

A BYZANTINE BUILDING WITH A CRUCIFORM PLAN IN THE CITADEL OF AMMAN

by
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During the studies and excavations that the Spanish Archaeological Mission in Jordan carried out in the Citadel of Amman, the most important and thorough work was centered initially around the best preserved and most monumental building of the whole architectural complex, the construction hitherto known as the "Umayyad Palace" or "Qaşr" (Fig. 1). Based on our studies and what we now know of the complex, we can state that it was a Vestibule or Audience Hall of the palace, which also included many other buildings and architectural elements (Almagro and Olavarri 1982; Olavarri 1985: 17-18).

Before the excavations of the Spanish Mission there was no archaeological evidence to settle the debate about the date of that singular building. Today we can state with certainty that the construction that we see dates to the Umayyad period, surely from the first third of the eighth century A.D. (Almagro and Olavarri 1982: 320).

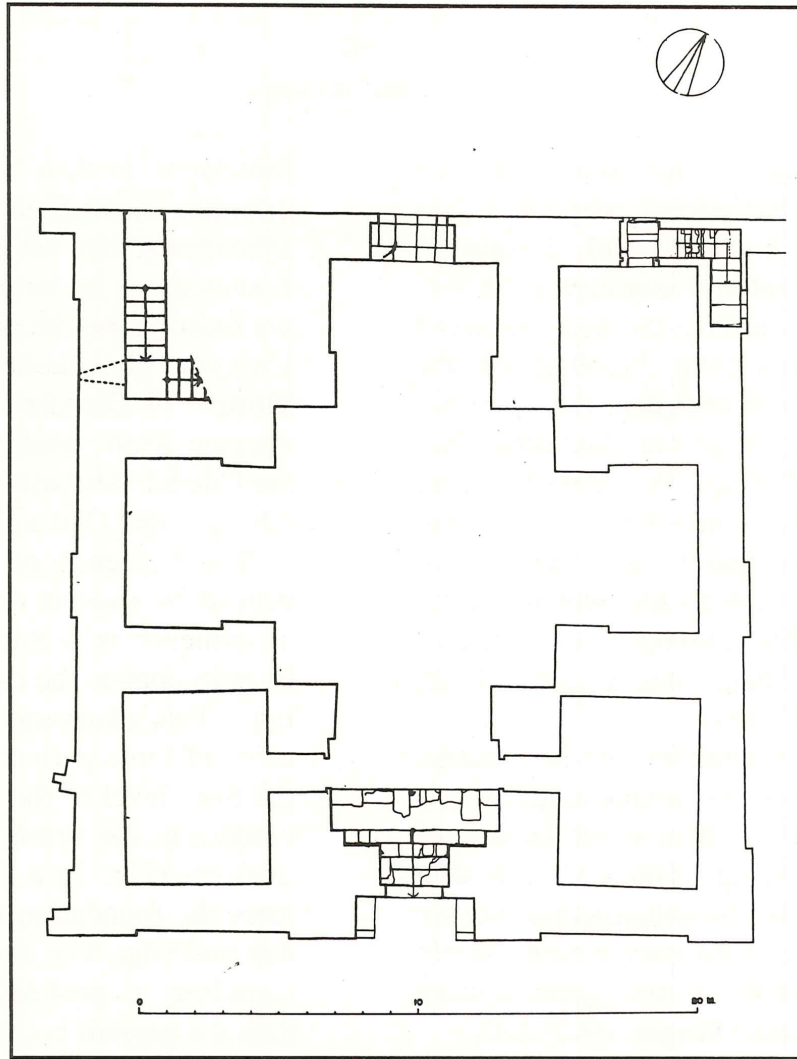
However, the opinions, by Creswell (1969: 637) among others, defending a pre-Islamic origin for this building were not without some basis, as the excavations themselves and our detailed analysis of the monument have shown. Even though the decoration and several other details of the building are clearly Oriental in inspiration, the floor plan is obviously Byzantine in origin, and it appears that those who attributed this construction to the Ghassanids saw it so.

The excavations and study of the monument have shown that the Umayyad building rests on a pre-existing structure and certainly makes use of its outer perimeter and very probably of the whole floor plan as well. That is to say, the Umayyads reused the remains of an earlier building as the

foundation of their construction. The plan that they maintained doubtless changed its appearance, but not its spatial conception. It should not be forgotten that the reuse of pre-existing buildings was common in other Umayyad constructions, such as the Great Mosque of Damascus, or in the palace of Amman itself, where Roman structures in the Citadel were used (Almagro 1983: 132; Almagro and Olavarri 1982: 320).

The existence of this building is evidenced by various details. The first piece of evidence is provided by the excavation in 1978 outside the east facade of the building. This excavation confirmed the existence of three periods of occupation below the floor level of the present building. According to the stratigraphic analysis of Dr. Olavarri (Fig. 2) a first level (15) constitutes the foundation trench of the present-day building. The materials appearing in it, including a post-reform Umayyad coin, date the present construction to the Islamic period. The contiguous row of stones (A) and those placed on top are therefore in all probability Umayyad. The row of stones below (B), which slightly projects from the row above, is related to a level (17) constituting the foundation trench cut into an earlier level (18) of a construction datable to the Byzantine period, based on the associated finds. This row of stones was found stratigraphically at three different points along the east wall of the building, two in the exterior and the third in the interior (Fig. 3).

Analysis of other zones of the building reveals further evidence of this construction, datable by virtue of the finds in levels 16 and 17 to between the second half of the fourth century and the first half of the fifth century (Olavarri 1985: 7-9). The lower



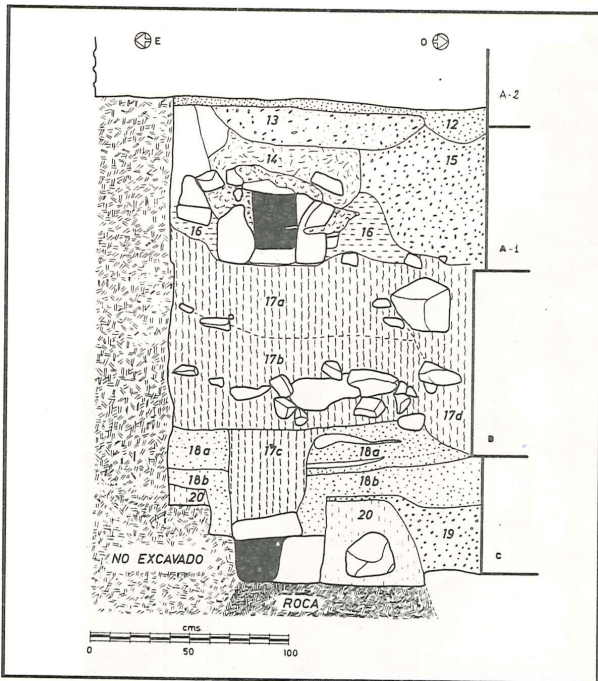
1. Plan of the vestibule or audience hall in the Amman Citadel.

row of stones of a Byzantine period building is also visible on the south facade, in an open trench at the right hand side, where there is also a slight ridge at the transition to the Umayyad period wall. Several of the visible stones of the Byzantine wall are reused Roman architectural elements.

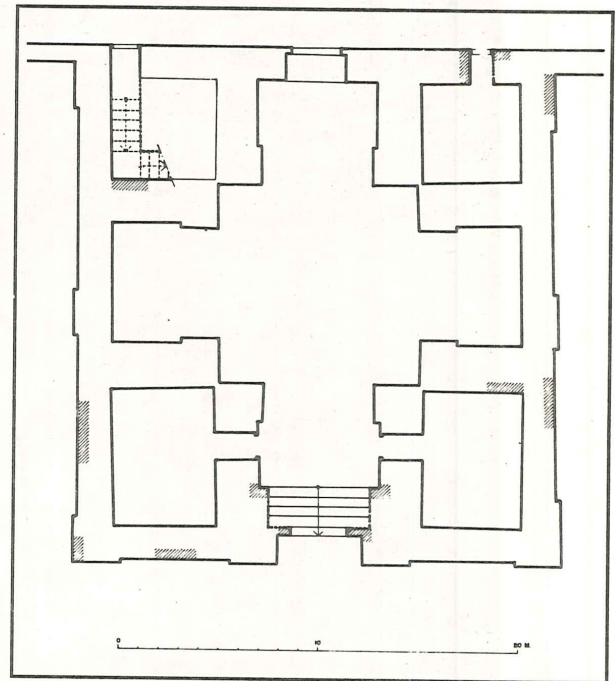
Additional evidence for the pre-existing building appears on the west facade of the building. At the south end of this facade are two door jambs that closed off a passage running parallel to the vestibule of the audience hall (Fig. 4). Stones of the same height as those of the facade wall were used in the construction of these jambs, and there is a clear continuity in the rows. However, close observation of the lower part of the jambs, shows that the wall of the facade

continued downward, whereas below the jambs is a foundation of rubble masonry, which is now exposed because the present level is lower than that of the Umayyad period. This shows that, although the door jambs and the facade all appear to be contemporary, their foundations are not. That is to say, the vestibule, or at least its foundation, was already built when the door jambs were constructed.

At the main door of the building, on the south side, there is yet further proof, even clearer if that were possible, to support our statement. The level of the interior floor of the vestibule is almost one meter lower than the outside of the south facade. For this reason a series of steps was placed at the south door (Fig. 5). At the lowest level



2. Stratigraphic section of the trench close to the east wall of the vestibule (after E. Olavarri).



3. Reconstruction plan of the Byzantine building.

there are three steps of well hewn stone blocks. At the threshold of the external arch is the highest step, the width of which is similar to that of the door jamb, and which has been covered by another row of stones of the same width that make up the present threshold of the door. But the most important detail to emphasize is the fact that this lower stairway continues on both sides below the side jambs of the passage arch, and furthermore they do not rest on it directly, but on a stone foundation similar to that of the jambs of the west facade. Therefore we can deduce that the present door of the Umayyad period is different from the door of the previous building because its passage arch rests on the original access steps. In addition, the level of the steps of the Umayyad building was higher than the Byzantine steps because they had to cover the rubble masonry foundation of the jambs that rested on the older steps.

This proves that those lower steps do not belong to the building we see today, but to an earlier one. In the present building, the steps down from outside covered them at a

higher level. This upper stairway, of which fewer remains have survived than those of its predecessors, was constructed of lower quality stone. It descended from a higher level than the original one to an interior level that must be similar to that of the earlier building.

So it can be seen that the lower entrance on this side of the building was different from the one visible today. Only one arch on the end or closing wall appears to correspond to the oldest plan, because its base connects perfectly with the deepest steps. The rest of the wall is the work of the present building, resting on the stairs of the older building, leading to the conclusion that the original door was wider than the present one. In two pits open at both sides of the interior part of the door jambs, the join of the threshold with the original door jambs can be seen, and they have been kept inside the masonry of the wall (Figs. 1 and 3). If these indications are true, the width of the door of the original building would be 2.77 m.

Further remains of this earlier building



4. Detail of the foundation of the door jambs in the west wall.



5. The south entrance of the vestibule with the steps from the Byzantine period.

can be found at the easternmost door on the north facade (Fig. 6). This door, 1.17 m wide at present, leads through a small passage through the thickness of the wall, to a room occupying the northwest corner of the vestibule. At the end of this passage is another door, and between them is the beginning of a staircase that leads to the east facade.

The threshold and pavement of these doors and passage deserve special attention. When we began to document the monument, the threshold of the outer door was some 0.65 m above the ground level outside the building, which appears to show that the original floor, at least in the Umayyad period, was somewhat higher than at present. Despite this, the threshold is some 0.20 m higher than that of the centre door. But apart from this problem of levels, the bottom of the door presents other features. The wall face below the threshold, as it was at the beginning of our work, consists of three stones. The one on the far right corresponds to the starting row of the wall, and part of it forms part of the threshold, while part remains under the jamb itself.

Next to it, on the left, there were two stones, very different in size and height, resting on a third stone as long as both together. The three of them form a group presenting a vertical join on the left that fully coincides with the door jamb. This arrangement, and the different appearance of the two upper stones led us to remove them, and so uncover the bottom of a narrower door, the left jamb of which matches that of the present door, even in its socket, whereas the right jamb is formed by the stone we described first, which also has its own socket (Fig. 7). The longer stone on which the upper two rest was the threshold of the smaller door with its own frame. This is one more bit of evidence to show the existence of an earlier building, with a similar perimeter and the same access, although slightly modified.

As we have seen, the earlier building follows the outer perimeter of the present one. Although it is less clear, a similarity in internal organization is also shown by the spatial typology of the present building that points to Byzantine precedents, distinct from the more general Sasanian influences seen in the rest of the palace.

In a trench excavated inside the southeast corner room, next to the east wall, the rows of that wall fit perfectly with the inner transverse walls. From that it may be deduced that at least one, or perhaps two of the bottom rows of the inside of the building were the base of the walls of the older building. This is confirmed by another detail of the stairs. On the outer wall of the second flight of steps, the first row of stones at the bottom presents a slightly different alignment from the upper part, which produces an unequal ridge along the wall. The reason for this doubtless is to be found in the reuse of an earlier foundation that did not fully coincide with the construction of the new building. As this foundation was to be hidden by the infill supporting the stairway, the builders did not consider it necessary to smooth the bottom of the wall. However, at the angle formed by the second and third flights, one row above, a stone that remained visible above the landing was smoothed, with the line of the angle of the top going down to where the stone was hidden by the landing.

From this analysis of the apparent remains of this earlier building, we not only deduce its existence, but we can glimpse its structure, at least in plan, and see that it does not differ from that of the present building of the Umayyad period. Therefore, accepting the hypothesis of a floor plan completely similar to that of the Umayyad building and taking into consideration the small variations we have seen, we can describe its structure exactly.

This building had a floor plan in the form of a Greek cross and virtual double



6. The east door of the south facade.



7. The threshold of the east door after the removal of the threshold from the Umayyad period.

symmetry (Fig. 3). Its plan was almost square, 24 m east-west and 26 m north-south. As in the Umayyad building, the corners appear to have had projections that were repeated in the centres of the two side facades. The south facade had a door, apparently open at the end of a niche, giving entry down a stairway of four steps. The north facade was plain and had three doors. Inside, there was a central space with a floor plan in the form of a Greek cross, and four lateral spaces occupying the areas between the arms of the cross. The hall in the form of a Greek cross was in turn formed by a central space of square plan and four lateral spaces forming the arms, somewhat less wide than the centre space. The union with this was lessened by four main arches.

The centre space of the cross measures 10 m on a side corresponding to the 5.50 m width of the main arches. The arms of the cross measure 6.00 m wide by 5.30 m deep.

Entry to this cruciform space was by two doors, one at the south with steps down, and another at the north. Access to the two satellite spaces of the south side was, as at present, from the south arm of the cross, whereas entry to the north ones was by outer doors on the north facade. It is not possible to assert that the building of the Byzantine period had a stairway to the roof, as the Umayyad building has.

We can say nothing about the elevations and sections of the building, as everything preserved today above 0.50 m is Umayyad construction, which certainly changed the physiognomy of the earlier building completely. Nevertheless, the plan makes one think of spatial and structural solutions similar to those adopted by the Umayyad building. So one may think that the arms of the cross were covered by barrel vaults. For the central space one may think of a stone dome, although this is only one possible solution. As we shall see, the spatial and structural solutions of possible parallels to this construction point to similar arrange-

ments.

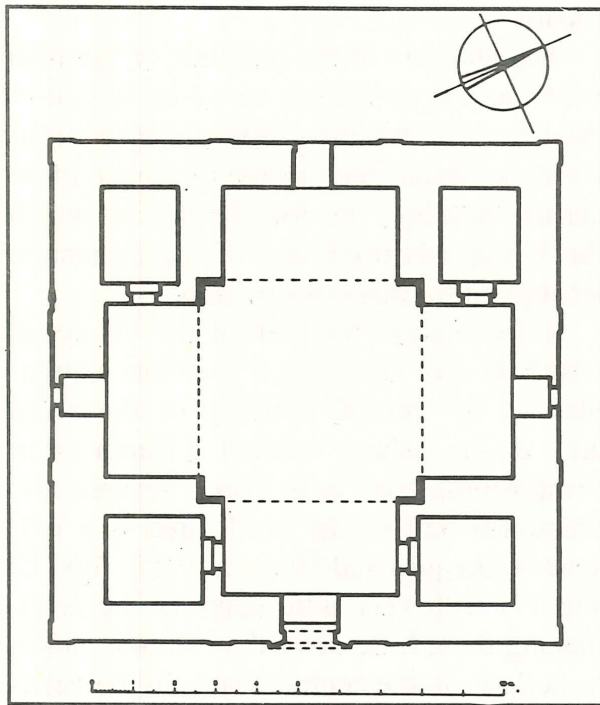
The analysis of the parallels of the plan we have just described, the same as that of the Umayyad building, offers us new arguments in favour both of the existence of an earlier building, the foundations of which the Umayyads used, and of the Byzantine attribution for that construction.

If we analyze the plan of the Umayyad vestibule and compare it with the similar plan of the central building of the north area of the palace, marked differences in composition strike us at once. Whereas the cruciform hall of the north area is a unit space (Almagro and Olavarri 1982: figs. 12 and 17) with very little depth in the arms, making them little more than simple niches or hollows in the central space, in the vestibule the arms of the cross are much deeper and are articulated as spaces in their own right.

The arches delimiting and separating the arms from the central space contribute greatly to this articulation, unlike the cross of the north area. There the dome covering the centre space was the element that defined the whole internal space, whereas in the vestibule the dome, even though the main element, does not define the space so clearly, because the half domes and vaults of the arms play an equally important role; today even without the dome, it has a well defined spatiality.

The design of the Greek cross of the hall in the north area is Sasanian in origin and its parallels are to be found in the palaces and fire temples of that great rival empire to Byzantium (Pope 1938: 534-541). However, plans in the form of Greek crosses with the arms so extended and articulated by arches are not found in Sasanian architecture. Nor do rooms occupy the spaces between the arms of the cross, as are found in the vestibule.

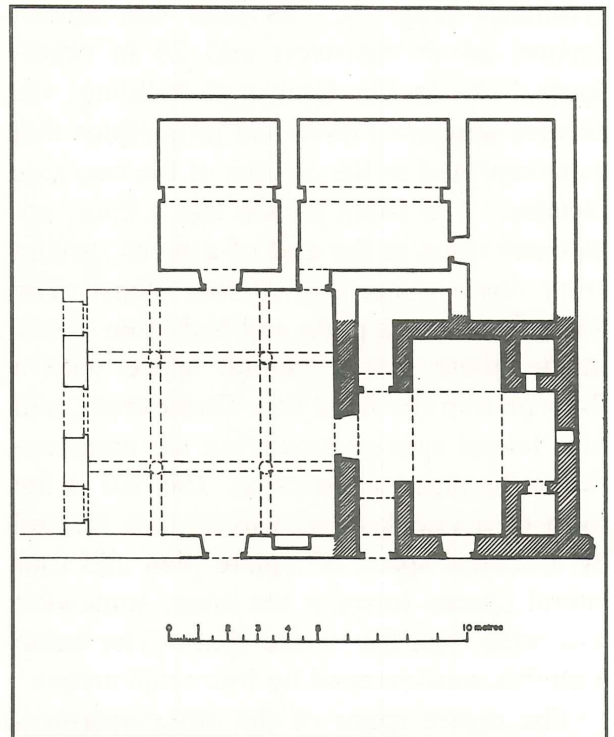
In the Late Roman and Byzantine architecture of Syria, we do find parallels of this plan. The oldest example, and the nearest



8. Plan of the Roman mausoleum of Qaşr al-Nuwayjis.

in geographical terms, is Qaşr al-Nuwayjis (Fig. 8) in the environs of Amman. It is a very well preserved Roman funeral building from the end of the second century that was doubtless designed as a family pantheon. Externally the plan is square, and its interior houses a main space with a plan in the form of a Greek cross. The arms are not deep like those of the vestibule, nor do they have arches. But their proportions are nearer the plan of the Amman vestibule than to the plans of the Sasanian buildings. Between the arms of the cross are four small cubicles in communication with the main hall by windows that must have been destined to contain the funeral urns. The arms are covered with barrel vaults and the central space with a hemispheric vault cut with four vertical planes, the diameter of which is the diagonal, and which defines squinches at the corners.

In fully Byzantine architecture are closer parallels, especially due to the fact that the function of the building of the citadel was civic not funerary. One parallel comes from Umm al-Jimal, situated not far from



9. Plan of the *praetorium* of Umm al-Jimal.

the *Via Nova Traiana* to the northeast of Amman, halfway to Boşra, the capital of the Province of Arabia, where there is a building, preserved to the height of one storey, and identified as a *praetorium* and dated to A.D. 371 (De Vries 1982) (Fig. 9). Next to other buildings and to an *atrium* with an *impluvium*, is a cruciform hall with a plan very similar to that of Qaşr al-Nuwayjis. The arms are once again covered by barrel vaults. The central space today has beams of basalt that clearly do not belong to the original construction. The zones between the arms of the cross are used for auxiliary rooms or corridors leading to other rooms.

The most interesting parallel that has made some scholars think that the construction of the Umayyad vestibule was due to the Ghassanids is the so-called *praetorium* of al-Mundhir in Ruşafa (Fig. 10). This construction, which aroused so much controversy until the correct interpretation of Sauvaget (1939: 115-130), is possibly the closest typological and functional parallel. It is an audience hall, built by the Ghassan-

id ruler al-Mundhir, in one of the most important religious centres for this Christian Arab tribe that served as an efficient auxiliary of the Byzantines in the defence of the desert frontier.

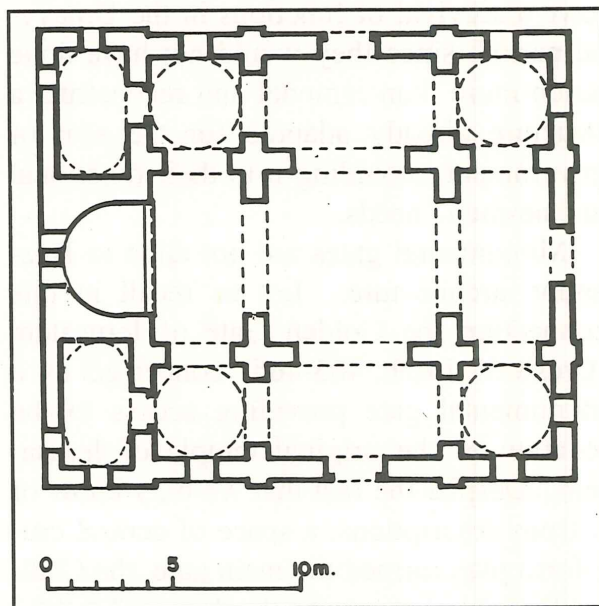
The building has a rectangular plan, with a prominent apse, which led people to think for some time that it was a church. Inside, four cruciform pillars trace out a Greek cross with four satellite spaces between the arms, open towards the cross by arches. In this case the central space is delimited by four arches as in Amman. The arms of the cross and the spaces situated between them are covered by half barrel vaults and the apse by a quarter sphere. The central space is open today, but it presumably was covered by a dome or wooden structure. The spatial articulation here, as in Amman, is much more complex because the central body is not the only element that defines the internal space of the building. The existence of arches, and the greater depth of the arms, are other features that this building shares with that in the citadel of Amman.

A whole group of Byzantine constructions that parallel the *praetorium* of al-Mundhir, which has been dealt with by Sauvaget, may also be mentioned. Of them one should note the *praetorium* of Mesmiye (Creswell 1969: 454). Even though its structure on columns is much lighter, the central space is unified with that of the arms and the spaces between angles. Though more distant and surely of a much later date, some constructions in Armenia, such as the cathedral at Mren (Mango 1975: 184, figs. 209-210) in the seventh century, may have their common origin with the building under study as a type that must have been common in early Byzantine architecture.

Although the plan is typically Byzantine, the most singular element is the arrangement of the south door, which appears to be the main door. This is situated at the end of a niche flanked by two projections that

could resemble towers. Such an arrangement of a sunken door between towers appears in some fortresses of the Late Roman period such as Qaşr Bshir (Brünnow and von Domaszewski 1905: 49-59). It can also be compared with the entrance to the church of Qalb Loze (Krautheimer 1965: 114, pl. 44A; Tchalenko and Baccache 1979: pl. 419-423) in northern Syria which would lead us to think that the niche was covered with an arch or vault.

Despite the broad similarities between this building of the citadel of Amman and other Byzantine buildings, the presence of two doors opposite each other and almost of the same rank is very singular with no clear parallel. This immediately raises serious problems in the interpretation of the function of this building in the Byzantine period. The nearest parallels are *praetoria* or audience halls. But the existence of two doors on what is clearly the main axis of the building makes the attribution of that function problematic, especially when its location in relation to the great palace of the Antoninian period (Almagro 1983, fig. 28) extending to the north of the citadel appears to indicate that it would be an element of passage and access to that area.



10. Plan of the *praetorium* of al-Mundhir in Ruşafa.

The two transverse arms of the cross lacking doors have no distinguishing elements at least in the floor plan, to attribute greater preeminence to one over the other through the presumed place occupied by the praetor or magistrate during audiences or public acts.

Therefore it is advisable to think of a different function, more related to the character of passage to the north area of the citadel. In the period of the Antonini a great place was built which could be a *temenos* of a temple. For its construction, great walls or retaining walls converted this part of the citadel into the area with the most difficult access. When this zone lost its sacred character due to the suppression of paganism, it could very well have been converted into a civil area and the seat of government of the city, protected by the solid defenses provided by the outer walls of the original *temenos*.

The construction of this cruciform building could be along those lines, and could very well have been conceived as a monumental gate or *propylaeum* of this civic area, perhaps destined for the seat of the local government. In this way we would have a survival of functions in the Umayyad period, since they would not have done much more than remodel and reconstruct a structure already adapted for the seat of government, moulding it to their functional and aesthetic needs.

Monumental gates are not alien to Byzantine architecture. Let us recall in this connection the Golden Gate of Jerusalem (Creswell 1969: 463-465) conceived as a monumental gate providing access to the location of the original temple of Jerusalem. Despite the fact that we only know of it from descriptions, a space of central cruciform plan formed the main gate, the Chalki, that gave access to the Imperial palace of Constantinople, erected between 532 and 536 (Krautheimer 1965, fig: 194a). This

building may have been the model for the building underlying the vestibule of the Amman palace.

Just as determining the function this building had is difficult, it is difficult to define with precision the date of its construction. The stratigraphic evidence next to the east wall appears to indicate a date no earlier than the fifth century, and the absence of later materials precludes a later date.

Although known constructions of this type are few, if one admits an evolution of this type from the simpler forms represented by the mausoleum of Qaşr al-Nuwayjis and the *praetorium* of Umm al-Jimal, and the more complex ones complete with arches and intercommunication of the arms of the cross with the corner spaces, as in the *praetorium* of Ruşafa, the construction of Amman would occupy an intermediate position, a bit nearer to the older types. Taking into account that the *praetorium* of al-Mundhir dates from the first half of the sixth century, whereas the simpler examples date from the beginning of the third and fourth centuries, the date provided by the excavation may well be acceptable. As a fact to be taken into consideration, it is advisable to remember the existence of a Byzantine church in the citadel itself, not far from the building under study, which dates to the fifth century (Zayadine 1978: 34-35, fig. 11B).

As to the end of this Byzantine construction of the Amman citadel, evidence from the way in which the Umayyads occupied and reconstructed this zone of the citadel, especially in the area of the *temenos*, gives the impression that they reused a structure in ruins. Wherever possible they used Roman walls and on some occasions rebuilt with rubble masonry walls that were originally well made with ashlar. This leads one to think that they found the walls in a state of ruin.

The cause of this generalized destruction

can be no other than the invasion of the Sasanian Persians in 614, the devastating action of which we have reference to especially in the large urban centres and seats of government such as Philadelphia. When some years later, the Byzantines not having had time to rebuild all the ruins left by the Sasanians, the Arabs burst into Syria and Palestine, references to a destroyed and devastated country are still common. When

the Umayyads decided to make Amman the capital of the Balqa', they must have also found the ruins of the area of government of the Byzantine period, which they reused to a great extent in the construction of a new Dar al-Imara.

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