

THE Umayyad Mosque of the Citadel of Amman

by

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Introduction

The campaign for the excavation of the mosque in the citadel of Amman took place between 19 October and 13 December 1997. The work was directed by Dr Antonio Almagro, Director of the School of Arabic Studies (C.S.I.C) of Granada, with the assistance of Pedro Jiménez Castillo, responsible for the fieldwork. The team was composed by Alvaro Jiménez, Andrea Moratalla, Belen Fernández, Juan Antonio Fuentes, Nouf Naser Jamil, Basim Muhameed and Hanadi Tahir, archaeologists; Angel Rubio, draftsman; Ignacio Arce, architect responsible of the restoration fieldwork; Ghassan Ramahi was the Representative of the Department of Antiquities. The campaign has been financed by the Spanish Ministry of Culture.

Architectural Description

The mosque of the citadel of Amman occupies almost the whole of the southern side of the square that constitutes the centre of the upper town (Fig. 1). It can be considered as the highest part of the citadel. The building is in an advanced state of destruction, due largely to its dominating position and intensified by both, natural erosion and human action.

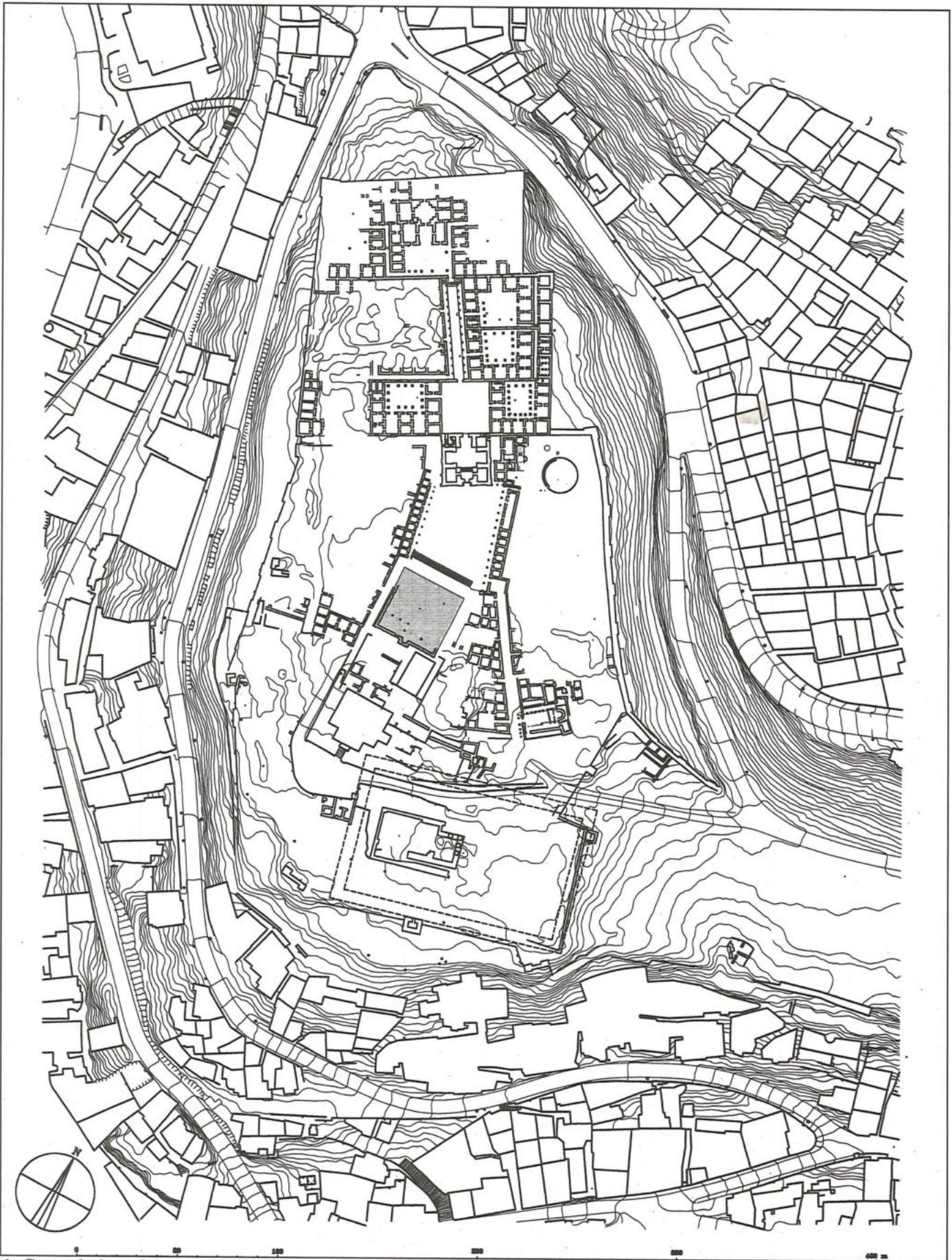
In spite of slight irregularities that can be observed, the ground plan of the mosque is practically square, with sides of 33.60 m (Figs. 2-5). The building was set on a horizontal platform, approached on the northern side by the flight of steps which gives access to it from the open square located between the mosque and the palace. At the northern end of the eastern side, the platform seems to have been set over a series of

constructions dating from Byzantine times, which were filled in and where the same walls of these buildings served as retaining walls. It seems that later on a thick wall existed, of which only the southern end remains. On the western side, the platform can be observed as being scaled, limited by the wall of the mosque itself and by the wall of the other side of the street flanking the building, leaving this street with an intermediate level between the floor in the interior of the mosque and the dwellings to be found on the other side of the street.

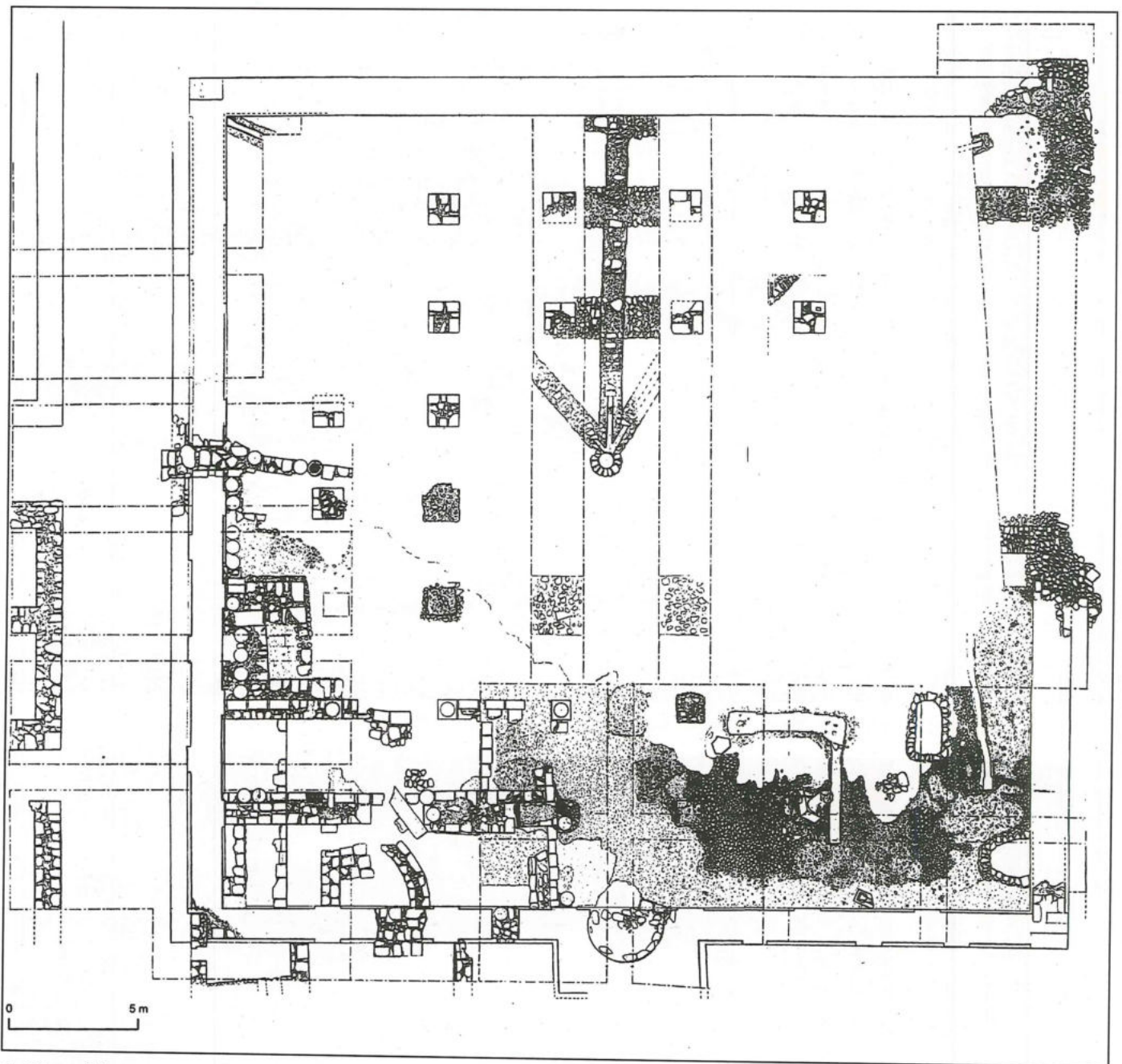
The mosque is laid out in an almost perfect setting in a north-south orientation, modifying the direction in which all the buildings situated in the northern part of the citadel are laid out. The adaptation to this new orientation was also the reason for the trapezoidal shape of the square which had to be converted into an element of transition and adaptation between the different palace buildings, which follow the arrangement of the Roman *temenos* adapted to the topography of Jabal al-Qal'a, and the mosque laid out in the established orientation towards the Mecca.

The design of the mosque is based on a perimeter wall enclosing a unitary inner space set out as a hypostyle hall, with lines of columns parallel to the perimeter walls. It is slightly off centre to the north, where there is a courtyard or *aş-Şahn* formed with the suppression of four columns and the corresponding covering.

The perimeter wall is considerably thick and has small buttresses on both the outer and the inner faces, placed alternately, in such a way that, with the exception of one part of the wall of the *qibla*, an inner and an



1. General plan of the citadel showing the situation of the mosque.



2. Plan of the mosque after the excavation.

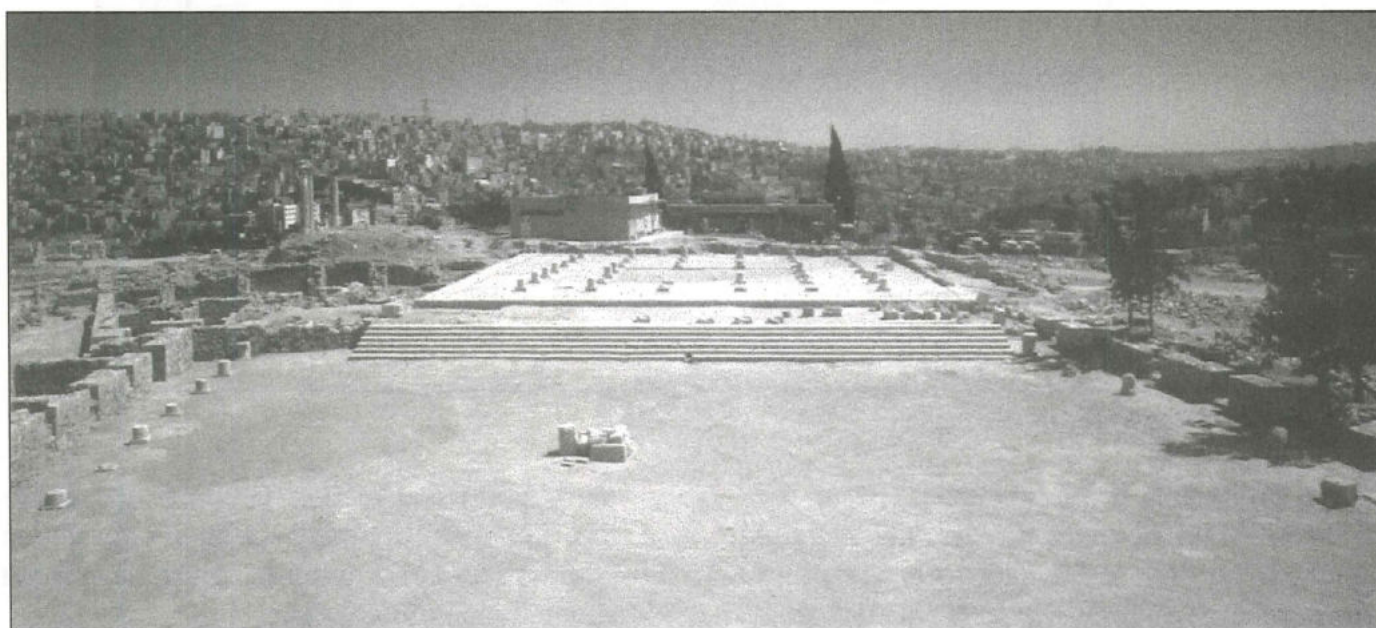
outer projection never coincide. There are projections on the outer corners, and as these coincide on both sides they form a type of thick pillar. On both the east and the west façades there are five projections, since in the place where there should be one, there is a small doorway, which coincides with the transverse axis of the courtyard. The northern façade has been razed to the foundations, and therefore it is impossible to be certain of the exact wall arrangement, although we shall deal with this subject when we study

the hypothetical reconstruction of the building. The main doorways, which we imagine could be three in number, must have been situated along this façade.

As we have already mentioned, the inside of the mosque offers a hypostyle hall. The columns, coinciding with the inner projections of the perimeter wall, are set in six rows in a north-south direction, and in seven rows in an east-west direction. Therefore, the separation between the columns is greater in the east-west than in the north-south di-



3. General view of the mosque from the upper part of the entrance hall soon after the excavation.



4. General view of the mosque and the square from the upper part of the entrance hall after the restoration.

rection. This difference in width between the columns is partly compensated for by the greater width between the central columns, which coincides with the path leading towards the *mihrāb*. The fact that there is a projection on all the perimeter walls leads us

to believe that the columns supported arches in both directions. Only three columns have appeared *in situ*, so we have had to deduce the situation of the rest from the location of their foundations.

In the middle of the mosque, but one sec-



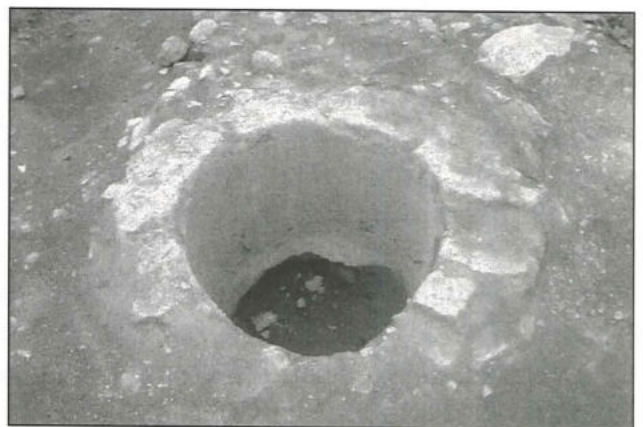
5. The mosque from the south-east corner.

tion further to the north, there was an open courtyard or *aş-Şahn*. To do this, four columns were eliminated, two from each of the fourth and fifth rows parallel to *al-qibla*. In this way, we have a prayer-room that is three sections deep and seven wide, a courtyard of three by three sections and three *riwāqs* two sections deep. The lack of foundations of four corresponding columns proves the existence of this courtyard. In the centre of the courtyard, there is a cistern with a fairly narrow outlet (Fig. 6), similar to many others to be found in different buildings in the palace. Another cistern has been located in the western area in what may be considered as the prayer-room, and could have been a reused previous construction. In the north-eastern corner, practically in the centre of *ar-Riwāq* nearest to the courtyard, there is a small deposit excavated in the paving and well plastered, and which was undoubtedly used for ritual ablutions (Fig. 7).

In the centre of *al-qibla* wall there is a large *mihrāb* of 2.90 m wide (Fig. 8). Judg-



6. The central cistern of the *aş-Şahn* with the chan-



7. The basin found on the eastern *Riwāq*.



8. *Al-Mihrāb*.

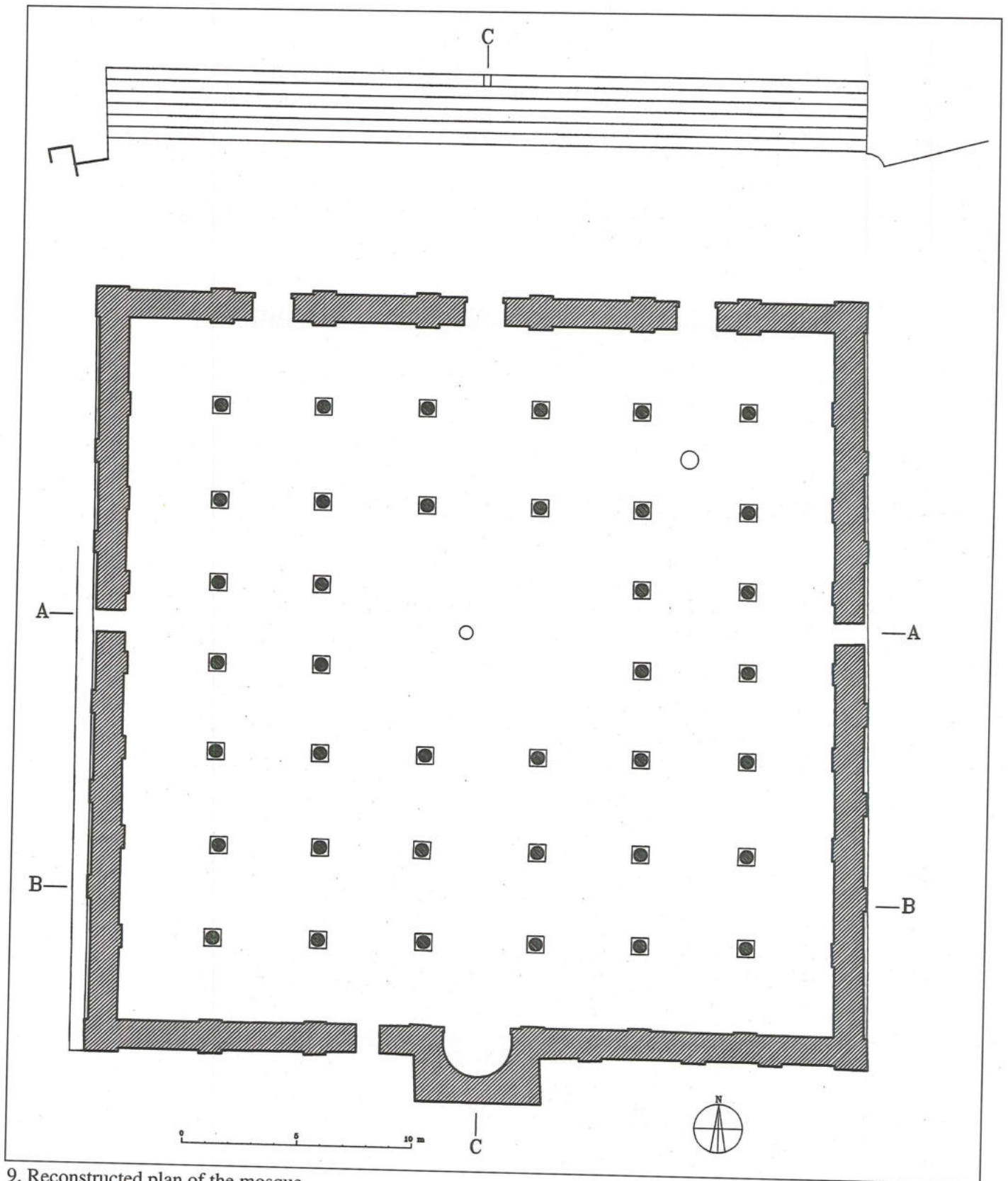
ing by the remains of the paving, it seems that *al-mihrāb* had a small step or ledge of no more than 5 cm which raised it higher than the rest of the hall. On the ground and aligned with this step, are traces of the presence of a decorative element in wood or marble. used as a. *Al-mihrāb* can be seen on the outside in the form of a mass of masonry projecting from the perimeter wall of the mosque, and constituting the only element which breaks the monotonous simplicity of the ground plan. It is worth mentioning the large dimensions of this *mihrāb*, which is almost the size of a small apse. The interior of the mosque has a paving composed of four layers of lime and small rubble stones.

The columns of this building are extremely simple, the same as the majority of those used in the palace. The base consists of a simple prism joined to the shaft of the column. It is a cylindrical shaft, without any entasis, 0.54m in diameter, stemming from this prism. The lower part was carved in the same block as the base. We do not have any details of the possible height of the columns, although judging from those existing in oth-

er parts of the palace, we could estimate them to be about 2.40 m.

A fragment of a capital, that can be assumed to have belonged to the mosque, has been found, although it was discovered outside the site. It consists of a prismatic abacus with a small moulding in the shape of a donut, decorated with a string of pearls. At the corners of the lower part of the abacus there are some stylised *fleur de lys*. The corners of this element have small concave angles which apparently could have been the bases of arches supported by these columns.

In fact, the remains of this building which have lasted up to the present day are hardly sufficient to enable us to create a true reconstruction of it (Figs. 9-10), particularly since the site has changed considerably in both, in ancient times and more recently. This has meant the disappearance of important elements of the mosque, and even of the rubble itself, which could also have supplied us with information about the ruined parts. In spite of the lack of evidence, we believe that we should establish some hypotheses regarding the form and organisation of

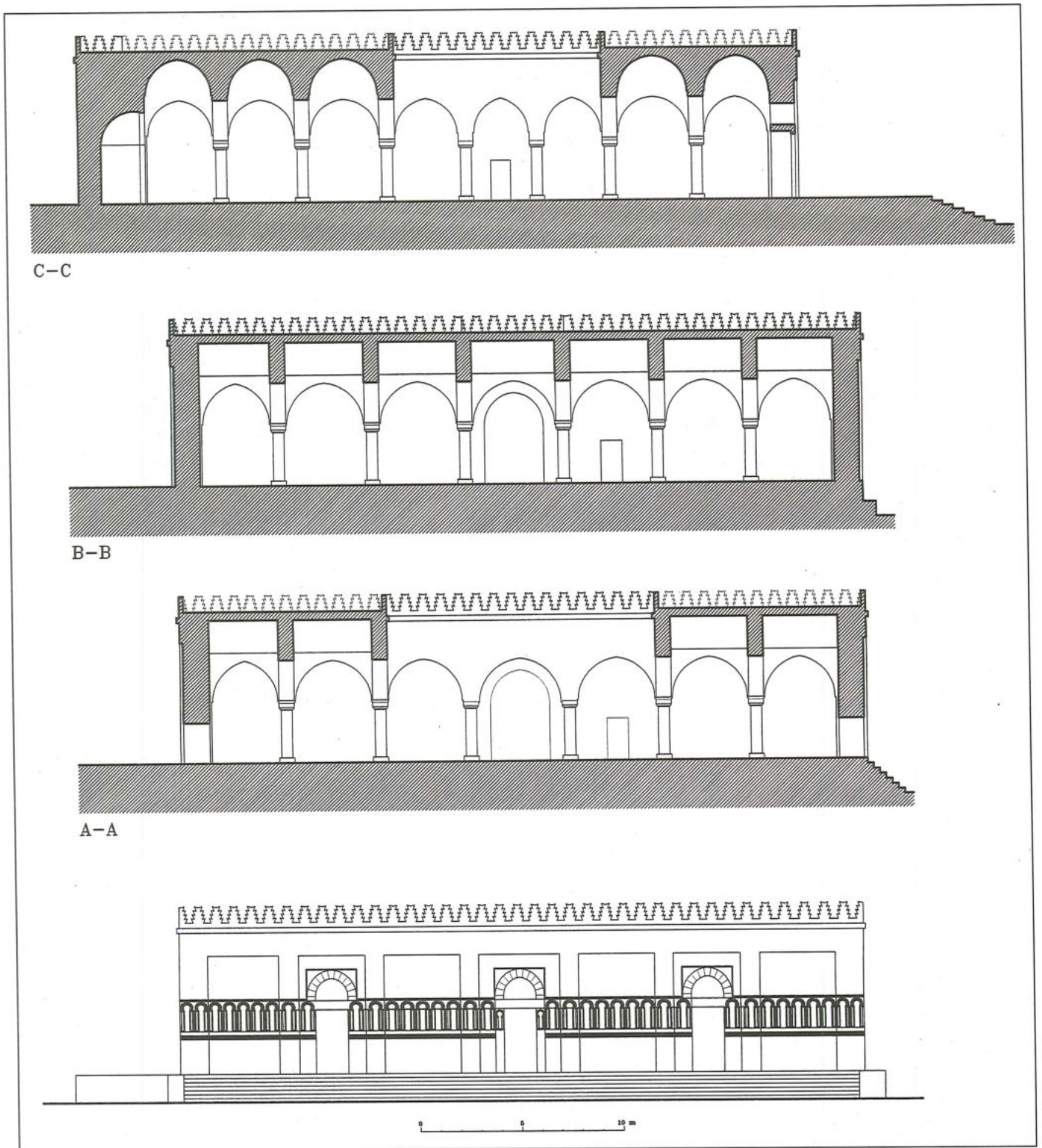


9. Reconstructed plan of the mosque.

the covering of the building as a basis for future discussions.

It is obvious enough that we are faced with a hypostyle mosque (Fig. 11), without

any clear predominant orientation for the structural elements. All the perimeter walls have attached pilasters, which seems to indicate that in both directions there were or

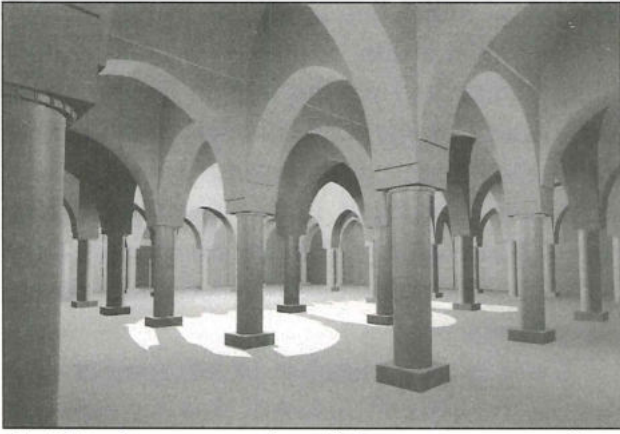


10. Reconstructed façade and sections of the mosque.

could have been covering structural elements. Only a few decorative fragments which appeared during the excavation seem to confirm the fact that the columns supported arches, some or maybe all of which were covered with carved plaster-work. The

existence of pilasters, as we have already mentioned, can be seen on all the inner surfaces of the perimeter walls, and leads us to believe that there must have been arches in both directions defining vaulted spaces.

The discovery of the cistern in the court-

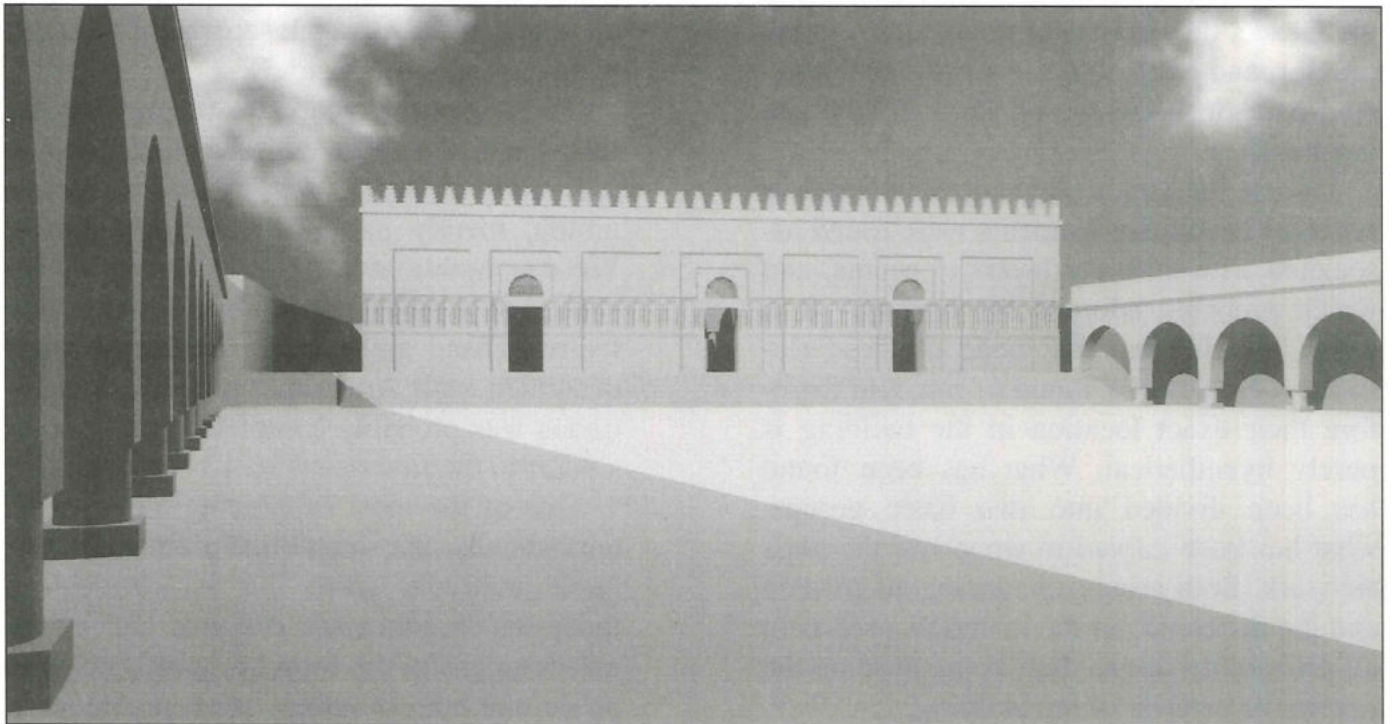


11. Virtual reconstruction of the prayer room and aş-Şahn (image made by J.A. Fernández).

yard (*aş-Şahn*) has meant that we have been able to learn about the hydraulic system designed to take advantage of the rainwater from the courtyard and from the terraces of the building. In the north-eastern angle of the mosque, the bottom of a drainpipe has been found which collected the water from the terrace, and which ran out into a drainage channel. This channel, together with another symmetrical one, runs in a south-eastern direction towards the cistern situated in the centre of *aş-Şahn*. Another channel also exists, apart from the two already mentioned, which follows approximately the

northern orientation of the building towards the main façade. No doubt this was meant as an overflow to take the excess water from *aş-Şahn* cistern towards the square.

Both, the lateral walls of the mosque and the back one seem to have had a similar arrangement. They were made of masonry and probably plastered on the outer and inner surfaces. The fact that they were rubble masonry walls, rules out the possibility of having any decorative elements carved in stone, in our opinion, although decoration in plaster could have existed, as undoubtedly there were in the interior. It is, however, more complicated to establish a hypothesis with regard to the main façade of the building. We know no more than its length, since only the foundations remain. From the analysis of the different decorative pieces which have appeared in the immediate surroundings, although always separate from the mosque itself, we can formulate a theory regarding the organisation of the decoration, based on the analysis carried out by I. Arce (Fig. 12). The main doorway would have been flanked by two small, carved, false arches, both the arch and the jambs incorporated in one block to-



12. Virtual reconstruction of the façade of the mosque (image made by J.A. Fernández).

gether with the small column of the other larger false arch. Therefore, on both sides there were larger blind arches and projecting pilasters with a false arch in each. After that, there would have been a stretch without a door, with five blind small arches, and a pilaster, again with a blind arch, serving as the jamb of the side door.

The mosque was basically constructed with rubble masonry made firm with good quality lime mortar. The joints between the stones were filled with plenty of mortar, so as to achieve a surface which was sufficiently smooth to be plastered afterwards. The corners of the building were finished off with ashlar cut from a type of stone which was considerably softer than the majority of the masonry. The columns and bases were cut from a harder limestone.

Architectural Decoration

Undoubtedly, the mosque boasted abundant decoration very similar to what was adopted in the different parts of the palace, which confirms the fact that both buildings were contemporary. The decorative elements can be divided into three basic groups: a frieze of blind arches decorating the façade, the capitals of the columns in the interior, and a set of plasterwork which covered part, or the whole of the wall face and inner arches.

During the archaeological excavations, a series of decorative elements were found associated with different layers of rubble, and which probably adorned the oratory. It is worth pointing out that none of these elements were actually found *in situ*, and therefore their exact location in the building is purely hypothetical. What has been found has been divided into two basic groups: what has been carved in stone and the plaster-work. Both groups are analogous in style and the difference in the materials used is in all probability due to their being used on the interior or exterior of the building.

The plaster-work comes from two differ-

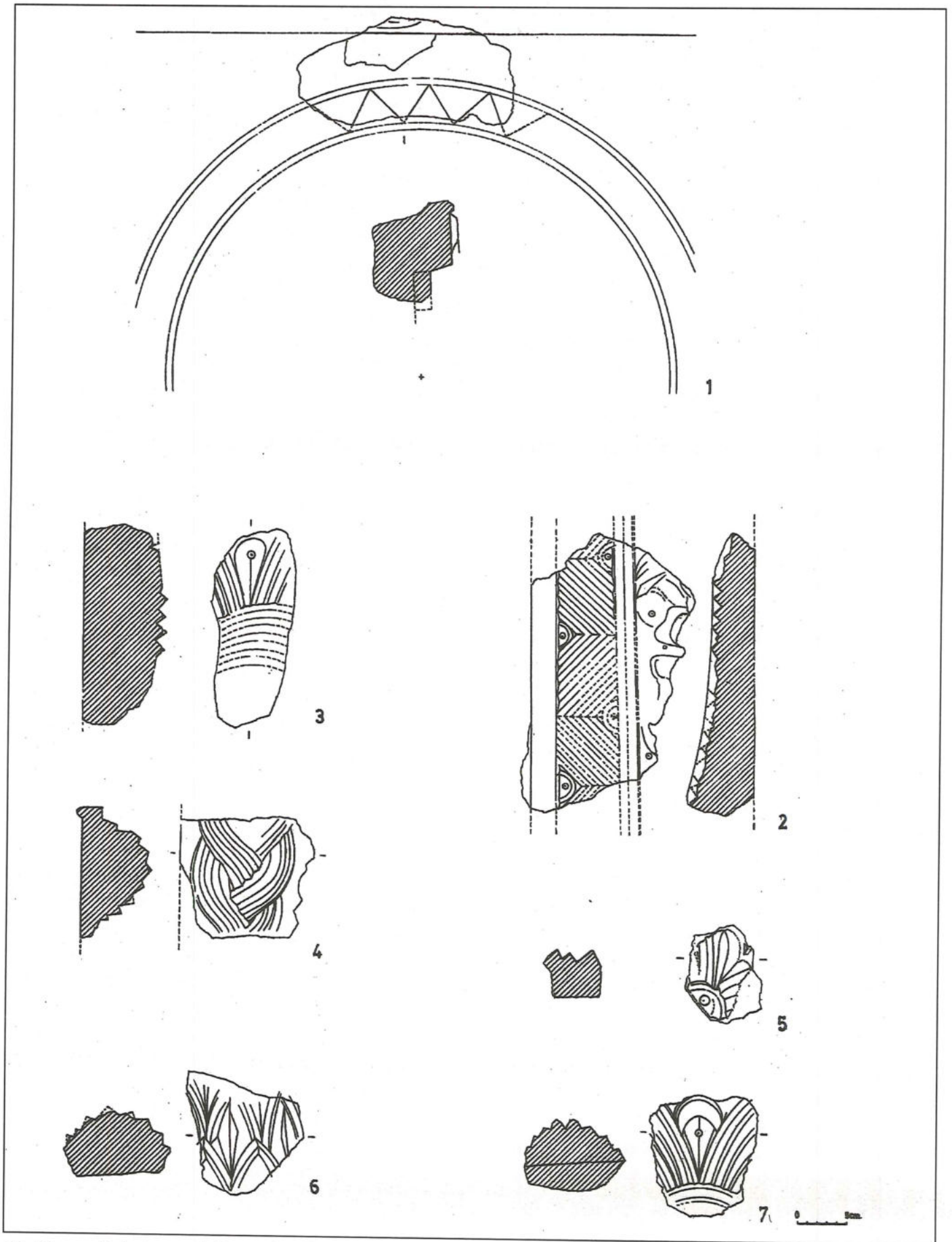
ent parts. Some has appeared in the interior of the prayer room, filling up a shallow hole in the Umayyad paving and in the inside of the cistern, together with abundant rubble from the work on the oratory and pottery from late Umayyad times. Finally, another group has been found in the courtyard of the mosque, with the embellished side facing the ground.

There is a remarkable arch fragment with part of the smooth spandrel and the archivolt arranged in a recessed surface and decorated with triangular saw-teeth; in the same way as with pieces from the interior of the entrance hall of the palace. It is likely that the piece we are dealing with had a second concentric archivolt similarly decorated (Fig. 13.1).

One group of fragments corresponds to small half columns with decorated shafts, in some cases with a rhombus pattern, including a double plaited rope and several bands of superimposed moulding. Some of these pieces still have the carved capital consisting of one single leaf which is oval at the axis, flanked by groups of curved moulding, the crown of which is not conserved. A simple moulding with a triangular section takes the place of the astragal, separating the shaft from the capital (Fig. 13.3).

The rest of the pieces are fragmentary remains which almost entirely correspond to the bands of pearls and stylised vegetable motifs, mainly palm and acanthus leaves. We can highlight a piece of intrados consisting of a side band with a zig-zag geometrical band and part of the central band decorated with Arabesque patterns. The intrados was probably completed with a band similar to the first one (Fig. 13.2).

One of the most fascinating elements is, undoubtedly, the small blind arch with a serrated archivolt, since this is identical to those which adorn the entrance hall of the palace opposite the mosque, which helps to prove that both buildings are contemporary. This is a motif of Mesopotamian origin to be



13. Pieces of plaster-work decoration found in the mosque.

found in Sassanian, Abbasid and especially in Umayyad constructions.¹

Since none of the fragments appeared in their original position, in order to establish the whereabouts of the plaster-work in the mosque, it is necessary to consider the morphology of the pieces, the place where they were found and parallels in analogous buildings.

It seems logical to assume that decoration should have been concentrated on the wall of *al-qibla*, and especially on the *mihrāb*, in the same way as in the mosque of al-Fudayn in al-Mafraq, with which there are stylistic similarities, as we shall see in the next section. We can assume that the attached colonettes would have flanked the *mihrāb* and that the wall would have been similarly decorated. The piece of arch must have formed part of a frieze running round the upper part of the wall of *al-qibla*, which most probably had blind arches alternating with narrow windows.

The piece of intrados may belong to any of the arches of the hypostyle hall, although it is also possible that they may have decorated the arch of the *mihrāb*, so we cannot be certain that the whole series of arches were decorated. If the set of plaster-work found in the area of the courtyard was in the place where it fell, we could assume that at least the arches and spandrels of the façades of the courtyard were embellished with plaster-work.

The set of plaster-work was narrowly related to the decoration of the recently excavated mosque of al-Fudayn, in al-Mafraq, both regarding the repertoire of motifs and the making of the plaster, which is less delicate than that of other Umayyad plaster-work to which it is related, such as Qaṣr al-Ḥayr al-Gharbī or Khirbat al-Mafjar. In al-Mafraq the lower part of the wall of *al-qibla* is conserved, including the *mihrāb* with the

plaster-work that adorned it. There, we can see the *mihrāb* set between attached plaster colonettes with the shaft decorated with motifs similar to those in our piece (Fig. 13.7). The stretch decorating the wall of *al-qibla* is bordered by a geometrical moulding similar to that of the intrados in Amman, and the framed acanthus leaf which can be seen next to the small column in al-Mafraq is identical to another of the pieces of plaster-work which we have recovered.

The decorative repertoire which we have described is basically of a Persian tradition, just as, in fact, is the use of gypsum plaster-work, and there are numerous parallels to be found in other buildings from the Umayyad period, as revealed by Almagro and Northedge who dealt with the subject of the decoration of the entrance hall. Generally speaking, we can confirm that the decorative repertoire of Amman, apart from some obvious differences with regard to quality and quantity, reveals a close similarity to that of Qaṣr al-Ḥayr al-Gharbī or Khirbat al-Mafjar, which are at the same time traditionally Sassanian, as explained by Hamilton when dealing with this subject. The nearest Iraqi and Persian influence which is most related to al-Mafjar is, according to Northedge, to be found at Kish, Ctesifonte, Tepe Hissar (Damghân), Chal Tarkhan, Tepe Mill and Nizâmbad.²

However, we should consider the set of plaster-work from Amman to be especially related to that of the mosque of Mafraq and of the Palace of al-Qastal, two monuments which are, moreover, near the capital of Jordan, the date of which has unfortunately not yet been set with exactitude. Therefore, decorative parallels date back to the later part of the Umayyad period, although greater precision is difficult, given the fact that there was hardly any variation in the ornamental repertoire from the Sassanian up to the early

1. See the parallels mentioned by Almagro (1983: 98), to which we must add the examples with serrated archivolt from al-Qaṣṭal (Carlier 1984: 343 -

383; Figs. 33 and 34).

2. Northedge 1992: 97.

Abbasid period, as can be born out from the ruins at Ukhaydir.

Architectural Parallels

Straightforward observation of the plan of the mosque demonstrates its clear difference with respect to the majority of the mosques that we know from the Umayyad period in the area of Syria, Jordan and Palestine. The fact that the mosque of the citadel has a ground plan which is practically square, relates it to the great mosques built in the first years of the Islamic expansion in the newly-founded cities such as Kufa and Wasit³ and others which seems to be derived from them, like Medina.⁴ With the previously mentioned mosques it also has in common the relatively integrated character to be seen in the patio and *ar-Riwāq* with the prayer-room. Another series of mosques have in common with the Amman citadel the layout of *ar-Riwāq* with a double aisle, characteristics which again can be observed in the mosques of Kufa, Harran, Susa, Baghdad, Raqqa, Der'a and Uskaf Banni Junayd, and partially in those of Anjar and Bosra⁵ But the more similar in most of the details are those of Susa and Siraf.⁶

The type of column, which is similar to that largely used in the citadel, both when built of plastered masonry and with ashlar stonework, undoubtedly corresponds to the type of oriental origin, of Sassanian tradition. The construction of these columns in cut stone has meant that they give a more slender effect than is achieved in the courtyard of the buildings in the central area of the citadel. There were more or less similar columns in the Iraqi mosques, particularly in Kufa and Wasit, where they were also made of stone; however they are lacking a base. Those of the mosque in Susa were not like

these, but they again were very similar to the columns of the mosque in Amman.

Al-mihrāb is another point of comparison. It was first used in the mosque in Medina in 707-709, which gives us a chronological basis to work on. The first projecting *al-mihrāb* are the ones in the mosques of Jabal Says⁷ and Anjar, after which they appeared with frequency in both the smaller mosques, such as al-Ḥallābāt, Umm al-Walid and al-Mafjar⁸, and in the larger ones in Harran and in the lower city of Amman.⁹ Hardly anywhere have we found such an enormous *mihrāb* as this, even in the greatest oratories. Only in the mosque in the lower city of Amman does the *mihrāb* exceed this citadel one in size, which seems to correspond to the geographical area, since in proportion, that of the mosque of Hallabat seems to be equally large in size.

An analysis of these points allows us to establish some parallel typological characteristics in contemporary constructions. The type of ground plan, the arrangement of the areas and the columns have oriental influence, with particular similarity to the Iraqi types, clearly in agreement with what is to be observed in many of the palace buildings. Features of more local influence, such as the circular *mihrāb* of large dimensions, and the use of masonry, reflect the same as what happens in the palace, a symbiosis of diverse cultural influence that takes place in the architecture of the Umayyad period in the citadel. This, together with the establishment of the building within the urban plan designed for the citadel, in which both the palace and the mosque become singularly important elements, means that they must be considered as contemporary. The characteristics that we have noted down, of a certain chronological value, as in the case of the

3. Creswell 1989: 9, 40.

4. Creswell 1989: 44.

5. Creswell 1989:9, 218, 222, 240, 247, 267; Creswell 1969: 650, 479, 484.

6. Ettinghausen and Grabar 1996:230-231.

7. Creswell 1989:121.

8. Creswell 1989: 167; Creswell 1969:559; Bujard 1992:14.

9. Northedge 1992:63.

palace, point towards a date shortly after 709, but no later than 730.

The Excavation of the Mosque

At the beginning of the excavation campaign of 1997, we already assumed that the mosque of the citadel built in the Umayyad period would be in the area to the south of the great square. This assumption was based on the special relevance of the siting, on the thickness, solid character and orientation of some of the perimeter walls which had been revealed previously, and on the references made by some visitors at the end of the last century or beginning of the present one, in which they situated a great temple or colonnaded building in this area. Confirmation of this was clear from the first day of excavation, when we disinterred the *mihrāb* in one of the sectors situated on the wall of *al-qibla*.

Study of this religious building, however, has not been so straightforward, because we found the area to have altered considerably. In fact, having probably been ruined by the earthquake of 749 AD, the mosque was partially reoccupied in the Abbasid period and adapted for other types of residential use, which meant the removal of numerous elements of construction. But it has only been recently - since the 60s the area has been affected by the construction of military buildings - that the soil was removed by using mechanical means, and the excavation of foundations and constructions of offices and storerooms was done. Two-thirds of the surface of the building have been found to have changed, to a depth that is lower than the original ground level; the greater part of the wall enclosing the mosque on the eastern side had been totally destroyed, of the northern wall only the foundations remained, and just three of the 38 columns of the oratory were found *in situ*.

Once we have described the mosque as it was originally built, we shall go on to deal with the historical development of the building and the street which borders it on the

west, according to the data obtained during the excavation.

Destruction and Reuse of the Mosque

In the same way as other parts of the citadel, violent and sudden destruction shook the mosque, and judging by chronological data obtained from the associated material, we believe that it was related to the earthquake of 749 AD.

There was a particularly high level of rubble in the oratory and in the street bordering it to the west, since the interior of the mosque was cleared of rubble in order to be able to reuse it. In the street, however, the collapsed construction materials were not taken away, and instead, the rubble was levelled out to allow the public road to continue in use. As a result, the street level was obviously raised, though in an uneven way.

This layer of fallen debris which had been deposited directly on top of the original ground of the street is composed of a large amount of construction material, no doubt from the western boundary wall of the mosque: treated masonry and abundant lime mortar mixed with ashes, which gives it a characteristic greyish aspect similar to the remains found in analogous layers excavated in Building F and in the houses found west of the square. There is a scarcity of pottery remains, which is only to be expected, since we are in a public way, yet there is sufficient evidence to indicate a late Umayyad period.

However, inside the mosque interior there was no such layer of waste, although we were able to record the existence of a series of walls alien to the prayer-room, in spite of it being constructed directly on top of the Umayyad floor. Numerous constructive elements of the mosque were reused, such as bases and shafts of columns, fragments of cornices, etc. Some of the columns of the hypostyle hall were used *in situ*, and appear incorporated into the later building, but the majority were torn out of their original place and reused as ashlar in the walls. Therefore,

it seems clear that after the disaster that devastated the oratory, as was proved in the adjoining street, the interior of the building was cleared of rubble and its surface was re-occupied after its reform by building the structures already mentioned. The fallen remains were partially made use of in later walls, discarded in the market square - where a deep layer of rubble was discovered - and even thrown into one of the cisterns in the mosque. In fact, the cistern situated in the western part of the prayer-room appeared full of building material from the Umayyad construction: masonry, broken up lime mortar with ash, some fragments of a base cut in marble, and a collection of plaster-work which have been already mentioned.

As we have explained previously, approximately two thirds of the northernmost part of the surface of the prayer-room were destroyed by the present-day building excavations as far down as the lower level of the original paving. Because of this, although we were able to establish the layout of the mosque in this area according to the arrangement of the foundations, we are unable to specify the buildings that may have been carried out after the earthquake, since, as mentioned, they were placed directly on top of the Umayyad floor. With regard to the southern third of the building, we can confirm that the later construction was limited to the southwest corner, while the southeast corner seemed to be free of any structure. In this last sector, we only found some trenches that crossed the Umayyad paving, and were the result of the military occupation of the citadel during the later years, and there was evidence that the majority of the columns had been torn out, in all probability to be reused as building materials.

Later construction took advantage of the western half of the wall of *al-qibla* and the wall bordering the mosque on the western side. The latter was seriously damaged by the earthquake, as we were able to appreciate on excavating the adjoining street,

which explains why walls were built to reinforce the original ones inside the oratory. The south wall, on the contrary, does not seem to have been damaged as much as the western one, probably because there was not such a difference in the level between the inside of the mosque and the ground outside, as what had happened with the western street. Nevertheless, we could observe that in *al-qibla* there was a hole approximately 1.70 m wide, which had been repaired with ashlars and masonry. The doorway which had existed to the west of *al-mihrāb* had also been blocked up, no doubt to separate the new space which was built inside the oratory. Basically, the later building work consisted of the construction of two or three parallel bays, built in an east-west direction, and occupying the south-western corner of the mosque. Only the two southernmost bays are sufficiently conserved to enable us to define the whole perimeter, while there are only traces of the western end of the third one, due to the devastation of all this area in recent times.

The southern bay was a rectangular shape of 12.00 x 3.20 m, flanked by the wall of the *qibla*. The western third of it was divided by a masonry wall with an opening at the northern end, with its corresponding mouchette carved in stone. This opening gave access to an alcove, the western half of which was raised by means of a platform finished with hardened earth and defined by a partition wall of ashlars and which only faced outwards. Access to this bay was through an opening situated in the north wall, therefore communicating with the nave attached on that side. Here, we are dealing with a bay which is similar in shape and size to the previous one, in which there is an identical platform on the western side. Unlike the previous one, this does not seem to have had any dividing wall, but did have a platform like the ones previously described on the east end. The western face of the wall limiting it on the south side was formed of bas-

es of columns, with the base of the shaft from the old mosque, laid out and lined up. In this wall, there is the opening which communicated with the area situated further to the north, which seems to have been another bay similar to the previous ones, although this was only partially conserved. In the previously mentioned opening, there was a pivot hole carved in stone, a couple of ashlar arranged as a threshold and some slabs of stone which seem to have reinforced the paving in the most well-trodden way through.

We do not know whether there were more buildings to the north of the three bays mentioned because, as already stated, this area was destroyed underneath the paving of the mosque. However, it seems that at least the adjoining area was in fact reused, taking into account that the reinforcement of the inner side of the western wall of the oratory is prolonged as far as the door which communicates with the west street. The lower part of this reinforcement, as far as it has reached us, is formed by fragments of the shaft of the columns from the mosque, which are laid out vertically. To solve the difference between the ground level of the street and the inside of the building constructed inside the oratory, a stairway was built in front of the door and on the street level. This stairway, which is not exactly in line with the door, is built of reused ashlar and masonry, all of it joined with clay.

These buildings which have been described were constructed after the earthquake and the subsequent rubble clearing, i.e. they must have been built after 749. The ceramic materials linked to these buildings are very similar to those recovered in the earthquake rubble, therefore we can date them as early Abbasid.

There is insufficient evidence to allow us to specify the nature of the building, although taking into account the relatively

good construction and the raised platforms at the ends of the bays in the form of alcoves, we would be inclined to believe that it was a domestic type of building. The layout does not correspond to the typical arrangement of a house with a central courtyard, which was widely known in Umayyad times, according to what has been reported in the Amman citadel itself and other contemporary settlements, such as Pella and Gerasa. Nevertheless, the type of housing consisting of several bays side by side is characteristic of the traditional residential architecture of this region, according to information from ethnographical research.¹⁰ It is clear that the examples collected from the different sites cannot be dated further back than the Ottoman period, however, it may be that these houses, certainly less developed than those with a central courtyard, did exist in the Umayyad period; the rooms of the eastern bay of Qasr-Hallabat are arranged in this way. The area to the south of the mosque was reoccupied during this phase, although we only have partial information obtained from the excavation of a narrow trench on the outer side of the wall of the *qibla*. A masonry wall, which formed an opening with its corresponding mouchette, fitted into the south-western corner of the oratory that was partially dismantled to make use of the ashlar that should have been placed at this point. This opening gave access from the street to a space enclosed by the *qibla* and by two other walls, one to the east and another to the south. In the latter there was another opening with a span of 0.93 m. Therefore, it seems that we are presented with a double-bended hallway of a building which was to the south of the excavated area and which was, evidently, built later than the ruin of the mosque.

There is evidence of the later occupation of the building that was constructed in the interior of the old mosque, in all probability

10. Biewers 1987: 485-506.

for purposes different from the original ones. Therefore, a wall was built opposite the opening in the western doorway of the mosque, partially obstructing the way; at the same time this is a wall of inferior construction and of a different orientation to the previously described ones, so it seems obvious that it is from a later date, probably from the Fatimid period, judging by the materials used. Some later constructions in the interior of the southernmost bay must correspond to

this period. We are dealing with two troughs, built at both ends of the nave, and an arch-shaped wall situated in the central area of the same bay. All of these are constructions of a secondary nature, and seem to indicate that the building was finally adapted for keeping livestock.

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