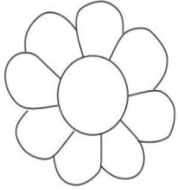








Table 5. Floral Motifs











| Material's code | Illustration | Motif | Motif's code | Description |
|-----------------|---|---|--------------|---|
| A9 |  |  | FA | With floral and geometric motifs. Current location: museum of fine Arts .Boston (Rosen Ayalon,1974:LVI) |
| A17 |  |  | FA | With floral and space divider geometric motifs. Current location: National museum of Iran (Rosen Ayalon,1974:XLIX) |



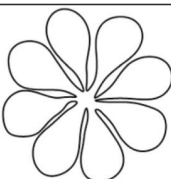




| | | | | |
|-----|---|---|----|---|
| A31 |  |  | FA | <p>With floral and geometric motifs.</p> <p>Current location: National museum of Iran (Rosen Ayalon,1974:LII)</p> |
| A32 |  |  | FA | <p>With floral motifs.</p> <p>Current location: National museum of Iran (Rosen Ayalon,1974:LVI)</p> |
| A33 |  |  | FA | <p>With floral motifs.</p> <p>Current location: Baltimore Museum of Arts (Rosen Ayalon,1974:LXV)</p> |
| K27 |  |  | FA | <p>With floral and animal motifs.</p> <p>Current location: Louvre museum (Koechlin,1928)</p> |







| | | | | |
|-----|---|---|----|---|
| K30 |  |  | FA | <p>With floral motifs.</p> <p>Current location: Louvre museum (Koechlin,1928)</p> |
| L3 |  |  | FA | <p>Cup. Earthenware with metallic luster and opaque glaze, over glaze painted, with floral and geometric motifs.9th century.</p> <p>Current location: Louvre museum (Photographed by Jastrow (2005))</p> |
| L13 |  |  | FA | <p>Fragment of a pottery, Earthenware, painted over glaze decoration, with floral motifs.</p> <p>8th–9th century</p> <p>Current location: Louvre museum (http://commons.wikimedia.org/wiki/File:Pottery_Susa_Louvre_MAO_S575.jpg/Jastrow)</p> |
| L11 |  |  | FA | <p>With inscription and floral motifs.</p> <p>Current location: Louvre museum (www.Louvre.fr)</p> |









| | | | | |
|-----|---|---|----|--|
| A16 |  |  | FB | <p>With floral and space divider geometric motifs.</p> <p>Current location :Courtesy cincinnuti museum (Rosen Ayalon,1974:LVI)</p> |
| A34 |  |  | FB | <p>With floral motifs.</p> <p>Current location: Louvre museum (Rosen-Ayalon,1974:XXII)</p> |
| A35 |  |  | FB | <p>With floral motifs.</p> <p>Current location: Louvre museum (Rosen Ayalon,1974:XL)</p> |
| A36 |  |  | FB | <p>With floral motifs.</p> <p>Current location: Baltimore museum of Art (Rosen Ayalon,1974:LVI)</p> |
| K16 |  |  | FB | <p>With floral and space divider geometric motifs.</p> <p>Current location: Louvre museum (Koechlin,1928)</p> |


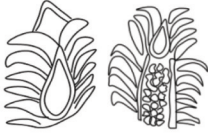
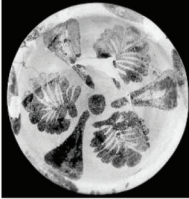
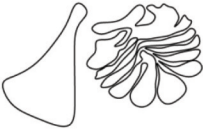

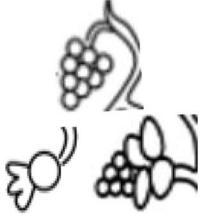
| | | | | |
|-----|---|---|----|--|
| K31 |  |  | FB | With floral and geometric motifs. Current location: Louvre museum (Koechlin,1928) |
| K32 |  |  | FB | With floral motifs. Current location: Louvre museum (Koechlin,1928) |
| K33 |  |  | FB | With floral motifs. Current location: Louvre museum (Koechlin,1928) |
| K34 |  |  | FB | With floral motifs. Current location: Louvre museum (Koechlin,1928) |
| K35 |  |  | FB | With floral motifs. Current location: Louvre museum (Koechlin,1928) |

| | | | | |
|-----|---|---|----|---|
| K36 |  |  | FB | <p>With floral and floral motifs.</p> <p>Current location: Louvre museum (Koechlin, 1928)</p> |
| K37 |  |  | FB | <p>With floral and geometric motifs.</p> <p>Current location: Louvre museum (Koechlin, 1928)</p> |
| K38 |  |  | FB | <p>With floral motifs.</p> <p>Current location: Louvre museum (Koechlin, 1928)</p> |
| K39 |  |  | FB | <p>With floral and geometric motifs.</p> <p>Current location: Louvre museum (Koechlin, 1928)</p> |
| L7 |  |  | FB | <p>Bowl with vines and pomegranate decoration, and a verse in Arab script. Earthenware ; molded decoration 7th century-8th century</p> <p>Current location: Louvre museum</p> <p>(photographed by Marie-Lan Nguyen)</p> |

| | | | | |
|-----|---|---|----|--|
| | | | | |
| | |  | FE | |
| L14 |  |  | FB | <p>Cup with rose petals, 8th–9th centuries. Earthenware with painted decoration on opacified glaze. With floral motifs.</p> <p>Current location: Louvre museum (photographed by Jastrow)</p> |
| F4 |  |  | FB | <p>Pottery with polychrome luster glaze. With floral motifs.</p> <p>Current location:? (karimi and kiani,1985:215)</p> |
| N4 |  |  | FB | <p>Unglazed pottery With floral and geometric motifs.</p> <p>,9th century</p> <p>Current location: National museum of Iran (national museum of Iran</p> |

| | | | | |
|-----|---|---|----|---|
| | | | | archive) |
| L15 |  |  | FC | <p>With floral motifs.</p> <p>Luster glazed pottery, 9th century</p> <p>Current location: Louvre museum</p> <p>(www.Louvre.fr)</p> |
| K15 |  |  | FC | <p>With floral and space divider geometric motifs.</p> <p>Current location: Louvre museum</p> <p>(Koechlin, 1928)</p> |
| L6 |  |  | FC | <p>Pitcher. Earthenware with molded decoration Pitcher. Earthenware with molded decoration smoothened with slip, with floral, inscription and geometric motifs, 8–9th century.</p> <p>Current location: Louvre museum</p> <p>(photographed by Jastrow)</p> |

| | | | | |
|-----|---|---|----|--|
| L16 |  |  | FC | <p>Painted pottery with floral motif, 8th-10th centuries</p> <p>Current location: Louvre museum</p> <p>(www.louvre.fr)</p> |
| K40 |  |  | FD | <p>Unglazed pottery with glaze floral decoration</p> <p>Current location: Louvre museum</p> <p>(Koechlin, 1928)</p> |
| L17 |  |  | FD | <p>Fragmentary jug with palmette decoration. The Terracotta, polychrome lustre decoration, painted over glaze, 9th century</p> <p>Current location: Louvre museum</p> <p>(photographed by Jastrow, 2006)</p> |
| L18 |  |  | FD | <p>With geometric and floral motifs.</p> <p>Current location: Louvre museum (www.louvre.fr)</p> |

| | | | |
|-----|---|---|--|
| L19 |  |  | <p>Vase with palmtree. Earthenware with colored glaze decoration in <i>cuerda seca</i>, 8th–9th century</p> <p>Current location: Louvre museum (photographed by Jastrow)</p> <p>FD</p> |
| N5 |  |  | <p>Pottery with under glaze painting of floral and geometric motifs.</p> <p>Current location: National museum of Iran (national museum of Iran archive)</p> <p>FD</p> |
| L20 |  |  | <p>Earthen ware with molded decoration of floral and geometric motifs. 7th & 8th centuries</p> <p>Current location: Louvre museum (photographed by Marie-Lan Nguyen)</p> <p>FE</p> |

be seen in Table 5, the minimum numbers of the objects were decorated by this genre. It's also interesting that its applying technique is barbotine or incising on unglazed potteries in most objects, emphasizing the neglect of the genre by considering the presence of different decoration and glazing techniques in this era. This issue along with the lack of human motifs can be a factor on the influence of "religion" or religious usage of materials.

The continuance of previous traditions in geometric motifs is also observable.

Dividing the vessel space by a large geometric form, checkered lines and curves are whole among the prehistoric traditions in Susa potteries which have been added to Islamic compositions such as division by several circular forms. A much smoother drawing of lines than the prehistoric era is the only difference.

All of the motifs presented by code GA1 in Table 2 entitled the Linear Geometric Motifs are among the most common motifs of prehistoric Iranian pottery such as Susa. even geometric motifs made by composing

Table 6. Frequency of investigated motifs in the potteries

| Motif's type | Frequency | Type of motifs composed in pottery | Number | Type of motifs composed in pottery | Number | Type of motifs composed in pottery | Number |
|--------------|-----------|------------------------------------|--------|------------------------------------|--------|------------------------------------|--------|
| Geometric | 55 | Just geometric | 27 | Geometric animal | 4 | Animal flora | 2 |
| Floral | 49 | Just inscription | 16 | Geometric floral | 20 | inscription floral geometric | 1 |
| inscription | 24 | Just animal | 7 | Geometric inscription | 2 | Geometric animal floral | 2 |
| Animal | 15 | Just floral | 19 | Inscription floral | 5 | Inscription animal floral | - |
| | | | | Inscription animal | - | Geometric inscription animal | - |

lines and shapes are exactly adapted from the Sassanid period and are placed along with motifs derived from or created with six-prongs and star structures that, according to Wilson play the most important role in Islamic art (Wilson, 1925).

As Clowson refers to a kind of transition between geometric and naturalism decoration in pottery motifs of Susa I (Clowson, 1939), the transition from floral to abstract by geometric motifs in motifs coded by GB1 In Table 2 can be seen. Therefore, there are observable continuance of an art tradition where the motif didn't has been repeated itself.

It is clear that a specific artistic style isn't inferable in Susa pottery. There is some confusion, irregularity and immeasurable diversity in the motifs that can be as result of its connection with different centers. These relations were so comprehensive that the trace of Susa works can be seen in the Mediterranean region, in this regards Jenkins refers to Susa as making place of some Qairawan mosque tiles in Tunisia; (according to their similarity with the bowl

code K18 Jenkins,1968). However, there are, examples of visual traditions in all the motif groups that are detectable in previous periods and influences of Islamic style are seen in the drawing of smoother lines, using of Kufic inscriptions, intertwined and Pichaki floral motifs and Sormedan. However, there is a kind of wandering, even in these designs; among them is the use of a deformed Sormedan in a vessel without any logical relation to the other elements, like what is seen in the Gereh sazi.

It is also quite evident in the floral motifs, as drawing the flower so rough like Sassanid stucco decoration and the Achaemenian rosette, so simple and smooth like a natural flower or like a childish painting alongside the Islamic pomegranate flower and khataye bud. The confusion and variation is also visible in the leaves: regulation of the wheat branch, free leaves spread in a vessel along with leaves in the Hellenistic style and very deformed and irregular spirals, and also natural single leaves.

There are animal motifs opposite each

other, using geometric shapes, areas and circles and checkered lines in this era's pottery motifs that are among the detectable traditions. All of these, according to Zaki Mohammad Hasan, have been decoration cases of ceramic artifacts in Iran. (Hasan, 1981). Using the wheat branch motif as the symmetry line between animal motifs and the exact adaptation of this motif's marginal usage is an imitation from Prehistoric cases. Another sample is the palm motif, which, according to Jenkins has its origin in the late classical tree of life (Jenkins, 1968).

Plurality of geometric motifs can be a representation of Susa artists permanent interest in abstraction and abstention from nature, and the plurality of floral motifs can be a greater factor on the influence of religion

Neither the influences of other centers nor the Islamic style were strong enough to lead Islamic Susa pottery to a specific direction. Perhaps lack of human motifs and neglect of the animal emphasizes the factor of "religion", although a stronger reason can be found in the return to earlier traditions of this region which is the insistence on Prehistoric Susa visual traditions.

Maybe the advent of Kufic inscriptions on the pottery motifs is the most obvious effect of Islam in Susa, as Wilson says, the use of calligraphy is the most significant characteristic of Islamic art. However, here the factor of abstraction and abundant interest in ornamentation in what is called Pseudo-inscription can be seen. But the interesting point in the study of inscription motifs on potteries is its obvious difference with other genres, that is, the empty space around the inscription. Although using

numerous and intense motifs is one of the main and obvious features of Susa objects, the potter has not adopted other motifs for vessels decorated by inscriptions, he has brought only several flowers, lines or one branch as a ornamental element. Table 6 shows that there have never been compositions of inscriptions and animal motifs in one object. All of these can be a reason for the sanctity of and respect for Kufic writing, and it can also be an emphasis on the religious importance and centralization of Susa.

CONCLUSION

The above shows that because of the low political, cultural and social importance of Susa in the early Islamic era, this region has received different influences without any specific resistance so the influences of the Sassanid period, Persepolis, Parthian and Neyshabur, Iraq and China potteries can be seen together. But the most powerful factor, even more effective than Islam, is Susa's own pictorial tradition, Susa, when it was a royal city and a strong center.

The result of the study on Islamic Susa pottery motifs is that Susa was a religious city that was not under the domination and coercion of any external force to impose a special style on its artifacts despite the influence of its other contemporary centers. It has also deliberately used Islamic influences, and among these various influences it has best kept faithful to its deep pictorial traditions after thousands of years. Because of similarity between motifs in few potteries, a research on exchange between Susa and Mediterranean region and its impact on motifs can be done using the result of this paper.

REFERENCES

- Clowson, H.P. (1939) Pottery of Susa I. *Parnassus*, Vol. 11, No 4, 26-27.
- Crow, Y. (1974) Certain Type et Techniques des la Ceramique de Susa. *Albisda*, Atti VII,75-83.
- Dimand, S. M. (1944) *Handbook of Muhammadan Art*, Metropolitan Museum, New York.
- Fehervari, G. (2000) *Ceramics Of the Islamic World in the Tareq Rajab Museum*, London and New York.
- Grobe, E.J. (1976) *Islamic Pottery of the Eighth to the Fifteenth Century In The keir Collection*, Faber and Faber Limited, 3 Queen Square, London.
- Harper, O. and Prudence, A.J. (1992) *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre*, The Metropolitan Museum of Art, New York.
- Hasan, Z. M. (1981) *Iranian Crafts in Islamic Era*, Darorraaed alarabi, Beyrouth.(In Arabic)
- Hillenbrand, R. (1999) *Islamic Art and Architecture*.
- Jenkins, M. (1968) The Palmette Tree: A Study of Iconography of Egyptian Lustre Painted Pottery. *Journal of the American Research Center in Egypt*, Vol. 7, 119-120,
- Karimi, F.and Kiani , M. Y. (1985) *Islamic pottery art of Iran*, Archaeology Center of Iran.(In Farsi)
- Kervran, M. (1977) Les Niveaux Islamiques du Secteur Oriental du Tepe de L'Apadana,II,Le Materiel Ceramique. *Cabier de la Delegation Archeologique Francaise en Iran* 7, 75-161.
- Khazae, M. (2002) *A Thousand Motifs*, Institute of Islamic Art Studies. (In Farsi)
- Koechlin, R. (1928) Chinese Influences in the Musulman Pottery of Susa. *Eastern Art*, 1-12. pls I-IV.
- Koechlin, R. (1928) *Les Ceramique Musulmanes De Susa Au Musee Du Louvre*, Librairie Ernest Leroux, Paris.
- Kuhnel, E. (1970) *Islamic Arts*, London.
- Lacam, J. (1950) La Ceramique de Suse (Iran),Campagnes de Fouilles de 1946,1947,1948. *Musee de France*, No Octobre 1950, 206-209.
- Lacam, J. (1949) Memories Sur La Ceramique Musulmane de Suse, Depose a LEcole du Louvre.
- Lane, A. (1947) *Early Islamic Pottery*, Faberand Faber 3 Queen Square, London.
- Lane, A. (1971) *Later Islamic Pottery Persia, Syria, Egypt, Turkey*, Faber and Faber 3Queen Square, London.
- Negahban, E. (1996) *Susa or The Oldest Urban Center of The World*, Iranian Cultural Heritage Organization.(In Farsi)
- Northedge, A. and Kennet, D. (1994) The Samarra Horizon, Khalili, N. *The Nasser Khalili Collection of Islamic Art*, vol. IX, 21-36.
- Philon, H. (1980) *Early Islamic Ceramics Ninth To Late Twelfth Centuries*, Islamic Art Publications, SA.
- Pop, A. U. and Ackermann, Ph. (1939) *A Survey of Persian Art*, Vol. 1, Oxford.
- Rafii, L. (1998) *Persian Pottery from Prehistoric Era to the Present*, Yasavoli, Iran.(In Farsi)
- Rashidian, N. (1990) *A Look at the Khuzestan History*, Buo Ali, Tehran, Iran.(In Farsi)
- Razavi Dezfuli, A. (2001) *Shuoshestan or Khuzestan*, Navide Shiraz, Iran.(In Farsi)
- Rice, D. T. (1975) *Islamic Art*, Oxford University Press.
- Rogres, Y. M. (1976) Review of Myriam Rosen- Ayalon Ville Royale de Suse IV: La Poterie Islamique. *Bibliotheca Orientalis*, Vol. XXXIII, No 5/6
- Rosen Ayalon, M. (1974) *La Poterie Islamique*, Librairie Orientaliste Paul Geuthner, Paris.

- Tazhibi, M. and Shahbazi, F. (1995) *Iranian Motifs*, Soroush, Tehran, Iran. (In Farsi)
- Unvala, Y.M. (1935) *Notes on The Lustered Ceramics of Susa*, Bulletin of The American Institute for Persian Arts and Archeology. 1935.
- Weill, D. (1951) Note Sur Deux Petites Cruches en Terre Cuite Provenant de Suse, D'époque Musulmane. *Revue des Arts*, 247-49.
- Wilson, E. (1925) *Islamic Designs for Artists and Craft people*.
- Witcomb, R. (1985) Islamic Archeology at Susa. *Paleorient*, Vol. 11.2, 85-95.
- <http://www.louvre.fr/en/recherche-globale?F-search-cles=Islamic+Susa&f-search-univers=>
date of access: 5/2 /2012
- Images Photographed by Marie-Lan Nguyen and Jastrow from Louvre Museum,
<http://commons.wikimedia.org/wiki/User:Jastrow> date of access: 20/11/2011