IMTO-Italian Mission to Oman

University of Pisa

Salut

EXCAVATIONS AT QARYAT SALUT (SLQ)

PRELIMINARY REPORT (SEPTEMBER-DECEMBER 2016)

INTRODUCTION

A long campaign of field work took place between September 17th and December 15th, 2016 at Qaryat Salut, the Iron Age settlement surrounding Husn Salut.

Following the discoveries of the last two campaigns, the main goal was the accurate investigation of few context mainly with the aim of their thorough understanding. The excavations were concentrated in the trench-6 with three deep sounding in order to get a better idea of the stratigraphy and the different phases of constructions of the rooms located in the north-eastern area.

Past excavations of the northern area of the site had revealed several burials from the Islamic period insisting on the Iron Age levels. These were partially excavated and removed with the contribution of two anthropologists from the University of Bologna (Appendix A).

Further works concerned the Building 13 located in the western area of the site which shows a real long history of reuse from the 13th/14th century to the Iron Age period. Two jars and a well from the Late Iron Age phases were also discovered.

In addition to the works on the hill of Salut, a parallel project involved the development of an archaeological park in the area. This led to the excavation of two tombs located in the small hill at the foot of Jebel Salut, facing Husn Salut from the east. Here, a dozen of collapsed tombs, presumably dating back to the Bronze Age, were chosen for investigation and subsequent restoration.

During this campaign, L. Strolin went on with the study of the animal bones from the so-called basement to complete the study of the materials for the publication work. The results of the work are listed in Appedix B.

The archaeological investigation has been integrated as usual with restoration work, mainly concentrated on Husn Salut to preserve the previous mudbricks restoration (Appendix C).

SLQ_NORTH: THE FORTIFICATION WALLS AND THE ASSOCIATED STRUCTURES

(TRENCH 1)

Inside the mudbrick house's courtyard, trench 1 was extended eastward in order to chase some wall features only partially exposed, for a very limited stretch, in 2016A campaign. The investigation of this area could allow significant insights on the role of the large wall SU61 through the settlement's life, whereas previous excavations had raised the issue of its possible use as a containment wall for a wide terrace alongside a function as a real perimeter wall, as primarily attested inside tr1. To collect a large set of data to better clarify these aspects, we proceeded with the removal of the upper debris related to the runoff and the wind accumulation from the east side of the trench going eastward.

Aerial picture of Trench 1

The first removal allowed us to expose a rather complex system with straight and curving walls built on different axis and with different techniques, probably related to at least four different phases of construction. With the removal of the courtyard's mudbrick wall in that area and the enlargement of tr1, it was possible to highlight the crest of this stone walls system, along with other stone and mudbrick features, in the southern part of the trench. Apart from the latest phase, the foundation levels are still to be investigated; the exposed structures are attested after the last

construction phase of the western end of wall SU61 (as it is clear from the superimposed wall on the western end of SU61, changing its overall shape, SU63 (see report 2015B).

General view of the complex wall system exposed during the 2016B campaign, looking north-east

The earliest building phase observed for the structures exposed during this campaign is represented by SU651, a stone wall that partially insists on a brown sandy loam, that slightly covers SU63. It is a straight wall roughly perpendicular to the wall SU61 (where it is preserved for a greater height than its western part). The corner made by the two walls is unfortunately collapsed, making it more difficult to evaluate the relations between them. SU651 however, seems to be built after the partial collapse of SU61, as it insists on the same row of the foundation level and in part on stones which probably come from the collapse of the SU61 wall.

The SU61 collapse is also clear from the erection of SU63 wall, which partially use it as a foundation and modify its shape. It is therefore likely that the plausible erected wall made by SU63 had also been partially collapsed at the time of the construction of SU651 or had been dismantled to raise SU61 in its eastern section (it's possible indeed to observe the absence of mounds of collapsed stones).

Apparently, the restoration or the rebuilding of the wall SU61 is related to an important rethinking of the area with the creation of a terraced structure on the slope of the hill and a change of the function of SU61, now used as the northern retaining wall.

SU651 could be a containment wall of the terrace system, as suggested by its structure. At this stage of the research it looks like a single faced wall, well finished only toward the exterior (west), while the inner face was not meant to be visible. It is not possible to completely exclude the existence of an internal face, not visible until the end of the investigation of the area. An original use of SU61 as a perimeter wall, not only in the Trench 1 but also in the area incorporated in the later terrace, could be indicated by the presence of some low walls, roughly founded on the same level of SU61 and intercepted by the excavation of some tombs of the Islamic cemetery above.

The collapsed corner between wall SU61 (in the foreground) and SU651, looking south. See the prosecution of SU61 beyond such corner, to the right

The size of these structure indicates a possible use as independent structures and not artificially filled compartments to raise the terrace, as the walls in artificial compartments appear generally thinner. Further investigation will need to be performed to better understand this area, despite the stratigraphic succession being extensively damaged by the installation of the Islamic cemetery.

As shown by SU651, the construction of some rectangular rooms delimited by stone and mud-bricks wall, unearthed in the southern sector of the trench could be traced to the phase of the redesign of the area. This zone will be further investigated during the next campaign in order to identify the foundation level and study the precise relationships between them and with the terracing wall SU651. They could be interpreted as compartmented foundations of the new terrace or an independent structure like the complex of buildings found in SLQ East.

Iinternal partition of compartmented foundations found in the southern part of the trench, cut by a later containment wall (to the west)

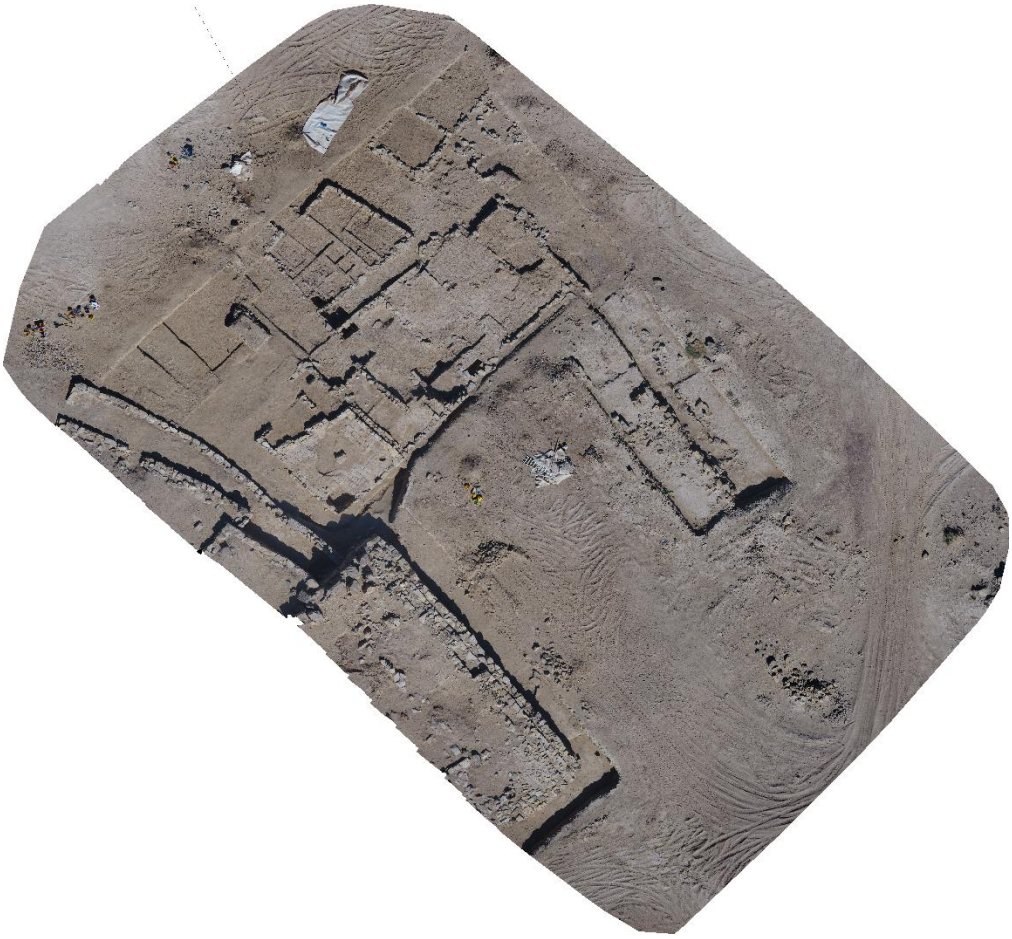
After the raising of SU651, and the subsequent change of use of the area, these structures were cut for the setting of an additional slightly curved containment wall, probably due to the partial collapse of the structures, to strengthen the western edge of the terrace. The foundation cut made through the collapse of existing environments is filled by a loose sandy layer, rich in stones and small pebbles.

The wall complex is cut by another foundation trench for the setting of a stone wall, whose understanding requires further investigations. At the moment, it's only possible to suggest that the cut opened a space in the western wall of the terrace to allow access to the summit. A fourth phase of construction is shown by a coarsely made wall that covers some of the walls described above.

Further investigations and soundings within the terrace to the east of the exposed walls are still necessary to better understand the nature of the complex system of walls discovered this year.

SLQ_EAST: THE EXCAVATION IN THE SETTLEMENT

(TRENCH 6)



General view of Trench 6

In this campaign, Trench6 has been extended in stages towards North-west in order to expose new rooms probably subsequent to those found in the previous campaign. North-west from the rooms 1 and 22, room 18 was found.

Room 18 looking south/east

The room was covered by twenty centimeters of surface debris (topsoil 28) and no consistent floor survives. The inner filling of the room shows an interesting construction technique: after a damaged adobe layer was removed, more bricks were found, not filling the entire room but dividing it into various smaller compartments. These are in turn divided into more compartments by lower mudbrick rows. The room is surrounded by a stone wall featuring an opening on the North-west side to a small corridor surrounding also other two rooms, R25 and R26.

Room 25 and 26 looking north

The two small rooms were not excavated on the inside other than for a very compact layer of recent debris (SU573). This corridor was partially excavated and was made of different fillings cut by various fireplaces and post holes.

Fireplaces and post holes near Room 25 and 26

In the "corridor" between the rooms R22 and R21 and R18 a floor surface (SU572) was found. This surface goes North between the R18 and R25 rooms even though it's damaged. It stops on a low wall (going NW-SE from the corner of R25 to R22) formed by small stones. This wall divides two sectors: the northern part with fireplaces, post holes and more recent wall structures and the southern one with the walking surface.

Corridor between R18 and 21

A series of soundings were made in rooms R21, R2 and R18 to understand how the mudbrick layers were laid down and the building techniques of the rooms. The first sounding in R21 (running N-S) showed different fillings and a compartmented structure for the foundations of the rooms,

characterized by the erection of small precincts delimited by a net of small walls. The internal walls were built with stones laid down vertically and the precincts were filled with rows of mudbricks and mudbrick lumps interspersed in a matrix. The deepest sounding located along the Eastern side of R21 shows the construction of the outer wall covered internally with stones. These outer walls are based on a soil layer and they are preserved for about 70 cm.

Sounding 1 in Room 21

The second sounding (running NW-SE) was performed between the R21, the corridor and R18. In the room R21 the sounding confirmed what was found in the eastern one. In the south-western corner of R18 the sounding shows a rebuilding phase. Indeed, in the lower levels of the fillings it's possible to observe a foundation cut related to the restoration of the room corner, filled by loose loam mixed with ashes and charcoal.

The Iron Age fillings of this second sounding cover the Western wall of room R21 which lays on the caliche, cut by two fireplaces later filled with wadi pebbles.

SLQ_EAST: THE TERRACE SYSTEM

(TRENCH 5-TERRACE 4)

The terrace system

The activities in the terrace system were limited to the cleaning of the main terrace (Terrace 4). The removal of the thick deposit SU102 (top soil) showed two walls: one running parallel to the northern wall of Terrace 4 and the other one perpendicular to it.

More interventions were made in tr5_s2 where last year a portion of a latter perimeter wall of the terrace was exposed. The excavation of the sounding revealed a portion of a mudbricks level laying below the later perimeter wall and running towards east. Some mudbricks are also visible in the western section of the sounding below the top soil, still in situ, but they were not excavated yet.

SLQ_WEST: B13

(TRENCH 8)

The 2016b excavation in Trench 8 has been focused on the internal excavation of B13 with the removal of various layers in order to reach the foundation level of the perimeter walls. Most of them have been dismantled, except the last stage of the Northern and Southern walls, and the investigations limited to the central area of Building 13.

General view of a Trench 8

A very complex stratigraphy was discovered, alternating periods of active use and periods of abandon. with a longer-term occupation from the Late Iron Age (levels detected below the layer of the Northern perimeter wall pose, SU748) to the Islamic era, including the pre-Islamic period.

Due to repeated use, trenches and pits digging and spoliation of walls during the long period of occupation, the stratigraphy is significantly affected and it makes the reconstruction of a coherent internal development more difficult.

The latest phase of use can be found in the levels reached at the end of the last season of excavations, such as SU410 (artificial leveling of an uneven layer of probable abandonment) and SU409. These are the foundation levels for the perimetric walls of the last phase (off-axis from the layer below), or the walls of the so-called mosque.

The Northern and Western perimeter walls are older than those in the East and South and it seems that at least in a first phase the building was opened in these directions; if it was not, there is no trace remaining from the closure.

At a later stage the building was closed to the South and East by two different walls that lean on the existing perimetric ones. These more recent walls rest on layers of compact sandy accumulation, SU412 and SU417 and are contemporary to a first partial division into two Room of Building 13 with the wall SU418. A more recent wall, SU212, was built on the older one, using it as a foundation row, and finally separating the rooms, still communicating by a threshold.

Below these phases the stratigraphy is even more different among the various areas of the B13:

- In the Western side, there is a collapsed level that covers an ellipsoidal pit cut through a mudbrick and compact clay platform.

The mudbrick platform with the nozzled jar

This hole contained a nozzled jar (F187), broken at the maximum diameter in a second phase and used as a hearth. It also contained another stone base for a second jar, probably used in the same way judging from the ashes lenses discovered on the spot. It is likely that that the cut of two supposedly circular pits for the deposition of the jars were followed, at a later time, by a re-digging in which the latter were broken and their fragments used as filling. Some fragments were bearing an inscription in square letters performed before cooking. The shape of the letters, for what can be seen, is similar to South Arabic, although not exactly. The mudbrick platform seems enclosed at least in its Northern side by an ancient wall, which goes much below this.

The noozled jar in a pit filled by vertical mudbricks

- The central area is delimited as follows: on the west by the mudbrick platform (the platform could extend until here, but it was not possible to identify it due to the poor state of preservation 0f its stratigraphic sequence); on the South by a wall that goes down to the Late Iron Age levels but and which shows a later construction phase directly superimposed on the earliest wall; on the North by an L-shaped wall (running East-West); on the East by a wall leaning the aforementioned two, closing off the central space.

-A Northern space delimited by the l-shaped wall and the Northern perimeter wall, with layers of sand accumulation which are covering the degradation layer of mudbricks, SU582, the foundation level of the L-shaped wall.

- In the Southern side, a complete jar still *in situ* (possibly belonging to the Late Iron Age) and a deep well were discovered (W27). The rectangular well curb was built with stones and it covers the caliche substrate, in turn cut by the shaft. The jar seems to be connected with the nearby W27 and tied to water conservation.

The Late Iron Age jar and the well

After the removal of the L-shaped wall and other wall features, it was possible to find a layer of mudbrick decay spread over the whole central-eastern area, SU731. Below it, a possible in mudbrick layer was found, contemporary to the well that the jar, or at least built while both were still visible.

Below this layer there is again a separation between the central area and Eastern one, with a subdivision that follows the limits of the overhanging walls on top of it.

In the later excavations, only the central area was analyzed, where it was possible to reach the Late Iron Age levels, where a long handle bowl was found. In the Northern area below SU582 it was possible to identify the Islamic foundation trench for the northern perimeter wall of the building, although not much is preserved above the foundation. The cut for the building of the West wall can be identified by the mudbrick layer SU637 covering the mudbrick platform.

The central area at the end of the campaign

SLQ_SOUTH: SS10

Aerial view of SS10 in the south area of the excavation site

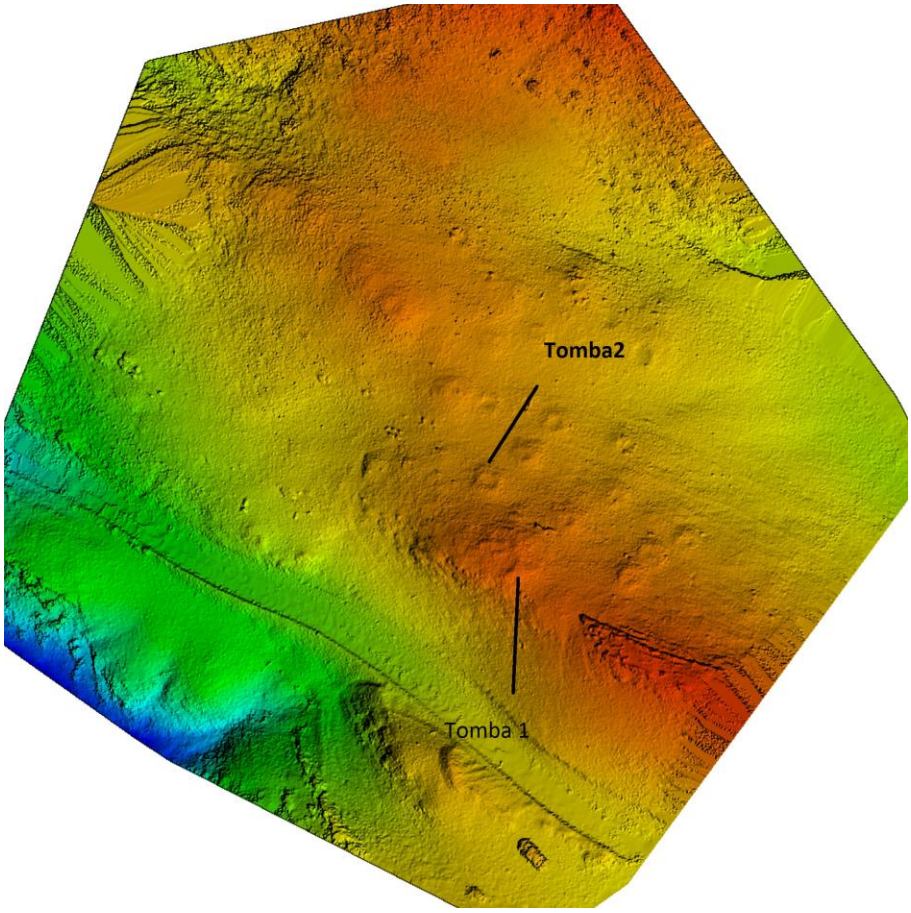
In front of the south-eastern foots of Husn Salut, alignments of stones appeared through the sediments. The works in this area had the purpose to understand if these stones were part of walls related to a terrace system.

The excavation started from the mountain and proceeded to the south. It revealed a series of walls constructed taking advantage of emerging rocks (SU626, SU629, SU630, SU631, SU632). In the north and central part of the trench, the bedrock emerged immediately after the removal of the layer of surface debris (SU625). Unfortunately, only scattered traces of ash and one coin were identified. The pottery shards recovered from this layer referred especially to the Islamic period but some of them belonged to the Iron Age.

In the eastern part of the trench a level of use appeared under the surface as a semicircular fireplace (SU635). The filling of the fireplace (SU636) was composed of ash mixed with few pottery shards belonging to the Islamic period.

JEBEL SALUT

(JSS3, JS4-G1, G2)



Map of the area JS4

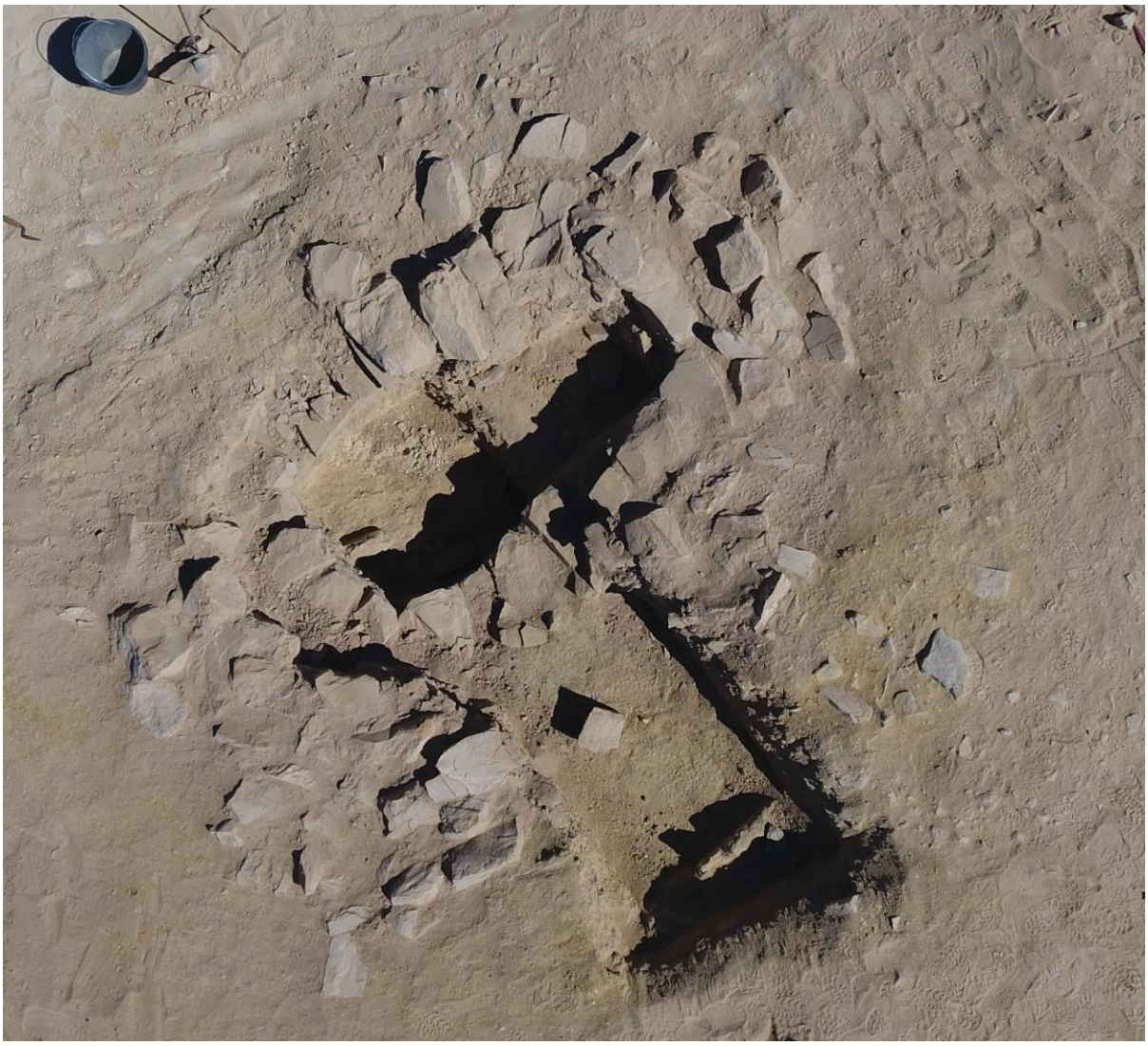
This excavation area was opened on the foothill of Jebel Salut. Here the presence of a dozen of grave cairns was known from the previous surveys in the area (JSS3) and from the pictures coming from the drone flights. The surveys showed the presence of pottery from Early Bronze Age to the Iron Age but also of a large amount of recent Islamic pottery.

Two cairns were chosen for the excavation, both located on the western side of the small outcrop and facing Husn Salut. The first tomb excavated is JS4, Grave1. After the removal of the collapsed roughly made stones, an oval shaped grave was revealed. It is constructed as single wall grave but only the last row of stones is still preserved. The tomb is oriented SE/NW and the stones are placed to compensate the slope of the hill. The layer below the stones is formed by yellowish gravel coming from the dismantling of the bedrock as it was already found in the excavations of Husn

Salut. The main structure of the grave is surrounded by two/three rows of stones, preserved only in the most north-western side.

The long use of the tomb and the reshuffling of it is testified by the lack of findings and bones. The few fragments of pottery come all from the upper level of collapse of the tomb and belong to the Iron Age.

The second feature (JS4, Grave 2) stands on the westernmost crest of the small hill. The grave was almost circularly shaped but only the last row of stone was identified. In the north-eastern part of the grave also a stone floor was partially found in place. The excavation of a small sounding shows that the tomb was cut in the bedrock and in the thin yellowish gravel layer. Unfortunately, also this one was robbed in the antiquity and its contents disappeared.



Aerial view of JS4, G1

SL_Q_North preliminary report and anthropological study: 2016B campaign

The 2016B archaeological campaign included the extensive excavation of the Islamic cemetery area, which occupied the superior layers of the abandoned Iron Age settlement. This sector covers a sub-rectangular area of roughly 70 m^2 and hosts about 50 burials, even though the exact number has still to be determined. This campaign has brought to light 27 burials: the main criterion which was adopted to select the graves to dig was their proximity to the northern limit of the slope, due to the programmed work that has to be performed in the next field season there.

Figure 1: View of the area. Note the upright marks (red circles).

Each grave had an upright mark made of simple stone (Fig. 1), usually worked in order to take a rectangular shape of about 25-30 cm of height. These marks were usually placed in a vertical position in the upper limit of each grave pit and were sometimes joined by an ulterior vertical mark at the opposite short side of the perimeter of the fossa. The situation described here is coherent with the current literature on Islamic funerary customs (Insoll 1995, Simpson 1995, Petersen 2013). The presence of the location of the grave mark in respect to the buried body has however no pattern: as seen in the area, in fact, there are some exceptions: in one case the body of the death was recovered in a pit that had no particular delimitation except for the limit of the fossa itself in the ground (G. 11). In other cases, the mark could have different collocations, like in the middle of the pit, roughly in correspondence with the thorax portion of the deceased (G. 23 and 24). Again, the mark was also not placed in apparent direct connection with the body (G. 15). Apparently, there is no significant difference between burials of males and females in terms of distinctive marks, in contrast with some situations described in the archaeological literature (Mershen 2004).

The structures of the tombs could not be appreciated at surface level, with few exceptions of emerging elements of delimitation. The majority of the burials were cut in the simple soil (G.11), but the stratigraphic differences between the rest of the sediment and the filling of the grave were not always clear. In other cases, the shape of the grave was delimited along its perimeter by a series of rectangular stones, describing the grave border (Fig.1, G. 19). In only two cases, this delimitation occurred in a sub-oval shape (Fig. 2, G. 29, 32). In two burials of infants, the stones described an elliptic surface (G.16, 28), but the body was recovered in a portion of soil outside this described area. There was no evidence of more elaborated structures above the graves, nor signs of elevated infill on each pit. 27 burials were excavated, but only 9 individuals were found (see Tab 1), while 2 contained scattered bones (G.18, G.14 and G.26). The presence of empty graves finds no parallels in the archaeological literature on Islamic funerary practice.

Fig. 2: From left to right, G. 29, G.32 and G. 19. The shape of the grave delimitation can varify.

The observations of the original position of the body and how it was arranged in the grave at the moment of the burial are made perfectly clear by the effects of the decomposition in a filled space: no coffin was in fact used, leaving the soil free to progressively fill the room occupied by soft tissues, so as the decomposition took place, the original position was preserved. According to Muslim tradition the body has to be placed on its right side, facing Mecca: this situation is also coherent with our findings in the cemetery, except in G.16, where the body is laid on the left side (Fig.3), and in G.38, where the body is laid on the right side, but the head is facing East.

Figure 3: G. 11 and G. 16. Note the original position of the skeleton in G.11, due to filled space decomposition, despite the fragmentation. G. 16 is laid on its left side, facing East.

No grave goods were present, with the exception of a bracelet composed by glass paste found in G. 16, in direct relation to the body of an infant.

The individuals recovered during the excavation are listed in Tab. 1. Of the total number (9) of the individuals, 8 are juvenile, 1 is a mature adult. In addition, other scattered bones were recovered in other graves, but since these bones were not in connection with other skeletal elements the anthropological study was not possible.

Grave	SU	Age-at-death	Sex
11	461	45-50 years	M
15	453	0-0.5 years	NR
16	463	2 weeks-3 months	NR
16	462	3-5 months	NR
21	474	NR	NR
22	479	7.5-9 months	NR
23	480	0-0.5 years	NR
24	485	Juvenile	NR
38	612	6-7 years	NR

Tab 1 : List of individuals

The estimation of age-at-death in juvenile skeletons was performed using the length of long bones, measured and then compared (Ubelaker, 1989, Stloukal e Hanakova, 1978), by the growth patterns of dentition (Ubelaker 1978, AlQathani, 2000), and by the diaphisys-epiphisys fusion (Scheuer e Black, 2009). The estimation of age-at-death in adults was performed by using the exocranic suture closure (Meindl e Lovejoy, 1985), by the grade of dental ware (Lovejoy, 1985, Brothwell, 1985). For the determination of sex in adult, the used method was the morphology of cranium and pelvis (Acsadi e Nemeskeri, 1970), and the maximum width of the head of the femur (Stewart, 1979).

The anthropological study was also performed on individuals that were recovered during the 2016A archaeological campaign, 4 adults and 2 juveniles. In total, the skeletal remains found in Salut so far are then belonging to 15 almost complete individuals.

Of this totality, it was also possible to perform a paleopathological study: all adults had pathological alteration related to age, such as osteoarthritis of the vertebral bodies and Schmorl's erniae (Fig. 4). Only one adult presented calculus.

Figure 4From left to right, G. 5, vertebral body affected with Schmorl's hernia and G.11, cranium, detail of the presence of calculus.

The anthropological study of an Islamic cemetery is a rather new approach, because there are very few examples of precedent similar efforts. Though, the excavation of similar contexts has put archaeologists in front of the necessity of this accurate study, providing new insights on Islamic burial customs and new information on populations in ancient times.

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Archaeozoological campaign : preliminary report of activities (15th o September – 16th of October 2016)

Laura Strolin

This has been the second archaeozoological campaign devoted to the study of faunal remains recovered at the site of Salut, and is part of a wider project of study of this kind of evidence, which will contribute to the understanding of this complex site. During this second archaeozoological campaign, the work previously carried out has been continued and finalised. We observed the remaining material collected by the excavators during the past campaigns in some well defined contexts and completed the database already set up in the first campaign. This brief report relates the activities carried out and some immediate results of the work.

The contexts selected by the archaeologists are the so-called Basement, Burnt Building and Building 1, for which a sound stratigraphy has been recognised and a series of radiocarbon datings have been produced to strengthen the analysis.

The material classified during this campaign pertains to the following layers: US7, US11, US15, US23, US43, US100, US240, US241, US259, US271, US272, US277, US279, US337, US348, US349 US356 US366 US367 US368, US376 US377 US378 US381 US384 US385 US386 US389 US390 US392 US393 US394 US396 US399 US400 US407 US426 US427 US428 US435 US439 US445 US474 US475 US480 US485 US489 US491 US496 US499 US551 US556 US558 US562 US566 , M138, M139.

The methodologic considerations explicited in the previous preliminary report are still valid. The material has been dry brushed to avoid any additional damage to the fragmentation due to the operations of excavation. Bone fragments have been hand collected by non-archaeozoologists, breakage often occurred and no sieving has been performed. These procedures bear scientific consequences as for the specific identification of fragments, the age determination and the representation of small-sized species. Nevertheless we decided to sieve all the earth agglomeration preserved, a procedure which allowed the recovery of some interesting remains, to which we will refer shortly. In some layers, the nature of the soil caused incrustations which hampered the complete observation of the bone surface, but this feature has been recorded and it will be possible to take it into account. Anyway, for the majority of the remains the state of preservation was good enough to allow determination of the species, sometimes the gender and the age of the animal.

The database already set up in the previous campaign also contains metrical information, recorded following the standards published by VON DEN DRIESCH 1976. Considerations concerning the size of animals will be object of a more detailed report.

A total amount of 6963 (NISP) fragments has been observed, of which 3348 could not be identified, mainly because of their fragmentation (81.5 % of the unidentified fragments did not reach 4 cm), in other cases because they belonged to a non diagnostic portion of the bone. Nevertheless, if we take into account the weight of unidentified fragments, it is important to stress that this portion equals only 7.25% of the total weight of the assemblage. This implies a less severe impact on the study.

Age at death has been assessed considering the epiphyseal fusion (following BARONE 1976 and HABERMEHL 1975) and through the observation of eruption and wear stage of mandibular teeth as standardised by GRANT 1982. Considerations made by MUNRO/BAR-OZ/STUTZ 2009 have been applied in the case of gazelles. The preservation of teeth was not ideal and often fragmentation into many splinters occurred even after recollection. Therefore we considered worth trying to reconstitute isolated teeth as well as tooth rows with accuracy, in order to provide even some mandibular wear stages. This effort allowed us to offer a sounder set of data concerning the age profile of the livestock.

Taphonomical analysis has also been performed on the assemblage, through detailed recording of the observed traces. Simple optical instruments have been used, such as magnifying lenses and a photographic enlargement, which allowed more punctual observations. Some traces have been later double checked trough microscope observation in laboratory. This approach will make considerations possible about diet and butchery practices in ancient Salut, as a second phase of analysis of the database.

The material has been stocked in Muscat Office deposit, exception made for some elements that have been transported to the Department of Archaeozoology of the *Muséum d'Histoire Naturelle* of Geneva (Switzerland) for further examination.

The results of a deeper study will be presented in the final report, in preparation. But this brief report can already anticipate that the new data set mainly confirms the results of the previous campaign for what concerns the species identified. The striking majority of the evidence (47.6 % of the total, 91.8 of the identified fragments) indeed belonged to sheep and goats, possibly present at the site as a domestic stock. In many cases the preservation of diagnostic features made specific determination possible, which revealed a prevalence of goats, a proportion coherent with the environment of the site in ancient times. Traces of butchery indicate a widespread use of these species for consumption, in particular marks located on atlas and occipital portion of crania point to slaughtering practices. A deeper consideration of the butchery marks is in preparation. It is unambiguous to imagine that ovicaprids were the base of animal exploitation: their importance in subsistence of human communities is attested at multiple sites in these areas. A study of the representation of the different skeletal elements and of the mortality profile are *in fieri* and will offer additional fundamental information.

Some remains of bovines have also been identified (5.3 % of the identified remains), showing marks related to meat consumption. The reduced number of remains pertaining to this species had already been stressed regarding Salut material. The environment surely played an important role in this situation. Still, a comparison with other sites in the area will be prepared in order to better estimate the natural or possibly anthropic origin of this situation.

Camelids were also part of the assemblage (20 fragments have been identified). Their presence at the site is of course not unexpected considering the geographical distribution of this species and had already been identified in other layers. Butchery marks were present too, suggesting a consumption of the animals. Considerations about the size of animals will be object of a specific examination, supported by comparisons with data from other archaeozoological studies.

A small amount of gazelle remains has also been identified, in one case sex assessment has been possible indicating a female. Additional measurement have been performed on gazelle remains, following MUNRO/BAR-OX/HILL 2011. The presence of this taxon points to hunting, but not to be considered the main activity at the site (the number of remains is too scarce). Still, the presence of butchery marks suggests dietary consumption.

An equid remain has been found during this campaign, and brought to Europe for intraspecific determination. The same has been done with bird remains (mainly big size birds), for which a specific assessment will be possible thanks to the comparative collection present at the *Muséum d'Histoire Naturelle* of Geneva. No cut marks have been recorded so far on these remains.

Some remains of a fox have also been identified, without any butchery mark and in anatomical connection. The presence of scavenger animals is not surprising and had previously been recorded at Salut, also –of course- through the observation of a significant amount of tooth marks left on bones by carnivores. The recording of toothmarks has also been performed, is included in the database and will be object of further considerations.

The secondary sieving of the earth found in the bags or accumulated in the voids of bones delivered a few remains of fish vertebrae and of a reptile mandible, which have been transported to Europe for detailed observation. For what concerns the few fish bones, the goegraphical location of the site, its environment primarily, as well as the methods of recovery of materials contribute to explain their scanty presence.

Rodent bones have also been recorded, which will be analysed for the final report, in particular in the case of teeth. Their presence is also attested by several tooth marks observed on bones. The issue of the presence of rodent remains in archaeological assemblages will of course be taken into account for the interpretation.

Another preliminary consideration may be done, concerning the relative abundance of material recovered from the various layers. It is immediately evident that from a quantitative point of view there is a disproportion between layers. Since the methods of recovery and the teams involved in the fieldwork have not substantially changed, this element could have archaeological explanations which will be discussed in the forthcoming study.

Together with the study of the faunal assemblage, we continued the set up of a small but useful comparison collection made of archaeological as well as modern local material. The enrichment of this collection is an excellent instrument to facilitate and accelerate work in the next archaeozoological campaigns.

Moreover, a look at the future has also been given since some instructions have been provided to the excavators concerning the methods of a more efficient collection of osteological remains during the digging operations. We aim this way to provide assemblages more and more suitable to archaeozoological studies.

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