

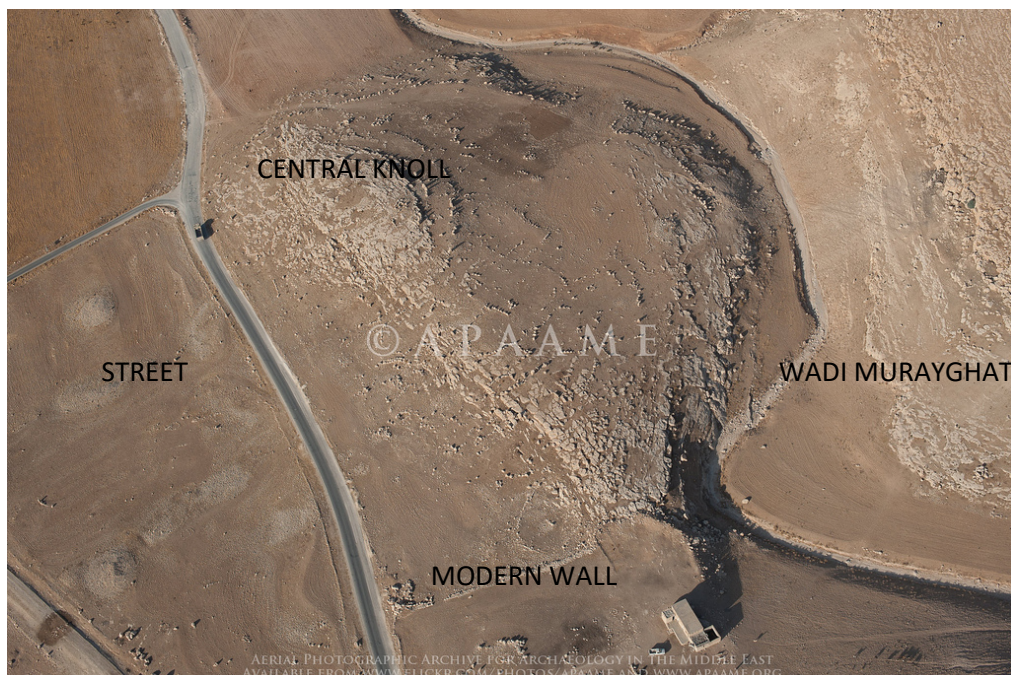
UNIVERSITY OF COPENHAGEN

The Ritual Landscape of Murayghat Project

5. Season: 2018

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Near Eastern Archaeology

ToRS



The Ritual Landscape of Murayghat

2018 report of 5. Season to the Department of Antiquities of Jordan

Susanne Kerner

Site and Present situation

The site consists of the central knoll (area 1; fig. 1) and the surrounding low hills to the north (area 3), west (area 4 and area 8), southwest (area 5 and area 6) and east (area 7). The low hills contain most dolmens, with the largest ones in area 3 and 7. In area 7 is also the Hadjar al-Mansub, a large standing stone, ca. 1 km from the centre of the central knoll. The central knoll is ca. 3.5 ha, while all the area surveyed includes ca. 70 ha.

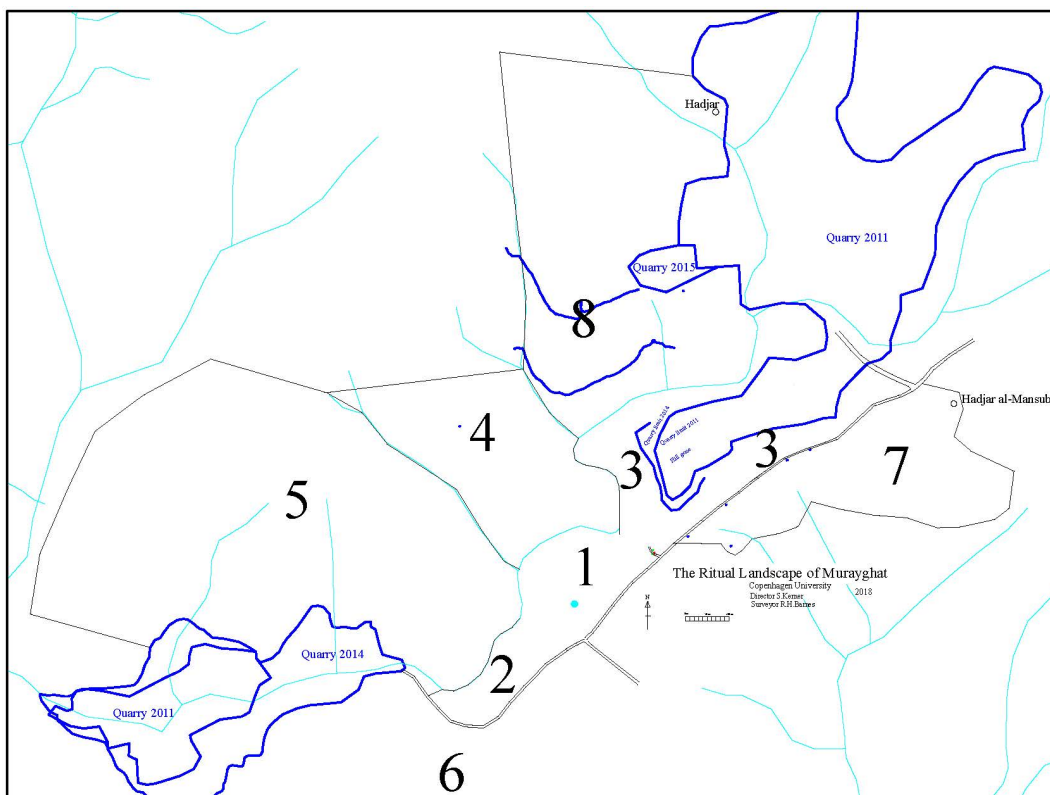


Figure 1: Overview Areas in Murayghat



Figure 2: Stone pile on central knoll created recently by bulldozer.

The northern quarry still works westwards (eating into area 8), but not anymore towards the site. The southern quarry is not threatening the site anymore. The third quarry in the south-west on the other hand still moves towards area 5. Along the road, next to the central knoll, some disturbance of the dolmens is still continuing.

The central knoll showed new disturbances, as a bulldozer had piled up two stone heaps (and thus removed the stones from their original setting) on the central knoll (fig. 2). A mobile phone company had

bulldozed a street all the way to the west of areas 4, 5 and 8, destroying a Roman tower and several of the long, low walls running in that area. This led to some rescue survey in area 5. The regional inspector was informed and took actions.

Project “Ritual Landscape” in 2018

The project by the University of Copenhagen (Institute for Regional and Cross-Cultural Studies) directed by Susanne Kerner is designed to study the dolmen fields, central knoll and related structures of Murayghat in order to understand the relationship between the single elements and comprehend the reasons for the existence of the dolmen-field. The project intends to understand the ritual meaning of the structures and identify their role in the ritual and socio-political make-up of the society as well as in the landscape of the periods involved.

The 2018 season consisted of a smaller number of participants and had the following objectives: limited continuation of the central knoll survey, further study of structures on the central knoll, continuation of trenches 3 and 4 to the south, survey of the surrounding hills (area 4). The project took place between the 16.4. and 24.5.2018; between the 21.4. and 16.5., the annual field-school of the University of Copenhagen was part of the project (see list at the end). The members of the team included, beside the director, Isabelle Ruben (vice-director) responsible for the excavation, Matthias Flender, responsible for the survey, and Hugh Barnes, responsible for the technical survey. Ann Anderson analysed the pottery and the supervisors from Copenhagen University included Olivia Petersen (find-registration), Pernille Nielsen (survey central site, find photography and draughtsperson), Sandra Mularczyk (excavation trench 3), and Reem Abed Aljader (pottery-assistant).

Hearty thanks are sincerely offered to HE Dr Monther Dahash, Director-General of the Department of Antiquities of Jordan, for his full and unreserved backing of the project. In addition, Aktham Oweidi and his staff of the Department of Antiquities office in Amman made sure that the work could start in time and good order. It was also a pleasure to have Dr. Abdullah, as our DOA representative, as well as Achmed for the first half. Abu Ibrahim worked as guard and admitted us to his land; and the second landlord allowed us this year to work on the central knoll again. Five Jordanian workmen and seven Danish and British students worked in the project. The project was financed by the Institute for Regional and Cross-Cultural studies, Copenhagen University.



Figure 3: Rectangle 1 (Area 1)

Systematic survey of the central knoll

The central knoll is limited in the west by Wadi Murayghat (flowing into the Wadi Main) and in the east and south-east by the street towards Wadi Main and the south quarry. The northern border is created by an artificial wall, formed by bulldozing activities since the 1970s. The southern border is a clear division between the knoll and an agricultural field. The knoll consists of two kinds of limestone, a material that breaks in relatively straight slabs, easy to use for the construction of dolmens or standing stones without the need of much further work and on top a different kind of limestone that is softer and breaks more irregularly. A 10 x 10 m net has been laid over the central knoll, which has also been surveyed intensively. In that process 109 squares (10.900 m² or just over 1 ha) have been surveyed, documenting the visible bedrock in 1:100 plans. Each of the

documented squares has also been surveyed, which is very fragmented due to it being a surface assemblage. The documentation of visible standing stones in 1:50 plans also continued. Survey work has been done in particular on the western edge of the central knoll, where the geo-magnetic survey showed archaeological structures.

Rectangular 1 (fig. 3) has been studied in more detail this season, and the structure has been documented by detailed photography. The cup-marks (particularly along the western edge) were studied in further detail. There are at present 21 loci documented (1219-1239), which consist either of single items or of groups of up to 13 cup-marks. The marks have very varied shapes and sizes, although the majority is bowl-shaped and not more than 20 cm deep. The largest one, however is ca. 60 cm deep and has a diameter of approximately 23 cm. Their creation might have been in some cases connected to water, as chalk lines run towards them.

Excavation

The trenches 3 and 4, started in 2014 and continued since then, were partly re-opened together with an enlargement to the south (trench 3.4) to further enhance the stratigraphic understanding as well as try to match the different walls and structures over a larger area. After talks with the main land owner, facilitated by Basem Hamadi, it was also possible to re-open Trench 1 on the central knoll. All trenches were re-filled at the end of the season. Several fill layers were sieved with different percentage from 20 to 100 %.

The manager (Imad Abu Jerez) of the southern quarry, owned by Qassara Jerez Isa Abu Jerez, helped with heavy equipment, when the trenches 3 and 4 were emptied at the beginning and then backfilled at the end of the season. The bulldozer was stopped when the first red cover material, used in 2017 to cover the surfaces, appeared. At the end of the 2018 season the surface of the trenches was covered again with the same material, but the baulk between the eastern and western part of trench 3.4 was additionally stabilised with sand-filled sacks. In Trench 1 the western baulk was covered by plastic, but not the ground as it consisted entirely of bedrock and does not need re-opening.

Trench 3 and 4 (3.3/3.4 (B62/C62) in 2018 was formed by the partially re-opened trench 3.3 (from 2017) and an enlargement of 2 x 10 m to the south, which formed trench 3.4 (parallel to the old trenches 3.3 and 4.3). Trench 3.4 was left with a baulk at 624m-625m E, while the old baulk between trench 3 and 4 was removed (developed in 2016 and 2017). The entire excavated area of trench 3 was thus 32 m² with an additional 6 m² (of trench 3.3) being cleaned but not further excavated. Trench 4.3 was opened largely as in 2017 with a length of 3.5 m N-S (leaving the empty northern parts of 4.3. covered) and 5m E-W. Added to this was an irregular removal of back-fill (approximately 4.5 x 2m) to expose as much of wall 1 as was necessary to study the connections between wall 15, wall 19 and wall 1. Trench 4 was thus opened with 26.5 m². The entire range of trench 3/4 was thus 58.5 m² in 2018.



Figure 4: Locus 1761 (surface) in trench 3.4

The eastern extension of trench 3.4 was only excavated to a depth of ca. 0.5-0.6 m, where the same insubstantial surface (fig.4) was found (L.1761) that had been found in the western part of trench 3.4 (L.1734), which was itself a continuation of the surface excavated in 2017 covering the western part of the trench (L.1701).

The old baulk between trenches 3.2/3.3 and trench 4.3 was removed allowing the full length of wall

7 to be excavated and recorded. Walls 7 (L.1457) and 11 (L.1702), which are both flimsily constructed,



Figure 5: Older phase (L.1489) of Wall 7 exposed in trench 3.2/4.

were first studied in detail and documented, then stone by stone removed, which showed that wall 11 was built into wall 7 (above the lower phase of wall 7). Below L.1457 the older phase of wall 7 (L. 1489) became clearly visible (Fig. 5) and Wall 11 had been constructed together with this lower phase of wall 7. Wall 11 (L.1702) was longer than assumed originally in 2017 as it went together with other stones (fig. 6), already excavated in 2015 and 2016 (L.1480). The upper phase of wall 7 (L.1457) in trench 4.3 was removed as well, together with wall 13 (L.1910) and wall 18 (L.1909), two even less convincingly built walls, to understand their relation to each other and to the large pit (L.1905/1739). All three walls were clearly younger than the walls 15, 16 and 17, all built from larger, squarish boulders, and along where the large pit is now. The lower phase of Wall 7 (L.1489) was also built over the large pit (L.1905) and ended in the east at a large, porous limestone boulder (fig.7) and in the west most likely at a similar boulder.

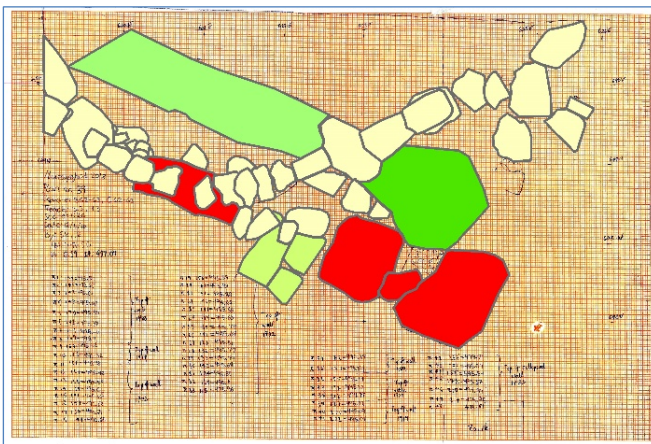


Figure 7: Wall 11 (beige) in connection with L. 1480 to the NE. Orthostats in red, Wall 7 in green

Trench 3.4 showed in the west the continuation of the rather substantial wall 14 (L. 1714), which disclosed itself as a curved, possible apsidal, room with the western and southwestern part present, but the eastern and southeastern part are missing (they might be in the new baulk between the eastern and western half of trench 3.4). The western side runs straight for about 2.7 m before it curves. Wall 14 is primarily constructed of a single row of very large, squarish orthostats of hard limestone with a width up to 0.7 m (fig. 8). The wall ended in the north at an irregular line of large orthostat boulders (L.1723), fig. 9).

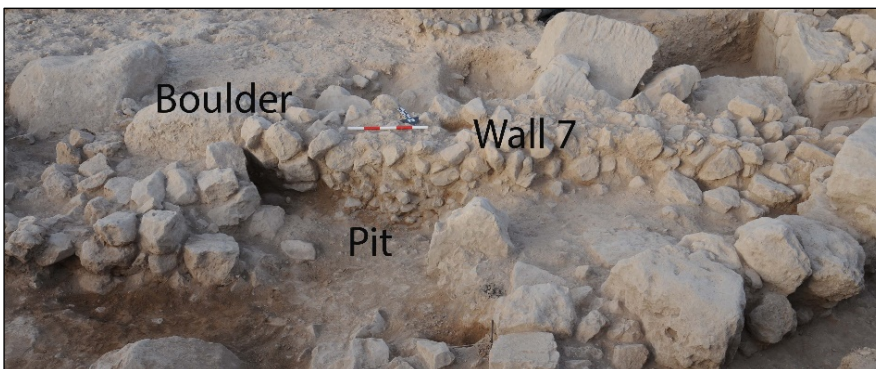


Figure 6: Wall 7 running West (right) to East (left), ending at boulder and passing over pit L. 1905.

Excavation on both sides of wall 14 showed that it stood on the typical orange virgin soil (L.1774). On the outside a foundation trench (L.1775) was visible; on the inside a broken limeplaster floor (L.1782) directly above the virgin soil was excavated in the eastern half of the room (fig. 10). Both on the floor and in the

fill layer above (L.1780) ceramics were found, which were broken, but might be reconstructed to almost complete vessel shapes. In some cases, it was clear that the pottery got broken by large stones falling on the floor. A pit had been cut through the floor into the virgin soil (L. 1789= pit, L.1788 and L.1785 =fill layers).

The line of large boulders (L.1723) was one of the earliest structures in the trench. The largest one was L-shaped with a length of over 1.2 m and a width of 0.8 m; this stone was polished on the upper edge, which can only be the effect of many hands over



Figure 9: Eastern side of Wall 14 (L.1714).



Figure 8: Wall 14 running into line of large boulders (L.1723).

many years touching this stone. Most boulders are tumbled over to the south (into the direction of the room build by wall 14), but still form a long, roughly straight line (fig. 11).



Figure 10: Floor (L. 17829 next to baulk visible).

A natural (earthquake?) or purposeful destruction led to the end of wall 14 and this line of boulders. They were afterwards used as base for an improvised connection with younger constructions like the snake-shaped line of boulders (Wall 11 = L.1702 in trench 3.2, L.1479 in trench 3, and L.1480 in the baulk between trench 3.2/4), of which some stones have already been excavated in 2014). And the even later wall

11 also used one of the large orthostates (L.1791) as support.

In trench 4.3 the younger walls 7, 13 and 18 were removed (see above) and the large pit, which had cut the line of boulders (L.1723) as well as walls 15, 16 and 17 was excavated to its full extent. The pit had certainly destroyed any connections, which might have originally existed between walls 15 and 17 (fig. 12). Wall 15, made from large, squarish stones and being two stones wide, and Wall 16 directly south of it, but made from large boulders, were also studied in detail as well as their connection to wall 1 (excavated 2014-2016). It became clear that wall 15 and wall 1 both sit on virgin soil, while wall 16 were added (out of unknown reasons) to the southern side of wall 15 at a later point.

Phase 1: final abandonment, modern bulldozer-cut.

Phase 2: The upper-part of rubble Wall 7 L.1457 (trench 3.2) = L. 1420 (trench 3.1.) = L.1371 (trench 4.2) that is running roughly E-W over several metres. The wall is built directly on top of L. 1489. The eastern end of Wall 7 is bonded in trench 4.3 with the southern end of Wall 13 (L.1909 and L. 1900). It is hard to associate any surfaces or layers that actually go with this large enclosure wall in trench 4.3; all the layers abutting it were tumbled stones. Perhaps in trench 3.3, the fill layers L.1498, lower part of L.1495 = L.1496 and lower L.1499 are associated. Wall 7 is built over Wall 11 in the same way as it is built over a number of large boulders (L.1479) at its western end, without any consideration of earlier structures.



Figure 11: Line of fallen boulders to the right of students.

Phase 3: Curved Wall 11 (L.1702), with a foundation trench (L. 1712) that was cut through fill L.1707 in the NW part of trench 3.3. Wall 11 was built resting in part on the top of a large standing orthostat (L.1791) that may be part of alignment L.1723. Wall 11 arcs round to be buried under later rubble Wall 7 (L. 1357) with which it is bonded. The western end of Wall 11 is formed by two large, squarish stones (L.1480) in trench 3. Wall 11 created an arc-shaped gap between it and the rubble Wall 7, the purpose of which seems inexplicable, as it is rather small. After W 11 was built, it seems that rubble Wall 7 partly tumbled down directly to the SE of Wall 11, forming a pile of tumbled rubble L.1769.

Phase 4: This phase comprises the big pond event, which produced the pond crust in trench 4, and which, further west (and higher up) in trench 3.3 and 3.4, may have produced what look like a natural surface (1734, 1742 and 1701).In trench 3.4 the fill layers (L.1713, L.1715, L.1706) with surface L.1701 go over the top of the south end of Wall 14

(L.1714). Layer 1707 is roughly equal in elevation, colour and texture to L.1399 (=L.1903) in trench 4.3.

On this surface, there was the rectangular hearth of burnt cobbles and ash, L.1384, found last year in trench 4.3; a similar hearth, L.1791, just appearing around the end of the baulk this season, and the smaller cobble feature, L.1700, in trench 3.3, which was not burnt.

Phase 5: The lower rubble Wall 7 (L.1489), was also built running NNW by SSE across the trenches 3.2 and 4.3, and over the lower black pit fill (L.1757) of large pit L.1746/1762 (on both sides of Wall 7 in trench 3.2 and 4.3, fig. 12). It is possible that in order to

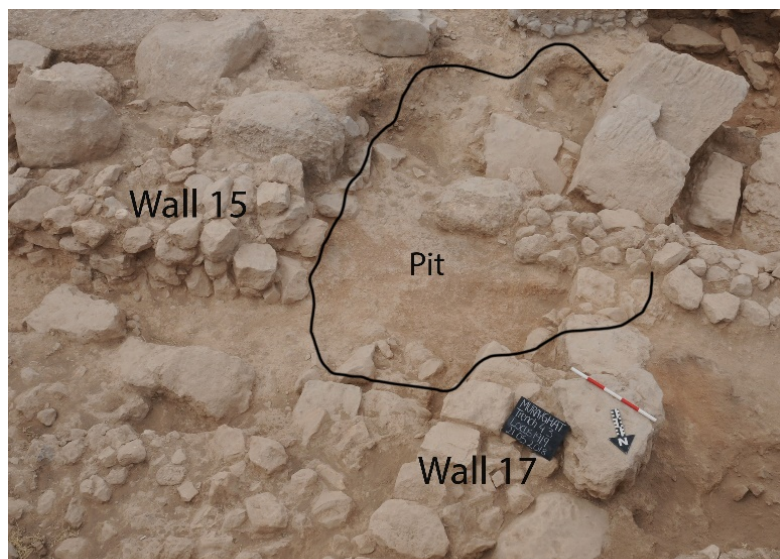


Figure 12: Large pit L.1746/1762 = L.1902/1904, cutting walls 15 and 19. Orthostat 1723 to the back, right.3

build this wall, a foundation trench was dug, of which the only evidence is a clear cut across the matrix of Wall 17 (L.1919). This Wall 17 may still have been standing up to at least a second course at the

time (fig. 12). In any case, the eastern end of lower Wall 7 (L.1489) seems to have been on a large, porous limestone block, while the west end is not clear – it was somewhere in trench 3, and may have been against the orthostates of line 1479.

Subsequent to this wall being built, the upper fills (1739, 1905) in pit 1746/1762 accumulated.

Phase 6: This seems to be an abandonment (and or destruction) phase. The phase can be provisionally subdivided as follows:

Phase 6a: After the accumulation of the fill layers, a large pit (L.1746/1762 = L.1902/1904) was cut through these accumulated layers, thereby exposing and perhaps destroying the western end of Wall 15 (L.1916), which would no longer have been visible. The pit has an uneven shape, probably because its excavators kept hitting stones; therefore the SW edge of the pit ends on the east face of the big fallen orthostat (L.1723), and the bottom of the pit is shallower here because they hit the next fallen orthostat and probably gave up digging there (fig. 12). In the centre, the pit bottoms out on a layer of orangey beige silty clay (L.1763) which may be virgin soil, and if not, it is not far above virgin soil.

In the bottom of this pit, about 10–15 cm of blackish deposit accumulated (L. 1757) (before the wall L.1489 was built across it in the next phase).

There was another big pit, probably belonging to this same phase, (pit L.1760 in trench 3.4), which was quite deep (around 0.9 m) and was filled with ashy silt and cobbles. Perhaps also pit L.1750/1486 (half excavated in trench 3.2) belongs to this phase.

Phase 6b: Abandonment of the area (covered by the trenches) and accumulation of layers of yellowish-beige compact clayey silt fills (L.1399, 1747, 1767, 1752, 1753, 1745, 1740, 1748, 1749). No walls seem to have been built in this phase, so presumably the area was largely abandoned.

Wall L.1919 was covered by these layers, as was Wall 14 (L.1714), while Wall 15 (L.1916) was covered with more rubbly fill.

Phase 6c: Destruction event, consisting either of a natural collapse or the robbing of stones, with the result that both ends of Wall 14 (L.1714) disappeared, perhaps even the whole eastern arm of the wall (unless it lies below the unexcavated eastern part of trench 3.4).

The line of orthostates L.1723 collapsed onto rubble fills, perhaps representing the upper courses of the D-shaped room wall.

Whatever structure may have existed on the rubble platform bounded by walls 1 (L.1307), Wall 15 (L.1916) and Wall 17 (L.1919) also disappeared.

Phase 7: alignments of large orthostates L.1479 in the west and Wall 16 (L.1917) in the east, both using older walls or wallstumps as base.

In trench 4.3, a short, slightly curved wall of two rows of small orthostates (1917) was built, the eastern end of the southern row abutting the west face of wall 1 (L.1307), while in the northern row there is a gap between the last orthostat and wall 1307. This gap was filled with large cobbles, perhaps because no suitable large stone was available. This wall was built on an early layer of fill (L.1784=1770), some 20 cm above virgin soil and it follows exactly along the south face of wall 1916, so 1916 must still have been clearly visible when this wall was built. Why one would choose to build a second wall up against an existing one is difficult to imagine!

In trench 3, another row of small orthostates was erected (1479), also founded some 20–30 cm above virgin soil. These do not seem to connect with anything in particular.



Figure 13: Tumulus L.5008 cleaned.

Phase 8: big orthostat (L.1791) and the line of big orthostates (L.1723) are roughly contemporary with wall 14 (L.1714), the U-shaped room and the surface in the room (L.1782). They are EBA. Sitting on the same palaeosoil are the big double-faced walls wall 1 (L.1307), wall 15 (L.1916) and wall 17 (L.1919) running either NE-SW or NW-SE, thus forming roughly a square, and the rubble platform (L.1305, L.1751=1921 and L.1756=1922) inside these walls. Dating not entirely clear.

Phase 9: the small stones set in an arc (L.1363) and the setting of the large cup-hole stone (L.1360) below wall 1, excavated in 2017. These are EBA.

The upper orangey palaeosoil formed L.1488 in trench 3.2 / L.1452 in trench 3/ L.1763 in trench 4.3, and on its top, there is a thin layer of topsoil development.

Pre-settlement phase; the natural soil is very red with white flecks (L.1774 in trench 3.3/ L.1913 in trench 4/ L.1773 in trench 4.3).

Survey

Due to the disturbances caused by the phone company (see above), two features, already noticed, but not precisely documented, were first surveyed.

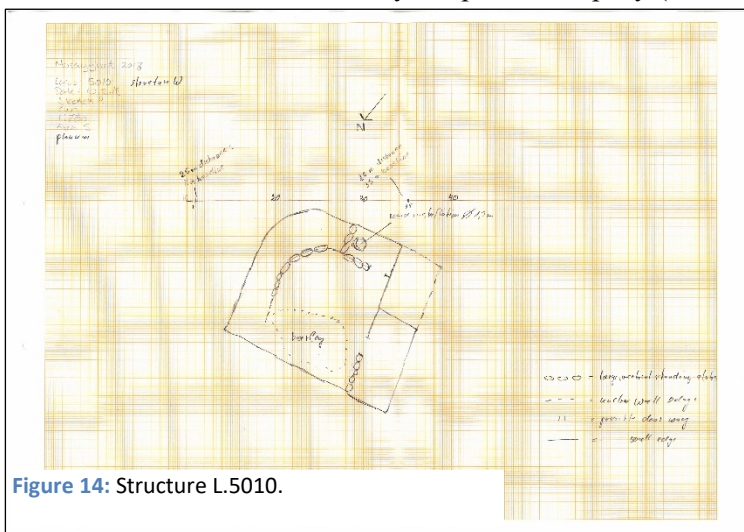


Figure 14: Structure L.5010.

The tumulus L.5008 on the western side of Area 5, which had been robbed some time ago, was now cleaned, measured and drawn (fig. 13). Several bones and some beads, compatible to those found in 2016, were found. The tumulus consisted of a stone-lined earthen pit. The second feature studied was a compound of buildings around at two or three courtyards (fig. 14), with a later addition to the North. The documentation of these features

took some time as they were relatively far away.

The systematic survey continued then in Area 4, which has been described in the reports (2015-2017). Two new fields (L.4056, L.4062) were defined, and in their boundaries two cave entrances (L. 4060, L.

4061) and three dolmens (L.4057, L.4058, L.4059) documented. The dolmen were still standing, but not complete (fig. 15)



Figure 15: Dolmens in Area 4 (L.4057, L.4058)

Material



Figure 16: Beads from Tumulus (L.5008).

The archaeological material collected consists of lithic, ceramic, basalt items and a few modern metals items. The amount of animal bones is very limited so far and the different soil samples have not been analysed yet. In the tumulus stone beads 17 small, complete or fragmented stone beads were found (fig. 16). On the floor in trench 3.4 two bone tools (awls?) were excavated, which require further analysis. Trench 3.4 provided some worked basalt stones.

Pottery



The pottery material in 2018 was slightly less (due to the smaller size of the group), so that more time could be spend towards developing a typology. The greater depth of excavation also slowly reveals larger fragments of pottery, which was particularly clear in trench 3.4 on the floor next to Wall 14, where large bowls were excavated, being smashed in situ. The material has not been analysed in detail, but the vessels seem to be at least 50% present (compared to the very small rim fragments, which have been found in most filling levels further up). Two if not three large bowls from these contexts (L.1772, L. 1777) represent a new form, which shows two ledge handles above each other. (fig. 17).

Bibliography

Conder, Claude R.

1889 *The Survey of Eastern Palestine*. London: Palestine Exploration Fund.

Harrison, T. P.

1997 Shifting Patterns of Settlement in the Highlands of Central Jordan during the Early Bronze Age. *BASOR* 306,1–37.

Harrison, Timothy & Savage, Stephen H.

2003 Settlement Heterogeneity and Multivariate Craft Production in the Early Bronze Age Southern Levant. *Journal of Mediterranean Archaeology* 16, 33–57.

Irby, C. L., & Mangles, J.

1985 *Travels in Egypt and Nubia, Syria and Asia Minor during the Years 1817 & 1818*. London: Darf.

Mallon, A., Koepfel, R. & Neuville, R.

1934 *Teleilat Ghassul I: Compte rendu des fouilles de l'Institut biblique pontifical*. Rome: Pontifical Biblical Institute.

Savage, Stephen H.

2010 Jordan's Stonehenge: The Endangered Chalcolithic/Early Bronze Age Site at al-Murayghât–Hajr al-Mansûb. *Near Eastern Archaeology* 73.1, 32–46.

Savage, S. H., & Rollefson, G.

2001 The Moab Archaeological Resource Survey: Some Results from the 2000 Field Season. *Annual of the Department of Antiquities of Jordan* 45, 217–36.