# C. Excavating the Upper Town of the Dinka Settlement Complex: the 2019 excavation campaign at Qalat-i Dinka 


#### Abstract

This chapter presents the results of the excavations, which took place between 29 August and 7 October 2019 in operation QID1, located on the western slope of Qalat-i Dinka (Fig. C1). The work was funded by the Gerda Henkel Foundation through a project grant awarded to Andrea Squitieri and Jean-Jacques Herr (AZ o9/V/19), with additional financial support provided by the Alexander von Humboldt Foundation (Alexander von Humboldt Professorship 2015 for Karen Radner) and WWU Münster (starter funding for Janoscha F. Kreppner's appointment to the professorship of Near Eastern Archaeology).


## C1. Previous work on Qalat-i Dinka and the methodology employed in 2019

## Andrea Squitieri

Prompted by the chance discovery of the Neo-Assyrian tablet dated to 725 BC on the western slope of Qalat-i Dinka ${ }^{37}$, a first magnetometer survey was undertaken on this side of the mount by Jörg Fassbinder and his team in 2015 . The resulting magnetogram highlighted several magnetic anomalies that were interpreted as structures, some of which were interpreted to have a possible defensive function ${ }^{38}$. Already in 2013, an archaeological surface survey had been conducted in this area by Jessica Giraud's team and had yielded a concentration of Iron Age pottery with the same characteristics as those unearthed at Gird-i Bazar, where the Peshdar Plain Project began excavations in $2015^{39}$.

Prompted by this combination of data, the decision was made to open a test trench on the western slope of Qalat-i Dinka in the spring of 2016. The trench, extending about $40 \mathrm{~m}^{2}$, was dubbed " 100000 " because, at that time, there was no dGPS available to the team for constructing a square grid system consistent with the one used in Gird-i

[^0]Bazar in $2015^{40}$. Already this test trench yielded important results. First, the same style of pottery as found at Gird-i Bazar was identified on the floors, suggesting contemporaneous occupation; second, a portion of a large stone wall and sections of a paved floor were encountered, which suggested the existence of monumental constructions unparalleled by any of the buildings excavated in the Lower Town; third, a number of decorated ivory or bone objects were collected, along with pieces of jewellery, which were also without parallel among the items unearthed in the Lower Town. On the other hand, the 2016 excavations also brought to light evidence that heavy looting had occurred at the site in recent years: a plastic biscuit wrapper found in one of the looting pits bore a production date of 1999 and an expiry date of 2000 , indicating that at least some of the looting activity happened around that time (with the year 1999 as a post quem date) ${ }^{41}$. Also the subsequent work conducted in this area in 2018 and 2019 revealed further heavy looting, which made it frequently difficult to reconstruct stratigraphic relations.

The archaeological investigations on the western slope of Qalat-i Dinka continued on a larger scope in the spring of 2018, with funding awarded to Andrea Squitieri from the LMUexcellent Junior Researcher Fund. Three trenches were opened (Fig. C2 $)^{42}$. The first was called QID1. It included the 2016 test trench and extended it to the east; its objective was to follow both the large wall and the paved floor that had been partially uncovered in 2016. The trenches QID2 and QID3 were opened further down the slope, about 50 m west of QID1, where a long curved line was visible in the 2015 magnetogram. QID2 yielded the remains of a wide sloping structure made of stones, which we interpreted as a glacis: a slanted structure commonly used to protect defensive walls. QID3 yielded the remains

[^1]

Fig. C1: Drone image of the western slope of Qalat-i Dinka taken from the southwest. Gird-i Bazar and the rest of the Lower Town of the Dinka Settlement Complex are visible in the background. Photo taken by Louise König with DJI Phantom 4 Pro drone.
of a linear feature made of loosely set stones that may have been part of a substructure supporting a built fence ${ }^{43}$.

Important results were obtained from QID1 where a monumental building was unearthed, designated as Building P. It consists of a large $5 \times 8 \mathrm{~m}$ room with a paved floor (Room 58) and a smaller room to the east (Room 59), with which Room 58 is connected by a 1 m wide threshold. The walls of Room 58 are about 1.4-1.5 m wide and made of large cobbles, set in several rows and courses. The inner faces of the northern and southern walls of this room show a series of square stone bases protruding from the walls: three on the northern wall and two on the southern one ${ }^{44}$. These architectural characteristics, as well as its monumentality, set Building P apart from every oth-

[^2]er building hitherto uncovered in the Dinka Settlement Complex. Moreover, following the trend observed in 2016, the 2018 campaign again unearthed a rich collection of small finds from Room 58, including several pieces of jewellery and many decorated ivory/bone fragments which have no counterparts in the Lower Town ${ }^{45}$.
These results prompted us to continue the investigation of Building P and its immediate surroundings. In 2019, we expanded on the 2018 operation at QID1 by opening four contiguous trenches around Building P (Fig. C3):

- a $7 \times 5 \mathrm{~m}$ trench located to the south of Building P, within Square 181908;
- a $5 \times 5 \mathrm{~m}$ trench located to the southeast of Building P, within Square 182908;
- an $8 \times 5 \mathrm{~m}$ trench located to the east of Building P , within Square 182909;


Fig. C2: Orthophoto of the western slope of Qalat-i Dinka, overlaid by contour lines with 10 m elevation intervals. Contour lines' annotations refer to absolute heights in meters a.s.l. In yellow, the three operations QID1, QID2 and QID3. The four black squares on QID1 indicate the 2019 excavation grid. Prepared by Andrea Squitieri.

- a $7 \times 4 \mathrm{~m}$ trench located to the north of Building $P$, within Square 181909.

Squares $181908,182908,182909$, and 181909 are part of the square grid system that the Peshdar Plain Project has applied since 2015 (with the sole exception of the 2016 test trench on Qalat-i Dinka due to the lack of a dGPS at that time) ${ }^{46}$.

This is a north-oriented, UTM-based grid of $10 \times 10 \mathrm{~m}$ squares, each named after the coordinates of their SW corner. So, for example, the SW corner of Square 181908 has the UTM coordinates E: 511810, N: 3999080 (zone 38 N ), hence the designation as 181908 . The square name also appears in the labels assigned to loci (pl. for locus). Loci are defined as stratigraphic units, which can be soil deposits (i.e., fills) or installations (e.g., walls, floors, cuts). Each lo-

[^3]cus is assigned a progressive number following the square number in which it lies (e.g., Locus:181908:001). A locus can yield several materials. If the material is in a fragmented state then it is documented as a collection. This commonly occurs with pottery and animal bones. Collections receive a progressive number after the locus number, e.g. Locus:181908:002:001 indicates Collection 001 in Locus 002 in Square 181908. Loci can also yield individual finds. These are given a find number, also following the locus number, though with a slightly different label. An example of a find label is "PPP 181908:029:034". Samples (e.g., charcoals, phytoliths, flotation samples) are labelled like finds. To avoid confusion, the same number is never applied to collections, finds, or samples from the same locus. Finally, there are at least two cases when it is necessary to incorporate two or more loci into a so-called locus group, abbreviated as LGR:

- when two or more loci extend across adjacent squares. In this case, the stratigraphic unit (e.g., a wall) is defined as separate loci in each of the squares it crosses. These loci are then grouped into the same locus group.


Fig. C3: Combination of the 2016, 2018 and 2019 excavation trenches opened in operation QID1. The red lines show the extensions of the four trenches opened in 2019. The black lines show the square grid. Prepared by Andrea Squitieri.

- when post-excavation analysis revealed that two separately excavated loci actually belong to the same stratigraphic unit.

Locus groups are also given progressive numbers following the label LGR, but unlike the loci, their labels do not provide information about the squares in which they were located. In the discussion below, a frequently used locus group will be LGR:o370 ${ }^{47}$, which brings together all the

47 Normally, in our system, for two or more loci to be grouped into the same locus group it is necessary that they be contiguous. So, for example, two disconnected parts of what seem to have originally been the same wall would not be grouped into a locus group because they are not in contact. However, we make an exception to this in the case of modern stratigraphic units, such as looting pits, which we group together even when they are not directly in contact with each other. This allows us to flag them when analysing the data. Another exception is represented by the locus group of the virgin soil. Despite this soil being reached in separate places across the excavation, the loci identifying these spots are grouped into the same locus group even though they are not contiguous.
loci (cuts and fills) affected by the many modern looting pits excavated in QID1.

Following the protocol established by the Peshdar Plain Project in 2015, the excavation system adopted in QID1 includes:

- the use of a MySQL-based database to store data, accessible in the field (designed by Cristoph Forster, www.datalino.de);
- the use of a DJI Phantom 4 Pro drone to create daily orthophotos, Digital Elevation Models (DEM), and 3D models of the excavated area by means of the software Agisoft Metashape Pro (replacing earlier versions known as PhotoScan).
- the use of a Leica dGPS "GS18" to allow precise measurements of each feature.
- the creation of a 3D stratigraphy through the visualisation of each deposit in three dimensions within a 3D Photoscan model, by means of Autodesk AutoCad $2018^{48}$.


## C2. Absolute chronology and relative stratigraphy

## C2.1 The radiocarbon dates

## Andrea Squitieri

During the 2019 campaign at QID1 two additional samples were collected for radiocarbon dating, adding to the previously dated samples, which were collected during the 2018 campaign ${ }^{49}$. Table C1 below sums up all the radiocarbon dates available from operation QID1, with the graphs shown in Figs. C4.a-e.

As Table C1 shows, the radiocarbon dates from QID1 span from the Iron Age up to the very late first millennium BC. The contexts of samples PPP 181908:018:016, PPP 181909:038:049, and PPP 181909:031:002 were discussed in the previous volume ${ }^{50}$. The contexts of samples PPP 181909:067:006 (disturbed fill) and PPP 182909:067:017 (Grave 110) are described in detail below (§C6.3 and §C5.3.3). The date ranges of the first three samples (i.e., MAMS 36939, 43917, 36674) very closely match those obtained from the Lower Town. This is the period that in terms of relative stratigraphy we refer to as the "Main Occupation Period", roughly corresponding to the Iron Age. Table $\mathbf{C 1}_{1}$ also shows that the only absolute date associated with architectural features is the one obtained from a charcoal collected in 2018 from the floor of Building P's Room $58^{51}$ (sample PPP 181909:038:049). This date collocates Building P within the Iron Age horizon. The other dates were obtained from human remains. They show that the area of QID1 was used for burials across a long span of time from the late second millennium $B C$ until the very late first millennium $B C$. Whether some burials were constructed during the same period that Building $P$ was in use will be discussed below (§C. 7 and §K).

## C2.2 The relative stratigraphy and the stratigraphic table

F. Janoscha Kreppner

The relative stratigraphy of operation QID1 is offered in Table C2. This table follows the same principles as previously published stratigraphic tables of the Peshdar Plain Project, and it updates the stratigraphic table of QID1 referring to the 2018 excavations. Please note the following, when reading this table:

- The rows are ordered chronologically, spanning from the oldest (bottom) to the most recent (top) periods.
- The columns refer to the spaces, such as rooms, courtyards, and outdoor areas. Consequently, roughly contemporary depositional processes and occupation periods that span across various areas of the site can be read in the table horizontally.
- The cells of the table contain a locus number (e.g., Locus:181908:025), a Locus Group number (e.g., LGR:0370) followed by a brief description, or a grave number (e.g., G101).
- The background colours of the cells indicate their interpretation and duration: pink shades are used for topsoil, modern occupation, graves, and virgin soil; brown indicates post-occupation periods (non-use/erosion processes), and yellow is used for occupation periods.
- The table follows the principle of the occupation phases. Occupation phases are defined by floors. The occupation phases can be divided into four sub-phases, to which stratigraphic units from the archaeological record, such as soil deposits, walls, or installations, can be assigned:
- First, the construction phase which preceded the use phase, including the construction of the walls, floors, and any installations (cell colour: yellow).

| Sample <br> registration no. | Lab no. <br> MAMS | Material | Context | Date <br> (calBC, 95\% probability) |
| :--- | :--- | :--- | :--- | :--- |
| PPP 181908:018:016 | 36939 | Human tooth | Grave 99 | 1259-1117 |
| PPP 181909:067:006 | 43917 | Human tooth | Looting pit | $1210-1029$ |
| PPP 181909:038:049 | 36674 | Charcoal | Floor of Building P Room 58 | $1001-847$ |
| PPP 182909:067:017 | 43915 | Human tooth | Grave 110 | $767-488$ |
| PPP 181909:031:002 | 36938 | Human bone | Grave 98 | $355-93$ |

Table C1: Radiocarbon dates available from operation QID1 (campaigns 2018-2019).

[^4]

Fig. C4a-d: Radiocarbon dates for samples: (a) PPP 181908:018:016, (b) PPP 181909:038:049, (c) PPP 181909:067:006, (d) PPP 182909:067:017. Calibration software OxCal v. 4.3.2.

- Second, deposits and installations from the period when the floor was in use (cell colour: yellow).
- Third, the end of the occupation period, including deposits that indicate the destruction or abandonment of the floor which cover the finds collected directly on the floor (cell colour: yellow).
- Fourth, the Post-Occupation Period (cell colour: brown) follows each occupation period, representing a period of non-occupation during which erosion phenomena are the main causes for the formation of archaeological deposits.
- These four phases may repeat cyclically if new floors were constructed, which is why yellow and brown rows can alternate in the table. However, not all of these sub phases are necessarily represented in the archaeological record.
- If a new floor that overlies an earlier one was detected, then a new occupation period is defined. Note that the term "floor" refers to either a purpose-built surface, or a trodden surface created through use, and which is


Fig. C4e: Radiocarbon dates for sample PPP 181909:031:002. Calibration software OxCal v. 4.3.2.
assigned a specific locus number. On the other hand, deposits found directly on a floor are given their own locus numbers. This allows us to isolate material found on floors and, at the same time, gain a better understanding of the formation processes of the deposits associated with a use of the floor.

| QALAT-I DINKA STRATIGRAPHY QID-1 | Room (?) 61 | Outdoor Area 60 |  | Building P |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Room 58 | Room 59 |
| PRESENT SQUARE SURFACE | Locus:100000:001 |  | Locus:181908:022 | Locus:181909:001, Locus:181908:001 | Locus:181909:049, Locus:182909:002 |
| TOPSOIL | $\begin{gathered} \text { LGR:0368 } \\ \text { (Locus:100000:002, } \end{gathered}$ |  | Locus:181909:050, Locus:181909:051, Locus:181909:062 | Locus:181908:002, Locus:181909:002 | Locus:181909:002, Locus:182909:004, Locus:182909:005 |
| MODERN OCCUPATION | LGR:0319 looting pit 2016 western trench (Locus:100000:008 stone accumulation, Locus:100000:009 brown loamy soil, Locus:100000:010 stone accumulation, Locus:100000:011, Locus:100000:034 accumulation of large stones) | LGR:0303 looting pit northwest (Locus:181909:013 stone accumulation, Locus:181909:009 row of stones, Locus:181909:010 dark brown silty clay; Locus:181909:008 looting pit cut, Locus:100000:003 and Locus:100000:005 stone accumulations in looting pit fill Locus:100000:004) | LGR:0370: Locus:181909:052 and Locus:181909:063 mixed material with dark yellowish brown loamy soil with pebbles, Locus: 181909:056 stone accumulation); local pit Locus:181909:057 with fill Locus:181909:058 and Locus:181909:072, local pit cut Locus:181909:059 with fill Locus:181909:060, local pit cut Locus:181909:064 with fill Locus:181909:065, local pit cut Locus:181909:074 with fill Locus 181909:073, local pit cut Locus:181909:079 with fill Locus 181909:078, local pit cut Locus:181909:066 with fill Locus:181909:067 (C14 1188-1054 calBC) and skull Locus:181909:084 | LGR:0291 reddish soil (Locus:181908:004, Locus:181909:004), LGR:0290 looting pit central (fill: Locus:181908:006, Locus:181909:006, Locus:100000:007, Locus:100000:012, Locus:100000:013, Locus:100000:027, Locus:100000:031, Locus:100000:032, Locus:181909:018, Locus 181909:020 Locus:181909:024; cut: Locus:100000:017, Locus:181908:005, Locus:181909:005, Locus:181909:014, Locus:181909:036); LGR:0297 stone accumulation (Locus:100000:014, Locus:181908:009, Locus:181909:015), LGR:0299 stone accumulation (Locus:100000:015, Locus:181908:010), Locus 181909:035 accumulation of stone slabs and cobblestones, stones laid down in a row: Locus:181909:017, Locus:181909:019, Locus:181909:021 | LGR:0305 looting pit northeast (Locus:181909:012 accumulation of stones; Locus:181909:016, Locus:182909:003, Locus:182909:020 dark brown clayeysilty soil with some pottery and some pebbles, Locus:181909:029, Locus:182909:016 looting pit cut, Locus:181909:026 moved stone slab with hole, looting pit east Locus:181908:012 pit cut) |
| graves |  |  | Grave 106 (Locus:181909:068 cut with fill Locus:181909:069 and skeleton Locus:181909:083), Grave 107 (Locus:181909:081 architecture), Grave 108 (Locus:181909:082 architecture) | Grave 97: Locus:100000:021 disturbed skeleton, Grave 98: Locus:181909:031 remains of articulated feet bones and tibia fibula with C14 355-93 cal BC, Grave 99: Locus:181908:018 remains of skeleton with C14 1259-1117 calBC |  |
| POST MAIN OCCUPATION PERIOD |  |  |  |  |  |
| END MAIN OCCUPATION PERIOD |  |  | Locus:181909:055 dark brown moist loose, loamy, poorly sorted soil with common sherd and bone fragments | remnants of deposit on brick floor unfortunately disturbed: LGR:0323 (Locus:181908:014, Locus 181909:038C14 1001-847 calBC), Locus:100000:019 dark brown clayey-silty soil; Locus 181909:044 and Locus 181909:045 burned mud plaster |  |
| MAIN OCCUPATION PERIOD |  |  | Locus:181909:061 and Locus:181909:071 surface of pebble package |  |  |
| CONSTRUCTION FOR <br> MAIN OCCUPATION PERIOD |  | Locus:100000:025 beaten mud floor | Locus:181909:076, Locus 181909:077 pebble package | LGR:0292 (Locus:181908:008, Locus:181909:011, Locus:100000:020) and LGR:0324 (181908:019, 181909:039) pavement made of baked bricks, Locus:100000:030 beaten mud floor, LGR:0317 (Locus:100000:033, Locus:181908:016), LGR:0320 (Locus:181908:015, Locus:181909:047), Locus 181909:028 and Locus:181909:037, Locus:181909:040 pilaster bases (?) | Locus:182909:023 pebble package |
| FIRST CONSTRUCTION PHASE FOR MAIN occupation period | Locus:100000:028, Locus:100000:029 walls | LGR:0319 (Locus: 181909:007, Locus:181909:054) wall, Locu Locus:181909:070 wall, Locus LGR:0363 (Locus:100000:026 pebbles substructure | , Locus:100000:006, Locus 181909:053, us:181909:080 northern corner of Building P , :100000:023 wall with threshold Locus:100000:024, 6 and Locus:181909:027) light brown clayey soil with | LGR:0319 (Locus:181909:007, Locus:100000:006, Locus 181909:053, Locus:181909:054) northern wall, LGR:0321 (Locus:181908:021, Locus 181909:023) eastern wall with Locus:181909:022 threshold; LGR:0329 (Locus:100000:016, Locus:181908:007) southern wall, Locus:100000:029 western wall; LGR:0325 (Locus:181909:034, Locus:181908:017), Locus:181908:020, Locus:181909:041, Locus:181909:042 and Locus:181909:043 pebble foundations; Locus:181909:046 burned clay | LGR:0321 (Locus 181909:023, Locus:181908:021) wall with Locus:181909:022 threshold, LGR:0376 massive northeastern corner of Building P (Locus:181909:030, Locus:181909:075, Locus:181909:080, Locus 182909:061, Locus:182909:062), LGR:0381 massive southeastern corner of Building P (Locus:181909:032, Locus:182908:053, Locus:182909:060), Locus:182909:035 walls |
| older |  |  |  |  |  |
| VIRGIN | Locus:100000:022 |  |  | LGR:0322 (Locus:181908:011, Locus 181909:033 | Locus:181909:025 |

Table C2: QID1 stratigraphy 2019. Prepared by F. Janoscha Kreppner.

| Outdoor Area 71 | Outdoor Area 71 | Outdoor Area 70 | QALAT-I DINKA STRATIGRAPHY QID-1 |
| :---: | :---: | :---: | :---: |
| Locus:182909:001 | Locus:182908:001 | Locus:181908:022 | PRESENT SQUARE SURFACE |
| Locus:182901:004. Locus:182901:005, Locus:182909:021 | Locus:182908:002, Locus:182908:006, Locus:182908:022 | Locus:181908:024, Locus:181908:026, Locus:181908:042) | TOPSOIL |
| LGR:0370: mixed material caused by looting activity (Locus:182909:006, Locus:182909:007, Locus:182909:010, Locus:182909:015, Locus:182909:018, Locus:182909:019, Locus 182909:024, Locus 182909:027, Locus:182909:034, Locus:182909:039, Locus:182909:042, Locus:182909:053, Locus:182909:054, Locus:182909:055, Locus, Locus:182909:056), stone accumulations (Locus:182909:028, Locus:182909:047), local pit cut (Locus:182909:011, Locus 182909:031) with fill (Locus:182909:012, Locus 182909:032), local pit cut (Locus:182909:013, Locus:182909:025, Locus:182909:040) with fill (Locus:182909:014, Locus:182909:026, Locus:182909:041), local pit cut Locus:182909:029 with fill (Locus:182909:030, Locus 182908:030), local pit cut Locus:182909:037 and Locus:182908:031 and with fill Locus:182909:038 and Locus:182908:032, local pit cut Locus:182909:057 with stone accumulation Locus:182909:043, Locus 182909:046 stone installation | LGR:0370: mixed material caused by looting activity: Locus:182908:004, Locus:182908:005, Locus:182908:020, Locus:182908:007, Locus:182908:010, Locus:182908:026, Locus:182908:028, Locus:182908:029, Locus:182908:012, Locus:182908:021, Locus:182908:038, Locus 182908:039, Locus:182908:042, Locus:182908:043, Locus:182908:045, Locus:182908:046, Locus:182908:052, Locus:182908:055; Locus:182908:003 and Locus:182908:011 stone concentration, local pit cut Locus:182908:009 with fill (Locus:182908:008, Locus:182908:027, Locus:181908:032), local pit cut Locus:182908:014 with fill Locus:182908:015 and Locus:182908:033, local pit cut Locus:182908:025 with fill Locus:182908:013, local pit cut Locus:182908:016 with fill Locus:182908:017 and Locus:182908:034, local pit cut Locus:182908:023 with fill Locus:182908:024 and Locus:182908:035 | LGR:0370: looting pit deposit dark brown silty soil with pebbles (Locus:181908:025, Locus:181908:027, Locus:181908:028, Locus:181908:029, Locus:181908:039, Locus:181908:043, Locus:181908:044, Locus:181908:045, Locus:181908:046, Locus:181908:050, Locus:181908:054, Locus:181908:056, Locus:181908:057, Locus:181908:058, Locus:181908:059, Locus:181908:060, Locus:181908:061, Locus:181908:062, Locus:181908:067, Locus:181908:068; Locus:181908:030 row of stones set by looters, stone accumulations (Locus:181908:031 and Locus:181908:048, Locus:181908:064), Locus:181908:047 row of stones set by looters, Locus:181908:049 stone accumulation), looted fill of grave 102 (Locus:181908:033, Locus:181908:034, Locus:181908:035, Locus:181908:036, Locus:181908:037, Locus 181908:040, Locus 181908:041), looted fill of Grave 105 (Locus:181908:051, Locus:181908:055), Locus:181908:052 fill of bronze bowl | Modern occupation |
| Grave 101: lining of cremation Locus:182909:044, ashes (Locus:182909:008, Locus 182909:048), fill (Locus:182909:009, Locus:182909:033, Locus:182909:045), Locus:182909:022 fill of jar; Grave 109: pit cut Locus:182909:049, ashes Locus:182909:051, fill Locus:182909:050, fill of bowl Locus:182909:052), Grave 110: pit cut Locus:182909:058, skeleton Locus:182909:067: C14 767-488 calBC, fill Locus:182909:059 | Grave 103: Locus:182908:018 architecture, Locus:182908:019 fill, Locus:182908:041 skeleton | Grave 102: Locus:181908:038 architecture, Grave 105: Locus:181908:063 architecture | GRAVES |
|  | Locus:182908:036, Locus:182908:037, Locus:182908:040 hard dry, silty, poorly sorted yellowish-brown soil with rare pottery and common pebbles |  | POST MAIN OCCUPATION PERIOD |
|  |  |  | END MAIN OCCUPATION PERIOD |
| Locus:182909:064 and Locus:182909:066, Locus:182909:072 surface of the pebble package | Locus:182908:057 possible surface of pebble package, LGR:0384 stone installation (Locus:181908:053, Locus:182908:050) |  | MAIN OCCUPATION PERIOD |
| Locus:182909:063, Locus:182909:065, Locus:182909:068 package made of pebbles | Locus:182908:044, Locus:182908:047, Locus:182908:048, Locus:182908:049, L | LGR:0382 (Locus 181908:069, Locus:182908:054) pebble packages | CONSTRUCTION FOR MAIN OCCUPATION PERIOD |
| Locus:182909:035 wall | LGR:0381 massive south-eastern corner of Building P (Locus:181909:032, Locus:182908:053, Locus:182909:060) | LGR:0329 wall | FIRST CONSTRUCTION PHASE FOR MAIN OCCUPATION PERIOD |
|  | Locus:182908:051 stone enclosure with possible floor remains Locus:182908:056 | Locus:181908:070 and Locus 181908:071 floors, Locus:181908:065, Locus:181908:066 walls | older |
| Locus:182909:017, Locus:182909:069, Locus:182909:070, Locus:182909:071) |  |  | VIRGIN |

Table C2 (continued): QID1 stratigraphy 2019. Prepared by F. Janoscha Kreppner.

Reading Table C2 from the bottom up, it is possible to identify the following phases:

- Virgin soil. This is a clayey soil, reddish in colour, devoid of any artifacts.
- The oldest phase was identified only in Square 181908. This phase is referred to as "Older than the Main Occupation Period".
- The "First Construction Phase for the Main Occupation Period" represents the period when the foundations for the Main Occupation Period buildings were laid and the walls erected.
- The "Construction Phase for the Main Occupation Period" represents the construction of the floors and installations, before the floor was used;
- The "Main Occupation Period" indicates the phase when the floors were occupied, resulting in new deposits and installations;
- The "End of Main Occupation Period" is the period from which deposits indicate the destruction or abandonment of the floors. These deposits cover the finds collected directly from the surface of the floor.
- A "Post Main Occupation Period" represents a period of non-occupation during which erosion phenomena resulted in the formation of archaeological deposits.
- "Graves" refers to the phase when graves were cut into the features of the Main Occupation Period. Since the stratigraphic position of the tombs in operation QID1 cannot always be clearly related to the architecture, due to modern looting, this line also includes graves that may be older or that were built during the Main Occupation Period of Building P.
- "Modern Occupation Period" refers to a recent period of heavy looting which has disturbed almost all the excavated fills and installations, including graves.
- The "Topsoil" represents the even more recent ploughing zone.
- The "Site surface" is the surface of the site from immediately before excavation commenced.


## C3. The trench in Square 181908

Jens Rohde \& Laura Tretow

## C3.1 Introduction

This section presents the results of the trench opened in Square 181908 (Figs. C3, C5). This trench includes areas which had been partially excavated in 2016 and $2018^{52}$. In 2019, we completed the excavation of the southern wall of Building $P$ (LGR:0329), and further enlarged the excavation area to the south of this building. The resulting trench measures $7 \times 5 \mathrm{~m}^{53}$. As elsewhere across QID1, the archaeological features uncovered in this trench had been severely damaged by looting pits opened in modern times (grouped together in LGR:0370). Nevertheless, it has been possible to at least partially reconstruct the stratigraphic sequence of the ancient features, which are described below from the oldest to the youngest.

## C3.2 Virgin soil

The virgin soil lying underneath Building $P$ had already been reached in 2018 in several places ${ }^{54}$. It was labelled LGR:0322 and is characterised by a reddish clayey soil, with very few small pebbles embedded in its matrix. In 2019, the virgin soil was reached in the areas approximately 1 m south of wall Locus:181908:065 and 1 m west of wall Locus:181908:066 (Fig. C5). Here, it has an elevation of 568.77 m , which matches the elevation of the virgin soil found in 2018 north of wall LGR:O329. Towards the southwest, the virgin soil slopes slightly down to an elevation of 568.71 m , whereas towards the northeast, and immediately west of wall Locus:181908:066, it slopes more sharply upwards to a level of 568.97 m . To the east of wall Locus:181908:066, a step in the virgin soil was observed, which was probably created for the erection of the wall (Fig. C6: section C). Past this step, the virgin soil slopes upwards to an elevation of about 569.42 m , thus reaching the same level as the highest preserved elevation of wall Locus:181908:066. More to the east, it moves upward to a level of approximately 569.70 m , as far as the eastern border of Square 181908. In the neighbouring Square, 182908,

[^5]

Fig. C5: Detailed orthophoto combining the 2018 and 2019 excavations at QID1. Loci (L), Locus groups (LGR) and graves (G) are shown in the 2019 excavation area. Prepared by Andrea Squitieri.
the virgin soil rises again, reaching a height of more than 570.50 m (Fig. C6: section C).

The virgin soil was also reached directly at the outer corner between walls LGR:0329 and LGR:O321, where a looting pit had been dug that revealed the virgin soil underneath (Figs. $\mathbf{C}_{\mathbf{5}}, \mathbf{C}_{\mathbf{7}}$ ). In this looting pit, we noticed the presence of a step created in the virgin soil for the construction of wall LGR:0329. In the eastern part of the pit, it is possible to see that the wall was founded at a level just below 570 m , while towards the west, the virgin soil goes up by about 40 cm . This observation confirmed that Building P was constructed on the virgin soil.

## C3.3 Walls and floor levels older than the Main Occupation Period

Before describing the southern wall of Building P, namely LGR:0329, and the other Main Occupation Period features unearthed in this trench, we need to mention two wall bases excavated south of LGR:0329, which belong to a phase that is older than the Main Occupation Period. The first is wall Locus:181908:066 (Figs. C5, C6: section C and Figs. C8, C9), located near the southweastern limit of the trench. This wall was set on virgin soil, and runs in a SE-NW direction. The exposed portion is 1.3 m

Fig. C6: Drawings of the southern (Section C) and southwestern (Section D) sections. Drawn by Sophie Pietsch, digitised by Alessio Palmisano. Prepared by Andrea Squitieri.


Fig. C7: Virgin soil close to the southeastern corner of Building P. Photo by Jens Rohde and Laura Tretow.
long, while the remaining part lies under the southern excavation limit. The northern end of the wall was disturbed by the construction of Grave 102 ( $\S_{3} \mathbf{C}_{3}$ ). Wall Locus:181908:066 consists of two rows of longish and roundish cobbles. In the northeast part of the wall three courses are preserved, corresponding to a height of about 40 cm , whereas in the remaining part only one course is preserved. On the western side of the wall, it is possible to see that roundish stones form the lowest course, while the second and third courses consist of longish cobbles set perpendicular to the wall's alignment. Smaller stones were placed to fill the gaps in between the cobbles. The longish cobbles vary in length between 30 cm and 45 cm and in width between $15-20 \mathrm{~cm}$. The more round cobbles are between $20 \times 30 \mathrm{~cm}$ and $30 \times 40 \mathrm{~cm}$ in size. The width of the wall is slightly more than 60 cm and is very close to the width of wall Locus:181908:065, which is described below. No floor level belonging to wall Locus:181908:066 was intercepted; perhaps it was destroyed by the installation of another grave, called Grave 105 (§C3.5), and by the modern looting activities.
To the northwest of wall Locus:181908:066 lies wall Locus:181908:065. This wall is oriented SW-NE and it is preserved for a length of approximately 4.3 m (Figs. C6: section D, C9, C10). It continues towards the west, within the excavation limit. Wall Locus:181908:065 is about 65 cm wide and up to 40 cm high; it is made from a variety of cobbles with irregular shapes. These cobbles vary in size between 20-30 $\times$ 20-40 cm. Only a few are slightly larger. The cobbles are mostly perpendicular to the alignment of the wall, while only a few align with the wall. Smaller stones are visible in the gaps between the cobbles. The wall is formed by two rows of stones and is preserved to a height of four courses. A looting pit which damaged the


Fig. C8: Wall Locus:181908:066. Photo by Jens Rohde and Laura Tretow.
western part of the wall has revealed that its stone base extends even deeper here. The width and the orientation of walls Locus:181908:065 and Locus:181908:066, along with the similarities in their construction techniques, suggest that a corner existed to connect these two walls; it was likely destroyed by the installation of Grave 102.

Two pebble floors can be connected to wall Locus: 181908:065. The pebble floor Locus:181908:071 abuts wall Locus:181908:065 from the south, and it is better preserved towards the west (Figs. C6: section D, C10). It is a pebble floor consisting of a dense and compact layer of small pebbles set in a clayey, greyish soil. To the south and west, the floor continues below the limits of our excavation. Originally, it may have extended further east, and it probably abuts wall Locus:181908:066. Only pottery sherds were found on this floor. Whether it belonged to an indoor or outdoor area is uncertain.
The second pebble floor, similar to the first, is Locus:1 81908:070, which extends north of wall Locus:181908:065 (Figs. C6: section D, C10, C11), and, very importantly, abutting it. More of this floor is preserved than of floor Locus:181908:071. However, in its eastern half the pebbles are not so visible, so that its original boundaries remain uncertain. Its relationship to the southern wall of Building P (LGR:0329) is clear: Locus:181908:070 continues below this wall, and therefore must represent an older building phase than the Main Occupation Period to which Building P belongs. Walls Locus:181908:065 and Locus:181908:066, and the pebble floor Locus:181908:071 must also belong to this same earlier phase as these features all predate the construction of Building P. Though this stratigraphic relationship is clear, it is not possible to say much more about the nature of the area enclosed by walls Locus:181908:065 and Locus:181908:066.


Fig. C9: Plan of the phase "Older than Main Occupation Period". Prepared by Jens Rhode.


Fig. C10: Wall Locus:181908:065 and its surrounding. Photo by Jens Rohde and Laura Tretow.


Fig. C11: Floor Locus:181908:070. Photo by Jens Rohde and Laura Tretow.

## C3.4 Wall LGR:0329 of Building $P$ and the Outdoor Area 70 of the Main Occupation Period

The southern wall of Building P, that is LGR:0329, was partially exposed in 2016 in what, at that time, was called the "Eastern Sector"55. By then, the top of the wall had been unearthed. In 2018, the northern face of this wall was uncovered down to the paved floor, named LGR:0324 ${ }^{56}$. At that time, the southern face of the wall was still covered. In 2019, we continued the excavation of the wall by exposing its southern face. While the northern face had been uncovered over a length of about 5.4 m , the southern face was exposed across a length of a little over 6 m (Figs. $\mathbf{C}_{\mathbf{5}}, \mathbf{C 6}$ : section D, $\mathbf{C 1 2}_{12}$ ). This face is preserved up to one meter high, and leans slightly towards the south. Due to its state of preservation, it shows from 3 to 9 courses of

55 Kreppner/Squitieri 2017a, 44.
56 Herr 2019, 49-52.
stones of different sizes (Fig. C13). In the eastern part, the lower courses consist of small cobbles measuring 10-20 $\times$ $15-25 \mathrm{~cm}$. In the western and upper parts, the cobbles are $20-30 \times 20-40 \mathrm{~cm}$ in size. They are all set perpendicular to the alignment of the wall, with smaller stones filling the gaps between the cobbles. The wall's width is not uniform. To the west, it is a little more than 1.2 m wide, while it measures about 1.45 m on the east (Fig. C12). Moreover, due to modern looting, the upper part of the wall is badly preserved, although the central and eastern sections are more visible. Overall, the layout and construction of wall LGR:0329 are comparable to those of wall LGR:0319, delimiting Building $P$ to the north (§C6.1.1). Both walls run in a SW-NE direction and meet wall LGR:0321, located to the east, at right angles. Moreover, both walls display a step on their inner faces. In wall LGR:0329 this step is about 80 cm wide, extending about 2.5 m to the west from wall LGR:0321 (Fig. C14); behind this step the wall continues vertically with a width of about 70 cm . The step is only visible on the northern face of the wall, and is about $70-75 \mathrm{~cm}$ higher than the floor level of Room 58 . As we will see below (§C6.1.1), a similar step is found on the inner face of the northern wall LGR:0319.

The southern face of wall LGR:0329 provides the boundary for Outdoor Area 70 (Figs. $\mathbf{C}_{5}, \mathbf{C 1 2}$ ), which refers to the space extending south of Building P , up to the southern limit of the excavation area. This space seems to be an open area because, within the trench, no evidence was found that it was enclosed by walls. To the east, Outdoor Area 70 merges with Outdoor Area 71 (§C4.3.2), with no clear demarcation between the two. The modern looting has irremediably damaged the original walking surface of Outdoor Area 70; however, a thick pebble package, called LGR:0382, was found abutting the southern face of wall LGR:0329 (Fig. C15). This is interpreted as the remains of a Main Occupation Period walking surface in Outdoor Area 70. The same pebble package was also preserved in various spots in the trenches to the southeast, east, and north of Building P (see below).

On top of LGR:0382 a two-row stone installation was found, called LGR:0384, about 60 cm wide (Fig. C16). The southern row of this installation forms a relatively straight face made of longish cobbles set perpendicular to the orientation of the installation. The northern row is made of irregularly set cobbles and it directly borders wall LGR:0329. These cobbles are between $10-25 \times 15-35 \mathrm{~cm}$ in size. The installation is two to three courses high. To the west, its limit is not clearly visible, while to the east, it continues into the neighbouring Square 182908, reaching a total length of about 2 m . The function of this installation is not clear.

Fig. C12: Plan of the "Main Occupation Period" phase. Prepared by Jens Rohde.


Fig. C13: Southern face of wall LGR:0329. Photo by Jens Rohde and Laura Tretow.


Fig. C14: Northern face of wall LGR:0329. Photo by Jens Rohde and Laura Tretow.


Fig. C15: Pebble package LGR:0382, abutting wall LGR:0329 from the south. Photo by Jens Rohde and Laura Tretow.


Fig. C16: Stone installation LGR:0384. Photo by Andrea Squitieri.

Fig. C17: Plan of the graves excavated in 2019 in QID1. Prepared by Jens Rohde.

## C3.5 Graves 102 and 105

Two cist graves, Grave 102 and Grave 105, were identified south of wall LGR:0329 (Figs. C5, C17). Unfortunately, both had been heavily disturbed by looters, and consequently neither yielded any skeletal remains or in situ items. Only a few bits of their architecture were found in situ.

Grave 102 (Fig. C18) is a cist grave which seems to have been cut into the Main Occupation Period pebble package of LGR:0382; however, because of the modern disturbances, this stratigraphic relationship is difficult to ascertain. What is certain is that Grave 102 cuts the walls Locus:181908:065 and Locus:181908:066, both of which are older than the Main Occupation Period, and also cuts into the virgin soil LGR:0322. The cist is about 2 m long and 90 m wide (measured from within), and is oriented from SW-NE. Its architecture, Locus:181908:038, consists of a stone lining made of roundish cobbles set in 4 to 5 courses on both the northern and southern sides, while flattish white boulders were placed upright to create the grave's western and eastern boundaries (Fig. C19). On the west


Fig. C18: Cist Grave 102 before the removal of the remains of the capping. Photo by Jens Rohde and Laura Tretow.


Fig. C19: Cist Grave 102 after removing the capping. Photo by Jens Rohde and Laura Tretow.
side, this boundary is created by one almost-rectangular boulder, while six boulders of different sizes form the eastern edge. Similar white, flattish boulders of different shapes were used to cap the grave. Three of them were still covering the tomb when it was excavated, while the others were found inside the tomb itself. The fills inside the grave architecture were excavated as Locus:181908:035, Locus:181908:036, Locus:181908:040 and Locus:181908:041. Because the grave had been robbed in modern times, these fills must be considered disturbed contexts. Along with many fragments of modern items left by the looters, ancient items were also found, particularly numerous bronze studs and several white appliques (see §E1, nos. 15 and 18). It is noteworthy that these ancient finds were concentrated in the area west of the grave, while none were found in Locus:181908:41 located to the east; likely this had to do with the method used by the looters to rob the grave. The upper grave fill and the fills right above the grave, labelled Locus:181908:033, Locus:181908:034 and Locus:181908:037, also contained finds that may be assigned to the original grave furniture (see $\S \mathrm{E}_{\mathbf{1}}$, nos. $\mathbf{1 4}$ and $\mathbf{6 3}$ and the arrowheads of Variant d discussed in §E4.1.4).

Southwest of Grave 102, close to the southern excavation limits, the remains of another cist grave were found: Grave 105 (Figs. C17, C20). Its architecture is labelled Locus:181908:055. Its northern boundary is about 2.8 m long and consists of a series of cobbles, about $15-30 \times 15-20 \mathrm{~cm}$ in size, up to five courses. On the eastern side, only one flattish white stone block is preserved, about 80 cm wide, standing upright. This block closely resembles the ones used for the architecture of Grave 102. The southern and western boundaries of the grave seem to continue south beyond the excavation limit; however, part of the architecture is lost, and hence no remains of this grave are visible in the southern section. No skeletal remains were found inside, since the grave had been completely robbed. The looted fill inside the grave architecture (named Lo-


Fig. C20: Cist Grave 105. Photo by Jens Rohde and Laura Tretow.
cus:181908:051 and Locus:181908:055) yielded fragments of an Egyptian Blue bead ( $\S \mathbf{E}_{1}$, no. 27) along with some modern remains left behind by looters. Right above the grave architecture, the looted fills Locus:181908:044 and Locus:181908:048 also yielded numerous finds, some of which probably originated from Grave 105 (§E1, nos. 63, $\mathbf{6 9}, \mathbf{7 8}, \mathbf{8 0}, \mathbf{8 4}, \mathbf{8 5}, 88$ and 93). A large, whitish, flat stone block found in the fill above the grave was likely part of the original grave architecture. Because of the looting, the stratigraphic position of Grave 105 is difficult to ascertain; however, the similarities in architecture might suggest contemporaneity with Grave 102.

East of Grave 105 and south of Grave 102, a cut into the virgin soil LGR:0322 was observed; it is very similar to the cut opened in the virgin soil to accommodate Grave 102. Moreover, the fill excavated here, Locus:181908:050, yielded two fragments of bronze pins, remains of Egyptian Blue beads, and a bronze bead ( $\S E_{1}$, nos. 79, 87 and 97), all of which would fit the item repertoire of a grave. Hence, it is possible that another grave was once present here.

## C3.6 The modern looting pits and the topsoil

As mentioned above, evidence for recent looting activity was abundant across the entire trench (Fig. C21). Looting pits reached down to the virgin soil in several spots and irremediably confused the stratigraphy of the operation. The cuts and fills of these pits have been documented in separate loci, which are now collected into one locus group (LGR:0370). The fills of the looting pits were characterised by a loose dark-brown soil, including pebbles, ceramics, animal bones and, more rarely, charcoals. Several modern finds (e.g., plastic fragments, cigarette filters, aluminium pieces) were also found in these fills, along with ancient objects. Occasionally, accumulations of me-dium-sized stones were encountered that represented stones dislocated and accumulated by the looters; these accumulations had already been observed during the 2016 and 2018 campaigns ${ }^{57}$. Both the soil characteristics and the presence of modern finds helped in the identification of the looting pits, though it has not always been easy to delineate their cuts because in most cases the pits superimposed and cut each other.

The looted fills connected to Graves 102 and 105 have been already discussed above, as they contained finds that possibly originated in these two graves. In addition, one more looted fill is worth mentioning: Locus:181908:029.

This fill extended across the length of the trench. Though it had no direct connection to any of the graves, it yielded several ancient finds, some of which may have belonged to a grave ( $\$ E_{1}$, nos. 62, 63, 66 and $\mathbf{8 2}$ and cf. the discussion of arrowhead "Variant c" in §E4). Among these objects is a complete bronze bowl ( $\S \mathbf{E}_{\mathbf{1}}$, no. 61; Fig. E1.14), found upside down, about 2 m west of Grave 102. This bowl's fill (Locus:181908:052) contained bones from a human hand. It is possible that this bowl originated in one of the graves. Due to a lack of collagen, the attempt to radiocarbon date one of the bones was unsuccessful.
The table below summarises the looted fills encountered in this trench, grouped into LGR:0370. Their locations are given in the plan shown in Fig. C21.

| Looted fills in trench Square 181908 (part of LGR:0370) |  |
| :--- | :--- |
| Locus numbers | Notes |
| Locus:181908:025, Locus:181908:028 | Generic disturbed fills con- |
| Locus:181908:039, Locus:181908:045 | taining pottery sherds, animal |
| Locus:181908:054, Locus:181908:057 | bones, charcoals and modern |
| Locus:181908:058, Locus:181908:059 | items, all embedded in a dark- |
| Locus:181908:060, Locus:181908:061 | brown, loose soil matrix. |
|  |  |
| Locus:181908:027, Locus:181908:029 | Disturbed fills yielding several |
| Locus:181908:043, Locus:181908:044 | ancient finds, some of them |
| Locus:181908:046, Locus:181908:048 | possibly originating from a |
| Locus:181908:050, Locus:181908:056 | nearby grave. |
| Locus:181908:062, Locus:181908:067 |  |
| Locus:181908:068 |  |
| Locus:181908:030, Locus:181908:031 | Stone accumulations gathered |
| Locus:181908:047, Locus:181908:049 | by looters. |
| Locus:181908:064 |  |
| Locus:181908:033, Locus:181908:034 | Disturbed fills inside or right |
| Locus:181908:035, Locus:181908:036 | above Graves 102 and 105, |
| Locus:181908:037, Locus:181908:040 | yielding finds which likely |
| Locus:181908:041, Locus:181908:051 | originated from these graves. |
| Locus:181908:055 |  |
| Locus:181908:052 | Fill from inside the complete |
|  | metal bowl (§E1, no. 61) con- |
| taining the bones of a human |  |
| hand. |  |

Finally, all the deposits and features described above were covered by topsoil, which did not bear any trace of looting. It was excavated in three separate loci (Locus: 181908:024; Locus:181908:026; Locus:181908:042), grouped into a single locus group LGR:0368. The 2018 backfill was partly re-excavated as Locus:181908:023, and along with the topsoil, it was covered by the site surface Locus: 181908:022.

Fig. C21: Plan showing the modern looting pits. Prepared by Jens Rhode.

## C3.7 Conclusions

Due to the heavy looting activity that occurred in modern times, the stratigraphy of the trench in Square 181908 cannot be reconstructed clearly. Nevertheless, some conclusions may be drawn. In particular, it seems that at least four phases were encountered:

- A phase stratigraphically older than the Main Occupation Period, represented by two walls and two pebble floors.
- The Main Occupation Period, to which the southern wall of Building P, the pebble package, and a stone installation belong. This phase was dated to the Iron Age (see Tables C1-C2).
- Cist Graves 102 and 105. The dating of the graves is uncertain, and their stratigraphic relationship to Building P is not very clear. Due to their architecture, it is possible that both graves are contemporary with each other, and because Grave 102 seems to cut into the Main Occupation Period pebble package, it is possible that it is later than the latter period. However, given how disturbed the stratigraphy of the trench is, we can not rule out the possibility that these graves were contemporary to Building P. The objects that have been linked to these graves and in particular the arrowheads (Table E4.2) would suggest a 9th-6th century BC date for them.
- The Modern Occupation Period, consisting of many looting pits reaching the virgin soil in several spots.


## C4. The trench in Square 182908

## Jana Richter \& Hero Salih Ahmed

The trench in Square 182908 is located to the east of the previously discussed trench in Square 181908 (§C3), and covers $5 \times 5 \mathrm{~m}$ in the southeastern corner of operation QID1 (Figs. $\mathbf{C}_{3}, \mathrm{C}_{5}$ ). It was opened with the primary goal of uncovering both the southeastern corner of Building $P$ and the features located next to this building to the southeast. The sections below present the features and deposits excavated, in stratigraphic order from the oldest to the youngest.

## C4.1 Virgin soil

The virgin soil was reached in several places across the trench. As throughout QID1, it is composed of a clayey, reddish soil, with some pebbles and white inclusions. It is called LGR:0322.

## C4.2 A stone structure older than the Main Occupation Period

Locus:182908:051 is possibly the oldest feature uncovered in this trench, located in its southern part (Figs. C $\mathbf{5}, \mathbf{C 6}$ : section C, C9). It is an irregularly shaped, yet structured, stone installation, which was set on the virgin soil. It encloses an area of c. $1.4 \times 1.7 \mathrm{~m}$, with the southern limit of the space extending beyond the southern limit of our excavation area. In its western and eastern inner limits, this feature shows well-aligned stone faces (Fig. C22). The northern end is marked by larger stones up to 55 cm long, forming an approximate corner, while protruding into the enclosed space. One more regular course of stones exists in the northwestern part of the feature, where a clear outer corner is formed. The northeastern outer limit of this structure gives the impression of an almost circular or nearly diagonal shape. In most parts, only one course of stones is preserved. In the southwestern part, two elongated stones are set in a lower position than the others, possibly forming a threshold (Fig. C22). Some patches of loosely distributed small pebbles and pottery sherds were found abutting the inner faces of the installation inside the stone structure, close to its southern end, and were interpreted as faint traces of a floor (Locus:182908:056).

The stone structure Locus:182908:051 has no clear function. It is not clear if it was part of a building unit, although the possible presence of a threshold would suggest it might be part of a room. It is also possible to interpret this structure as a platform or a large basin. Admittedly, there is no strong evidence that this stone installation is older than the structures of Building $P$ as no stratigraphic connection was identified; however, it seems that the thick Main Occupation Period pebble package that extends all


Fig. C22: Stone installation Locus:182908:051, with the remaining floor Locus:182908:056 towards the southeast. A patch of the pebble package Locus:182908:049 visible in the foreground. Photo by Jana Richter.
around Building P covered this installation, making it older than the Main Occupation Period. More data, however, are needed to ascertain this stratigraphic relationship.

## C4.3 Structures and features of the Main Occupation Period

## C4.3.1 The southeastern corner of Building P

A portion of the southeastern corner of Building $P$ was uncovered within this trench. It was assigned Locus: 182908:053, part of LGR:0381 (Figs. C5, C12, C16). The corner is built of roundish and longish cobbles of maximum lengths between 25 and 45 cm . The longish stones sit perpendicularly to the outer wall face. Up to three courses of stones are preserved above ground, but in most places fewer are visible. Following the technique used for the construction of the whole eastern part of Building P, which was built into the slope of the hill, the southeastern corner was also set against a cut opened into the virgin soil. This became visible when we made a small sounding near the looting pit (Locus:182908:023) which disturbed the area directly next to the corner. There, the removal of some virgin soil below the lowest visible stone course of the wall corner showed the presence of two to three additional courses of stones going deeper into the virgin soil. As they increase in depth, they recess towards the interior of the building, thus undercutting the outer wall edge. When seen from above (Figs. $\mathbf{C}_{\mathbf{5}}, \mathbf{C 1 2}_{12}, \mathbf{C 1 6}_{16}$ ), the southeastern corner of Building P does not form a sharp angle, but follows a curved line that smoothly connects
the southern wall (LGR:0329) to the outer eastern wall of Room 59 (Locus:182909:035).

Two more features were found in connection to Building P. One is a patch of a pebble layer located south of the Building P's southeastern corner. It extends west into the neighbouring Square 181908, where it was described as LGR:0382. This layer, abutting the walls of Building P, may represent a remnant of the walking surface of Outdoor Areas 70 and 71 during the Main Occupation Period. LGR:0382 lies below a two-row stone installation, called LGR:0384, set against the southern face of Building P. This installation was also mentioned previously in our discussion of Square 181908.

## C4.3.2 Outdoor Area 71

Outdoor Area 71 extends to the southeast and east of Building $P$, up to the excavation limits, merging to the west with Outdoor Area 70, which extends south of Building P (Figs. C5, C12). In Outdoor Area 71, we encountered several patches of a thick pebble layer, very similar to the aforementioned LGR:0382. It is made of pebbles mixed with several pottery sherds, going down to the virgin soil. This layer must have originally formed a large, thick pebble package that extended around Building P. It is better preserved on the east of this building in Square 182909 (§C5.2.4). Modern looting pits damaged this feature, leaving behind only a few distinct, discrete patches. The upper surfaces of these patches are interpreted as remains of the original walking surface of Outdoor Area 71, used at the time of the Main Occupation Period. Each patch has been documented with two loci, one for the thick pebble layer and another for its upper surface. One is Locus:182908:047 (Figs. C23, C24: section B), located in the northeastern quarter of the trench. It continues to the north into Square 182909, where it corresponds to the pebble layer Locus:182909:063 (Fig. C24: section A). The latter abuts Building $P$ from the east; hence, the pebble accumulation Locus:182908:047 is also deemed to belong to the construction of Outdoor Area 71 during the Main Occupation Period. Above this, Locus:182908:047 shows a flat horizontal surface, which was given the name Locus:182908:057 and likely represents the ancient walking surface. This surface also continues north into the neighbour-

Fig. C23: Pebble surface Locus:182908:047 in Outdoor Area 71, damaged by modern looting pits. Photo by Jana Richter.


${ }^{0}{ }^{2} \mathrm{~m}$

ing Trench 182909, where it is called Locus:182909:064 (Fig. C24: section A).

Right in the southeastern corner of the trench is another patch of pebbles, called Locus:182908:048. Though physically separated from Locus:182908:047, it may be equated with it (Figs. C5, C24: section B). To the northwest, near the feature LGR:0384, a pebble package (Locus:182908:049) was also found; it slopes upwards between two looting pit cuts (Figs. C5, C22). A portion of this pebble layer covers the western part of the stone feature Locus:182908:051, described above, thus suggesting that the latter is older than the Main Occupation Period. However, Locus:182908:049 is composed of stones which appear to be larger than those observed in the rest of the pebble package across Outdoor Area 71. For this reason, and also due to the lack of any physical connection, it is not clear that Locus:182908:049 belongs to the Main Occupation Period or constitutes a part of the pebble package extending across Outdoor Area 71.

## C4.4 Deposits of the Post-Main Occupation Period

Some patches of the pebble package in Outdoor Area 71 were covered by deposits made of a hard and clayey soil with a yellowish colour. These deposits were clearly distinguishable, both in appearance and composition, from the darker, loose fills of the modern looting pits; they are interpreted to be the preserved remains of fills formed during the Post-Main Occupation Period, that is after the structures of the Main Occupation Period had been abandoned. One such deposit is Locus:182908:037 (Fig. C24: section B), located in the northeastern portion of the trench, where it covers the pebble package surface called Locus:182908:057. One additional post-occupation deposit is Locus:182908:040, covering a pebble layer (Locus:182908:048), located in the very southeastern corner of the trench (Fig. C24: section B). No diagnostic ancient find was retrieved from either deposit. Their affiliation to the Post-Main Occupation Period is only based on their colour and consistency, which, as mentioned, differ from the surrounding looting pits.

## C4.5 Grave 103

In the southwestern portion of the trench, the burial Grave 103 was identified (Figs. C5, C17). This is a NE-SW-oriented cist burial measuring c. $1.6 \times 0.6 \mathrm{~m}$. Its lining is made of two courses of stones (Locus:182908:018) (Fig. C25). The cist was clearly set on top of installation Locus:182908:051
because the stones belonging to the latter were visible at the bottom of the grave pit. Most of the northern and eastern part of the cist were preserved, whereas the western and southern parts had been disturbed by modern looting activity. One trapezoidal, whitish stone slab, c. 50 cm wide, was found covering the central part of the cist. Most likely it was in situ or very close to it. Despite having been robbed, parts of the skeleton, (Locus:182908:041) were found. This skeleton (Fig. C26) was in an extended supine position. The pelvis and femur areas were better preserved as they were covered by the stone slab. The other bones were fragmented into many pieces held together by the surrounding soil. Remains of the elbow bones indicate that the left arm was originally in a flexed position; the right arm's bones were not preserved at all. Some teeth were found within the area of the crushed jaw and skull. They were sampled for dating purposes but proved to be unsuitable for radiocarbon analysis. A few items were found on the skeleton, most notably a well-preserved bronze ring, found inside the pelvic cavity ( $\S \mathrm{E}_{\mathbf{1}}$, no. 19). The dark brown grave fill was excavated as Locus:182908:019. It contained some pottery sherds, as well as two iron pins (PPP 182908:019:003, PPP 182908:019:004, §E1, no. 22), one small iron bracelet (PPP 182908:019:002, §E1, no. 21), and fragments of at least two more iron rings (PPP 182908:019:005, PPP 182908:019:008, §E1, no. 23). Immediately above the grave, a looted fill was excavated as Locus:182908:042. In it, a bronze bead (§E1, no. 99) was found that may belong to the Grave 103 furniture; also the looted fill Locus:182908:011, which partially covered Grave 103, probably derived from the looting of that same grave; it contained an iron rod (PPP 182908:011:003: § $\mathbf{E}_{1}$, no. 62) that may have originated there.

Because Grave 103 is a cist grave, and includes the remains of a white stone slab used as a capping, it is possible that it is contemporary with Graves 102 and 105, described above (§C3.5). See also §K.

## C4.6 The modern looting pits and the topsoil

The stratigraphy of this trench was irremediably damaged by the recent heavy looting activity (Fig. C21). As in the rest of QID1, the fills of the looting pits consisted of loose, dark brown soil, which assumed a more greyish colour in some cases. These fills contained pebbles, pottery sherds, animal bones, and several modern finds amongst the ancient ones. The cylinder seal PPP 182908:008:006 was found in fill Locus:182908:008 (§E3.1). The pit cuts were not always clear as they frequently superimposed on each other. Nevertheless, it seems that, on the eastern side of the trench, looters proceeded in a north-south direction, as some pits


Fig. C25: Cist Grave 103 with the remains of its capping (white stone slab). Photo by Hero Salih Ahmed.


Fig. C26: Skeleton of Grave 103. Photo by Hero Salih Ahmed.
were aligned this way (for example, Trench 182909). As we have done before, all looting pits were grouped into the single locus group LGR:0370. The table below summarises the looted fills grouped within LGR:0370.

| Looted fills in trench Square 182908 (part of LGR:0370) |  |
| :--- | :--- |
| Locus numbers | Notes |
| Locus:182908:004, Locus:182908:020 | Generic disturbed fills con- |
| Locus:182908:010, Locus:182908:028 | taining pottery sherds, animal |
| Locus:182908:029, Locus:182908:012 | bones, and modern items, all |
| Locus:182908:021, Locus:182908:039 | embedded in a dark-brown |
| Locus:182908:043, Locus:182908:045 | or greyish soil, alternating |
| Locus:182908:052, Locus:182908:055 | between a loose and a more |
| Locus:182908:003, Locus:182908:027 | compact consistency. |
| Locus:181908:032, Locus:182908:015 |  |
| Locus:182908:017, Locus:182908:024 |  |
| Locus:182908:005, Locus:182908:007 | Disturbed fills yielding sever- |
| Locus:182908:026, Locus:182908:038 | al ancient finds, some of them |
| Locus:182908:046, Locus:182908:008 | possibly originating from a |
| Locus:182908:033, Locus:182908:013 | nearby destroyed grave. A |
| Locus:182908:034, Locus:182908:035 | cylinder seal was found in fill |
|  | Locus:182908:oo8 (§E3.1). |
| Locus:182908:042, Locus:182908:011 | Disturbed fills connected |
|  | to Grave 103, yielding finds |
|  | which in part may have |
|  | originated there (§E1, nos. 62 |
| and $\mathbf{9 9}$ ). |  |

All features excavated in this trench were covered by the topsoil. The latter was excavated in three loci, namely Locus:182908:002, Locus:182908:006, and Locus:182908:022, then grouped together into locus group LGR:o368. The topsoil did not show any trace of looting.

## C4.7 Conclusions

Overall, more than $70 \%$ of the entire volume of excavated material from the trench in Square 182908 was composed of looting deposits. Despite this considerable level of disturbance, four pre-modern phases could be observed:

- A phase older than the Main Occupation Period, to which the stone structure Locus:182908:051 belongs.
- The Main Occupation Period, to which the southeastern corner of Building $P$ and various patches of the pebble package of Outdoor Area 71 belong.
- A Post-Main Occupation Period, to which some deposits, missed by the looters, belong.
- The partially disturbed Grave 103, surely younger than the stone structure Locus:182908:051, but whose stratigraphic relation to Building $P$ and the pebble package is not clear. Given its architecture, it is possible that it is contemporary with Graves 102 and 105.


## C5. The trench in Square 182909

Jean-Jacques Herr \& Louise König

The trench in Square 182909 extends by $8 \times 5 \mathrm{~m}$ to the east of Building P , and to the north of the previously discussed trench in Square 182908 (Figs. C4, C5). It was opened with two principal goals. First, to complete the excavation of Building P Room 59, which had been partially uncovered in 2018 ${ }^{58}$; second, to investigate the features located east of Building P, in the area dubbed Outdoor Area 71. The sections below will present the excavated features in stratigraphic order, from the oldest to the youngest, although the heavy looting activities that occurred in the modern period have, in many cases, made it difficult to establish precise stratigraphic relationships.

## C5.1 Virgin soil

The virgin soil was reached in several locations, designated with different loci numbers and grouped into the locus group LGR:0322 (composed of Locus:182909:069, Locus:182909:070, Locus:182909:071, Locus:182909:017). As throughout QID1, the virgin soil is a reddish, clayey soil with white inclusions, devoid of any artifacts. It may represent the ancient slope of the hill against which, and partially cutting into, Building $P$ and the features of Outdoor Area 71 were set.

## C5.2 Features of the Main Occupation Period

## C5.2.1 Room 59 of Building $P$

Room 59 (Figs. $\mathbf{C}_{\mathbf{5}}, \mathbf{C 1 2}$ ) is a small room located east of the much larger Room 58, to which it is connected via a 1.2 m wide threshold (Locus:181909:022), uncovered in 2018. Room 59 has a slightly trapezoidal layout, measuring about $1.6 \times 2.9-3.3 \mathrm{~m}$. It is bordered on the north and the south by the northern and southern walls of Building P. To the west, the room is bordered by the wide wall LGR:0321 (equipped with a threshold, as mentioned above), while to the east, it is bordered by a thinner wall about 3.3 m long. Because the eastern side is longer by about 40 cm than the western side, Room 59 has a trapezoidal layout. During 2018, only the western part of the room was excavated. Its excavation was completed during the 2019 campaign.

## C5.2.2 The walls of Room 59

The walls of Room 59 lie on virgin soil. The southern wall was only partially exposed in 2018, when it was named Locus:181909:032; by then it was already clear that this wall was set at a higher level than the wall of the adjacent Room 58 (LGR:0321), thus conferring a stepped profile to the entire structure of Building P. The threshold between Room 58 and Room 59 is 90 cm higher than the floor of Room 58, indicating that Room 59 was intended to be at a higher level. In 2019, wall Locus:181909:032 continued to be excavated to the east as LGR:0381 (Fig. C27). Although it was badly damaged by looting activity, on the eastern part it is possible to see that this wall is about 1 m high, and is composed of 6 courses of large cobblestones set perpendicular to the wall's alignment. The wall's core was filled with smaller stones. Its eastern face, which corresponds to Building P's southeastern corner, is set partly against the virgin soil, and, as already noticed in Square 182908, has a curved shape (Fig. C16).

The northern wall of Room 59 was uncovered in 2018 and documented as Locus:181909:030, now part of


Fig. C27: Room 59, the southern and eastern walls. Photo by Jean-Jacques Herr and Louise König.


Fig. C28: Room 59, the eastern and northern walls. Photo by Jean-Jacques Herr and Louise König.

LGR:0376. It is made of $4-5$ courses of cobblestones (about 70 cm in total height), which, in contrast to the southern wall, are aligned with the direction of the wall (Fig. C28). In 2019, it was discovered that this wall is part of a larger structure constituting the northeastern corner of Building P, which, despite being heavily damaged by looters, clearly differs from the southeastern corner. This corner will be better described in the discussion of Square 181909.

The eastern wall of Room 59, called Locus:182909:035, contrasts strikingly with the other walls of Building P as, at $40-50 \mathrm{~cm}$ wide, it is considerably thinner (Fig. C29). Moreover, only its inner face is visible, while the opposite face is completely covered by the pebble package that forms the walking surface of Outdoor Area 71. The wall is made up of only one row of cobblestones, about $20-$ 30 cm long, laid in 5-6 courses, and set perpendicularly to the wall's direction. Like the southern wall, it is preserved at an elevation of about 1 m . In the middle of the wall, one larger boulder, about 65 cm long, was set in the uppermost course of stones. It appears that in order to build this wall the virgin soil had been dug so that the wall could lean against it. On the inside, it can be seen that the wall is not straight but slightly slanted towards the west. On the top, the wall's cobblestones are doubled, with the addition of another row of stones. Here, the upper part of the wall meets the walking surface of the pebble package Locus:182909:065, which extends to the east of Building P (Fig. C30).

## C5.2.3 The large stone slab and the floor of Room 59

In 2018, when the western portion of Room 59 was excavated, it was already clear that this room had been completely looted, down to the virgin soil. In that year, we found a massive stone slab in an upright position in


Fig. C29: Room 59, the eastern wall. Photo by Jean-Jacques Herr and Louise König.


Fig. C30: Outdoor Area 71 in the foreground, with the looting pits damaging its pebble floor abutting the eastern wall of Room 59. Photo by Jean-Jacques Herr and Louise König.
the middle of the room, called Locus:181909:02659. In order to proceed with the excavation, it was necessary to lean it against the eastern limit of the excavation area (see Fig. C31, depicting the situation during the 2018 campaign). Because we continued excavation towards the east in 2019, we moved the massive stone to the western limit of Room 59 (supporting it with bags of soil). This stone slab was described in detail in the previous excavation report; the following comments are only a brief summary of that information. It is a squarish, 14 cm thick, quarried block of white limestone, measuring $1.55 \times 1.27 \mathrm{~m}$. It shows a carved circular depression on one corner, with a diameter of 19 cm . Despite the additional excavation of this room, its original use remains unclear. It is possible that it was lifted up by looters expecting to find a grave underneath, which would explain why we found it in an upright position in 2018. Whether it was originally part of the floor of the room, with the circular depression functioning as a door socket, or whether it was used in other ways (e.g., as a podium) is not certain. It is also possible
that it was misplaced by the looters and its original location must be sought elsewhere in the vicinity.

The 2019 excavations in this area revealed that the looters must have stopped at the room's floor level on the eastern side of the room. This appears as a concentration of pebbles and pottery sherds embedded in a greyish soil matrix, called Locus:182909:023 (Fig. C32), and extending along Room 59's entire length. Perhaps it was the original walking surface that had been destroyed by the looters in the western part of the room. Assuming that Locus:182909:023 was the original floor level of Room 59, then the difference in height between it and the threshold leading to Room 58 is about 30 cm .

## C5.2.4 Outdoor Area 71

In the eastern side of Room 59, we encountered a thick and dense layer of pebbles mixed with pottery sherds embedded in a grey-brown soil, which was lying directly above the virgin soil (Figs. C5, C12, C33, C34). This pebble package covers the entire extension of the trench. It continues into the southern trench in Square 182908, as mentioned above (§C4.3.2), and parts of it were also un-


Fig. C31: Room 59 at the end of the 2018 excavation campaign with the large stone slab Locus:181909:026 found in the room in upright position. Photo by Jean-Jacques Herr.
covered in the trench 181908 (§C3.4). This pebble package was heavily damaged by looting pits, whose excavation showed that the package of pebbles and pottery sherds reach a depth of about 1.5 m (Figs. C21, C34, C35). The various spots where it had been left undamaged were assigned different loci. In particular, each spot was assigned a locus for the pebble package itself, and one for its upper surface. The pebble packages are Locus:182909:065, Locus:182909:063, Locus:182909:068 (Figs. C21, C24: section A), to which the following surfaces correspond: Locus:182909:066, Locus:182909:064 and Locus:182909:072, respectively (Figs. C21, C24: section A). These surfaces are thought to belong to the Main Occupation Period as they represent the walking surfaces used at that time. It is noteworthy that the pebble package abuts Building $P$ from the east, and for this reason it is considered contemporaneous with the latter.


Fig. C32: The pebble floor of Room 59. Locus:182909:023. Photo by Jean-Jacques Herr and Louise König.

## C5.3 Graves 101, 109 and 110

In the northern portion of the trench, three graves were found (Fig. C17). Graves 101 and 109 are cremation burials, while the Grave 110 is a simple pit grave. They had been all partially robbed, but some of their features can be reconstructed. Most notably, Grave 110 yielded a partially preserved skeleton, from which a tooth (Locus:182909:067:017) has yielded the radiocarbon dates of 767-488 calBC (see Table C1). The sections below describe the graves and discuss their stratigraphic position in relation to the Main Occupation Period features.

## C5.3.1 Grave 101

Grave 101 (Figs. $\mathbf{C}_{\mathbf{5}}, \mathbf{C 1}_{17}$ ) is a cremation burial whose urn was found intact: fortuitously, it was missed by the looters. However, the rest of the burial was affected by looting so it is not possible to clearly define its outer boundaries (Fig. C35). The edges of the grave seem to have been defined by a burnt clay lining that is orange in colour with darker spots (Locus:182909:044). This lining defines a rectangular pit, measuring about 2 m from east to west. In the southeastern portion, this lining was completely obliterated by looters. Inside the lining we found ashy layers (Locus:182909:008 and Locus:182909:048), along with a dark brown fill (Locus:182909:009, Locus: 182909:033 and Locus:182909:045). The limits of the grave pit were identified thanks to the discovery, at the bottom of the pit, of a powdery, white-grey, ashy layer, which included many heavily fragmented bones (Locus: 182909:008 and Locus:182909:048) (Fig. C36). The urn was located inside the pit. This carinated jar with a neck (PPP 182909:009:002) was found intact, standing on the bottom of the pit


Fig. C33: The pebble floor of Outdoor Area 71, damaged by the looting pits. Photo by Jean-Jacques Herr and Louise König.


Fig. C34: Northeastern corner of Outdoor Area 71. Photo by Jean-Jacques Herr and Louise König.


Fig. C35: The cremation burial Grave 101, with the cremation burial Grave 109 in the background. Photo by Jean-Jacques Herr and Louise König.
(§D1.2.2); its top became visible around 60 cm below the site surface. The urn's mouth was covered by a broken, but complete, carinated bowl (PPP 182909:009:003), set upside down (§D1.2.2 and Fig. C37). Around and underneath the urn (Fig. C38), several other grave goods were unearthed, most notably six decorated hollowed bone tubes (§E1, no. 7), fragments of metal items, and a golden earring (§E1, no. 9).

The urn contained a dark brown soil (Locus:182909:022) in which several fragments of human and animal bones were found. The bones were very fragile, and many of them looked as if they had been exposed to fire ${ }^{60}$. A human long bone was sent to the laboratory for radiocarbon analysis; unfortunately, it did not contain enough collagen for dating. No artifacts were found inside the urn, with the exception of one shapeless metal fragment (§E1, no. 10). Four drop-shaped pebbles were found, which did not look worked. Three of them are dark red, while the fourth is translucent white (§E1, no. 11).

60 According to the assessment of the archaeozoologist Anja Prust after her on-site autopsy of the bones in autumn 2019.

The characteristics of the grave lining (Locus:182909: 044), which seems to have been exposed to fire, and the presence of ashy and powdery layers at bottom of the pit would point to a fire event. In our reconstruction, the pit was created to host the cremation ritual. After the incineration, the pit may have been partially cleaned, and the bones (or some of them) gathered into the urn. Finally, the urn, with its bowl lid, and most of the goods were placed into the pit. Most of the grave goods did not look burnt, as was the case of the fragmented decorated bone tubes; however, a bronze item was also found next to the urn which appeared to have been melted (Fig. C38, no. 6). Hence, it is possible that some grave goods had been deposited with the body before incineration, while others were placed there afterwards. Further analysis is required to better understand and reconstruct the process of this cremation. Due to the modern disturbances, the stratigraphic relationships of Grave 101 are not easily reconstructed; however, it seems that the grave cut the pebble package, Locus:182909:066. This would make Grave 101 younger than the construction of the Outdoor Area 71 floor.


Fig. C36: Cremation burial Grave 101, with its withish and ashy layer at the bottom of the grave pit. The red $\times$ shows the location of the urn. Photo by Jean-Jacques Herr and Louise König.

## C5.3.2 Grave 109

About 2 m east of Grave 101, another cremation burial was found, named Grave 109 (Figs. C5, C17, C35 and C39). Unfortunately, it had been damaged by two looting pits on the southern and the eastern sides. As in the case of Grave 101, Grave 109 also seems to cut the pebble package of Outdoor Area 71. The edge of Grave 109's pit has been preserved on its western side; this edge consists of a line of burnt clay with an orange colour and some darker spots; it is similar to the lining of Grave 101. The upper fill of the pit was a light brown soil with pebbles (Locus:182909:050), which covered a carinated bowl set upside down (PPP 182909:051:001, see §D1.2.3). The bowl was embedded in a fill of brown and white ashy soil (Locus:182909:051). In the northeastern part of the pit, we found an accumulation of fragments of fragile human bones (PPP 182909:051:002) (Fig. C40). This ac-


Fig. C37: The urn of Grave 101 as it was found still in situ, with a broken but complete bowl on top of its mouth in an upside down position. Photo by Jean-Jacques Herr and Louise König.


Fig. C38: Positions of some of the items collected from around the urn (no. 8, after removal) of Grave 101. For the bone tube fragments nos. 1-5 see §E1, no. 7; and for the bronze fragments nos. 6-7 see §E1, nos. 1-2. Photo by Jean-Jacques Herr and Louise König.
cumulation included parts of a cranium, as well as some finger bones. North of the carinated bowls, a few ribs were also found. Underneath the bowl were the remains of an epiphysis of a femur along with a loose, powdery, white fill (Locus:182909:052) (Fig. C41). Some of the bones which were underneath the bowl had an intensely white or grey colour, possibly because they had been exposed to fire. Unfortunately, none of these bones were suitable for radiocarbon dating. The grave goods consisted of a single white stone bead (PPP 182909:052:005), found underneath the bowl (§E1, no. 12). Like Grave 101, Grave 109 showed traces of fire on the preserved walls of the grave pit. As we have seen, this was filled with ashy layers including several bone fragments, both around and underneath the bowl, which looked as if they had been exposed to fire. For these reasons, we interpret


Fig. C39: Cremation burial Grave 109. Photo by Jean-Jacques Herr and Louise König.


Fig. C41: Bones found underneath the bowl in Grave 109. Photo by Jean-Jacques Herr and Louise König.

Grave 109 as a cremation burial. Unlike Grave 101, however, the bones of Grave 109 were not all gathered inside an urn, but were partly below and around it. Whether this was intentional or the product of later disturbances is not clear.

## C5.3.3 Grave 110

Another grave was identified about 2 m south of Graves 101 and 109: Grave 110 (Figs. C5 and $\mathbf{C 1 7}_{17}$ ). Unlike the previous two, Grave 110 is an inhumation burial in a simple pit. Unfortunately, it was damaged by looters who dug two pits on either side of the grave (Locus:182909:013 and Locus:182909:025) (Fig. C42). It was possible to observe that the grave pit cut the pebble package of Outdoor Area 71, which in this spot is called Locus:182909:065. The southern part of the grave is missing where a looting pit was dug. However, the northern part still contained the grave's fill (Locus:182909:059) and the remains of the up-


Fig. C40: Grave 109 with a bone concentration on the northeastern side. Photo by Jean-Jacques Herr and Louise König.
per part of a skeleton (Locus:182909:067), which lay directly on top of the pebble package Locus:182909:065 (Fig. C43). The body was laid on its back, with its head facing east. The lower skeleton is missing, from the ilium to the phalanges of the feet. The left arm was bent so that the mouth was covered by the hand, and the left thumb was found next to the left clavicle. The lower ends of the humerus, radius, and ulna were not preserved as they were damaged by the looters. The thoracic vertebrae were in place, and there the ribs were in contact with each other. The scapulae were badly preserved, which prevented us from removing them in one piece. On the right side of the skeleton, the humerus was extended and the lower epiphysis is missing as well as the radius, ulna, and the hand. Although fractured, the cranium was well preserved with visible sutures. The mandible and the maxillary were well preserved, although not in contact with each other. The left and right maxillaries still joined. The mouth was found open, likely due to taphonomic processes. As mentioned previously in §C2.1, a tooth was radiocarbon dated to 767-488 calBC (Table C1).

During the excavation of Grave 110, it became clear that some of the bones had shifted position. The mandible had fallen down, leaving the mouth open. The ribs had all moved towards the lower part of the body, as had the clavicles. The joints between the metacarpal bones and the finger phalanges showed a depression, as if this part also had fallen down. Moreover, the sternum and rib cage were missing and the centre of the preserved thoracic vertebrae looks badly damaged. To explain these changes in position, we hypothesise that the body was not buried directly in the soil, but was originally covered by stone slab or a wooden lid. This capping must have prevented the body from being fully covered by soil before it completely decomposed, thus allowing some of the bones to shift position (namely the mandible, ribs, clavicles). If the body


Fig. C42: Inhumation Grave 110 with the remaining part of the skeleton. Photo by Jean-Jacques Herr and Louise König.


Fig. C43: The skeleton of Grave 110 with two of the objects still visible in situ: 1: Fibula PPP 182909:067:004 (discussed in §E2); 2: cylinder seal PPP 182909:067:007 (discussed in §E3). Photo by Jean-Jacques Herr and Louise König.
had been fully covered with soil when it was interred, these bone movements would not have occurred. Concerning the age, we could not find the third molars, and
the epiphyses had not finished joining with the diaphysis. Hence, the individual may have been young ${ }^{61}$.

Grave 110 yielded several grave goods, some visible in Fig. C43. Next to the lower part of the left humerus, we found a completely preserved cylinder seal, PPP 182909:067:007, with its glass cap PPP 182909:067:008 (§E3.2). From the area of the left pectoral and underneath the ulna, we found two bronze fibulae, named PPP 182909:067:010 and PPP 182909:067:011 (§E2.1). Next to the right shoulder, another bronze fibula was found (PPP 182909:067:004) (§E2.1). One carnelian bead (PPP 182909:067:001) and one white incised bead (PPP 182909:067:003) were found next to the right ear ( $\S \mathbf{E}_{1}$, nos. 48-49). A shapeless, rock crystal (quartz) fragment, PPP 182909:067:009, was found underneath on one of the left ribs (§E1, no. 46). A fragment from an Egyptian Blue bead PPP 182909:067:005 was found in the fill, along with tiny fragments of gold (§E1, nos. 46-47).

Given the available evidence that these graves cut the pebble package of Outdoor Area 71, it is possible to give the graves a terminus post quem following the construction of the Main Occupation Period floor.

## C5.4 The modern looting pits and the topsoil

## C5.4.1 The fill of Room 59

As mentioned above, the fill of Room 59 had been completely looted and contained no undisturbed remains. In 2019, this fill was excavated as Locus:182909:016. The fill is part of the locus group LGR:0305, which was created in 2018 to incorporate all of the looted fills in the area of Room $59^{62}$. This locus group is comparable to LGR:o370, which (as described above) combines all the remaining looted fills of QID1.

## C5.4.2 Outdoor Area 71

As mentioned previously, Outdoor Area 71 had been extensively damaged by several looting pits (Fig. C21). These pits were filled with a dark brown soil mixed with variously-sized stones which must have originated from the ancient structures. We also found some irregular

61 The preliminary anthropological observations contained in this section were carried out by Jean-Jacques Herr and some of them may have to be revised once in-depth analyses can be carried out by a specialist in physical anthropology.
62 Herr 2019, 59, Fig. D21.
stone accumulations which must have been gathered by the looters. Some pits were circular, others were more ovoid, and they seemed to have been excavated in roughly regular rows in 50 cm to 1 m intervals. However, the pits frequently cut each other, which has made identifying the individual cuts very difficult. Apart from soil and stones, the looting pit fills yielded a combination of fragments of modern items, such as pieces of aluminium packages and cigarette filters, and ancient objects. The table below summarises the looting pit fills excavated in this trench, and grouped into LGR:0370.

| Looted fills in trench Square 182909 (part of LGR:0370) |  |
| :--- | :--- |
| Locus numbers | Notes |
| Locus:182909:018, Locus:182909:039 | Generic disturbed fills con- |
| Locus:182909:042, Locus:182909:053 | taining pottery sherds, animal |
| Locus:182909:054, Locus:182909:056 | bones, and modern items, all |
| Locus:182909:012, Locus:182909:032 | embedded in a dark-brown, |
| Locus:182909:041, Locus:182909:030 | loose soil matrix. |
| Locus:182909:038, Locus:182908:032 |  |
| Locus:182909:006, Locus:182909:007 | Disturbed fills yielding sever- |
| Locus:182909:010, Locus:182909:015 | al ancient finds. |
| Locus:182909:019, Locus 182909:024 |  |
| Locus:182909:027, Locus:182909:034 |  |
| Locus:182909:055, Locus:182909:014 |  |
| Locus:182909:026, Locus:182909:043 |  |
| Locus:182909:028, Locus:182909:047 | Stone accumulations gathered |
| Locus 182909:046 | by the looters. |

All of the looting pits were covered with topsoil (LGR:O368) which did not bear any traces of looting activity, although it showed plough tracks left by the most recent agricultural activities (Fig. C44).


Fig. C44: The surface of the topsoil in Square 182909. Photo by Andrea Squitieri.

## C5.5 Conclusions

As a result of the 2019 investigations in Square 182909, we have now completed the excavation of Room 59, having reached a pebble surface that very likely constitutes the room's floor. To the east of Room 59, Building P seems to have occupied an isolated position, as no other architectural structures have been identified there. Outdoor Area 71 extends to the east of Building P. Its walking surface is characterised by a pebble package mixed with pottery sherds. Because this pebble package abuts Building P, we consider both to belong to the Main Occupation Period.

We identified three graves which seem to have been cut into the pebble package. Two are primary cremation burials (Graves 101 and 109) while one is a simple inhumation pit (Grave 110). The latter yielded a radiocarbon date range of 767-488 calBC (Table C1). These graves seem to be stratigraphically younger than the Main Occupation Period. However, it is not possible to establish whether they were all contemporary with each other. Finally, several looting pits have been encountered that damaged the graves, the pebble package, and the fill of Room 59.

## C6. The trench in Square 181909

## Alessio Palmisano \& Sophie Pietsch

The 2019 trench in Square 181909 extends the northern portion of the 2018 excavation area (Figs. $\mathbf{C}_{3}, \mathbf{C}_{5}$ ). In total, this trench measures 4 m towards the north and 7 m towards the east, where it connects with the trench in Square 182909. The goals for this trench were to complete the excavation of the northern wall (LGR:0319) and northeastern corner (LGR:0376) of Building P, and continue the excavation of what, in the 2018 campaign, was labelled Room 60 but in the 2019 campaign was renamed Outdoor Area 6o: a seemingly open space extending north of Building P. The following sections will describe the features excavated in this trench in stratigraphic order.

## C6.1 The Main Occupation Period

## C6.1.1 The northern portion of Building $P$

During the 2019 campaign, we exposed the northern face of wall LGR:o319, Building P's northern wall, which runs parallel to wall LGR:0329 on the south. A portion of it had
already been partially exposed in 2016 and $2018^{63}$. Combining the results from the previous campaigns, LGR:0319 appears to be a large wall, exposed for a length of about 8 m (Figs. C5, C12). However, its original length may be longer, as its westernmost limit has yet to be reached. It is 1.4 m wide on the west, increasing to about 1.6 m in the east, and it runs parallel to the southern wall LGR:0329, whose width also increases as it moves east. In the portion of the wall exposed in 2019, we uncovered two looting pits: one about 80 cm west of wall LGR:0321; and another, larger, about 2.5 m to the west of the previous one. Several stones were removed by looters; however, the wall structure is still clear. The northern face of wall LGR:0319 is about 1.6 m high, and shows 7 to 9 courses of cobblestones (Fig. C45). The cobblestones are c. 30-45 cm long and are set perpendicularly to the wall's alignment; they encase a core of smaller stones with a diameter of about 10-25 cm. No mortar was observed between the stones. It shares a particular feature with southern wall LGR:0329. On its southern face, an approximately 2.5 m long step can be


Fig. C45: Northern face of wall LGR:0319, the northern wall of Building P. Photo by Alessio Palmisano.


Fig. C46: Southern face of wall LGR:0319. Photo by Alessio Palmisano.
seen. It is about 80 cm wide, and it begins at the eastern wall LGR:0321 (Fig. C46). Behind it, a narrower portion of the wall rises for another $50-55 \mathrm{~cm}$. As with southern wall LGR:0329, this step is only found on the inner face, and it is about $70-75 \mathrm{~cm}$ higher than the floor level of Room 58 . It is too regular to be the result of the modern looting, so we assume that it was part of the original wall structure. Beyond the step, towards the west, the wall is solid with no signs of any similar step. The function of these steps in both walls LGR:0319 and LGR:0329 is not clear.
As we observed in 2018, the eastern wall LGR:0321 is higher than both wall LGR:0319 and wall LGR:0329, thus forming a stepped structure. However, the northeastern corner of the building, which had been completely exposed in 2019, appears to differ from the southeastern corner, described above. The northeastern corner, called LGR:0376, is a squarish structure measuring 3.3 m in NESW direction and 2.1 m in NW-SE direction (Fig. C47). It is built with $35-45 \mathrm{~cm}$ long boulders, and flattish, 2025 cm long cobblestones. This structure connects to wall LGR:0321 in the south, and with wall LGR:0319 to the west. The northern face was partially damaged by a looting pit. There had possibly been a revetment as some reddish remains of burned clay were found still adhering to it (Fig. C47). The top of LGR:0376 was unfortunately damaged by looters, who opened a round pit in the middle of it. Nevertheless, looking at the plan (Figs. C5, C12), LGR:0376 has a different appearance than the southeastern corner of Building P, giving the building an asymmetrical layout. It is possible that LGR:O376 had a different function from the southeastern corner, which is as yet unclear.


Fig. C47: Northeastern corner of Building P, LGR:0376. Photo by Alessio Palmisano.

63 Kreppner/Squitieri 2017a, 52 ("The Northern Sector"), Fig. C6 (labelled Locus:100000:006); Herr 2019, 49-52, Fig. D10.


Fig. C48: Section E: northwestern section drawing. Section F: northern section drawing. Drawn by Sophie Pietsch, digitised by Alessio Palmisano. Prepared by Andrea Squitieri.

## C6.1.2 Outdoor Area 60

Open Area 60 is a space measuring about $4 \times 7 \mathrm{~m}$ located to the north of Building P (Figs. C5 C C12). The western portion of this space was partially exposed in 2018, when it was named Room 60 ${ }^{64}$. In 2019, we expanded its excavation to the east and the north. As it appears to not be a walled space, we renamed it Outdoor Area 60. In the western part of the outdoor area, we reached a layer that was about $45-50 \mathrm{~cm}$ thick and made of a mixture of cobbles and pebbles, named Locus:181909:076 (Figs. C5, $\mathbf{C 1}_{12}$ and C48: sections E and F, C49). The cobbles are ovoid-shaped and measure approximately 15-20 x 10-15 cm . This layer abuts the lowest course of wall LGR:0319. We interpreted it to be a levelling layer laid beneath the outdoor area's floor. This floor was exposed in two spots: Locus:181909:061 and Locus:181909:071 (Figs. C49-C50). Before describing the floor, we need to mention a stone structure that was uncovered near the northwestern corner of the excavation area, labelled Locus:181909:070 (Figs. $\mathrm{C}_{5}, \mathrm{C}_{12}$ and $\mathrm{C}_{4} 8$ : section $\mathrm{F}, \mathrm{C}_{49}, \mathrm{C}_{50}$ ). This is a north-south-oriented structure that extends for about 1 m from the northern excavation limit (and continues beyond it). It is about 70 cm high and 80 cm wide and is made of four preserved courses of stones. Its northwestern section was partially damaged by a looting pit (pit cut: Locus:181909:o66). Its size suggests that it is a preserved portion of a stone wall; however, the top view reveals none of the usual structural forms found in walls. To compare, the two walls in Square 181908, Locus:181908:065 and Locus:181908:066 (Figs C8 and C10), which are comparable to Locus:181909:070 in width, display two clear rows of stones with gaps filled with smaller stones in between when looked at from above; other similar walls exposed in 2016 also have the same structure ${ }^{65}$. In contrast, Locus:181909:070 does not show clear rows of stones. It is possible that it represents another type of wall, built using different techniques, or that it is simply a badly preserved wall; however, it is also possible that Locus:181908:070 had a separate function which at the moment remains unclear.

The floors of Outdoor Area 60, Locus:181909:061, are formed by a mixture of cobbles, pebbles, and pottery sherds lying flat on the surface (Figs. C49-C50). Some of the cobbles are flattish and roundish, and measure 5-10 cm in diameter; others are ovoid and measure approximately $10-15 \times 5-10 \mathrm{~cm}$. This floor is only preserved to the north of Wall LGR:0319 and to the west of the northeast-
ern corner of Building P LGR:0376. The preserved portion is 1.65 m long and 1.25 m wide and it covers approximately a surface of 2 sqm . This surface abuts Wall LGR:0319 to the south and the northeastern corner of Building $P$ (LGR:0376) to the east. The deposit found directly on the floor is called Locus:181909:055. It yielded several pottery sherds, bone fragments, and a complete ceramic bowl (PPP 181909:055:001, see §D1.1.1, Fig. D1.1.3).

Another small portion of the outdoor area's floor, called Locus:181909:071, is similar to Locus:181909:061, and was found in the north-western corner of the excavation trench, where it seems to abut the stone structure mentioned above (Locus:181909:070) (Figs. $\mathbf{C}_{5}, \mathbf{C 1 2}_{12}$ and $\mathbf{C}_{48}$ : section $\mathbf{E}, \mathbf{C}_{\mathbf{5 0}}$ ). In the remaining areas, the floor of Outdoor Area 60 was heavily damaged by several looting pits. West of Locus:181909:061, and at a higher level, a pebble package called Locus:181909:077 was found (Figs. C5 and C47). This package seems to be the continuation of the thick pebble layer found in several spots in Outdoor Area 71 in Square 182909 (§C5.2.5). As with Outdoor Area 71, it is possible that the top surface of this pebble package was the Main Occupation Period walking surface. A step which was created by the looters during their illicit excavations is visible between Locus:181909:077 and floor Locus:181909:o61. Originally, this spot must have been a sloping portion of the floor connecting Locus:181909:077 and Locus:181909:061.

As we saw also with Outdoor Areas 70 and 71, the distinction between Outdoor Area 60 and Outdoor Area 71 is not clear, as both areas seem to be part of the same open space around Building P, extending (at least within the limits of our excavation) to the north, east, and south of this building.

## C6.2 The Graves 106, 107 and 108

Three burials were found within the trench: Graves 106, 107, and 108 (Figs. $\mathbf{C}_{5}$ and $\mathbf{C 1}_{17}$ ). In addition, a loose skull (Locus:181909:084) was found in a looting pit (fill: Locus:181909:067), located in the northwestern corner of the excavated area (Fig. C50). The burials had all been severely looted; however, Grave 106 yielded both human remains and artefacts. Stratigraphically, the graves seem to be later than the Main Occupation Period as they cut into features of Outdoor Area 60, namely (from east to west) Locus:181909:077, Locus:181909:061, and Locus:181909:076.

[^6]

Fig. C49: The features in Outdoor Area 60, and the two later graves. Photo by Alessio Palmisano.


Fig. C50: The features in Outdoor Area 60, with the later Grave 107, and on the right the looted fill Locus:181909:067 from where the radiocarbon dated tooth was derived. Photo by Alessio Palmisano.

## C6.2.1 Grave 107

Grave 107 is the only grave in this trench with preserved architecture (Figs. $\mathbf{C 1 7}_{\mathbf{1 7}}, \mathbf{C}_{\mathbf{5}} \mathbf{-}-\mathbf{C}_{\mathbf{5 1}}$ ). It is a cist grave, about 1.75 m long and 1 m wide, lined with medium-sized, 20-25 cm diameter stones, set in three visible courses. It was originally capped with approximately 50 cm long white stone slabs, of which two are still visible in situ in approximately the middle of the grave. The grave was looted from the west, and therefore no finds remained. Structurally it closely resembles Graves 102, 103, and 105 (discussed above), which suggests that they were contemporaneous with each other.

## C6.2.2 Grave 106

We found Grave 106 immediately north of Grave 107 (Figs. $\mathbf{C}_{5}, \mathbf{C 1}_{17}$ and $\mathbf{C}_{49}$ ). It yielded the remains of one or two individuals (Figs. C51-C52). No architecture was found in connection to this grave: whether the architectural details were completely destroyed by looters, or whether Grave 106 was a simple pit burial (like Grave 110) is not clear. The


Fig. C51: Graves 107 and 106. Photo by Alessio Palmisano.


Fig. C52: Human remains in Grave 106. Photo by Alessio Palmisano.
burial is 2 m long and 55 cm wide. The skeleton(s) lay on the back(s). The burial fill, Locus:181909:069, has yielded several pieces of jewellery, described in detail in §E1 (nos. 28-45). It also yielded a broken iron arrowhead (PPP 181909:069:019), described in §E4.1.6.

## C6.2.3 Grave 108

Grave 108 is a cist grave located immediately east of Grave 106 (Figs. C5, C17 and C48: section F). Though not complete, the southern part of its stone lining is visible. This lining is formed from two courses of medium sized (ca. $20-25 \mathrm{~cm}$ diameter) stones (Fig. C53). The grave is approximately 2 m long and 85 cm wide. Unfortunately, the stone capping was removed by looters; however, a large white stone slab that may have been part of the missing grave capping was found in the fill above the grave (Locus:181909:063). No human or manufactured remains were found. It is possible that Grave 108 was contemporaneous with the other cist graves discussed above (Graves 102, 103, 105 and 107).

About 1 m south of Grave 108 (Fig. C5), there are some stones that are partially aligned in the form of an ovoid cist. It is possible that another cist grave was once here, now irrevocably destroyed by the looters.

## C6.3 Skull Locus:181909:084 from a looting pit: evidence for Early Iron Age burials

In the northwestern corner of the trench, a looting pit was excavated, with a fill named Locus:181909:067 (Figs. C48: section $\mathbf{F}, \mathbf{C}_{\mathbf{5 0}}$ ) and cut Locus:181909:066. Its position at the edge of our excavation means that the complete extension of this pit is unknown; however, it is clear that it damaged the stone structure Locus:181909:070. The pit


Fig. C53: The remains of Grave 108. Photo by Alessio Palmisano.
fill contained a bronze fibula (Locus:181909:067:001, discussed in §E2.2) and a cylinder seal (Locus:181909:067:003, discussed in §E3.3). Whether these items originated from one of the nearby graves cannot be definitively established, but is very likely.

In this pit, also a skull was found (Locus:181909:084) as well as a tooth (Locus:181909:067:006), which was collected close to the skull and most likely came from it. The tooth was radiocarbon dated to 1210-1029 calBC (Table C1). The tooth's context does not allow us to connect these dates to any of the known graves. Nevertheless, it is noteworthy that this date range is very close to the dates obtained from a skeleton excavated in 2018 (Grave 99): 1259-1117 calBC ( $95.4 \%$ probability) ${ }^{66}$. These human remains demonstrate that graves from the late second millennium BC existed in the area; most likely, they preceded the excavated structures of Building P and the graves described above.

## C6.4 The modern looting pits and the topsoil

As elsewhere in QID1, the trench in Square 181909 bears signs of the heavy looting that occurred recently (Fig. C21). The looted deposits, grouped in LGR:0370, yielded a mix of both modern and ancient materials. Some of the ancient finds may have originated from either the graves or the occupation period of Outdoor Area 60; however, this is difficult to establish. Fragmented human bones were frequently found in these deposits, as were medi-um-sized stones, which may have originally been part of the now-destroyed graves. None of the original stratigraphy of these deposits was intact, so it was not possible to identify any post-occupation deposits that may have formed following the abandonment of the Main Occupation Period structures. The table below summarises the looted fills found in this trench and grouped into LGR:0370.

| Looted fills in trench Square 181909 (part of LGR:o370) |  |
| :--- | :--- |
| Locus numbers | Notes |
| Locus:181909:053, Locus:181909:072 | Generic disturbed fills con- |
| Locus:181909:060, Locus:181909:065 | taining pottery sherds, animal |
| Locus:181909:073, Locus:181909:078 | bones, and modern items, all |
|  | embedded in a yellowish dark |
|  | brown, loose soil matrix. |
| Locus:181909:051, Locus:181909:052 | Disturbed fills yielding several |
| Locus:181909:058, Locus:181909:063 | ancient finds. |
| Locus:181909:050, Locus:181909:062 |  |


| Looted fills in trench Square $\mathbf{1 8 1 9 0 9}$ (part of LGR:0370) |  |
| :--- | :--- |
| Locus numbers | Notes |
| Locus:181909:056 | Stone accumulations gathered <br> by the looters. <br> Locus:181909:067 <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Disturbed fill in which tooth <br> Radiocarbon date from the <br> tooth: 1210-1029 calBC. |

Finally, the topsoil, excavated as Locus:181909:050, Locus: 181909:051, and Locus:181909:062 (grouped in LGR:0368), did not show any signs of looting, but was characterised by recent ploughing marks.

## C6.5 Conclusions

The excavations of the trench in Square 181909 yielded the following results:

- Building P, to the north, appears to be isolated. Outdoor Area 60 extends here, and seems to be the continuation of Outdoor Area 71, located to the east.
- Building P's northeastern corner seems to be a massive structure that is architecturally different from the southwestern corner. Therefore Building P has a slightly asymmetrical layout.
- Cist Graves 106, 107, and 108 postdate the features of the Main Occupation Period (Building P and Outdoor Area 60). One of them, Grave 107, closely resembles Grave 102 in Square 181908. Considering their architectural similarities, it is possible that all these graves were contemporaneous.


## C7. Preliminary assessment of the 2019 excavations at QID1

## F. Janoscha Kreppner \& Andrea Squitieri

The 2019 excavation campaign on the western slope of Qalat-i Dinka continued investigations in operation QID1, prompted by the discovery, during the 2016 and 2018 campaigns, of portions of a monumental building, dubbed Building P. The 2019 excavations covered an area of about $150 \mathrm{~m}^{2}$ and they focused on completing the investigation of Building P and its surrounding area. As was already recognised during the prior campaigns, the entire excavation area had been disturbed by several recent looting pits, which has made it very difficult to reconstruct the stratigraphy for the entire operation.

The 2019 campaign brought to light evidence (§C3.3) of an architectural phase older than Building P, consisting of two walls and a pebble floor. Unfortunately, it is not possible to assign these older features to a specific chronological period. It is worth mentioning that both the construction technique and the size of these older walls are consistent with some of the walls uncovered during the 2016 campaign in QID1 (Fig. C12: L24 in Outdoor Area 69 and L28 in Room 61), as well as in the operations of the Lower Town (namely Gird-i Bazar, DLT2 and DLT3). However, whether this resemblance indicates contemporaneity is difficult to ascertain.

During the 2019 campaign, our knowledge of Building P and its immediate surroundings was furthered. This building stands out from the other buildings of the Dinka Settlement Complex for its distinctive characteristics: it has wide walls, a brick paved floor, and a monumental threshold connecting Room 58 with Room 59. The eastern wall of Room 59 was uncovered in 2019. Its 40-50 cm width contrasts with the wider walls found in the rest of the building. Because Building $P$ was built against a natural slope it has a stepped structure: the northern and southern walls of Room 58 meet the eastern wall of this room at a lower level, and there is an approximately 90 cm difference in height between the floors of Room 58 and Room 59. Moreover, Building P has two slightly asymmetric corners: the northeastern corner has a wide, squarish shape, while the southeastern corner has a rounded profile. When observed in detail, some of the architectural features of Building P are consistent with the other structures of the Dinka Settlement Complex. The use of unworked cobbles for walls and the use of baked bricks to pave the floor can be found elsewhere across the settlement; however the scale of Building P's architecture is greater than any other of the buildings there. Other architectural features, on the other hand, are only attested in Building P. The protruding stone bases in Room 58, the steps visible in this room's northern and southern walls, and the use of quarried blocks for the threshold and in Room 59 (although in Room 59 this block's purpose is not clear as it had been moved by the looters) are all features that contribute to differentiating Building $P$ from the other structures so far unearthed at the Dinka Settlement Complex. Building P's affiliation to the Iron Age is confirmed by a charcoal sample collected in 2018 from directly above the floor of Room 58, which provided a radiocarbon dating of 1001-847 calBC, indicating that Building P was in use at the same time as at least some of the other buildings of the Lower Town (§A and Table C1). In relative stratigraphy, we refer to this period as the Main Occupation Period.

During the 2019 campaign, it became clear that Building $P$ was situated in an open space that extended around it towards the north, east, and south (called Outdoor Areas 60,70 , and 71 ). The western portion of Building $P$ is not completely uncovered so this part remains unclear. A thick package of pebbles and pottery sherds was deposited across these open areas abutting the outer walls of Building P. The top layer of this package served as a walking surface during the Main Occupation Period. However, due to the extensive modern looting activity, only a few patches of this surface layer have survived. Moreover, the looting activities blended the fills in the outdoor areas as well as in the rooms of Building P, irreparably damaging the original stratigraphy.

The features described above were cut by graves that have since been plundered, but must have originally been equipped with valuable finds. The remains of some cist graves are still preserved (Graves 102, 103, 105, 107). In a few cases, skeletal remains were found together with finds (Graves 106, 110). In addition to these inhumation burials, two cremation burials were also detected (Graves 101 and 109). Although it seems that some of them cut the Outdoor Area floors from a higher elevation, which would make them younger than Building P , it is not impossible that some of the graves were contemporary with, or even older than, Building P. In fact, the radiocarbon dates provided by the human remains unearthed in QID1 in both 2018 and 2019 reveal that the area was used as a cemetery across a long span of time. Two radiocarbon dates from human remains are available that pre-date the charcoal sample from Building P Room 58's floor (see Chapter A and Table $\mathbf{C 1}_{1}$ ). These results came from a tooth associated with Grave 99 dated to 1259-1117 calBC, and a tooth from a looting pit (not associated with any grave) dated to 1210-1029 calBC. They predate the charcoal from Room 58's floor, which was dated to 1001-847 calBC. These older human remains indicate that graves existed in this area before Building P was built.
The chronological sequence was advanced by a tooth from Grave 110, which yielded the radiocarbon date of 767-488 calBC (Table C1). Grave 110, therefore, seems to be later than Building P; however, whether the other graves excavated in 2019 also belong to the Grave 110's period is unclear. Finally, a human bone connected to Grave 98 (found in 2018 above the northern wall of Building P) was radiocarbon dated to $355-93$ calBC, pointing to the existence of even later graves. How the undated graves relate to each other chronologically, and how they relate to Building P remains uncertain, and clarifying this should be the target of future investigations.


[^0]:    37 Radner 2015.
    38 Radner 2016, 17-22; Fassbinder/Ašandulesei 2016, 38-42, Fig. B4.6. Giraud 2016, 29-35; Herr 2016, 80-99.

[^1]:    40 Kreppner/Squitieri 2017a, 44-56, Fig. C5.
    41 Kreppner/Squitieri 2017a, 48.
    42 Now equipped with a dGPS, the 2018 operations followed our established grid system and were located in Squares 181908 and 181909 (QID1), Square 176909 (QID2), and Squares 176904, 176905 and $177905\left(\mathrm{QID}_{3}\right)$.

[^2]:    43 For QID1, see Herr 2019, 44-58; for QID2, see Hashemi 2019, 59-62; and for QID3, see Wolter 2019, 63-66.
    4 Herr 2019, 49-53.

[^3]:    46 Kreppner/Forster/Squitieri 2016, 43-45; Kreppner/Squitieri 2017b; Kreppner/Squitieri 2018, 31; Squitieri/Rohde 2019.

[^4]:    49 Radner/Squitieri 2019, Fig. D5.
    50 Radner/Squitieri 2019; Herr 2019.
    51 Herr 2019.

[^5]:    52 Kreppner/Squitieri 2017a, 49 ("The Eastern Sector"); Herr 2019, 4953.

    53 In the northern portion of this trench, a $1 \times 7 \mathrm{~m}$ strip had already been excavated in 2018, but it was uncovered again in 2019 by removing the old backfill in order to better understand the structure of wall LGR:0329.
    54 Herr 2019, 49 and 53.

[^6]:    64 Herr 2019, 55.
    65 Kreppner/Squitieri 2017a: Locus:100000:028 and Locus:100000:023, Figs. C12, C19.

