

JARASH. EXCAVATIONS OF THE TRAPEZOIDAL SQUARE IN THE SANCTUARY OF ARTEMIS: PRELIMINARY REPORT OF THE 1999-2000 SEASONS*

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Introduction

The trapezoidal square is located along the lower part of the *via sacra* which starts from the bridge on the Chrysorhoas River and connects the eastern part of the city of Jarash (جرش) with the Sanctuary of Artemis. The latter lay on the terrace in the northwestern part of the urban sector (Fig. 1).

The shape of the square, determined by the oblique orientation of its northern and southern sides, suggested the modern designation of the area. The fan-shaped layout of the complex, beside the colonnaded street, made it possible to have a wider view across to the western *propylaea* located on the opposite side.¹ The two oblique sides of the square, formed by two symmetrical buildings, today only partially visible, had the same function as the wings of a scene (Fig. 2).

The earlier excavations of the northern and the central parts of the square were carried out in 1926-1927 by Horsefield and successively by the Anglo-American team.² After the discovery of a sixth century mosaic in the circular room made out of the exedra of the Roman structure, the church phase "Propylaea church" became the principal interest of scholars in this area (Crowfoot 1938: 227-229, pl. LXIII.b).

Further analysis by Parapetti during the 1980s

(1982: 256-260; 1983-84: 75-78) suggested new hypothetical reconstructions of the Roman phase structures. He identified the presence of a balustrade blocking up the space between the two anta pillars on each side. A minor order in relief on the same pilasters was also recorded.³ Leaving aside the details related to the architectural reconstruction, he suggested the presence of two fountains on both sides of the irregular square. Twin structures, in fact, were mentioned in a double inscription visible along the colonnaded street, recording their donation by the *legatus Attidius Cornelianus*.⁴ Parapetti therefore identified these symmetrical buildings with two *nymphaea*.

New excavations started again in 1994, first on the southeastern part of the square. Further seasons (1999-2000) concluded the analysis of the southern sector of the square. This paper is a preliminary report on these seasons.

Current excavations focus on the southeastern connection between the rooms in the atrium and the southern nave of the church.⁵

Roman Phase (Fig. 3)

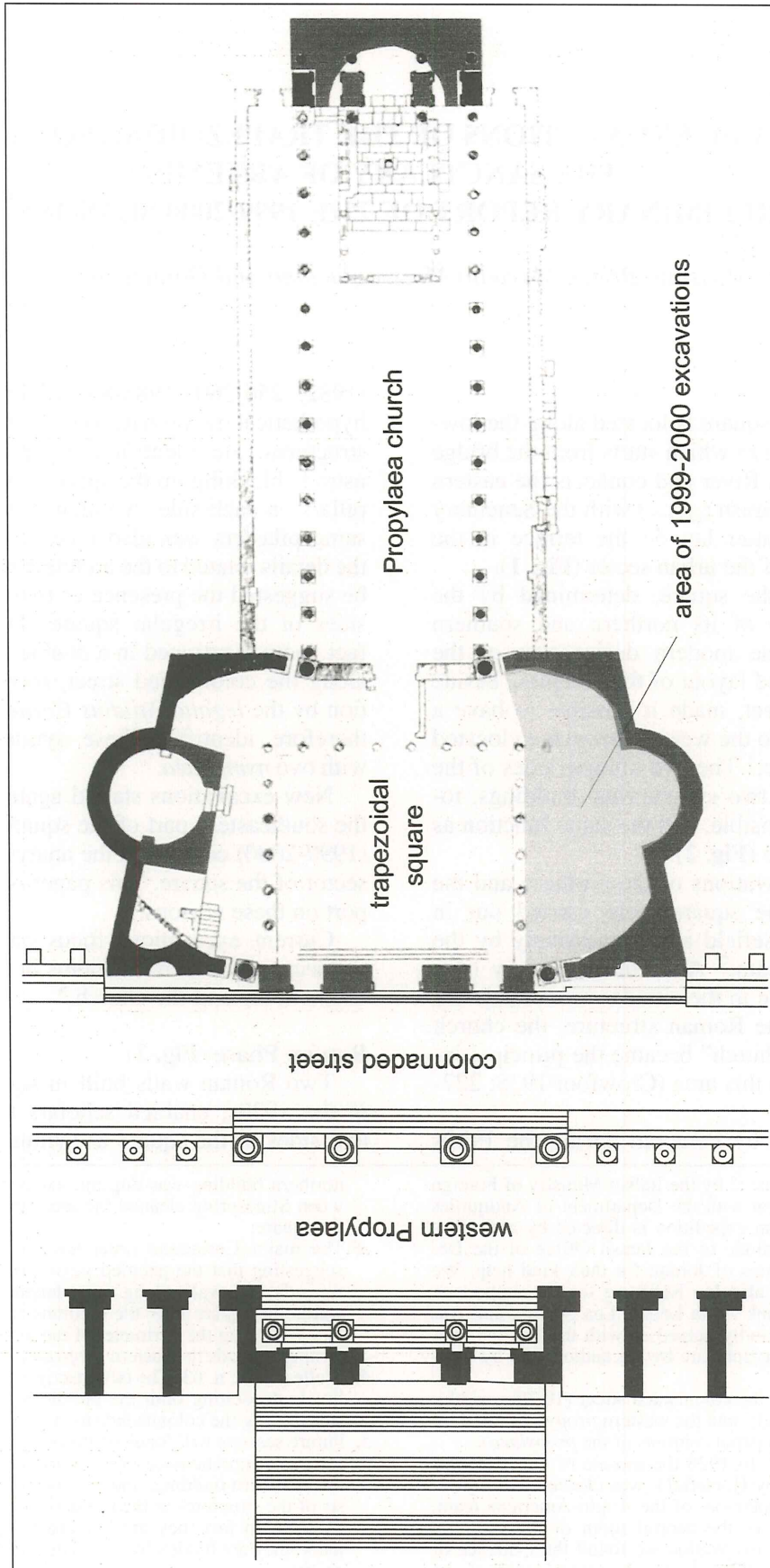
Two Roman walls built in square blocks found in the 1930s, enabled scholars to reconstruct the two sides of the square as symmetrical. The struc-

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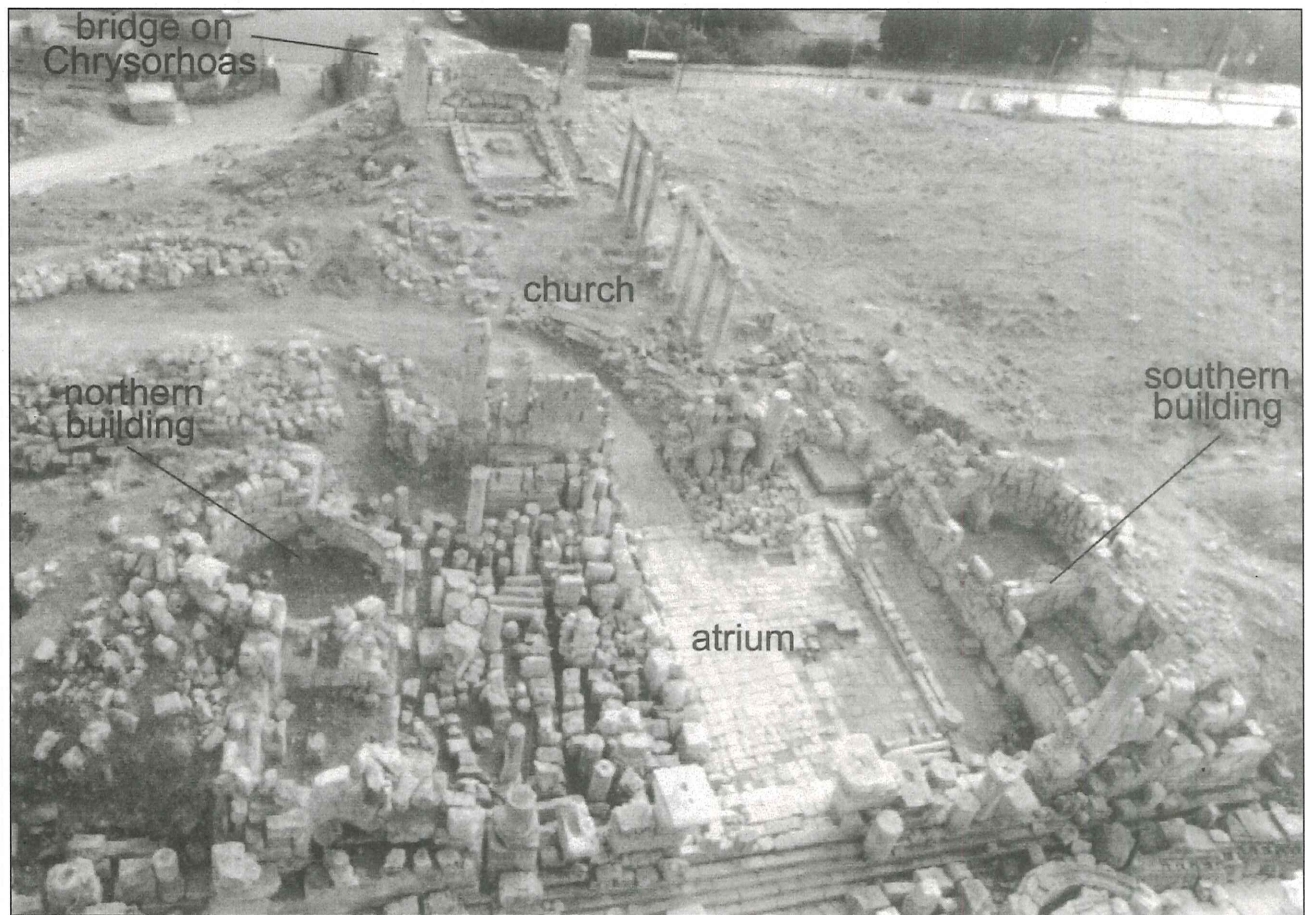
1. The square connects the colonnaded street (10.70m width), opened on the east side, and the western *propylaea* (20.47m width between the external columns of the *propylaea*).
2. Crowfoot 1938: 227. In 1928 the mosaic of the *diaconia*, already discovered by Horsefield, was cleaned and drawn. In the same year Robertson, of the Anglo-American team, dug the trial trench in the central room of the southern building (during our excavation we found the evidence of this old trench). In 1929, the northwestern room of the

northern building was dug up; excavations ended in 1934, when Stinespring cleaned the area between the church and the square.

3. The major Corinthian order has also been reconstructed, suggesting that the peopled scroll ran without interruption from the two walls along the colonnaded street, turning towards the square near the columns related to the anta pillars, following the perimeter of the internal walls, and again turning towards the eastern *propylaea*.
4. Welles 1938: n. 63. The two inscriptions were placed on the lintels decorating both the buildings and displayed on the sides facing the colonnaded street.
5. Future seasons will focus on this sector of the square, useful for the comprehension of the connection between the atrium, southern building, and the church. Moreover the analysis of the structures in the northern side of the area has been planned. In fact they are only partially visible at the moment: they are hidden by the architectural decorations found nearby.



1. Jarash. Via sacra of the Artemis Sanctuary and position of the trapezoidal square.



2. Jarash. View of the lower part of via sacra of the Artemis Sanctuary, from the west.

ture is visible on the northern side of the area as a central semicircular exedra placed between two walls finishing with two anta pillars preceded by two columns on pedestals.⁶

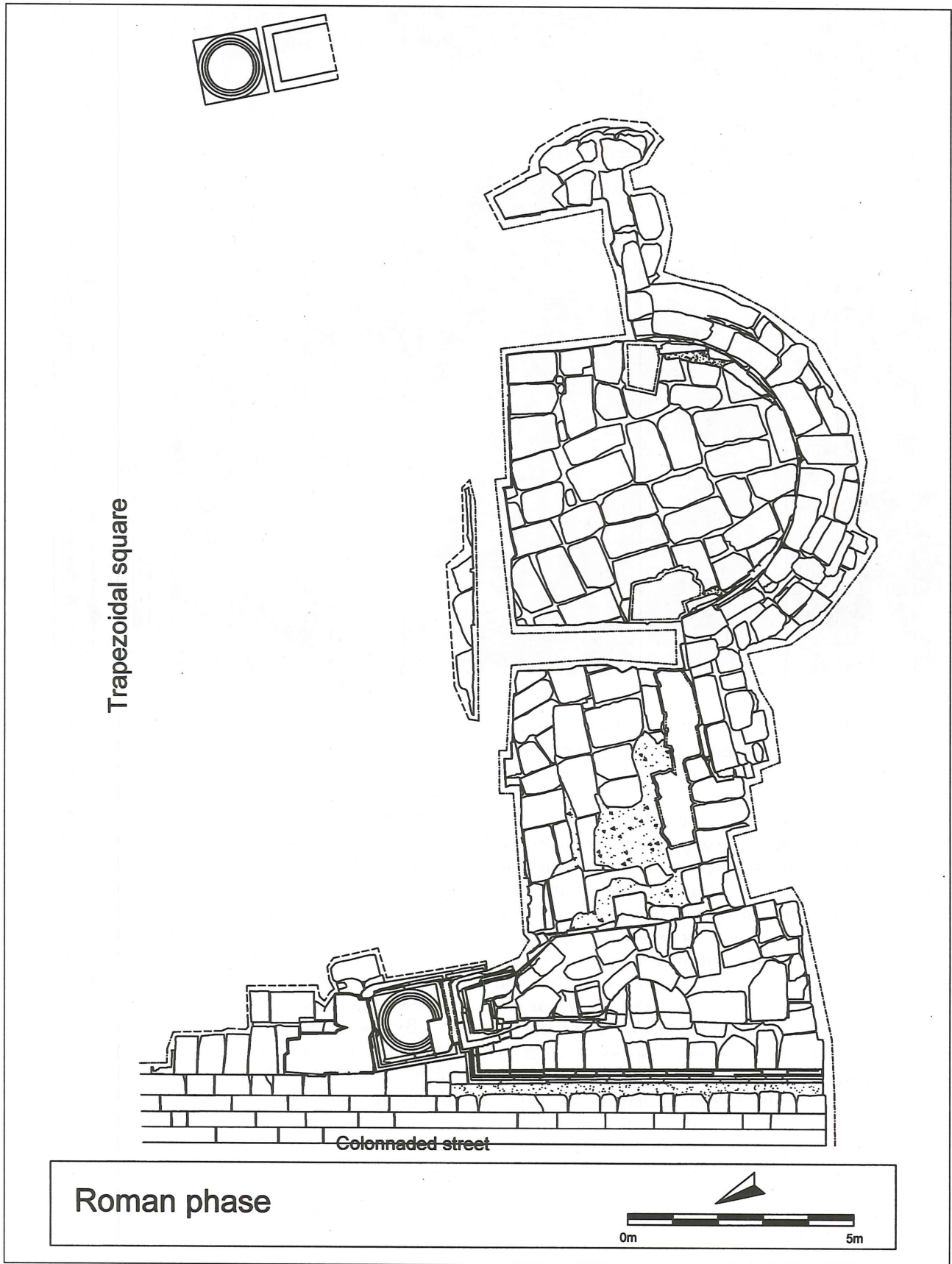
The new excavation of the southern part of the square revealed the imposing foundation platform of the wall already visible, dated to the Antonine period (Fig. 4). This structure, delimiting the southern part of the area, was built above a large surface constructed in limestone blocks, displayed in superimposed courses in the sector between the two anta pillars. The excavation has identified the presence of at least five courses (Fig. 5). It was not possible to excavate under the blocks. The building material is soft limestone cut in blocks of irregular quadrangular shape, with a flat upper face. Each block measures 0.90-1.40m in length and 0.65-0.80m in width. They are joined with sandy mortar mixed with ash, spread also on the upper part to receive the blocks of the course above, only partially

preserved in the western part. The visible blocks of this course (about 0.50m in height) are more regular and smooth than those of the lower one. There does not seem to have been particular concern for obtaining a regular surface. Instead, in the lower part a general arrangement might be suggested of a series of blocks laid in pairs alternately as headers and stretchers, although their irregular dimensions do not enable this pattern to be clearly seen. Occasionally in fact smaller blocks have been inserted to regularize the course. Despite these small insertions, the pattern of blocks follows the same orientation as a chord drawn across the exedra.

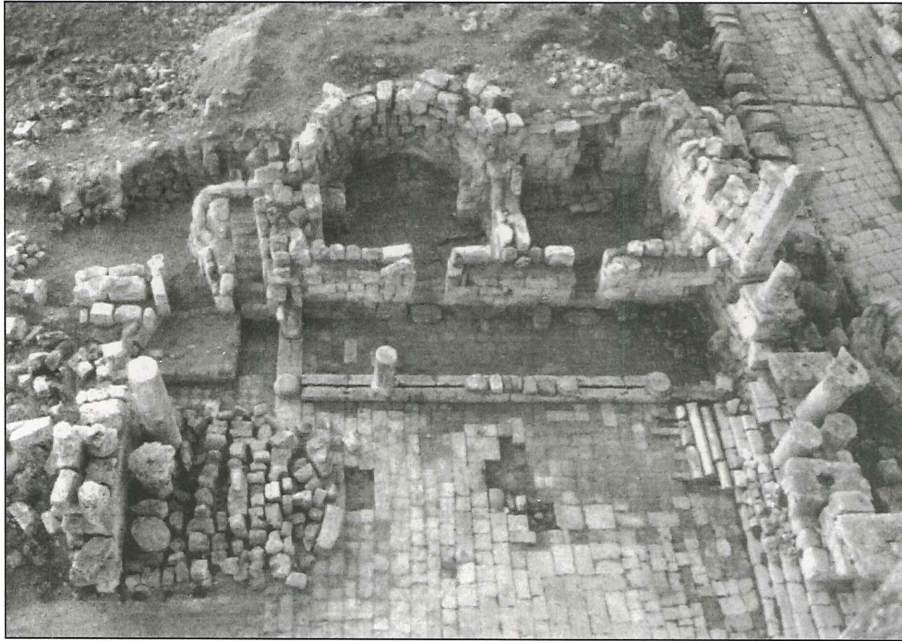
Byzantine stone-robbing of the nearby standing structures reduced the height of the paved area by 2.50m, removing the upper four courses of the foundation platform along the perimeter of the regular Roman walls. The original floor level was identifiable from the irregularity of the robbing cut and the preservation of some of the original floor-

6. The northwestern corner is the only part preserved. It presents a complex plan to create a niche; probably the same form was similarly obtained in the east side of the complex. For the description of the square see Fisher 1938: 128-129 (without any proposal for the reconstruction of the

square). An implausible reconstruction has been proposed by Browning 1982: 89, fig. 30. For the recent proposal of reconstruction by Parapetti see Parapetti 1982: 256-260; 1983-84: 75-78.



3. Jarash. Trapezoidal square. Roman phase top plan.



4. Jarash. Trapezoidal square. Excavation area from the north.

ing blocks on the eastern side near the stairs built on top of the sixth century phase. The Roman floor level appears to be 1.5m higher than the stylobate of the anta column. This evidence indicates that the original foundation platform was composed of at least five courses of blocks (about 3m thick) and was as large as the area between the two anta pillars. Its upper level is higher than the pavement in the centre of the square (Fig. 5). It forms a raised pulpit limited by the large wall with the exedra, still marked on the site.⁷ The building of such a platform was probably determined by the need to have strong substructures all over the area. The bedrock was uneven at this point, dropping away towards the east, and a flat surface was created over it.⁸

Only two courses of blocks of the semicircular exedra (about 6.20m wide) and of the structures on the east and west sides of the bordering wall are preserved. The masonry of the standing structure (very damaged and only partially preserved) is regular, characterised by square blocks, 0.6m in height, laid alternately as stretchers and headers. In the west part of the wall (near the west side of the exedra), two headers (0.60 in width and 1.20m apart) stick out of the masonry. They were probably associated with the presence of decorations on the front of the structure.

The southern part of the wall, near the southwestern corner, was robbed (a length of about 3m is lacking) in the Byzantine period. The internal part of the western wall (along the colonnaded street) has been chiselled off on the south side of the anta pilaster, in order to obtain a rectilinear standing structure for the creation of a new room. The original shape is not preserved, but it is possible to suggest it comparing the northern building, which preserved the angular curving wall mentioned by Fisher (1938: 128-129). The wall, extending between the eastern anta pillar and the exedra, was totally removed at about 4.8m from the exedra itself. The corner of the building, on this side as well as in the northern building, has therefore been completely destroyed.

Masonry analysis and the study of the Roman architectural elements are currently underway, and it is not yet possible to suggest any architectural reconstruction. It is important, nevertheless, to highlight that the large size and the solid masonry of the platform suggest the presence of columns or other structures in front of the exedra, between the anta pillars. The increased height of the pavement of the building, shown also by a door in the centre of the northern exedra,⁹ could suggest a different function for the lateral buildings in the square.¹⁰ In

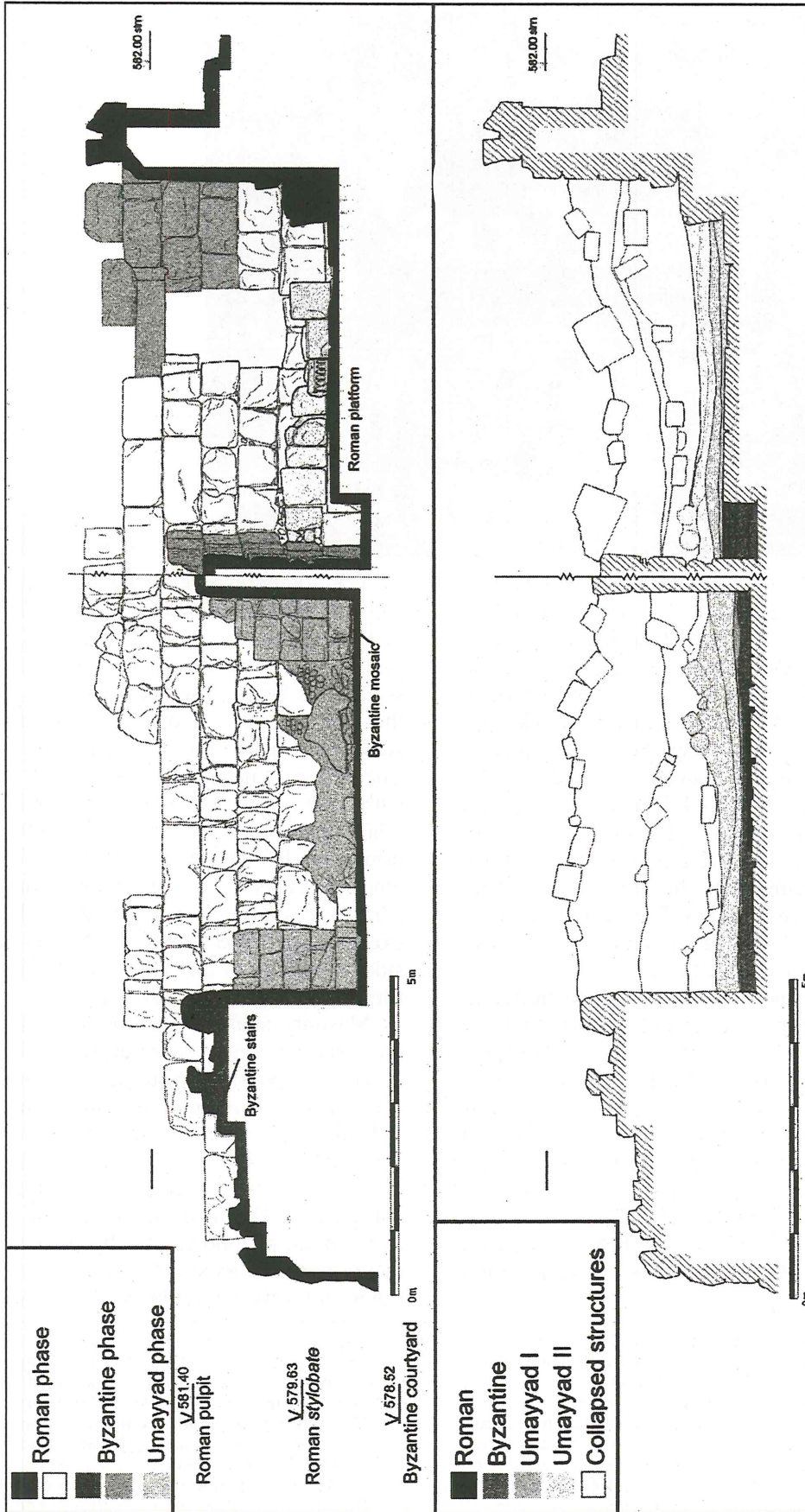
7. The front of the podium corresponds to the balustrade identified by Parapetti on the western anta pilasters. It could be considered like a real *frons pulpiti*.

8. Little evidence is known before the Antonine period. A trench dug in the narthex of the Byzantine church showed a dump layer of building materials (plaster, bricks) mixed with ceramics, dating to the beginning of the second century AD. Structures have appeared at about 2.70m below the stylobate of the narthex. At this level the bedrock, visible just

under the colonnaded street flagstones, was not found here.

9. The threshold preserved marks of the hinges and the tread. The passage is probably a secondary entrance, connected with stairs inserted in the external masonry.

10. The architectural façade, composed of one or several *exedrae* without the presence of water, recalls the so-called *nymphaeum* in 'Ammān, which was not a water feature. Similar buildings are known also at Bostra and Philippiopolis. The latter has been connected with the Imperial cult.



5. Jarash. Trapezoidal square. Southern building east-west sections showing: (upper) the elevation of the Roman wall with central exedra, the foundation platform and later structures; (lower) stratigraphy from the western and central apsed rooms.

this case the two fountains must have been located in the area where the inscriptions are visible, i.e. along the colonnaded street.

The inscriptions, together with the organisation of the entire square and the western *propylaea*, suggest a date during the magistracy of *Attidius Cornelianus*, who was governor in Arabia from AD 148-151. Analysis of the capitals confirms that the structure was built at the same time as the western *propylaea*. The carving of the architectural decoration attests to the high quality of the builders and sculptors, who reached a very high level of artistic calibre.

M.B.

Byzantine Phase (Fig. 6)

The Antonine buildings did not show any particular evidence of transformation before the interruption of the *via sacra*, which brought about many modifications in its course between the bridge and the colonnaded street and in the function of the structures. The change was caused by the building of a church, located between the triumphal arch and the trapezoidal square. The area of the Roman square became the atrium of the church. Because the church was built at a lower level, the paved level in the trapezoidal square was lowered in height by about 1.10m, and so was the floor level of the lateral buildings. The western part, which opened onto the colonnaded street in the Roman phase, was blocked up by a wall with three passages. The same organisation was obtained on the east side, transformed into the front of the church. The narthex, paved with bicoloured stone tiles, was then constructed against this part.

The platform of the two lateral buildings was partially robbed and their function was changed.¹¹ Only the limiting wall and the central exedra were preserved. The entire platform was deprived of its upper four courses of blocks. The blocks of the foundation, sticking out of the masonry, were cut off and regularized, becoming themselves a part of the standing structure.

The stone building materials obtained from the robbing were reused to build up structures against

the Roman complex, forming a wall parallel to the central axis of the square (about 2.80-5m from the Roman structure) and two walls orthogonal to the first one, butted against the corners of the exedra. The rooms thus created were irregular: the western one square, and the central one apsed. On the east side of the latter was built a U-shaped staircase. The first flight and two steps of the landing are still visible. Independent entrances on the northern side gave access to the two rooms and the stairs.

The paved area of the western room has not been preserved. Little evidence of the paving preparation is visible at the same level of the second course of the Roman platform. The latter has been removed only in the area of the foundation of the northern wall, and a part of the eastern one. The space between the masonry and the blocks of the platform was filled in with building material from the construction site and then covered by the floor.

A door (1.1m wide and 1.85m high), resulting from the destruction of about 3m of the Antonine wall on the southern part of the room, provided a secondary entrance.¹² It was covered by a reused architrave.¹³ On the west side of the door-post the southern wall was rebuilt, abutting the Roman structure, which was intentionally cut back to obtain a rectilinear wall (for all the length of the room).

The walls of the western room are preserved to a height of about 2m. In this phase the structures are built with a double thickness of square limestone blocks bound with earthy mortar. Evidence of the plaster covering of the wall is visible on the western structure.

The only entrance to the central room was built about 70cm west of the axis of the Roman exedra. The threshold is made of a reused cornice from the Antonine building. It, together with the entire masonry, is built on the lower course of the platform.¹⁴ The substrate for the floor is visible all over the room. The presence of a small fragment of a polychrome mosaic suggests that all the area was floored with such a pavement.¹⁵

The western and the eastern walls, preserved to a total height of about 2.5-2.8m, abutted the edges of the exedra. They were built with the same tech-

11. For a description of the northern building see Crowfoot 1938: 227-229.

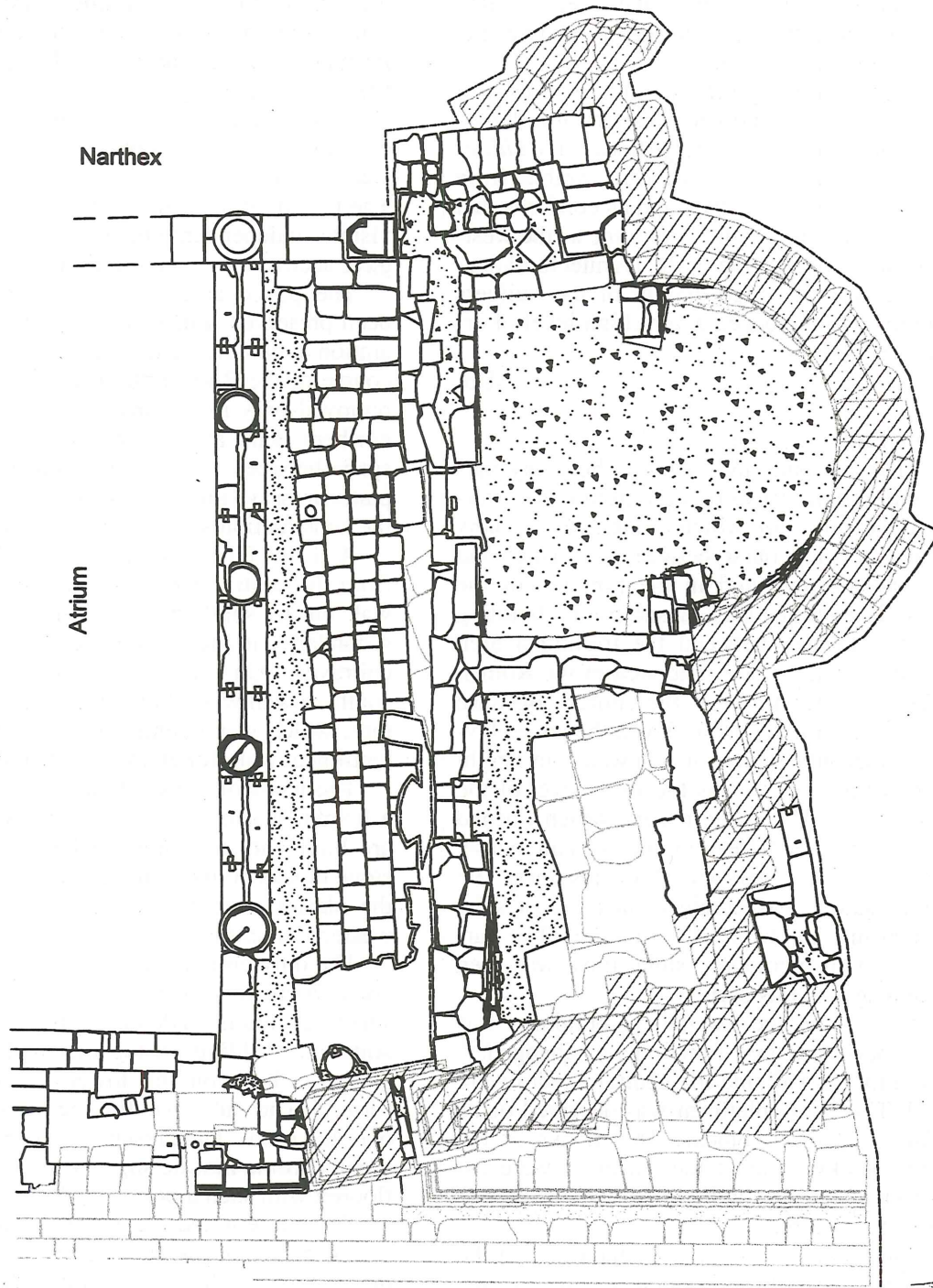
12. The destruction started from the third courses of blocks of the Roman platform. We cannot exclude the possibility that a door was created after a partial collapsed of the Antonine wall.








13. The same type of architrave has been reused also in the stylobate of the southern portico of the atrium (see below).

14. The presence of this cornice, together with two other elements of the entablature of the major order of the Roman

building, reused in the northern wall of the Byzantine structures attests to the partial demolition of the Antonine complex.

15. The few mosaic tesserae still *in situ* composing the mosaic measure less than 1cm; the preparation is made of three layers: a stratum composed of building material (about 10cm thick), in which fragments of the mosaic itself are visible; in some parts of the northern sector of the room a second mortar surface is identifiable, with a high percentage of ash; above it was laid a very thin layer (about 0.5cm) of mortar into which the tesserae were inserted.



Byzantine phase	 Reused walls	 Byzantine
	 Pavement	 Reused structures
	 Foundation fill	

6. Jarash. Trapezoidal square. Byzantine phase top plan.

nique of the northern wall: a double thickness of blocks. The blocks of the foundation of the exedra have been chiselled off, following the shape of the standing structures. Gaps were filled with a mixture of earth and stone chips, then covered with plaster. Evidence of an earlier facing is visible on the wall of the exedra and on the eastern one, here covered by a later structure.

The staircase on the east side of the apsed part was created by butting the elements of the lower flight against the remaining blocks of the upper part of the platform. The first flight is composed of seven steps, and three other steps separate two small landings. The entrance to the stairs is on the northern side, starting from the ambulatory of the narthex of the church.

The presence of at least a second floor in this phase (reached by the stairs) is attested by fragments of a mosaic pavement found in the structures collapsed over the Umayyad levels. Moreover, the discovery of elements of the *epistylum* of the Antonine complex, in the most upper layer formed by the collapsed structures, indicates that the building still preserved its earlier height (about 12.45m from the Roman *stylobate*, i.e. 12.90m from the mosaic floor)¹⁶ when it was reused, in this later phase, to build up another floor.

On the north side of the two described rooms there is evidence of a portico (about 15m long and 2.50-2.90m wide), parallel to the central axis of the square and separated from the courtyard by four columns (inter-axis about 3.08m). Only the reused bases (all different) of the columns have been preserved, with the plinth re-cut to an octagonal shape. The bases are located on a *stylobate* constructed reusing 16 limestone architraves displayed in pairs with the fronts facing inwards.¹⁷ A structure made with small limestone blocks aligned in four courses is the only preserved part of the floor of the portico.¹⁸ On the west side the latter is connected to the western wall of the atrium by a short fragment of wall.

This *stylobate* abuts against the *stylobate* of the narthex on the east side. The latter is composed of square limestone blocks set on top of a carefully built platform.¹⁹ The narthex abuts against the north wall of the rooms related to the southern building; a pilaster with semi-column (obtained from the same block) was built up to correspond with it.

The complete structure of the atrium is composed of three porticoes, similar to the one recorded also in the church of Saint Theodore (Crowfoot 1938: 220); but here it seems that the southern and northern porticoes were added in a second phase, after the completion of the structures inside the Antonine complex and the narthex of the church.²⁰

A phase of restoration is recorded also in the apsed room. Here two pillars were inserted to divide the sector into a northern anteroom and a southern apse. The two structures abut against the lateral walls, covering the plastered surface, and are built above blocks laid irregularly and cutting the mosaic floor.²¹ On top of the western pillar a limestone cornice is still visible, with the shaped profile facing north. In the collapsed structures some parts of an arch bearing the same decoration were found during the excavation. The two pillars subdividing the room probably supported an arch (4.30m high). Above it was probably built the upper floor.²² The second floor already existed at that time, as attested by the presence of the stairs. This evidence suggests that the arch was probably built to support some transformation carried out in the second floor.

Related to this restoration, but in any case carried out after the building of the arch, a new layer of coloured plaster, featuring geometrical and naturalistic subjects, was applied to the walls of the anteroom. On some fragments of this decoration found in the collapsed levels Greek inscriptions have been identified (Fig. 7). In the western room three blocks bearing some red painted Greek in-

16. The height is reconstructed until the cornice of the major order.

17. The architraves probably come from the dismantling of one or two unknown decorative orders. They all preserve the holes for the cramps and the one for the hand lever used to insert the elements of the frieze. The lengths range between 1.48m and 1.64m. The moulding of their crown is very similar in all the elements, but some dimensional variations have been identified and it is still very difficult to interpret them.

18. The pavement, preserved at a lower level than the *stylobate*, than the thresholds of the rooms and than the blocks of the Roman platform used as foundation of the northern wall, is probably the preparation for a floor later removed and no longer visible.

19. The platform of the narthex was excavated in the 1994 season.

20. The posteriority of the southern *stylobate* together with the different building technique and the presence of a cut in the pavement of the portico demonstrate the later construction of the southern colonnade. At the moment it is not possible to propose a precise chronological span.

21. No evidence relates to other pavements referred to this phase; it seems possible to suggest that the earlier mosaic was still in use in this phase.

22. The keystone of the arch was probably 3.85m above the mosaic level. The level of a complete ring of a U-shaped staircase preserved on the east side of the room corresponds probably to the level of the second floor (about 4.20-4.50m above the mosaic).



7. Jarash. Trapezoidal square. Inscribed plaster from the abandonment sand deposition in the apsed room.

scriptions were also found among the levels of collapse. Other fragments of painted plaster were found in the portico.

The circular room, on the northern side of the atrium, excavated by the Anglo-American team has been interpreted as a *diaconia*, based on the inscription decorating the sixth century mosaic paving the structure (Welles 1938: n. 331 dates it to AD 565). By contrast, we do not have any direct evidence suggesting the possible function of the complex in the recently excavated sector,²³ but it seems certain that it was connected with the ceremonial tradition of the adjacent church.

More data are available to propose a chronology for the transformation of the Antonine buildings into a religious complex. The layers created after the building of the northern and eastern walls contained numerous pottery fragments, securely dated to the third and fourth quarters of the sixth century (Fig. 8). The chronology of the mosaic of the *diaconia* thus belongs to the phase of the building of the complex and corresponds to the mosaic laid in the southern apsed complex. Further restorations and transformations cannot currently be precisely defined. It can be generally said that they took place at any time between the building of the northern *diaconia* and the Muslim conquest.

M.M.

Umayyad Phase

Several alterations, dated to the Umayyad period, changed the function of the existing structures. In the apsed room the mosaic was removed.

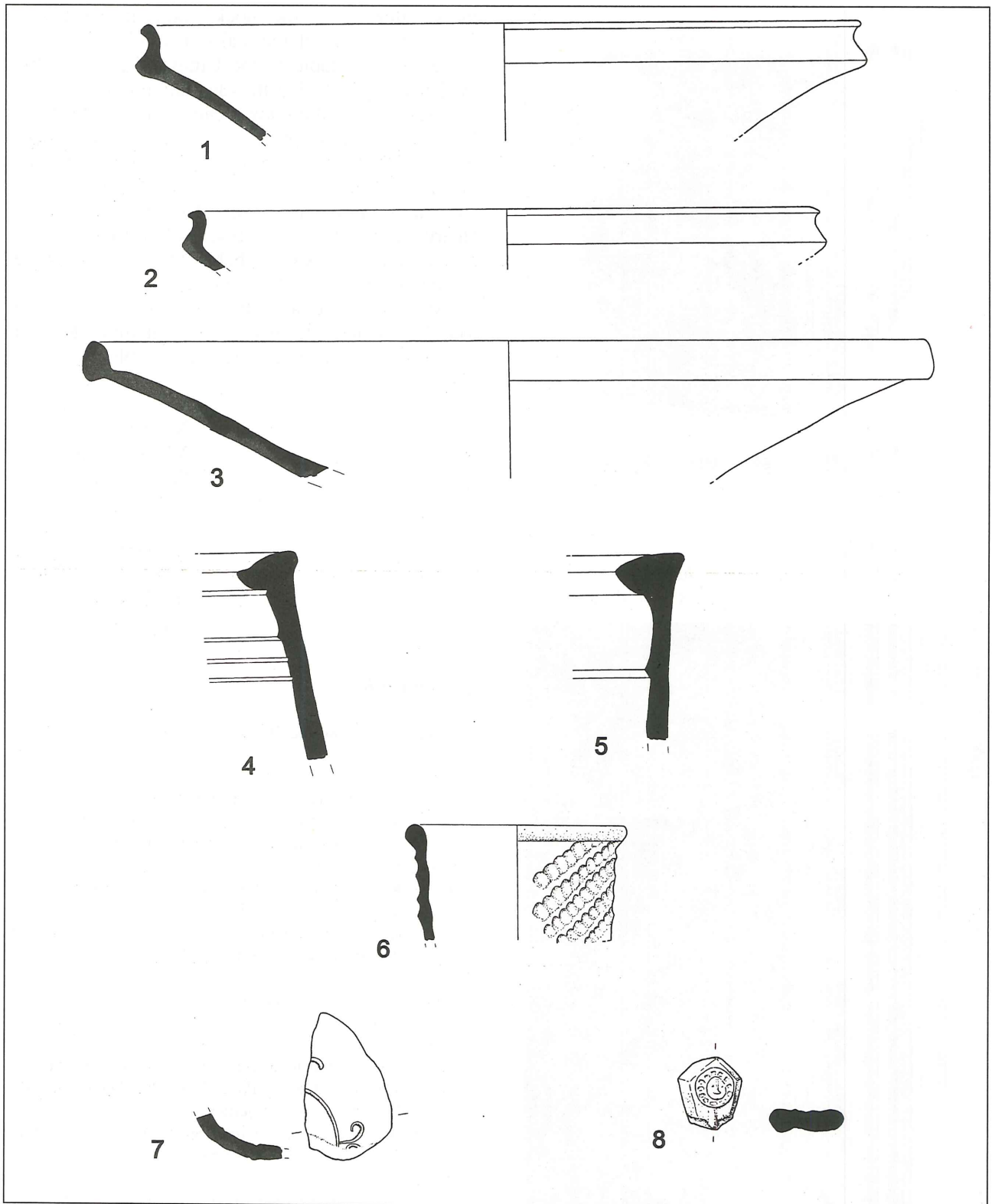
In the northern part a beaten earth floor was created, covering the remaining part of the Byzantine pavement. In the northwestern corner a small rectangular wall was built with reused fragments of limestone, including a part of a marble Roman statue of a male figure; in this limited sector was found a small jug decorated with white painted wavy lines on the body (Fig. 9). In the opposite side of the same room the base of a *ṭābūn* (i.e. a mud-brick oven placed directly over the beaten floor) was excavated. In the western room the pavement was removed. On both the rooms, plaster still covered the walls, as shown by the debris in the later layers.

The pavement was also removed in the portico. Here on the western side a series of pit kilns was dug simultaneously; in the same area, small walls were built to block up the colonnade.

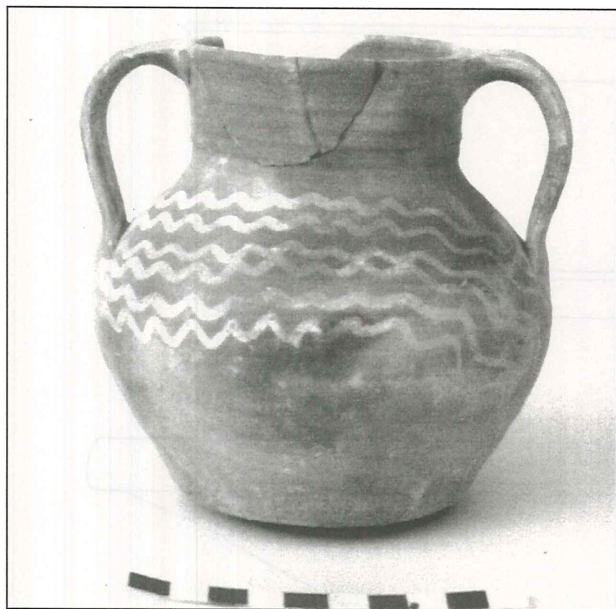
After this occupation came a phase of abandonment, attested by the presence of aeolian sand deposition along the walls. On top of this layer were found fragments of painted wall plaster, which probably fell off the wall. Similar evidence appeared in the western room: here again a thick layer of sand mixed with clay attests to the abandonment of the area. A partial collapse of the building has been recorded in the apsed room, where the Byzantine arch fell down together with column fragments, probably from a colonnaded structure on the upper floor. Related to this first limited collapse, a partial use of the area has been recorded in the western room only. Here elements of the collapse were reused to create two benches

23. The restoration of the plaster fragments (related to the wall paintings) is ongoing. Despite the poor preservation

of the fragments, the inscribed parts could be useful to clarify the function of the building.



8. Jarash. Trapezoidal square. Sixth century pottery from the filling of the foundation of the Byzantine wall in western room: 1. Jarash carinated bowl with thin red slip, diam. 26cm, red fabric - 6th cent. AD; 2 - Jarash semi-carinated bowl, traces of red slip, diam. 22cm, red fabric; 3. Jarash bowl, large knobbed rim with very thin red slip, diam. 30cm, red orange fabric - AD 570/600-625; 4. basin, flat undecorated rim, wheel lines on the body, diam. >40cm, grey fabric - mid 6th/ early 7th cent.; 5. basin, undecorated flat rim, diam. 44cm, brown fabric - mid 6th/ early 7th cent. AD; 6. cup, round rim, impressed decoration on the body, diam. 8cm, grey fabric - Byzantine period; 7. lamp, base fragment, brown fabric - Byzantine period; 8. lamp, fragment of a figured handle, red fabric - Byzantine period.



9. Jarash. Trapezoidal square. Umayyad jar from central apsed room.

along walls (Fig. 10).

A second general tumbling down of the Byzantine walls all over the complex is indicated by



10. Jarash. Trapezoidal square. Late Umayyad phase: collapsed elements reused in benches in the western room.

24. It is not clear if the inscription faced the portico or the apsed room. The study of this inscription is currently in process.

the smaller size of the blocks found in the debris. On the east side of the stairs this collapse sealed some basins datable to the Umayyad period. This evidence suggests that this destruction phase could be a result of to the known earthquake in AD 748/749. A Kufic inscription incised in the white plaster covering the southern wall of the portico fell off during this collapse.²⁴ The earthquake probably destroyed a large part of the Byzantine structure. Hearths and a few other traces of further occupation of the complex, probably by squatters, were recorded in the area of the portico.

Another earthquake, dated sometime before the Mamluk period, destroyed the remaining Roman structures and made the area inaccessible.²⁵

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25. Evidence of Mamluk pottery on the surface of the last collapse layer indicates the anteriority of the latter.

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