sent, also for its characteristics, one of the earliest techniques, possibly dating to the Serbian age.

On the other side of the chronological arc we have technique no. 7, which is found mainly in the central buildings of the town and could be assigned to the Turkish period due to

the fact that it seems to have been employed both in the hammamm (building n. 77) and in the black powder store (building no. 156, dated by an inscription to the 18th century). However, both structures show a certain degree of restoration, especially of the mortar, and thus cannot be clearly defined.

STARI BAR: THE EXCAVATION OF UTS 161. THE SEQUENCE

Diego Calaon

In October 2004, a trench was excavated inside the fortified citadel of Stari Bar. The excavation was situated in the western sector of a room, at present without a roof, already found in Bošković's research of the 1950s and known as building 161 (Bošković 1962, 120, Fig. 158).

The trench, measuring 3.5 by 5 meters, reached the bedrock at the maximum depth of 2.9 m. from the present ground level, which has an altitude of 156.77 meters above sea level. A total of 44 cubic meters of soil was excavated and most was dry-sieved (Fig. 1).

The choice to open this first trench inside the citadel was based on the need to date the fortified structures of the area more precisely. Previous analyses have shown that the complex was characterized by a series of restorations and re-buildings, which took place partially in the Venetian (starting in the first half of the 15th century) and partially in the Turkish period (second half of the 16th century).

Inside building 163, a tower with a sub-circular plan of Venetian age, the remains of a structure embedded in the walls of the citadel have been found, surely pre-dating the standing fortifications. It is a short wall constructed of roughly worked stone, dated to the first phase of life at the settlement of Antivari (Bošković 1962, 321), that is to the Byzantine period (10th century). A preliminary evaluation, conducted in 2004 (Baudo 2005), based on the building techniques and on the relative chronology of the different buildings of the complex, permitted the main unitary phase of construction to be identified in the sequence. In this phase, the walls visible nowadays were erected (USM 1001, 1004, 1005, 1006, 1009 and 1010). These walls have undergone several restorations, the most evident of which is the latest of contemporary age, realized after the earthquake of 1979 (Zagarčanin 2004, 96).

PHASES OF ROOM 161

The excavation of room 161 permitted six chronological and typological periods to be identified, related to the different functions of the buildings through centuries (Fig. 2).

The earliest phase found in period 6 (phase 4) enabled the stratigraphy, associated with the foundation of USM 1004.



Fig. 1: Location of UTS 161.

the northern wall of the citadel, to be analysed. The wall, constructed of big square stones bound by mortar, lay directly on the rock that constitutes the elevated plateau on which the defensive structure was built (Fig. 3).

Only a few traces of the scaffolding used for the building of the standing wall are preserved in the construction phase: we found sub-rectangular holes cut directly in the rock, aligned with the walls, with the function of fixing some vertical wooden poles to support the scaffolding. The holes still showed remains of mortar and stone fragments from working the stone blocks used in the building in situ. The same filling was found in two stratigraphic units (US 1117 and 1118), tied to the levelling of altimetric irregularity of the yard levels, resulting from an even spread of debris from the building activity. Subsequently, the area has been prepared with a walking level consisting of a soil deposit (US 1116) probably collected in a near-by area. The pottery sherds of these levels permit the building of the wall to be dated towards the end of the 13th century (D'Amico 2005).

TOTAL TOTAL

Fig. 2: Section east - west, B-BI.

A confirmation of this dateg is suggested by the complete lack of residual material from previous centuries. The voids between the stone strata showed only sterile soil, of natural formation, without any trace of human activity.

In the following phase (period 6, phase 3), traces of occupation and activity in the area have been recovered. The room, oriented differently from the present one, was developed on a north - south axis, with a length of 6.8 meters, and contained an entrance on its southern side, constructed from a big stone slab into which a little step had been carved. Still visible on the entrance are the traces of the hinges of a wide, about 1.4 meters wide double gate, probably made of wood. A small service passage had been constructed on the north side in order to reach the space, possibly subterranean, in the area of the present revelin.

The roof of the room was constituted by a wooden ceiling, held by beams (in the side wall it is still possible to notice, even if heavily restored, two beam holes) and by vertical

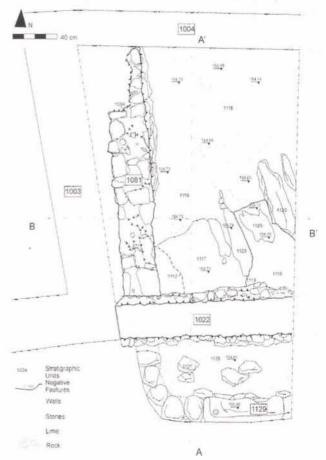


Fig. 3: Plan of period 6, phase 4.

wooden poles, indicated by two post holes aligned with the side walls (US 1109 and 1110).

A third phase of the use of the room (period 6, phase 2), dated to the second half of the 14th century, is characterized by a dirt paving (US 1108) covered by a thin layer of lime. Later in the same phase, above a pavement made of mortar rich in lime (US 1101), that lay on a solid preparation, (US 1102), a structure made of large square blocks (US 1105) formed a level, probably for work and support, raised about 30 cm above the walking level. Relatively to this level a hearth delimited by stones (US 1106) and used for cooking was found. Some remains of burnt food were found in the layers of ash and charcal that constitute the cooking place.

Considering the dimensions of the room and the presence of a raised level connected with the hearth, it is possible to suggest the identity of the room as one of the spaces dedicated to the preparation of food for the inhabitants of this area of the citadel. The building could have been one of the rooms of the kitchen, also linked to the northern passage that could led to a cellar or an underground store. This interpretation needs to take into consideration the existence of a ventilation system to disperse cooking fumes: the room, in fact, was at ground level and had above it a wooden ceiling and a second floor. The smoke may have reached the exterior through the same chimney that could have existed on the upper floor.

This chimney is still visible under the restoration of the parament of wall US 1004, but it is even more clearly visible, already sealed in the past, in a photo of the 1950s (Bošković 1962, Pl. LXVI a). Its attribution to the first building phases can be inferred from the different distribution of the floors after the re-building of the room with the new sidewalls. This work was undertaken after a violent destructive episode documented in period 5 (beginning of the 15th century). On this occasion, room 160 was built: it had at least two floors, the highest attested to by two entrance doors, one on USM 1003 and one on USM 1004. The base of the two doors, equal to the new level of the floor, is at half of the height of the chimney. In this phase then, the chimney was walled up and no longer used.

The last phase of use of the room (period 6, phase 1) is characterized by a new level of compacted soil (US 1100). In this period, dated between the end of the 14th and the beginning of the 15th century, the US 1105 level was no longer used, whereas a repeated use of a large fire, also for cooking, in the middle of the excavation area may be observed.

The following period (period 5) is characterized in the first phase (period 5, phase 4) by a sequence that indicates a relatively limited use of the room.

The area seems to be employed as a site for refuse disposal: an extremely large quantity of food remains (animal bones) were found, evenly spread over the entire area of the building (US 1125).

Subsequently, the area was covered by a thick layer of clay on which a new walking level was created (US 1094).

The structural element that characterises the following phase (period 5, phase 3) is the presence of a temporary layout of stones smoothed on the surface (US 1095), around a small rectangular pit (15 cm wide, 17 cm deep) with well defined walls. In the space between the stones and the pit an exceptionally well preserved coarse-ware jug was found: a connection between the use of the jug and the stone structure seems to be obvious. One possible hypothesis, yet to be verified, is that the latter could have been a privy and the jug could have been used as a container for water used for cleaning. This hypothesis seems to be confirmed by the organic nature of the filling of the space between the stones and the pit (US 1096), although their location in the middle of the room and the lack of a drainage system seem to be unusual (Fig. 4).

The jug has been completely preserved because it has not been taken away before the fall of USM 1081, the west side of the building. This fall proceeded from west to east: it is possible to see the stone slabs fallen horizontally that preserved the original layout in regular lines. There seems to be no sign of the fall of stone elements from the north side, whereas the southern side of the building was also involved in the same episode: the fallen blocks have covered the entrance and were not recovered for a subsequent re-use.

The fallen wall can perhaps be connected with a siege, and this could be indicated by the presence of two stone projectiles and by fragments of others. After the fall, the area shows signs of a fierce fire, indicated by a thick layer of ash across the whole area (US 1082). In this layer, 5 coins were found and they are being studied at the moment. Two were easily readable: they were minted towards the end of the 15th century, under the Venetian rule, and show on the recto the image of the patron of Antivari, St. George, and on the verso the lion of St. Mark, the symbol of the Serenissima.

At the moment of the fall or of the fire, a sewing kit has been lost. It consisted of two bronze thimbles and two needles. In the proximity of these finds a burnt fragment of textile was found. Another interesting find is a ceramic mould, used to produce small metallic projectiles. In the same stratigraphic unit a bronze marble was recovered: it was forged on the large "size" of the matrix.

After a period of abandonment, the rooms wer restructured with the building of a new western side (USM 1003) and the new construction of building 160 (period 5, phase 2). The new wall was built just to the west of the old USM 1081 that, on this occasion, was definitively demolished and robbed of its top part. The building then eventually assumed its present shape with the construction of a new wall to the south, USM 1022, that is the new southern border of the room. The excavation has shown the foundation trench of this wall (US 1080) and its fill (US 1079 and 1083). The chronology of the pottery associated with this building phase allow us to date this restructuring activity to the mid 15th century and thus relate it to the building activity that involves the fortified elements of the town dated to the Venetian period.

Several traces of the yard used in the reconstruction have been identified. They consist of a thick layer of stone fragments, work debris from the finishing of building blocks (US 1088) on site and of a shallow pit for the preparation of mortar (US 1077).

The first paving after the restoration (period 5, phase 1) was composed of flat-laid bricks (average measurements: 19.5 x 9.5 cm, US 1071) on a preparation consisting of a clay fill



Fig. 4: US 1082, period 3, phase 3.

(US 1072). This paving is preserved only on a small area: it was probably robbed already in the past.

The new building, with a ground level one meter higher than the one of the 13th century, probably had a second floor, indicated by a central post hole (US 1074) and by a series of beam holes visible in USM 1003.

The ceramic indicators and the finds of the final phases of period 5 (phases 1 and 2) refer to stratifications created with subsequent additions of soil. We can imagine that these movements of soil could have involved deposits both from inside and outside the fortified area and therefore part of the excavated layers correspond to soil taken outside the citadel. For this reason, the pottery assemblages - and the image of the material culture that derives from them - do not necessarily correspond with the social and economical characteristics of those who lived inside the citadel.

In the 16th century (period 4), building 161 was used as housing space: it probably corresponds with one of the barracks for the garrison of the citadel. Many finds relating to military life have been found in this phase: stone projectiles, iron arrow heads and a spear head.

An earthen floor with a clay matrix, not particularly structured, characterizes the walking levels. There are signs of hearths for cooking on the surface of the levels.

It is possible to subdivide this period into two phases based on the social and cultural groups.

The first phase (period 4, phase 3) is dated with the aid of the pottery to the first half of the 15th century. It is linked, according to the written sources, to the garrison of the Venetian army. The main archaeological layer is a sandy stratum (US 1059) used to create the walking level US 1060. This phase reveals an act of restoration of the southern wall (USM 1022) identifiable in a cut along the wall itself (US 1061). The phase is sealed by a deposit of ash on the entire area, left from the fire, possibly linked to a war episode.

The second phase (period 4, phase 2), with richer data, can be interpreted as related to the settlement of troops of the Turkish - Ottoman army, present in Stari Bar from the third quarter of the 16th century. The walking level is an earthen floor (US 1054). A circular hearth for cooking was identified in the centre of the area: it yielded food remains and was structured with a series of stones along its border. In the ashes a complete stone projectile was recovered, toge-

ther with several other stones employed to cover and surround the area of the hearth. In the north-western corner of the room there was a sort of storage structure, made of a sub-rectangular pit delimited by some stones and closed by a thick (1.5 cm) metal plate (Fig. 5).

At the end of this phase, probably because of another war episode that provoked the fall of the upper part of the sidewalls, big stone blocks falling from above crushed the metal plate. During the excavation it was possible to recover from underneath the plate most of the sherds of a maiolica jug, the reconstructible sherds of a pentola con ansa sopraelevata and also a bronze food lid with incised decoration, part of the typical table ware of Turkish origin.

The period is sealed (period 4, phase 1) by a thick layer of debris artificially levelled on the whole area of the room (US 1053). It is characterized in its lower part by a strong presence of tiles: it is envisageable that in this phase both floors of the building collapsed, involving in this also the tiles of the roof.

Building 161 was newly paved in the following phase (17th century, period 3), with a layer of mortar with a low lime content, directly on top of the previous level of debris.

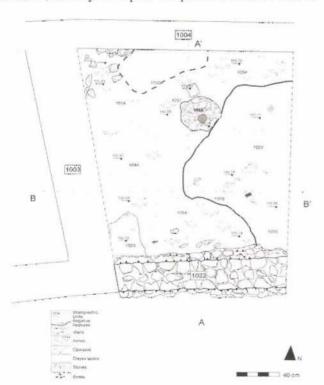


Fig. 5: Plan of period 4, phase 2.

Consequentially, archaeological layers are thin and pottery sherds sparse.

The relative difficulty in identifying elements continues in the following phase (period 3, phase 1). The reason lays in the nature of the pavement levels: US 1047, made of mortar, and US 1046, made of cocciopesto (powdered bricks). These surfaces were kept "clean" during their use.

The surface of the cocciopesto pavement in particular, even if preserved only in its preparatory form, must have had a long period of use and, in fact, in the absence of refuse pins or similar features in the sequence we do not have any elements dated to the 18th century.

In the following period (period 2), the *cocciopesto* pavement is cut so as to create a drainage trench, constructed from reused stones bound by mortar. To create the drainage, a hole was made, aligned in a north-south direction with the southern side wall (USM 1022). The presence of this element may be connected to the transformation of the area in a open or sheltered space: the drainage system was probably used for the disposal of the rain water, collected in a central basin and coming from the roof of the near-by building 160.

The impression that we get is the loss of a specific function in the use of the room.

In the northern part, next to the side wall USM 1004, a rectangular pit was dug (US 1042) measuring 1 x 0.70 m. characterized by a flat floor of lime and well defined vertical walls. The filling (US 1043) included several fragments of glass from modern bottles. The chronology of the deposit characterized by residual pottery sherds, is provided by a medal of the Montenegrin army, dated to 1861 AD.

The layers of period 3 revealed around 15 iron cannoballs. They have different dimensions (between 5-6 cm and 10-12 cm) that probably correspond to the different reaches of the firearms they were used by. The high number of these types of objects in such a relatively small area and the fact that the projectiles were left in situ, without being reused, suggest that they could be ammunitions used in the massive bombing by the Montenegrin army against Turks in 1878.

Furthermore, a decorated plate of the butt of a rifle, the metallic trigger of a second rifle, a mess tin and around tem metal cartridges were recovered and can be attributed to this phase.

The gravity of the casualties of the battle at the end of the 19th century may be inferred from a particular deposit constituted by US 1026, 1027 and 1041. These layers, characterized by abundant ash, yielded more than 60 buckles of various sizes, which can be connected with belts and other elements of military uniforms. In association with the buckles several metal buttons were recovered. It is possible to suggest that the room 161 had been used to burn, essentially for hygienic reasons, several uniforms.

Period 1, dated to the 20th century, corresponds to the restoration yard for the walls of the citadel, put in place after the earthquake at the end of the 1970s. All pottery sherds recovered are residual. The area was no longer used after the military events of 1878.

The excavation enabled us to establish that the fortification of the citadel of Stari Bar can be dated to the end of the 13th entury. There is no evidence for the previously believed existence of earlier structures, at least not in the excavation area.

The absence of residual pottery fragments dating before the 13th century in the whole sequence and in particular in those layers used as filling and thus rich in residual elements, suggests the topographic localization of the early and high medieval phases in different sectors of the town, outside the area of the citadel.

STARI BAR: THE EXCAVATION OF UTS 161. THE POTTERY

Erica D'Amico

The excavation provides a continuous stratified sequence extending from the end of the 13th to the 17th century with a clear interruption in the 18th century and continuation in the 19th and 20th centuries. The different typologies of wares reflect the changes that occurred in the varying commercial and political context of the city of Stari Bar.

A relative chronology has been set, defining six main periods, with an absolute chronology based on pottery evidence. The pottery sequence ends in the 17th century, with the vessels from the last two periods being residual.

The dating at Stari Bar does not depend on a single particular ware but on the entire range that characterizes the various periods. Moreover, the chronology of the pottery is based on parallels with other sites.

The percentages for the different wares found in the trench were based on the total counted number of sherds (Fig. 1).

The analyses of the sherds began by grouping them in the main classes: unglazed ware, glazed ware, slip ware and tin-glazed ware; each group was then further divided into classes.

The fabrics were defined on the basis of their macroscopic characteristics, since no petrographic analyses have been carried out as of yet. It seems rather clear that the majority of the pottery consists of imports.

ANALYSIS OF THE PERIODS THROUGH POTTERY

Period 6

(last quarter of the 13th century - end of the 14th century).

The presence of well dated imported pottery allows us to place period 6 between the last quarter of the 13th and the end of the 14th century. The majority of the pottery is unglazed kitchen ware (84%; Fig. 2) with a rather varied but very small presence of tableware. The period can be subdivided in 4 phases.

The earliest phase (phase 4, Calaon, page 179 Fig. 3) shows evidence of glazed roulette ware in association with unglazed ware from US 1117, which permits us to date the foundation of the wall USM 1004 to after the last quarter of the 13th century.

In the same phase, US 1116, there is important evidence of pottery with a heterogeneous chronology: RMR is found in association with Venetian DDW and can be dated between the end of the 13th and the beginning of the 14th century (RMR and DDW, Fig. 3).