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Living in the Lower Town at Kınık Höyük (Niğde). Preliminary Report on the 2021-2022 Campaigns in Anatolia

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Abstract. Excavations at the site of Kınık Höyük have brought to light over the past twelve years several occupational phases dated to the first Millennium BCE both on the acropolis and in the lower town, especially for the Middle Iron Age and the Hellenistic period. Since 2021 the University of Firenze joined the University of Pavia (Italy), NYU-ISAW (USA) and Dokuz Eylül University in Izmir (Turkey) in the excavations at the site of Kınık Höyük, and since 2022 the same university took over in the management of the project. This article is a preliminary report on recent excavations area D2-3, located in the lower town, where archaeologists could identify six phases of occupation and two large primary contexts dated to the beginning of the Middle Iron Age, that provide new insights on every-day assemblages and inventories produced locally and the architectural and archaeological context they are related to. The most interesting element in terms of urban layout and structure is related to the construction of the massive defensive fortification of the lower town, that seems to be related so far to the earliest occupation of the Iron Age lower town, i.e. possibly at the end of the Early Iron Age. A selection of the materials and a detailed report on deposits and architecture provides the reader with the archaeological data collected mainly in the campaign 2022 and 2021 in the lower town excavations, while a general overview on the urban fortification of the acropolis allows a general picture of the whole settlement defensive system and space organisation.

Keywords: Middle Iron Age, Cappadocia, Lower Town, Kınık Höyük, urbanism.

In 2021 the University of Firenze joined the University of Pavia (Italy), NYU-ISAW (USA) and Dokuz Eylül University in Izmir (Turkey) in the excavations at the site of Niğde-Kınık Höyük, and in 2022 the same university took over the management of the project. All four institutions continue to cooperate in this large archaeological project, focusing their research on different excavation areas and sharing the same aims and research goals. This collaboration fosters productive scientific discussion, connects students from different universities, and encourages teamwork, which is vital in supporting such a large enterprise.

This article is a preliminary report on recent excavations conducted in one area located in the lower town, Operation D. Furthermore, in an introductory section, we will provide a brief overview of archaeological research conducted at the site's mound, with a specific emphasis on the evidence originating from the southern slope (Operation C), which is of more direct relevance to the discussion of topography and urbanistic layout of the lower settlement.

The authors of the present contribution have been involved at different levels in the analysis and study of the archaeological evidence.¹ The results presented here also consider the activities carried out prior to 2021 in the lower town, as well as the precious work and documentation provided by other colleagues previously and still involved in the project.²

1. THE ARCHAEOLOGICAL SITE OF NIĞDE-KINIK HÖYÜK

Niğde-Kınık Höyük (N-KH) is located on the northern fringes of the Bor Plain, in southern Cappadocia. Excavations at the site stemmed from a survey conducted between 2006 and 2009, under the direction of Lorenzo d'Alfonso and Clelia Mora (Pavia University). The survey covered an area of about 800 km², stretching over the northernmost fringes of the Bor Plain and the southern and eastern slopes of the Keçiboydurandağ and Melendiz Dağları (Matessi, Gürel *et al.* 2016, d'Alfonso, Balza *et al.* 2017). Among the 37 sites recorded, Kınık Höyük was selected for a long-term excavation project in light of its long occupation history – with surface materials spanning from the Early Bronze Age to the Ottoman periods – and its large dimensions, supporting the presence of a first-tier settlement. Furthermore, no modern constructions are present on the mound and in the surrounding terrace, in contrast to other key regional centres such as Niğde-*Nabita-Nabitiya* and Kemerhisar-*Tuwanuwa-Tuwana-Tyana*, which are buried underneath modern cities. Despite an undeniable historical interest, until recent decades southern Cappadocia has remained systematically overlooked by archaeological research (Matessi, Tommasini Pieri 2017). One of the main goals of the project has been, thus, to provide a new set of archaeological evidence for this region, which correspond to the core of the Iron Age kingdom of Tuwana and the Graeco-Roman Tyanitis.

Following geomagnetic and GPR prospections conducted in a preparatory campaign, excavations at the site began in 2011 as a collaborative endeavour of Pavia University (Italy) and NYU-ISAW (USA), under the direction of Lorenzo d'Alfonso. The site is composed by an elliptic (180×120 m), 20-m-high mound, set on a roughly square terrace rising about 2 m from the surrounding plain. Excavations are currently divided into five main operation areas (Fig. 1). Operation A is located on the northern slope of the mound, investigating the mound defensive

¹ Dr. Mariacarmela Montesanto works as supervisor since 2021 in the excavations in Area D, in 2022 Sofia Bartolozzi, Federica Lenti and Margherita Carletti (MA) supervised different trenches in Operation D. Caterina Fantoni (MA) is writing a PhD thesis at the University of Pavia on the materials from the lower town, she is also small find registrar at the excavations, Corrado Alvaro together with Margherita Carletti are responsible since 2022 for the topography at the site; Dr. Lorenzo Castellano is supervisor in Operation C, he also conducts bioarchaeological research at the site since 2015. Burak Yolaçan is co-director and supervises excavations in Operation E on the acropolis. Marina Pucci is the current director of the excavations.

² We would like to acknowledge and thank Prof. Lorenzo d'Alfonso, former director of the excavations and current responsible for the acropolis investigations, who started and organized the excavations at the site and focused his attention on this specific region. Credits are due to Paola Vertuani, illustrator, and to Figen Türker, photographer, they have authored the pottery and small finds drawings and photos in this article, while the conservators Izel Gungor and Fazlı Açıköz have been working on the pottery material in 2022. All students from the universities of Izmir, Pavia and Firenze provided a crucial contribution to the success of the 2022 season. To all these people goes our warm thanks.

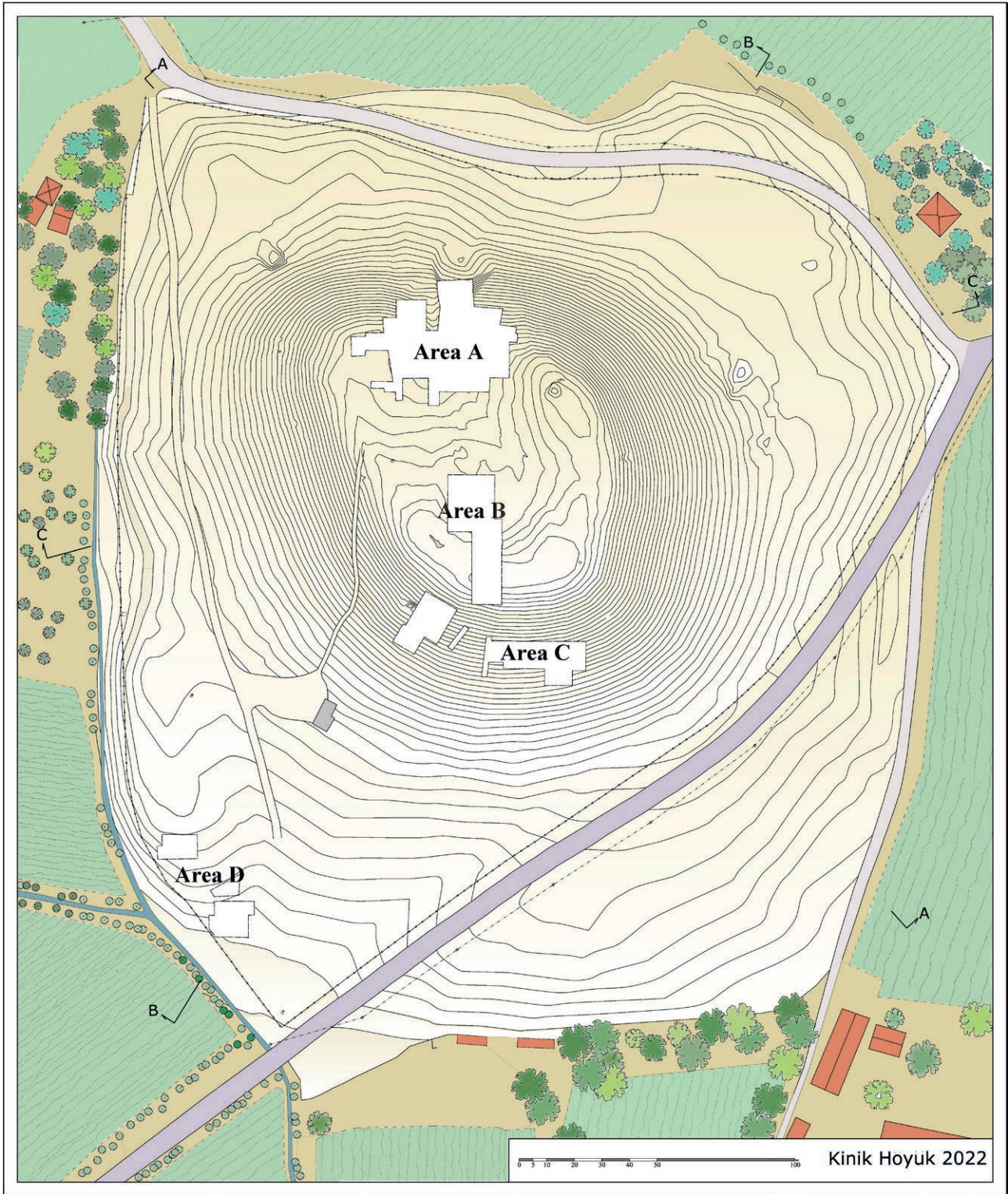


Fig. 1. Topographic plan of the mound (C. Alvaro).

structures (sector Aw) and building complexes to the inside of the citadel (sectors A1 and A2). Operation A is adjoined to the south by Operation E, focusing on public architecture dating to the Hellenistic and Roman periods. Operation B, divided into sector B1 (north) and B2 (south), is located on hilltop. In Operation C, on the southern slope of the mound, are under investigation the Iron Age fortifications and a coeval storage area in their proximity. Finally, Operation D, the focus of this contribution, investigates the occupation of the lower town. For a general introduction to the site, we refer to Highcock, Crabtree *et al.* 2015; d'Alfonso, Castellano 2018; Lanaro, Castellano *et al.* 2020; d'Alfonso, Yolaçan *et al.* 2020; and Yolaçan, Pucci *et al.* 2022.

2. THE TOPOGRAPHY OF THE SITE

We conducted a topographic survey during the 2022 campaign at N-KH that aimed to update and review the documentation at our disposal, since more than 12 years had passed since the first survey and some adjustments were required.³ Moreover, given the evidence of the structures identified on the acropolis and in the lower town, we decided to draft several mound sections to provide the shape of the mound, its features, and the position of the defensive structures identified so far. This activity has been propaedeutic for the morphological analysis of the mound in connection to the main structures identified on the acropolis and in the lower town. The network of topographic reference points has been checked and when needed new ones have been set to thicken the polygonal network at the site.⁴

The archaeological site extends over a surface of approximately 9.5 ha, 7 of which are currently fenced; its maximum height from ground level is about 20 m and it is clearly divided into a central higher area, an approximately 3 ha mound, and the surrounding lower town. The section (Fig. 2) clearly shows that the north-eastern slope is particularly steep: the lower town just next to the mound is only 4.5 m higher than ground level (1199.5 m)⁵ in this portion, while the slope of the mound is particularly steep and reaches here its highest elevation (1220 m). A paved road runs through the south-eastern portion of the lower town (Fig. 1) and gravel roads are found in the northern and western parts of the lower town. When archaeological excavations began in 2011 the mound was still intact.

The 1-m range isohypses naturally highlight the slope of the acropolis, which is very regular except in the northern sector. For the lower city, the morphology of the terrain highlights some interesting anomalies. In the south-western area, the curves show a wide depression that channels water in the direction of the south-western corner of the site. Considering that archaeological finds in Operation D (see Phase 6 below) point to the presence of a town wall and possibly a road network (cf. Phase 5), the above-mentioned depression could therefore indicate the presence of a gate access that, understood as a discontinuity in the supposed city wall, would have facilitated the formation of the depression itself.

A similar morphology, although not yet archaeologically investigated, is visible on the northern slope of the site; here a slightly smaller depression located very close to the bottom of the mound may also suggest a discontinuity in the mound-wall perimeter, thereby indicating the town wall is irregular. To the north-east the site presents a “protuberance”, which could potentially be read in connection with a possible mound gate. A water course, now regimented, is located at the western border of the archaeological area. Even if its straight course is now artificial, a water source was present in the ancient landscape. A preliminary discussion of the broader environmental and geomorphological setting of the site is provided by Castellano, Campana *et al.* (2023).

³ The relative zero point for the coordinates has been set at the bottom left corner of the grid, the rotation error between the structures on the acropolis and those on the slope and in the lower town has been in part fixed. The original grid 100 by 100 m has not been changed, as well as the 10x10 squares.

⁴ Topography operations have been carried out using a Leica Total Station Flexline TS 10, angular precision 0.1”, range 3500 m, quadruple axis compensation.

⁵ All elevation measurements provided in this article and in all other publications about the site should be considered relative and not absolute above sea level.

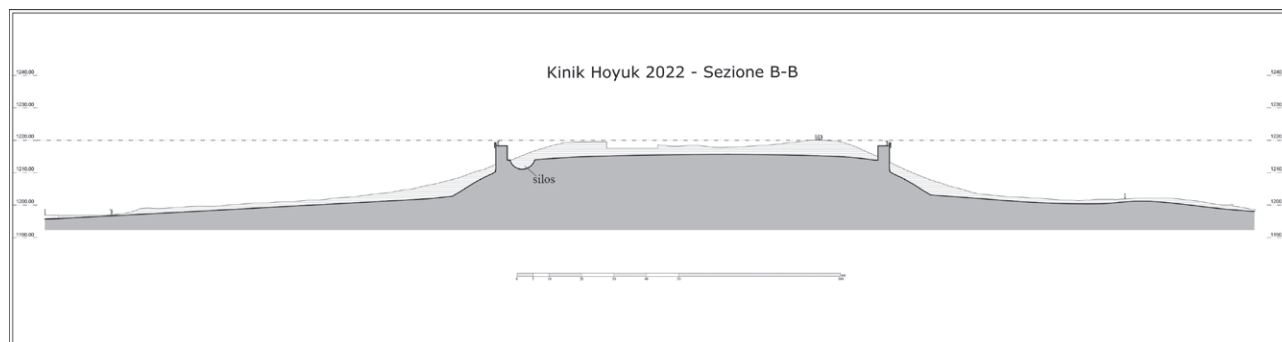


Fig. 2. Section connecting the mound to the lower town (C. Alvaro).

3. THE ACROPOLIS FORTIFICATION SYSTEM

The presence of a fortification on the acropolis of N-KH was initially documented through geomagnetic prospections conducted in 2010 (d'Alfonso, Mora 2011: 551). Following these findings, stratigraphic investigations were carried out in 2011, and two excavation areas were opened on the northern (Operation A) and southern (Operation C) slopes of the mound, respectively (Fig. 1). The results of the 2011 campaign confirmed the existence of walls enclosing the citadel in the Iron Age (Matessi, Capardoni *et al.* 2014). Subsequent fieldwork has been dedicated to studying the layout, construction techniques, chronology, and phasing of these structures.

Leaving to literature (e.g., Lanaro, Castellano *et al.* 2020) a discussion of the evidence from elsewhere on the mound, in this section we provide an overview of the southern slope fortification system, which more directly connects to the urbanistic organisation of the lower town exposed in the nearby Operation D (Figs 1 and 2). Research in this area of the site is ongoing; the considerations provided here are thus to be regarded as provisional.

a. Excavations on the southern slope

Excavations on the southern slope of the mound (Operation C) began in 2011 with the opening of four test trenches aimed at exposing the stone socle of the citadel walls (Matessi, Capardoni *et al.* 2014: 326-328). After a hiatus of three years, fieldwork in this area of the site resumed in 2015 and since then has been carried out in four main sectors: Cwalls (squares S15.17, S15.22, S22.1-2, S22.6-7), C3 (squares S15.8-9), C3walls (squares S15.2-3, S15.8), and C4 (square S15.17).

Sector Cwalls is a large-scale, open-area excavation covering approximately 435 m². The main objective of this sector is to investigate the general layout of the Iron Age defensive infrastructures. By removing a shallow sequence of reworked slope deposits, it was possible to expose the socle of the citadel walls for a total length of approximately 35 m. The width of the wall masonry varies between *ca.* 4.0 and 4.5 m. The core of the structure (C3505) was constructed using small unworked stones, with voids filled by a mixture of earth mortar and rubble. The two sidewalls (C3503, C3504) are made of comparatively larger unworked stones that are more coherently arranged. As we move eastward in the sector, the walls gradually descend to lower elevations on the modern slope (Fig. 3). In the easternmost portion of the sector, the outer façade of the walls is abutted by the stone socle of a square tower (C2586) measuring approximately 6.00 x 5.70 m. Another similar structure (C2602) was intercepted further to the east (Fig. 4). This evidence might suggest the presence of a gate flanked by two towers (Fig. 3), which is currently under investigation.

Sectors C3 and C3walls are situated in the north-western end of Operation C. Although these two trenches are adjacent to one another, they are considered distinct sectors due to the absence of any direct stratigraphic relationship: C3 is located upslope of the citadel walls, while C3walls is downslope. In Sector C3, Achaemenid (KH-P

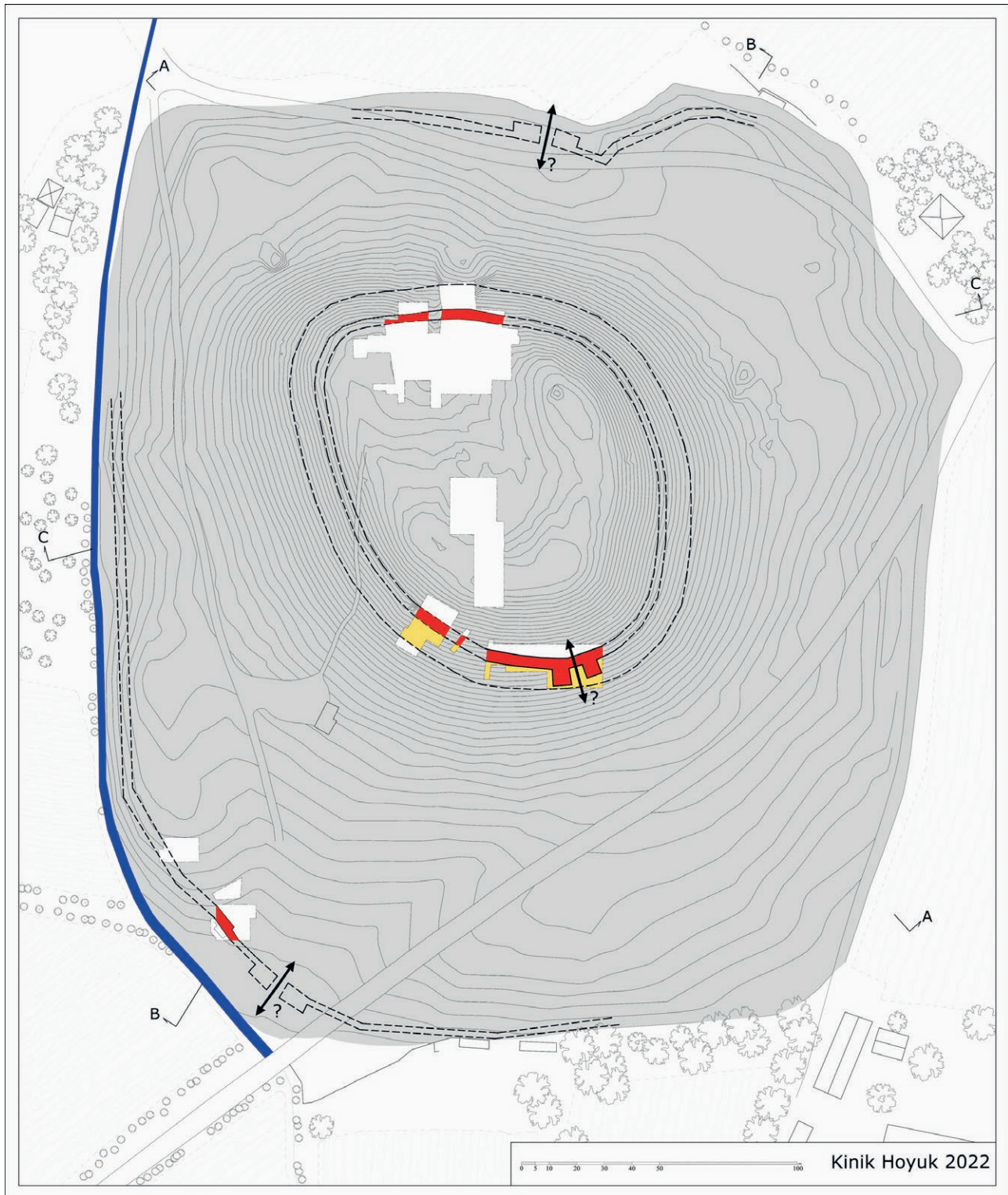


Fig. 3. Reconstruction of the possible layout of the defensive walls during the Iron Age (C. Alvaro).



Fig. 4. Sector C walls at the end of the 2022 field season. In the foreground are the citadel walls and the tower C2602. A second tower (C2586) is visible in the background.

III) and Hellenistic (KH-P IIB) evidence is to date completely missing, while a Seljuk-Ottoman presence (KH-P I) is documented exclusively by negative features (Level C3.1). This stratigraphic hiatus is likely a result of runoff that occurred after the abandonment of the citadel. Slope processes severely also eroded the top-most portion of the Iron Age deposit. Middle-Late Iron Age (KH-P IV) strata (Level C3.2) are, in fact, preserved exclusively in a narrow strip approximately 1 m wide along the north-eastern excavation limit. Although occupation surfaces are likewise eroded, foundations and negative structures dating to the Early-Middle Iron Age (KH-P VA) have been exposed in the entire excavation area (Level C3.3). To this level are attributed two large-scale underground granaries (C2522 and C2884), which are discussed at length by Castellano (Castellano 2018) (Fig. 5). It is plausible that these storage structures were constructed in conjunction with the citadel walls as part of a coherent urbanistic project. Thus far, deposits predating the construction of Level C3.3 infrastructure have only been reached at the bottom of a deep trench (Levels C3.4, C3.5, C3.6), providing little information in terms of spatial organisation and architecture. A sequence of radiocarbon dates allows us to frame the chronology of the stratigraphic sequence exposed in Sector C3. Radiocarbon analysis on cereal grains found in between two plastering phases of Silo C2522 (Level C3.3) provides a *terminus ante-quem* to its construction at 920 ± 86 cal BC (95% probability). The uppermost unit (C2526) from Level C3.4 has been radiocarbon dated to 1065 ± 138 cal BC (95% probability), which returns thus a *post-quem* term to the construction of Level C3.3 architecture. Finally, the lowest level (C3.6) intercepted in C3 has been radiocarbon dated to 1259 ± 130 cal BC (95% probability; cereal grains from C3411).

Sector C3 walls is located to the south of C3, downslope to the citadel walls. In this area, Late Hellenistic (KH-P IIB) structures (Level C3walls.1) are preserved in a narrow area approximately 2 m wide, close to the south-



Fig. 5. Sector C3, granary C2884 (Level C3.3), partially intercepted within the excavation limits.

western excavation limit. These include a glacis (C3432) made of large-flattened stones, which was likely built as part of a broader intervention of slope consolidation. Uphill from the Hellenistic glacis, beneath the topsoil we exposed a thick sequence of accumulations rich in mixed Iron Age materials (Level C3walls.3). Location and characteristics of these units suggest they were deposited either as part of an intervention for slope consolidation or as trash deposits (Fig. 6). Below the accumulations of Level C3walls.3, we uncovered an earthen rampart (C2673) (Level C3walls.4). The rampart consists of a compacted silty-sand mixture that is 10-20 cm thick (Fig. 7). Radiocarbon dating of a short-lived specimen from an accumulation (C3473) underneath this surface returned an age of 1117 ± 102 cal BC (95% probability), which provides a *terminus post-quem* to its construction. The rampart surface lines to the socle of the Iron Age citadel walls (up to 1.20 m), forming a plaster that is further strengthened by the large ceramic fragments pressed into it (Fig. 6). A steep east to west slope is present, showing a gradient of approximately 56% (5.48 m rise over a 9.78 m run). While the overall slope appears regular, internal breaks are noticed. In the exposed area, the rampart does not show any significant reduction in the slope, thus further continuing towards the current base of the mound.

Sector C4, finally, is a deep sounding (ca. 2x15 m) excavated in Square S15.17 within the limits of a 2011 test trench. The main aim of this sector is to investigate the construction techniques used for the citadel wall and to expose the deposits underneath it. A recent review of the fieldwork conducted in C4 has been published (d'Alfonso, Matessi *et al.* 2020: 71-77), to which we refer for further information.



Fig. 6. Sector C3walls, rampart (Level C3walls.4), note in section the sequence of accumulations abutting the outer façade of the citadel walls (Level C3walls.3).

b. A view of the lower town from the southern slope

In Operation C, the uppermost portion of the occupation sequence has suffered significant erosion. These post-depositional processes directly impact the overall topography of the lower town near the slope's base, where deposits from the Iron Age and post-Iron Age periods are likely buried beneath a thick layer of later colluvium. Due to the limited available evidence, it's challenging to reconstruct the configuration of the slope and its topographic connection to the lower town during the Achaemenid and Hellenistic occupations. However, the presence of a Late Hellenistic stone glacis suggests a degree of monumentality in the late 1st millennium BC (Level C3walls.1; KH-P IIB). More substantial evidence is available for the Iron Age.

Available evidence suggests that the Iron Age citadel walls were built in the early 1st millennium BC (KH-P VA, 1000-800 BC) as part of a broader urbanistic reorganization of the mound (Lanaro, Castellano *et al.* 2020). It's plausible that during this period, a second fortification system existed in the lower town, as suggested by the structures exposed in Operation D, which are discussed in detail elsewhere in this article (see Phase 6 below). To the outside of the walls, an earthen rampart connects the citadel to the lower town via a steep slope. If we hypothetically consider an elevation of the Iron Age lower town at approximately 1196 m (based on Phase 6 surfaces in Operation D, see below), and assume that the rampart's slope is consistent, the latter would extend approximately 15 m beyond the current southeastern excavation limit of Sector C3wall, for a total length of about 24 m (Fig. 2). A citadel gate likely exists between the two towers exposed in the easternmost sector of Operation C (Fig. 3). Consequently, we may further speculate about the presence of a street connecting the gate to the lower settlement. Fieldwork in this sector is ongoing; additional information on the urban layout of this area may be thus provided in future excavation seasons.



Fig. 7. Sector C3walls, panoramic view of citadel walls and associated rampart (Level C3walls.4).

4. EXCAVATIONS IN OPERATION D (SECTORS D2 AND D3)

Archaeological investigations in the lower town – specifically in Operation D – started in 2013 with the aim of exploring the settlement on the south-western edge of the terrace. Operation D encompasses two excavation sectors (D1 and D2+3) that are not archaeologically connected and are located 15 metres apart.

When the northern sector was opened in 2013 it was initially named D; in 2018 the name was changed to D1 (cf. Fig.1). Four occupational levels have been identified over an extent of 142 m² (cf. Table 1, left column, level D.1-4). Thus far the best-preserved architectural features are located in Level D.3 and date to the Achaemenid-Early Hellenistic period (KH-P III in the settlement periodisation): here a large domestic structure with an external courtyard and several fire installations was brought to light. In 2018 archaeological investigations were stopped in this specific sector to preserve this domestic structure, which is currently visible under a protective roof.⁶ In the same year the team opened a new excavation sector – named D2 – to the south, in a portion of the settlement where the surface drops, probably because of the later removal of uppermost soil levels for construction purposes (see Phase 1 below). This feature of the terrain once led archaeologists to assume that the uppermost (Hellenistic

⁶ The University of Pavia and NYU-ISAW promoted a roofing system that allowed for better air circulation and protection of the excavated areas (Morandotti, Zamperini *et al.* 2016).

and Achaemenid) occupational levels had already been removed from this portion of the lower town, and that the archaeological evidence underneath the current surface should be dated earlier than the Achaemenid period; they therefore numbered the occupational “levels” identified in D2 starting with the number 5, i.e. the one considered below the Achaemenid level D.3 (Lanaro, Castellano *et al.* 2020: 220). This assumption was based on the retrieval of stone foundations in the sounding in D2 north that could possibly be equated to the stone foundations of the structure to the north belonging to Level D.3. In order to obtain a general overview of the settlement sequence of the lower town and retrieve data useful for chronology, a small portion of the new sector D2, i.e. the northern triangle, was investigated vertically. In this very small trench, recently published (Highcock, Matessi 2021), archaeologists were able to identify an occupational sequence dating from the Early Bronze Age to the Achaemenid period.

During the 2021 and 2022 campaigns Sector D2 was further expanded (D3) to the south, east and north, reaching the current extent of 252 m². Archaeological excavations in this area aimed at better understanding the type of occupational sequence of this southern part of the terrace, the horizontal connections to the stratigraphy of the lower town identified so far, and the urban layout of this portion of the lower town during the Iron Age. This article presents the provisional results and the archaeological data related to the deposits and structures that have been brought to light. To clearly separate the “levels” identified in Operation D from the occupational phases, the term “phase” is used here to identify periods of occupation that are characterised by the same concept of built space: a general structural rearrangement or abandonment of the area identifies each phase.

a. Phase 1: the Abandonment

The topsoil in Areas D2 and D3 slopes towards the south-eastern part of the area, with a sudden drop in elevation of approximately 2 m when compared to the surface immediately to the north of D2. Underneath the topsoil, the archaeological features are scattered and do not represent a steady occupational phase. These are visible only in the eastern, western, and northern parts of the area. The main feature is a very compact and yellowish deposit made of sand and small pebbles (D4413) that slopes towards the south and the east (Fig. 8). On top of this compact layer and concentrated in the eastern part of the area are a series of small, elliptical, and very shallow lenses of ashes, probably the remains of small open fires (D4408, D4409, D4410, D4411, D4412).

A few installations were identified in the northern part of the sector as belonging to this phase, such as an irregularly shaped pit (D4443) filled with loose brown soil. Inside the pit many pottery sherds were found along with animal bones and three metal slags, two of which are probably linked to metal production activity. The filling of the pit, and consequently the artefacts found within it, are obviously not related to the primary function of the pit itself.

Remains of an E-W aligned structure/installation (D4454) consisting of stones and mud bricks were unearthed in the north-eastern part of the sector, but no clues as to its function are discernible.

An alignment of one course of stones (D4445) oriented NW-SE is located in the north-western part of the area and may represent scant remains of wall foundations. Thus, the archaeological evidence does not provide any clear data for an occupational phase during this phase, but rather points to a scattered, temporary, and discontinuous use of the area.

The ceramic material in the deposits belonging to this phase does not provide a functionally homogeneous assemblage but rather includes fragments belonging to many different classes. Rim fragments of cooking pots are the most represented in the assemblage and their shape varies greatly: externally thickened, rolled out, simple and flaring. Some of these also present a short neck or simple decorations, but very little can be inferred about their body shapes or bases. Fragments pertaining to food consumption, such as plates, shallow bowls with decorated painted rims, deep bowls, as well as lustrated or painted open shapes, are common. The few closed examples in the assemblage consist of jar fragments with different rims and decorations and one fragmented hole-mouth jar, as well as sporadic storage jar fragments, both with flanged or hole-mouth rims.



Fig. 8. Phase 1, Small open fires (D4408, D4409, D4410, D4411, D4412).

Two fragments of grey ware – one carinated bowl rim, one shallow bowl/rim plate rim (Summers 1994)⁷ – are also part of the assemblage. This kind of ware is absent in all other phases of this area except for this most recent Phase 1; however, it is a well-known class on the acropolis (KH-PIV) and has been dated between the 7th and 6th centuries BC (personal communication of Alessio Mantovan). None of these findings can be considered in primary context.

b. Phase 2: Pitting

Archaeological evidence in Phase 2, consisting of several round pits and a few built structures and installations, shows a clearer pattern of occupation that extends over the entire area (Fig. 9). In the north-eastern section two different installations are visible: first, a semi-circular stone structure (D3345=3291) made from boulders, seemingly part of a larger installation; the second being a smaller NW-SE wall, also built in stone (D3366), that appears to be part of the same structure but is not archaeologically connected. These may have been used to divide two areas that were at different elevations: a lower area with large pits, located to the west and north of the structure, and an

⁷ The classification of the grey ware inside the larger group of “Reduction Ware” proposed by A. Mantovan in his PhD thesis is currently under revision. Therefore, for the time being Summers’ (1994) definition of grey ware is employed here.

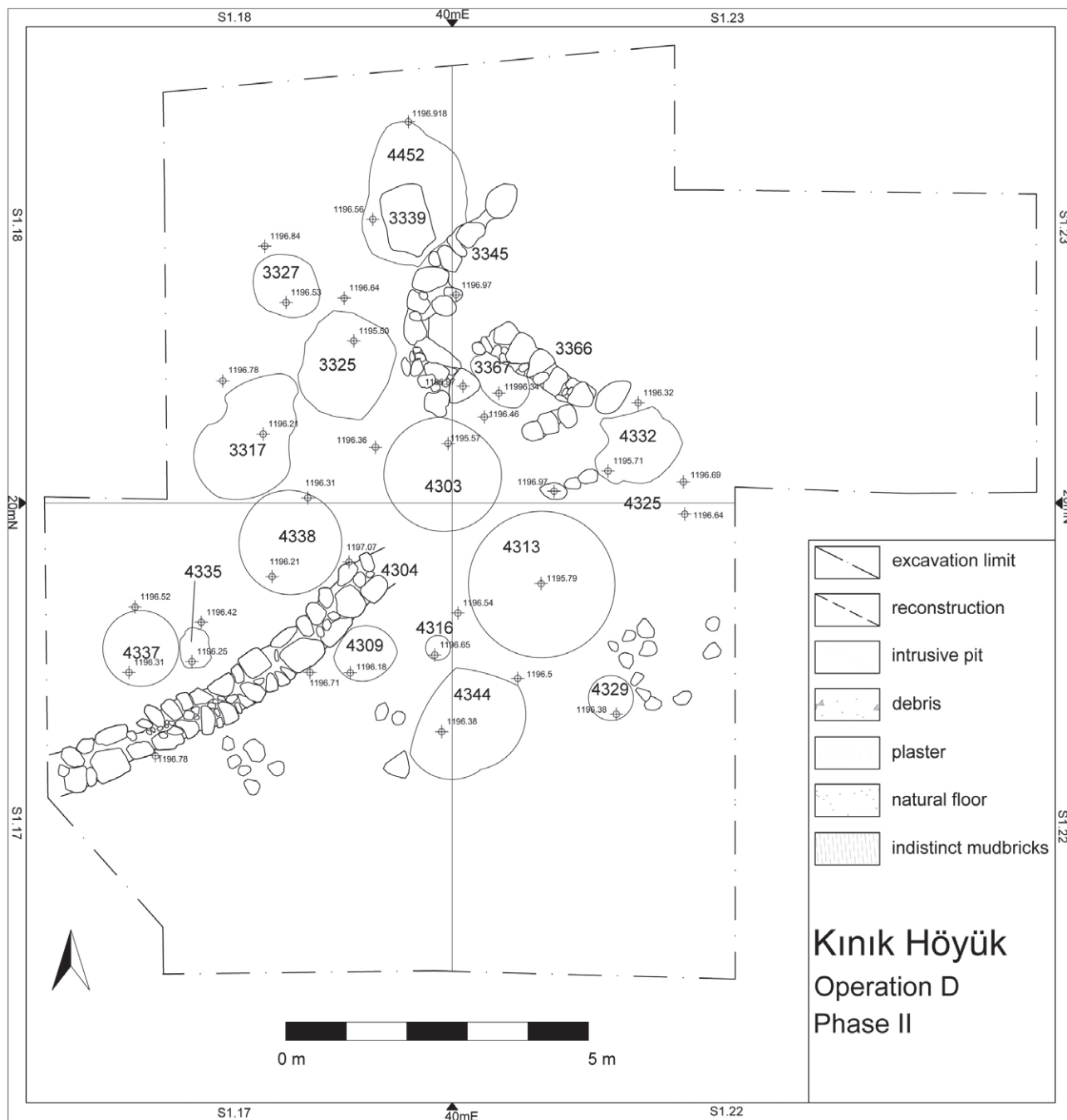


Fig. 9. Phase 2, Plan (editing M. Carletti and C. Alvaro).

eastern one extending over Square S1.23 without pits and characterised by a slightly thicker compact soil surface (Fig. 10). Deposits of compact earth (D3292-3318-3333) abut the structure on the eastern and western sides of the wall (D3305-3316).

In Square S1.17 a second, more solidly built stone wall (D4304=4330; Fig. 11) with a south-west/north-east orientation presents a slightly irregular alignment pointing towards the installation described above, but abruptly stopping just south of Pit D4303. Even though the construction technique used for D4304, i.e. two rows of stones



Fig. 10. Phase 2, D3345. Semicircular stone wall with north-east/south-west orientation on the northern side of the trench.

in width and two courses of stones in height, is different from the smaller and less precise D3366, we should not exclude the possibility that it originally extended up to Square S1.23. Occupational surfaces clearly related to both structures could not be found. The stratigraphic sequence points to the contemporary use of these structures and a series of pits located in the central part of the excavation area. Their cuts all appeared after the removal of the uppermost deposit, although the surface, from which they were cut could not be clearly identified. Although their primary function cannot be inferred, at the end of their use phase some of them were seemingly employed as trash pits, while others were left empty and later filled naturally with debris. Since their fill materials vary, it is possible to distinguish the different types of rubbish as follows: discarded installations and materials such as fragments of ovens, large pieces of pithos and other ceramics (D4313, Fig. 12); ashes (D4332); ashes and metal slags (D4309); as well as animal bones (D4338).

Debris such as stones and mud brick fragments are common, appearing in several pits such as the one in the centre of the area (D4303) and the one to the east in S1.22 (SU D4329), while a sort of collapsed material is very evident in the filling of the two pits (D4335 and 4337) on the western side of Square S1.17. All these installations seem to have been “filled”. Only Pit D3367 located in between the stone installations in S1.23 has a different filling, characterised by large quantities of ceramic fragments; since this installation was dug into the room filling underneath (Phase 5), it is evident that a large quantity of material from this room became mixed into the filling of the pit itself.

The fillings in pits D4344, D3317 and D3327 lack any specific features to define their nature, most likely the result of being gradually filled in over time. Each of these three pits were dug into more ancient occupational levels, cutting one stone structure underneath, and the stones emerged on the bottom and on the sides of the pit. Howev-



Fig. 11. Phase 2, D4304. Stone structure with south-west/north-east orientation on the southern side of the trench.

er, only in Pit D3317 were fire traces detected on the side and bottom stones, while both D3317 and D4338 clearly cut a large mud brick wall belonging to the previous phase (D3353 in Phase 5).

A large pit (D4452- already D3365 in 2019) belongs to this phase. When it was partially excavated in 2019, its filling revealed soft earth, ceramic fragments, obsidian fragments and animal bones similar to the natural fillings observed in pits D4344 and D3317. In addition, a large, worked basalt stone (D3339) was found collapsed in the pit: the stone is roughly rectangular in shape, with long smoothed sides, and possibly represents an architectural element (Fig. 13).

All features seem to disappear just along an approximately E-W line located 15 m N: south of this “line” the deposits are natural accumulations (D4801-4817-4824-4805-4830) with scarce human traces (small pieces of ceramic and animal bones) and scattered stones. We deduced that during this phase, this southern area was not used for fixed installations.

Inside Pit D4313 two almost intact objects were uncovered (Fig. 14): one large krater (KIN21D4313F13) with a flanged rim, two strap vertical handles and a thickened raised low carination in the low part of the body. The base is missing. The surface presents an uneven coloration (bright orange/red on one side, dark brown on the other side) and is self-slipped and burnished; the traces of burnishing are clearly visible, and the strokes were made in different directions, pointing to hand burnishing. These traces of burnishing disappear below the carination, where there are two small holes indicating signs of an ancient restoration. The other intact object found inside the pit



Fig. 12. Phase 2, D4313. Pit with pithos fragments.

is a shallow bowl (KIN21D4313F15) with a vertical rim and a ring base. The surface is well smoothed with even colour, but it does not show any trace of further treatments, such as polishing or painted decorations. This shallow bowl is identical to another one found on the acropolis in Sector A (KIN22A4611F12), which has been dated to the Hellenistic period (Alessio Mantovan personal communication; Derada 2019, unpublished MA thesis). A partial grinder was also found in this assemblage.

The ceramic assemblage of this phase does not provide useful information on function or chronology of the area. Most of the uncovered fragments are associated with cooking ware (cooking pots and one shallow bowl). Several coarse ware fragments were discovered but are unrelated to any specific shape other than a pithos and a krater. Many fragments show signs of painted decoration or surface treatments, and they belong to shapes for food consumption, such as bowls or small jars. It's interesting to notice in the assemblage several fragments of Black on Red⁸ and the presence of one Anatolian metallic ware fragment (Highcock, Matessi 2021).

⁸ Black on Red or Cypro-Phoenician Ware is a well-known class of pottery, so far related to Cypriot production, and distributed in the eastern Mediterranean, in particular, Cilicia and the Amuq (Pucci 2019) during the 9th to the 7th cent. BC (Schreiber 2003).



Fig. 13. Phase 2, D4452. Pit with monumental, worked stone (D3339).



Fig. 14. Phase 2, KIN21D4313F15 and KIN21D4313F15, Krater and shallow bowl from pit D4313.

c. Phase 3: partial abandonment

Phase 3 is characterised by a series of thin, densely stratified deposits of pressed earth that are clearly visible in the southern half of the excavation sectors (Fig. 15). These deposits build a layer that is thicker in the south-western part, and it slopes towards the south-eastern part of the area (D4414) with a drop in elevation of approximately 0.30 m over a length of 13 m (Fig. 16-17). Each thin deposit seems to be the result of earth mixed with water

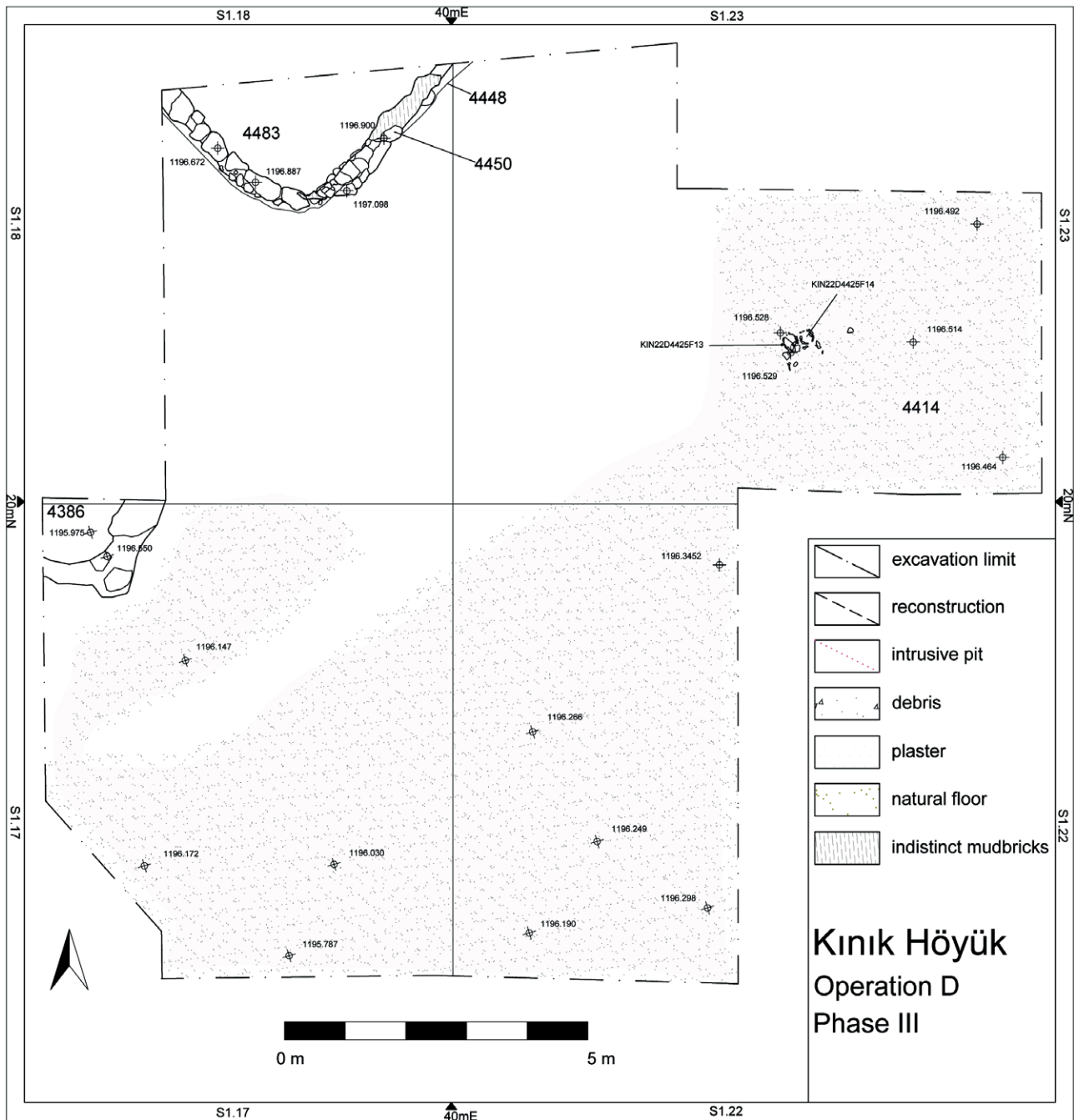


Fig. 15. Phase 3, Plan (editing M. Carletti and C. Alvaro).



Fig. 16. Detail of D4414, view from the eastern part of the area.



Fig. 17. Phase 2, D 4414. D4414, view from the west.

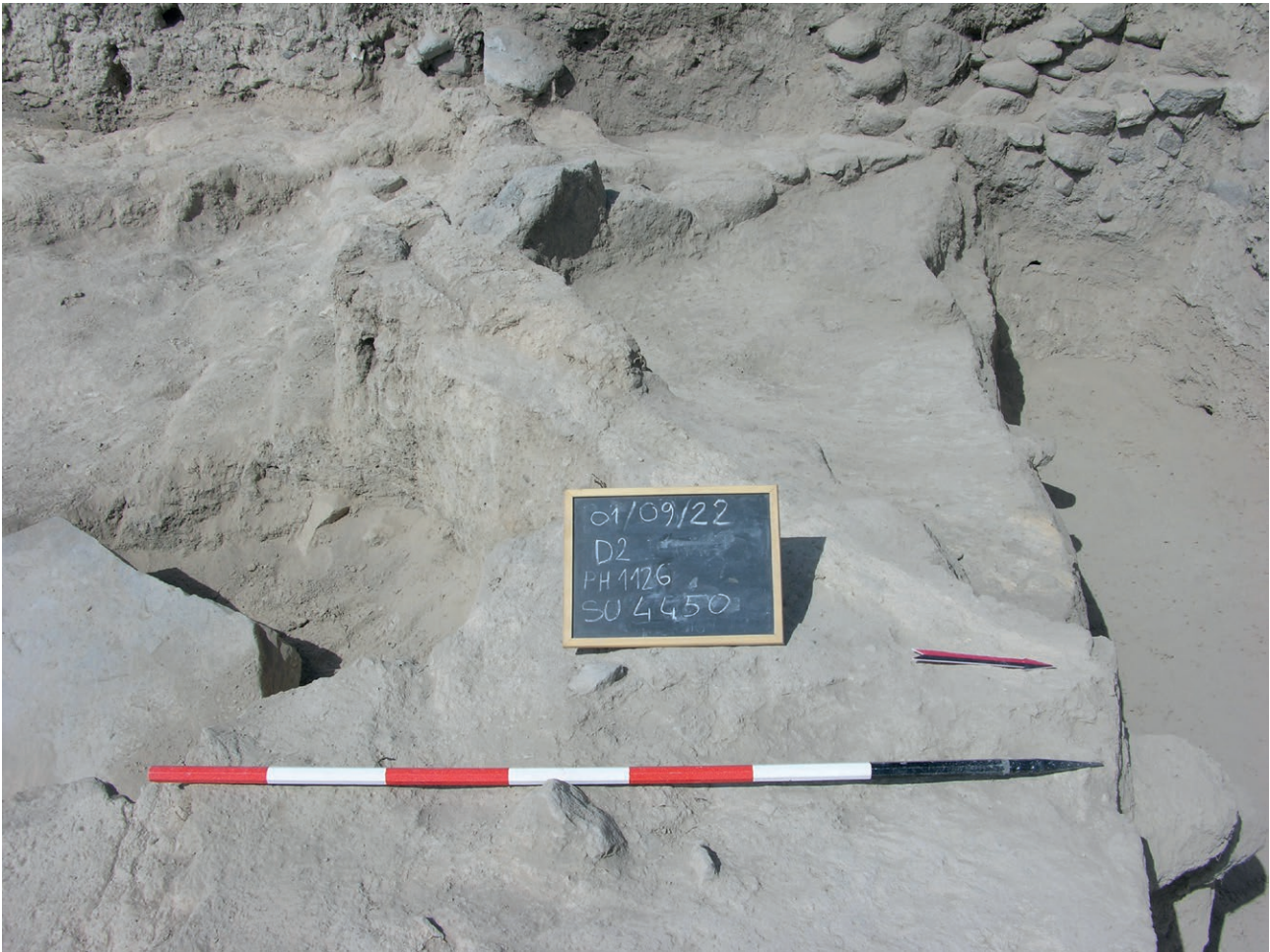


Fig. 18. Phase 3, Mud brick wall D4450 with part of stone foundation D4483 visible to the west.

and some straw stamped together, thus it was most probably used as a walking surface. This floor was interrupted by the construction of the later stone structure (D4330-4304; see Phase 2) and was not identified in 2019 in the northern part of the sector, probably due to the high concentration of pits (more recent features), and to the high elevation that this surface probably reached here. Therefore, connecting this “floor” to the foundations identified at the northern edge of the excavation area is difficult to prove based on the available archaeological data.

A mud brick wall (D4450) running in a SW-NE direction, partially preserved in its northern section was built on stone foundations (D4483) and connects, shaping a corner, to a second wall, visible only on its lower portion and foundation (D4448). This room corner has been attributed to this phase based only on the vertical sequence (Fig. 18). The foundations’ cut is visible only where the stone are located and only on its southern side; the area to the north, which could be identified as a room, has not yet presented any evidence for a floor, probably not preserved in this part.

On the north-western corner of the excavated area in S1.17, part of a stone feature has been identified (D4386). It consists of a circular stone structure made of recycled stones⁹, mud brick fragments and soil (Fig. 19). This construction emerges in part from ground level and appears to delimit a circular pit or, more probably, a storage unit like a silo; up to this point only about a quarter of the entire installation has been unearthed, therefore

⁹ Most probably from D4368 (stone fortification, see phases 5 and 6).



Fig. 19. Phase 3 Silo D4386.

neither its filling (D4387) nor the bottom of the installation has been completely exposed. Yellowish soil with stones and a few ashes were retrieved inside this structure, possibly indicating that the silo was left empty, and part of its wall collapsed inside.

On top of the surface described above (D4414) a small, circular pit (D4424=4425, Fig. 20) was identified in the eastern part of the area (S1.23). Two jugs (KIN22D4425F13; KIN22D4425F27) and a cooking pot (KIN22D4424F14) were found here, providing the only materials in primary context related to this phase (see below).

The mixed ceramic assemblage from this phase provides some information on specific classes of pots. Two different kinds of cooking pots, one with a simple rim and a short neck (that we can describe as a collar) and the second with a hole-mouth. Shallow bowls and deep bowls with different rim-shapes, decorations (mostly black-painted on the rim) and surface treatments (such as red, orange and white slip) are numerous. The same kinds of painted decorations are visible on some body fragments with horizontal bands and lines. Some sherds are characterised by the same small concentric circle pattern that is commonly found in Layer IV of Alişar. Among the painted fragments a small cup with a flaring rim and a black-on-red decoration stands out: it seems to be an imitation of the typical “black-on-red” class seen above (Fig. 21).

The small circular pit (D4224) on the eastern side of the area contains one cooking pot and two trefoil jugs found completely smashed inside the pit (Fig. 15, 20 and 22). The cooking pot (KIN22D4325F14) has a short collar, simple rim, globular body, flat base and one vertical handle, not fully preserved but probably of the strap type. The surface shows traces of fire on the opposite side of the handle, according to the practice of cooking that involved placing the pot directly against the embers in the fireplace (Matsumura 2005: pl. 170 KL188-1002,1004,1006, dated Middle Iron Age, Phrygian phase). The better preserved of the two trefoil jugs,

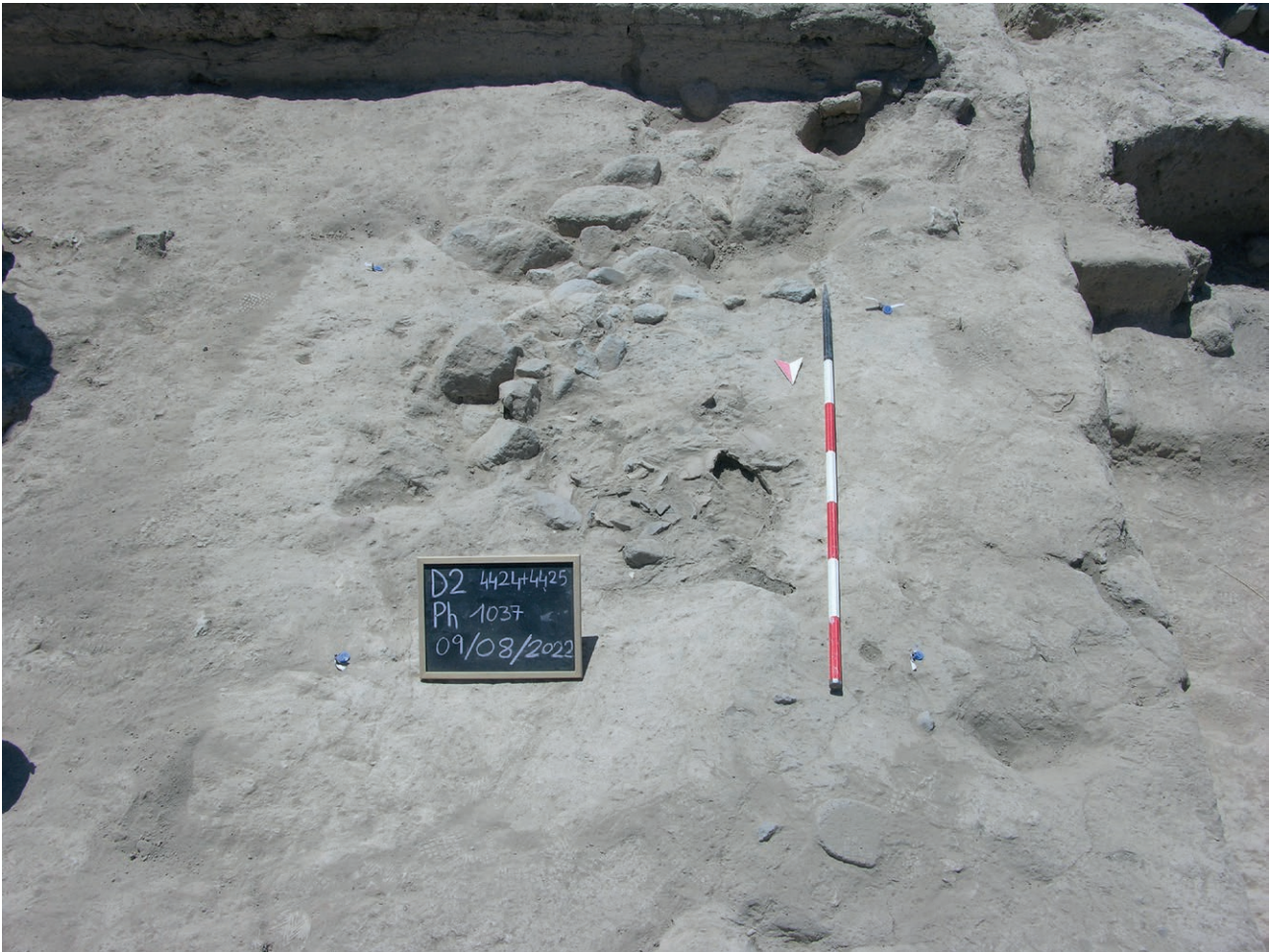


Fig. 20. Phase 3 Pit D4424 with details of material in situ.

KIN22D4325F13, has an ovoid shaped body and a large but very short neck. The body and the handle become narrower towards the base, which is not preserved. The folds shaping the trefoil are very deep; meanwhile the surface is smoothed, but other surface treatments are not present. Jug KIN22D4325F27 is very similar to the other trefoil jug, but all that survives is the rim (intact), part of the handle and the neck. The strap handle is attached directly to the rim, which is folded with the same deep folding of KIN22D4325F14. Its surface is smoothed, and some traces of hand-burnishing are visible near the rim. Similar trefoil jugs from Boğazköy have been dated to the Late Iron Age (Bossert 2000: pl. 41, no 386), as well as the one-handed cooking pots (Bossert 2000: pl. 48, no 492) that share with our example the same general body shape.

d. Phase 4: scattered occupation

This phase is the most ephemeral (Fig. 23), containing only two architectural features that are stratigraphically more ancient than those identified in Phase 3 but more recent than those in Phase 5. Although both features are located in the northern part of the excavation, they are not directly connected archaeologically. Several deposits that were identified underneath the floor of Phase 3 have been ascribed to this phase, being the result of debris or

of dumping that took place in the central and most of the southern portion of the sector, which was not used for activities or inhabitation during this phase.

In the northern part of the area two mud brick walls (D3352 and D4489) join in a corner; wall D3352 (Fig. 24) is about 5 m long and runs from southwest to northeast, while D4489 is 0.75 m long and runs from the corner with D3352 towards the north. The thickness of both walls is approximately 0.70 m. The space to the south of this



Fig. 21. Phase 3 KIN22D4423c7, Small bowl with painted decoration, probably a “black on red” imitation.



Fig. 22. Phase 3, SU D4425 finds group, Trefoil jugs and cooking pot from D4425 (from left to right KIN22D4425F13, KIN22D4425F27, KIN22D4425F14).

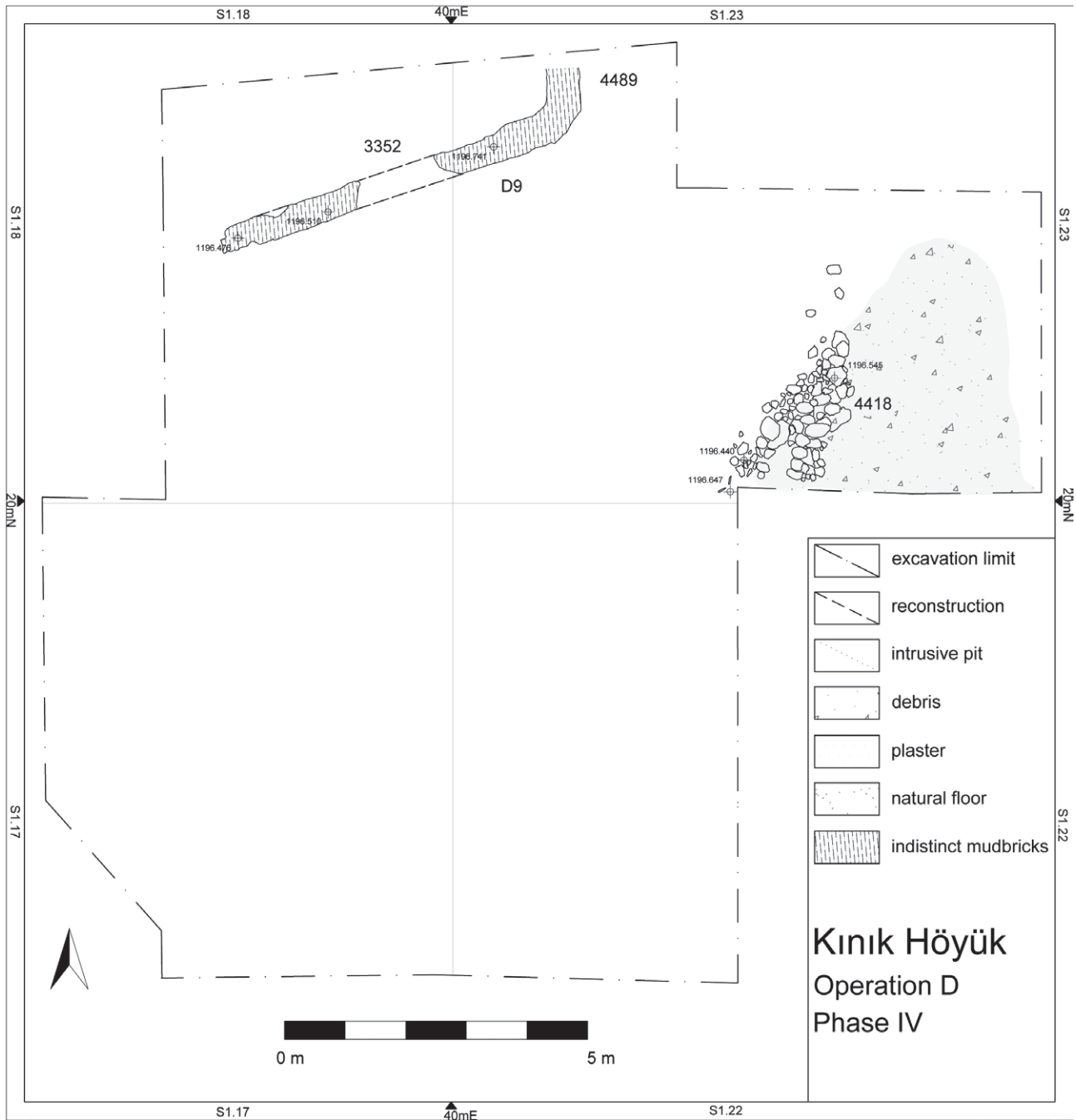


Fig. 23. Phase 4, Plan (editing M. Carletti and C. Alvaro).

corner is named Room Dr9, and provisionally ascribed to this phase: only the northeast corner of Room Dr9 is preserved, and its filling is partially excavated: the upper part of the filling D4480, which is located close to Wall D4486, is characterised by a brownish friable layer with many fragments of painted pottery. Under and to the east of this first deposit another brown and compact layer has been identified, but this has yet to be excavated (D4486).

The ceramic assemblage collected in the fill of Room Dr9 (D4480) is very similar to the one identified in a layer (D3332) associated with the stone structure: the decorative motifs (small triangles in bands) of some body



Fig. 24. Phase 4, D3352.

wall sherds belonging to a large shape have been dated to the Middle Iron Age at Boğazköy (Genz 2004: pl. 54). The same fill is particularly rich in shallow bowls with various treatments and decorations, mostly horizontal and wavy lines on the rim, and polishing and slip on the surface. The number of sherds that can be attributed to jars or jugs is minimal, as is that which can be attributed to cooking pots, but there are many sherds with a surface treatment similar to that of shallow bowls (slip, polishing and painted decoration) that can be related to closed forms.

In the western part of Square S1.17 a thick deposit made of loose beige earth and numerous burnt mud bricks (D4380) was found underneath a large amount of debris (D4378, Fig. 25) below the floor surface of Phase 3. Although the ceramic material from this deposit still needs to be analysed in detail, one almost complete jar (KIN21D4380F47, Fig. 26) it is worth mentioning. This long narrow-necked jar in black polished ware has a flaring and thickened rim and two vertical rim-shoulder handles, typically formed by joining together two coils. The body has a globular shape and is decorated with deep excised lines that are both vertical and diagonal; its lower section, including the base, is missing. Analysing the fracture point at the lower body, the base is more likely to have been of the ring or footed types rather than flat.

The morphological features of the vase are not common in the Iron Age material from Anatolia. The ware is fine, dark grey in colour and looks similar to that of grey ware (Summers 1994); the whole surface is covered with a thin black slip and later polished. In Anatolia, a vessel with similar decorations on the body and a double vertical handle was found in the Kültepe area (no date provided), although the neck appears wider and the surface is light grey without slip (Özgül 1971: 69, fig.166). A similar shape, with a long neck and at least one vertical handle, was found in Boğazköy (Genz 2004: pl. 63, no 3) and dates to the Middle Iron Age, although in this case no surface treatment was used at all. From Gordion we find similar decorations on the side-spouted sieve jugs from Tumulus P and the “post-clay context” of the citadel made in black-polished ware (Sams 2012: 65, fig. 65.11-12).

Gjerstad’s Black Slip Ware I trefoil jugs and contemporary amphorae may provide some comparisons (Gjerstad 1948: fig. 10); however, if the trefoil jugs have just one handle (besides a different kind of mouth), the necks and mouths of the Cypriot amphorae are much larger than those of KIN21D4380F47. There are analogies with the Cypriot repertoire even in the decoration incised on the body of the jar, with vertical and diagonal lines that recall the decoration of metal vessels. The black slip with grooved decorations applied to the shapes most reminiscent of KIN21D4380F47 from Cyprus have been dated from 1050 to 750 BC. Fragments from Gordion and Boğazköy have been dated between 900 and 700 BC. Considering that no exact match could be found for the example presented, and that black slip ware in Cyprus as well as grey or grooved ware in Anatolia are not very common, only further analysis of the ceramic materials found in the same deposit may shed some light on the chronology of this piece. For the time being, we may consider a time span from the 9th to 7th centuries BC.

In Square S1.23 a very large dump has been temporarily ascribed to this phase, although further analysis is required (D4418+4427+4438+4435+4423). Large and small-sized stones, many fragments of mud bricks, ashes, charcoal, bones, and pottery fragments were all dumped in this area. The uppermost stones were already identified immediately underneath the floor of Phase 3, however looking at the southern section of the square (Fig. 27) it becomes evident that this massive dump slopes towards the east and could possibly be intrusive from above.

The context of the large dump associated with 4418 shows, by its nature, a very mixed repertoire in which there is a predominance of cooking pots with different types of rims, but also hole-mouth jars with different rims and different surface treatments, mainly slipping and polishing. Ceramics associated with food consumption, such as shallow bowls, plates, and deep bowls, are also present. Shards of storage pithoi with different rim types were also found.

An interesting fragment (Fig. 28) belongs to a flat-rimmed crater with bichrome decoration on the body; the fragment has a white slip, and between the slip and the rim there is a broad band in red paint. Above the white slip there is figurative and geometric decoration: still visible are a series of red and black triangles, under which are found what resemble two faced curls (perhaps part of an animal) in the middle of concentric triangles where a triangle filled with red is contained within a larger triangle left white. On the upper part of the rim there are parallel vertical lines in black paint. This type of bichrome decoration, probably applied within a metope, is common in Middle Iron Age ceramic production (see Bossert 2000: table 68, no. 764, BKII; Genz 2004: table 56, no. 9). At



Fig. 25. Phase 4, D4378.



Fig. 26. Phase 4, KIN21D4380F47, Black polished long necked jar from D4380.

Kaman-Kalehöyük a bichrome decoration painted on white slip dates to the Middle Iron Age (Matsumura 2005: table 163, no. KL88-1009; table 179, no. KL88-1018 and KL90-P41). Examples of bichrome vessels have also been found in Arslantepe and date between the Early and Middle Iron Age (Manuelli 2012: 450, fig. 454, no. 456-457). In Tarsus, bichrome triangles date to the 6th century BC (Goldman 1963:pl. II, no 1190 and 1191).¹⁰

e. Phase 5: Domestic life in the Lower Town

Phase 5 is the best-preserved occupational period (Fig. 29) for these sectors and the only one that seems to extend over the whole excavation area. The arrangement follows a main northeast/southwest direction and can be divided into three sections: 1) an eastern part consisting of the reused stone foundations of the town wall (D4811), 2) the central paved alley (D4347) adjoining the mud brick wall (D4361) built on top of the stone foundations (D4811), and 3) two adjoining rooms, Dr7 and Dr8.

Starting from the east, Room Dr7 is the only one that has been completely excavated and is bordered to the NE and SW by two thin (0.35/.40m) walls made with stone slabs, mud bricks and mortar (D4357 and D 4358);

¹⁰ Employing two colours, usually black and red, to paint the vessels' surface is a feature well known in the entire eastern Mediterranean and most likely the example from Tarsus belongs to this tradition: there is a Bichrome class in Iron Age Cypriot Pottery (Gjerstad 1948), a so-called Phoenician Bichrome (Gilboa 1999 ; Gilboa, Goren 2015), and the locally produced northern Levantine Bichrome (Gates 2010 ; Pucci 2019). Vessel shapes and patterns usually help in better defining the regional area, however the relationship between this Mediterranean tradition and the use of bichromy in Anatolia still needs to be investigated.



Fig. 27. Phase 4. Dump D4418+4427+4438+4435+4423.



Fig. 28. Phase 4, KIN22D4414c6, Painted bichrome krater.

these walls seem temporary, given they are not even straight and were frequently repaired as the stone slabs on top of mud brick seem to indicate (Fig. 30). The thickness of the NE wall (D4359) remains for the moment unclear; however, it seems to have been built exclusively with mud bricks. The connection of the room to the SE, i.e., towards the alley, is heavily disturbed by a later pit that destroyed most of the wall (D4356). A sort of bench was built in the northern corner of the room (D4376) with large stones and clay plaster, and similar installations were also found in the western corner (D4381). The most recent clay floor belonging to this room (D 4360) consists of clay plaster and adjoins the walls and bench; it was also discovered in the south-western side of the room, on top of a flat stone that has been interpreted as a possible threshold or step to connect the room to the alley (Fig. 31), therefore a door is also represented in the plan (Fig. 29).

Room Dr7 was filled by a slightly burnt greyish/black sandy layer (D4353) with mud brick debris, charcoal, pottery, and animal bones: the filling consists of numerous fragments of vessels, some of them fully preserved (Fig. 32), which were smashed on the floor and against the wall faces and bench. No wooden beams or large amounts of charcoal were retrieved from this filling; therefore, we may exclude the possibility of a sudden fire. It seems likely that the room was left with its intact inventory and once the walls collapsed, the inventory kept inside was smashed. Following levelling activities and soil compaction in the area, the deposit was reduced into a very dense layer of sherds and artefacts, on some occasion, sherds belonging to the same vessel were scattered over a large area as if the deposit had been levelled.

The uppermost, and most recent, floor of Room Dr7 (D4360) consists of a compact yellowish/grey clay plaster and represents only one of a long sequence of superimposed clay floors (D4377, 4394, 4401, 4415), forming an approximately 0.15 m thick floor package that has been sampled and will soon be analysed. The bottom and original floor of the room (D4415, Fig. 33) was built with the same clay material.

Since the primary context D4353 is the main topic of ongoing PhD research, the restoration of the inventory has not yet been completed and the bioarchaeological analyses connected to the deposit are still ongoing, only some examples from the pottery and artefact assemblage will be presented here. Up to now, it has been possible to identify the following: three globular jars; two small pitchers, one of them with a handle; two large kraters, both with painted decoration; one globular jar with painted decoration and two handles; one globular jar with neck and painted decoration; three small vessels painted with geometric and figurative patterns, one of which is a pitcher; one footed plate with painted decoration; one basin with two handles; one small amphora; six shallow bowls, mostly with painted decoration on the rim; six large trefoil jugs; three deep bowls/small basins; three pilgrim flasks with painted decoration; one globular jar with one handle and painted decoration; the bottom part of a small vessel; the body and base of most likely a globular jar with painted decoration; a fragment of a sort of pottery ring, hollow on the inside (probably a *kernos* ring). Additionally, 14 rims, 17 handles and four bases from cooking ware were identified, along with 69 other fragments of rims, bases, handles and body walls with painted decoration from table ware.

Beyond the ceramic objects, a bronze fibula (KIN21D4353F42), metal objects such as nails and bosses, three spindle whorls, obsidian fragments, two basalt grindstones, two andesite tools and one astragalus were also found in the same context.

KIN22D4353F54 (Fig. 34) is a small pitcher with a globular body and spout, flat base, and vertical strap handle. The whole surface has been carefully polished, with black painted decoration placed between the base of the neck and the maximum diameter of the globular body. Triple and double horizontal bands border the decorated field on the top and the bottom, respectively. The decoration is divided into three decorative registers of different heights separated by horizontal lines: the upper is composed of a row of triangles filled with a cross-hatched pattern inside bigger triangles. The second register, the shortest of the three, consists of a simple continuous horizontal wavy line that separates the first and the third registers. The third and bottom register is filled with a sequence of concentric circles with a central dot, possibly where the compass was set. Part of the handle and the upper part of the rim are painted with solid black paint. Upon seeking decorative comparisons elsewhere, an exact design emerges on a krater found at Alishar (von der Osten, Schmidt 1930:late II, dated to Layer III). The same decoration is also present in multiple sherds from Layer IV from the same site (von der Osten, Schmidt 1932: pl. XLIV, no 904, von der

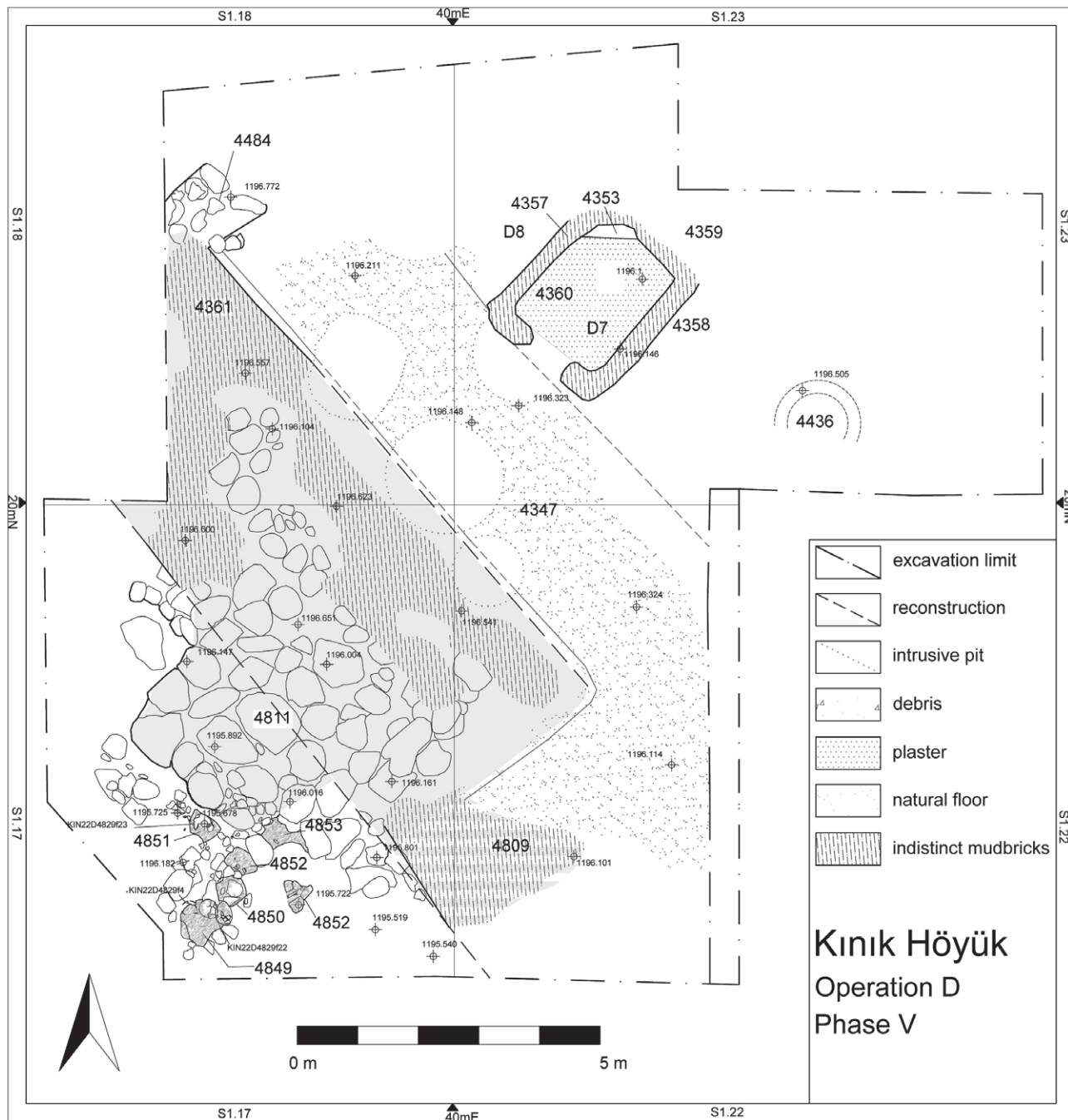


Fig. 29. Phase 5, Plan, (editing M. Carletti and C. Alvaro).

Osten 1937: fig. 471, no 472; fig. 449, no 413). Combining both the shape and the decoration we find at least two examples in Boğazköy (Genz 2004: table 61, no. 6-9; table 62, no. 1, dated to the Middle Iron Age). These all belong to the general class called Painted Geometric Monochrome Ware (d’Alfonso, Basso *et al.* 2022: 41).

KIN21D4353F59 (Fig. 35) consists of a small globular jar not fully preserved but characterised by a narrow neck, flat base, and likely a trefoil rim. The surface shows traces of burnishing in the lower part of the body; the upper part with the neck is polished and covered by a white slip. The non-slipped part of the surface is light red/



Fig. 30. Phase 5, Room Dr7.

peach in colour. The jar is decorated with three registers of painted decoration – with both figurative and geometric motifs in black and red/dark brown paint – separated by four groups of black horizontal lines and/or bands. The first register is placed below the rim, which is also painted in solid black paint in the upper part, and it is bordered by four and three horizontal lines on the top and on the bottom, respectively; the preserved decoration consists of traces of red paint, but the decorative pattern or motif is not recognisable. The second register, located on the shoulder, is the most visible: the field is divided in metopes (only two or probably three are preserved). A metope with a geometric motif separates two other metopes with figurative decoration. The geometric one consists of a net in black paint with central red dots, while the figurative metopes represent two quadrupeds: depicted to the right of the geometric metope and separated by four vertical lines is the rear of a hoofed animal with a long tail (maybe a bovine?), and the red dots on the upper part of the leg are probably made to depict the fur. Above this animal there is a simple wavy line. The second animal is painted on a sherd that does not join with the others but is clearly part of the same vessel: still visible are branched antlers, part of the neck, and almost the whole body from the rear to the front, representing likely a stag with a sinuous body shape. Its legs and tail are not preserved. The body of the animal is outlined in black paint, while the inner part of the branches of the antlers are in red paint. The texture of the fur is suggested through red and black painted dots and lines. The third register is composed of a series of alternating painted bands. From top to bottom we can see a row of black dots painted on the white slip, a red painted band enclosed between two thick black horizontal lines, and finally a row of red dots painted on the white slip.

Looking for comparisons in Anatolia, bichrome decoration is present at Gordion in contexts from the South Cellar dating from the late 8th to 7th centuries BC (DeVries 2005: 41, figs 44-45), as well as at Alişar in Layer IV (Von der Osten 1937: fig. 445, nos 3-5). Decoration with animal subjects – not wild goats/goats sampled in



Fig. 31. Phase 5, Room Dr7 opening to alley.

black Alişar IV style but animals with a black outline – has been identified in the Destruction Level and Post-Destruction Levels of Gordion (Sams 1994: fig. 29, no. 804 and 809; table 47, no. 1067-1069). The decoration with black crosshatching and red dots was employed in the assemblage of Alişar IV (Schmidt 1932: pl. XXXIV, no. b743:17; 903; Von der Osten 1937: fig. 444, no. 23) as well as in Tarsus during the Middle Iron Age (Goldman 1963: pl. 71, no. 564). Although there are no figurative decorations in Layer IV from Alishar similar to the one presented here, the black silhouette is employed for the wild goat/deer/stag representations. By contrast, similarities can be identified in the ceramic material from the excavations at Göllüdağ in the 1960s: fragments of large vessels show metope decorations containing geometric motifs and animals. Here, too, not only the black silhouette style is present but also the animals are depicted with a black outline on a white background, just as in the decoration of jar KIN21D4353F59. The Göllüdağ fragments are generally dated to the Phrygian period (Tezcan 1969 ; Tezcan 1992) but given also the presence of the silhouette style of wild goat/stag/deer it is possible to associate them with the Alişar IV horizon.

KIN21D4353F70 (Fig. 36): a large krater with a flanged rim, short neck, and four vertical strap handles with a ridge applied at the edge. The body has an ovoid shape and shows a sort of carination placed in the lower part of the vessel. The base is not preserved but considering the shape of the body it was probably simply rounded or had a ring base. The whole external surface of the krater and the inner part of the rim and neck were covered by a white/light brown slip and then polished: the polishing is more refined in the upper section, while the strokes of the tool used for burnishing are still visible in the lower plain part. A black painted decoration organised in three registers separated by triple horizontal lines covers the upper part of the vessel, from rim to carination. The lip and handles are also decorated; the lip with a wavy line and the handles with patterns like the ones employed on the body.

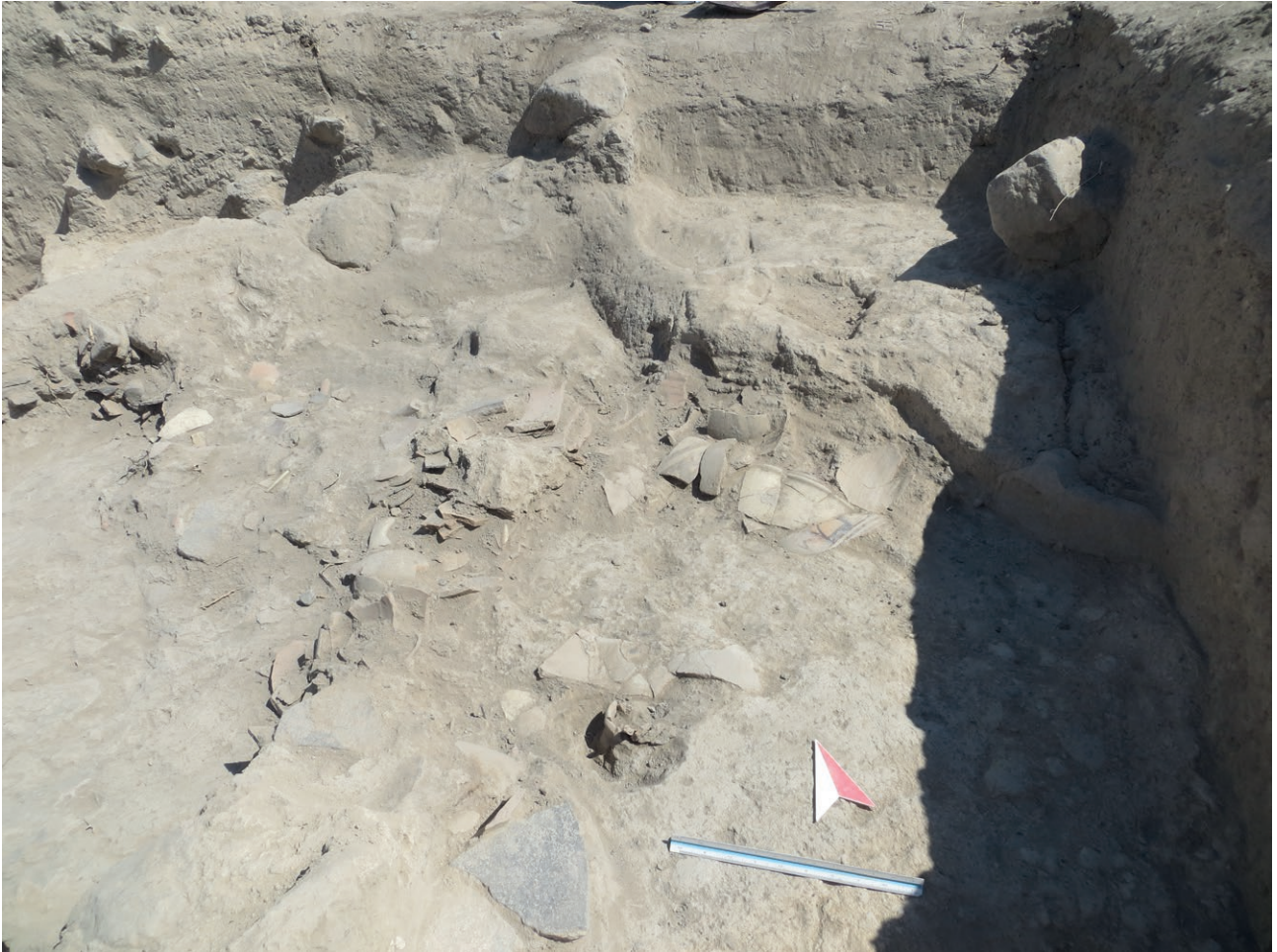


Fig. 32. Phase 5, Primary context D4353.

The uppermost decorative register includes a sort of guilloche or opposing wavy lines that originates from small concentric circles placed at regular intervals. Every element that forms the guilloche pattern is, in turn, filled with rows of small dots that create a wave pattern. The middle register, located on the shoulder, is divided into metopes, probably complying with the structure of the vessel given the presence of the four handles dividing the surface. The metopes fill the entire space between the handles and two alternating motifs are used: the first is a checkerboard motif made of squares of different sizes and patterns, where the larger squares are filled with a crosshatch pattern and the medium plain squares and smaller squares are filled in solid black with reserved central concentric circles. The chessboard is enclosed by two sets of four vertical lines on each side, in the middle of which is a row of concentric circles. It is interesting to note that the right row of concentric circles is not perfectly straight: whoever executed the decoration must have been right-handed and the presence of the handle influenced the accuracy of the design. Its counterpart on the opposite side of the vase is preserved just enough to recognize the same vertical lines bordering the checkerboard, but with one difference: between the lines a series of lozenges filled with a crosshatch pattern replace the row of concentric circles. The second motif employed is characterised by alternating painted sandglass shapes and plain almond-shaped elements, repeated four times. Each “almond” contains an inner one filled with a row of dots. Positioned between one “almond” and the other is a sandglass shape filled with a central cross and, on opposite sides, horizontal lines and a solid band with reserved concentric circles (three or four). The bottom register consists of a horizontal series of arches directly adjoining each other on top of horizontal lines



Fig. 33. Phase 5, Room Dr7, D4360.

below. The arches are alternately filled with a black band at the base and reserved concentric circles (varying in number from two to five, depending on the space available) or with two rows of concentric dots aligning with the shape of the arch. Only at one point the interchange between one type of arch and the other does not occur, probably due to an error. The vertical strap handles with a ridge applied at the edge are all decorated in the same way: on the top a checkerboard with horizontal lines underneath, vertical lines on the ridge and a series of horizontal lines enclosing a black cross on a plain black background on the side. A black line marks the junction point of the handle with the body. Comparisons in terms of both form and type of decoration can be found in Gordion (Sams 1994: pl. 125, no. 930); in Boğazköy (Genz 2004: pl. 69, no. 1); in Kaman-Kalehöyük (Matsumura 2005: pl. 96, KL90-P63; pl. 132, KL-P93); as well as in the excavations conducted on the Göllüdağ (Tezcan 1968: 232, fig. 23-25 and 1992: 15-17). A very similar decoration with arches can be found in the vicinity of Kültepe (Özgüç 1971: pl. 16, fig. 39) and in Layer IV at Alişar (Von der Osten 1937: fig. 408, no 7; fig. 444, no 18; fig. 445, no 7), while handles decorated in the same style were also found in Layer IV at Alişar (Schmidt 1932: pl. XXXIX). All comparisons have been dated to the Middle Iron Age.

KIN21D4353F42 (Fig. 37) is an almost intact copper alloy fibula; only the pin is missing. It is a U-shaped or horseshoe-shaped example with one arm (the one from which the needle starts) slightly more open than the other. The fibula has a rounded cross-section decorated with three mouldings, one in the centre of the arch and two next to the spring and the catch, respectively. The moulding close to the spring seems to be made of two or three discs



Fig. 34. Phase 5, KIN21D4353F54, Small pitcher with painted geometric decoration from D4353.



Fig. 35. Phase 5, KIN21D4353F59, Bichrome globular jar with painted animal decoration from D4353 with drawing reconstruction.



Fig. 36. Phase 5, KIN21D4353F70, Krater with painted geometric decoration from D4353.

joined together (perhaps one thicker than the others), but the surface is too worn to be sure; a similar composition is visible in the other two mouldings. The catch is modelled in order to have two incisions that create ridges recalling those of the fingers of a highly stylised hand. The pin would be inserted inside the squared end of the arch. According to Blinkenberg's classification of fibulae (Blinkenberg 1926), the fibula found in Kınık can be placed inside Group XII, the so-called "Types d'Asie Mineure", and to the sub-group XII,13 in particular. This type of fibula is composed of an arch that varies from semi-circular to horseshoe in shape and with an oval or circular cross-section. It usually has three mouldings (one in the centre of the arc and two at the ends) of various shapes and sizes. Muscarella (Muscarella 1967: 21) follows Blinkenberg's classification and sub-group division. This sub-group has been identified in Gordion in several Tumuli (K-III, IV, V, I cf. Blinkenberg 1926: 208): Tumuli S, E, I (Roman one), W, and MM (Muscarella 1967: pl. IX-XI). Only three of them have been recently re-dated (III, W, MM cf. Sams 2012: 57) to a period ranging from 850-740 BC¹¹.

Muscarella (1967) defines the fibulae identified in Gordion as Phrygian, including those belonging to Group XII,13. This specific type is usually described with three mouldings formed by rings, a ridged catch, the general

¹¹ Caner (1983) publishes four similar examples, three of which come from Gordion and one from Burdur (table 47, nos. 722-723, 728-729), and ascribes these to the variant HII,3 (also table 46, nos. 701, 703 variant HII,1).



Fig. 37. Phase 5, KIN21D4353F42, Bronze fibula from D4353.

horseshoe shape, and the round cross-section of the arch. There is, however, one important element missing from the Kınık fibula: the two spurs/horns above the catch.

According to Muscarella (1967: 40), it is possible to recognize local copies of Type XII,13 fibulae: most of them lack the horns above the catch, and they are characterised by a more squared shape for the arc, which is generally thinner. He points to examples found mainly in Greece (both from the mainland and the islands) and on the western coast of Turkey, where these supposed copies were found together with “standard” XII,13 type fibulae. A second difference is represented by an asymmetrical arrangement of the arch: one arm being slightly more open and not perfectly symmetrical to the other, a feature shared with the Cypriot types. The fibulae defined as copies by Muscarella and the asymmetrical fibula are recognisable in Pedde’s A2.3 group classifications and date between the 9th-8th centuries BC, coming from both Cypriot and Anatolian contexts (Alişar, Kaman-Kalehöyük, Alalakh; Pedde 2000: 109).

Given that the fibulae indicated by Muscarella as local copies are classified by Pedde as Cypriot production, and given that this fibula morphology is present in Anatolian sites such as Alişar and Kaman (but with some morphological differences), it is for the moment impossible to ascribe our fibula to the Phrygian cultural area, but a 850-750 BC date range seems to be the most likely.

Overall, at a first glance it is clear how many vessels are characterised by a painted and sometimes carefully executed decoration applied to a wide range of shapes. Such a rich assemblage appears to be in contrast with the simple and architecturally poor context of Room D7.

In the eastern part of Square S1.23 a curvilinear stone structure (D4436) was identified, consisting of one, sometimes two rows of medium-sized stones built against a sort of cut in the terrain. This was probably an oven since the filling of this structure consists of soft, loose and dark grey ashy material (D4437) (Fig. 38).

To the north of Room Dr7, a corner of another room (Dr8) has been identified (Fig. 33). However, its extension further north has not yet been uncovered; it is probably still underneath or cut by the mud brick wall belonging to Phase 4. Thus far only the filling of this room has been excavated (D4354), and it consists of a yellow compact deposit with brick debris and flat, squared stones. The south-western limit of this room should be the extension of Wall D4343 to the north, which is only visible in the floor of the neighbouring Alley D4347 that rises to adjoin the external face of the wall (Fig. 39). The small alley/street (D4347) has a northwest-southeast orienta-

tion, is approximately 2 m wide and consists of a whitish clay plaster probably mixed with some lime. The floor, although cut by several later pits, is clearly visible and rises towards the northeast and southwest against what was possibly the original face of the outer mud brick walls (D4343 and D4361). To the north, the floor is cut by the later foundation pit of Wall D3352 (belonging to Phase 4, see above), but no further continuation to the north was identified in the 2019 deep trench (D2north). A wall (D4484) made of stones mixed with mud brick fragments has been identified in the north-west part of the excavation. Its orientation is at a right angle with Wall D4361, possibly representing where the alley dead ends. Its connection to this mud brick structure will be examined in the next campaign, after the removal of the later structures.

Alley D4347 widens towards the southwest and slopes down in both directions. The floor of the wider section consists mostly of stamped clay and runs above and against possible remains of the wall (D4809). It forms a sort of corner with the end of the preserved part of D4361, suggesting a change in direction or a considerable drop in elevation of the structure at this level.

Whereas Wall D4343 is ephemeral and is only visible thanks to the layout of the streets (D4347), the mud brick wall (D4361), especially its northern portion, is well preserved. It was built on top of large stone foundations already visible in this phase, not only on the sides of the pit cutting into it but also mainly on its eastern part: here the large boulders employed in the foundations appear adjacent to the silo belonging to Phase 3. In Square S1.17 to the west of Wall D4361 the deposits tend to slope down southwards from 15m. Here several deposits have



Fig. 38. Phase 5, Oven D4437.

accumulated against the mud brick remnants (D4809) above the stone foundations (D4811), becoming thicker towards the south and the east. A layer of dark brown soil with small black pebbles (D4808, 4838) extends over this small area but is absent in the east. Indeed, here the deposit consists of sand, clay, and small stones (D4812-4813). Underneath D4808 a deposit (D4829-4831) of ashes and charcoal fragments cover several fire installations (D4849-4850-4851-4852-4853, cf. Fig. 29 and Fig. 40) located partially above and inside the stone foundations, and partially dug into a soil deposit of compact earth just outside of them. This deposit is rich in ceramic fragments and includes three complete vessels that were found still on top of the pyrotechnical installation (Cf. location in Fig. 29).

Two rounded cooking pots, one (KIN22D4829f24) with a loom weight inside (KIN22D4847F25, Fig. 41) and a second (KIN22D4829F22, Fig. 42) with one obsidian sample inside (KIN22D4829S54), were found on Fireplace D4849; a third cooking pot (KIN22D4829F23) with two grinder stones nearby (KIN22D4829F28 - KIN22D4829F17) were located on top of Fireplace D4851. This ashy deposit and the area with the fire installation seems to extend further to the west beyond the excavation trench; the fireplaces were built directly reusing part of the stone installation, inserting smaller stones to delimit the fire area and cutting a deposit that in part covered some larger stone, part of the wall socle. It seems therefore evident that all these installations were built taking advantage of a monumental structure that was no longer being employed in its full capacity.

The pottery assemblage found in the primary context of this area is still under restoration and analysis; at the end of the 2022 season, however, it came to light that many pottery fragments found in these deposits covering the fire installations could be joined together to form several whole vessels. Thus far it has been possible to restore and analyse two vessels: one hole-mouth cooking pot (KIN22D4829F22) with a globular body, rounded base and two



Fig. 39. Phase 5 alley D4347.

vertical loop handles (not fully preserved). The surface, although very poorly preserved, shows traces of burnishing made with a tool whose strokes are still clearly visible. There are a few comparisons for this object; for example, the same spherical body shape and position of the handles are also visible on the black slip jar found in Büyükkale (Bossert 2000: pl. 32, n. 292, dated to BK Ib, Late Phrygian). However, the Kınık example has a round base and it is grouped as cooking ware. In general, the hole-mouth shape is rather common from the Late Bronze Age levels until the end of the Iron Age as it is well attested at Kaman-Kalehöyük (Matsumura 2005, “Halslose Gefäße ohne Kragen”), but since complete cooking vessels are extremely rare, finding an exact match for this shape remains a difficult task.



Fig. 40. Phase 5, fire installation.



Fig. 41. Phase 5, Primary context with cooking pots.

The hemispherical bowl (KIN22D4829F31) with a straight rim, pointed base, burnished surface and a whitish slip on the outer surface was joined with fragments found in the deposit above the installations (D4829) and the inner surface shows secondary burnt traces. Hemispherical bowls are common in the Iron Age assemblage; the few that have survived intact show a flat or rounded base. There are few examples of hemispherical bowls with a pointed base: one is from the Late Bronze Age Kazankaya Cemetery (Özgüç 1978: fig. 22) and the other is from Layer II at Alişar (von der Osten, Schmidt 1932: pl. X, b2737).

Analysis of the other complete vessels, as well as a complete study of the ceramic materials coming from these deposits, is still ongoing. For the moment it is possible to add that the deposit included a majority of shallow bowl fragments with painted decoration and burnishing, and together with numerous cooking ware fragments obviously point towards an area for food processing and consumption.

f. Phase 6: the fortifications of the Lower Town

The oldest phase reached so far is related exclusively to the presence of the large stone fortifications of the town wall (Fig. 43) and to those deposits that are connected directly to its architectural features. The plan presented for this phase shows the evidence identified during the excavations and the stratified unit numbers employed to differ-

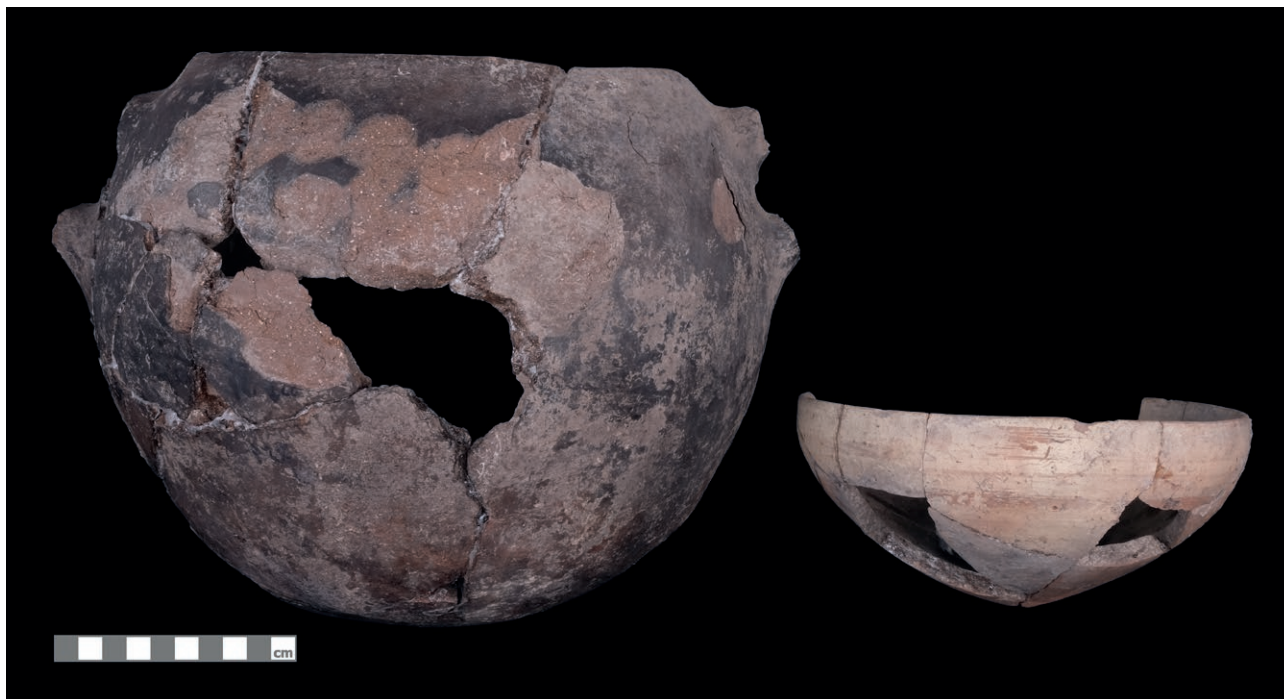


Fig. 42. Phase 5, Globular jar and shallow bowl from D4829 (from left to right, KIN22D4829F22 and KIN22D4829F31).

entiate it. It also presents a possible interpretation of the archaeological evidence based on the archaeological data collected during the 2022 campaign. D4361 identifies a mud brick wall that is preserved on the north-western part of the trench: this wall was built on top of stone foundations (D4811) and is preserved on three courses of bricks on its northern part. Unlike in typical mud brick construction the perpend are not contiguous across courses, and they are not visible on the bed of bricks; they are visible only in sections where the mud brick wall has been cut by later pits. Because the structure's poor state of preservation has only allowed for a few measurements to be taken, the sizes of the bricks may vary. The most common dimensions of a whole brick are 0.48 by 0.48 by 0.18 m; colour varies from pale brown to reddish brown, consistency is very hard, and, on most occasions, it was the main criterion to identify the structure during the excavations. The wall was damaged in part by later pits and by the natural erosion of the wall itself, which tends to disappear towards the south. The internal face of the mud brick wall is clearly visible to the north, where in Phase 5 it was adjoined by the plaster floor of the alley, but it is no longer preserved towards the south. The external, western, face of the same wall is visible on a small portion of the north-western section of S1.17; towards south east it is completely decayed, and on the northern corner near the excavation limit of S1.18 seems to be cut by the later construction of the silo D4386 (Phase 3) that has been left in situ in order to be excavated once the dig area is enlarged to the west. The approximate thickness of the mud brick wall measures 4.20 m. The portion of the mud brick structure identified to the south (D4809) has some features that do not allow us to connect it with any certainty to the rest of the wall: they are not directly connected to D4361, their perpend are not visible in section, and their lower bed (where the mud brick wall connects to the stone foundations) is much deeper than the rest of the structure. This is strictly connected to the architectural features of the stone foundations (D4811): they consist of large limestone blocks preserved on the eastern part of the wall up to four courses and clearly visible in the pit sections, while towards the west, the bottom of the foundation seems to be on a lower elevation and the stone courses are preserved on a few spots up to two stone courses. This structure is homogeneous, and the portion of the wall that is shaded grey on the plan was built without mortar (a sandy filling D4367 was identified between the stones). To the south, the surviving stones are very flat and are preserved approximately at the same elevation as the lowest row of stones identified to the north.

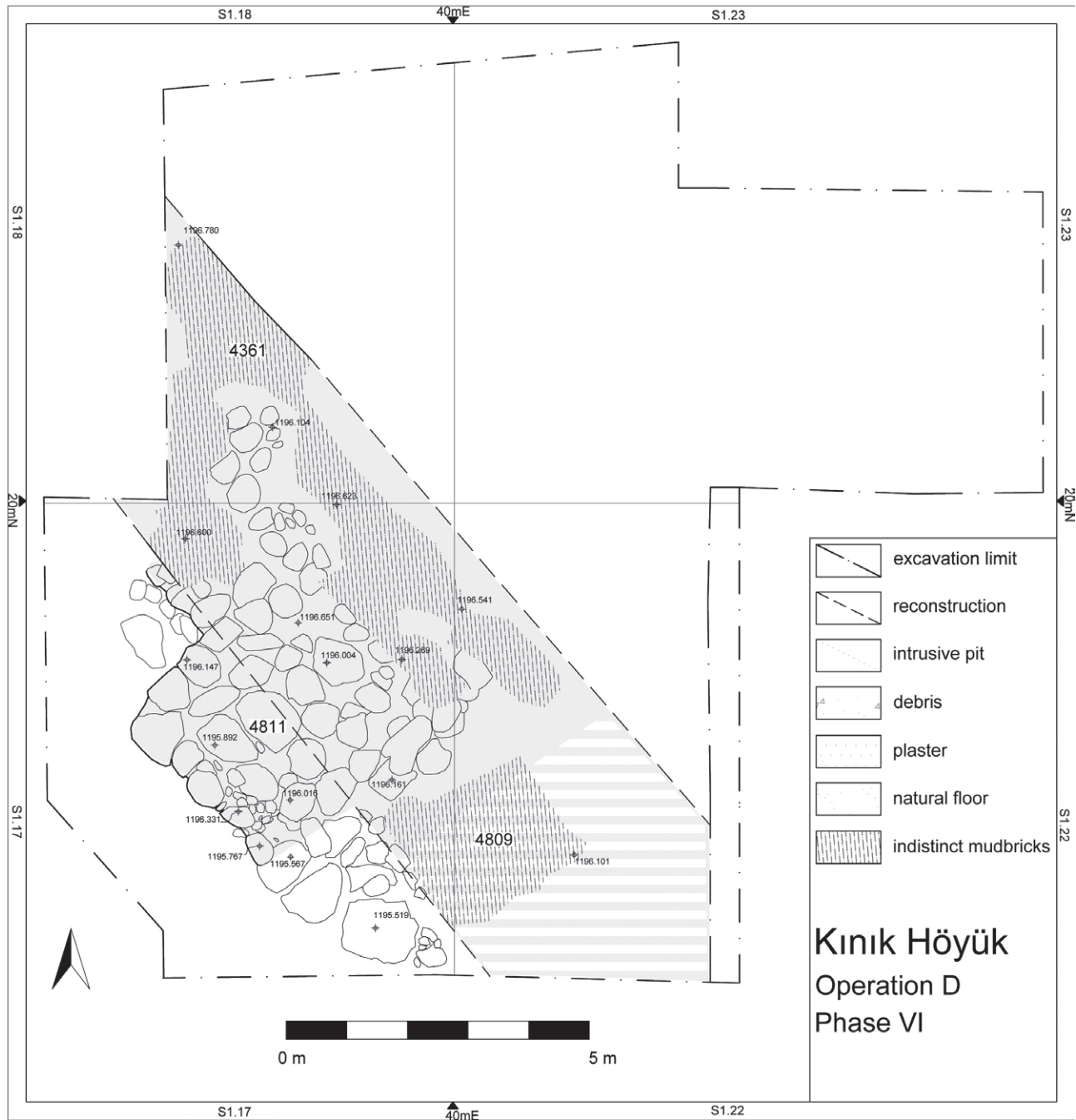


Fig. 43. Phase 6, plan (editing M. Carletti and C. Alvaro).

The reuse of the structure as described in Phase 5 does not provide enough evidence to explain this state of preservation: once the fireplaces were built in part reusing the stones of the wall, the south-western part of the stone structure, just south of D4809, was already entirely covered by an earth deposit (D4831) on which some installations were placed (e.g., D4852 in Phase 5). This evidence clearly implies that before the construction of the fire installations, the top of the southern preserved structure was much lower than its northern part. For this reason, Fig. 43 shows a grey hatched area in connection with D4809, emphasising the need for further investigation

to prove the existence of the wall in this portion. The stone foundations are under the level of the internal alley but probably visible from the outside; the bottom shows a gradual slope towards the west, as if they were constructed following the natural slope of the lower town. The stone socle is slightly larger than its mud brick superstructure (approximately 20/30 cm) except at one point, where it clearly shapes a rectangular feature that protrudes out for 1.9 m. The blocks employed for this construction are particularly thick and clearly define the limits of this “tower” to the north and the west. Defining the width of the tower is more complex since the southern portion was reshaped during the construction of the fireplaces belonging to Phase 5. The stones identified further south of the tower lay approximately 0.5 m lower and are very flat; these can be interpreted either as the lowest course of the foundations or as the embankment of the defensive structure. The reduced space at our disposal and the presence of the later fire installations on the south-western corner of the area have thus far prevented the identification of an external surface/floor connected to this structure. As a working hypothesis we may suggest that the original surface during Phase 6 sloped not only towards the west but also towards the south, identifying a disruption in the town wall perimeter that could hypothetically be related to a gate.

5. CONCLUSIONS

Table 1 presents a chronological chart that aims to correlate the archaeological sequence presented above to the general chronology of the site (KH periodisation) and to the evidence found in Sector D1 in the years 2013-2019, located to the north of D2+3. The correlation is based on the similarities between material culture and the assemblages found on the acropolis and/or to the absolute dating of specific small finds. The most ancient phase (6) reached thus far can be dated by an *ante quem* element: the wall was reused during Phase 5, so the fortification wall of Phase 6 was constructed before the mid-9th century BC. Moreover, the presence in room D7 of a long sequence of floor renovations (at least 10 clay floors could be identified), and the fact that radiocarbon analysis of a charcoal¹² in a deposit (KIN19D3260S144) cut by the fortification wall has been dated to 1255 ± 126.5 (call BC 95.4%), suggest that the lower town was fortified after the 14th and before the 9th century BC. However, material culture related to the deposits of the fortification is dated to the Iron Age horizon. Therefore, the construction period of the fortification can be dated to the Early Iron Age, possibly in the period between the 11th and the 10th century BC.

Given the presence of two very rich primary contexts in Phase 5, the chronological setting of this specific phase relates mainly to the complete vessels and the small finds found in the main primary context, i.e. D4353. The chronological range for the latest occupation of Phase 5 (see discussion above) can be ascribed from the end of the 9th century to the first half of the 8th century BC, between KH-P VA and KH-P IV. The absolute chronology of the other phases is based on the materials found in secondary and tertiary contexts, which have been positioned in the general chronological chart according to their similarities with or differences from the pottery from the previous phase. To provide an example, in Phase 4 and Phase 3, which saw a complete rearrangement of the area, the ceramic material is very similar to Phase 5 and ceramics belonging to the Achaemenid period are generally absent. Instead, the primary context identified in one of the pits related to Phase 2 provides examples related to the Hellenistic period, which represents the latest occupational phase for this area. Seljuk/Ottoman periods, the equivalent to Period D.1 to the north, are not preserved in this area of the excavations; this is possibly the consequence of the removal of the uppermost deposits for agricultural purposes, a recent event that took place around 30-40 years ago. As a matter of fact, the uppermost Phase 1 consists of a very recent deposit that includes modern artifacts and organic materials, the state of preservation of the latter seemingly pointing to the past 30-40 years.

From a cultural perspective, the archaeological sequence identified in Sectors D2+3 provides some clues on the Iron Age urban layout. During Phases 5 and 6 the lower town extended towards the south and was fortified with a large wall with stone foundations sloping towards the external area. In Phase 5 the settlement was built in part by

¹² Cf. Highcock, Matessi 2021: fig. 15.05.

Table 1.

Operation D (2013-2019) ¹ , Sector D1 and (Sector KH Periodisation ² D2)		Sectors D2+3 (2021-2022) Phases	Date
	Modern times	Phase 1	
Level D.1, sector D1	KH-Period I Seljuk/Ottoman	missing	1200-1300 AD
Level D.2, divided into 2a (construction) and 2b (destruction) (Sector D1)	KH-Period II Late Hellenistic period	Phase 2 Grain-storage pit and installation	400 BC-100 BC
Level D.3 (divided into a and b. (sector D1) (Level D2.5a)	KH-Period III Achaemenid Period	Phase 3 Abandonment and silo	550-400 BC
Level D.4 (sector D1) (Level D2.5b)	KH-Period IV Middle-Late Iron Age	Phase 4 Levelling	850-550 BC
(Level D2.5c)	KH-Period Va Early Iron Age	Phase 5 Reuse of fortification (900?- 850 BC) Phase 6 Fortification (uncertain correspondence)	1100-850 BC

¹ Occupational levels related to D (later D1) have been published in several articles (d'Alfonso, Gorrini *et al.* 2015: 630; Highcock, Crabtree *et al.* 2015: 115-117). Information about the D2 phases was recently published (Lanaro, Castellano *et al.* 2020).

² Periodisation refers to the settlement sequence that was established based on the first ten years of excavations (Highcock, Crabtree *et al.* 2015: 101; Highcock, Matessi 2021: table 15.11).

directly adjoining the fortification walls and constructing small domestic rooms, made with cheap building materials and frequently remodelled floors, on a slightly lower elevation than the neighbouring alley. If during Phase 6 a large economic effort went in to fortifying the lower town, it seems that the domestic architecture of Phase 5 uses a low-budget approach, reemploying older mud brick walls and using small slabs built directly against the previous walls to define the room perimeter. This architectural evidence emphasizes a difference between Phase 6, a period during which major urban changes were carried out, and Phase 5, when this monumental structure was reemployed, keeping the general urban setting, and rearranging the internal areas for domestic purposes. The still uncertain date for the construction of the fortification wall (Phase 6) prevents conclusive analysis on the cultural background that led to the general rearrangement of this part of the lower town, only some provisional observations can be made here. Considering that 1. the first Iron Age fortification wall on the acropolis (described above with the silo granaries) has been dated to the 11th century BC; 2. the subsequent rampart and the fortification wall reconstruction on the acropolis is set after mid-9th century BC (d'Alfonso, Matessi *et al.* 2020: 77; d'Alfonso, Yolaçan *et al.* 2020: 20), and that 3. the construction of the lower town wall should be ascribed to the period end of the 11th – 10th century BC (see above), we may suggest that both lower town and acropolis were fortified at the same time in a general replanning of the defensive structures of the site.

Examples of Early Iron Age lower town fortifications are very rare in southern Anatolia;¹³ Sirkeli Höyük represents the best comparison in the geographical area: here the earliest Iron Age fortification wall of the lower town (SE-F0153, SE-F0399) has been identified in operation F and dated to Phase F(S) 9, Period U V i.e. to the 10th

¹³ For a general overview see Osborne 2017.

century BC. The very small wall section¹⁴ excavated so far consists of a stone socle of unworked stones in a shallow foundation pit with, possibly, rectangular towers (Sollee, Mönninghoff *et al.* 2020: 225-227), its thickness is estimated around 3-4 m. Even though building technique cannot be compared due to the very small surface excavated at Sirkeli, the political and economic context that allowed local settlers to plan and build a fortified lower town might be similar, on a smaller scale, to the one in Sirkeli: according to Sollee (*et al.* 2020: 266) this fortification mirrors the economic and political stability reached by the state of Hiyawa during this period, enclosing a city of approximately 70 ha (Novák 2020: 160, fig.113), ten times larger than KH.

Enlarging the picture, the urban layout of Phase 6, i.e. when the perimeter of the lower town was clearly defined and the acropolis was fortified, finds comparisons with urban rearrangements and reconstructions that took place in the second half of the Early Iron Age/Iron Age I identified both in Central Anatolia (Özyar 2014; Vergnaud 2016) and south-eastern Anatolia/northern Syria (Pucci 2008; Osborne 2021). During this period, starting approximately in the 10th century BC, the new political context fostered the birth of independent capital cities (different in size and consequently in dimension of their site catchment area) with fortified lower towns. Whether or not the defining of the boundaries of a lower town, inhabited or not, already took place at these early stages of re-urbanisation remains up for debate.¹⁵ Very few of these lower towns have been investigated archaeologically and none of them provide direct comparisons with the evidence at Kınık: in Zincirli and Tell Ahmar lower towns the main occupation dates to the neo-Assyrian period and culture with elite residential buildings; at Gordion (25 ha) the settlement is organized along sectors/neighbourhoods,¹⁶ each of them with a large defensive system. Tell Tayinat lower town (16 ha), even though it has only been surveyed, provides a clear spatial distinction between areas with dense occupation interspersed irregularly with sparsely occupied zones (Osborne 2017), showing a fortified lower settlement for the most part unplanned. Given the limited extent excavated, it is too early to state the existence of spatial distinctions at N-KH lower town, even in its latest stage of occupation; the archaeological evidence so far shows that this sector of the lower town was employed for short term storage (room D.7), food preparation (outside the citadel wall) and possibly textile production; all activities related to the domestic house.

Considering that the construction of city walls implies an amount of human and material resources that only a strong political power would have the capacity to gather, the archaeological evidence from Kınık builds upon the pre-existing data and confirms the working hypothesis of a 10th century BC re-urbanisation of the south Anatolian plateau, showing, as already stated by d'Alfonso (2020: 23) a fully-fledged urban site only in part reorganizing the Hittite legacy.

Archaeologists point out in Sirkeli, at the end of phase U V (end of the 9th century BC), large scale destructions and a general new reassessment of the city (Phase U IV), with a new double town wall built with ashlar masonry¹⁷ indicating the political and economic success of the local dynasty (Sollee *et al.* 2020: 267). At Gordion, the lower town fortifications were erected in the early 8th century BC, i.e. immediately after the conflagration at the end of the 9th century, and no traces of previous fortifications or even use of that area for domestic purposes were ever found (Rose 2017: 138 footnote, 146). Both Gordion (300 km from N-KH) and Sirkeli (200 km from N-KH) experienced at the end of the 9th century a flourishing period that resulted in the new arrangement of the lower town and in the construction of ashlar masonry fortifications. Instead, the evidence at Kınık suggests that while the fortification system on the acropolis continued to fulfil its defensive function, the lower town lost its defensive function over time, with the external stone socle of the town wall partially reused during Phase 5 for fire installations. This southern part of the lower town was then abandoned and in part reoccupied only in the

¹⁴ The wall is still underneath the phase F(S) 8 double fortification wall.

¹⁵ At Gordion and Karkemish, and probably also at Karatepe, the lower towns were added in a later period (8th century BC), as if the town was “growing”. At other sites such as Zincirli the question whether the lower town was fortified since its first planning in Iron Age I in order to clearly limit the town territory is still open (Pucci 2015; Herrmann 2017).

¹⁶ Magnetometry carried out at Gordion on the mound of Kuştepe shows that the mound covers a bastion that is probably of the same layout and date as the one excavated at Küçük Höyük.

¹⁷ This technique is very similar to the one employed in the fortifications at Gordion but never identified at Kınık, where the lower town seems to be abandoned and destroyed during the 8th century BC.

Late Achaemenid period when further to the north (sector D1) larger residential structures were built, levelling the southern sectors (D2 and D3), cancelling the presence of a fortification wall. The 4th century reoccupation of the Lower town was then not fortified, and its duration still needs to be fully investigated.¹⁸ Therefore, it seems that the site was reduced during the Middle and Late Iron Age, after the end of the 9th century until approximately the 4th century BC, to the fortified acropolis, with a consequent decrease in population and possibly economic power.

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