SURVEY OF THE ARAB CASTLE IN PALMYRA, 1993

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The castle is a fortress built on a solitary hill west of the ancient city. Traditionally known as the "castle of Fakhr ed-Din Ibn Ma'an" (a Druze emir whose semi-autonomous power extended over part of Syria and Palestine from 1590 to 1635), it was long thought to be a late 16th century stronghold. Inferior in quality to such Islamic fortresses as Aleppo, Damascus, Bosra or Nadjim, it is nevertheless much better (indeed practically completely) preserved. Its attribution to Fakhr ad-Din has been questioned by Khaled As'ad, director of the Palmyra Museum, who found some specimens of 13th century pottery inside it. Unfortunately, the inscriptions which had once adorned the entrances are gone without ever having been recorded.

The survey in 1989 brought more evidence for the possible medieval date of the building. It coincided with Khaled As'ad's concern for the restoration of the castle which is considered an important monument. The Polish Mission was asked to prepare a study which, apart from its archaeological value, should be useful in any restoration works to follow in the future. The author was assigned the task by the Director of the Polish Mission, Prof. Michał Gawlikowski in 1990.¹

Working with architect Jan Kempa, the author completed a preliminary architectural survey of the site and excavated test trenches in selected spots inside the castle. Work was resumed in 1993 with generous support from the Max van Berchem

¹ See: J. Byliński, The Arab Castle in Palmyra, *PAM* II, 1988-90 (1991), pp. 91-93.

Foundation. In the meantime, corroborative evidence for the dating of the castle was found in a 13th-century chronicle Al-Tarikh Al-Mamouri by Abu al-Fada'il Muhammad Ibn 'Ali Ibn Nazif Al-Hamawy where it is mentioned that the Ayyubid emir of Homs, Al-Malik Al-Mudjahid Shirkuh Ibn Muhammad Ibn Shirkuh built a fortress on a high hill in Palmyra around 627 AH=AD 1230. The objectives of the 1993 season included:

- completing the ground plans and cross-sections of the building at different levels;
- studying construction phases;
- excavating for chronological evidence;
- searching for possible remains of pre-Islamic structures.

The program followed these guidelines, although it was impossible to complete the survey of the interior in time. Almost 75% of the building volume was measured and relevant drawings have been prepared. (Fig. 4)

To study the chronology and the construction phases, we selected two sites within the castle. One was a corridor providing access to the halls on the top of two cisterns built into the core of the castle and in a part of one of the halls (Fig. 1:1). The other was an area on the lower terrace just beside the building on top of tower XI (Fig. 1:2).

Excavations in the first locus resulted in the complete clearing of the narrow corridor filled with accumulated earth and debris from the fallen vault. The corridor, accessible via stairs leading down from the upper court, was originally barrel-vaulted and its roof was level with the upper terrace. Its walls were plastered as were most if not all of the rooms and corridors in the castle. The same lime mortar was used on the floor. The corridor provided communication with two halls above the cisterns



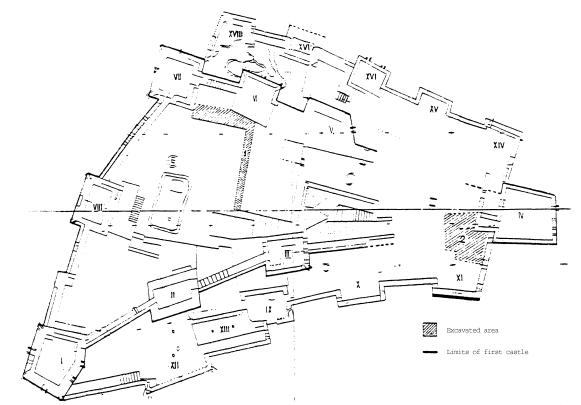


Fig. 1. General plan of the Arab Castle in Palmyra. Drawing J. Kempa.

and the upper storey of Tower VI. A channel for rainwater disposal ran along the southern wall and emptied into a cistern.

The floor of the corridor was found overlaid with a thick layer of animal dung mixed with organic material and rubbish containing potsherds and pieces of cloth and rope. The presence of tobacco pipes suggests an Ottoman date for this layer. Layers of the same, easily recognizable composition were found in many other places inside the castle, mainly in passages and on stairs. The unusual accumulation of such material was found in 1990 around and above the partly destroyed elements of the original structures of a flour mill and neighboring silos. An earlier layer was present only at the eastern end of the corridor, where the floor had been repaired. This contained some tiny sherds of pottery dating from Mamluk period.

The hall above the cisterns had three superimposed floors. The earliest one was laid directly on top of the fill covering the cistern's vault and was laid again after the construction of a basin-like installation beside the opening of the cistern. The next one consisted of a thick layer of cement mortar on top of crushed stone. Floors were similarly constructed in other parts of the castle, for instance on the top storey of Tower IV. On this floor and under a later one sherds of glazed pottery accompanied by a bronze coin were found. These sherds, which can be dated to the middle of the 13th century (Fig. 2), provide a *terminus ante quem* for the construction of the hall. No substantially earlier pottery has been encountered in the castle. The bulk of the material dates from the 13th-14th centuries, pointing to this period as the time of construction and use of the castle. Unfortunately, the coin was too eroded to be identified.



While the first test trench was situated within the oldest part of the fortress, the second one was located near to buildings bearing visible traces of several reconstructions. Excavations brought to light the foundations of a number of superimposed structures, all located on the terrace.

To understand the function of some of these structures, one has to bear in mind the complex building history of the castle which was established in the course of our investigations. The first castle was an irregularly shaped structure including seven towers linked by curtain walls forming a triangle; an isolated tower at the end of the rock spur was linked to the former by two parallel curtain walls. (Fig. 1) The space inside these walls probably formed a small lower court. This castle was enlarged by the addition of wings on the east and west, each with a set of towers, curtain walls and galleries. To judge by the masonry work and construction technology, the extension must have occurred shortly after the establishment of the castle; only defensive strategies had improved in the meantime, causing loopholes to be pierced at the base of the curtain walls in the later additions in order to enable the defenders to shoot at the enemy from the ground floor galleries as well. Still later, two galleries with rooms on top and terraces with battlements were added to the western wing. It is noteworthy that the curtain wall here received machicolation which was reserved earlier for towers alone. This extension included the construction of another (fourth) rockhewn cistern located outside the original structure. Another late addition consisted of raising the eastern wing and Tower IV in order to bring both extensions to the same level. The former terrace levels of some of the eastern towers and Tower IV received barrel vaults and another storey was built on top, to be used as a new terrace. In this way the terraces of all the towers of the later part of the castle were brought up to roughly the same level, and the upper battlements became accessible from a passage running in the middle of what became later the lower court. This facilitated the communication on the top level. Almost all the eastern wing was provided with a two-storey machicolation.

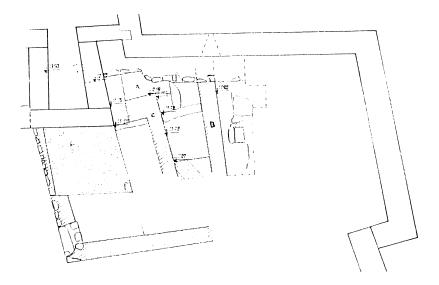


Fig. 3. Test trench no. 2. Plan A. Witecka.

At an unknown moment the western wing was partly destroyed: the outer halves of the towers collapsed, leaving only stumps barely rising above the rock; corresponding curtain walls were damaged. The southern facade of the tower was heavily affected as were the battlements of the whole southern section. It is possible that the interior of the castle was seriously damaged as well. In any case, the restoration which followed was comprehensive: the western towers were rebuilt again, some curtain walls provided with new facing and the central part inside the castle was rearranged. On the front side, a barbican (no longer existing) was added or reconstructed, the parapet wall of a diagonal ramp and the piers of the bridge were rebuilt. All these restorations were made uniformly with a distinct type of masonry which is easily recognizable wherever encountered: small, square and regularly cut.

With all this in mind, we located our second test trench in the southwestern part of the lower court in the hope of obtaining the most comprehensive evidence for the stratigraphy and building history. Under the surface of what is now a plain open court, several building phases were discovered. The crowning of two original curtain walls of the first construction and the original floor of the terrace above the western extension was reached eventually. (Fig. 3A) This white plastered floor extended between a side entrance of the building atop Tower IV and a wall running parallel to the western parapet wall of Tower XL This former wall (Fig. 3B) was found destroyed or dismantled down to the foundations, with only a negative of it to be seen in the trench between corresponding floors. It was impossible in the limited space of the trench to tell whether the white floor belonged to a roofed building or an open space. In any case, a step was laid later on this floor, abutting Wall B, and the floor itself, fissured and fragile, was covered with several thin layers of earth mixed with organic material, including sherds of common cooking pottery of types found in other loci in context with 13th century glazed vessels - proof that the western extension was added in the same period. Still later, another wall (C in Fig. 3)

was built upon a new surface and another tamped floor was laid between this wall and the older Wall B. Glazed pottery sherds found in connection with this later floor belong to the "blackunder-green glaze", "black-under-white transparent glaze" and "green-lead glaze on slip" classes.

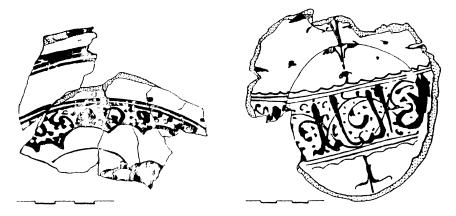


Fig. 4. Two fragments of pottery from test trench no. 1. Drawing A. Witecka.

On the other side of Wall B another white plastered floor was found with traces of successive plastering. It seems quite plausible that Wall B was part of a walled terrace atop Tower XI, which originally and before the final reconstruction, must have had the same form as the construction preserved on top of Tower IV. In fact, all the towers might have had such terraces closed with walls on all four sides, as indicated, for instance, by the visible remains of walls atop Tower XVI. Hence, the lower court should not be regarded as a court, but rather as a floor on which several buildings, now extant, had once stood.

In the catastrophe that ruined Tower XI, terrace wall B collapsed and part of the terrace floor was ripped off. After the tower's ceiling and the outer walls had been restored, the remaining gap was filled with small stones and plaster debris, probably originating from wall B, when it was finally dismantled. The same debris with some potsherds covered the remaining terrace floor. It is in this debris that we vainly searched for evidence of Ottoman restorations. On the contrary, the fill above the repaired ceiling yielded a sherd of 14th century Mamluk "tricolor underglaze". Although it is definitely too little in the way of evidence for a Mamluk date of the last reconstruction, it is nevertheless a tentative corroboration of our observations concerning the architecture of this phase, which might well belong to the 13th-14th century repertory. An extension of this trench, planned for the coming season, which should also be the last of the survey, could bring more positive proof.

The most recent phase of the construction of this locus is represented by modest remains of walls built over a layer of mud brick leveling. These walls probably belonged to a more recent phase when the castle was no longer used as a military stronghold and became instead the refuge or seat of local tribal lords. In the topmost layer, corresponding to these walls, an ostracon with a Quranic inscription in ink, in rather modern Naskh characters, was found. The medium used for this inscription was a sherd of a hard, red clay vessel with mineral accretions all over the surface and the text superimposed. This is proof that the sherd was used long after it had been abandoned. Sherds of the same type were very common in the castle.