Mosaic Floors of the Church at Ḥorbat Ḥadat, Israel İsrail'deki Horbat Hadat Kilisesi'nin Mozaik Zeminleri

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Abstract

The mosaic floors of the church at Ḥorbat Ḥadat in Israel were uncovered in the nave, along the southern aisle, at the eastern end of the northern aisle, between the columns separating the southern aisle and the nave and in the liturgical space. Some of the panels were removed and are now stored in the Rockefeller Museum, some left in situ. The mosaic floors were laid in the early phase of the church, and they continued in use during the late phase with repairs and changes made of tesserae larger than those of the original floors.

All the carpets and panels exhibit geometric and floral patterns made in a variety of colored tesserae. These patterns include geometric grids and interlaces, some of which create trompe-l'œil effects.

In the late phase, the western part of the nave's mosaic floor and the northern edge of the westernmost mosaic panel between the columns were replaced by a white carpet with an orange cross. The findings of the cross in the floor will be discussed in the framework of the prohibition (Edict of Emperor Theodosius II, AD 427) against depicting crosses on floors.

The early basilica-type dated to the second half of the 5^{th} century AD, and a later phase dated to the end of Byzantine and Umayyad periods (7^{th} - 8^{th} centuries), when the church underwent changes and its dimensions were reduced. The church fell out of use during the Abbasid period.

Keywords: Horbat Hadat, geometric and floral patterns, trompe-l'œil, Cross, Edict of the Emperor Theodosius II.

Öz

İsrail'de Horbat Hadat'taki kilisenin mozaik tabanları, nefte, güney nef boyunca, kuzey nefin doğu ucunda, güney nef ve nefi ayıran sütunlar arasında ve ayin boşluğunda ortaya çıkarılmıştır. Panellerin bazıları kaldırılmıştır ve günümüzde Rockefeller Müzesi'nde muhafaza edilmektedir, bazıları ise in situ olarak bırakılmıştır. Mozaikler kilisenin erken evresinde döşenmiş, geç evrede orijinal döşemelerden daha büyük tesseralardan yapılan onarım ve değişikliklerle kullanılmaya devam etmiştir.

Tüm döşemeler ve paneller, çeşitli renklerdeki tesseralardan yapılmış geometrik ve çiçek desenlerini içermektedir. Bu desenler, bazıları trompe-l'œil etkisi oluşturan geometrik ızgaraları ve iç içe geçmeleri içermektedir.

Geç evrede, nefin mozaik zemininin batı kısmı ve sütunlar arasında en batıdaki mozaik panonun kuzey kenarı turuncu haçlı beyaz bir döşeme ile değiştirilmiştir. Zemindeki haç buluntuları, zeminlerde haç tasvirinin yasaklanması (İmparator II. Theodosius Fermanı, İS 427) çerçevesinde tartışılacaktır.

Erken bazilika tipi İS 5. yüzyılım ikinci yarısına, daha sonraki bir evre ise kilisenin değişikliğe uğradığı ve boyutlarının küçüldüğü Bizans ve Emevi dönemlerinin (7.-8. yüzyıl) sonlarına tarihlenmektedir. Kilise Abbasiler döneminde ise kullanım dışı kalmıştır.

Anahtar Kelimeler: Horbat Hadat, geometrik ve çiçek desenleri, trompe-l'œil, haç, II. Theodosius Fermanı.

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History of the Excavation

The excavations conducted by Rudolph Cohen in 1962–1963 on behalf of the Israel Department of Antiquities and Museums in Ḥorbat Ḥadat (Khirbat el-Hadathea)¹ revealed a church paved with mosaic floors, a decorated marble chancel screen post made of white marble, and a limestone column capital decorated with a cross (Habas 2020a).² The church was accompanied by a complex of rooms. The church was re-examined in 2003 by Uzi 'Ad, Orit Segal, and Oren Shmueli on behalf of the Israel Antiquities Authority, and the findings indicate that some of Cohen's conclusions have to be refined.

Church Plan

Two phases of construction were identified in the church: an early phase with a basilica-type plan, and a later phase when the original plan of the church was modified and its dimensions were reduced.

The early phase (Plan 1), dated to the Byzantine period, comprised the church and the complex of rooms to its south, north, and west. The church was basilical in plan, comprising a nave, an elongated and narrow apse, two aisles, and an atrium to their west with a cistern. Three entrances led from the atrium into the church. The central entrance to the nave and the entrance to the south aisle have survived. The entrance to the north aisle was blocked in the later phase. Two rows of columns separated the aisles from the nave. The northern row of columns was removed in the later phase, and three bases of the southern row have survived. A column drum and a capital were discovered in the collapsed material inside the church, and two columns drums were discovered in secondary use, Two steps ascended from the nave to the *bema*, in front of which was a panel with a Greek inscription. A chancel screen separated the *bema* from the nave. The *bema* has a long and narrow space, and is an internal apse ('Ad et al. 2020; Di Segni 2020).

In the later phase (Plan 2) the basilica plan was reduced in size, the atrium and the south aisle were narrowed, and the south aisle became part of the nave. The southern row of columns remained in place, while the northern row of columns was removed and replaced by a wall or a low partition, which cut off the north aisle from the rest of the church and slightly covered the mosaic panel bearing the Greek inscription. A bench was erected along the southern wall of the aisle, covering the northern part of the mosaic floor. The plan of the liturgical area was adapted to these changes with the construction of a semicircular apse.

The mosaics were laid in the early phase of the church, and the original floor continued to be in use, other than some repair work at the western end of the nave which will be discussed below. Some of the panels were removed and are now stored in the Rockefeller Museum,³ and some were left *in situ*.

Mosaic Floors in the Early Phase

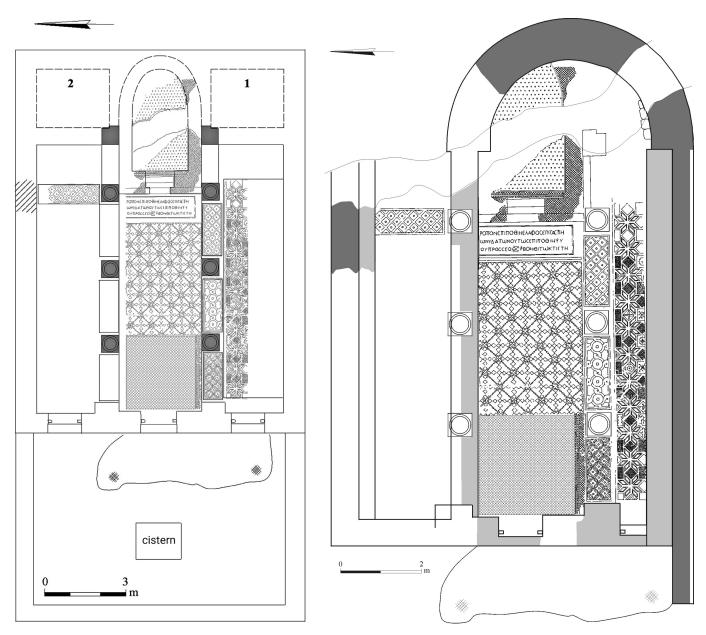
From the early phase, mosaic floors were uncovered in the nave, along the south aisle, and at the eastern end of the north aisle, between the columns separating the south aisle and the nave, and in the liturgical space – the *bema* and the apse (Plan 1).⁴

¹ Israel Antiquities Authority (IAA) archives file no. 15/1962. Khirbat el-Hadathea 1963a; 1963b.

² My grateful thanks for their cooperation to Galeb Abu Diab, Arieh Rochman-Halperin, Silvia Krapiwko, Uzi 'Ad, Orit Segal, Oren Shmueli of the IAA, and Leah Di Segni of the Hebrew University of Jerusalem.

³ My deepest gratitude for their cooperation to Galeb Abu Diab and Shmulik Freireich (Mosaic Unit, Conservation Department), IAA.

⁴ Samuel Moskovitch, Ram Shoeff and Natalia Zak took part in drawing up the plans. Black and



Reconstructed plan of the early phase of the church (Plan: S. Moskovitch, R. Shoeft and N. Zak, curtesy of IAA).

Plan 2 Reconstructed plan of the late phase of the church (Plan: S. Moskovitch, R. Shoeft and N. Zak, curtesy of IAA).

The Mosaics in the Nave

The nave is decorated with a carpet adorned with geometric and floral patterns, surrounded by several frames (Plan 1, Figs. 1-2), described below from the outside in: three rows of white stones (Avi-Yonah 1933: 138 Type A2),5 two rows of black stones (Avi-Yonah 1933: 138 Type A1), two rows of white stones, a row of orange stones, a bichrome serrated saw-tooth pattern in black and orange (Avi-Yonah 1933: 138 Type A6; Ovadiah - Ovadiah 1987: 229 Type A5-6), and two white rows. The row of orange stones that is attached to the triangle pattern creates the illusion that the orange triangles are larger, because their base and apexes touch the white frames. On the other hand, the black triangles appear smaller because the base touches the white frame, while the apex is integrated in the row of orange stones.

white photographs were taken from the IAA archives file. Colour photographs are by the Mosaics Conservation Department, the IAA excavation expedition of 2003, and Lihi Habas. The plans and illustrations are courtesy of the Israel Antiquities Authority.

⁵ Definitions of the patterns from: Avi-Yonah 1933; Ovadiah - Ovadiah 1987; Décor I; Décor II.





The carpet is decorated with a polychrome orthogonal pattern of tangent multilobate squares of scales, radiating in four directions from a central quadrilobe of scales, creating the effect of a grid of poised tangent concave squares and a diagonal grid of tangent recumbent spindles. The diamond grid consists of rows of small black-brown ellipses, laid diagonally. At the intersections of the grid, four ellipses form an array that resembles an open flower with four petals. The pattern of scales is formed in white-beige stones, placed according to the shape of the scales (Avi-Yonah 1933: 141 Types J3, J5; Décor I: 340 pl. 219:f; Ovadiah - Ovadiah 1987: 254 Types J3, J5). At the center of each scale is a bud growing at the end of a branch. The end of the branch is indicated by a single black stone, laid diagonally, from which the base of a black goblet develops, on which sits a bud consisting of a white stone and an orange inflorescence, made of two rows of stones laid diagonally so as to form a round flower (Avi-Yonah 1933: 139 Type F4; Ovadiah - Ovadiah 1987: 238 Type F4). The white scales are set on a background of orange stones. This carpet, which combines geometric and vegetal-floral motifs, creates a trompe-l'æil effect: it is a geometric grid of diamonds, but at the same time there are schematic floral squares, formed by the orange margins surrounding the scales. Contributing to this illusion is the direction of the buds that surround the intersection of the diamonds on four sides - which is also the center of the floral squares.

The color palette is limited: black, dark brown, white-beige and orange. Cutting of the stones is approximately square or rectangular, and is characterized by inaccuracy (stone sizes: in the frame - 1.0×1.3 , 1.2×1.2 , 1.2×1.5 cm; in the carpet - 1×1 , 1.0×1.5 cm). In addition, small stones, and sometimes even triangular stones (c. 0.5×1.0 cm) are used to form the space between the scales, at the

Figures 1-2 Detail, the mosaic floor in the nave, the early phase (Photos: Abu Diab Galeb, courtesy of IAA).

ends of the buds, and within the ellipses. Laying of the stones varies according to their place: they are horizontal and vertical in the frames, and curving in the scales and ellipses. The buds are usually located in the center of the scales, but their position near the chain of ellipses is not uniform. The density of the mosaic stones per square decimeter is 81-82 in the frame, and 90 in the carpet. This density, according to the yardstick of quality of mosaic execution, is defined by Avi-Yonah as high quality (42-100 tesserae per dm²), while Dauphin defines it as medium quality (60-110 tesserae per dm²) (Avi-Yonah 1934a: 72; Dauphin 1976: 123-125, 133 fig. 6).

The geometric-vegetal grid pattern is very common in our region. This is an infinite pattern that suits large carpets in halls, aisles, and passages, as well as small panels. It is neutral in nature, and does not require a particular point of view. Parallels have been found in many churches from the Byzantine and Umayyad periods, and among the many examples, large carpets in church naves will be mentioned below. In Israel they are found in 'Ajjur (Ovadiah – Ovadiah 1987: 11 pl. I, no. 1), in Bethany (Saller 1957: 15-17 pls. 2, 14-15), in Khirbet el-Hebeileh (Abel 1925: 281 fig. 8; Avi-Yonah 1934a: 28, no. 206; Vincent 1939: 88 pls. III, IV:1), in Umm er Rūs (Avi-Yonah 1934a: 45 no. 326.2), in the Northern Church at Herodium (Netzer 1990: 166-168 figs. 3, 5; Habas forthcoming), in Horvath Hesheq (Aviam 1990: 366-367 fig. 25), and in Suhmātā (Avi-Yonah 1934b: 95 pl. XXX fig. 2). In Transjordan they are found in the Upper Church of Saint Kyriakos at al-Quwaysmah, south of Amman (Piccirillo 1984: fig. 3; 1993: 268 fig. 489), and in the Church of Saint Menas at Rihab (AD 635; Lux 1967a: 35 plan 2:I taf. 14:a; Piccirillo 1980: fotos 18, 21; 1993: 313 figs. 634-635).

The Greek Inscription

The panel at the eastern end of the mosaic floor in the nave, in front of the steps leading up to the *bema*, incorporates a three-line Greek inscription (Fig. 3). The inscription is set in a simple rectangular frame, made of two rows of black mosaic stones (length 2.3 m, width 0.72 m). On its west side, the frame of the



Figure 3 Greek inscription (Photo: Abu Diab Galeb, courtesy of IAA).

inscription is integrated into the simple black frame that surrounds the carpet of the nave. The southwestern corner of the panel appears to have been repaired at some stage, as it is missing the black frame, and the white stones of the repair were laid in slight deviation from the horizontal lines of the original tesserae. The letters are made of black tesserae set in a white-beige background, about 10 cm high, with a density of 90 stones per dm². The northern part of the inscription was damaged when the later wall was built, and as a result the first three letters in each of the rows are missing. The text is a quotation from Psalms 41:2 in

the Septuagint version (42:2 in the Masoretic Text): "As the hart longs for the streams of water, so longs my soul for Thee, O God! Christ, help the founder". The letters belong to the round alphabet, and the shape of the letters indicates a date in the second half of the fifth century AD (translation and discussion Di Segni 2020).

The Mosaic in the South Aisle

In the early phase of the church, the south aisle (original length 6.5 m, original width 2.2 m) was decorated with a complex and rich geometric carpet (Plan 1, Figs. 4 - 6).⁷ In the later phase of the church, the southern part of the south aisle was damaged during the construction of a new wall, and its width in the later phase was only 0.7 m.

The carpet is surrounded by two simple frames, consisting of two rows of black stones and two rows of white stones (Avi-Yonah 1933: 138 Type A1). The carpet is made in a geometric grid pattern: rows of stars, and between them geometric shapes. Each star consists of eight parallelograms; their contours are shaped from two rows of white stones and a row of black stones, and they are filled with white or orange stones alternately. Between the stars large diamonds and squares are formed, and along the frame - triangles and rectangles (Avi-Yonah 1933: 139 Type H6; Ovadiah – Ovadiah 1987: 245 Type H6; Décor II: 98 pl. 296:a).



Figure 4
The mosaic floor in the south aisle (archives file no. 15/1962, courtesy of IAA).





Figure 5 Detail, the mosaic floor in the south aisle (Photo: Abu Diab Galeb, courtesy of IAA).

Figure 6 *In situ* section of the mosaic floor of the south aisle, looking south (Photo: Tzila Sagiv, courtesy IAA).

⁶ Old Testament, Authorized King James Version; http://www.kingjamesbibleonline.org

⁷ Parts of the mosaic were removed and are in the IAA Mosaic Unit and Conservation Department in the Rockefeller Museum; other parts were left in situ and were uncovered again in the re-excavation in 2003.

The triangles, diamonds and squares are filled with simple geometric patterns, such as chess, zigzag (zigzag; Avi-Yonah 1933: 139 Type G2), and rainbow. They also feature two types of interlace: the Solomon knot (Avi-Yonah 1933: 140 Type I4; Ovadiah - Ovadiah 1987: 249 Type I4), formed by ribbons made of a row of black stones, a white row, and an orange row on a black background, with a few white stones in the spaces between the loops; and a chain interlace in a square array, made of two interlaced ribbons — one consisting of two orangepink rows, a white row and a black row, and another consisting of two gray rows, a white row and a black row. In the spaces between the loops a few white stones have been laid, and in the center of the interlace — a white square with a single black stone in the center. In addition to these, four-petalled flowers are depicted in some of the diamonds, in alternate black and orange on a white background. In the center of each side of the diamond are small serrated triangles (Avi-Yonah 1933: 138 Type A4) in varying colors: white and orange-pink, or black, orange and white. The carpet is rich and laden with motifs, and in this grid trompe-l'æil effects are created, in which the eye picks out the main pattern, but at the same time also the secondary patterns, similar to the quadrangular perspective prism. Only four colors are used in the carpet: black, gray, white-beige and orangepink. The way the stones are laid — in straight, horizontal rows, diagonally, or in curved rows — varies depending on the pattern, in order to emphasize it. The filling of the parallelograms that form the stars is usually in straight and horizontal rows, but in some place the filling is in diagonal lines, a method that highlights the pattern. The limited color palette and the avoidance of graduated colors create a rich but flat geometric grid. The size of the stones $(1\times1, 1.0\times1.3,$ 1.5×1.5 cm) and their density (81 per dm²) indicates good quality work in laying the tesserae – high quality by Avi-Yonah's method (42-100 tesserae per dm²), or medium quality according to Dauphin (60–110 per dm²) (Avi-Yonah 1934b: 72; Dauphin 1976: 123-125, 133 fig. 6).

Parallels to this pattern are known from the Roman period. The pattern is used in secondary carpets in floors in East Asia Minor for mythological depictions: in Zeugma parallels are found in the mosaics of the Okeanos Villa, Poseidon Villa, and Euphrates Villa (Ergeç 2007: 90, 104 figs. on pp. 91-93, 105-107, 148-151; Önal 2009: 16, 24, 76 figs. on pp. 17, 25, 78-79); in Daphne/Antioch they are found in the House of Dionysus and Ariadne (Levi 1947: II: pls. XXVIIa, CIa; Cimok 2000: 124 fig. on p. 125), in the House of the Drinking Contest, in the House of the Boat of Psyches, and in the lower level of the House of Aion (Levi 1947: II: pls. XXXa, XXXb, XXXVIIId, XLIIIc, CIb, CIIIe). This geometric grid also appears in mosaic floors from the Byzantine period. Similar, but not identical, parallels have been found in our area. In Israel, parallels can be found in the first church in Bethany (Saller 1957: 20-21 pls. 4, 18), and in Khirbet Is-hā (Avi-Yonah 1934a: 29, no. 212 pl. XVIII:1), where a variant of this grid appears. The parallels in Transjordan are a grid of stars made up of eight parallelograms surrounding a large octagon in which there is an interlace and an inscription in the church at Shunat Nimrin (Piccirillo 1982: fig. 1 pls. CIII:1, CVIII:2; 1993: 322 figs. 662, 664-665); a grid of stars made up of four parallelograms in the Glass Court of the Cathedral Complex and the northwest chapel of the Procopius Church (AD 526/27) at Gerasa (Biebel 1938: 309-312, 340 pls. LVIII:a, LVIIIb, LXXXIV:a; Piccirillo 1993: 284, 292-293 figs. 526, 560); and in a church in the village at Jubaiha in the Philadelphia/Amman area (Mhaisen 1976: pl. 4:a-b; Piccirillo 1993: 314 fig 645).

The Mosaic in the North Aisle

Rudolph Cohen hypothesized that the north aisle (width 2.2 m in the early stage) was decorated with several panels organized in a row, one after the other, rather than a single, continuous carpet as in the south aisle. Of the mosaics of the north aisle, only part of the eastern panel (0.6×1.7 m) has survived, as the northern part was cut off when a later bench was constructed; it seems that in the early phase it was about 2 m long. The mosaic remains *in situ* and the description of the mosaic is based on the plan drawn up following Cohen's excavation (Plan 1).8 The panel has a frame made of three rows of black stones, which surrounds a grid of diamonds in which small diamonds are set (see Plan 1; Avi-Yonah 1933: 139 Type H1; Décor I: 188 pl. 124:b-c; Ovadiah – Ovadiah 1987: 242 Type H1).

The diamond grid was a common pattern in mosaic floors in the Roman and Byzantine periods in both secular and religious contexts, populated with diverse motifs. In churches, the pattern appears in different parts of the structure but it is common in the secondary spaces, such as the aisles, both as a uniform and continuous carpet, and as one in a series of panels. Similar to the church in Horbat Hadat, a diamond grid populated by small diamonds adorns the eastern carpets of the two aisles in the Church of Saint Peter at Khirbat al-Samra (Piccirillo 1993: 307 figs. 606-608), and the eastern panel of the south aisle of the Basilica of the Memorial of Moses at Mount Nebo (Piccirillo 1993: 148 fig. 193; 1998: 289-293 figs. 2, 43-44), both in Transjordan.

The Southern Intercolumnar Panels

Three panels were laid between the pillars of the southern row, separating the nave and south aisle:

The Western Panel (Fig. 7)

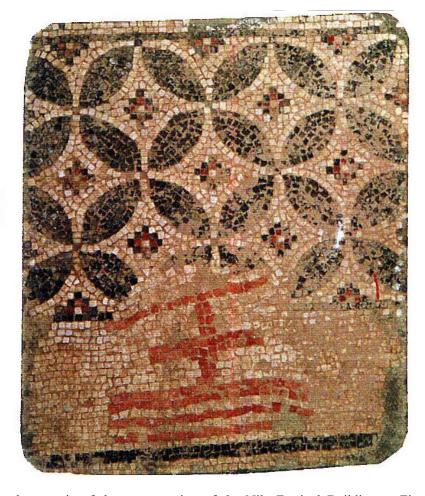
This panel, bounded between the western wall of the church and the western pillar, is decorated with a frame made of a row of black stones. The pattern inside the panel creates a *trompe-l'œil* effect: it is an orthogonal pattern of intersecting circles, forming saltires of black quasi-tangent solid spindles and white concave diamonds, but at the same time it is a pattern of four black petals (Avi-Yonah 1933: 141 Type J4; Décor I: 370 pl. 237:g; Ovadiah – Ovadiah 1987: 254 Type J4). Biebel calls this pattern "four-leaf decoration", while Levi calls it "intertwined circles forming four leaves" (Biebel 1938: 310; Levi 1947: I: 374). At the intersection of the four petals is an orange or black stone. Set in the concave diamonds are small serrated diamonds in orange-red and black colors, each with a white stone in the center. Near the frame, the diamonds are cut in half, forming serrated triangles in the same colors that touch the frame. The stones are laid so as to emphasize these motifs: black stones form convex contours that follow the shape of the leaves, and concave lines in white form the shape of the concave diamonds.

The size of the stones in this panel is 1.0×1.1 and 1.0×1.5 , 1.5×1.5 cm, their density is 56 per dm², and the color palette is limited: white, black, and orangered. The panel was damaged, and there are several repairs attributed to the later phase of the church: its area was extended northward by a white strip (0.9×1.7 m) and a cross was incorporated into this strip (see below).

An orthogonal pattern of intersecting circles is very common in mosaic floors from the Roman and Byzantine periods. In a secular context, the pattern appears

⁸ Since the mosaic was left in situ, it is not possible to discuss the technical and stylistic aspects.

Figure 7 The western panel between the southern row of columns, and a cross in the mosaic floor of the nave in the late phase (Photo: Abu Diab Galeb, courtesy of IAA).



in the mosaic of the eastern wing of the Nile Festival Building at Zippori (Weiss – Netzer 1994: 39 color ill. A). Prominent examples of this pattern in an ecclesiastical context in Israel are the mosaics in the Monastery near Sha'ar ha-'Aliya (Dothan 1955: 98-99 figs. 1-2 pl. 19:B); in the refectory and the Chapel of the Three Priests at the Monastery of Saint Martyrius at Ma'ale Adummim (Magen – Hizmi 1985: 72-74, 77-78 figs. on pp. 73, 77 pl. 3 and the title page of the booklet; Magen 1993: 181-184, 186-188 figs. on pp. 182, 187 pl. XI); in the north aisle of the Eastern Church of Herodium (Netzer – Birger – Peled 1987: figs. on p. 38; Netzer et al. 1993: fig. on p. 226); and in the north aisle of the Church at Suhmātā (AD 555; Avi-Yonah 1934b: 94, 97, 101 pl. XXVII:2). Similar examples in Transjordan are the mosaics of the bema in the Church of Saint George at Khirbat al-Mukhayyat (AD 535/6; Piccirillo 1993: 178 figs. 244-245), and of the *bema* in the Chapel of Bishop Marianus at Gerasa (AD 570; Gawlikowski - Musa 1986: 141-143 fig. 2 pl. II:a; Piccirillo 1993: 298 figs. 579, 581).

An orthogonal pattern of intersecting circles is common in panels between rows of columns and pillars in basilicas, similar to where it is found in Horbat Hadat church. Examples from Israel are the church at Tell Ḥassān, Jericho (Baramki 1936: 84 pls. L:2, LII:4); the church at Khirbet el-Beiyûdât (Hizmi 1990: plan on p. 246); the Northern Church of Herodium (Netzer – Birger – Peled 1987: figs. on p. 33, 36; Netzer et al. 1993: fig. on p. 222 pl. XVI:a); the church at Emmaüs (Vincent – Abel 1932: pls. XII:2, XXIV); and the synagogue at Na'aran (Vincent – Benoit 1961: 163-177 pl. VII). In Transjordan this decoration is familiar in the Church of the Apostles (AD 578) at Madaba, in the Memorial of Moses Basilica at Mount Nebo, in the Church of the Deacon Thomas in 'Uyun Musa Valley, in the church of al-Dayr at Ma'in, in the Church of the Lions (AD 574 or 589) and the Church of Bishop Sergius (AD 587/8) at Umm al-Rasas (Piccirillo 1993: 106, 148, 187, 202-203, 234-236 figs. 91, 95, 193, 269, 319, 365, 369, 373, 376; 1998: 289-293 fig. 49), and in the church at Khirbat ad-Duwayr/Jinīn as-Ṣafa' Church in Irbid area (Melhim 1998: 28-33, 36 figs. 2, 16).

The Central Panel (Fig. 8)

This panel $(0.6 \times 1.7 \text{ m})$ has a simple rectangular frame, made of two rows of black stones and two rows of white stones, featuring a pattern of a strapwork of circles interloped tangentially, in asymmetrically shaded bands (Avi-Yonah 1933: 138 Type B11; Décor I: 132 pl. 82:f; Ovadiah – Ovadiah 1987: 235 Type B11). The interlace includes four circles, within which are concentric circles. Four connecting links join the circles and join them to the frame, thus becoming part of the pattern. One ribbon of the interlace consists of a row of black stones, a white row, a pink row, a red row and a black row, while the other ribbon consists of a row of black stones, two yellow rows, a white row and a black row. In the center of each connecting link is one white stone. The concentric circles consist of two rows of white stones, a pink row, a red-brown row, a brown-gray row, a black row and a white row, and in the center of each circle — one pink stone. Between the circles, buds are depicted on a white background; the base of each bud is pink, and the inflorescence is red.

The stones are laid according to the contours of the patterns, so that they emphasize the shape of the interlace and the concentric circles; in the background, the stones have been laid as needed. The size of the stones is 1.2×1.5 cm in the frame and 0.8×1.0 cm in the interlace, and their density per square decimeter is 72 in the frame and 64 in the interlace. The color palette includes black, white, yellow, pink, red, shades of brown, and gray.

The pattern of interlaced circles is very common in mosaic floors in the Roman and Byzantine periods. It appears in frames, panels, and large carpets (Avi-Yonah 1933: 141 Type J1), and the motif set within it varies and is diverse. Similar to Horbat Hadat, the pattern appears in many panels in the spaces between the columns or pillars in the rows of columns in basilicas. In Israel, this pattern is found in the church at Khirbet el-Beiyûdât (Hizmi 1990: plan on p. 246), and in the Church of Saint Étienne in Jerusalem (Avi-Yonah 1933: 177, no. 157.A.2). In Transjordan this pattern appears in the old Diakonikon-baptistery and the Memorial of Moses Basilica in Mount Nebo (Piccirillo 1993: 146, 148 figs. 182, 193; 1998: 289-293 fig. 50); in the Church of the Holy Fathers at Khattabiyah (Piccirillo 1993: 244 figs. 405, 407); in the Church of the Rivers (Church of Bishop Sergius) in Kastron Mefaa at Umm al-Rasas (Bujard et al. 1992: 295-296 fig. 1; Piccirillo 1993: 240-241 fig. 392); in the Church of Saint George at Khirbat al-Samra (Piccirillo 1993: fig. 600); and in the church at Khirbat Sa'ad in the Mafraq area (AD 572/3; Sari 1995: 527-529 fig. 4). This pattern appears also in a frame that surrounds the carpet of the nave of the church at 'Ain Fattier (Chambon – Strus 1992: 432 fig. 2; 1993: 76 ill. 99).

The Eastern Panel (Fig. 9)

The panel remains *in situ*, and therefore its description is based on the plan drawn up following Cohen's excavation, and black-and-white photographs from the area. The panel (0.6×1.7 m) is surrounded by a simple frame, made of two rows of black stones and two rows of white stones, and decorated with a grid of bichrome serrated triple filets, which create a grid of diamonds containing small



Figure 8
The central panel between the southern row of columns (Photo: Abu Diab Galeb, courtesy of IAA).

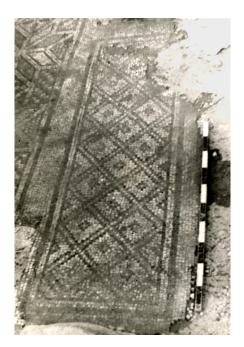


Figure 9 *In situ* the eastern panel between the southern row of columns, looking west (archives file no. 15/1962, courtesy of IAA).



In situ the mosaic floor of the bema and apse, looking northeast (archives file no. 15/1962, courtesy of IAA).

serrated diamonds (Avi-Yonah 1933: 139 Type H1; Décor I: 188 pl. 124:b-c; Ovadiah – Ovadiah 1987: 242 Type H1).

The pattern is identical to the pattern in the eastern panel in the north aisle of the church - a geometric pattern common in mosaic floors from the Roman and Byzantine periods in secular and religious contexts, populated with diverse motifs, and appearing in both small panels and large carpets. This pattern appears in various locations in churches and in synagogues that are basilical in plan, but as in the church in Horbat Hadat, it is common in the panels between the columns in the rows of columns. Examples in Israel are the church at Horvat Hesheq in Upper Galilee (AD 519; Aviam 1993: 62 fig. on p. 62), and the synagogue at Na'aran (Vincent – Benoit 1961: 163-177 pl. VII). In Transjordan the pattern appears in the Church of the Apostles (AD 578; Piccirillo 1993:106 fig. 95), and the Church of the Holy Martyrs (Church of al-Khadir; Lux 1967b: taf. 40:b; Piccirillo 1993: 129-131 fig. 146) at Madaba; Church of Bishop Sergius at Umm al-Rasas (AD 587/8; Piccirillo 1993: 234-235 figs. 365, 369); Church of Saint Menas at Rihab (AD 634/5; Lux 1967a: plan 1; Piccirillo 1993: 313 fig. 633); the church at Shunat Nimrin (Piccirillo 1982: fig. 1; 1993: 322 figs. 664-665), and the Western Church at Yasileh (the panels between the columns in the southern row and the northern row; al-Muheisen 1990: 460-461 fig. 2; Piccirillo 1993: 341 fig. 754).

The Mosaic of the *Bema* and Apse

The mosaic carpet has been partially preserved and remains in situ, so the description is based on photographs from Cohen's excavation (Fig. 10).9 The carpet is surrounded by two simple frames: the outer one consists of a row of black stones, a red row, a white row, a red row and a black row, while the inner one consists of a row of black stones. The carpet is designed in a pattern of scales, created by the way in which the mosaic stones, white-beige in color, are laid; in the center of each scale is a red bud (Avi-Yonah 1933: 141 Type J3; Ovadiah – Ovadiah 1987: 254 Type J3).

The Mosaic Floors in the Late Phase

Although the ancient mosaic floors remained in the late phase, some were cut off during the construction of the late phase walls (Plan 2): the walls cut off the northern end of the two carpets in the nave — the central carpet and the eastern panel containing a Greek inscription, as well as in the southern part of the south aisle. In addition, construction of a bench affected the northern part of the eastern panel in the north aisle. The mosaic carpets in the western part of the church appear to have been damaged to a greater extent than the other mosaics in the church; it is possible that damage occurred during the construction work at the later stage. Following this damage, a new mosaic floor, made of white stones, was laid in the western part of the nave. The new carpet, whose stones were laid diagonally, extended from the entrance to the western bases of each of the two rows of columns. This carpet was apparently surrounded by two black frames made of one row of stones each, as is preserved in its southern part, and at this stage the northern side of the southern panel was also repaired. The mosaic stones in this phase (1.5×2.0, 1.6×2.0 cm) are larger than those of the original carpets in the church $(1\times1, 1\times1.5 \text{ cm})$, their density is lower (36/39 per)dm²), and although the stones in this phase were laid horizontally it is apparent that the work was inaccurate.

⁹ The photograph shown here is the clearest of those found in the report on Cohen's excavation.

In the new carpet, near the southern row of columns, a repair can be seen that slightly damages the ancient pattern: a cross is depicted on a background of white stones, slightly tilted to one side (Figs. 7, 11), but with a general north – south axis. The arms are not equal in length (the length of the horizontal arm is 0.22 m, the vertical arm is 0.16 m), and they are made of two rows in orange. The cross stands on a kind of rectangular base, consisting of six rows of stones: an orange row, a white row, an orange row, a white row and two orange rows. Above the cross is a stripe, made of a row of orange stones, which also tilts to the side. The cross is visible to an observer standing in the nave and facing the south aisle.



Figure 11 A cross in the mosaic floor of the late phase of the nave near the western panel between the southern row of columns (Photo: Lihi Habas, courtesy of IAA).

The incorporation of crosses in mosaic floors in churches, chapels and private homes is a common phenomenon in the Holy Land - Israel and Transjordan in the Byzantine and Umayyad periods (Habas 2005: 1: 313-315, 372-373; 2016: 282-283; 2015; 2020b and there discussion and references; Hachlili 2009: 225-226). The same is true in Syria and Lebanon (Donceel-Voûte 1988: 17-18, 22, 28, 262, 265-266, 428, 436). Crosses in mosaic floors decorate the vestibules of church and monastery complexes, inside the churches, independence chapels and chapels attached to churches, crypts, martyrium chapels, funerary chapels, and baptisteries. They are not hidden, and are not limited to a specific part of the church or chapel building; on the contrary, the crosses are open to view and appear in the apse, the *bema*, the sacristy, halls, the narthex, vestibules, and passageways or entrances between spaces (Hachlili 2009: 224-226 fig. XI:2 pl. XI:2). Some crosses have also been discovered in secular buildings.

The repertoire of crosses is rich, and crosses have been found of the equal-armed Greek cross type (+) ($crux\ quadrata$), the Latin cross (†), the Maltese cross (*), the monogrammatic cross, or a geometric interlace in the form of a Greek cross. There are also crosses of the $crux\ clipeata$, $crux\ gemmata$ and $crux\ decussate$ types. In some places the letters alpha and omega; chi and rho, symbolizing Jesus Christ, are shown between the arms of the cross, or suspended from the vertical arm. In other places the cross is shown on a graduated mound symbolizing the hill of Golgotha. 10

¹⁰ On the types of crosses and their origin, see: Tzaferis 1971: 49-52, 57-60, 88-95.

The combination of a cross and the letters A, Ω , I, X is very common in Christian art: iota-chi represents Ιησούς Χριστός. The letters alpha and omega are an accepted abbreviation of ἄ(λφα) (καί) ὤ(μέγα), referring to the words of Jesus in Revelation 1:8: "I am Alpha and Omega, the beginning and the ending, saith the Lord, which is, and which was, and which is to come, the Almighty."; and in Revelation 22:13: "I am the Alpha and the Omega, the first and the last, the beginning and the end" (Avi-Yonah 1940: 53, 73).¹¹

Among the many known examples of crosses in mosaic floors in Israel it is worth mentioning the Greek crosses in the chapel of the monastery at Beth Ha-Shitta and in the church at Shavei Zion, the Greek cross and monogram in the north-western room in the church at 'Evron (AD 415; 442/3), Maltese and Greek crosses in the East Church at Mamshit (Mampsis-Kurnub), the monogram in the Church of the Annunciation at Nazareth and in Church/Chapel C at Magen, and Latin crosses in the North-East Church at Hippos-Sussita and in Church A at Magen (Aharoni 1954: 211-215 fig. 1 pl. 8:1; Ovadiah – Ovadiah 1987: 20, 59-60, 104, 127, nos. 18, 80, 173, 215 pls. XIII.1, XIV.2, XLIX.2, L.1, CXIII.2, CXLIV.1-2, CXLVI; Hachlili 2009: 224-225 pl. XI.2 fig. XI-2; Tsaferis 1985a: 6, 8 figs. 2, 9-10, 15; 1985b: 19-21 fig. 6). Crosses accompanied by the letters $A\Omega$ and IX and pair of animals were found in the church at Ozem (AD 430/1), and in the northern hall (AD 506/7) of the church at Hazor-Ashdod (Habas 2016: 274 figs. 1-2; 2019: 111*, 114* figs. 14-15, 18-19). A Latin cross as a crux gemmata is depicted standing on the hill of Golgotha with the letters $A\Omega$ and peacocks in heraldic pose on either side of the cross in the northern apse of the church in Hufa al-Wastiyah (Abu Dalu 1994: 13 figs. 5, 11; Habas 2005: I: 314, 345-347).

As mentioned, crosses of different types are found in different areas in the ecclesiastical structures. Crosses decorate the mosaic floors of the courtyard, atrium and narthex, as in the monastery at Khirbet Deir Sam'an (Magen 2012a: 23 figs. 8-10, 22; Magen – Kagan 2012a: fig. 34.2) and the western side of the north aisle of the Church of Saint Bacchus at Horvat Tinshemet (Dahari 2012: 105, 124 fig. 1); crosses are set close to the entrance threshold leading to the nave, aisles and chapel, as in the Monastery at Umm Deimine (Amir 2012: 447, 481 fig. 46:6; Magen – Batz – Sharuk 2012: 455-456 figs. 4, 27; Magen – Kagan 2012b: 287-289 fig. 347:2, 4) and in the Church of Saint Bacchus at Horvat Tinshemet, mentioned above (Dahari 2012: 106, 124 figs. 4, 6); crosses appear in the center of the halls, such as in the center of the nave of the Monastery Church (area C) at Khirbet Yattir (AD 588/589; 631/632; Eshel – Magness – Shenhav 2000: 158 figs. 7-8, 10; Bordowicz 2007: 75-77 figs. 31, 71, 94-95; Magen – Kagan 2012b: 297-299 fig. 354:2), and the nave of the church of Saint John at Khirbet Umm er-Rus (Magen – Kagan 2012b: 126 figs. 238:1, 238:3). They are also found in the center of the chapel hall, as in the northern chapel of the church at 'Anab el-Kabir (Amir 2012: 452 fig. 10; Magen - Kagan 2012b: fig. 345.2; Magen – Peleg – Sharuk 2012: 349, 361-362 figs. 1, 4, 24, 39), and in the center of the chapel hall (building I) in the monastery at Qasr Khalife (Magen 2012b: 208-212 figs. 2-3, 5, 14; Magen – Kagan 2012b: 191 fig. 283.1); in the center of the north aisle of the North-West Church at Hippos-Sussita (Segal et al. 2004: 88-89 fig. 90) and in the center of the north aisle in the church at Shavei Zion (Avi-Yonah 1967: 49 pls. XXVIII-XXIX, XLb, plans 2, 7; Ovadiah – Ovadiah 1987: 127 pl. CXLVI, no. 215). Crosses also appear in the liturgical spaces, as in the apse floor of the chapel in Mount Olives, Jerusalem (Séjourné 1896: 274-276 fig. on p. 275), in the apse and *bema* of the church at Khirbet el-Beiyûdât (c.

¹¹ New Testament, Authorized King James Version; http://www.kingjamesbibleonline.org

AD 570; Hizmi 1990: 252-254 figs. 6, 10 plan on p. 246; 1993: 160 figs. on pp. 156, 159 pl. VIIa-b), and in the Western Church at Horvat Qastra (Finkielsztejn 2005: 442-443 figs. 10-11).

The incorporation of a cross in a repair to a mosaic floor, as occurred in the church at Ḥorbat Ḥadat, is also known in Israel in the church at Ḥorvat Ḥanot (Shenhav 2003). A parallel is found in the Upper Church at Massuh in Transjordan, and it can identify the religious identity of the artist who carried out the restoration of the damaged mosaic floors in the eighth century AD, in which the mutilated figures in the nave were replaced by images of a Christian nature (a church and single cross), making use of the original tesserae (Piccirillo 1983: 336-338 foto 20; 1993: 252-253 fig. 443; Habas 2005: I: 489; 2015: 43-44).

The appearance of crosses on mosaic floors in churches is ostensibly surprising, because it contravenes the edict issued in AD 427 by Emperor Theodosius II, prohibiting crosses on floors: "It being our concern to preserve by all means the faith in God Supreme, we hereby decree that no-one shall carve or draw the sign of the Lord our Saviour on the floor or on a slab of marble laid over the ground; those that are found shall be removed, and whoever dares to break this law shall be punished with a heavy fine." (Cod. Just. I, viii; trans. Mango 1986: 36). In the past, researchers discussed and raised various claims that aimed to bridge the gap between the wording of the decree and the archaeological reality. Kitzinger claimed that overt crosses were not common on mosaic floors, and suggested that they were not placed on the axis of traffic or on the entrance route into the building, for fear of desecrating the sacred symbol (Kitzinger 1970: 640-644 nos. 12, 13, 21-23, 27). Avi-Yonah also held that the crosses were situated in places on which people did not tread, or in places where they walked barefoot, or in places where only the priest would walk over them, that is, in the liturgical spaces (Avi-Yonah 1934a: 63; 1957: 270). Brandenburg also held this view, and related to the topographic role of the Christian symbols (signa Christi), marking the position of furniture connected with the liturgy (altar table, lectern, or offering table), or a sacred spot, and the crosses were seen as apotropaic motifs of secular origin, a kind of superstition – rejected by the edict (Brandenburg 1969: 96, 98, 104, 111-110, 127-129, 132-133). These explanations may have been appropriate based on the evidence available to these researchers, but they no longer hold true in light of the discovery of many more churches and mosaic floors as a result of the archaeological excavations of recent decades throughout Israel and Transjordan. Hence the opinion of those who consider the date AD 427 as the terminus post quem for the cross representations must be rejected: crosses were placed in mosaic floors before, during, and after the edict was issued. Evidence of failure to comply with the edict can also be found in the fact that in AD 692 another edict was published, included in the canons of the Ecumenical Council in Trulo. Cannon LXXIII renews the edict of Theodosius, and repeats the prohibition against presenting and depicting the cross in inappropriate places (Percival 1900: 398). The archaeological evidence shows unequivocally that the edict of Theodosius had scant influence on the mosaics of our region (Kitzinger 1970: 646-647, note 39; Tzaferis 1971:61-63; 1993: 285).

¹² Shenhav, in his publication of 1998, does not refer to this. My thanks to Shmulik Freireich, IAA, for bringing this to my attention.

Summary and Conclusion

A basilica was uncovered at Horbat Hadat in Israel. The church was decorated with mosaic floors, and each part was designed in a different polychrome geometric or floral pattern. Identical patterns are found in mosaic floors from the Roman and Byzantine period in secular and religious contexts, and these are very common in our region. Some of the patterns are simple, while some are complex and rich, creating a trompe-l'æil effect.

The style and technique are uniform in all parts of the church. The floor mosaics belong to the group of mosaics that are made to a medium to high technical standard. Although the color palette is limited, by technical means the artist has managed to create rich and impressive floors.

The text of the Greek inscription at the eastern end of the nave and in front of the steps leading up to the bema quotes a verse from Psalms relating to the hart longing for the stream, and creates an explicit parallel with the Christian believers and their souls. Visual depictions of this text are known in floor and wall mosaics and illustrated manuscripts from the Byzantine period. In addition, in the renovation of the late phase a cross was incorporated in the new floor.

Two phases of construction were identified in the church, the early basilica-type dated to the second half of the fifth century AD, and a later phase dated to the end of Byzantine and Umayyad periods (seventh-eighth centuries), when the church underwent changes and its dimensions were reduced. The church fell out of use during the Abbasid period.

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