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GEOMETRICAL MOSAIC DECORATIONS AT QASR AL-HALLABAT: A COMPARATIVE STUDY

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ABSTRACT

The mosaic artists at Qasr al-Hallabat possessed great technical skill. Comparative study of the decorative elements increases our understanding of the relationship between Qasr al-Castal and Byzantine sites. The artists, whether they were Muslim or Christians, had no difficulty in using their experience of traditional motifs, including those found in churches, to decorate the palace of the new Muslim rulers.

Qasr al-Hallabat is one of the most important structures with geometric mosaic pavements in Jordan. The purpose of this study is to examine the individual designs in comparison with others to understand influences from the region and beyond. Wherever possible, comparative examples have been chosen from sites that are relatively close so that a comprehensive overview of mosaic production in the region may be possible. Every effort has been made to discern the major sources of influence at Qasr al-Hallabat, and in particular those coming from Asia Minor and elsewhere outside of the region.

KEYWORDS: Geometrical pavements, mosaic, decoration, composite motif, geometric design, Roman, Byzantine, Islam, Qasr al-Hallabat, Qusayr Amra, Mount Nebo, Madaba, Asia Minor.

1. LOCATION AND HISTORY OF THE SITE

The Qasr al-Halabat, an early Umayyad Palace some 60 km, north east of Amman), the site, about 626 m. above sea level, has long been known and studied. The region of Qasr al-Hallabat visited and described by some early travellers. Butler of the Princeton Archaeological Expedition to Syria (1905, 1905 who reported archaeological remains and the first exploration of the site by H.C. Butler director) (Butler 1909: 70-71; Musil 1927; Creswell 1952), he was working and drawing of the first plan of the site (Kennedy 1982: 17-6.7).

A survey was begun in summer 1978 by David Kennedy, with five excavation campaigns (1979-1985) under the supervision of Ghazi Bisheh from the Department of Antiquities of Jordan; David Kennedy (University of Sheffield) and Tom Parker (North Carolina State University) (Bisheh 1980: 69-77; 1982: 133-144; 1985: 263-265; 1986a: 129-134; Kennedy 1982: 17-67; Marciliet-Jaubert 1980: 121-124; 1982: 145-158; Mundy and Musallam 2000: 38).

The dating of the Al-Hallabat site due to the Architectural building and art (carved stucco, fresco and mosaics), in addition the site dating by two main inscriptions, the first one is a Latin inscription which refers to the construction of a novun castellum, dated AD 212 (Kennedy 1982: 39, figs. 3-4), and the second one is a Greek inscription dated to AD 519. Also, completely rebuilt in the Umayyad period (Bisheh 1982: 133-144, figs. 1-2, pls. 35-49; 1993: 49-50; Weiss 2016: 44-47

2. DESCRIPTION AND DISCUSSION OF THE GEOMETRIC MOSAIC AT QASR AL-HALLBAT (TABLES 1, 2)

The plan of the Qasr al-Hallabat is square design, 44 m. with four towers located in each corner, also came as a square design. In general the site of al-Hallabat area has two main parts: the Castle (figs. 1, 2) and the mosque. It seem the buildings of the castle are partly decorated with mosaics pavements, most of them are destroyed, we can study of remain of the mosaic on floor of some rooms and the court. Much the same technique (without glass tesserae) was used for the floors of the locations of study in Madaba area. (Nassar and Al-Muheisen 2010; Nassar and Turshan 2011; Al-Muheisen and Nassar 2012; Nassar 2013; Nassar and Al-Muheisen 2013; Al-Muheisen and Nassar 2014; Nassar 2015; Nassar and Sabbagh 2016).

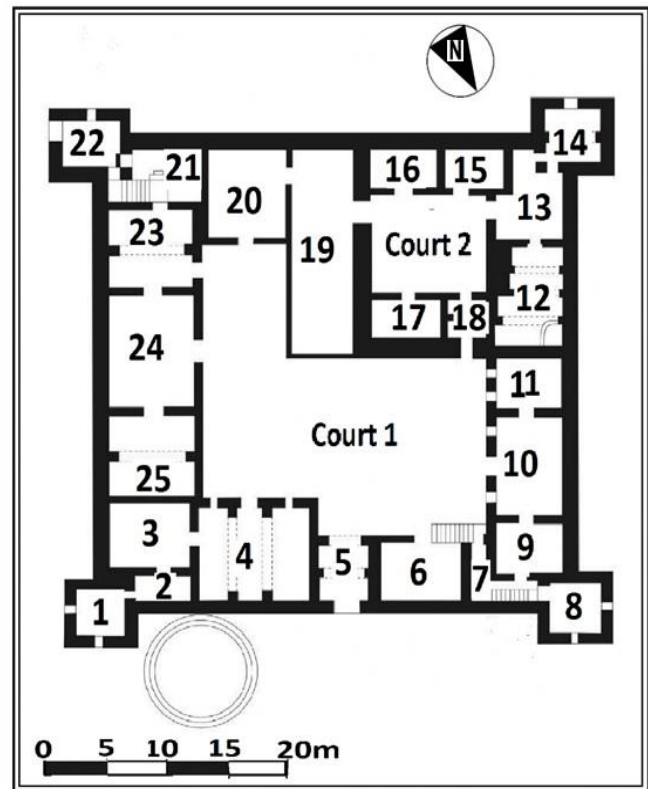


Fig. 1. The Plan of the Casr Al- Hallabat



Fig. 2. Qasr Al- Hallabat

The fourth room mosaics

The fourth room is located in the south west of the castle and south the main entrance of the palace (figs. 2, 3, 4) is 7.00 m. deep, 9.00 m. wide. The field of the floor is enclosed by a three borders are extending a round all four sides, the outer decorated with double calices motif, the middle is decorated with composite geometric design, while the third border is decorated with wave crest motif.

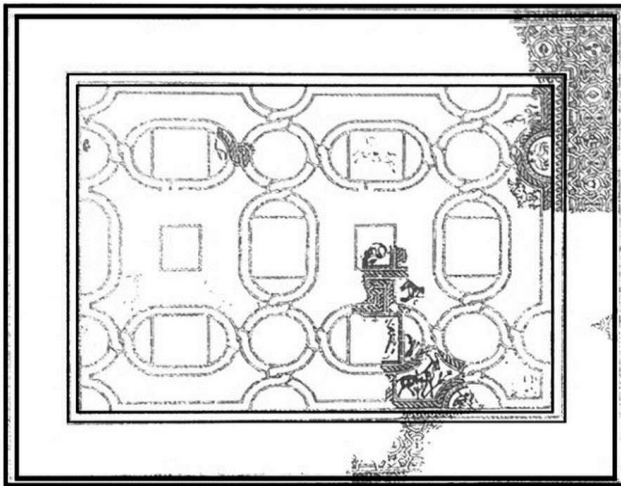


Fig. 3. Plan, fourth room mosaic

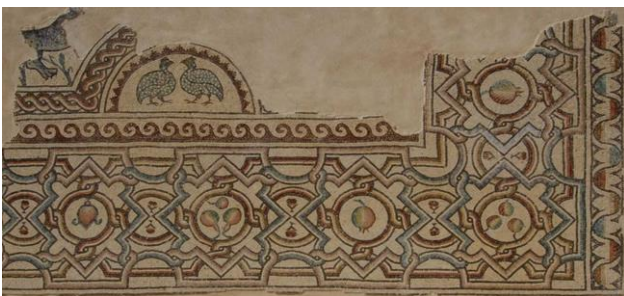


Fig. 4. Fourth room mosaic

Double calices (trifled calices) pattern

The outer border decorated with polychrome row of adjacent double calices sounded of the filled pattern (Figs. 4, 5). The colors of this pattern are red, dark and white red, blue, dark blue, and gray against a white background.



Fig. 5. Fourth room / double calices (trifled calices)

There are one similar example from Umayyad Period, is on the floor of the Western Room at Qusayr Amra in Jordan (Nassar 2015: fig. 8). The colors of this pattern are black, white, red, green, yellow green, and white red background colors. This motif also spread during the byzantine period in Jordan and others locations. For example, on the floor of the Burnt Palace at Madaba (Piccirillo 1986: 333-339; 1997: 78, Pl. 51). Here, the colors of this mosaic are red, dark red, and the outline of the motif is dark in white background. On the floor of the North aisle of the Church at Kirbat Mar Elyas, dating to AD 624 (Nassar and Sabbagh 2016: 546, 547, fig. 29). The colour is light red on a dark red background. The double calices motif also used in some locations, for example, on the floor of the north and south Transept of the Church of Tabgha, dating to the second half of the 5th century AD (Schneider 1937: 58-63, plan 3,

tables A, B; Avi-Yonah 1981: Pl.50; Pixner 1985: 196-206; Hachlili 2009: 97, 99, fig. 5.2a-b).

Furthermore, this type of double calices (trifled calices) pattern can also be found at other locations in the Near East dating from Roman/ Byzantine periods; two earlier examples at Antioch in Asia Minor, on the floor of Room c of the House of Barracks, dates to 450-475 AD (Campbell 1988: 80, 81, fig. 62a, Pl. 228), and on the floor of the nave at Korykos, which dates to 490-491 AD (Campbell 1995: 125, 126, 129, 133, Fig. 20).

Composite geometric design pattern

The middle border (figs. 3, 4) is a large extending a round all four sides consists of two main composite geometric pattern there are came as a two parts or unites, not interlaced together, this case of decoration it seem is rear in the area, thorough we can compare each pattern.

Interloped squares pattern

The upper pattern of the middle border (figs. 4, 6) consists of squares inscribed and interloped with half-circles (here, in shaded band). The colors of this pattern are red, dark and white red, blue, dark blue, and gray against a white background.



Fig. 6. Fourth room / Interloped squares pattern

There is one example from Madaba are similar those found at Qasr al-Hallabat, which date to the byzantine period, is on the floor of the nave of the Church of Saint George at Khirbat al-Samra (fig. 7), which dates to AD 637 (Humbert 1990: 467-474; Piccirillo 1997: 306, Pls. 601-605; Nassar, Catalogue, fig. 5.11.1). Here, the interloped squares together, while those found on contacting with half-circles. The colors of this mosaic are red, dark red, and the outline of the motif is dark black, while the background colors are white. Also, we find another example from area, is on the floor of the North aisle of the Church at Kirbat Mar Elyas, dating to AD 624 (Nassar and Sabbagh 2016: 539, 547, fig. 17). The colours are dark red, light red, dark grey, and white, while the background is white.

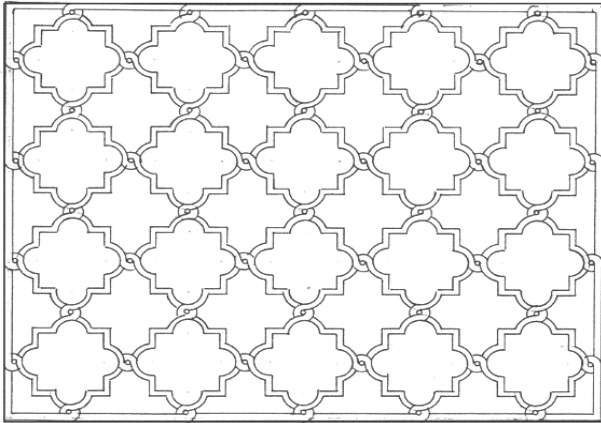


Fig. 7. Kirbat al Samra / Interloped squares pattern

Interloped circles pattern

The lower pattern of the middle border (figs. 4, 8) consists of interloped circles (here, in shaded band). We find here, some motifs depicted in center of each circle with several fruits, such as pomegranates and lemons. The colors of this pattern are red, dark and white red, blue, dark blue, and gray against background.

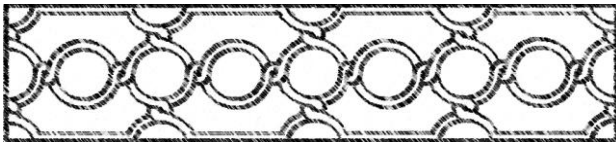


Fig. 8. Circles pattern

There are some locations in Jordan has the same design motif from the Byzantine period. Is on the floor of the eastern end of the aisles of the Western Church at Looped circle pattern at Yasileh (fig. 9), dated to middle of the 5th or beginning of the 6th century AD (Nassar and Muheisen 2010: 182,196, fig. 16; Nassar, Catalogue, fig.2.32). Here, the circles are intertwined with one another in such a way that a curvilinear octagon with short axial sides always remains between four of them. The insides of the circles are each divided into four quarters, two dark blue, two white.

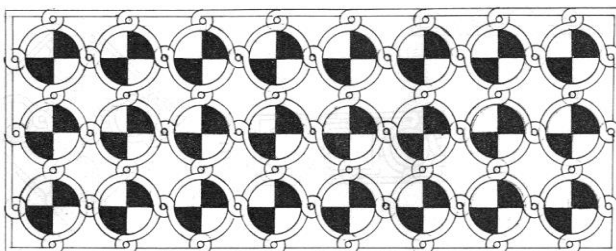


Fig. 9. Western Church, Yasileh

A similar scheme occurs in the nave at Ya'amun Church, which dates to the end of the 5th or 6th century AD (Nassar and Turshan 2011: 41, 44, 45, fig. 17). Here, the circles are intertwined with one another so as create curvilinear octagons with short axial

sides between every grouping of four. The insides of the circles are decorated with crosses, while the spaces within the curvilinear octagons are decorated with diamonds. Mosaics with the looped circle pattern have also been found on the floors of rooms 3 and 4 in the Priest's House at Aphrodisias in Caria, dating to the late fifth century AD (Campbell 1991, Pl. 84), and on the floor of the Phoenix House at Antioch on the Orontes, dating from the sixth century AD (Campbell 1998, Pl. 120), though here the octagons are decorated with diamonds.

Wave crest motif

The inner border of the Room 4 is a wave crest motif (Fig. 10), the colors are dark red and white background. It seems this design is rear during the Umayyad period in the area, but we can parallel with Byzantine locations in Jordan Area and others, for example, on the north aisle of the Church of Saint George John at Mount Nebo, Mukhayyat, dating from AD 535/536 (Piccirillo 1997: 178, Pls. 244, 246). Here, the color are dark red and white background. On the nave of the Church of Church of Saint Stephen at Umm al-Rasas, dating to AD 756 (Piccirillo 1997: 238, pls. 345, 347, 385). Here, the color are red, dark red and white background.



Fig. 10. Fourth room, inner border, wave crest

The single wave - crest is known in the west bank, for example, on the floor of the nave of the Church of the Nativity, which dates to the fifth century AD (Harvey 1935: fig. 102; Bagatti 1971: fig. 49; Madden 2012: 147, 151, figs. 3, 4, 7) and on the North Aisle of the St. Church at Kissufim, which dates to six century AD (Hachlili 2009: 160-162, figs. VII-4, VII-6). There are two examples from Syria and Lebanon, both similar to those found at Qasr al-Hallabat. The first, on the floor at Deir Sleib Church, which dates to the Byzantine period (Hanfmann 1951: II, 121, No. 192; Donceel-Voûte 1988: fig. 35; Olszewski 1995: 9-34, fig.3; Hachlili 2009: 188, fig. VIII-6), while the second one from Lebanon, and on the nave of the St. Christoph's church at Qabr Hiram (Louvre Museum), dated to 575 AD (Hanfmann 1951: II, 117-120, no. 193; Donceel-Voûte 1988: 412-415, figs. 402, 404; 1995: fig. 12). Finally, the pattern is also known from the northern part of the Levant, for examples, on the Atrium House at Antioch (The Baltimore Museum Art), dating from AD 115-150 (Morey 1938: 27-28; Campbell 1988: 21, 22, Pls. 73, 74), on the Room 5 of the House of the Druken Dionysos (Antakya Museum), dating to AD 115 (Morey 1938: Pl. V; Campbell 1938: 212, fig. 6; 1988: 21, 22, Pls. 73, 74) also on the House of the Bacchic Thiasos (Antakya Museum),

which dates to the second century AD (Campbell 1988: 73, Pl. 204).

Composite interloped circles and oval pattern

The panel of the center of the Room fourth (fig. 11) decorated by composite design included an interloped circles contacted with oval motif (circles and rectangles). In general the composite design came as the semi - octagonal, though here, the tangent of composite design, interlaced simple guilloche. It seem the composite design are decorated with different motives, but we find remain of the design included animals, (an Oryx) brides (a pair of partridge) and fish. The colors of this pattern are red, dark and white red, blue, dark blue, and gray against a white background. It seem the composite design appeared only in Qasr al- Hallabat.

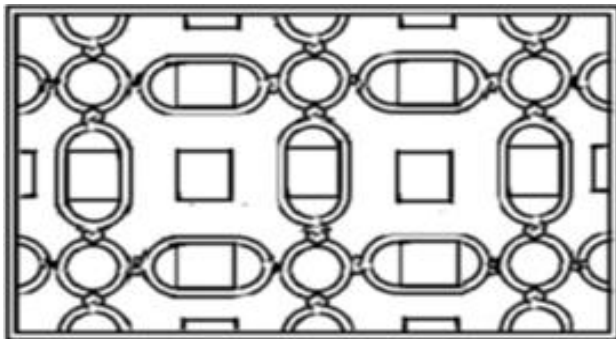


Fig. 11. Composite interloped circles and oval

Saw-tooth motif

The motif it seem decorated all the half- circles in the Room fourth (figs. 3, 4, 12), we find some remain of this motif in the half- circles in the northwest and southwest corners of the Room fourth of the Castel. The color red and white background. They are one example from Umayyad period similar to those found Qasr al- Halabat, is on the floor of the western room at Qusayr Amra (Nassar, Catalogue, fig. 1:1.8; Nassar 2015: 426, fig. 9). Many parallels are found in Byzantine churches in Jordan (Nassar 2015: 427; Nassar and Sabbagh 2016: 533).



Fig. 12. S Fourth room, saw- tooth motif

Two-stranded guilloche motif

The motif it seem decorated all composite pattern in the Room fourth (figs. 3, 4, 13), we find some remain of this motif separated in the middle and in the corners (northwest and southwest). The colors of this pattern are red, dark and white red, blue, dark blue, and gray against background. We find two examples from Umayyad period similar to those found on the Room 4 at Qasr al- Hallabat. The first one, is on the floor the panel of the eastern room at Qusayr Amra

in Jordan(Nassar 2015: 415, fig. 3), while the second example is on the floor of the Bath of the Khirbat al-Mafjar at Jericho (Bliss1894: 175-183; Hamilton 1959: 1988; Bacharach 1996: 27-44; Piccirillo 1997: figs. 760, 761; Taha 2005: 179-88). This border pattern is widespread in mosaics of the Roman and Byzantine periods (Nasaar and al-Muheisen 2010: 194; Nassar and Sabbagh 2016: 539).



Fig. 13. Fourth room, two-stranded guilloche motif.

Guilloche swastika - meander pattern

The motif is decorated in central of the right of the semi - octagonal pattern, consist of a swastika - meander with single returns and two-strand guilloche (figs. 3, 14, 15). The colors of pattern are red, dark and white red, blue, dark blue, and gray against background.



Fig. 14. Guilloche swastika - meander pattern

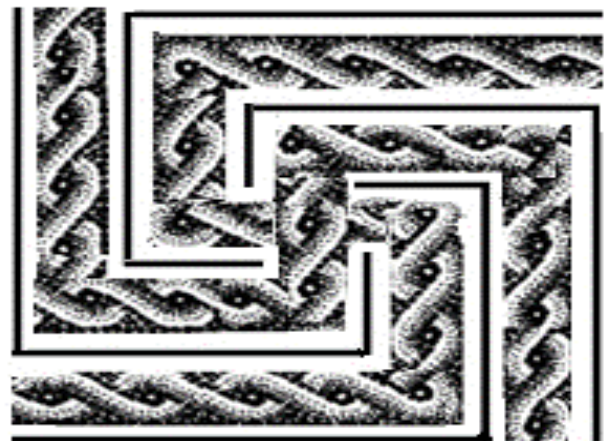


Fig. 15. Guilloche swastika - meander

This is a design of decoration is rare in the region from the Umayyad period. Many parallels are found in Byzantine churches in Jordan and others locations, for examples, in the floor of the Central Church at Pella (Tabaqat Fahl) in Jordan, which dates to the

Byzantine period (Smith 1973; 1989; Piccirillo 1997: 330. Pl. 706). In the nave of the Church of the Nativity, which dates to the earlier Constantinian era (Harvey 1935: figs. 102, 112; Madden 2012: 152,153, figs. 4, 9; Magness 2012: 333). Also, this motif known in some Syrian locations, for example, on the floor of the Apamea Cathedral, which dates to the fourth century AD (Balty 1995: 265-266; Dunbabin 1999: fig. 175; Madden 2012: 170, 172, fig. 16). Similar decoration can be found at Turkey locations, there are two examples from Aphrodisias in Caria, the first one, is on the floor of the North Room at North Temenos, which dates to 350/375 AD, (Erim 1966: 59-67; 1967: 171, 172; Campbell 1991: 1, -4, 7. fig. 39b, pls. 4,5) and the second one, in the floor of the South Room at House of Tetrapsylon, dating to 400 AD (Campbell 1991: 16, 17, 19, 37, fig. 39b). There are one example from Spain, we find one example similar to those found at Qasr al- Hallabat, but also from the Roman period, in the floor of the Roman villa at Baños de Valdearados, which dates to between the beginning and the mid-fifth century AD (Oliver 1975: 899-912; Blázquez 1982: 407-423; Fernández-Galiano 1984: 107-108, fig. 6; López Monteagudo 1999: 40, 41, fig. 3). We find one example from Roman Empire (Severan period), in the floor of the Pautalia in Bulgaria (Velea 1995: 251, fig. 5). Finally, this motif appeared in Italian locations in Italy, for example, is on the floor Roman Villa at Negrar location in Italy (Campanite 1922: 352, 353, figs. 4,5).

Meander motif

The outer border extending around all four sides of the oval shape; it is a simple border consists of meander forming dentils (figs. 3, 14, 16) (Nassar catalogue fig. 1: 3). The colours are light red, black, against a white background. The same meander pattern can be found at other sites in Jordan dating from the Byzantine period, for example on the floor of the north aisle of the Church of the Lions at Umm al-Rasas, dating to AD 574-589 (Piccirillo 1989: 266-268; 1997: 236, Pl. 374). In the floor of the nave of the Great Church of Mar Elyas, which dates to AD 624 (Nassar and Sabbagh 2016: 535, fig.10). In the West bank, one example was found in the floor of the Beth Midrash of Meroth (The vision of the End of Days), dating to the early 7th century AD (Ilan 1989: 33-34; Hachlili 2009: 88, fig. 4.22). In general the meander motif is widespread use in the mosaic pavements during the Roman and Byzantine periods.



Fig. 16. Meander motif

Mosaics of the room twenty four

The room is located in the south west of the castle and left of the court 1. (Figs. 2, 17) is 6.50 m. deep, 8.400 m. wide. It seem the room decorated with several patterns mostly are destroyed, though, we find remain some decoration located in the north and west of the castle. It seems the field of the floor is enclosed by a three main borders are extending a round all four sides. The outer decorated with simple guilloche motif, the middle is decorated with interlaced pattern design and the decorated with row of diamond patterns. Also, we find pattern cane as the border in the right side of the room with six guilloche motif. The motives remain of the panel included a louts calyxes, zigzags, guilloche swastika – meander Pattern and diamonds. Although most of the decorations similar to the decoration on the floor Room No. 4, we find there are some new decorations here like composition patterns and six guilloche ornament a, we can study it.

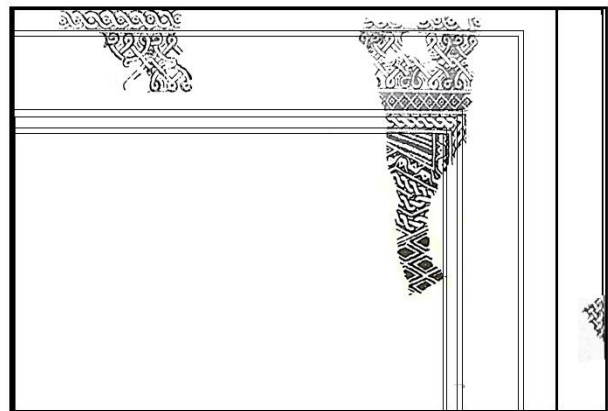


Fig. 17. Plan, Room twenty four

Composition pattern

The middle border (figs. 17, 18) is a large consists of interlocked looped half-circles forming concave rectangles. The colors of this pattern are red, dark and white red, blue, dark blue, and gray against a white background. There are one similar example from Umayyad Period, is on the floor of the North Room at Qasr al- Qastal in Jordan (Carlier and Morin 1987: 221-246; Piccirillo 1997: 352, Pls. 778. 779). The colors of this pattern are black, white, red, green, yellow green, and white background color.

The composition pattern is rare in the reign, nonetheless we find two examples from the Byzantine period in Jordan are similar those in Qasr al-Hallabat: in the southeast corner of the Church of Virgin Mary at Madaba, dating to the eight century AD (Piccirillo 1982b: 373-408; 1997: 64, Pls. 21m 22, 23), here, the color is red, light red, dark red and white background. The second from the Church on the Acropolis at Esbus (Hesban), dating to the Byz-

antine period (Brown 1978: 175, 176, 178, fig. 16; Van Elderen 1978: 19-30; Piccirillo 1997: 255, Pl. 450).

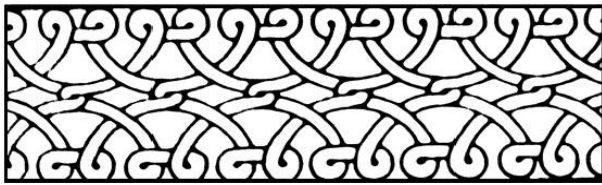


Fig. 18. Room twenty four, composition pattern.

Diamond pattern

The outer border consist of a row of diamonds motifs (fig. 19), The colors of this pattern are red, dark and white red, blue, dark blue, and gray against a white background. Diamond decorations became widespread in Jordan during the Byzantine period.



Fig. 19. Room twenty four, diamond pattern.

Six-stranded guilloche pattern

The pattern is located in the right side of the room, consist of six-stranded guilloche (fig. 20) (Nassar Catalogue fig. 1: 17.2). The colors of pattern are red, dark and white red, blue, dark blue, and gray against a white background. It seems this example is only in the region during the Umayyad period, so, we find other locations included a similar to those found at Qaar al-Halabat.

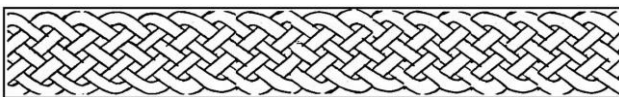


Fig. 20. Six-stranded guilloche pattern.

Many parallels are found in Byzantine Churches in Jordan: for example, is on the floor of the nave of the Western Church at Yasileh (Nassar and al-Muheisen 2010: 189, fig. 7). In the floor of the border of the north east corner of the nave of the Church at Shunah al-Janubiyah, red dark red, light red and white background (Piccirillo 1997: 322, Pls. 669). Also, we find example is on the floor of the Great Church at Khirbat Mar Elyas, which dates to AD 624(Nassar and Sabbagh 2016: 529, fig. 34). Here, the colors in dark red and light red on a white background. In the floor of the Chapel of the al-Twal Family at Madaba, which dates to Byzantine period (Saller and Bagtti 1949: 236-238; (Piccirillo 1989: 129- 132; 1997: 128, pl. 140), here, the color are red, dark red light red and white background. Additionally, we find one example at Umm Qays (Gadara) on the floor of the Byzantine Bath (Lux 1966: 64-70; Weber 1990: 204-214; Piccirillo 1997, 328, Pl. 686).

Mosaics of the room twenty five

The room is located in the south west of the castle and left of the court 1. (Figs. 2, 21) is 6.50 m. deep, 5.80 m. wide. It seem the room decorated with several patterns mostly are destroyed, though, we find remain some decoration located in the west of the castle. It seems the field of the floor is enclosed by a three borders are extending a round all four sides. The outer decorated with simple diamonds motif, the middle is decorated with double looped guilloche pattern design and the inner border decorated with row of waves patterns. While, the panel decorated with composition pattern included a four big interloped half - circles and small interloped circles with triangles, here, it seems the design of the panel found only in the Qasr al-Hallabat, so we can study the middle border and the panel, while inner border and other motifs (waves, saw-tooth) was study though in rooms 4 and 11. Therefore, we can study double looped guilloche patterns

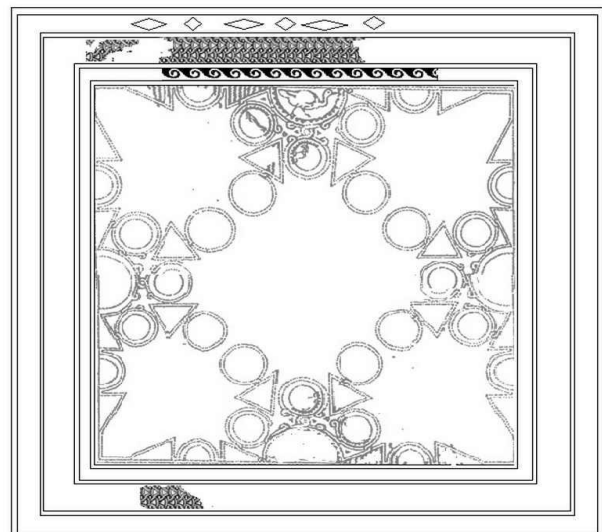


Fig. 21. Plan, room twenty five mosaic

Double looped guilloche patterns

The border consist of interlaced of two double guilloche (fig. 22), each one included a round tongued double guilloche opened to from eyelets. The colors of this pattern are red, dark and white red, blue, dark blue, and gray against a white background. It seems this design of pattern is only in the region during the Umayyad period, so, we find other example similar to those found at Qasr al-Hallabat from Byzantine period from Jordan, is on the floor of the border of the north east corner of the nave of the Church at Shunah al-Janubiyah, red dark red, light red and white background (Piccirillo 1982a: 335-342; 1997: 322, Pls. 669).



Fig. 22. Room twenty five, double looped guilloche

We find one example from west bank, is on the floor of the nave of the Na'aran synagogue at Khirbat Naaran, Which dates to the sixth century AD (Vincent 1961: 163-177, Pl.XIIa; Netzer 1983: 72-73; Avi-Yonah 1993; Hachlili, 2009: 19, 290, fig. II.4; Ovadia 2010: 55, 55, fig. 14). We find one example from Lebanon similar to those at Qasr al-Hallabat is on the floor of nave of the St. Christoph's church at Qabr Hiram Now in the Louver Museum, dated to 575 AD (Hanfmann 1951: II, 117-120, no. 193; Donceel-Voûte 1988: 412-415, figs. 402, 404; 1995: fig. 12; Olszewski 1995: 9-34, fig.3; Hachili 2009: 128, fig. VI-14). There are three examples from west and east Europe resemble those found at Qasr al- Hallabat, the first one from Greece, is in the floor of the nave of the Basilica of Paul at Philippi, which dates to the fourth century AD (Madden 1999: 158, fig. 7, Spiro 1978: pl. 711), while the second from Cyprus on the Nea Pafos location, which dates to the Roman period. (www.alamy.com). The third example from Romania, is in the floor of the Roman Mosaic Museum, also known as the Roman Edifice, Constanta Romania (Barnea 1977: 183, fig. 62), here, the colors are red, dark and white red, yellow, gray against a red background.

Finally, this design also appeared on the floor of the House by the City at Aphrodisias in Caria, which dates to the third or fourth quarter of the fourth century AD (Campbell 1991: 31, 32, 38, fig. 75c, Pl. 114), here the colours are outlined in dark blue with strands two shades of blue with white and two shades of red with white.

The mosaic pavements of the Court two

The court two is located in the south east of the castle (Figs. 2, 23) is 7.30 m. deep, 9.70 m. wide. The room is decorated with three panels, in the center with diamonds pattern is enclosed by a diamonds are extending a round all four sides. While the second decorated with (looped circles and squares motifs) and the third panel with interlaced circles pattern is enclosed by a saw-tooth are extending a round all four sides. The colors are red, dark and white red, blue, dark blue, and gray against a white background.



Fig. 23. Mosaics of court two

Diamonds Pattern

The panel (figs. 23, 24) located in the center of the court 2 and is a cover most of the floor, consist of a grid of bichrome serrated triple filets and the center of diamonds depict a small squares came a parallel. The colors are red, dark and yellowish against a white background. There are one similar example from Umayyad Period, is on the floor of the Eastern Room at Qusayr Amra in Jordan (Nassar 2015: figs. 1. 6), here, the colors of this panel are red, blue, and dark blue against a red background.

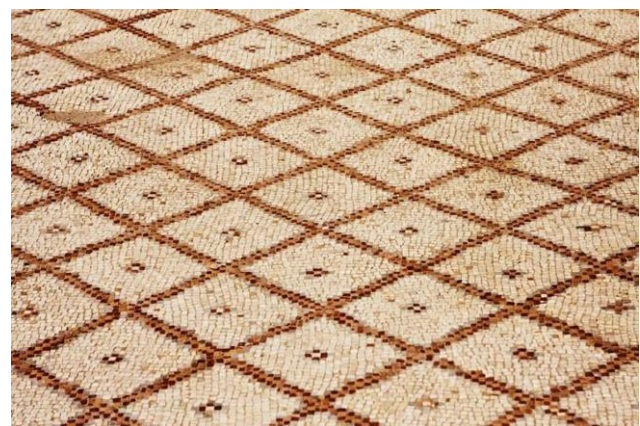


Fig. 24. Court two, diamonds pattern,

In general the diamonds pattern are separated during the Byzantine period in the region, we can compare it with other examples similar to those in the Qasr al-Hallbat. For examples, One of these is on the floor of the north and south aisles of the Church of Bishop Leontios at Ya'amun, which dates to end of the 5th or the beginning of the 6th century AD (Nassar and Turshan 2011: 41, Figs. 24,25). In the floor of the ntercolumnar of the Second Church at Yasileh, which dates to A.D. 528 (Al-Muheisen and Nassar 2012: 661, fig. 11). Two examples at Rihab are similar to those in Qusayr Amra. One is in the intercolumnar panels of the north and south rows of pillars of the Church of Saint Peter, dating to AD 623

(Avi-Yonah 1947–48: 68–72; Piccirillo 1980: 317–350; 1997: 312, Pl. 633; Nassar catalogue fig. 5: 2.3). The other is in the northern intercolumnar panel of the Church of Saint Menas, which dates to 635AD (Lux 1967: 34–41; Piccirillo 1997: 312, Pl. 633; Nassar catalogue fig. 5: 2. 4).

Looped circles and squares motif

The mosaic of the second panel located at the eastern end of the court 2 is composed of looped; consist of an eight circles and seven squares (figs. 23, 25). The colors are red, dark and white red, blue, dark blue, and gray against a white background. We find here, the circles included a birds, fish and basket of frosts, while the squares with small cross in the center.

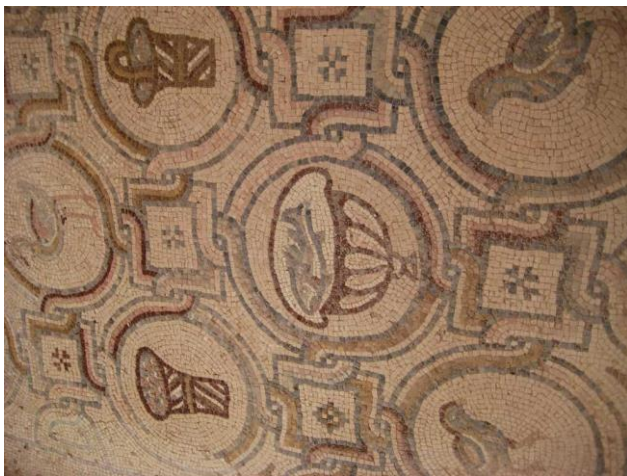


Fig. 25. Court two, Looped circles and squares

Similar decoration can be found at other Jordanian sites of the Byzantine period, for example in the north aisle of the church of Saint George at Khirbet as-Samra (637) (Humbert 1990: 467–474; Piccirillo 1997: 330, pl. 703), in the nave and southern aisle of the church of Bishop Leontios at Ya'amun (late V to early VI) (Nassar and Turshan 2011: 55, 60, figs. 17, 23), in the 'First Church' of Khirbet al-Bediye (640) (Nassar and al-Muheisen 2013: 594, 600, fig. 9), at Yasileh in the First Church (mid V to early VI) (Nassar and al-Muheisen 2010: 184, fig. 16). Farther afield, motifs of looped circles are in rooms 3 and 4 of the Priest's House at Aphrodisias in Caria (late V) (Campbell: 23, pl. 84) and in the House of the Phoenix at Antioch (sixth century) (Campbell 1998: 25, pl. 120).

Interlaced circles pattern

The field of the third panel of the floor (figs. 23, 26) is enclosed with saw-tooth border is extending a round all four sides. Its composite of a four Interlaced circles pattern; each on consist of a quasi-tangent quadrilles came as the cross, the shape in general came as a concave square. The colors are red,

dark and white red, blue, dark blue, and gray against a white background. It seems this design of pattern is only in the region during the Umayyad period, so, we find other example similar to those found at Qasr al-Hallabat from Byzantine period from Jordan.



Fig. 26. Court two, interlaced circles pattern

This pattern is also known in mosaics in other churches in Jordan in the Byzantine period; for example, on the floor of the south aisle of the Church of Saint Menas at Rehab, dating from AD 635 (Piccirillo 1997, 314, Pl. 634). This type of ornamentation was also found at the Deacon Thomas Church at Uyun Musa, dating from the 6th century ad (Piccirillo 1988, 195–205; 1997, 187, Pl. 263; Roussin 1995, Fig. 13). Here, the color red, white and light red background. In the floor of the south aisle and intercolumniation panel of the Western Church at Yasileh, which dates back to the middle of the 5th or beginning of the 6th century AD (Nassar and al-Muheisen 2010: 183, fig. 14.a, b).

There are two examples from Garasa similar to those at Qasr al-Hallabat, the first one is on the floor of the northern intercolumnar of the Church of Bishop Isaiah, which dates to Byzantine period (Piccirillo 1997: 294: pl. 566), and the second example is on the floor of the Cathedral complex, the Glass Court, Lower mosaic (Piccirillo 1997: 284: pl. 526).

3. CONCLUSION

Through the study of geometrical decorative units that appeared on the floors of the Qasr al-Hallabat, we find there are many wonderful decorative units that extend their roots to Roman and Byzantine art, the Muslim artist was able to employ them in this palace and this is illustrated by the comparative study of those decorative units. There is no doubt that geometrical motifs at Qasr al-Hallabat to Byzantine artistic conventions is clear. The mosaic artists at Qasr al-Hallabat possessed great technical skill. Comparative study of the decorative elements increases our understanding of the relationship between Qasr al-Halabat and Roman and Byzantine sites. The artists, whether they were Muslim and

Christians, had no difficulty in using their experience of traditional motifs, including those found in churches, to decorate the palace of the new Muslim rulers. The debt of the geometrical motifs at Qasr al-Halabat to Byzantine artistic conventions is clear. But we find some motifs that were rare in the area and elsewhere, e.g. the composite geometric design (4), guilloche swastika-meander (15), the composi-

tion pattern (18), the double looped guilloche pattern (22) and the interlaced circles pattern. Those Geometrics' Designs are very familiar in Islamic mosaics floors as mentioned above in many Sites which indicated that there is a kind of school of mosaic spread all over Bilad Al-sham and other reigns. The authors hopes that these findings will further encourage the investigation of these artistic traditions.

Table 1 Type and place of the comparative patterns study

| Figure No. | Type of the pattern | Place of the pattern |
|--------------|---|--|
| Fig. 1 | Plan | Qasr Al-Hallabat |
| Fig. 2 | View | Qasr Al-Hallabat |
| Fig. 3 | Plan, fourth room mosaic | Qasr Al-Hallabat |
| Fig. 4 | Fourth room mosaic | Qasr Al-Hallabat |
| Fig. 5 | Fourth room / double calices mosaic | Qasr Al-Hallabat, Qusayr Amra / western room Madaba / Burnt palace Mar Elyas Church Tabgha / Church Antioch / House of Barracks Antioch / Korykos |
| Figs. 6, 7 | Fourth room / Interloped squares pattern | Qasr Al-Hallabat Khirbat al-Samra / Church of Saint George Mar Elyas Church |
| Figs. 8,9 | Fourth room / Circles pattern | Qasr Al-Hallabat Yasileh / Western Church Ya'amun Church Priest's House / Aphrodisias in Caria Phoenix House / Antioch on the Orontes |
| Fig. 10 | Fourth room/ Wave Crest pattern | Qasr Al-Hallabat Church of Saint George John / Mount Nebo Church of Saint Stephen / Umm al-Rasas Church of the Nativity/ Bethlehem St. Church / Kissufim Deir Sleib Church St. Christoph's church / Qabr Hiram Atrium House / Antioch House / Druken Dionysos (Antakya Museum) House / Bacchic Thiasos (Antakya Museum) |
| Fig. 11 | Fourth room / Composite Interloped circles and oval interloped. | Qasr Al-Hallabat |
| Fig. 12 | Fourth room / Saw- tooth pattern | Qasr Al-Hallabat Western room / Qusayr Amra |
| Fig. 13 | Fourth room/Two-stranded guilloche motif | Qasr Al-Hallabat Bath of the Khirbat al-Mafjar / Jericho |
| Figs. 14, 15 | Fourth room / Guilloche Swastika - Meander Pattern | Qasr Al-Hallabat Central Church / Pella (Tabaqat Fahl) Church of the Nativity/ Bethlehem Cathedral/ Apamea North Temenos / Aphrodisias in Caria |

| | | |
|--|--|--|
| | | House of Tetrpylon / Aphrodisias in Caria Roman villa / Baños de Valdearados Pautalia / Bulgaria Villa / Negrar |
|--|--|--|

Table (2) Type and place of the comparative patterns study

| Figure No. | Type of the pattern | Place of the pattern |
|------------|---|---|
| Fig. 16 | Fourth room / Meander motif | Qasr Al-Hallabat Church of the Lions / Umm al- Rasas Great Church / Mar Elyas Beth Midrash of Meroth / West bank |
| Fig. 17 | Plan/ Room twenty four mosaic | Qasr Al-Hallabat |
| Fig. 18 | Room twenty four / Composition pattern. | Qasr Al-Hallabat Church of Virgin Mary / Madaba Church on the Acropolis / Ebus (Hesban) |
| Fig. 19 | Room twenty four /Diamond pattern | Qasr Al-Hallabat |
| Fig. 20 | Room twenty four /Six-strand guilloche pattern | Qasr Al-Hallabat Western Church / Yasileh Church / Shunah al-Janubiyah Great Church / Khirbat Mar Elyas Chapel of the al-Twal Family / Madaba Byzantine Bath / Umm Qays (Gadara) |
| Fig. 21 | Plan / Room twenty five mosaic | Qasr Al-Hallabat |
| Fig. 22 | Room twenty five/ Double looped guilloche pattern | Qasr Al-Hallabat Church / Shunah al-Janubiyah Na'aran synagogue / Khirbat Naaran St. Christoph's church / Qabr Hiram Basilica of Paul / Philippi (Greece) Nea Pafos / Cyprus Mosaic Museum Romania Roman Edifice / Constanta Romania House by the City / Aphrodisias in Caria |
| Fig. 23 | View / Court two mosaic | Qasr Al-Hallabat |
| Fig. 24 | Court two/diamonds pattern, | Qasr Al-Hallabat Church of Bishop Leontios / Ya'amun Second Church / Yasileh Church of Saint Peter / Rihab Church of Saint Menas / Rihab |
| Fig. 25 | Court two/Looped circles and squares pattern | Qasr Al-Hallabat Church of Saint George / Khirbet as-Samra Church of Bishop Leontios / Ya'amun First Church' / Khirbet al-Bediye First Church / Yasileh Priest's House/ Aphrodisias in Caria House of the Phoenix / Antioch |
| Fig. 26 | Court two / interlaced circles pattern | Qasr Al-Hallabat Church of Saint Menas / Rehab Deacon Thomas Church / Uyun Musa Western Church / Yasileh Church of Bishop Isaiah /Garasa Cathedral complex / Garasa |

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