Jabal Moussa - Qornet ed-Deir Archaeological Project

Report on the stratigraphic relation between contexts and pottery collections of the 2017 season

Bettina Fischer-Genz

Introduction

Even before the onset of excavations in July and August of 2017, surface cleaning of several areas was undertaken in order to enable the drawing of architectural plans by the topographer.

In the course of these cleaning works pottery was collected from three of the four rooms within the main architectural structure (Fig. 1), and a large amount of pottery also came from a feature termed "the hole", which probably constituted a cistern of sorts, although a silo for the storage of food or grain is also a possibility. The pottery was not collected according to any specific strategy, and constitutes all the fragments visible on the surface.

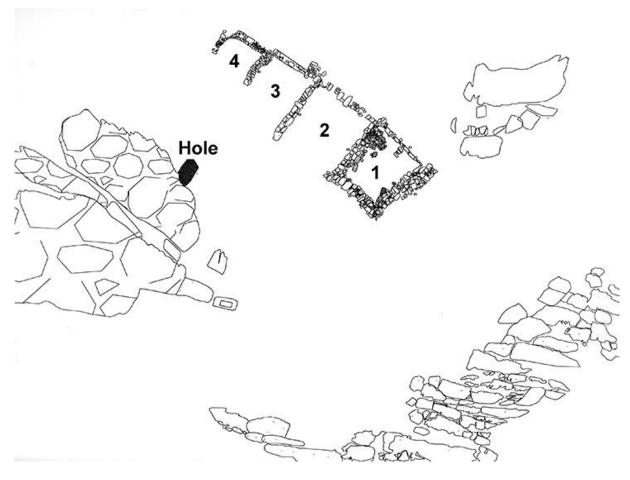


Fig.1 Qornet ed-Deir architectural plan 2016

As already stated in the previous report on this pottery, it provided a good initial sample of the later occupation periods present at the site from the Roman period all the way to the Ottoman period, although not surprisingly the earlier Middle Bronze Age layers were not represented in the surface

assemblages. In summary, the surface pottery already revealed in terms of functional analysis a rather normal distribution between table wares (plates and bowls, pitchers and jars), pottery for food production (cooking pots with and without a stout neck, as well as few fragments of pans) and pottery for long term food storage in the form of large storage jars with massive lateral handles and ring bases. A few fragments of conical bases and smaller handles indicate medium sized storage jars or even transport containers such as amphorae, but for none of the rooms a predominance of either storage or cooking wares could lead to differentiating their function on the basis of this surface pottery alone.

In terms of phasing, there were pottery forms belonging to the Middle and Late Roman period, but no fine wares, which would definitely be expected in more urban settings and were generally also present in rural estates and farmsteads of the Roman period. There were only relatively few tile fragments, raising the question of what type of construction material was used for the roof. At least for the later period buildings, the presence of pillars in the middle of the rooms alerted us to the possibility of stone vaults. This would also explain the large amount of stone collapse in the middle of the rooms, which effectively truncated and even obliterated floors of earlier periods. Except for one brown-and-yellow glazed Mamluk lamp no lamp fragments had been found in the surface collections, but we would expect larger amounts in the excavation, or otherwise should consider alternative means of lighting inside the rooms.

In summary, before the start of the excavations we anticipated from the available surface pottery multi-room buildings of the Middle Islamic to Later Islamic period 12.-18. c. AD, with a Roman phase of unknown layout and function beneath. The economic context seemed to point to normal storage and food production capacities, without any of them being important enough to warrant an interpretation as a farm or a specialized production installation for grain or oil. Therefore taking into account the location, we were expecting a small site with a domestic or monastic function, possibly even an overnight accommodation for travelers.

Excavation areas

In the summer of 2017, a permit was granted by the Directorate General of Antiquities (DGA) to conduct two small soundings in the presumably Roman building on the northern slope (Area 1) as well as in Room 2 of the multi-room building up on the plateau (Area 2). Area 2 was selected as the most accessible area inside the building in-between massive stone collapse, and the goal was to ascertain the date of the different building phases and gain some insight into the function of this architectural complex in a highly strategic location. In addition, an underground chamber measuring 1 x 2.50 m in the western prolongation of Area 2 was investigated, as it had been disturbed in previous decades and was endangered.

Area 1

In this area at the bottom of the stairs ascending to the plateau, we exclusively worked in the western of the two rooms of the structure, which was larger and easier accessible. The eastern room is probably a small annex. Only the north wall (Context 1001) and the west wall (1002) of the main western room were visible from the beginning (**Fig. 3**). A 1m wide gap at the southern visible end of the western wall very likely represents an entrance. The south wall and the east wall remained

unclear, and even during the one week of sounding no evidence for their location were obtained (**Fig. 4**). The eastern wall was probably thoroughly disturbed by tree roots, whereas the southern wall was either covered or destroyed by context 1003, which is rubble from the medieval lime kiln right next to it.

Inside the room under the topsoil (Context 1000) was a stone collapse (context 1004 consisting of very large mostly rectangular ashlars, which clearly represent collapse from the walls. On the surface it looked as if the northern wall was three courses wide in contrast to the western wall, which only was two courses wide. But after the removal of the stone collapse 1004 it turned out the innermost line of the northern wall just represented collapse and this wall also was two courses wide. Under 1004, context 1005 was discovered which consisted of a clay soil, slightly reddish in color, which was very hard to excavate due to its density. Also this context contained stones, but mainly smaller in size. This was also the only context that produced some pottery sherds, unfortunately mainly body sherds of ribbed vessels which belong to a very long lived pottery tradition covering the first millennium AD, not allowing us to clearly assign it to the Roman or Byzantine period. But it would seem that the site started out as early as the 3rd c. AD, judging from the single rim of type of Beirut Amphora found in the lowest level (FN 7, context 1005).

Context	Find number	Total number	Weight (Kg)	Types/quantities	Dating
number		of sherds			
1000	1	15	0.2	BS, all kept	Not datable
1000	2	2	0.05	BS, all kept	Not datable
1004	3	7	0.35	1 Diag., all kept	Not datable
1004	4	39	0.2	3 Diag., all kept	Not datable
1005	5	68	0.55	3 Diag., all kept	Handle and
					cooking pot
					rim with
					handle -1 st -8 th
					c. AD
1005	6	156	2.8	116 BS thrown,	Handle type
				29 BS kept, 11	from Kamed
				Diag.	el Loz,
					possibly Early
					Roman; lug
					handle on
					shoulder, 16.
					c. AD
1005	7	126	1.75	88 BS thrown,	Rim of Beirut
				33 BS kept, 5	Amphora, 2
				Diag.	3. c. AD
Total		413	5.9	28 Diag.	

The excavation was stopped before any floor level was reached. Therefore questions regarding the function and precise date of the structure cannot be answered with certainty. However, the building's position along one of the access routes to the site from the north as well as its construction technique (made out of large, well hewn ashlars with walls up to 1m in thickness) suggests that we are dealing with an extra-urbam administrative or military building, such as a police or custom's building for example. This building was certainly somehow connected to securing and/or controlling

access to the plateau, and it was probably integrated into the wider communication network from the coast through Afqa into the Beqaa.

Area 2

During a preliminary mapping in 2016 before the inauguration of the trail, the four rooms on the western side of the plateau were numbered from north to south (**Fig. 5 and Fig. 6**). Another multiroom building lies to the north-east of the plateau, which has not been cleared of vegetation or been investigated yet.

As previously mentioned, Room 2 of the multi-room building was selected for an archaeological sounding, as it seemed to be the most accessible one in terms of stone collapse. It measures about $2.40 \times 8.40m$, and includes at its western end what was first thought to be one of the typical piriform cisterns, but turned out to be a well constructed underground burial chamber measuring $1 \times 2.50 \, \text{m}$ (Fig. 7).

The surface of the entire room needed to be cleared of a massive stone collapse (Context 2000), which contained copious amounts of pottery and very loose brown soil. Many of these stones were well hewn and measured about 60 x 40 x 40 cm. In all likelyhood these stones had fallen from a vault above the room, as after more investigations several bases for central stone pillars could be indentified in other rooms. In order to see how deep the stone collapse reached and what levels were preserved underneath, the square was divided into four parts: from east to west 2/1, a baulk of 2m width only later excavated as 2/4, 2/2 and the adjacent constructed underground chamber 2/3. A surface cleaning of the next room to the west was conducted to facilitate completing the plan of the building.

Area 2/1

2/1 was the easternmost part, and here under the large stone collapse two steps leading into the room were found (**Fig. 8**). A compacted layer with small white stones in dark brown soil below the unfortunately not detectable floor level of the room started to yield a large amount of Middle Bronze Age pottery, context 2005. This layer was dug down almost 2m, continuously revealing Middle Bronze Age pottery, and no further floors or structures were encountered so far. This layer certainly continues further down as no bedrock was reached.

Area 2/2

The sounding in the middle of the room, called 2/2, revealed under the stone collapse on the third day of excavation the outline of a round pottery structure adjacent to the southern wall of the room, which was first interpreted as a *tannour*, context 2009 (**Fig. 9**). As the walls of the "tannour" made of fired pottery (or even made of reused *pithoi*) looked to be restorable, they were consecutively collected and bagged separately. It became apparent that there was a distinct outer and inner wall (**Fig. 10**), or indeed two layers of pottery set one into the other. When the material was washed, it was found that there were at least two and possibly three rim forms, and there was evidence of fenestration or at least one opening with vertical finished edges perpendicular to the rimⁱ. Although the structure could be used as a *tannour*, another possible identification of this vessel could be a Middle Bronze Age cult stand, as we know them for example from Kamed el-Lozⁱⁱ. It is not clear yet whether it is indeed one vessel, or possibly several. When the pottery from the adjoining Area 2/1 was washed, it appeared that more pieces of the same or similar vessels were also found in that

square among the Middle Bronze Age pottery from that context. Due to the two parts set within each other it is possible that the "tannour" in Area 2/2 was not in its original location, although its preservation and upright position make it at least possible that it was *in situ*.

The layer around it was made of rather hard grayish soil, possibly due to an ashy component, with only few pottery fragments. The "tannour" sits on its lower rim in an almost sterile layer of red clay, with a dense concentration of white stones 10-20 cm in size (Fig. 11). The same white stone layer was also encountered in area 2/1 as context 2005. This level is entirely made up of Middle Bronze Age material and needs to be excavated further down. Possibly this clay layer, which was also encountered in the northern part of Area 2/2, might have been a floor. It could alternatively have come from decomposed mud brick structures such as benches. But the preservation conditions were unfortunately not good enough to determine any particular shape, only the concentration of this pure clay material otherwise not encountered in the area.

The entire structure of the "tannour" had a diameter of 70 cm, and the walls were preserved to a height of around 30 cm. From the partial removal of the baulk in between 2/1 and 2/2, labeled Area 2/4, it is clear that the layers containing Middle Bronze Age pottery can be expected to go down for at least another meter or more, judging by the level reached in Area 2/1.

Area 2/3

In Area 2/3 it was first thought that the visible underground structure would be a cistern. But cleaning of the surface showed that it was indeed a roughly south-north oriented built chamber tomb with at least three covering slabs in situ, possibly two more in the northern part that are now broken and not completely preserved (Fig. 12 and Fig. 13).

After the removal of one of the middle covering stones it was possible to access the tomb (**Fig. 14**) and check whether it still contained human burials in situ. At first it seemed through the material that had fallen through the cracks of the northernmost covering stones that the tomb was heavily disturbed, but after several craniums were collected in Context 2026, it became apparent that indeed the skeletal remains below were still articulated, and that the levels underneath had to be excavated by a specialist . The pottery found in the upper layers of the tomb were from the Middle Islamic Period, roughly the 12th-15th c. AD.

Context number	Find number	Total number of sherds	Weight (Kg)	Types/quantities	Dating
2017	33	147	5.8	105 BS thrown, 25 BS kept, 17 Diag.	1 rim + handle of firing pan with slip painted decoration underglaze, 1 F. cooking pot with glaze and 1 F. beige ware, all Middle Islamic
2017	34	1	0.2	Complete juglet	Roman period, overfired

2018	36	163	4.0	135 BS thrown,	T-shaped rim
2010		103	7.0	20 BS kept, 8	of bowl/basin
				Diag.	with wavy
				Diag.	incised
					decoration,
					possibly pre-
					islamic. 1 Late
					Roman
					handle, 1
					possible Akko
					Amhora. No
					secure Islamic
					material
2019	43	85	1.9	56 BS thrown,25	1 Roman
				BS kept, 4 Diag.	Cooking pot
					handle, 1 BS
					decorated
					(Pilgrim Flask),
					1215. c., 1
					glazed ware
					rim, 2 slip
					painted BS,
					1213.
					c./Middle
					Islamic
2019	47	75	1.2	12 Diag., all kept	1 F. small
					roman beaker,
					possibly Early
					Islamic
					material (Late
					Abassid or
					Fatimid?)
2020	44	59	2.8	39 BS thrown,18	1 rim of
				BS kept, 2 Diag.	medieval red
					ware with
					glaze,
					Middle/Late
					Islamic
TOTAL		530	9.9	44	
	L			1	

At this stage, Dr. Nada Elias agreed to join the excavation, and under her careful supervision the entrance to the tomb at the southern end was uncovered (Fig. 15), and she excavated three skeletons with preserved anatomical connexion (Fig. 16). The skeleton context 2037 of a male between 20-29 years of age had two simple bronze arm rings around his right wrist (Fig. 17). The very narrow space only allowed for one person to work in it, but all in all the minimal number of individuals is 10 so far, with mostly their craniums preserved. For gender identification we will have to wait for more complete skeletons, and the analysis of the uncovered three is still ongoing. More skeletons still remain in the tomb, which will hopefully be excavated in the coming season. In addition to the simple bronze arm rings two little bronze bells (Fig. 18), fragments of a terracotta lamp and a few beads were discovered in the tomb. A comparative study of burial practices for this

period in the wider region will hopefully shed some light on the cultural context of this burial chamberⁱⁱⁱ.

C14 dating of the tomb

We received from the Chrono Laboratory three RadioCarbon Dates for the skeletons excavated before Dr. Nada Elias worked with us. These give the following information:

Laboratory Identification: UBA-37491 Date of Measurement: 2018-05-04 Site: Sample ID: QED2 Material Dated: bone, antler or tooth root Pretreatment: Collagen, conventional 14C Age: 1712±36 BP using AMS

68.3 (1 sigma) cal AD 258- 283

322-387

95.4 (2 sigma) cal AD 244-400

Laboratory Identification: UBA-37492 Date of Measurement: 2018-05-04 Site: Sample ID: QED4 Material Dated: bone, antler or tooth root Pretreatment: Collagen, conventional 14C Age: 1517±49 BP using AMS

68.3 (1 sigma) cal AD 433-459

466-489

95.4 (2 sigma) cal AD 426-632

Laboratory Identification: UBA-37493 Date of Measurement: 2018-05-04 Site: Sample ID: QED7 Material Dated: bone, antler or tooth root Pretreatment: Collagen, conventional 14C Age: 1734±33 BP, using AMS

68.3 (1 sigma) cal AD 251- 343

95.4 (2 sigma) cal AD 237-389

Felix Hoeflmeyer from the Austrian Academy of Sciences had a look at the results of the three Radio Carbon Samples from Qornet ed-Deir:

There is in the three samples (UBA-35491/92/93) nothing that would indicate a "reservoir effect". The quality of the collagen representing the preservation condition of the bones, which is reflected in the C:N-level, should be between 2.9-3.6 in order to give good results, and the relative collagen amount should be above 1%. The Qornet ed-Deir samples fulfill both criteria, and would have been labeled by the laboratory as "non-datable" in that case. The Isotopes, namely $\delta15N$ und $\delta13C$ give indications as the diet during life time. On the base of these results we can reconstruct mixed diet based on agricultural products, a low amount of animal based products, very low or none fish or marine products. So the date seems to be as given by the Sanger Institute 2.-4. c. AD, therefore in the Middle Roman Period.

After seeing these results we rechecked all the pottery, and indeed at least the complete juglet found wedged in between the covering stones (context 2017, FN 34) indicates a Roman date as well, even though a lot of Middle Islamic pottery was found on top of the burials.

Most individuals had their head to the north and feet oriented to the south, only one so far is oriented in the opposite direction. For the moment we cannot determine if they were related and what community they belonged to, but the preservation of the bones is excellent for dating, and we are also very fortunate to have samples of these individuals included in the ongoing project at the Wellcome Trust Sanger Institute to catalogue the genetic changes that have occurred in Lebanon after the Bronze Age^{iv}.

Area 2/5

The room west of Room 2, Area 2/5 (**Fig. 19**), was cleaned on the surface to allow a better mapping of the walls. During the cleaning, Context 2033 revealed in the southern entrance to the building wedged between two stones next to the threshold a beautiful figurative handle of either a jug or a large terracotta lamp (**Fig. 20**). From the style this most probably belongs to the byzantine period.

The whole pottery from this context was byzantine without roman or later intrusions.

ⁱ In her study of different *tannour* types from the prehistoric to the modern period, Alison McQuitty observed in Aqaba ovens that had several layers of pottery set one within the other, see McQuitty 1994: 63-65. But she righly states that there usually is a lot of ash and faunal remains associated with these ovens.

ii Among the multitude of different forms of cult stands found in the middle bronze age temple of Kamid el-Loz, Martin Metzger also presents some rather large examples and refers to comparisons with fenestrations. See Metzger 2012: 194 Fig. 77 for simple forms, and Metzger 2012: 203 Fig. 88 for fenestrated ones.

iii In the case of the two individual burials found in the basilica of Yanouh, their date could unfortunately not be confirmed for either the byzantine or the medieval period, see Gatier et. al. 2002, 217-219.

^{iv} We are extremely fortunate that Dr. Marc Haber included into this project the radiocarbon dating of 3 samples from Qornet ed-Deir, and is working on the genetic sequencing of 5 individuals from our excavation.