

Wave Scroll Motif: Trace of Ancient Greek Art in Oriental Rural and Nomadic Carpets

Sara Moslehi

PhD Student, Department of History, Central Tehran Branch, Islamic Azad University, Tehran, Iran

Bahman Firouzmandi-Shirehjin

Professor of Archaeology, Department of Archaeology, Tehran University, Tehran, Iran

Arman Shishegar

Assistant professor, Iranian Center for Archaeological Research (I.C.A.R), Research Institute of Cultural Heritage & Tourism (RICHT), Ministry of Cultural Heritage, Handicrafts and Tourism

> Article Information Doi: 10.30495/jaa.2024.2004224.1024 Received Date: 18/10/2023 Accepted Date: 27/01/2024 Available Online: 01/03/2024

Abstract: The wave scroll motif is among the designs that, nowadays, are mainly seen in rural and nomadic carpets in a wide geographical area, from Central Asia to Anatolia and the Caucasus, as well as Iran. Historically, this motif originates from Hellenistic art and is still used in oriental carpets today. The purpose of this article is to find out how and the possible time of the arrival of this pattern from Greek art to Iranian carpets using archaeological evidence, including old museum carpets. Using valuable motifs of Sassanian Carpets, this article tracks the transfer of this motif from the Hellenic-Byzantine civilization to the art of pre-Islamic Iran and in various artistic disciplines such as pottery and textiles to clarify this motif's long journey from pre-Islamic art to the Islamic period. This study shows that the motif was most likely known since the Seleucid period in the Persianate world, but the most evidence of it can be seen in the art of the Parthian and Sasanian periods, furthermore the findings show that this motif was used at least from late Parthian era on the border of hand-made textiles like carpets.

Keywords: Carpet, Hand-Mad Textiles, Archeology, Wave Scroll, Ancient Iranian Art, Hellenistic Art.

Introduction

One of the decorative motifs on oriental carpets, including rural and nomadic carpets in Iran and its adjacent areas, is the wave scroll motif, which is mostly used on the border of these carpets. Considering that the origin of this design goes back to ancient Greco-Roman art, the question arises as to how this pattern found its way onto contemporary carpets of the Persianate world. It is clear that for finding out the origin of this motif, we should look at the oldest examples of existing carpets, but because carpets are produced from decayable natural materials, obtaining historical evidence to investigate the background of carpet designs and their evolution throughout history is very difficult and depends on the luck of the researchers to find samples of old carpets from different historical periods. On the other hand, fortunately, there are very valuable examples of pre-Islamic carpets in museums, providing clues about the evolution of Iranian carpet designs durinf pre-Islamic era, but unfortunately, there are no examples of Iranian rural and nomadic carpets of post-Islamic era until around the 16th century A.D. From this period, there are only examples of court carpets from the Anatolian region and Islamic areas, whose designs are clearly influenced by the art of the Islamic Caliphate and cannot exemplify the carpets used by ordinary people. However, we know that the rural and nomadic carpets that are nowadays woven in the Persianate world, from Central Asia to Anatolia, Caucasus and also Iran, still retain some ancient elements (cf. Parham: 1985 and 1992). Given the available evidence, pre-Islamic Iranian carpets fall into two categories (in terms of design). The first one is from before the 4th century B.C, of which two examples have been obtained (Bashadar carpet and Pazyrik carpet), both of which are related to the Scythian culture. These two examples are considered to be the oldest pile carpets found in the world. The second category is flat-woven carpets and pile carpets of an era spanning from the first centuries A.D. to the beginning of the Islamic era, which were found around Chinese Turkestan (East Turkistan), Central Asia and Iran, and are related to the Iranian cultures of that geographical region.

The important point about the motifs of Iranian carpets is that the design of them, since ancient times, has been a combination of artistic elements of the cultures of different peoples and does not necessarily belong to a specific culture. For example, in the Pazyryk carpet, a fusion of the art of the nomadic people of the Siberian steppes can be recognized alongside the Achaemenid and Mesopotamian cultural elements, and in the carpets of the Al-Sabah group, the characteristics of Iranian art can be seen alongside the elements of Hellenistic-Byzantine art (See Rudenko 1970; Spuhler 2014). The wave scroll is a decorative element seen in all kinds of modern rural and nomadic carpets, and its use can be seen in a wide area from west to central Asia. Due to the fact that many of the modern carpet motifs in this region go back to the ancient times, it seems that the wave scroll is one of those ancient artistic elements introduced in these carpets in the past centuries. The subject of this essay, is research on the origin and age of the wave scroll and its introduction to modern Iranian carpets.

Review of Literature

Because the wave scroll motif in the Iranian wavy carpets has not yet been independently addressed so far, we have to refer to two sources as a review of literature:

A) Sources dealing with the history and origin of the wave scroll and its transmission among cultures.

B) Sources that provide us with information about Persian and Oriental carpets and the evolution of their designs throughout history. Among the most important sources taking to the wave design, we can refer to Britannica Encyclopedia (1999), which provides a brief yet useful definition of this design and refers to its use in ancient European arts. Also, Wilson (1999) has dealt with a relatively complete history of the emergence of this motif from the Neolithic period in Europe and Anatolia to the Bronze Age civilizations and beyond. Parham (1985 and 1992) is the first Iranian scholar who has researched the background of nomadic and rural carpet designs and its relationship with the art of the peoples dwelling in ancient Iranian plateau. After him, Zhuleh (2001) also conducted a detailed research into the literature on the field of carpets and its motifs, which is considered as a complement to Parham's valuable work on the post-Islamic Iranian carpet.

Rudenko (1970) is the first one who, in addition to the exploration reports of the steppes of Eastern Siberia and the publication of ancient findings of Pazyryk kurgans, provided a complete description of the physical characteristics and the design of the Pazyryk carpet. Albenda (1978), with regard to Assyrian bas-relief, has described the motifs of ancient Near Eastern carpets around the first centuries of the second millennium B.C. Shurman (1982) made a more comprehensive study of Pazyrik carpet motifs and speculated about the place of its weaving, which is slightly different from Rudenko's theories. Robinson (1990) has compiled the history of pre-Islamic Iranian carpets in an entry in the Encyclopedia Iranica, which, of course, does not include evidence such as the Al-Sabah carpets. Spuhler (2014), for the first time, introduced the carpets of Al-Sabah Collection of Kuwait, considering them related to Sasanian art.

Research Method

This research was done using the descriptive-analytical research method and the collection of combined library information and with an interdisciplinary approach, and in which findings from art history, archeology, architecture, and history were used. Regarding the semiotics of the pre-Islamic carpets' motifs, the most important historical source is museum objects and ancient artifacts from archaeological excavations. By combining interdisciplinary data and finding any connection between the desired motif and other examples of ancient art such as architecture and textiles, it is possible to trace the historical development of this motif among different nations as well as how it was transferred among them. In this research, six pre-Islamic carpets from different museums as ancient witnesses, and seven contemporary carpets containing this motif have been examined.

Antiquity of The Iranian Carpet

The antiquity of carpet weaving and its origin is still unknown for us, however, we have to make do with the available archaeological findings to answer this question. Today, the oldest existing carpets are two pile ones found in eastern Siberia, both of which were found in the domain of Iranian civilizations and ancient steppe peoples. The oldest known knotted carpet is the "Bashadar" carpet from around the 6th to the 5th century B.C, which was discovered in an area of the same name in Kurgan (2), pattern of which is not discernable due to extensive damage. After this hand-made carpet, the so-called "Pazyryk" carpet can be considered the oldest one. It was woven around the 4th or 3rd centuries B.C. and was found in the Scythian grave known as Kurgan (5) (Rudenko 1970: 304; Rubinson 1990: Enc. Iranica). The importance of the Pazyrik carpet is mostly due to the fact that, because of the frozen climate of that region, it has largely remained intact and the patterns and colors used in it help a lot for finding information on the Iranian carpets before common era. As can be deduced from the Pazyrik carpet, the design of it is influenced by the art of the Near East (western Iran and Mesopotamia) and to some extent Scythian art, and no traces of Greek art can be seen in it. But after these two mentioned carpets,

there is not any discovered pile carpet until around the 2nd century A.D. The oldest pile carpets (related to the Iranian culture) found after Pazyrik, are some pieces of carpets from west China, east Central Asia and north Afghanistan belonging to 1st to 7th centuries A.D, which include pieces of Lulan carpets and the carpets of Al-Sabah collection whose motifs, unlike Pazyrik carpets, are related to the art of east Iran (such as the art of Balkh and Khotan) and the Sassanian art (Spuhler 2014: 13-19),

History of Decorative Wave Scroll Motif in Ancient Art

Definition of Wave Scroll Motif

This motif, known as running dog or Vitruvian Wave, consists of repetitive curved-spiral shapes that resemble the profile of water waves and is usually seen with two contrasting colors (similar to the Yin-Ying symbol in China) (Fig. 1). In Greco-Roman art, it is found on the border of architectural motifs (reliefs, stucco, mosaics, wall paintings), pottery and textiles (Encyclope-dia Britannica, 1999).

Wave Scroll Motif in Greek Art and Architecture:

It seems this motife, for the first time, was used to decorate Greek colored pottery. Although its symbolic meaning is not completely known, it was probably originally associated with mythical waters and then, as noted, was used decoratively in borders and to fill the space between frames (Wilson 1999: 2). For example, this motif was repeatedly used on the rim decorations of many red vases from the Greek settlements of Paestum in Italy (Trendall and McPhee 2014). On a ruddy bell crater belonging to about 350 B.C. from this area, a Greek myth is depicted and this motif can be seen at the bottom of the picture frame and around the bell crater (Fig. 2). This motif was also found on the frescos of Greek Colonies in Italy (Fig. 3).

Wave Scroll Motif in Greco-Roman Art and Archeology

The Romans also borrowed this decorative motif from the Greeks (perhaps through the Etruscans) and used it on the border of many of their mosaics (Fig. 4). Finally, some centuries A.D, after conversion of the Roman Empire to Christianity, this decorative pattern was used in mosaic art and textiles of the Byzantine civilization. This motif is used in several hand-made Byzantine tapestries found in Egypt. For example, on a textile known as "Sabine Shawl" (Fig. 5) which is kept in the Louvre Museum, wave scroll is used to decorate the frame around the images, which indicates the use of this pattern in the contemporary weaving art of the Byzantine Empire, in the neighborhood of Iran.

Wave Scroll in Iran

Wave Scroll in the Sassanid Art

The existence of this decorative motif in a number of Sassanid relics shows that its use in Iranian art dated back to pre-Islamic era, however, the time of its introducing to Iran is not known correctly. One appropriate way for this borrowing can be the Seleucid period, when many elements of the Hellenistic culture were mixed with the Iranian culture and art of the post-Achaemenid era, and this fusion continued in the Parthian and Sasanian periods (Fowlkes-Childs 2003). Furthermore, this influence of Greek culture can be seen in some cases, including alphabet in the east lands of Iran, north and east of modern Afghanistan, especially during the rule of the Kushans in Balkh, (Sims-Williams 1988: 344). Therefore, there is a high probability that the motifs of Hellenic art from Seleucid to the Sassanian era were familiar elements in Iran and were used in the Persianate world. Additionally, in spite of long wars between Iran and Rome,



Fig. 1 The general scheme of the wave scroll motif

33 *****



Fig. 2 Bell Crater pottery, ca. 350 B.C. (https://collections.lacma.org/node/230099)



Fig. 4 Roman Mosaic, Cacodaemon & The Evil Eye, Roman Emperial Period, Hatay Archaeology Museum, Antakya (https://www.theoi.com/Gallery/Z40.2.html)



Fig. 3 fresco of Greek Colonies in Italy (https://commons.wikimedia.org/wiki/File:Ancient_Lucanian_ fresco_-_Museo archeologico nazionale – Paestum – Italy 2015 (3).JPG)



Fig. 5 Sabine Shawl, Louvre Museum (https://www. louvre.fr/oeuvre-notices/chale-de-sabine)

due to the ancient cultural contacts of these two Empires, the exchange of artistic and architectural elements between these two great empires is very eye-catching, and ample evidence can be found to prove this, one of which is the use of wave scroll motif in Sasanian art. Although evidence of the use of this motif has not yet been found in Sassanid mosaics, examples of it can be found on a Stucco of Ctesiphon (Fig. 6) which is kept in the Metropolitan Museum. In this decorative relief from the 5th century A.D, a kind of bird (Guinea fowl) is depicted and the bird design is placed in the center of a circular frame decorated with a wave scroll motif. This motif also can be seen on a jar (Fig. 7) discovered in Marv, which is kept in Ashgabad Museum. This jar is one of the burial objects on which scenes are painted in the style of Sassanid art, and it probably shows a scene of ritual burial of a Sassanid prince (Zoroastrian?). All around the neck of the jar and below its handles, this wavy pattern is drawn in black and white. It seems that this jar is currently the only discovered sample of Sassanid painted pottery that has a wave scroll pattern; however, its existence proves that artists in the Sasanian cultural basin (from the east to the west of the empire) were acquainted with decorative elements of the West.

Wave Scroll Motif in Pre-Islamic Iranian Carpets

The oldest elements borrowed from Greco-Roman art can be seen on a pre-Sassanian textile from the Parthian period, called Germi carpet (Fig. 8). Some Greek motifs, including the socalled "Greek key", are seen on the border of this carpet, which proves that these motifs were used in Iranian textiles before the Sassanians. However, the discovery of some pieces of carpets from the Sassanid era, which are kept today in the Al-Sabah Collection and in the Museum of Dar al-Athar al-Islamiya in Kuwait, filled the gap between the Pazyrik carpets from around the 4th century B.C. and the old Iranian carpets from the Islamic era. The images of these carpets, along with some Sassanian hand-made textiles, including carpets without piles and some fabrics, were published for the first time by F. Spuhler in 2014. According to Spuhler's research, these carpets were probably discovered in a cave named Ayrmalek in Doab Shahpasand village in Samangan Province, Afghanistan (Spuhler 2014: 16-17). Therefore, these carpets should be attributed to a region that was intersection of Buddhist, Greco-Kushani, Chinese and Persian cultures in ancient times. Although very small and damaged pieces of carpets belonging to the Sassanid period (such as Qumes, Nuyin-Ola and Lulan carpets) were discovered before, but due to their small size and damage, the design of none of them could be recognized. In fact, by having the relatively intact pieces of carpets of the Al-Sabah collection, many ambiguities about the type of design, color and dimensions of contemporary Sasanian carpets, or in fact, the carpets of the Sasanian civilization domain, were resolved (Spuhler 2014: 14). The wave scroll motif, which is seen in most of the carpets of the Al-Sabah collection, is used as a small border separating the main field of the carpet from the main border. An interesting example in this collection is the carpet with code number Cat. 1.4 (see Spuhler 2014: Cat. 1.4). If the historiography is correct (157 A.D.), it shows that this carpet is from before the Sassanid empire and the area where this carpet was discovered (and probably produced) was, at that time, under the influence of the culture and art of the Parthian empire. This point shows that the decorative elements this collection's carpets, which postdate the Cat. 1.4, are similar to it in terms of style, and have roots in the art of the Parthian period, so naturally, the wave scroll is included among these patterns. Of course, the continuation of this style and the motifs used in these carpets until the 8th century A.D. (see Spuhler 2014: Cat. 1.5; 1.6; 1.10; 1.13) show that these designs were still popular in the Sasanian carpets and were, somehow, stablished in the Sasanian period. Another interesting point can be deduced from the design of the carpet piece Cat. 1.5. The wave scroll motif on the border of this carpet (Fig. 9; Spuhler 2014: Cat. 1.5.) is in a broken geometric style, unlike the other carpets in this collection, that have curved lines, i.e. in the same style as the rural and nomadic carpets that are still common in central Asia, the Caucasus and many other Iranian regions. Perhaps this is the only example of pre-Islamic carpets in which shapes are woven geometrically and angularly.

Wave Scroll in the Post-Islamic and Contemporary Iranian Carpet

Due to the decayable materials used in textiles, especially pile carpets, which are usually made entirely of wool, it is very unlikely that an example of ancient hand-made textiles (especially those carpets produced and used by ordinary people) will be discovered, and until now, such a thing has not been discovered in Iran, except those which are from 15th century A.D. onward. In fact, if such textiles have been found in archaeological excavations, they are court rugs being preserved in areas with special environmental conditions. Because of this, we have no information about designs of old Iranian hand-made textiles (Islamic era until the 16th century) -produced and used among ordinary people, especially villagers and nomads- in order to trace the evolution of carpet motifs of this category in the Islamic era. Therefore, the examples of carpets from the Islamic era that are now kept in museums across the world do not help us much in terms of motifs to bridge the gap between Iranian carpet design from the pre-Islamic era to the oldest rural-nomadic carpets (probably from Safavid era). Therefore, we have to make do with only rural and nomadic carpets left over from a few centuries ago, of which similar examples are still produced in the Persianate world. Usually, very ancient motifs and elements are still preserved in these hand-made textiles (Parham 1985: 98). Here are some examples to prove this hypothesis. Nowadays, the wave scroll can be found in pile carpets or flat woven carpets in rural and nomadic areas of Iran. Their best examples can be seen in textiles of Turkmenistan, the Balochi people and some regions of the Caucasus.

On the Turkmen carpet known as Jānmāzi (prayer rug), as seen in Fig. 14, there are rows of parallel wave scroll, which are alternately in red and green in contrast with the white negative space. Probably, using this motif around the design of the place of worship shows its use in ritual art. In Azerbaijan, which has a distinct Caucasian style in the composition of motifs and coloring, the wave scroll motif on the border (Fig. 15) and the field (Fig. 16) show that this design was known in the region. In Fig. 15, as can be seen, this motif is used in a broken form and its similarity with the Sassanid carpet in Spuhler 2014: Cat. 1.5. is remarkable. This geographical area has been located between the ancient Iranian and Greco-Roman civilizations for a long time, and a mixture of native style and that of the mentioned cultures can be seen in it. In the Alpan-Kuba carpet, as seen in Fig. 17, the border design is a modified form of the wave scroll, however, the overall design and its positive and negative spaces are preserved. The wave scroll is one of the most widely used motifs in the Iranian nomadic Kilims (or Gilim), which can be seen in the border decorations. This motif, which is known as Chapalghe (originally chap halqhe "left ring") among the nomads, is used in a stepped form due to the weaving technique of this type of kilim (Fig. 18). This motif can also be seen in another type of flat woven hand-made rug, called Suzani which is a kind of kilim (Fig. 19). Here, the weaving technique has inevitably made the weaver change the shape of the motif and, instead of using curved and spiral lines, the broken and angular lines are used, which is also similar to Spuhler 2014: Cat. 1.5. Also, the use of this motif with two contrasting colors on the carpet border has been preserved.

The Baluch people live in a wide area, from the modern Khorasan in northeast Iran and the areas east of the Caspian Sea in the north of Iran, in the vicinity of the nomadic Turkmen tribes, to southeast Iran and the west of Pakistan. Balochi carpets are mostly made by Baloch women in Khorasan and Sistan in Iran. Their hand-made carpet is still made with natural materials and



Fig. 6 Sasanian Stucco from Ctesiphon, Metropolitan Museum, New York (https://www.metmuseum.org/ toah/works-of-art/32.150.13/)



Fig. 8 Greek key motif on Parthian Germi Carpet (Bakhtoor-Tash, 2007)



Fig. 7 Sasanian Jar from Merv, Ashgabad Museum (http://warfare.tk/Ancient/Merv_Vase-National_ Museum_of_Turkmenistan-5.htm)



Fig. 9 Graphic restoration 1 of the Wave Scroll motif on a Sasanian rug (Spuhler: Cat. 1.5, p. 31)

plant and mineral dyes. It has preserved very ancient designs and motifs (Edwards 1989: 210-16). The wave scroll is used on the border of some of these carpets (Fig. 20) as broken lines.

Conclusion

A- Wave scroll decoration was introduced in the art of ancient Iran, first via Greek and then through Roman art.

B- Based on the evidence, this motif has been used since the Parthian period in all kinds of art, including handmade textiles and all kinds of carpets.

C- Sasanian art, which is mostly continuation of Parthian art, received the West artistic and cultural elements through the Parthians and Romans, and for this reason, this motif can be seen in various branches of Sasanian art, such as plastering, pottery, and carpets.

D- The carpets of the Al-Sabah collection represent a branch of the artistic style of the Sassanid carpet and are the continuation of Parthian art. Also, the artistic elements of the Greco-Ro-



Fig. 10 Graphic restoration of the Wave Scroll motif on a Sasanian rug (Spuhler: Cat. 1.5, 33)



Fig. 12 Graphic restoration of the Wave Scroll motif on a Sasanian rug (Spuhler: Cat. 1.10, 48)



Fig. 13 Graphic restoration of the Wave Scroll motif on a Sasanian rug (Spuhler: Cat. 1.13, 54)

man world can be seen in them, and the wave scroll is one of those elements.

E- Although examples of rural and nomadic carpets belong only to some recent centuries, evidence in contemporary carpets on the Iranian plateau and nearby areas shows that this motif is still used to decorate rural and nomadic carpets. The history of its use in Iranian carpets dates back at least to the Parthian or Sassanid era. This motif can be found in the carpets of the areas that historically were all within the limits of the Parthian and Sassanid empires.

F- Wave scroll motif in modern carpets has undergone slight changes in form. However, it still preserves its original shape, contrasting color and decorative use.

G- The carpet designs of the Persianate world are like a historical museum, absorbing elements from different ages and preserving them until today. These elements are not limited to oriental motifs, and as seen in this research, the influence of ancient Greco-Roman art can be seen in the formation of oriental carpets, and, most likely, this influence was not limited to wave scroll. Therefore, in future researches, it is possible to deal with the geometric or floral motifs etc., which were introduced to Iranian art from the West.

Acknowledgments

We are thankful to Dr. Bita Sodaei Associate professor of Azad University Varamin-pishva and Dr. Maryam Kolbadi Assistant Professor of Azad University, Central Tehran Branch.

Conflict of Interest: The authors declare that they agreed to participate in the present paper and there is no competing interests.

38



Fig. 14 Turkmen prayer rug (https://www.wikiwand. com/en/Turkmen_rug)



Fig. 16 Caucasian carpet design (Karimof, 1983: 71)



Fig. 18 Wave Scroll motif on a kilim (http://www. honarnews.com/prtaiwne.49nay15kk4.html)



Fig. 15 Caucasian carpet design (Karimof, 1983: 34)



Fig. 17 Alpan-Kuba (http://www.azerbaijanrugs. com/arfp-kuba-alpan-rug-120x192cm.htm)



Fig. 19 Wave Scroll motif on Suzani kilim (https://arastan.com/journey/border-motifs-in-oriental-carpets)



Fig. 20 Wave Scroll motif on a Baluch Carpet (https://nazmiyalantiquerugs.com/antique/persian/baluch/antique-persian-baluch-rug-46449/)

Bibliographical References

Afroogh, M., 2014. Symbol and Semiotics of Iranian Carpet. Tehran.

Albenda, P., 1978. "Assyrian carpets in stone". Journal of the Ancient Near Eastern Society, 10(1): 2277.

Bakhtoor-Tash. N. A., 2007. Mythical Symbols. Tehran.

Britannica (Editors) (1999). "Running dog". Encyclopedia Britannica. Available at: https://www.britannica.com/art/running-dog-pattern (Access Date: Jan. 03 2020)

Edwards, S., 1989. The Persian Carpet. Translated by M. Saba. Tehran.

Fowlkes-Childs, B., 2003. "The Sasanian Empire (224–651 A.D.)", In Heilbronn Timeline of Art History. The Metropolitan Museum of Art, http://www.metmuseum.org/toah/hd/sass/hd_sass.htm (originally published October 2003, last updated April 2016, Access Date: Feb. 05 2020)

Parham, S., 1985. Tribal and village rugs from Fars. V. I. Tehran.

Parham, S., 1992. Tribal and village rugs from Fars. V. II. Tehran: Amir Kabir.

Karimof, L., 1983. Azerbaijan Carpets, Vol. III. Baku.

Rubinson, K. S., 1990. "The Textiles from Pazyryk". Expedition, Philadelphia. Vol. 32, 1, pp. 49-61.

Rudenko, S. I., 1970. Frozen tombs of Siberia: The Pazyryk burials of Iron Age horsemen. Translated and with a preface by M.W. Thompson. University of California Press.

Schürmann, U., 1982. "Der Pazyryk: ein 2500 Jahre alter Knüpfteppich aus einem Eisgrab im Altai-Gebirge; seine Deutung und Herkunft". A Paper During the Symposium of the Armenian Rugs Society, 26th September 1982. New York.

Sims-Williams, N., 1988. "Bactrian language". Encyclopedia Iranica. Vol. III, Fasc. 4, pp. 344-349

Spuhler, F., 2014. Pre-Islamic Carpets and Textiles from Eastern Lands. New York.

Trendall, A. D. and McPhee, I., 2014. "Recent additions to the collection of Greek vases". Art Bulletin of Victoria. Available at: https://www.ngv.vic.gov.au/essay/recent-additions-to-the-collection-of-greek-vases/ (Access Date: Feb. 03 2020)

Wilson, E., 1999. "Spiral, Meander, Key Pattern and the Maze". British Museum Pattern Books: Roman designs. London.

Zhuleh, T., 2002. A Research on Iranian Carpet. Tehran: Yassavoli

Figures:

Fig. 1: Graphic Image by the Author.

Fig.2: https://collections.lacma.org/node/230099

Fig.3: https://commons.wikimedia.org/wiki/File:Ancient_Lucanian_fresco_-_Museo archeologico nazionale – Paestum – Italy 2015 (3). JPG

Fig.4: Cacodaemon & The Evil Eye, Roman Emperial Period, Hatay Archaeology Museum, Antakya https://www.theoi.com/Gallery/Z40.2.html

Fig.5: https://www.louvre.fr/oeuvre-notices/chale-de-sabine

Fig.6: https://www.metmuseum.org/toah/works-of-art/32.150.13/

Fig.7: http://warfare.tk/Ancient/Merv_Vase-National_Museum_of_Turkmenistan-5.htm

Fig.8: Bakhtoor-Tash (2007)

Fig.9: Spuhler (2014)

Fig.10: Spuhler (2014)

Fig.11: Spuhler (2014)

Fig.12: Spuhler (2014)

Fig.13: Spuhler (2014)

Fig.14: https://www.wikiwand.com/en/Turkmen_rug

Fig.15: Karimof (1983)

Fig.16: Karimof (1983)

Fig.17: http://www.azerbaijanrugs.com/arfp-kuba-alpan-rug-120x192cm.htm

Fig.18: http://www.honarnews.com/prtaiwne.49nay15kk4.html

Fig.19: https://arastan.com/journey/border-motifs-in-oriental-carpets

Fig.20: https://nazmiyalantiquerugs.com/antique/persian/baluch/antique-persian-baluch-rug-46449/