

INTERNATIONAL JOURNAL CONSERVATION SCIENCE

Volume 15, Issue 1, 2024: 415-428



DOI: 10.36868/IJCS.2024.01.03

SCIENTIFIC ASSESSMENT OF THE MOSAICS DECORATION AT QASTAL PALACE

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Abstract

The following research deals with Al-Qastal Palace, one of the most important early Islamic structures. It dates specifically to the Umayyad era in Jordan. Its floors are decorated with geometric mosaics, which were revealed during a series of archaeological excavations. These mosaics are characterized by a high level of artistic skill in their execution, particularly as evidenced by the great diversity in their shapes and designs. This study marks a serious attempt to compare the palace's mosaics with their counterpart in Byzantine art as represented at various Byzantine sites, likewise, to show the influence of Byzantine models on Islamic mosaics. Our research suggests that there was a prevalent school of art that was widespread in the region. By comparing the mosaics with relatively nearby sites, we were able to arrive at a comprehensive overview of mosaic production in the region, and determine whether they all belong to a single school of art. A serious attempt is being made to identify the main sources of influence for Qasr al-Qastal, especially those coming from Asia Minor, but also from other places outside the region.

Keywords: Geometrical pavements; Mosaic; Decoration; Composite motif; Geometric Design; Al-Qastal Palace; Qasr al-Hallabat; Qusayr Amra; Mount Nebo

Introduction

Al-Qastal Palace is located 25km south of Amman, and about 768m above sea level (Fig. 1). It is one of the most important structures in Jordan to feature geometric mosaic pavements.



Fig. 1. Al-Qastal Palace

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The purpose of this study is to examine individual designs at Al-Qastal Palace and compare them with similar designs elsewhere, whereby we might recognize influences from within the region and beyond. Wherever possible, comparative examples have been chosen from sites that are relatively close, so as to make possible a comprehensive overview of mosaic production in the region. Every effort has been made to discern the major sources of influence at Al-Qastal, certainly those coming from Asia Minor, but also those from points outside of the region. Al-Qastal Palace's distinguished mosaic floors deserve special attention. The importance of these decorative elements lies in the fact that they comprise a considerable diversity in their geometric shapes, which raises questions regarding the origins of their design, questions best addressed by comparing them with similar elements found both within the region and outside of it.

The region of Al-Qastal has been visited by European travellers and archaeologists since the late-nineteenth century, among them, R.E. Bruennow and A.V. von Domaszewski [1], who in 1897, were the first to study the historical site. In 1934, the site was mentioned by N. Glueck [2] and H. Gaube [3]. Patricia Carlier and Frederic Morin were the first to excavate Al-Qastal Palace, in July - November 1983 and to draw up plans of an adjacent mosque. New excavations and a survey were begun in March, July and November of 1983 under the direction of Patricia Carlier, in cooperation with the Department of Antiquities of Jordan; it was the first of three excavation campaigns (in 1983, 1985 and 1987) [4-7]. The site consists primarily of the palace and an adjacent mosque. The floors of Al-Qastal Palace are decorated with mosaics. Though mostly destroyed, enough of the palace floor remains to warrant its study. Al-Qastal dates back to 744 C.E. (during the reign of Al-Walid II). The basic plan of Al-Qastal Palace is a square design (Fig. 2) measuring 68 square meters, with a tower located at each corner. The design is typical for the Umayyad period, and there are many other Umayyad palaces very much like it, for example, the Mushatta Palace [4-8].

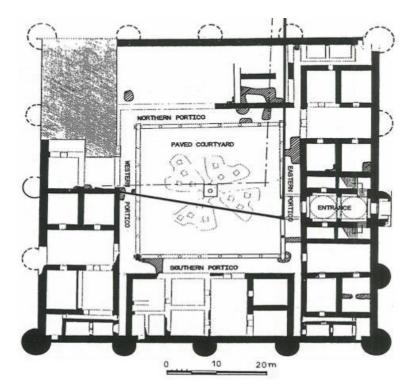


Fig. 2. Plan: Al- Qastal Palace [1]

The Geometric Mosaics Design at Al-Qastal Palace

Historically speaking, geometric motifs are among the most important motifs to adorn the tools used in daily life, inclusive of those used to decorate buildings, both internally and externally. The research in this article focuses primarily on describing, analyzing and comparing the geometric elements prevalent in Al-Qastal Palace, such as greatly contributed to it aesthetically. Especially prominent are calligraphic designs, which of course, were a common decorative form during the Islamic era.

The Mosaics at the Northern Portico

Interlooped bands with square patterns

The panel on the northern portico (Figs. 3 and 4) is located on the left side of the gate. The remains of the mosaic pattern found on the panel consist of a grid of interloped bands that form squares (taking the form diamonds), circles contacting squares, and oval shapes. They are mostly coloured dark green and red and are set against a white and yellow background.



Fig. 3. The interlooped pattern at Al-Qastal Palace

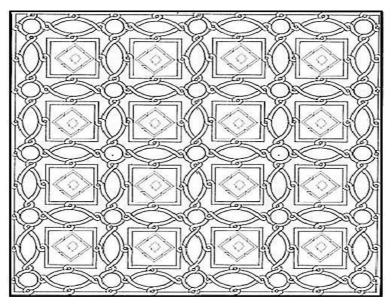


Fig. 4. The interlooped pattern at Al-Qastal Palace

The Interloped band with squares is a design found at several sites in Jordan dating to the Byzantine period, for example, on the floor of the Church of Saint Stephen at Umm al-Rasas (Fig. 5) [9]. Here the colors are red, dark red, yellow, black and white. Whereas the squares found at the Al-Qastal Palace feature rhombic shapes, those at Umm al-Rasas feature bride and basket motifs.

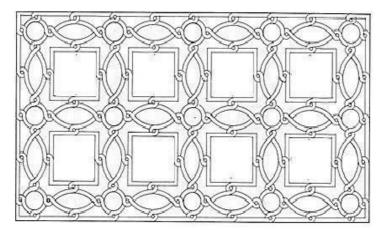


Fig. 5. The interlooped pattern at the Church of Saint Stephen in Umm al-Rasas

The pattern of interlooped bands with squares can be found at other locations in the area, for instance, on the lower floor of the Church of Quwaysmah in Amman, which dates back to 717-718 C.E. [10, 11]. Here, most of the squares include scenes of a building design motif, as well as bunches of grapes, jars and geometric patterns. The same motif is used in the nave of the Church of Saint Peter at Rihab, which dates back to 623 C.E. [12, 13]. While much of the decoration on the squares has been destroyed, one can still make out the colours, which are red and dark red against a white background.

Another example featuring a similar motif as that found at Al-Qastal, is the design on the floor of the Church of Elias. Dating from the Byzantine period [14], it depicts Maria and Soreg at Gerasa. Here, most of the squares contain scenes of daily life: a shepherd, a man with an animal, birds, animals and flowers. The colours are black, white, red, green and yellow green, against a light red background. This type of interlooped circles with squares and oval patterns can be found elsewhere in the Near East, dating from the Roman and Byzantine periods. For example, in the north corridor of room 3 at the House of Aion in Antioch, which dates back to

500 C.E. [15], most of the squares have geometrical patterns within them, We also find a motif consisting of multiple colours, among them, white, grey, red and green. Another example can be found on the floor of the Korykos Church in Mersin Province, dating back to 429-430 C.E. [16]. Again, the squares have geometrical patterns within them.

Interlaced circles pattern

The panel located in the northern portico (Fig. 6) and the decoration of the floor both feature interlaced circles, whose bands form hexagons. The panel is enclosed by a border with a four-stranded guilloche motif. The colours are green, yellow, red and black, against a white background. This is similar to the design found on the floor of the northern room at Al-Qastal Palace. Two other examples in the region that are similar to what is found at Al-Qastal Palace, and which date to the same period, bear mentioning. The first is the design on the floor of Qusyer Amra (Fig. 7) [17]. Here, the motif, as well as the colours, resemble those found at AlQastal. The second example is from the floor of Room 24 at Qasr al-Hallabat (Fig. 8) [18].

Here, the border design of the motif consists of interlocked looped half-circles that form concave rectangles. The colours are blue, red, black and grey, against a white background.



Fig. 6. Al-Qastal Palace: the interlaced circles pattern at the northern Portico

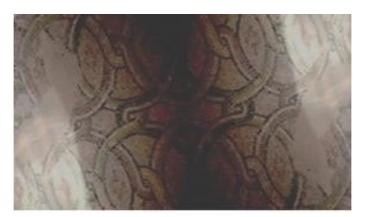


Fig. 7. Qusyer Amra: the interlaced circles motif

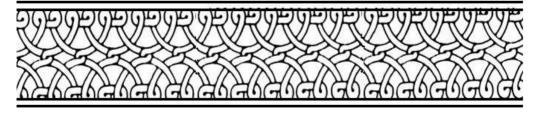


Fig. 8. Qasr al-Hallabat-Room 24: the interlaced circles motif

A similar motif is found at other locations in the area, for example, on the floor of the Church of Virgin Mary in Madaba, which dates back to the eighth century C.E. [19]. Here, the interlaced circles motif features many different colours, as among them, red, light red and dark red, against a white background. Another example from the Madaba area can be found in the Church of the Acropolis at Esbus (Hesban), which dates back to the Byzantine period [20]. Here, the motif consists of a border of interlaced half circles, similar to the one found at

Qaser al-Hallabat. In the West Bank, we find a similar example at Khirbat Hubeila, on the of floor of a church there dating back to the Byzantine period [21]. Other similar examples can also be found in Greece. Two notable examples of this kind of motif can be found in Greece, on the island of Kos (Cos): the first is on the floor of the Major Basilica at Kephalos, dating back to the time of the early Christians [22-24]; the second, on the floor of the Basilica of Thèbes de Phthiotide (Néa-Anchialos), which dates back to the early Christian and Byzantine periods [25-28]. An additional example can be found in Albania, on the floor of the Baptistery at Butrint (Butrotum), which dates back to the sixth century C.E. (525-550 C.E.) [29-31]. Here, the motif takes the shape of a circle-coloured light brown with a black outline, against a white background.

The mosaics at the Southern Portico

The south portico of Al-Qastal Palace (Fig. 2) is decorated with looped squares, with circles enclosed by interlocked squares and circles with borders like those found at the east portico. The colours resemble those of the mosaic at the northern portico. The border, however, is fairly unique to the area.

Looped squares with circles motif

The mosaic pavements at the south portico (Figs. 9 and 10) consist of looped squares with circles (outlined circles and poised squares) and come together to form bobbins in a symmetrically shaded band that is inter-looped tangentially [32]. It features a border with a two stranded guilloche motif. Small circles and diamonds are in the centers of the looped circles and squares. The colours are red, green, white and yellow, against a light red background.

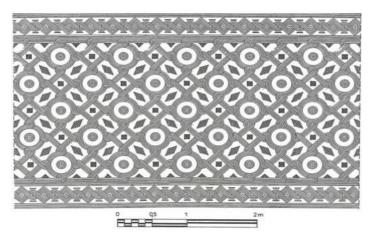


Fig. 9. Al-Qastal Palace at the southern portico: a looped squares with circles pattern

The Pattern of the Mosaics at the Eastern Portico

The east portico of Al-Qastal Palace (Fig. 2) is decorated with looped circles and squares enclosed by a border of interlocked squares and circles. The colours are similar to those used in the other pavement mosaics at Al-Qastal Palace. The border features a looped circles and squares motif and consists of interconnected rhombic shapes. Again, we a border design rare to the area.

The looped circles and squares motif

The pavement mosaics in the portico (Fig. 11) consist of looped outline circles and poised squares, and form bobbins in a symmetrically shaded band tangentially inter-looped. Small circles and diamonds are in the centers of the looped circles and squares. The colours resemble those found at the southern portico.



Fig. 10. Al-Qastal Palace at the southern portico: a looped squares with circles pattern

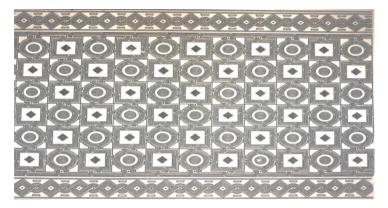


Fig. 11. The eastern portico: a looped circles and squares pattern

A similar motif can be found on the floor of court two at Qasr al-Hallabat (Fig. 12) [33]. Here the loop consists of eight circles and seven squares. Whereas the circles contain birds, fish and a basket of frosts, the squares contain small crosses. The colours include blue, red, black and grey, against a white background. It seems that this is the only example of this motif in the region dating from the Umayyad era.



Fig. 12. Court two at Qasr al-Hallabat

The looped circles and squares design spread throughout the region during the Byzantine era. Many similar patterns can be found in other areas, for example, at Umm al-Rasas, in the

southern aisle of the Church of Saint Stephen, which dates back to the eighth century C.E. [34]. Here the looped circles and squares contain fruits, leaves, small flowers and geometric patterns, unlike at Al-Qastal Palace, where only geometric patterns can be found. The background colours are red and white.

Similar also is the design of the motif appearing in the northeast room of the Procopius Church at Gerasa, which dates back to 526 C.E. [35]. Another example similar in design is that found on the first floor of the Church of Saint George at Khirbet as-Samra, dating back to 637 C.E. [36]. Here the colours are grey, red, light brown and yellow, against a white background.

The motif appearing on the floor of the Church of Bishop Leontios at Ya'amun, dating back to late fifth or early sixth century C.E. [37], is also similar. Here the colours are grey and red, against a white background. Another example is the motif used at the earliest church at Yasileh, which dates back to late fifth or early sixth century C.E. [38]. Finally, we find two examples of similar motifs in Asia Minor, the first one on the floor of the Priest's House at Aphrodisias, which dates back to the late fifth century C.E. [39], the second one on the floor of the House of the Phoenix in Antioch, which dates back to the sixth century C.E. [40].

The Northern Apartment Mosaics Pattern

The mosaics in the north room are located in the northern apartment of Al-Qastal Palace (Figs. 2 and 13). The floor here is decorated with a composite design, enclosed by three borders decorated with saw-tooth motifs, a composite geometric design and a diamond motif. Here the colours are green, yellow, red and black, against a white background.

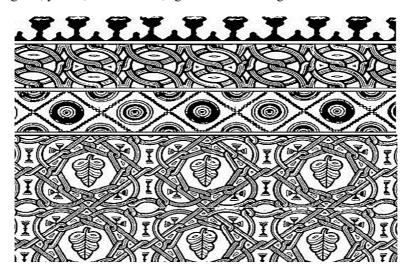


Fig. 13. Al-Qastal Palace: the mosaic pattern in the north room of the northern apartment

The saw-tooth with rosettes pattern

The outer border in the northern room consists of a row of spaced rosettes tangent to a sawtooth motif (Fig. 14). The colours here are red and yellow, against a white background. It would appear that the motif dates back to the end of the Umayyad period. It resembles the design used on the floor of the Bath of Khirbat al-Mafjar in Jordan [41]. The colours are similar to those found at Al-Qastal Palace. In general, the saw-toothed motif, which dates back to the Byzantine period, can be found throughout the area. Another example of it can be found at the Church of the Holy Martyrs Lot and Procopius on Mount Nebo, which dates back to 557 C.E. [42]. Here, the rosettes run tangent to a simple filet. The colours are the same as those found at Al-Qastal. The design is comparable with the saw-tooth motif, which can be found at many sites in Jordan and elsewhere [43].

Fig. 14. Al-Qastal Palace: the saw-tooth pattern on the mosaic, from the north room of the northern apartment

The interlaced circles motif

The design of the motif used in the north room (Fig. 15) consists of interlaced circles whose bands form hexagons [44]. The colours here are black, white, red, yellow and green, against a white background. The same motif can also be found in the northern portico of AlQastal Palace.



Fig. 15. Al-Qastal: the mosaic pattern with interlaced circles motif, from the north room of the northern apartment

The rhambic shape motif

The inner border found in the western room consists of a row of rhombic shaped motifs with inner convoluted circles (Fig. 16). The colours here are blue, red and grey, against a white background. This motif design was also used in room 24 of Qasr al-Hallabat (Fig. 17), which dates back to the Umayyad period [45], though here, the rhombic shapes contain small circles.

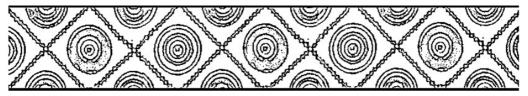


Fig. 16. Al-Qastal: the mosaic pattern with the rhombic shaped motivs, in the north room

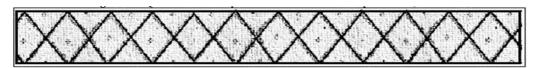


Fig. 17. Qasr al-Hallabat: the rhambic shape motifs in room 24

The composition pattern

The mosaic pattern of the field in the eastern room of the northern apartment (Fig. 18) consists of interlaced large squares intertwined with lobed octagons, and circles that form an octagon design [46]. Many of the circles and octagons contain fruits, leaves and small flowers. The colours here are red, white, blue and grey, against a white background. It seems this design is unique to Al-Qastal palace.

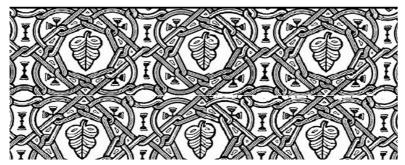


Fig. 18. Al-Qastal Palace: the composition pattern in the north room in the northern apartment

The interloped circles pattern

The mosaic found in the northern room (Fig. 19) consists of interloped circles that form shaded bands. Some of the circles contain cross shapes and pears, while others contain curvilinear squares decorated with roses. The colours here are red, white, blue and grey, against a white background. This design would seem to correspond to the Umayyad period.



Fig. 19. Al-Qastal Palace: the mosaic pattern with interloped circles pattern, in the north room

These decorations, which date back to the Byzantine period and are comparable to those at Al-Qastal Palace, can be found at many sites in Jordan, for example, on the floor of the Western Church at Yasileh (Fig. 20), which dates back to the fifth or sixth century C.E.

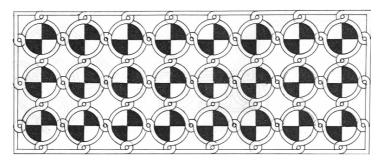


Fig. 20. The interloped circles pattern

The motif used there greatly resembles the one used at Al-Qastal Palace. Here, eachhe circle consists of four quarters; the colours consist of two shades of dark blue and two shades of white. Another example can be found in northern Jordan, at the Church of Bishop Leontios in Ya'amun, which dates back to the fifth to sixth century C.E. [47]. The motif shed here is very similar to the one found at Al-Qastal Palace, though the insides of the interloped rosettes feature crosses. The colours are red and blue, against a white background.

Conclusions

This comparative study of decorative elements has increased our understanding of the relationship between Al-Qastal Palace and Byzantine sites, as well as the relationship between artists who appear to have followed the same school of art. These artists, whether Muslim or Christian, clearly had no difficulty using or imparting their expertise in the implementation of the various motifs involved, regardless of whether used to decorate churches, or the palaces of their new Muslim rulers.

By studying the decorative elements found on the floors of Al-Qastal Palace, the authors were able to discern that many of these have their roots in the region's Byzantine mosaic art.

There is no doubt that most of the geometric shapes or motifs appearing on the floors of the Palace were imitative of or at least influenced by Byzantine mosaic art. Most of the geometric motifs are similar to those used in Byzantine decoration, whether within the region or further afield. Among these are the intertwining of circles with square shapes and oval shapes

(Figs. 3, 4 and 5); the pattern of interlocking circles (Figs. 6, 7, 8 and 15); the pattern of zigzag circles and squares (Figs. 11 and 12); the saw-tooth pattern with rosettes (Fig. 14); the rhombic shaped patterns (Figs. 16 and 17); and the pattern of overlapping circles (Figs. 19, 20 and 21).

Additionally, the authors found many elements at Al-Qastal Palace representative of Umayyad art, among them, those consisting of zigzag squares with a circular pattern (Fig. 10), and those with a compositional pattern (Fig. 18). We can conclude from this comparative study that Bzyantine art had a strong influence on Islamic art, which indicates that there was a high level of interaction between Muslim and Christian artists in this field. There exists a high level of consistency in the geometric motifs used in the decorative artwork. suggesting that they comprise a homogeneous and interdependent artistic tradition, even if the actual engineering of the motifs, and their components and parts are not wholly similar, while there exist significant differences between them—for instance, circles versus squares, or rhombuses versus hexagons—it is evident that there is a coherency and connectedness that cuts across all of the motifs, for instance, in terms of how they are linked together.

Among the most prominent findings from this research concerns the role of Arab Christians as the link between Islamic art and Byzantine art, regardless of whether they understood themselves as "Arabs", or as subjects of the Byzantine state. Another conclusion is that Islamic art is not a product of Byzantine art (as was already understood), nor an imitation of it. Put differently, the relationship between Islamic art and Byzantine art was not one-sided but was rather one of mutual interaction. The authors hope that these findings will encourage further research into the relationship between these artistic traditions.

Acknowledgments

The authors would like to acknowledge the Department of Antiquities of Jordan and the American Center of Oriental Research (ACOR) in Amman, for their permission to study the mosaic floor at Al-Qastal Palace. I also thank my colleague Dr. Erik Freas for correcting the language.

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Received: March 20, 2023 Accepted: January 12, 2024