

EXCAVATIONS AT QASR AL-HALLABAT, 1979

by
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Excavations were carried out at Qasr al-Hallabat,¹ from the 16th June to the 20th July 1979 with the express purpose of uncovering as many of the Greek inscriptions scattered throughout the castle as possible². Altogether ninety-five Greek inscriptions engraved on regularly dressed basalt stones were uncovered. The vast majority of these inscriptions form a part of an edict issued by the Byzantine Emperor Anastasius (491 - 581 A.D.) for the administrative and economic re-organization of *Provincia Arabia*. In addition, numerous pottery sherds, fragments and coloured mosaic tesserae from the Umayyad period, were unearthed. These finds together with the architectural evidence, clearly indicated the extensive reconstruction of the castle and the remarkable development of the site during the Umayyad period. Although the excavations did not solve the problem of the precise architectural phases of the castle, yet they provided a new perspective for solving it.

The Castle: The castle which is situated some 25 kms. northeast of Zarqa, north of the highway which connects Zarqa with the oasis of Azraq, was built on the usual lines of Roman military posts in southern Syria. The plan (Fig. 1; Pl. XLVI,1), is a square of 44.00 m. The angles are strengthened by square towers, originally three stories high and measuring 5.70m. to the side. They project from the line of the side walls by 2.20 - 2.40 m. Entrance to the building is gained by a single doorway, 1.25, wide, in the middle of the northeast wall. The entrance opens into a passageway measuring 4.10 x 3.90 m. In the middle of this passageway is located an arch springing from piers, evidently to facilitate the roofing of the passageway with corbelled courses of stone.³ At the far end of the passageway is another entrance surmounted by a semi-circular arch. It was originally 2.50m. wide but was later narrowed to 1.50m. by adding a pier to each side of the entrance. (Pl. XLVI:2). This entrance opens into the courtyard which is paved with flagstones. In the courtyard is a cistern.

A series of oblong and square rooms, originally two stories high, surrounds three sides of the central courtyard.⁴ All rooms on each side have interconnecting doors. The north-west side is occupied by an inner structure measuring 16.25 x 16.20m. built of roughly quadrated limestones which are laid in courses without mortar. The inner structure also consists of a central courtyard surrounded on all sides, except the south-east where the main entrance to the structure is situated, by a series of parallel rooms. In the courtyard is another cistern.

The enclosure wall, which is about 1.25 m. thick, consists of an inner and outer facing of smooth quadrated limestone and basalt with a core of lumps of stones, rubble and mortar.

THE ARCHITECTURAL PHASES OF THE CASTLE:

There are only two clear documents for dating the castle: one is a latin inscription on a lintel which referred to the construction of a *novum Castellum* during the reign of the Roman Emperor Caracalla,⁵ and the second is a Greek inscription from the reign of Justinian dated specifically to the years 529-30 A.D.⁶ However by comparing the evidence of the inscriptions with that afforded by inspection of the building and its masonry, we may distinguish three principal stages in the construction of the castle:-

I- In the first stage the small inner structure was built, a point which has already been acknowledged by Butler.⁷ Although we have no concrete evidence for dating this phase, yet it is obvious that it ante-dates the enclosure wall and the rooms inside it. There are several reasons for this conclusion:-

- A) There are two qualities of workmanship within the castle. In the inner structure the masonry is of roughly quadrated limestone laid in courses without mortar, and with average measurements of 0.80 x 0.60 x 0.30m.; whereas in the outer enclosure the masonry consists of smoothly squared blocks of basalt and limestone which average 0.50 x 0.35 x 0.30m.
- B) Whereas the thickness of the partition walls of the inner structure averages 1.17m., it is only 0.93m. in the partition walls of the larger enclosure.
- C) The northwest outer wall is not bonded with the northeast wall of the inner structure but merely abuts against it. This suggests that the inner structure existed before the larger enclosure.

The original date of the inner structure remains as yet uncertain. It is likely, however, that it was built as a military post or watch-tower to provide an indepth protection for the Via-Nova TRAJANA which was constructed between 111-17 A.D. The fact that some of the basalt stones bear Nabataean inscriptions does not permit us to conclude automatically that the inner structure, which was built exclusively of roughly quadrated limestone, had been constructed by the Nabataeans. The basalt stones were used only in the second phase of construction when the larger enclosure with its square towers was built between 212-15 A.D. This fact may indicate that the submission of the Nabataean kingdom and its annexation to the newly founded *Provincia Arabia* in 106 A.D. did not put an end to the Nabataean trading activities which continued at least down to the first quarter of the third century.

II- In the second phase the enclosure wall together with the rooms inside it and the corner square towers were constructed. Its plan is similar to that of many Roman castles to be found in Syria.⁸ This phase might be dated by the latin inscription which refers to the construction of a new castle to the years 212-13 A.D.⁹ Tribal unrest might have prompted the enlargement of the watch-tower and the construction of the castle, for it was in this period that new forts were constructed and existing ones were enlarged, for example Qasr Uwaynid and Usaykin.¹⁰ It seems that the castle continued in use down to the 6th century when some restoration works were carried out in the year 529-30 A.D.¹¹ However, the castle was apparently abandoned and fell into disuse during the first half of the seventh-century, perhaps as a result of the Persian invasion (614-40 A.D.) which undermined the military structure of the Byzantine empire in Syria and Palestine.

III- In the third phase, which is assigned to the Umayyad period (640-750 A.D.) on the evidence of pottery sherds and carved stucco (see below), the castle underwent a massive repair. It would appear that the layout and wall divisions of the earlier structure were retained, though in the course of this reconstruction the basalt stones which bear Greek inscriptions were removed from their original location, inserted in the walls and covered with a thick coat of plaster.¹² Actually the archaeological evidence points to a remarkable new development of the site, because we find not only the rebuilding of the castle, but also the appearance of new structures such as the extra-mural mosque situated 15m. to the southeast of the castle, and a bath, Hammam al-Şarāḥ.¹³ Situated some 2 kms. to the east at the castle, as well as five cisterns and huge water reservoir¹⁴ to the west and southwest of the castle respectively. The reservoir (Pl. XLVII), which is much silted up, is built of well-squared blocks of limestone. A few sherds of the Umayyad period were extracted from the mortar between the stone courses.¹⁵ This indicates that the reservoir was reconstructed, if not actually built, during the Umayyad period. In addition to these monuments, there are also signs of rudely built ancillary structures which might have been temporary living quarters. The most important feature of the site, however, is an irregularly shaped enclosure — some 300m. long from south to north — gradually narrowing towards the north. The walls which are flush with the ground and visible from an aerial photograph¹⁶ (Pl. XLVIII) are strengthened by semicircular buttresses on their outer and inner faces. This enclosure can be compared to the large enclosures at Qasr Al-Ḥīr al-Sharqī and Qasr Al-Ḥīr Al-Gharbī in Syria, the walls of which exhibit the same alternation of semicircular buttresses on either side¹⁷. Since this enclosure at Hallabat has not been investigated properly, it is difficult to decide at present for what purpose this walled enclosure was built.¹⁸ It might however be tentatively related to some kind of concern with water and irrigation or animal husbandry.

The castle's occupancy seems to have ended with the fall of the Umayyad dynasty. This abandonment of the castle was quite final, for there is nothing to indicate a later reset-

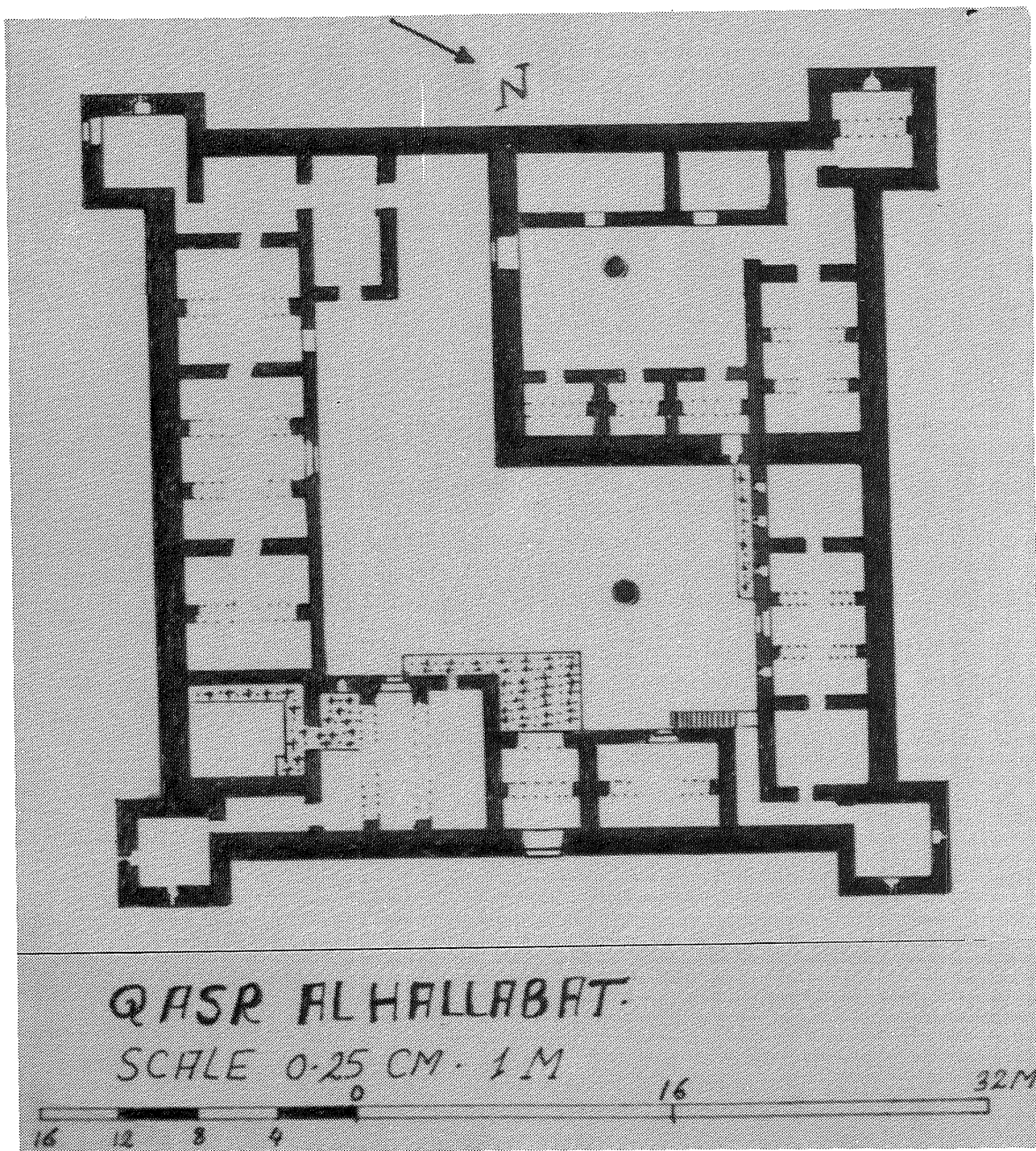


Fig. 1 Qasr al-Hallabat. Ground plan; after Butler.

tlement with the possible exception of squatters' settlements or passing bedouins.¹⁹

The Pottery:- The area outside the castle has produced quantities of pottery sherds dating principally from the third to the eighth centuries.²⁰ Excavations within the castle, however, tend to present a different picture, for the pottery sherds uncovered are reasonably representative of the types in use throughout the Umayyad period with exterior ribbing, combing, incising, and painting.²¹ It would thus appear that the massive restoration works carried out by the Umayyads had removed all traces or material remains of earlier occupations.

For purposes of convenience pottery sherds can be divided into four major groupings:-

- A) Low, flat-bottomed, flaring-sided basins with blackened cores and surfaces. Most of these basins have slight ribbing and a combed wavy band around the middle or neck (Pls. XLIX: 1-3). Good parallels appear among the pottery from Mt. Nebo, kh. al-Mafjar,

- Heshbon, Pella, Amman citadel and Amman Forum.²²
- B) Sherds of dark grey ribbed body painted over with white lines. In some instances the body is also decorated with carinated undulation (Pl. XLIX: 4). Vessels of this kind, which appear to be one of the most characteristically Umayyad types, have been found at a number of sites in Jordan and Palestine, e.g. Mt. Nebo, Kh. al-Mafjar, Kh. al-Nitlah, Amman citadel, and Pella.²³
 - C) Smooth, well-levigated creamy-coloured ware with red paint on the surface (Pl. L:1). This type also appears to be particularly characteristic of the Umayyad period.²⁴ Close parallels are found at Mt. Nebo, Amman citadel, Amman Forum, Heshbon, and Pella.²⁵ A possible variation of this type, though less common, is a gritty orange ware with creamy paint on its surface. (Pl. L: 2-3,)²⁶
 - D) Sherds of hard buff-ware, generally well fired.

THE CARVED STUCCO:-

The use of basalt stones would not have affected the aesthetic appearance of the building, for these were placed in string courses on the outside²⁷ while inside, the building depended for its effect of beauty upon a coating of carved stucco and painted plaster, which covered the basalt stones and concealed them from view.

Apart from a fragment of carved stucco which was found *in situ* adhering to the outer face of the northeastern wall facing the courtyard, all the stucco was recovered in small fragments mixed with rubble and fallen stones. These were found in two distinct contexts:-

- A) In the oblong room and the smaller adjacent to it, situated at the eastern corner of the castle. These fragments apparently had fallen when the upper storey gave way, because the lower oblong room was coated with a layer of painted plaster, traces of which can still be seen on parts of its southwestern and southeastern walls.
 - B) In the trench along the northeastern wall facing the courtyard.
- For purposes of convenience the stucco fragments can be divided into the following groups:-

- 1) **Borders:-** These consist of the following patterns:-
 - A) Guilloche or interlacing double bands (Pl. LI:1).
 - B) Heart-Shaped petals with drilled eyes (Pl. LI:2). This is a common border at Kh. al-Mafjar.²⁸
 - C) Egg-and-Leaf pattern (Pl. LI: 3). Here the three-pointed leaves make this pattern different from the classical Egg-and tongue.
 - D) Bead-and-reel (Pl. LI: 3), with horizontal and double vertical groovings respectively. This pattern which is drawn schematically, is derived from the repertory of, classical ornamentation and occurs at Kh.al-Mafjar²⁹
- 2) Narrow bands or stripes. Virtually all the band patterns are derived from vegetal or leaf motifs. Simple lines or interlacing bands are used to determine triangular or circular compartments which are filled with some kind of vegetal motif.

The band patterns can be divided into the following groups:-

- A) Narrow band divided into upright and inverted triangles by a double band which runs in a zigzag fashion. Each upright triangle is filled with a trefoil rising upwards, and in the inverted triangles are trefoils hanging downwards with a hole drilled in the middle of the side leaves (Pl. LI: 1;4).
- B) Band divided into loops by interlacing triple bands; each loop is filled by a six-lobed rosette; the space above and below the intersection of the bands is occupied by a trilobate leaf. (Pl. LI:2; LII:2).
- C) Band decorated with lively palm leaves bent at an angle around a central unit of similar leaves. (Pl. LII:4).
- D) Asplit-palmette framing a floral volute with a deep groove in its centre forming a sort of vertical axis. At the corner is a bunch of elongated grapes which are drawn in a summary manner with two shallow grooves or notches in the middle of each grape. Another version of this pattern shows a bulbous floral motif. (Pl. LIII: 3).

- 3- Window-grills and frames (Pls. LIII: 1-2)
- 4- Curved surfaces and arches:- these exhibit scale - pattern decoration (Pl. LIII: 4). A similar pattern was found at kh. al-Mafjar and Hammam al-Sarkh.³⁰

PAINTED PLASTER:-

That there were mural paintings at Hallabat is indicated by the finds of fragments of painted plaster in the debris of the eastern oblong room (Pl. LIV: 1-3), and by the fact that sections of this plaster with faint traces of paint are still preserved on the walls of the same room.³¹ However owing to the fragmentary condition of this plaster, no complete design can be reconstructed.³² They are only useful insofar as they provide a range of colours which include: red, dark brown, yellow ochre, and blue.

It should be mentioned that one painted fragment was found *in situ* attached to the outer face of the northeastern wall of the inner structure near its northwestern end (Pl. LIV: 3). This may indicate that the courtyard was originally surrounded by porticos, because it is unlikely that the painted plaster would have been left exposed to the elements.

THE MOSAICS:-

The two rooms in the eastern corner had mosaic pavements. The pavement in the long room with two transverse arches was entirely missing with the exception of two rows of plain white tesserae along the northeast and southeast walls, while the floor in the innermost eastern room was fairly well preserved.³³ It was paved by intersecting diagonal rows forming indented squares, each enclosing a diamond pattern (Pl. LV: 3).

MISCELLANEOUS FINDS:-

Other non-ceramic objects recovered from the two rooms in the eastern corner include a few wood and glass fragments (Pl. LV: 1-2; 4). The latter consists mostly of fragments from windows of the building.³⁴

The Extra-mural Mosque³⁵ (Fig. 2).

At a distance of some 14.00m. to the east of the castle is a small rectangular mosque measuring 11.77m. internally. The walls, which are 0.86-0.88 m. thick, are built of finely dressed limestone blocks on their inner and outer faces with a filling of limestone rubble and mortar. The interior is divided into three aisles by two arcades of three arches each.³⁶ The arches rest on two columns and two wall piers. Of the columns of the Mosque only their square plinths (0.53 m. to the side) and bases (0.40 m. in diam.) remain (Pl. LVI: 1). No column drum or capital has been recovered. A possible explanation for this lack of column drums may be that these columns stood for some considerable time after the arches and tunnel-vaults had fallen, and were thus prey to later stone robbers. The floor is paved with mortar and pebbles with a thin layer of plaster above. The aisles were roofed by tunnel-vaults running parallel to the *qibla* wall, and resting on the north and south walls and the two intermediate arcades. In order to diminish the thrust on the arcades, a filling of concrete composed largely of light volcanic scoriae was used for the roofing of the tunnel-vaults.³⁷

Access to the Mosque was given by means of three entrances. The principal entrance, in the centre of the north wall opposite the *Mihrāb*, was partially blocked up (Pl. LVI: 2). It is 1.80 m. wide and was spanned by a single monolithic lintel which was found partially broken outside the north wall near the entrance. The door-sill is composed of six separate slabs carefully laid and fitted with sockets for door pivots on either side (Pl. LVI: 3).

The lateral entrance in the centre of the west side is still well-preserved. It is 0.96m. wide and 1.90m. high from the door-sill. The door jambs are surmounted by a lintel above which is a relieving cusped arch (Pl. LV). That a similar arch existed above the doorway in the centre of the eastern side is attested by the recovery of two voussoirs with billet underneath.

The most important part of the Mosque, the *Mihrāb*, in the centre of the south wall, is still

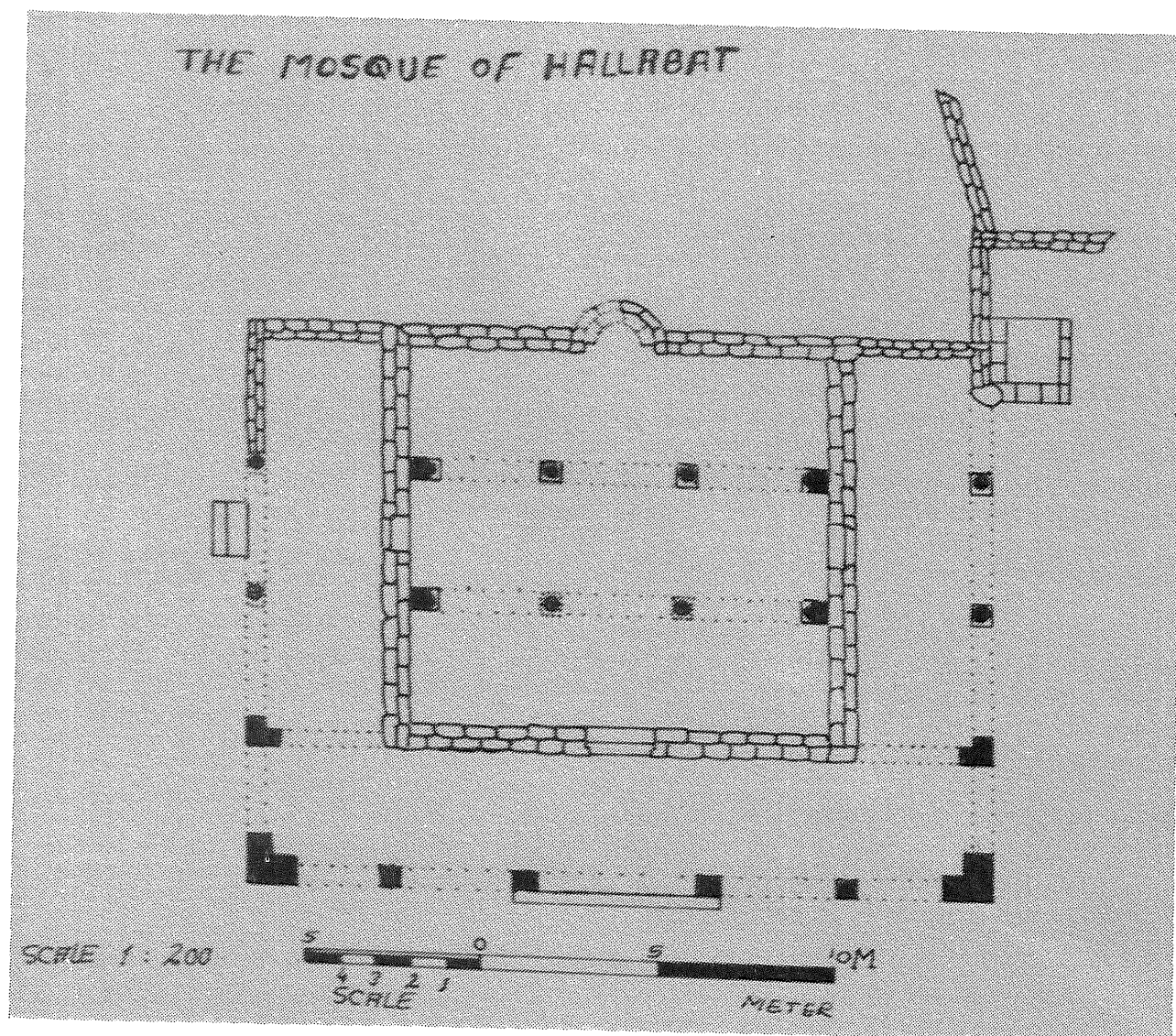


Fig. 2 Ground plan of the Mosque of Hallabat.

preserved two courses high, and it clearly forms one with the south wall of the Mosque. Its concave part measures 1.78 m. in width and 1.50m. in depth. On both sides of the *Mihrab* are square-section recesses, 0.30 m. deep, for the flanking colonettes which have long since disappeared.

The Mosque was surrounded on three sides by porticoes consisting of arches on columns and L-shaped piers at the corners as shown in the plan (Fig. 2). This arrangement of columns and piers is ascertained in the western portico where two column bases were found *in situ* at a distance of 3.10 m. and 6.25 m. respectively from the inner L-shaped corner pier. A splayfaced capital at the northern end of the west wall of the Mosque shows that it must have been connected with the western portico, which averages 3.40m. in depth excluding the column bases, by an arch. The same arrangement of columns and piers must have existed in the eastern portico, though here, because the ground slopes towards the east, a wall was built to retain a platform and raise its floor to the level of the Mosque floor. This retaining wall formed a kind of stylobate which supported the eastern colonnade. A deep sounding was made in the south-eastern corner of the eastern portico. From this it became evident that the lower layers had been filled from the foundation up to the floor level with rubble and stone chips. The eastern portico was approached by a flight of two steps. Of the supports of the northern portico our evidence is scanty, for the column bases and their emplacements have disappeared without any trace. It is likely, though by no means certain, that the central arch facing the principal entrance was wider than the rest. This would have given added emphasis and elegance to the principal entrance. The surrounding porticos must have had a flat wooden roof, for a series of beam holes are still to be seen along the extant parts of the west and north walls of the Mosque.

The eastern and western porticos terminate towards the south in a solid wall. At a distance of 3.40m. the western extension of the *qibla* wall makes a right angle turn and abuts another structure further to the south.

A stepped platform was built against this southern extension as shown in the plan. The lower platform is a square measuring 2.30 m. to the side, and the upper one measures 1.93 x 1.35 m. The only possible explanation for this feature is that it might have served as an elevated place for the call to prayer (*Adhan*).³⁸

Two kufic inscriptions engraved on two blocks of limestone were recovered. The first consists of a common pious formula and reads:

“Oh God, forgive your servant, Jābir son of..... the client of.....”

The second inscription is less clear and could not be read. Though these inscriptions cannot be precisely dated, the absence of diacritical marks and the square form of the letters point to a date consistent with the pottery i.e. the Umayyad period. Unfortunately no concrete evidence for dating the mosque precisely was found. However, since the *Ṣihrāb* (concave niche) was first introduced in the Umayyad mosque of Madinah in A.H. 91³⁹ we thus obtain A.H. 91 as a *terminus a quo* for the construction of the little Mosque of Hallabat. And since the carved stucco fragments are more rigid and repetitious than the stucco panels from khirbet al-Mafjar and Qaṣr al-Hīr west which were built during the caliphate of Hisham (A.H. 105-25/A.D. 724-43), we may hazard the guess that the reconstruction of the castle and the building of the mosque took place sometime between A.H. 91-125/ A.D. 709-43.

The question of Hallabat's exact social or historical significance must be left for further excavations to answer. The point to be stressed here is that the elaborate decorations in stucco, painted plaster, and mosaic point to a princely sponsorship. The transformation of the castle into an elaborately decorated residence was only natural, for Jordan in the Umayyad period was no longer part of the insecure region of the limes, but rather it became the district from which the Umayyads drew support and manpower for their army.⁴¹ This may partially explain why most of the Umayyad palaces were built in the Jordanian *bādiya*.

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Footnotes

1. Hallabat was rapidly investigated by H.C. Butler in the winter of 1904 - 5. His investigation, however, focused attention on the specifically Pre-Islamic character of the building. More recently the site of Hallabat was the subject of a detailed study by Dr. Fawwāz Toukân, who rightly emphasized the Islamic character of the site without, however, taking into sufficient consideration the earlier architectural phases of the castle. H.C. Butler, *Ancient Architecture in Syria*. Div. 2 sect. A (Leyden, 1909) pp. 70-77. F. Toukân, *Al-Hā'ir, Baḥṭh fī al-Quṣūr al-Amawiyyah fī al-Bādiyah*, (Amman, 1979) pp. 405 ff.
2. The excavation was part of a project to collect all the Latin and Greek inscriptions in Jordan for the forthcoming publication of a corpus of Latin and Greek inscriptions. The inscriptions from Hallābāt will be published by Prof. Jean MARCILLET-JAUBERT of Lyon University, who was present at the site during the first three weeks of the excavation, and took active part in the work. My sincere thanks are due to him for his constant help and advise.
3. This system of roofing with corbelled courses and stone slabs was quite common in the buildings of southern Syria. For the roofing of narrow rooms, corbel courses and flat slabs were employed. However, for covering wide spaces, an arch or more - depending on the width of the space - was thrown across to support ceiling slabs. H.C. Butler, *Ancient Architecture in Syria*, Div. II sect. A, p. 68. K.A.C. Creswell, The vaulting system of the Hindola Mahal al Mandu *The Indian Antiquary*. July 1918, pp. 169-77. I would like to thank my friend Steven Urice who was kind enough to provide me with an x-rax copy of this article.
4. There is a marked difference between this arrangement of rooms and what is commonly known as the *Bayt* system (self-contained units of habitation consisting of several rooms opening into and communicating with a central larger room or hall) which is typical of the Umayyad buildings such as Harraneh, Minyah, and Mshatta.
5. Butler, *op. cit.* p. 71, Div. III, pp. 21 f.
6. The inscription is specifically dated to the year 212-213 A.D.
7. Butler, *Ibid.* p. 71, note 2.
7. *Ibid*

8. *Ibid.* pp. 82, 146
9. cf. note 5.
10. S.T. Parker, "Archaeological survey of the limes Arabicus: A preliminary report," *ADAJ*. vol. XXI (1976) p. 27.
11. cf. note 6.
12. In many instances the Greek inscriptions are placed upside down. Therefore, one cannot conceive of this reconstruction as being done in the Byzantine period.
13. Although the castle and the Mosque are usually discussed alone, it should be noted that they are related to the bath building of Ḥammām al-ṣarḥ, and thus the three monuments should be discussed together. In other words Ḥammām al-ṣarḥ with its elaborate heated rooms and elegant decorations in carved stucco, mosaic, and fresco paintings was evidently part of a much larger complex of buildings. The contemporaneity of the castle and the Mosque with Ḥammām al-ṣarḥ can be demonstrated in more than one way. First, the local stone used in the construction of the Mosque is identical to that used in the bath. Second, their roofing system with parallel tunnel-vaults built of light volcanic scoriae is also identical. Third, both monuments yielded the same types of pottery sherds and stucco fragments.
14. H. Field, *North Arabian Desert Archaeological Survey*, 1925-50, (Cambridge, 1960) p. 17
15. I wish to thank my friend Alastair Northedge for kindly drawing my attention to this point.
16. Reproduced from *Antiquity*, vol. III, (1929), Pl. VIII facing p. 401.
17. K.A.C. Creswell, *Early Muslim Architecture*, Pt. II, pp. 533 - 36.
18. O. Graber, et-al, *City in the desert, Qaṣr al-Ḥayr East*, (Cambridge, 1978) pp. 98ff.
19. The purpose of such enclosures has been the subject of much debate among scholars. They were variously interpreted as gardens, artificial lakes, and animal-preserves. It is likely that the walled enclosure at Hallabat, which is much smaller than those in Syria, was used for hunting and trapping animals. Though the U-shaped earthwork in the middle of the enclosure has the appearance of a crude dam, and might have served as a water-catchment.
20. H. Seyrig, *Les Jardins de qaṣr el-Ḥeir*, "SYRIA. Vol. XII (1931) pp. 316 - 18.
21. *Idem*, *Retour aux jardins de qaṣr el-Ḥeir*, "SYRIA vol. XV (1934) pp. 24-32.
22. A. Gabriel, "A propos de qaṣr el-Ḥeir, à l'est de Palmyre" *SYRIA*, vol. XIII (1932) pp. 317-20.
23. K.A.C. Creswell, "Another word on Qaṣr al-Ḥair," *SYRIA*, vol. XVIII (1937) pp. 232-33.
24. For the various meanings and interpretations of the word *Ḥa'ir* or *Ḥir* cf. F. Toukân, *op. cit.* pp. 195-400.
25. Although it is not yet certain whether the site of Hallabat could have supported other occupations than pastoral farming, the fact that the site was abandoned after the fall of the Umayyad dynasty may indicate that Ḥallābāt did not constitute a viable economic unit. It could have only functioned as long as the funds and investments were coming from the outside.
26. S.T. Parker, "Archaeological survey of the limes Arabicus: A Preliminary report," *ADAJ*, vol. XXI (1976) p. 23.
27. I would like to express my gratitude to Dr. Jim Sauer, director of ACOR, for his help in the identification of pottery sherds. He, however, bears no responsibility for the shortcomings or mistakes in the discussion of the pottery.
28. H. Schneider, *the Memorial of Moses on Mt. Nebo, Pt. III. the Pottery* (Jerusalem, 1950) pp. 47, 74. Fig. 7; Pl. 152 nos. 20 A-B.
29. D. Baramki, "The pottery from kh. al-Mafjar," *QDAP*, vol. x (1940 - 42) Figs. 2:4; 10: 2,6.
30. J.A. Sauer, *Heshbon Pottery 1971*, (Berrien Springs, 1973) Fig. 3: 133
31. R.H. Smith, *Pella of the Decapolis*, (The college of Wooster, Ohio, 1973) Pls. 33: 504, 1144; 92.
32. G.L. Harding, "Excavations on the citadel, Amman," *ADAJ*, 1 (1951) Figs. 2: 53, 57; 3: 50; 4: 38
33. A. Hadidi, "The pottery from the Roman Forum at Amman," *ADAJ*, XV (1970) Pl. VI. B: 2.
34. H. Schneider, *Ibid.* pp. 42 - 46; pls. 149; 150: 14-15.
35. D. Baramki, *Ibid.* Fig. 3: 1-3.
36. J. Kelso and D. Baramki, "Excavations at New Testament Jericho and kh. en - Nitla," *AASOR*. vols. XXIX-XXX (1955) pp. 35; 39 pls. 16; 28: N51, N53.
37. Harding, *Ibid.* Fig. 4: 41, 66.
38. R.H. Smith, *Ibid.* pls. 31: 405; 92A.
39. For the dating of the red-painted ware cf. J.A. Sauer, *op. cit.* pp. 45; 47-8, and note 113.
40. Schneider, *op. cit.* pl 148: 15-17
41. Harding, *op. cit.* pl. 4: 61
42. Hadidi, *op. cit.* p. VI, B: 4-6
43. J.A. Sauer, *Ibid.* Fig. 3 nos. 131-32
44. Smith, *Op. cit.* p. 234: pl. 30: 492; 1101. 45: 488
45. R.H. Smith, *Ibid* pls 92A: 1139; 1156; 91C: 1100
46. Such decorative use of two different colours of stones brings to mind the striped-house (*al-Dār al-Raqṭā'*) built to Mu'awiyah at Mecca with red baked brick and white plaster.
47. al-Azraqī, *Akhbār Mecca*, (Mecca, 1965) vol. 11, p. 237
48. R.W. Hamilton, *khirbat al-Mafjar, An Arabian Mansion in the Jordan Valley*, (Oxford, 1959) p. 212; fig. 156.
49. Hamilton, *Ibid* p. 213: Fig. 157.
50. *Ibid.* p. 223; Fig. 172
51. The painted plaster was applied in three coats: A coarse coat 2 cms. thick of greyish colour and replete with gritty inclusions; over this a hard coat, 1 cm. thick, of lighter colour scratched with chevron patterns to provide a grip for the final smooth coat which was painted.
52. Insofar as one can judge from these fragments, the decorations consisted mainly of geometrical designs and possibly some floral motifs. None of them seem to show human or animal representations.

33. Owing to the enormous number and size of the blocks of stones, as well as the lack of the necessary lifting machines, only a portion of the mosaic floor was uncovered; and this had to be covered up to protect it.
34. Small fragments of window glass still fitted into the slots of the fine-grained stucco frames were uncovered.
35. Butler, *Ancient Architecture in Syria*, pp. 74-77: Appendix, pp. XVII-XIX.
Creswell, *Early Muslim Architecture*, pt. II, pp. 502-3. Since the Mosque had been adequately described by Butler and Creswell, our work consisted only in clearing it anew. In most essentials Creswell's plan and elevation are basically correct, though minor modifications in the details, especially the number of columns and measurements, are needed.
36. The same roofing system was also used in the audience hall of Quṣair 'Amra and Hammām al-ṣarāḥ.
37. It should be mentioned here that the idea of uttering the call to prayer from an elevated place was already current when Islam emerged from the confines of the Arabian peninsula. According to one tradition, when the *Adhan* was ordained in the year 1 or 2 A.H., Bilāl b. Rabāḥ used to recite the call to prayer from a square pillar called *al-Mitmār*, which was reached by a flight of steps. cf. al-Samhūdī (Nūr al-Dīn 'Alī b. 'Abd-Allāh), *'Wafā' al-Wafā bi-Akḥbār Dār al-Muṣṭafā*, (Cairo, 1326 A.H.) vol. 1.p. 375.
38. Similar inscriptions were found at Jabal Says in Syria. cf Al-'Ush (Abū al-Faraj), "Kitābāt 'Arabiyyah," *Majallat al-Abḥāth*, vol. XVII (1964) pp. 227 - 305 Sourdell-Thomine, J. "Inscriptions et graffiti arabes d'époque Umayyade, 'á propos de quelques publications recentes," *Revue des Etudes Islamiques*, vol. 32 (1964) pp. 115 - 20.
39. After the death of Yazīd I, the situation became very precarious. Iraq, Hijaz, Egypt, and even some Syrian cities renounced their allegiance to the Umayyads. Thus the Umayyad dynasty was on the verge of collapse when suddenly the tribesmen of Kalb from the district of Jordan, under the leadership of Ḥassān b. Baḥdal, rushed to support the Umayyads and re-establish their authority.