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## EXCAVATIONS AT TILMEN HÖYÜK <br> I

# THE FORTIFICATION SYSTEM IN THE LOWER TOWN 

by<br>Valentina Orsi

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Volume<br>7

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I

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by<br>Valentina Orsi<br>with contributions by<br>Vittoria Cardini<br>and<br>Raffaella Pappalardo

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## Chapter 1

## INTRODUCTION

### 1.1 THE SITE OF TILMEN HÖYÜK

The site of Tilmen Höyük (coordinates $37^{\circ} 1^{\prime} 48.49^{\prime \prime} \mathrm{N}, 36^{\circ} 42^{\prime} 16.48^{\prime} \mathrm{E}$ ) is located in the fertile plain of Islahiye - Gaziantep province - in South-Eastern Turkey. The narrow valley, oriented North-South, extends for about 15 km on the east-west axis. While the southern side is open toward the 'Amuq depression, the vale is framed by mountainous chains in the other directions: the Nur Dağları - or Amanus - to the west; the Taurus to the north; and the Kurt Dağları - 'The Wolf Mountains' - to the east.
The area geographically belongs to the last fringes of the North Syrian plains. The location is highly strategic with respect to the main communication axis between the Anatolian highlands and the upper Mesopotamian and Levantine lowlands. The continuity of the Islahiye plain with the 'Amuq depression provides an effortless connection southward, with the lower Orontes valley and inner Syria; a natural crossing toward Cilicia throughout the imposing Amanus reliefs was granted through the Bahçe pass, also known as the 'Amanian Gate', and the Belen pass, known as the 'Syrian Gate', respectively to the north and the south of the valley.
Tilmen lies on a basaltic outcrop along the banks of the Karasu river, the main waterway of the area. The original landscape was slightly altered toward 1990 by the construction of a barrier on the river, which caused the water level around the site to rise: at present, in fact, the waters of channels and of a small lake flow through its entire perimeter (Marchetti et al. 2011: 26). The site covers a surface of ca. 5.5 hectares and includes a lower terrace, mainly extending to the west, and an eccentric mound or acropolis on the eastern side, rising to 21 m above the plain level -442 m above sea
level - at its highest point. Additional extensions of the archaeological area have been uncovered NE of the river, on the basalt plateau west of the lower terrace, and south of the main mound.
The site was first visited in 1958 by U. Bahadır Alkım (Istanbul University) during the Eastern Islahiye surface survey (Alkım 1959: 693-694). After a first sounding in 1959, excavations at the site were conducted between 1960-1964 and 1969-1972 under his direction. In 2002, in consequence of a marked deterioration process observed on the structures, an intensive restoration program was conducted by R. Duru, Alkım's former assistant. Extensive research at the site was subsequently resumed in 2003 by a Turco-Italian team directed by N. Marchetti (University of Bologna) and was concluded in 2008 after the opening of Tilmen Höyük archaeological park. The present report is the account of the archaeological investigations carried out by the Turco-Italian team in the lower town fortification system.

### 1.2 THE HISTORICAL SETTING

Historical data on the Amanus area are scarce and fragmentary for the Early Bronze Age, when the region was in all likelihood under the control of Ebla. ${ }^{1}$ After the fall of the city, the control of the territory was claimed by Akkadian kings in their celebrative inscriptions and year names, but it is only by the Middle Bronze Age that a clearer frame of the geopolitical situation became available. At that time two small reigns were known to have ruled the Karasu valley: Alalakh to the south, under the sphere of influence of the powerful kingdom of Yamkhad, centered in Aleppo, and Zalwar (or Zalbar), to the north. Zalwar is probably to be identified with the site of Tilmen Höyük, and it is mentioned in different archives of the period (Mari, Alalakh, Tikunani). ${ }^{2}$ The control over some of the trade routes between northern Syria and the Anatolian Plateau was probably at the basis of the flourishing of the city: the absence of the place name in the Old Assyrian texts likely indicates that the city was not part of the trading network of Assyrian merchants in Anatolia, but evidence from Tilmen

[^0]suggest the possibility that the site may have hosted a Babylonian trading station integrated within a network parallel to that of Assur and extending from the Middle Euphrates to Cilicia (Marchesi 2013; Marchetti 2011: 55; Marchesi, Marchetti 2011: cat. 21, pp. 109-111; Marchetti 2010: 369-370; Marchetti 2003: 166 and n. 20. Cf. Charpin 1989). ${ }^{3}$ Together with Alalakh, the city of Zalwar was claimed to have been destroyed by Hattušili I - founder of the Old Hittite Kingdom - in the $2^{\text {nd }}$ half of the $17^{\text {th }}$ cent. BCE (de Martino 2003: 52-61, 76-77). In the Late Bronze Age period, only Alalakh was still mentioned in the contemporary written sources as a capital of the small reign of Mukish. Working to carve out his own political space between the Hurrian empire of Mittani to the east and the Hittite empire to the north-west, Mukish succumbed to the attacks of Shuppiluliuma I in the $14^{\text {th }}$ cent. BCE, becoming first vassal of the Hittites and, by the end of the $13^{\text {th }}$ cent. BCE, of the kingdom of Karkemish.

### 1.3 THE ARCHAEOLOGICAL SEQUENCE

The earliest phases of occupation at the site, brought to light in a deep sounding on the upper city (Duru 2013), date back to the Late Chalcolithic and Early Bronze Age periods. However, most of the excavated buildings, together with the preserved urban layout, belong to different sub-phases of the Middle Bronze Age when the city, probably on account of its favorable location with respect to trade routes connecting Northern Syria with the Anatolian Plateau, attained the size, monumentality, and complexity of a small capital center. At that time, in fact, the settlement included a massively enclosed lower town and a fortified acropolis, the seat of main official structures.

[^1]Turkish excavations at the site identified five MBA settlement levels (levels III b-a and levels II $\mathrm{c}-\mathrm{a}$ ) comprising an accumulation of up to $3 \mathrm{~m} .{ }^{4}$ Evidence of the earliest $2^{\text {nd }}$ millennium phases (III b-a) were restricted to trench D, a deep sounding excavated between the upper city palace buildings. With respect to the previous EBA phases, an architectonical growth is visible in the shift from small-scale EBA building to more extensive structures, but the limited extension of the area brought to light hampered a sound evaluation of early MBA contexts. Most of the excavated contexts instead belonged to levels II, when the city attained its major growth and extension. The three sub-phases of period II (sub-phases c-a) were identified in the palace sequence. Although direct evidence is missing, the defence system and the city walls most probably belonged to Turkish subphases II c and b, which corresponded to the strongest monumental phase of the palace area (Duru 2003: 55).

Evidence of destructions and fire scattered in different excavation sectors, and especially centered in the upper city, mark the end of the MBA flourishing, but although reduced in magnificence and size, Tilmen continued to be occupied also in the subsequent Late Bronze Age Period. ${ }^{5}$ After a long phase of abandonment, a small village was established on the acropolis starting from the second half of the $2^{\text {nd }}$ cent. BCE, and continued to be inhabited during the entire Roman Period, at least until the $4^{\text {th }}-$ $5^{\text {th }}$ cent. CE. A Byzantine village dating from $11^{\text {th }}-12^{\text {th }}$ cent. constituted the last phase of the settlement, after which the site was sporadically frequented by nomadic groups in the first Ottoman period and then definitively abandoned (Marchetti et al. 2011).
Investigations in the lower town fortification system confirmed conspicuous occupational phases dating to MB II and early LBA. An additional occupational phase dating back to the Roman period has been documented in area $\mathrm{K}-1(\mathbb{\$}$ 2.3.2), while evidence of the Byzantine occupation derives from area P2 (\$6.4.5).

[^2]
### 1.4 NORTHERN LEVANTINE CHRONOLOGY AND PHASING

Concerning the Levantine area in the $2^{\text {nd }}$ millennium BCE , there is no definite agreement on archaeological phasing and chronology (Table 1.1). In the Northern Levant, the distinction of MBA into two main phases and four subphases, substantially based on the Mardikh sequence and its synchronisation with key sites (Matthiae 1997; Nigro 2002a; Pinnock 2005: 139), remains the most widely used. The correlation with absolute chronology may be subject to slight variations and, in general, must be considered largely approximate: according to a recent overview, however, it has been proposed that MB IA $=\mathrm{ca} .2000-1850 \mathrm{BCE}$; MB IB $=\mathrm{ca} .1850-1770 \mathrm{BCE}$; MB IIA = ca. 1770-1700 BCE; MB IIB = ca. 1700-1600 BCE (Morandi Bonacossi 2013: table 28.1). ${ }^{6}$ A revised periodisation of Middle and Late Bronze Ages, with a major modification concerning its final stages and the Middle/Late Bronze Age transition, has been lately proposed on the basis of intra-site correlations with the Qatna archaeological sequence and the support of additional 14C datasets. Foreseeing the distinction of three main MBA periods followed by two main LBA periods, in the new scheme the four Middle Bronze Age phases - as above - are followed by a third phase - MB III - covering the period between 1600-1500 BCE and bearing a substantial transitional character. The first Late Bronze Age phase (LB I) is subsequently equated to ca. 1500-1400 BCE (Iamoni, Morandi Bonacossi 2010-2011: table 1; Iamoni 2012; Morandi Bonacossi 2015: table 1). ${ }^{7}$

Regarding the period of transition between the Middle and Late Bronze Age, frequently ascribed to the number of 'Dark Ages' (Luciani 2013; Coppini 2014; Schwartz 2018a), different chronological schemes have been proposed in relation to the Northern and Southern Levant, the Euphrates area, Central Anatolia and the Cilician area. The divide between Middle and Late Bronze Age is generally placed around 1700 BCE in the Upper Euphrates area (Manuelli 2013: fig. X.1), 1650-1600 BCE in Central Anatolia; 1595 BCE in Cilicia (Novak et al. 2017: 182-183); 1600 BCE in the

[^3]Northern Levant and Upper Mesopotamia, and around 1550-1500 BCE in the Southern Levant (Sherrat 2013: table 33.1).

As far as the Levant is concerned, a main issue (especially pertinent for comparisons with nearby areas) lies in Southern Levant seriations in the labelling - following Albright's periodisation - of the last centuries of the III millennium BCE as 'MB I', subsequently renamed as 'EB IV' or 'IB/Intermediate Bronze Age'. In accordance with the denomination of what originally was the MB I, the remaining phases of the MBA have been indicated as MB II (more or less corresponding to Northern Levant MB I and MB II) or renamed as MB I and II. ${ }^{8}$ Relating the Late Bronze Age Southern Levant, in addition to local processes, the periodisation is intricately tied to Egyptian New Kingdom activities. Many authors assume a broad contemporaneity of the beginning of the Late Bronze Age with the beginning of the Egyptian New Kingdom (and the Aegean Late Minoan I). However, a series of 14C datasets support an earlier dating, according to which the beginning of the LBA might be set around 1640 BCE, before the region fell under the Egyptian Empire (Sharon 2013). Relating to chronology, the use of Low Chronology (hereafter LC) or Very Low Chronology (hereafter VLC) is also widespread (Tables 1.2, 1.3). ${ }^{9}$
In the Middle Euphrates area - or Upper Syrian Euphrates area - for a long time a main reference for Middle and Late Bronze Age chronology has been the sequence of Tell Hadidi, according to which a phasing had been proposed by R. Dornemann (Dornemann 1985; Dornemann 2007) that, similarly to Southern Levant schemes, distinguished, after a MB I phase (ca. 2000-1900 BCE), three MB II sub-periods (MB IIA = ca. 1900-1775 BCE; MB IIB $=1775-1650 \mathrm{BCE} ; \mathrm{MB}$ IIC $=$ ca. $1650-1550 \mathrm{~B} . \mathrm{C})$ and two LB I sub-periods (LB IA $=1550-1500$ BCE; LB IB $=1500-1400 \mathrm{BCE}$ ) attributing the primary transitional characteristics to the MB IIC period. ${ }^{10}$ An accurate review of LBA regional sequences and datasets, however, elaborated a slightly revised phasing, setting the divide between MBA and LBA in the area around 1600 BCE

[^4](Otto 2018: table 1). The divide between Middle and Late Bronze Age is probably to be set earlier in the Upper Euphrates area where a transitional phase, corresponding to Arslantepe period VB1 and attributed on the basis of radiocarbon dates to the $17^{\text {th }}$ cent. BCE, is likely to be recognised as the first LBA phase (Manuelli 2013: 355-357 and tables IX.2, IX.3, IX.5).
In the Syrian Jazirah, reference is frequently made to a tripartite division of MBA, but different schemes have been proposed over time on the basis of site sequence correlations and radiocarbon datasets. ${ }^{11}$ A region-specific periodisation following the $3^{\text {rd }}$ millennium sequence of Early Jazirah (EJ) has been also advanced by several scholars, but in this case as well a consensus is still lacking. According to this seriation, the Old Jazirah (OJ), corresponds to the Middle Bronze Age, while the Middle Jazirah (MJ) corresponds to the Late Bronze Age. ${ }^{12}$

In the Upper Mesopotamia, a dating around 1600/1595 BCE is frequently retained as the divide between MBA and LBA in reference to the descent of Muršili I on Babylon around ca. 1595 BCE according to Middle Chronology, an event that would mark the end of the Amorite dynasty in Babylon and the subsequent rise of the Mittani polity in the north. Considering the possibility of a dating of the Hittite incursion to Babylonia toward 1530 BCE on the basis of Low Chronology, an intermediate date of 1550 BCE is sometimes preferred (Pfälzner 2007: 232). The presence of a precise correspondence of material culture-based sequences, however, is still debated. In the archaeological literature, the divide between MBA and LBA may thus be found around 1600 BCE (Otto 2018: table 1); ca. 1595 BCE (Faivre, Nicolle 2007: 183); 1550 BCE (Dornemann 1985; Pfälzner 2007: fig. 1); or 1500 BCE (Koliński 2014: table 1).

[^5]Instead of reference to technological eras, reference to historically based periodisations or to specific site sequences appear largely preferred in Middle and Late Bronze Age Central Anatolian contexts. The term 'Karum period' or 'Assyrian Colony Period' is frequently used synonymously with 'Middle Bronze Age'. More specifically, however, the Old-Assyrian texts of Kültepe from Karum levels II-Ib document a period ranging from ca 1972 to ca. 1718 BCE according to the Middle Chronology (Barjamovic et al. 2012: 55) thus corresponding, more precisely, to the first phase of the MBA. For this reason, reference to the Karum period is at times consistently equated to the 'early MBA' (for example, Barjamovic 2011; Atici et al. 2014). In contrast, a distinction into four technological phases of the MBA has been schematised by Y. Yakar as follows: MBA I $=2000-1900$ BCE; MBA II $=1900-1800$ BCE; MBA III = 1800-1700 BCE; MBA IV = 1700-1600 BCE (Yakar 2011: table 4.6). According to this scheme the reigns of Hattušili I and Muršili I, mainly centred in the $2^{\text {nd }}$ half of the $17^{\text {th }}$ cent. BCE according to the Middle Chronology, correspond to the last phase of the MBA. The divide between the Middle Bronze Age and the Late Bronze Age in Central Anatolia, however, is more frequently made to coincide with the probable ascension to the throne of Hattušili I, placed around ca. 1650 BCE (Özyar 2014). The so-called Old Hittite period, mainly corresponding to the reigns of the kings from Labarna and Hattušili I until Telipinu and Tahurwaili, is largely equated to the $2^{\text {nd }}$ half of the $17^{\text {th }}$ and the $16^{\text {th }}$ cent. BCE. ${ }^{13}$

An overview of some of the different terminologies and chronological refences used in the Northern Levant and nearby areas to describe the Middle and Late Bronze Age sequence is schematized in Table 1.1. In the present report, the reference to 1600 BCE as the divide between MBA and LBA has been generally retained in conformity to the history of research at Tilmen and to the phasing until now most frequently used in the region, but the reference to local sequences and chronologies has been referred when related to commentary and comparisons with other sites. ${ }^{14}$
Independently of phasing, the transition between MBA and LBA appears in many respects largely to be considered a long process. Relating ceramic production, the

[^6]

Nigro 2002a; 2009; " lamoni, Morandi Bonacossi 2010/2011; Morandi Bonacosi 2015
Table. 1.1 - Different chronologies used in the Northern Levant and nearby areas.

| 1200 | Southern Levant <br> (LC) | Southern Levant <br> (VLC) | Northern Levant <br> (VLC) |
| :---: | :---: | :---: | :---: |
| 1250 | LB IIB <br> $(1300-1190)$ |  |  |
| 1300 |  |  |  |
| 1350 | LB IIA <br> $(1375-1300)$ |  |  |
| 1400 | LB IB |  |  |
| 1450 | (1479-1375) |  |  |
| 1500 | LB IA <br> $(1550-1479)$ |  | MB IIC <br> $(1600-1530)$ |
| 1550 |  | MB Ilb |  |

Table 1.2 - Different chronologies used in the Levant discussed in the text.


| Northern Levant (MC) |  |  |  | 1200 |
| :---: | :---: | :---: | :---: | :---: |
| LB II | LB II |  | LB IIB | 1250 |
|  |  |  | LB IIA | 1300 |
|  |  |  | 1350 |
| LB I | LBI |  |  | 1400 |
|  |  |  | LB I | 1450 |
|  |  |  | 1500 |
|  |  |  | MB III | 1550 |
| MB IIB |  |  | MB IIB | 1600 |
|  | MB IIB |  |  | 1650 |
| MB IIA |  |  | 1700 |
|  | $\begin{array}{r} \mathrm{MB} \\ (1770-1 \end{array}$ | IIA <br> 700 BC ) |  | MB IIA | 1750 |
| MB IB | $\begin{gathered} \text { MB IA } \\ (2000 / 1900- \\ 1850 / 1800 \\ \text { BC }) \end{gathered}$ | $\begin{gathered} \text { MB IB } \\ (1850 / 1800- \end{gathered}$ | MB IB | 1800 |
|  |  |  |  | 1850 |
| MB IA |  |  | MB IA | 1900 |
|  |  |  |  | 1950 |
|  |  |  |  | 2000 |
| Nigro 2002a; 2009 (MBA); Sherrat 2013: tab. 33.1 (LBA) | Pinnock 2005: 136 (MBA); Matthiae 2011 (LBA) |  | la moni, Morandi Bona cossi 2010-2011; <br> Morandi Bonacossi 2015 |  |

Table 1.3 - Approximate correlation of Middle and Late Bronze Age phases according to the Middle Chronology (MC) and the Very Low Chronology (VLC).
transition between Middle and Late Bronze Age appears to be characterised by a marked continuity, particularly remarkable in morphological aspects, that seems to affect the capacity of scholars to distinguish remains of late MBA from those of early LBA (Schwartz 2018a: 440-441). ${ }^{15}$ This smooth transition of the material culture, on the other hand, is paralleled in many cases by an abrupt change in the demographic and socio-political spheres, which are marked by severe disruptions, sometimes closely preceded by traces of decay. ${ }^{16}$

Regarding the Tilmen Höyük ceramic tradition, a preliminary overview of Middle Bronze Age local production presented by A. Bonomo (Bonomo 2011) highlighted the strong rooting in the Northern Levant cultural tradition, including connections with the Amuq area, Inner Syria, and, to some extent, the Syrian Euphrates area. A preliminary evaluation of LBA local production given by A. Colantoni (Colantoni 2010b) registered comparisons with the Late Bronze Age sites of Central, Coastal and Middle Euphrates Syria as well as, on the other hand, with the majority of Cilician Late Bronze Age centres.

### 1.5 THE METHODOLOGY OF POTTERY ANALYSIS

The sampling method of the Turco-Italian expedition envisaged a distinction between diagnostic and non-diagnostic potsherds. The diagnostic category includes all the ceramic samples considered most significant in terms of chronology, function, style or cultural context; less informative potsherds, mainly body-sherds and particularly badly preserved potsherds belonging to other categories, have been ascribed to the category of non-diagnostic potsherds and discarded. Among diagnostic potsherds, a cluster of the most relevant samples has been selected as indicators for drawing and detailed analysis; unselected samples were more concisely registered and subsequently discarded. The selected potsherds are currently stored at the Archaeological Museum of Gaziantep - Turkey.

[^7]The clusters of selected potsherds aimed to supply a meaningful representation of the ceramic assemblages associated to the different stratigraphic units: they mainly included particularly well-preserved samples, typologically indicative either for their frequency or, inversely, rarity. Plates organised by fill thus reflect a significant sample of the ceramic inventory deriving from specific stratigraphic units, but do not include the drawings of the entire assemblage. Each selected potsherd has been inked, drawn and photographed in association to the other fragments composing the same stratigraphic unit. The detailed analysis included the description of the preservation state; functional class; morphology; sizes; production technique; fabric; surface; firing and decorations.

The registration process of unselected potsherds was limited to a description of the state of preservation, functional class, morphology and decoration.

All data were registered on paper on the field and subsequently transcribed and organised in a database. ${ }^{17}$

A general quantification of potsherds inventories connected to the different archaeological contexts has been attempted with statistical analyses expressed in tables and diagrams. Taking into account our ignorance concerning the average lifespan of vessel types attested in the archaeological records, a circumstance that deeply affects our capacity to properly evaluate the composition of a ceramic assemblage (Orton, Huges 2013: 203), quantification analyses must be considered of primary use for comparisons between different assemblages. As a secondary use, they have been the basis for constructing general hypotheses about function anSherd counts were the basis of quantification analyses.

Statistics have been expressed in frequency tables (see List of Tables) and bar charts (see List of Diagrams), in order to visually describe the composition of datasets. In the frequency tables, the frequency (number of potsherds sorted out in a definite category) and the relative frequency (rate of the category in a given sample) are expressed in juxtaposed columns. The quality and size of the reference samples is always made plain either in the columns or the lines of 'totals', or in the captions. ${ }^{18}$

[^8]Concerning the range of attested morphologies, which might bear significant meanings in term of chronology, culture, and function, the incidence of each shape has been calculated relative to the total number of potsherds where a general shape of reference was detectable. The same principle has been held in order to detect the incidence of specific morphological elements, like bases, and the functional horizon.

Concerning function, a generic functional classification was adopted in order to investigate possible macroscopic characterizations of different areas and contexts. A broad distinction based on morphological and technological attributes was made between fine ware, simple ware, kitchen ware, and storage ware. The storage ware ceramic class includes potsherds whose presumed range of use was centred on longterm storage. The category thus included mainly large and very large vessels with thick walls and coarse fabric, presumably destined for limited displacement. To the kitchen ware class, potsherds were ascribed whose presumed range of use was centred on cooking activities involving the use of heat. Fine ware included samples that might be ascribed to the category of luxury vessels and particularly fine and depurated samples whose range of use presumably involved a high investment in display. All other samples were ascribed to the simple ware category. This group, in fact, gathered a large span of functional spheres ranging from middle and short-term storage, shortto long-distance transfer, processing without use of heat, and tableware functions. ${ }^{19}$

Fabrics were largely characterised by mineral inclusions, in medium to mediumhigh frequency in simple ware, to high and very high frequency in kitchen and storage ware. Fabric colours ranged mainly from orange to reddish brown; the kitchen ware, however, was most frequently brown and darkish brown. Most of samples did not appear to be slipped, but the surfaces seemed to be in many cases slightly eroded, hampering a proper recognition of the original surface treatment.
The commentary to the pottery has been organised according to the specific nature of each archaeological context and thus it may be arranged by single fills and loci, or by meaningful groups of fills. In any case, the composition of each fill may always be appreciated in the ceramic figures and plates, which are always arranged by fill/locus. Whitin the fill, the composition of each ceramic bucket, which corresponds to the smallest unit of collection, and may vary according to location, day of collection, or quantity of collected potsherds, can always be verified in the description of the potsherds represented in the figures.

19 For an example of functional classification and terminology see Rice 1987: 208-210.

As a remark to the ceramic commentary, a few aspects related to the state of the art seem worth noting. The use of different phasings and chronologies in different areas and sites of comparison, as exemplified in Table 1.1, adds some complexity to the ceramic commentary. When proposing a parallel, however, reference is always specifically made to local cronologies and sequences. At present, the continuity of the ceramic production between intermediate and late phases of the MBA and the early LBA appears substantial, especially in terms of morohological analysis. The same is true in relation to aspects or regional differentiation that, despite the many parallels that may be sorted out in term of general morphologies or 'functional' morphologies between the Northern Levant properly speaking and the nearby areas, appear remarkable. The insufficient accuracy of datings of many ceramic parallels limits our capacity to draw precise chronological ranges, and may be, at least in part, responsible for misjudging aspects of chronological and geographical continuity and discontinuity of the ceramic productions. Inaccurate or large-range datings, in particular, may increase the apparent continuity of ceramic productions between different periods, and, at the same time, may affect the evaluation of locally-based distribution charts. New sets of published materials from different areas of the Northern Levant will hopefully improve this condition.

## Chapter 2

## AREA K-1-K-6

The gate system K-1-K-6, located on the south-eastern side of the site, represents the main access to the city (Pls. I-II). Extensive research in the area was conducted by the Turkish team of Istanbul University in the course of 1960s excavation seasons, and included excavations in the gate area plus surface and stratigraphic investigations extended along the outer fortification wall south and north of the gate. ${ }^{20} \mathrm{~A}$ two-room rectangular tower (tower 1) was cleared out ca. 20 m south of the gate. Here, the collapse of mudbricks inside the structure testified to the use of mudbricks for the upper sections of the architecture (Duru 2013; 78 and pl. 23). Additional structures integrated in the lower town fortification system were brought to light north of the gate K-1: the building F (Duru 2013: 78 and pls. 18, 24-25), immediately north of K-1, made of four rooms, and an additional block north of building F that, according to the excavators, might have hosted a staircase (Duru 2013: 78).
After the interruption of 1960s Turkish excavations on the site, the area was subjected to severe disruption, mainly connected with the establishment of new paths on the lower slopes of the höyük and the construction of water channels (Duru 2013: 107). In particular, the remains of the outer towers of the access system - K-6 - were largely dismantled, thus inducing the Turkish team to intervene later on with exten-

[^9]sive restoration activities. ${ }^{21}$ In this context, in 2002, K-6 towers, damaged almost to the foundations, were partially restored (Duru 2013: pl. 56: 1-3).

The research in the area was recovered by the Turco-Italian team between 2005 and 2006, and included survey and excavation activities (Marchetti 2007a: fig. 5; Marchetti 2008a: 392; Marchetti 2008c: 469 and fig. 11).
Relative to the other gates of the Lower Town, K-2 and K-3, the K-1-K-6 gate complex is distinguished both in size and in plan. The complex is composed of two main gate buildings: an inner gate, named K-1, and an outer gate, named K-6. The inner gate K-1 is directly integrated in the lower town fortification wall, from the outer line of which it only slightly projects. The second, smaller gate K-6 is prepended ca. 18 m to the SE (Figs. 2.1, 2.2; Pls. III, VII-XXIV).

### 2.1 THE SETTING

The gate system K-1-K-6 gives access to the city from the SE (Pl. VII). Considering that $\mathrm{K}-1-\mathrm{K}-6$ is the main city gate, the southern trajectory - that is, the southern connection route - presumably played a central role in Tilmen Höyük socio-economic and political life. Unlike gate $\mathrm{K}-3, \mathrm{~K}-1-\mathrm{K}-6$ is located almost at the base of the slopes. Only a slight gradient of ca. 70 cm is registered between the lowest, westernmost sectors (ca. +450.70 msl ), and the easternmost ones (ca. $+451.40 \mathrm{msl})$. West of the gate, the slope of the hill rises steeply until the base of the upper town wall, ca. 33 m west of K-1 and ca. 6 m above (ca. +457.50 msl ). Around 40 m to the north, along the upper city wall, the K-5 staircase grants the transit toward the upper town district. The transit toward the lower town districts of the north-western terrace, instead, apparently proceeded along the low skirts of the höyük.

The gate K-1 is embedded in the lower town fortification wall, and appears as a self-contained block in the casemate line. The continuity in the fortification line is granted by the wall W. 1026 to the south, bounded at a right angle to the southern wall of the gate W.1025, and by the wall W. 1020 to the north, bounded at a right angle to the northern wall of the gate W.1015. The structure is only slightly

[^10]protruded from the fortification frontline on its southern side, while the projection is more marked on the northern side. This slight and irregular protrusion seems related more to the necessity to conform to the fortification's trajectories on this specific terrain and to maintain right angle connections between the walls than to military needs. This arrangement produces the so-called 'inset-outset' wall morphology (Keeley et al. 2007), characteristic of the entire Tilmen Höyük lower town fortification system.
As seen already, additional buildings are located to the north - the building F - and to the west.
The outer gate K-6, more than 20 m to the east of $\mathrm{K}-1$, close to the present day Karasu riverbed, is completely external to the preserved lower town fortification line, to which it was presumably connected through a walled courtyard (see $\int 2.2 .2$ ). ${ }^{22}$

### 2.2 ARCHITECTURE AND STRATIGRAPHY

Turco-Italian investigations in the area K-1-K-6 envisaged cleaning activities of surface evidence in 2006 and stratigraphic investigations in 2005 and 2006. The cleaning activities for the purpose of an accurate and up-to-date topographic survey of architectures of the area first focused on the structures brought to light in 1960s by the Turkish team: the two gates' buildings K-1 and K-6, and the building F. Structures preserved on the surface east of $\mathrm{K}-1$, however, were additionally cleared out.
The stratigraphic investigations, instead, were concentrated in the area between the gates. A preliminary sounding of $4 \times 1.5 \mathrm{~m}$ was conducted in 2005 , south of the access K-1 (Pl. XX); subsequently, more extensive excavations were undertaken in 2006 (Pls. XII-XIX). Following the identification in 2005 of a large stone paved floor in front of the K-1 eastern access - L. 1328 - investigations were subsequently aimed at verifying the presence and chronology of a possible paved path connecting the two gates. With this focus, the 2006 excavation area was shaped as a corridor of ca. $17.44 \times 5 \mathrm{~m}$, oriented NW-SE connecting the two gates.

[^11]
### 2.2.1 Stratigraphic investigations

## Phase 1

A pavement of large, irregularly shaped basaltic slabs, named L. 1328 is located in front of gate K-1 (Fig. 2.1; Pls. XVI-XVII). The pavement was first identified during the excavation, in 2005, of the small test trench east of the gate $\mathrm{K}-1$, and more extensively exposed in 2006. The pavement is preserved for $3.26 \times 4.66 \mathrm{~m}$ on the main axis (between +451.20 and +451.22 msl ), east of L.1013, the outer, eastern passage of gate K-1. At least two large stones located on the central-southern side of the area close to the passage probably constitute the covering of the drain D.1028, partially exposed on the western side of K-1 (see $\int 2.2 .2$ ). An accumulation of brown, compacted soil F. 1327 (buckets 226-228) - covers the stone floor (Pl. XVIII: 1). The extension of the deposit is limited to about 2.30 m of length east of the access L.1013. Further east, in fact, the earthen fill F. 1327 and the stone floor L. 1328 are cut by the pit P.1329. East of the pit, possible remains of the same phase of the floor were probably obliterated by later activities connected with the construction of the NW-SE wall W. 1330 (Fig. 2.2) (see $\int 2.2 .1$, phase 2).

The same building phase of the pavement L. 1328 likely also included similar slabpaved sectors identified in K-6 inner courtyard, namely L. 1005 ( $6.59 \times 4.68 \mathrm{~m}$ on the main axis; between +450.69 and +450.75 msl ) and in K-6 inner access, L. 1006 (2.36x1.55 m on the main axis; between +450.86 ) (Pls. XII, XIII: 1). Additional paving slabs identified west of the K-6 western passage - L. $1334(5.12 \times 4.75 \mathrm{~m}$ on the main axis; between +450.99 and +450.78 m ) - probably belong to the same pavement (Pls. XIII, XIV: 1).

The preserved paved sectors L. 1328 and L. 1334 suggest the possibility that a large part of the area between the gates was paved with large stone slabs (Pls. XIV: 2, XV: 1). The gap in the middle of the excavation area, however, did not allow for a complete reading of the evidence (Fig. 2.1).

## Phase 2

An irregularly shaped pit, named P. 1329 ( $2.33 \times 1.61 \mathrm{~m}$ on the main axis), is located around 2.30 m east of $\mathrm{K}-1$ access L. 1013 (Fig. 2.2). The pit cuts the phase 1 stone pavement L. 1328 and the fill F.1327, and is filled by F.1332, characterised by finegrained, loose soil of darkish colour. Since no definite stratigraphic relation could had been ascertained with the NW-SE wall W.1330, it is not possible to define with
certainty if the pit is to be assigned to the same building phase or to later activities. No associated materials in fact were uncovered that might help the attribution.
East of pit P.1329, ca. 4.5 m east of the access L.1013, is located the wall W.1330, NE-SW oriented (Pls. XV: 2, XVI, XVIII: 2, XIX). The structure was cleared out over $5 \times 1.67 \mathrm{~m}$ on the main axis, but apparently it continued beyond the northern and southern excavation limits. The wall, preserved for one row above surface, presents external scaffolds made of medium size, irregular stones plus an inner fill of smaller rocks (between $+451.01 / 451.18$ and +450.75 msl ). The building technique is rather similar to that of K-1 walls, but a slight misalignment of their trajectories seems to point to a different building phase. The upper portion of the wall was still visible on the surface in the 2000s, and lined-up stones visible on the surface north and south of the excavation trench - for about 7.70 m southward and for about 5 m northward - might have been also related to it. An additional east-west oriented alignment of stones visible on the surface south of the excavation trench might had been a structure related to the same wall, to which it might have been connected at a 90 o angle. Should this hypothesis be proven correct, the wall W. 1330 would constitute the western limit of a building extending in the area. A connection with the NW-SE wall W.1012, identified on the surface north of the excavation area, might also be postulated, but the different orientation of the structures makes this hypothesis more unlikely.
East of W.1330, the excavation area is occupied by a concentration of stones F. 1333 - ranging from medium to very large in size, mainly of irregular shape, probably to be interpreted as the collapse of a stone building (Pls. XV: 1, XIX: 2). F. 1333 extends over a surface of $5 \times 4.75 \mathrm{~m}$ on the main axis. Against the wall W. 1330 and the stones F. 1333 leans a fill - F. 1331- of brown, compact soil that extends over a length of ca. 5 m eastwards. Associated materials (bucket 229), which include a fragment of glass and a fragment of roof-tile, mainly derive from the section above and between the stones of F.1333, while no finds derive from the portion of soil leaning immediately against the wall.

### 2.2.2 The topographic survey

## Gate K-1

K-1 is shaped as a courtyard gate with four piers and a direct access flanked by towers. The inner courtyard, almost squared in shape (ca. 4.90 m on the main NE-SW axis per
4.80 m on the main NW-SE axis) covers an area of ca .29 m 2 . A sound definition of the courtyard layout, however, is hampered by the bad state of preservation of the masonry on its northern and, especially, on its southern side. ${ }^{23}$ Remains of the stone pavement floor - L. 1048 - were recorded on the middle of the room, to the south and south-east (between +451.10 and +451.32 msl ) (Pls. XX, XXI: 2, XXII-XXIII). Two accesses, both ca. 2.60 m large, are located on the eastern - L. 1013 - and western side - L. 1049 - of the courtyard, respectively toward the outer and inner city, and allow transit across the gate through a direct path, perpendicular to the gate building (Pls. XXI: 2, XXIV). Two pairs of piers frame the passages. The outer passage L. 1013 ( 2.61 m large $\times 2.38 \mathrm{~m}$ long, $+451.10 \mathrm{msl})$, deeper than the inner one, is paved with the same large, flattened stones of the chamber courtyard (Pl. XX: 2); the inner access L. 1049 ( 2.60 m large x 1.50 m long) is paved on the western margin with two elongated doorstep stones (respectively 1.61 and 0.91 m long x 0.60 m large; $+451.57 \mathrm{msl})$ (Pl. XXIV).

The piers of the eastern, outer access, W. 1018 on the northern side and W. 1335 on the southern side, were preserved for a single stone row above surface. The northern pier ( $2.38 \times 1.36 \mathrm{~m}$ on the main axis) is made of medium-size stones of irregular shape with external flattened surface (Pl. XX: 1). On the NW side, it was badly preserved; its NE edge instead bounds to the eastern wall - W. 1014 - of the northern tower of the gate, and forms with it a linear façade. The southern pier W. 1335 ( 2.60 x 1.13 m on the main axis, between +451.33 and $+451.10 \mathrm{msl})$, shaped in the same way, abuts the eastern wall - W. 1022 - of the southern tower forming a linear façade. A gap in the disposition of stones at the NW edge of the pier affects a sound reading of the masonry in the SE part of the courtyard (Pls. XX: 1, XXIII: 2).

Unlike the eastern façade of the gate, characterised by a plain layout, the western façade presents a short, open antechamber ( 4.20 m in width per 0.75 m of depth on the main axis) (Pl. XXIV: 1). The antechamber - or large niche - is crafted by the disposition of the piers of the passage, retracted with respect to the building western façade. The piers of the passage L. 1049 - W. 1017 on the northern side $(1.58 \times 0.76 \mathrm{~m}$ on the main axis; preserved for 4 stone rows; between +451.59 and $+451.57 \mathrm{msl})$ and W. 1336 on the southern side $(1.42 \times 0.89 \mathrm{~m}$ on the main axis; preserved for a single

23 In particular, it is impossible to detect if the courtyard southern side is delimited by the alleged wall W.1027, whose reconstruction remains unclear, or by another wall section immediately north of it. The presence of a passage connecting the courtyard with the chamber to the south through the alleged wall W. 1027 constitutes a further uncertainty (see below).
stone row; between +451.68 and $+451.56 \mathrm{msl})$ - bond at right angles to the walls of the northern and southern towers. A particular accuracy in the building technique, noted already in the Tilmen masonry of significant structural components, making use of well-dressed stones, is recognised in both piers. Moreover, the disposition of the outer stones indicates that piers and walls are the result of a single planning phase, envisaging first the laying down of the perimeter shell of the structure and, secondly, the filling of the wall's cores.

Two door sockets still in situ in the inner sides of L. 1013 piers attest that the outer access was equipped with a double door opening toward the courtyard inner side (Pl. XX: 2). The door sockets are obtained from coarsely regularised stones of rectangular shape ( 0.77 x 0.44 m the northern socket; 0.74 x 0.49 m the southern socket): a half circle cut on the eastern sides of the stones (ca. between 13 and 8 cm of radius), closed by the western façades of piers, framed the hinges lodgement. In contrast, no evidence of closure devices was identified on the western, inner access.
A drain, D.1028, between 42 and 62 cm large, was exposed on the surface west of the inner access L. 1049 over a length of 2.5 m (Pls. XVI: 2, XVII, XXIV: 1). The drain was framed by medium-small size stones of irregular shape, but 1.60 m west of the access, a stone shaped as a rectangular parallelepipedon ( 0.95 m length x 0.37 m width, +451.65 msl ) with a barrel vaulted hole cut on the lower side was positioned as drain covering, preserved in place since the time of first investigations in the area. Large, coarsely regularised stones lined up in the middle of the gate courtyard and continuing to the east correspond in all likelihood to the covering of the drain, thus indicating its path. A confirmation for this observation has been found on the eastern margin of the access L. 1013 where a small section of the drain was exposed (Pl. XXI: 1). Overall, the drain is discernible over a length of ca. 12.82 m : it extends below the threshold of the inner access L.1049; it passes through the gate courtyard, from west to east, and turns abruptly toward the south in front of the outer access L. 1013.

Two rectangular chambers, certainly towers, flanks the gate courtyard. The towers were preserved only for a single stone row above the surface, but collapse layers removed at the time of Turkish excavations attested to the use of mudbricks for the upper masonry (Duru 2013: 81). At the time of first excavations in the area, two large rooms had been identified in the northern tower, while two elongated rooms had been hypothesised to be hosted in the southern one (Duru 2013: pl. 24: 1). The com-
promised state of preservation of the structures in 2006, however, did not allow for a sound reconstruction of the inner layout.
The southern tower is delimited by wall W. 1024 on the western side (NE-SW oriented; $7.25 \times 1.78 \mathrm{~m}$ on the main axis; between +452.23 and +451.52 msl , preserved for two stone rows above surface); by W. 1025 on the southern side (NW-SE oriented; $6.83 \times 1.70 \mathrm{~m}$ on the main axis; between +452.09 and +451.46 msl , preserved for two stone rows above surface) and by W. 1022 on the eastern side (NE-SW oriented; $6.40 \times 2.32 \mathrm{~m}$ on the main axis; between +451.65 and +450.72 msl , preserved for two stone rows above surface) (Pls. XXI: 2, XXII). ${ }^{24}$ Inside the tower, traces of lined-up stones forming right angles with the encircling walls have been hypothesised to represent the remains of NW-SE walls - W. 1023 to the south and W. 1027 to the north - dividing the chamber into two elongated compartments, L. 1030 to the south and L. 1029 to the north. The two compartments would be respectively $5.76 \times 1.32 \mathrm{~m}$ and $5.95 \times 1.38 \mathrm{~m}$ on the main axis. This same layout with two elongated room is also proposed in the Turkish reports (Duru 2013: pls. 24: 1, 26: 1) but given the state of preservation of the structures this reconstruction must remain largely hypothetical. ${ }^{25}$ In particular, a gap in the intermediate section of the presumed wall W. 1027 may represent the evidence of an access connecting the gate's inner courtyard with the southern chamber. Further alignments of stones form right angles east of the pier W. 1336 and west of the gap. They include either stones comparable to those of the main building phase, large and with a flattened side, or smaller and irregular stones, which usually belong to later structures. All these alignments probably represent the evidence of different arrangements of the area that characterised different phases of use.

The northern tower is delimited by the wall W. 1016 on the western side (NE-SW oriented; $6.89 \times 1.75 \mathrm{~m}$ on the main axis; between +452.67 and +451.35 msl , preserved for three stone rows above the surface); W. 1015 on the northern side (NW-SE ori-

[^12]ented; $5.64 \times 1.88 \mathrm{~m}$ on the main axis; between +452.70 and +452.11 msl , preserved for one stone row above the surface) and W. 1014 on the eastern side (NE-SW oriented; $6.36 \times 2.44 \mathrm{~m}$ on the main axis; between +452.60 and +452.11 msl , preserved for three stone rows above the surface) (Pls. XXIII, XXIV: 1). Due to the poor state of the preservation of part of the masonry, the definition of the southern perimeter of the structure, also delimiting the gate inner courtyard, is problematic: evidence of a NW-SE wall, named W.1019, bounding at right angles to the pier W. 1017 and to the wall W.1016, was visible on the surface and extended for a length of ca. 2 m east of the pier W.1017; two stone alignments further east merging with the wall W. 1014 presumably belong to the same structure, but definite evidence is missing. Regarding the disposition of the inner space, a small, rectangular room - L. 1021 - NE-SW oriented, probably occupies the western section of the chamber, delimited by the walls W. 1016 to the west, W. 1015 to the north, and W. 1019 to the south. The eastern border is probably defined by the NE-SW wall W. $1337,{ }^{26}$ but the interpretation of this structure is also affected by its poor state of preservation, limited to a single row of lined-up stones ( $2.93 \times 1.44 \mathrm{~m}$ on the main axis; between +452.66 and $+452.47 \mathrm{msl})$. Even more problematic is the interpretation of the eastern part of the tower. The area is probably occupied by another small room parallel to that to the west $(1.77 \mathrm{~m}$ on the east-west axis; uncertain extension on the north-south axis), but the presence of different sets of lined-up and collapsed stones does not allow for a sound interpretation.

## Gate K-6

The gate K-6 (Duru 2013: pl. 26: 1-2) is shaped as a passage between two protruding massive towers (Pls. IX-X, XI: 1, XII-XIII, XIV: 1). Two accesses disposed in the same axis connect the outer and the inner city space through a central chamber. The gate building measures ca. 13.5 m on the main N-S axis and ca. 8 m on the main E-W axis. The western access, toward the inner city, was probably narrowed by piers leading at right angles to the towers; the potential restriction, difficult to determine with certainty due to the state of preservation of possible piers, which is limited to the base level, would have narrowed the passage to 2.33 m of width per ca. 1.5 m of depth. If piers did not restrict the passage, it would have been ca. 4.75 m large, but this second reconstruction appears less likely (Pl. XI). Still due to the poor state of preservation,

26 In this case, the room would measure $2.02 \times 1.50 \mathrm{~m}$ on the main axis.
the layout of the outer, eastern access is even more uncertain. A large, flattened stone preserved at the floor level on the southern side of the access, where the preserved lion statue was positioned after excavation (see below), might have constituted the base of a pier restricting the access (Pl. IX). Piers are usually symmetric, so that if a pier was located on one side of a passage, another pier was located on the other side, opposite to it. However, a gap in the stone paved floor on the northern side of the access, opposite to the potential southern pier, does not help the reconstruction of the layout. If the piers were present, the access would have been ca. 3.40 m large; if not, the access would have reached 5.50 m in width. ${ }^{27}$
The western access, toward K-1 and the inner city, presents a linear façade, the potential gateway piers restricting the entrance being shaped as an extension of the tower's western walls. ${ }^{28}$
The eastern, outer façade of the gate (see Duru 2013: pl. 26: 2-3) was presumably also equally linear. Two lion sculptures, originally found displaced in the area, were probably located at the sides of the outer passage. One of the two sculptures (Object TH.06.K6.6) (Duru 2013: pl. 29: 1/2), originally found in the vicinity of the southern side of the gate, is presumed to have been placed on the southern, left side of the access (Duru 2013: 82). The other sculpture, badly damaged, was found on the path approaching the gate from the east (Duru 2013: 82 and pl. 29: 3-4) (Pl. VIII: 2), and during the 1960s excavations was positioned on the right-hand side of the access. However, as a consequence of working activities undertaken in the area after the end of archaeological investigations, the two sculptures were again displaced; the first one, although badly damaged, was rescued in 2002 and repositioned back in place (Duru 2013: 108 and pl. 57: 1-2). The second lion sculpture, instead, was never recovered.
R. Duru (2013: 81) hypothesised that the outer access was equipped with a double door, but no door-sockets were preserved in situ. The same holds true for the inner access.

Although described as 'rough', R. Duru attributed to the gate a 'cyclopean' appearance due to the large stones used in the masonry of the flanking towers (Duru 2013: 81).

[^13]28 Relating the western access L.1006, see $\S 2.2 .1$ - phase 1 .

At the time of first investigations, the towers were preserved up to a height of 3 meters (Duru 2013: pl. 27: 2, 3), but in 2006 only the first stone rows were still preserved in situ.
The southern tower, delimited by wall W. 1004 on the southern side (preserved for $2.91 \times 0.78 \mathrm{~m}$ on the main axis, between +451.86 and +451.54 msl , eastern section missing), W. 1003 on the western side ( $5.15 \times 0.92 \mathrm{~m}$ on the main axis, between +451.54 and $+451.08 \mathrm{msl})$, W. 1002 on the northern side $(6.03 \times 1.10 \mathrm{~m}$ on the main axis, between +451.54 and +450.79 msl ) and W. 1001 on the eastern side (preserved for $1.56 \times 0.49 \mathrm{~m}$ on the main axis, between +450.84 and +450.79 msl ), measured ca. 4 m on the $\mathrm{N}-\mathrm{S}$ axis per 7.35 m on the E-W axis (Pl. XII: 2).
The northern tower, delimited by wall W. 1010 on the southern side ( $6 \times 0.64 \mathrm{~m}$ on the main axis, between +451.05 and +450.72 msl , W. 1007 on the western side ( $6.13 \times 1.64 \mathrm{~m}$ on the main axis, between +451.60 and +451.05 msl ), W. 1008 on the northern side ( $6 \times 0.90 \mathrm{~m}$ on the main axis, between +451.85 and +450.81 msl ) and W. 1009 on the eastern side (preserved for $4.10 \times 0.45 \mathrm{~m}$ on the main axis, between +450.85 and +450.72 msl ), measures ca. 4.50 on the main $\mathrm{N}-\mathrm{S}$ axis and 7.90 m on the main E-W axis (Pl. X: 2, XI: 1, XII: 1). The perimeter of the tower foundations is not precisely rectangular but slightly trapezoidal, with the eastern façade slightly shorter than the western one. The same might have been true for the southern tower, but a gap in the SE edge of it does not allow for a sound reconstruction.
Original investigations in the area proved the two towers hosted a single chamber framed by cyclopean walls. The large stone deposit uncovered inside was considered intentional by the excavators: in fact, they interpreted the towers as solid structures, without rooms at the ground level, and hypothesised a functional space - such as a look-out or a patrol area - to be located on the upper floor (Duru 2013: 81).

## K-1-K-6 Inner courtyard

Concerning the open section between the two gates buildings K-1 and K-6, the area has been hypothesised to be shaped as a closed courtyard delimited by walls: a wall section oriented NW-SE leaning against the SE façade of K-1 northern tower and continuing in the direction of K-6 was supposed to represent the courtyard northern boundary (Duru 2013: 82). The wall, named W.1012, in 2000s was preserved on the surface over a length of 8.49 m by 1.57 m of width (Pl. XI: 2). The texture was not perfectly clear, but apparently it was built with two stone scaffolds with a of small rocks filling. The wall leans against the K-1 eastern wall W. 1014 but the building
technique, as far as it may be appreciated from surface survey, appeared largely coarser than K-1, making substantial use of medium-small and small stones of irregular shape.
No evidence of a southern wall delimiting the potential courtyard, in contrast, was ever recognised (Duru 2013: 82).

### 2.3 THE POTTERY

In the course of the 2006 Turco-Italian excavations in the Area K-1, 67 diagnostic potsherds were collected. ${ }^{29}$ Of these, 15 have been selected as indicators for detailed analysis. ${ }^{30}$
Analysed data have been modelled in statistical distributions, but the value of the results appears largely affected by the meagreness of the sample.

All the ceramic samples derive from fills and collapse layers: the largest part of the inventory resulted from F. 1327 ( $80 \%$ of K-1 diagnostic inventory) and belongs to Phase 1. The remaining $20 \%$ of the ceramic inventory, instead, derives from F.1331, and belongs to the phase 2 (Table and Diagram 2.1). Although phase 1 potsherds may not be related to a primary context, their presumable connection with the last phase of use of the paved floor L. 1328 made them all the same to some extent valuable either in terms of chronology, culture, and function. The same holds true for the inventory of phase 2.
The largest part of the diagnostic ceramic inventory is composed of rim-sherds, which comprise up to 30 samples (ca. $45 \%$ of the inventory of diagnostic potsherds). Additional samples belong to potsherds including rim and handle ( 5 samples; $7.46 \%$ ) or, rarely, only handle ( 2 samples; ca. $3 \%$ ). The fragments of bottoms amount to only 3 samples, accounting for $4.48 \%$ of K-1 ceramic inventory. Body-sherds, although most of them derive specifically from F.1331, also represent a relatively significant component of the corpus, accounting for $40.30 \%$ of the assemblage (Table 2.2; Diagram 2.2).

With the exception of a single kitchen ware rim-sherd that appears to be handmade (F.1327.b.227-4), all the vessels are wheel-made.

[^14]Concerning general functional classification, the largest part of the K-1 inventory might be ascribed to the simple ware ceramic horizon (82.09\%); only a minority of potsherds might be sorted into kitchen ware (13.43\%), while most sporadic was the class of storage ware ( $4.48 \%$ ) (Table 2.3 and Diagram 2.4).

Proper fine ware has not been recovered from K-1, thus suggesting that activities with high display and official implications were not substantially performed in the excavated sector, or that such activities, in the specific range of time when the area was settled, did not involve the use of specialised assemblage. Cooking and storage activities, instead, might have been sparsely performed.

The kitchen ware is rather homogeneously distributed, but a slightly higher incidence is registered in F. 1331 (phase 2) ( $55.56 \%$ of K-1 inventory, Table 2.4 and Diagram 2.6); the major concentration of storage ware is from F. 1327 (phase 1), but considering the low incidence of the cluster, its distribution may not be considered substantial. The simple ware is also rather homogeneously distributed, but a slightly higher incidence is registered in F. 1327 (54.55\%).

Concerning the range of attested morphologies, the incidence of each shape has been calculated relative to the total number of potsherds where a general shape of reference has been detected, coming to 64 diagnostic samples (Table 2.5; Diagram 2.7). Their distribution in the two stratigraphic units is rather homogeneous (Diagram 2.8).

With the exception of potsherds generically attributed to open, closed, intermediate and uncertain morphologies, sorted in the cluster of 'other' shapes, the largest part of K-1 inventory of morphologically detectable potsherds is composed by fragments of jars, accounting for $28.13 \%$ of the K-1 inventory. A high incidence is also registered by bowls ( $17.19 \%$ ), while only sparse are jugs ( $4.69 \%$ ) and small jars (1.56\%) (Diagram 2.7).

The distribution pattern of morphological categories in the two fillings appears largely irregular. The largest part of jars and jugs derives from F.1327, while only a minority derives from F.1331. Bowls and small jars, instead, derive entirely from F. 1327 (Diagram 2.10).

Morphologically classified base-sherds amount to only 3 samples, all of them deriving from F.1327: 2 are flat bases and 1 is a ring-base (Table 2.7 and Diagram 2.11).

The largest part of the K-1 ceramic inventory is composed by undecorated vessels ( $97 \%$ ), but two decorated potsherds have also been recovered. All of them derive from F. 1327 and account for ca. $3 \%$ of the K-1 diagnostic inventory. One is a painted sample, and one is an incised sample.

|  | Selected Potsherds |  | Unselected Potsherds |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| F. 1327 | 12 | $80.00 \%$ | 24 | $46.15 \%$ | 36 | $53.73 \%$ |
| F.1331 | 3 | $20.00 \%$ | 28 | $53.85 \%$ | 31 | $46.27 \%$ |
| Total | 15 | $100 \%$ | $\mathbf{5 2}$ | $100 \%$ | $\mathbf{6 7}$ | $100 \%$ |

Table 2.1 - Area K-1: Distribution of diagnostic potsherds by stratigraphic unit.

|  | F.1327 |  | F.1331 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| Kitchen Ware | 4 | $11.11 \%$ | 5 | $16.13 \%$ | 9 | $13.43 \%$ |
| Simple Ware | 30 | $83.33 \%$ | 25 | $80.65 \%$ | 55 | $82.09 \%$ |
| Storage Ware | 2 | $5.56 \%$ | 1 | $3.23 \%$ | 3 | $4.48 \%$ |
| Total | 36 | $100 \%$ | 31 | $100 \%$ | $\mathbf{6 7}$ | $100 \%$ |

Table 2.2 - Area K-1: Potsherds state of preservation. Incidence of different potsherd categories for stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F.1327 |  | F.1331 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| Bottom | 3 | $8.33 \%$ |  | $0.00 \%$ | 3 | $4.48 \%$ |
| Rim | 26 | $72.22 \%$ | 4 | $12.90 \%$ | 30 | $44.78 \%$ |
| Rim+ <br> handle | 3 | $8.33 \%$ | 2 | $6.45 \%$ | 5 | $7.46 \%$ |
| Handle | 2 | $5.56 \%$ |  | $0.00 \%$ | 2 | $2.99 \%$ |
| Wall | 2 | $5.56 \%$ | 25 | $80.65 \%$ | 27 | $40.30 \%$ |
| Total | $\mathbf{3 6}$ | $\mathbf{1 0 0} \%$ | $\mathbf{3 1}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{6 7}$ | $\mathbf{1 0 0 \%}$ |

Table 2.3 - Area K-1: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | Kitchen Ware |  | Simple Ware |  | Storage Ware |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| F.1327 | 4 | $44.44 \%$ | 30 | $54.55 \%$ | 2 | $66.67 \%$ |
| F.1331 | 5 | $55.56 \%$ | 25 | $45.45 \%$ | 1 | $33.33 \%$ |
| Total | $\mathbf{9}$ | $100 \%$ | 55 | $100 \%$ | $\mathbf{3}$ | $100 \%$ |

Table 2.4 - Area K-1: Functional classes. Distribution of functional classes by stratigraphic unit.

|  | F. 1327 |  | F. 1331 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | \% | n. | \% | n. | \% |
| Bowl | 11 | 33.33\% |  |  | 11 | 17.19\% |
| Jar | 15 | 45.45\% | 3 | 9.68\% | 18 | 28.13\% |
| Small jar | 1 | 3.03\% |  |  | 1 | 1.56\% |
| Jug | 2 | 6.06\% | 1 | 3.23\% | 3 | 4.69\% |
| Other | 4 | 12.12\% | 27 | 87.10\% | 31 | 48.44\% |
| Total | 33 | 100\% | 31 | 100\% | 64 | 100\% |

Table 2.5 - Area K-1: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  | Bowls |  | Jars |  | Small jars |  | Jugs |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| F. 1327 | 11 | $100.00 \%$ | 15 | $83.33 \%$ | 1 | $100.00 \%$ | 2 | $66.67 \%$ | 4 | $12.90 \%$ | 33 | $51.56 \%$ |
| F.1331 |  |  | 3 | $16.67 \%$ |  |  | 1 | $33.33 \%$ | 27 | $87.10 \%$ | 31 | $48.44 \%$ |
| Total | 11 | $\mathbf{1 0 0} \%$ | 18 | $100 \%$ | 1 | $\mathbf{1 0 0} \%$ | $\mathbf{3}$ | $100 \%$ | $\mathbf{3 1}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{6 4}$ | $\mathbf{1 0 0 \%}$ |

Table 2.6 - Area K-1: Morphology. Distribution by stratigraphic unit of morphological categories (Bowls; Jars; Small jars; Jugs; Other) and of potsherds with classified shapes (Total).

|  | F.1327 |  | F.1331 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| Base-flat | 2 | $66.67 \%$ |  |  | 2 | $66.67 \%$ |
| Base-ring | 1 | $33.33 \%$ |  |  | 1 | $33.33 \%$ |
| Tot | 3 | $100 \%$ |  |  | 3 | $100 \%$ |

Table 2.7 - Area K-1: Bottoms morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified base-sherds.

|  | Base-flat |  | Base-ring |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| F.1327 | 2 | $66.67 \%$ | 1 | $33.33 \%$ | 3 | $100.00 \%$ |
| F.1331 |  |  |  |  |  |  |
| Total | $\mathbf{2}$ | $\mathbf{6 6 . 6 7 \%}$ | $\mathbf{1}$ | $\mathbf{3 3 . 3 3 \%}$ | $\mathbf{3}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

Table 2.8 - Area K-1: Bottoms morphology. Distribution by stratigraphic unit of bottoms typologies (flat; ring) and of potsherds with classified bottom (Total).

| Decoration Type | F.1327 |  | F.1331 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Incised | 1 | $2.78 \%$ |  |  | 1 | $1.49 \%$ |
| Painted (Reddish Paint) | 1 | $2.78 \%$ |  |  | 1 | $1.49 \%$ |
| Undecorated | 34 | $94.44 \%$ | 31 | $100 \%$ | 65 | $97.01 \%$ |
| Total | 36 | $100 \%$ | $\mathbf{3 1}$ | $100 \%$ | 67 | $100 \%$ |

Table 2.9 - Area K-1: Decoration. Distribution of decorated potsherds by stratigraphic unit.

### 2.3.1 The ceramic inventory of phase 1 (LB I)

F. 1327 - Buckets 226-228
F. 1327 is an accumulation of brown, compacted soil brought to light in the western portion of the excavation trench covered by the superficial hummus and covering the stone pavement L.1328. To the east, it was cut by the pit P.1329.
The ceramic inventory includes 36 diagnostic potsherds (ca. $54 \%$ of K-1 ceramic inventory), of which 3 are base-sherds; 26 are rim-sherds; 3 are fragments comprehensive of rim and handle; 2 are fragments of handle; and 2 are decorated body-sherds (Table 2.2, Diagram 2.3).

From the functional point of view, most of the ceramic inventory belongs to simple ware, which accounts for ca. $83 \%$ of the F. 1327 ceramic inventory. A smaller incidence is registered for the kitchen ware (ca. 13\%), while the storage ware is only sporadic (ca. 4\%) (Table 2.3 and Diagram 2.5).

Relating the morphological range, jars and bowls represent the main incidence in the F. 1327 ceramic inventory, respectively accounting for ca. $45 \%$ and $33 \%$ of the assemblage. Jugs ( 2 samples; 6\% of F. 1327 ceramic inventory) and small jars ( 1 sample; $3 \%$ of F. 1327 ceramic inventory) are sporadic (Table 2.5 and Diagram 2.8).
Twelve samples have been selected as indicators (Fig. 2.3; Pls. XCVIII, XCIX: 1).
The inventory of simple ware open shapes includes medium-small bowls (Fig. 2.3: 1-3, 5), probably to be related to serving and consuming activities; large bowls (Fig. 2.3: 6-7), probably related to serving or consuming activities in a communitarian context; and large-mouthed, deep vessels, poorly preserved, between large, deep bowls and kraters in form (Fig. 2.3: 8-10), probably to be related to mixing and shortterm storage.

Medium-small bowls mainly belong to carinated morphologies, characterised by straight upper sides and everted rim. The small carinated bowl Fig. 2.3: 1, with convex upper sides, finds comparison with different typologies attested at Mardikh IIIB2 destruction layers (see esp. Pinnock 2005: pl. 18: 5, type 1283, but see also pl. 16: 6, type 1272; pl. 15: 17, type 1250 and pl. 9: 7, type 1210) but something similar may also be traced back in the MB I assemblages of the Northern Levant. ${ }^{31}$ Further general morphological similarities may be recognised in other MB II morphologies. ${ }^{32}$ Some items that could possibly be ascribed to the same morphological range may be identified in later contexts, either for example from Qatna (Sieversten 2007: fig. 5: MSH01G-q0558-9, phase G8, MB III) ${ }^{33}$ or from Central Anatolian sites (see for example MüllerKarpe 1988: pl. 38: type S10a: 1-3, Boğazköy Upper City).
The poor state of preservation of the small bowl Fig. 2.3: 2, characterised by rolled rim, does not allow for a sound reconstruction of the precise morphology. Something

[^15]similar, however, may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 22: 9, type 1314).

The carinated bowl Fig. 2.3: 3, characterised by straight, corrugated upper sides and an outside thickened rim, finds also some parallel in morphologies from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 16: 6, type 1272, but see also pl. 15: 15-17, type 1250) maybe as an evolution of typical earlier typologies. ${ }^{34}$ More close comparisons, however, seem to be related to slightly later assemblages, like those attributed to LB I in the Mardikh sequence and approximately dated, according to A. Colantoni, to the $2^{\text {nd }}$ half of $16^{\text {th }} /$ beginning of $15^{\text {th }}$ cent. BCE (Colantoni 2014: pl. 1: o, Mardikh). ${ }^{35}$

Of the medium-size bowl Fig. 2.3: 5, in simple ware, only the rim and a small section of the upper wall are preserved. Characterised by straight, open sides and inside thickened rim with inside pointed profile and flattened upper side, the morphology is extremely similar to that of the kitchen ware bowl Fig. 2.3: 4, characterised by thicker walls and a slightly outside-bevelled rim profile.
Morphological parallels may be found in Alalakh level 9 (Heinz 1992: Cat. A, pl. 33: 7; pl. 35: 20) but better comparisons are offered by later contexts, like Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 1: 23, type 1111; pl. 4: 14, type 1121). ${ }^{36}$ Something similar is further attested at Qatna in contexts attributed to MB IIB-III in the local sequence (Iamoni 2012: pl. 2, J11-10, type B4 - considered late MBA ${ }^{37}$ ), probably evolving also in later LBA assemblages (Iamoni 2012: pl. 35, LBA; pl. 68: 1, LB IIA). ${ }^{38}$ In Central Anatolia, the shape recalls some type S 5 variants whose general morphology, attested along the entire sequence of Kuşakl1/Sarissa Westhang (2 $2^{\text {nd }}$ half of $16^{\text {th }}-$ $13^{\text {th }}$ cent. BCE) - which represents one of the better stratified sequences in the region - remains particularly frequent in $15^{\text {th }}-14^{\text {th }}$ cent. BCE layers (Mielke 2006: pl. 54: 6).

[^16]A similar morphological range of comparison may be postulated for the bowl Fig. 2.3: 4. ${ }^{39}$

The large bowl Fig. 2.3: 6, of which only the hammer-shaped rim is preserved, belongs to a type already seen, in a more curved variant, in the K-3 inventory of phase 3 (Fig. 4.4: 3). ${ }^{40}$ A closer comparison for the K-1 flattened variant, however, might be identified in Mardikh IIIB2 destruction layers type 2243 (Pinnock 2005: pl. 77: 2).
The large, simple ware bowl Fig. 2.3: 7 (diameter: 36 cm ), is characterised by relatively thin walls, and curved sides: its peculiarity, however is represented by a slight bent innserside of the very upper section of the walls, corresponding to an inturned rim. Inturned rim bowls, although in different variants, found large comparisons in the Middle and Late Bronze Age Northern Levant and nearby areas. 41 Similar bowl morphologies - with thinner walls - are found in Tilmen Lower Town in area P phase 3a (Fig. 5.9: 1). A close comparison for K-1 morphology, however, may be observed in contexts attributed to LB I in Mardikh local sequence, approximately dated to the $2^{\text {nd }}$ half of $16^{\text {th }}$-beginning of $15^{\text {th }}$ cent. BCE (Colantoni 2014: pl. 1: d): here the type is considered an evolution from MB II variants. Further parallels may be observed in the Euphrates area in Hadidi H XIII (Dornemann 1981: fig. 13: 24), attributed to the $2^{\text {nd }}$ half/late $16^{\text {th }}$ cent. BCE, and in Lidar Höyük phase 5 (Kaschau 1999: pl. 245: 7; pl. 265: 7; pl. 171: 11), attributed to MB IIIB in the local sequence and tentatively dated to the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE. The type is quite widespdead in LBA North Central Anatolia: in Hittite sites, in fact, it founds comparisons in some S 12 variants (Mielke 2006: pl. 58: 39-40, type S12k, ${ }^{41}$ type S12l), whose general morphology, attested along the entire sequence of Kuşakl1/Sarissa Westhang ( $2^{\text {nd }}$ half $16^{\text {th }}-13^{\text {th }}$ cent. $B C E)$, presented a main incidence between the $16^{\text {th }}$ and $14^{\text {th }}$ cent. BCE. To the south, in Cilicia, similar bowls are recorded in Tarsus level A.7-8 (Slane 1987: pl. 118: 514) attributed to ca. $15^{\text {th }}$ cent. BCE.

[^17]The deep vessel Fig. 2.3: 8, with open sides and grooved rim, belongs to a general morpholgy widespread in Tilmen Lower Town. Similar rim morphologies, in fact, are attested in the assemblage of area K-3 (Fig. 4.9: 1, Fig. 4.6: 2, in painted ware), area P (phase 1, Fig. 5.6: 2; phase 3a, Fig. 5.12: 4; phase 3b, Fig. 5.14: 6, Fig. 5.13: 2, and phase 4, Fig. 5.18: 1, 2-3, 9-10), and P2 (phase 2, Fig. 6.3: 2). Kraters or deep bowls with grooved rim are largely attested in the MBA Northern Levant and Euphrates area, continuing, in some variants, into the LBA. ${ }^{42}$ Specific comparisons for the K-1 variant may be recongised in Mardikh IIIB2 destruction layers, type 1341 (Pinnock 2005: type 1341, pl. 28: 4, pl. 29: 1, 2, 4) and type 1315 (Pinnock 2005: pl. 23: 3).

Concerning the rim typology in Fig. 2.3: 9, its poor state of preservation does not allow for a sound recontruction of the general morphology, but general comparisons, with the exception of some samples from Mardikh IIIB2 destruction layers (Pinnock

[^18]2005: pl. 90: 4, type 2531), seem mainly to be identified with LBA samples. ${ }^{43}$ Presumably similar shapes may be observed also in the Hittite ceramic sequence. ${ }^{44}$

A similar chronological range would seem to be postulated for the simple ware, large-mouthed vessel Fig. 2.3: 10, characterised by straight shoulders, a short, everted neck, and outside thickend, hooked rim. ${ }^{45}$

Among the inventory of closed shape, a small fragment belonging to a short-necked jar with everted rim is attested (Fig. 2.3: 11). Something similar is found in the K-3 phase 3 ceramic inventory (Fig. 4.5: 3, F.824). Closer comparison for the K-1 sample, thicker and with slighlty grooved rim, can be observed in the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 89: 3, type 2520). ${ }^{46}$

A pre-firing pot-mark is also attested, located below the handle of a vessel of which only a fragment of wall and part of the handle are preserved: Fig. 2.3: 12. Similar potmarks are largely attested in the Middle and especially Late Bronze Age Northern Levant and Antolian sites. Their meaning is not always clear and, in many cases, the fragmentary state of preservation does not allow for a sound reading. ${ }^{47}$ The sample from K-1 presents a central, vertical line, benting on the left side at the top, and two intersecting diagonal lines, the three of them presumably continuing beyond the limit of the preserved sherd. Presenting different similarities with Anatolian production, the mark may correspond to the upper part of the hierogliph for 'king' (Mielke 2006: Abb. 145: 1-6, 9; Glatz 2012: fig. 2: type 10), ${ }^{48}$ or to the hierogliph for 'luck'/health' (Glatz 2012: 8). Further comparisons may be observed with a sign type corresponding to the hierogliph for 'man' (Glatz 2012; sign type 4). The disposition below the handle is largely typical (Mielke 2006: pl. 84).

[^19]
### 2.3.2 The ceramic inventory of phase 2 (Roman Period) (by Raffaella Pappalardo)

F. 1331 - Bucket 229
F. 1331 is a filling of brown, compact soil covered by the superficial layer of hummus and leaning against the wall W. 1330 and the large stone collapse F.1333.

The ceramic inventory includes 31 diagnostic potsherds, of which four belong to rim-sherds, two to fragments comprehensive of rim and handle, and 25 to bodysherds (Table 2.2, Diagram 2.3). A fragment of roof tile - a flat tile (tegula) with rounded profile flanges - was also recovered from the same bucket.

From the functional point of view, the greatest majority of the ceramic inventory belongs to the simple ware, which accounts for ca. $80 \%$ of F. 1331 ceramic inventory. A minor incidence is registered for the kitchen ware (ca. 16\% of F. 1331 ceramic inventory), while only a single fragment of storage ware, accounting for ca. 3\% of F. 1331 ceramic inventory, is attested (Table 2.3 and Diagram 2.5).

Concerning the morphological range, with the exception of the large incidence of body-sherds only generically classified ( $87 \%$ of F. 1331 ceramic inventory), two samples of jar ( $9.68 \%$ ) and one fragment of a jug (ca. 3\% of F. 1331 ceramic inventory) are attested (Table 2.5 and Diagram 2.14).

Three samples were selected as indicators (Fig. 2.4; Pl. XCIX: 2). The fragment Fig. 2.4: 1 is a closed rim-sherd with rounded thickened rim and high cylindrical neck. Handles are not preserved but the rim most likely belong to a storage or table amphora with neck handles; the narrow mouth might suggest that the vessel was used for liquid storage or pouring. The vessel Fig. 2.4: 2 is a jar with slightly grooved rim: as well as in the previous sample, handles are not preserved. The vessel Fig. 2.4: 3 is very poorly preserved, showing a squared slightly thickened rim almost completely covered by a grooved handle.

Despite the high fragmentation incidence of this assemblage, some notes can be made.
Jug Fig. 2.4: 1 is very close in shape to one type in Jebel Khalid (Jackson, Tidmarsh 2011: fig. 58: 13), dated back to the $2^{\text {nd }}$ cent. and not later than early $1^{\text {st }}$ cent. BCE.

A type close to Fig. 2.4: 2 was found in a site on the left bank of Euphrates River not far from the Syrian-Turkish border during the survey of the 'Land of Carchemish Project' (LCP SITE 18; Newson 2014: fig. 2: 18A-02). More comparisons for this type can be made with vessel from Jebel Khalid (Jackson, Tidmarsh 2011: fig. 60: 1) and,
further east, in the assemblage of the site 4 B in the 'Upper Khabur Survey' area (Dorna Metzger 1996: n.18, p. 374). The chronological frame of the jar can be ascribed to the $2^{\text {nd }}$ cent. BCE. as well.
Even if the F. 1331 ceramic repertoire is very modest in quantity, it seems to be well connected to a sort of 'Euphrates valley vessel's koine' as the comparisons clearly show.

### 2.4 SMALL FINDS (by Vittoria Cardini)

Excavations in the Area K-1-K- 6 brought to light two objects.

### 2.4.1 Figurine

The fragment of a head of a female clay figurine - TH.05.K1.108. ${ }^{49}$ This figurine represent a valuable chronological indicator and it was one of the most typical classes of Middle Bronze Age II material culture (Marchetti 2000: 839-867; 2007b: 247-283). Several examples of this class of material are found in most of the Northern Levant sites (Marchetti 2007b: 247-283).

### 2.4.2 Sculpture

A full-relief sculpted lion of grained basalt - TH.06.K6.6. The lion appears very damaged: it is possible to identify the oval and protruding muzzle surrounded by a sort of mane, the squared body with an incomplete backside, and the hints of broken paws. This sculpture was probably positioned guarding the gates of the outside fortification walls (Duru 2003: pls. 20, 45), specifically at the K-6 door, north of wall W.1001. It was probably part of a pair of lions placed on the sides of gate K-6 and was repositioned by Turkish archaeologists (by Alkım in the 1960s). A second lion was found in the Karasu river and has not been repositioned. ${ }^{50}$ Lion statues were apotropaic protectors of gates and entrances characteristic of Anatolian sacred architecture (Yener 2005: 111) especially against potential and local enemies (Strawn 2005: 217-28). Aside from the well-known lions at the Lion Gate at Hattusa dating to the Late Bronze Age, fragments of lion sculptures were found in Nişantepe and recumbent lions at Temple

[^20]2 (Neve 1993: figs. 175, 112, 116). The lion sculptures of Tell Atchana/Alalakh, coming from Levels III or II (Yener 2005: 110-111), present angular and cubic stylisation, which differs from the Hattusa examples. Woolley (Woolley 1955: 82) noted a similarity to the geometric abstraction of the ram's head architectural sculpture found in the Level IV palace, also echoed by Mellink (1957: 398), who attributes it to 'Syrian stylization.' This tradition in inland Syria can be observed in the votive statue of a dignitary from Mardikh Temple P2 (Matthiae 1990: fig. 4).

### 2.4.3 Catalogue of small finds

TH.05.K1.108, Figurine (Pl. CXVI: 1) TH.06.K6.6, Sculpture (Pls. IX: 1-2,

Material: clay
Dimensions: h. 3 cm; w. 2.5 cm; th. 2.2 cm

SU: surface
Bucket: -
Preservation: fragmentary

CXVI: 2-4)
Material: stone
Dimensions: h. 90 cm; w. 54 cm; 1. 90 cm
SU: -
Bucket: -
Preservation: nearly complete, severely eroded

### 2.5 SYNTHESIS

### 2.5.1 Materials and chronology

The materials brought to light in the course of 2006 Turco-Italian excavations in the area K-1 relate to two different phases: phase 1 and phase 2 . The small finds, a fragment of a clay figurine (TH.05.K1.108) and the remains of the apotropaic lion statue originally guarding K-6 gate (TH.06.K6.6), derive from the surface.
Considering the stratigraphy, the ceramic inventory from F.1327, which corresponds to the corpus of K-1 phase 1, may be considered in general terms related to the last phase of use of the paved floor L.1328, probably connecting the two gates K-1 and K-6. The secondary context and the location close to the surface, however, substantially affect its reliability.
F.1331, in turn, may be considered indicative of $\mathrm{K}-1$ phase 2 but, as for phase 1 inventory, its reliability is affected by its location close to the surface.

## Chronology of K-1 phase 1

Relating to the K-1 inventory of phase 1 , the range of ceramic comparisons are concentrated between the very late stages of the MBA and the early stages of LBA. As already observed ( $\$ 1.4$ ), the marked continuity in the ceramic production recognised in the Northern Levant and nearby areas along this span of time, and the nature of reference contexts and material sequences, affects the degree of reliability of ceramic comparisons, but a few elements appear nonetheless valuable. In this respect, the comparison with the ceramic of the area $\mathrm{K}-3$, which is related to a more conspicuous sequence and is provided with 14 C references, appears to be significant. A few $\mathrm{K}-1$ ceramic typologies find a rather precise parallel in the K-3 ceramic inventory from phase 2 or early 3 ( $\$$ 4.4.1-4.4.2), but the majority appear to diverge substantially. Although it seems important to bear in mind that the small size of the K-1 sample may have affected the comparison, the explanation of this evidence may rely on a difference in terms of functional context, or in a different chronological range. Concerning context, in fact, in addition to the different function of the gate, a major distinction between K-3 and K-1 is that K-3 materials derive from the gate inner chambers, while K-1 inventory was scattered on an open area, probably a courtyard, in front of the gate. A slight difference in the chronological range, however, appears likely: a few K-1 morphologies, in fact, accord more closely to typical LBA assemblages, thus suggesting the possibility of a slightly later range of dating of the K-1 assemblage compared to K-3 phase 2 and early 3 , maybe to be attributed to the $16^{\text {th }}$ cent. BCE or to $16^{\text {th }}$ and early $15^{\text {th }}$ cent. BCE. Of course, in the absence of a perfectly stratified ceramic sequence of reference, the secondary nature of the context and its closeness to the surface, considered along with the possibility that the area may have been in use over a relatively long span of time, do not allow us to determine whether the phase 1 inventory should be considered the homogeneous product of a relatively short period of use, or better the evidence of a relatively long span of time whose remains were first displaced and subsequently concentrated in the K-1 sector after post-depositional events. The presence of probable LB I typologies, however, would imply an attribution of the end of K-1 phase 1 to the LBA.

Chronology of K-1 phase 2
Despite the small size of the ceramic sample, the typical ceramic morphologies, associated to one fragments of glass and one fragment of tile, clearly supported the attribution of K-1 phase 2 to the Roman period.

### 2.5.2 Architecture and layout

The K-1-K-6 gate system constitutes the Tilmen main city gate, oriented toward the south of the Islahiye valley and the Amuq depression.

Turco-Italian investigations in the area included an accurate topographic survey of the exposed architecture of the gate buildings either excavated and restored - as in the case of K-6 - by the Turkish team and/or still visible on the surface. The area between the gates instead has been the object of a stratigraphic investigation.

Due to the poor state of preservation of the exposed architecture and to the relatively limited evidence gathered from well stratified contexts, a few aspects of the layout and dating of the gate complex remain to some extent uncertain.

In the middle of the courtyard between the gates, a building dating back to the Roman period probably affected the Bronze Age remains ( $\$ 2.2 .1$, phase 2 ).

As already assumed at the time of first investigation of the area, the main phase of use of the gate is presumably to be attributed to the MBA, the peak of the city's flourishing (Duru 2013). Different pieces of evidence suggest the possibility that the complex experienced architectural evolutions and modifications over time. In particular, the presence of different series of lined-up stones in the lateral chambers of the gate K-1 seem to be related to different architectural phases and different phases of use. After all, the continuity of use over a long span of time is normal for city gates as well as fortifications (Mielke 2011: 83; Herzog 1986: table 7). A precise reconstruction of the entire sequence is impossible in the absence of extensive excavations, but a few elements may be pointed out. The Turkish archaeologists already hypothesised the outer gate K-6 to be a later addition to the original structure K-1 (Duru 2013: 81). The new investigations have not produced conclusive evidence in this respect, but the hypothesis is still valid. The last use of the paved floor that connected the two gates (phase 1) is probably to be attributed to the $16^{\text {th }}$ cent. BCE - if not to the beginning of the $15^{\text {th }}$. Potential earlier phases of use, however, seem likely. In fact, the arrangement of the floor exposed in the K-1 inner courtyard L. 1048 is probably to be attributed to the main MBA architectural phase, and a partial continuity with the external paved floor L. 1328 appears to be granted by the path of the drain DThe presence of a drain, attested also in $\mathrm{K}-2$ and $\mathrm{K}-3$, is largely common below the floors of city gates, ${ }^{51}$ and drainage is in fact a main concern in the architectural planning of

51 See for example Tell el-Far’ah North (Herzog 1997: fig. 4.19); Ashkelon XXII, Phase 12 (Voss 2002: fig. 4);
fortifications (Burke 2008: 53; 71; Hemker 1993). Its bend southward in front of the K-1 outer access seems worth noting, since it may have been related to an original path to approach the gate. The lined-up disposition of the two gates $\mathrm{K}-1$ and $\mathrm{K}-6$, together with the recovered evidence of stone paving, although sparse, suggest a direct access path, but a bent path, well attested in city gates since the EBA, and mainly related to military reasons (Naumann 1971: 274-275), may not be excluded in front of K-1, especially if connected to a phase in which K-6 was not yet in use. A comparable turn in approaching a city gate finds a significant comparison, for example, in MBA Tell Mardikh. ${ }^{52}$

K-1 is shaped as a chamber gate, most probably roofed, as is usual in city gates (Mielke 2011), between two flanking rooms, corresponding in all likelihood to towers. Presumably higher with respect to the courtyard covering, they granted additional military power through elevation, increasing the force of missiles projected from a higher level and enhancing the defenders' view of their field of fire (Keeley et al. 2007: 68). Only a limited advantage from protrusion, enhancing the defenders' watch of their field of fire, was bestowed by the slightly jutted disposition of K-1.
In contrast a high defensive potential was offered by the gate K-6, presumably completely projected from the defence line of the city wall. The space between the two gates K-1 and K-6, unless we hypothesise the presence of a further, minor fortification wall lined up to K-6, must be surmised to have been shaped as walled. ${ }^{53}$ The configuration of two gates connected by a walled courtyard recalls the later, Iron Age example from the Karkemish inner city West Gate (Woolley 1921: pl. 10; Herzog 1986: fig. 105), characterised by an outer access flanked by towers, or, to some extent, the accesses of the Zincirli Höyük outer town, always doubled in consequence of the

[^21]double wall encircling the city (Koldewey 1898: pl. X-XI). ${ }^{54}$ The absence of clear Iron Age occupation layers on the site, however, suggests the possibility that the K-1-K-6 layout may have constituted a sort of antecedent.

The perimetral walls of K-1 towers range from 1.70 to ca. 1.90 m in thickness. However, the eastern walls, which face the outside of the gate, are larger, between ca. 2.30 and 2.45 m . The massiveness of the outer wall could have been related to the necessity to strengthen the outer barrier, which is the first that would be encountered by potential assailants. This aspect might comply with the hypothesis that K-1 may have been conceived first as a single gate, directly facing the outer side of the city.

Two pairs of piers narrow the passages and shape the K-1 inner courtyard. The façades of the building are plain on the outer, eastern side, while presenting an 'insetoutset' layout on the western, inner side, where the access is framed by the two protruding towers. In K-6, instead, both the outer and inner façades are plain.

Something similar to K-1 layout may be recognised at the Shechem East Gate (SLVLC MB IIC - NL MB IIB) (Wright 1984: fig. 3; Herzog 1986: fig. 45; 1997: fig. 4.14 [after Toombs 1992: Figs 1, 4]), which is conformed as a chamber gate equipped with flanking towers, slightly projected from the city wall. However, unlike the Tilmen Höyük K-1, where the outer access is plain, the slightly retracted disposition of the pillars of Shechem East Gate outer access, instead, create the sort of vestibule similar to that of K-1 inner access.

Plain layouts comparable to the Tilmen K-1 outer façade and K-6 appear markedly rarer if compared to the vestibule layout but, nevertheless, they are postulated, for example, for LBA Alişar Höyük south terrace gate (Mielke 2018: fig. 6.5: i).

Concerning the inner plan of the towers, the layout with two elongated rooms (L. 1030 and L.1029) hypothesised for the southern tower of K-1 would find a further comparison in the gate of Alişar southern terrace. ${ }^{55}$ Similar elongated rooms are usually staircases, but in the specific case of $\mathrm{K}-1$ it is not clear how they could have been accessed. Moreover, the first investigations in the area gathered no evidence of the presence of a staircase

[^22](Duru 2013: 81), so, in this case, it may be hypothesised the two elongated rooms night have been filled like in the Kastenmauer architecture ( $\$ 8.4$ ). However, the presence in the southern tower of two elongated rooms is not certain. In fact, a second possibility is that the tower hosted a large room accessed from the inner chamber. This second, hypothetical layout would be comparable, to some extent, with that of the southern tower of the already mentioned Shechem East Gate (Wright 1984: fig. 3). The two rooms of K-1 northern tower, instead, did not seem to be accessible from the floor level, so they should have been accessed from the roof, or be filled like Kastenmauers. Both systems appear quite common in Anatolian traditions (Mielke 2018: 73).
Aspects typical of the so-called Kastenmauer architecture, as reported after Turkish final reports, are almost certainly to be postulated for K-6 flanking towers. In this kind of military architecture, in fact, the masonries were completely filled with soil or scree, thus producing a massive structure highly effective against battering rams and also economical (\$8.4).
Access to the upper floors and ramparts as well as to possible wall-walks, essential in military actions, was presumably from the parapets. Concerning the upper portions of the masonries, if we bear in mind the comparison with similar Anatolian samples (Mielke 2018: 69), they may have been built in stone until the entire first floor; the mudbrick collapses found during first investigations, however, further testify to the use of mudbricks and, presumably, timber.
Concerning the passages, the double door opening toward the courtyard inner side like those attested in the K-1 outer access find wide comparisons in Middle and Late Bronze Age Northern Levant and Anatolian city gates. No remains of MBA doors have ever been recovered so far, but they were undoubtedly built of wood with bronze fittings (Burke 2008: 72). Where clearly documented by the disposition of door-sockets, either Middle and Late Bronze Age passages through city gates were usually equipped with double doors, usually opening toward the inner side of the chamber (Mielke 2011). A second door located on the inner passage toward the inner side of the city is not documented in $\mathrm{K}-1$, and this would seem to confirm an aspect already observed by other scholars: in most of Anatolian and Near Eastern single chamber gates, only a single door is ascertained, so that, unlike what is frequently assumed, the inner chambers did not seem to have been used as self-contained forts. ${ }^{56}$ The size of

56 See Milke 2018: 73, contra Naumann 1971: 279, and Herzog 1986: 62-66.
the openings is supposedly to be related to either functional aspects, connected to the degree of accessibility for people, animals and things, or cultural aspects, connected with concepts of visibility, monumentality and perception. Most of traffic through the Middle Bronze Age gates is probably to be considered pedestrian, but animal transit should had been common too (Burke 2008: 71). ${ }^{57}$ With regard to the kind of transit expected to cross the gate system, some question remains due to impossibility of ascertaining the size of some of the passages. The passages of gate $\mathrm{K}-1, \mathrm{ca} .2 .6 \mathrm{~m}$ large, may have easily allowed the crossing of chariots and carts: in fact, it is estimated that 2.5 m of width are suitable for their transit (Burke 2008: 71). More dubious is the situation of the gate K-6: in fact, if inner piers were present, the K-6 inner access - 2.33 $m$ large - would have been slightly smaller than necessary for chart transit.

[^23]

Fig. 2.1. Plan of area K-1-K-6, phase 1. General plan of the area including evidence detected by topographic survey and detail of excavated loci from phase 1.


Fig. 2.2. Plan of area $\mathrm{K}-1-\mathrm{K}-6$, phase 2, Roman period (the remains of phase 1 are in grey).

| N. | Year | Area | Locus <br> Type | Locus N. | Bucket N. |  | Class |  |  |  |  |  | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | K1 | F | 1327 | 228 | 1 | Simple <br> Ware | 10 | W | M | S | L | 5YR 7/6 | 5YR 7/6 | 5YR 6/3 |
| 2 | 2006 | K1 | F | 1327 | 227 | 3 | Simple Ware |  | W | M | S | M+ |  |  | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 5 / 8 \end{gathered}$ |
| 3 | 2006 | K1 | F | 1327 | 227 | 1 | Simple Ware |  | W | M | S | M + |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 4 | 2006 | K1 | F | 1327 | 227 | 4 | Kitchen Ware |  | H | M | M | M + | $\begin{gathered} 7.5 \mathrm{YR} \\ 4 / 2 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 3 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 3 / 2 \end{gathered}$ |
| 5 | 2006 | K1 | F | 1327 | 227 | 2 | Simple Ware |  | W | M | S | M | 5YR 6/6 | 5YR 6/6 | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 6 | 2006 | K1 | F | 1327 | 226 | 1 | Simple Ware | 31 | W | M | M | M+ | 5YR 5/8 | 5YR 5/8 | 5YR 5/1 |
| 7 | 2006 | K1 | F | 1327 | 228 | 2 | Simple <br> Ware | 36 | W | M | S | M- |  |  | 5YR 6/6 |
| 8 | 2006 | K1 | F | 1327 | 228 | 3 | Simple <br> Ware | 29 | W | M | S | M- | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 2 \end{gathered}$ |
| 9 | 2006 | K1 | F | 1327 | 226 | 2 | Simple <br> Ware | $35$ | W | M | M + | M |  |  | 5YR 6/6 |
| 10 | 2006 | K1 | F | 1327 | 228 | 4 | Simple <br> Ware | 40 | W | M | S | M |  |  | 5YR 6/6 |
| 11 | 2006 | K1 | F | 1327 | 227 | 5 | Storage <br> Ware |  | W | M | S | M |  |  | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 6 / 3 \end{gathered}$ |
| 12 | 2006 | K1 | F | 1327 | 226 | 3 | Simple <br> Ware |  | H | M | S | M- | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \\ \hline \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | 5YR 6/2 |

Fig. 2.3


Fig. 2.3. K-1, phase 1. Pottery assemblage of F.1327.

| N. | Year | Area | Locus Type | Locus <br> N. | Bucket N. | P.N. | Class |  |  |  | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | K1 | F | 1331 | 229 | 1 | Simple <br> Ware | 8 |  |  | M | M+ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 2 | 2006 | K1 | F | 1331 | 229 | 2 | Simple <br> Ware | 17 | W |  | M | M+ | 2.5YR <br> 6/6 | 2.5YR <br> 6/6 | 5YR 6/3 |
| 3 | 2006 | K1 | F | 1331 | 229 | 3 | Simple <br> Ware | 16 | H | M | M | M + | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | 5YR 6/3 |

Fig. 2.4

Area K-1 - K-6

$-1$ 3
=- =
Fig. 2.4. K-1, phase 2. Pottery assemblage of F.1331.

## Chapter 3

AREA K-2

First investigations in the area K-2 were conducted by the team of U.-B. Alkım during the exploration of the fortification system (Alkım 1960b; Alkım 1962c: 449; Alkım 1962d: 241; Alkım 1971a: 342; Alkım 1971b: 23; Alkım 1972: 40 and figs. 6-7; Alkım 1974a: 7; Duru 1987: fig. 3: 1, 3-4; Duru 2003: figs. 5-6, pl. 21:1, pl. 53; Duru 2013: 82, 108, pls. 30-31, pl. 62: 2-3). The schematic plans produced by the Turkish team (Duru 2003: fig. 5; Duru 2013: pl. 30) have been subsequently refined in 2000s by the Turco-Italian team, who undertook a new topographic survey of the building (Fig. 3.1; Pl. XCI: 2).
The gate is opened in the northern sector of the terrace wall, at its easternmost edge. The structure is located at the point of probable conjunction between the two main sectors of the lower town fortifications: the terrace wall and the northern sector of the outer wall of the höyük. According to the first sketched plan of the fortifications (Duru 1987: fig. 1), immediately NE of the gate, the outer wall turned abruptly to the south, forming a narrow niche. The structure, however, was severely damaged at the time of Turco-Italian investigation, and the layout of this key point of the fortification system was no longer detectable (Pl. I).
The gate corresponds to a small, self-contained building integrated into the terrace wall. In fact, the block may be closely compared to the single chamber bock typology of the terrace wall north. ${ }^{58}$ The eastern side of the wall was deteriorated in the 2000s, so it was not possible to register the exact sizes, but the structure has an approximately squared perimeter, with a side of ca. $6 \mathrm{~m} .{ }^{59}$ Like K-3 (at least in its oldest architectural

58 See § 7.4.
59 The building was preserved for 5.9 m on the $\mathrm{N}-\mathrm{S}$ axis, and for 5.5 m on the $\mathrm{E}-\mathrm{W}$ axis.
phase), it is shaped as a simple, single chamber gate or 'four-pier' gate. ${ }^{60}$ The inner chamber, also squared, is ca. 3 m . large. The passages, ca. 1.3 m on the outside and 1.2 m on the inner side, thus as in $\mathrm{K}-3$, are not located exactly on the middle point of the chamber, but slightly displaced toward its eastern side. The short passageways correspond to the length of the walls, ca. 1.4 m thick. The pillars, as usual in the buildings of the lower town fortifications, are built of well-dressed stones, with accurately smoothed surfaces and sharpened angles. Unlike many gateways of the lower town that present a characteristic bottleneck layout engendered by niches on the sides of the pillars, ${ }^{61}$ the passages of the gate K-2 have a simpler, plain profile. No evidence of the location of doors has been observed. Although it is frequently assumed that this kind of structure might be closed at both accesses, thus functioning as a proper fort, or tower, attested closures are always located on the inner side of the outer passageways, opening toward the inner side, while the inner passage is open. ${ }^{62}$ The size of the openings is considered to be related to either functional aspects, connected to the degree of accessibility for peoples, animals and things, or cultural aspects, connected with concepts of visibility, monumentality and perception. As well as in the case of $\mathrm{K}-3$, the size of the openings in $\mathrm{K}-2$, although slightly larger than in the western gate, did not allow for the transit of chariots, but a frequent use by people and small flocks may be hypothesised on the daily level. A possible perception of the gate in term of 'monumentality', more than to size, may be postulated to have been granted to some extent by the accuracy of the building technique and regularity of the ashlar's masonry.
The access followed a N-NE-S-SW line. It was not protected by integrated, flanking towers or jutting sectors, but the niche formed by the outer wall of the höyük to the NE may have offered some protection on the eastern side of the access. The location on the high slopes of the terrace ( +454 msl ), although not remarkably high on the modern surface of the valley in this area (see chapter 7), provided a favourable position with respect to potential assailants, and surely this offered some additional value to the defence of the passage. However, in order to guarantee at least an accept-

[^24]able protection, the presence of an upper storey or a battlement, accessible from the outside, is to be hypothesised.
As it stands, in fact, the gate does not seem to be equipped with a relevant defensive capacity.

No materials were associated to the structure, so it is not possible to specify a chronology or a sequence of use, but the consistency in building techniques, materials and layout, would suggest the gate to be mainly contemporary to the main sector of the terrace wall north. Some scant information however is worth noting. In fact, the first investigations in the area report the presence of a drain along the passage (Alkım 1971a: 342; Alkım 1972: 40), which is a typical element of city gates. Additionally, the recovery of a triangular shaped stone comparable to a keystone in the debris of the gate suggested the hypothesis that the northern gate could had been framed as an archway, but evidence for a final interpretation is lacking (Duru 2013: 82, and pl. 31: 4).


Fig. 3.1. Plan of gate K-2.

## Chapter 4

AREA K-3

First investigations in Area K-3 were conducted by the team of U.-B. Alkım while exploring the lower city fortification system. References to K-3 architectural remains were first made in the 1970 report (Alkım 1971a: 341-342; Alkım 1971b: 23; Alkım 1972: 40 and fig. 8) where they appeared together with notes on the other identified lower city gates: K-1-K-6 and K-2. Additional comments and the sketch plans were published later on by R. Duru (Duru 1987: 41 and fig. 3: 2; Duru 2003: 58, fig. 7, pl. 21: 2; Duru 2013: 79, 82-83 and pl. 32). The Turkish team cleared out the western sector of the gate system, corresponding to the passage through the western lower town defensive wall. In 2005, in order to clarify the whole access system related to gate K-3 and the connection with the lower town topography, the Turco-Italian team investigated the area to the east, bringing to light a central sector and an eastern sector (Marchetti 2007a: 358 and fig. 12; 2008c: 469). Altogether, the excavations in the area brought to light a sequence of three small rooms connected by a central passage on the east-west trajectory. An additional space was discovered north of the intermediate room. A restoration season took place in 2008, followed by the opening of the archaeological park of Tilmen Höyük (Marchetti et al. 2020).

In the present report the results of the Turco-Italian excavations will be presented in detail integrated with already published data from Turkish excavations (Figs. 4.1, 4.2; Pls. IV, XXV-XXVI).

### 4.1 THE SETTING

Area K-3 is located on the western border of the lower terrace, and it constitutes one of the two secondary gates giving access to the city that have been identified
on the lower town. K-3 gives access to the lower city from the west, and faces the Amanus Mountains (Pls. XXV, XXXI).

The gate system is set on the hillside, between +454 m above sea level on the slope margin to the west and +456.40 msl on the eastern margin of the excavation area, and it is embedded in the western section of the lower town fortification wall (Pl. I; Fig. 4.1). ${ }^{63}$
The layout of the western fortification wall south of the building P2 is uncertain: while apparently preserved in 1960s - based on the reconstructing planimetry proposed by R. Duru (1987: fig. 1) - the P2 western and outer wall was already deteriorated in 2000s, thus hampering the detection of the architectural connection between P2 and the unit to its south (Pl. VI: 2). The last surface survey south of P 2 revealed a block, the $4^{\text {th }}$ from north to south, in the western section of the lower town fortification wall, made of walls more massive than expected and larger than P2's. Its perimeter is almost aligned with P2 units according to a 1960s survey, but it is probably projected slightly outward with respect to P 2 , thus forming a short indentation in the western fortification line. The architectural block further to the south - the $5^{\text {th }}$ from north to south in the western branch of the lower town fortification wall - consists of a backtracked, self-contained unit made of two rooms.

South of this unit, in the $6^{\text {th }}$ block of the western section of the lower town fortification wall, is located the gate $\mathrm{K}-3$. The architectural blocks north and south of K-3 have not been stratigraphically investigated, but significant data concerning the $\mathrm{K}-3$ layout in relation to the outer fortification wall has been obtained by surface survey.
Like other architectural units of the lower town fortification wall, K-3 does not appear self-containing. To the north, the K-3 internal walls and pillars lean against the outer façade of the adjoining casemate southern walls. To the south, due to the deterioration of some of the structural elements and to the presence of extended collapse layers on the surface, the connection with the architectural unit could not be detected with certainty. Considering the presence of a staircase connecting the gate sector with a raised room to its south, however, the sector immediately south of K-3 was probably a directly connected architectonical unit instead of a different architectural block.

63 On the basis of refined measurements made in 2000s excavations, the elevation above sea level calculated at the time of first investigations was raised by about $25 \mathrm{~m}(24.7 \mathrm{~m})$. The difference has been registered in the area K-3 at the top of the staircase L.801, whose state of preservation remained unchanged in the two excavation phases.

The K-3 western façade - that faces the outside of the city - is framed to the north by a 0.90 m projection of the casemate block north of K-3, jutting west of the gate outer wall. The presence of collapsed stones on the ground hindered a precise localisation of the southern edge of the projection, but it should have been located between 1.42 and 2.70 m north of the K-3 outer opening (Pl. XXVI). ${ }^{64}$ Due to deterioration, the outline of the western outer façade of the fortification wall south of K-3 was entirely indecipherable in 2005 but, as already hypothesised on the basis of 1960s investigations, it was most probably plain (Duru 1987: fig. 3: 2; Duru 2003: fig. 7) (Fig. 4.1).

### 4.2 ARCHITECTURE AND STRATIGRAPHY

The architecture of K-3 area appears to substantially adapt to the conformation of the ground in this part of the site, sloping down from east to west. An additional, minor gradient is registered on the north-south trajectory - sloping down from north to south - between the central and eastern sectors. A slight grade is maintained on the paved floors, while a step at the level of the passage's thresholds overcomes higher elevation differences between the rooms. ${ }^{65}$ The walls and the inner spaces of the gate are substantially oriented north-south and east-west. All the recovered architectonical structures are built of basaltic stones without mortar. The wall's building technique envisages two outer scaffolds made of large and, in some cases, well-dressed stones forming the wall façades plus an inner filling of smaller, irregular stones and debris.

The northern wall of the gate western sector, the wall W.805, corresponds to the perimetral southern wall of the architectonical block immediately north of K-3; opposite to it, the southern wall of the gate, the wall W.803, corresponds to the perimetral northern wall of the architectonical sectors south of K-3. The walls W. 830 plus W. 829 constitute the western, outer barrier of the gate, while the walls W. 804 plus W. 802 constitute the eastern one. On the southern section of the western and

[^25]eastern facades are set the accesses L.838, opened toward the outer side of the gate, and L.839, opened toward the inner side. A stone flight of stairs, L.801, located on the south-eastern edge of the inner chamber, connects the gate area to a raised room to the south, outside of the excavation area.
The passage L. 839 connects the western sector of the gate system, L.807, to the central sector to the east, granting access to a second, trapezoidal room, L.816. ${ }^{66}$ This second room is delimited to the north and south by the east-west oriented walls W. 815 and W.808; the north-south walls W. 813 plus W. 822 delimit the area to the east and the walls W. 804 plus W. 802 delimit the area to the west.
A passage opened in the wall W. 815 - L. 835 - connects the central room to a sector to the north, only partially excavated. The northern sector is delimited to the west and east by the north-south walls W. 828 and W.826: the northern boundary, instead remains outside of the investigated area.
The access L. 823 connects the central room with an additional room to the east, L.812. Only the western portion of this chamber has been excavated: the room is delimited to the north by the east-west wall W.819; the continuation of wall W. 808 delimits the area to the south, while the eastern boundary remains outside of the investigated area. A small platform, B. $820+821$, leans against the northern wall W.819.
With the exception of the northern one, the other sectors of the gate are plastered with large, stone floors, whose remains (L.807+806; L. $816+834$ and L.812+818) have been brought to light in different parts of the area. Traces of a yellow beaten earth floor, L.814, have been brought to light in the northern room and, above the stone pavement L.816, in the middle room. Below the floors, a drain crosses the western, central, and eastern rooms, following the transit path throughout the intermediate passages L. 939 and L.823. Conforming to the slight slope of the ground, higher to the east and sloping down to the west in ancient times as today, it runs from the inner side of the lower city toward the outer side. The main portion of the drain, D.817, has been exposed in the middle room, but the peculiar disposition of the stones placed as covering or lateral boundary (L.806, L.834, L.818), set on the paved floors of the three rooms (L.807, L. 816 and L.812) allow to follow the drain path along almost the entire east-west axis of the area. The path is not linear but slightly curved, drawing up a sort of arch.

[^26]The stratigraphic investigation of the area has been interrupted at the level of the stone paved floors and, when the floors were not preserved, at the level of the floor's foundations, which were kept in place. In no case were the bases of the walls brought to light: considering the possibility they could continue below the excavated level, an indication has been given in the detailed description of the structures of the state of preservation 'above surface', reporting the number of stone rows and their elevation above the exposed level. ${ }^{67}$

### 4.2.1 The western sector

The western sector of the gate area is centred on a nearly squared chamber - L. 807 - of ca. 5.50 m on the north-south axis by 6.20 m on the east-west axis on the outer perimeter -3.15 m on the north-south axis by 3.10 m on the east-west axis on the inner perimeter, covering ca. $10 \mathrm{~m}^{2}$. The chamber is shaped by the erection of northsouth tongue walls - walls W. $802+\mathrm{W} .804$ to the east and walls W. $829-\mathrm{W} .830$ to the west - between two units of the fortification system located north and south of the structure (Pl. XXVI: 2).

The northern wall W.805, which corresponds to the southern encircling wall of the architectonical block immediately north of $\mathrm{K}-3$, is ca. 1.20 m thick, running for about 6.70 m from east to west (Pls. XXVII: 2, XXVIII: 1). ${ }^{68}$ It was preserved up to the fourth stone row above the surface along most of its length. Part of the fifth stone row was still in place on the eastern edge of the wall; on the western part, instead, the fourth stone row was covered by a layer of displaced and collapsed stones (between +456.57 and $+454.74 \mathrm{msl})$. The wall is mostly built of large and very large, coarsely regularised stones plus small irregular rocks used as fillings. The eastern and betterpreserved margin of the wall, however, which devised a $90^{\circ}$ angle with the northsouth wall W.828, is built of regular, well-dressed stones.

Leaning against the wall W. 805 are the north-south walls delimiting the chamber to the east and to the west, the wall W. 830 to the west and the wall W. 804 to the

[^27]east. From a structural perspective, they clearly constitute independent and secondary architectural elements (Pl. XXXI). To the east, the slight but evident misalignment of wall W. 804 with respect to the northern wall W. 828 appears unusual (Pl. XXX: 2-3). This feature may have derived from earth movements in the course of time, or from the necessity to build an area circumscribed by previous structures, which would hint at an absence of a totally comprehensive architectural planning.
To the west, leaning against the wall W.805, is the massive north-south wall W.830, which constitutes the outer wall, on the slope, of the gate building (Pls. XXVI, XXVIII). The wall W. 830 is about 1.70 m thick, extending ca 1.50 m from north to south. Large, coarsely dressed basaltic stones are used for the outer and inner side scaffolds, while smaller, irregular stones are used as fillings. Probably due to the proximity of present-day slope, the wall was severely deteriorated in the 2000s, but three stone rows were still visible above the surface. ${ }^{69}$ Instead, evidence of the wall section W.829, south of the opening L.838, and of its junction with the east-west wall W.803, was limited to a single row of collapsed stones (Pl. XXVI: 1). ${ }^{70}$
The western passage L.838, which gives access to the inner chamber from the outside of the city, was also severely damaged: judging from the threshold conformation, however, it is possible to hypothesise an opening of 1 m of width and 1.70 m of depth, corresponding to the wall size. A large, flattened stone slightly displaced in front of the access is probably part of the threshold floor (Pls. XXVII: 1, XXVIII: 2).
The eastern passage L.839, which connects the western and the central sectors of the area, is 0.9 m large by 1.16 m deep. The original floor was not preserved in 2005: the sector had already been almost entirely excavated by the Turkish team in the 1960s, but evidence of a clear floor did not emerge from the original excavation pictures either (Duru 2013: pl. 32: 2). The drain D. 817 crosses the passage on the east-west axis: the covering of the drain was not preserved in situ at the time of Turco-Italian excavations, but large stones recovered on the deposits filling the passage probably belonged to it (Pls. XXIX: 2, XXX). A flattened stone covering almost the entire access width, visible in 1960s pictures and in 2000s deposits, may have con-

[^28]stituted one of the access thresholds, covering the altitude difference in the floor level between the western and the central sectors with a step (Duru 2013: pl. 32: 2).

The pillars of the passage, which were preserved until a height of 1.6 m at the time of first excavations, were still preserved in the 2000s, but severely damaged (Pls. XXIX-XXXI). The northern pier W. 804 ( 1.47 x 1.16 m ), brought to light until the $6^{\text {th }}$ stone row above surface in the 1960s (Alkım 1972: fig. 8; Duru 2003: pl. 21: 2; Duru 2013: fig. 32: 2-3), was collapsed until the third row by the 2000s. A fourth row was preserved only at the junction between wall W. 804 and the northern wall of the chamber W. 805 (between +455.83 and +455.03 msl ). The southern pillar W. 802 $(1.95 \times 1.11 \mathrm{~m})$, preserved up to the fourth stone row above the surface in the 1960 s , was collapsed until the $2^{\text {nd }}$ row in the 2000 s, while two more rows of irregular stones were preserved above the southern lines of the stones (between +456.26 and +455.03 $\mathrm{msl})$. The collapsed stones, which filled the passage L. 839 and the western chamber at the beginning of 2005 excavations, were restored in place in the course of 2008 restoration season (Marchetti et al. 2020).
A rectangular indentation of $0.13 \times 0.19 \mathrm{~m}$ is cut on the south-western corner of the pillar W.804, carefully shaped on each row of the well-dressed stones composing the edge of the pillar. The same indentation $(0.13 \times 0.15 \mathrm{~m})$ is located on the opposite pillar W.802, on its north-western edge. The indentations produce a typical 'bottleneck' layout passage that is characteristic of the lower town fortification architecture, largely attested also in area P and P 2 , as well as in the northern section of the terrace wall. The K-3 passage, however, presents a remarkable peculiarity: in fact, while K-3 indentations are carved in the stones of the pillars, in most cases the indentations are architectonically shaped by the edge formed between the protruding pillars and the sidewalls. Probably the niches were also functional for the location of the door that, in this case, was likely disposed on the western front of the passage and opened toward the inner side of the western chamber. ${ }^{71}$ The absence of a door socket does not allow determination of the direction it opened, but at the time the staircase L. 801 was in service, it may be presumed to have been clockwise, with the door hinge located on

71 See for example comparable arrangements in area P (L.1637) and in area P2 (L.1617), where the door-sockets were still in place. The location of a door in this position, however, would not match the usual disposition of doors in typical 'three entrance' city gates like those attested, for example, at Ebla (Matthiae 2002b: 34), for which see below $₫$ 4.6.2.
the northern pier: otherwise, the use of the staircase would have been affected by the door opening.
As far as the shape of the gateways is concerned, different hypotheses may be proposed. ${ }^{72}$ The profile of the piers does not appear perfectly vertical, but slightly canted inside: it is difficult, however, to evaluate with certainty if the inclined profile was original and intentional or resulted from a slight displacement of the stone masonry. ${ }^{73}$
The two passages opened in the western chamber are disposed on the same axis, thus defining a direct access path through the gate. They are not located on the chamber midpoint but shifted toward its southern side: this disposition results in an asymmetric partition of the chamber space in a larger compartment north of the entrance path - the left-hand side for visitors entering the city, and a narrower one south of the path - on the right-hand side. The narrowest section, in the courtyard southern side, additionally hosts the stone staircase L.801, probably leading to a higher sector of the building south of the gate courtyard. The staircase rans parallel to the eastern wall of the chamber, framed between the south-eastern pier of the gate to its eastern side - W. 802 - and a $60-70 \mathrm{~cm}$ thick retaining wall - W. 831 - to its western side.
The stone flight, which is the only architectural element remaining intact between the 1960s and 2000s excavation projects, was preserved to a high of about 1 m and comprised four steps, each ca. 25 cm high, each step built of singular, large and flattened stones (Pls. XXIX, XXX: 1). ${ }^{74}$ The staircase, about 1 m large $(1.73 \times 0.96 \mathrm{~m}$ on the main axis, between +455.96 and +455.03 msl ), leans against the stone floor L .807 to the north, W. 802 to the east and W. 831 to the west. This last structure was preserved only until the level of the staircase flight in 2005, but on the basis of 1960s pictures, which document a better state of preservation, it seems probably to be interpreted as the staircase abutment (Duru 2003: pl. 21: 2; Alkım 1972: fig. 8). ${ }^{75}$ W. 831 (1.81x0.82 m on the

[^29]main axis, between +455.32 and +455.33 msl ) was preserved for a single stone row above surface in 2005 excavations (pl. 26), and counted two lines of irregular stones. ${ }^{76}$

Together with the staircase L.801, the wall W. 831 presumably leans against the southern wall of the gate area - W. 803 - but since this last wall was largely deteriorated by the 2000s, and laid outside of the main research area, such a structural relation could not be ascertained (Pl. XXVI: 2). On the basis of original reliefs, the wall W. 803 was composed of three lines of medium-size stones with an irregular, rounded shape over a thickness of ca. 1 m . From the staircase abutment W. 831 it extends for ca. 1.80 m westward, where it forms an angle with the western, outer wall of the gate, W.829.

The floor of western chamber is covered by the stone pavement L.807. In 2005 it was mainly preserved on the southern part of the room, at the base of the staircase L.801, but first reliefs show that it covered the entire area (Duru 2013: pl. 32: 1). The stones of the pavement lean against the walls W. 802 and W. 804 to the west and are covered by the staircase L. 801 and the abutment W. 831 to the south. An almost rectangular section of the pavement, east-west oriented, preserved in front of the passage L. 839 probably constitutes the lateral boundary of the drain D. 817 (see below L.806). With the exception of a recent collapse of the large stones from the top of the walls cleared out in the 1960s, no additional deposits were removed from the western sector in 2005. Relating to first investigations, apart from abundant stone debris, no soil accumulations had been uncovered in the area, an absence which had been connected with the proximity to water channels and basalt outcrops (Duru 2013: 82-83). Additionally, no materials were reported from this area.

### 4.2.2 The central sector

The passage L. 839 connects the western room L. 807 to the central room, L.186, to the east, and toward the inside of the city (Pls. XXXII: 2, XXXIII). The room L. 807 is delimited to the north by wall W.815; by wall W. 808 to the south; by walls W.828, W. 804 and W. 802 to the west, and by walls W. 813 and W. 822 to the east. The space thus enclosed has an irregular perimeter ( 3.70 m on the northern side; 3.58 m on the eastern side; 2.60 m on the southern side and 3.60 m on the western side), almost trapezoidal in shape, covering an area of about $10.85 \mathrm{~m}^{2}$. The chamber is

[^30]paved with the stone floor L.816, made of large and medium-size, coarsely flattened stones (between +455.72 and +455.81 msl ). The floor was partially preserved in the southern and central part of the room. In the central part, it additionally included the covering stones of the drain D.817, which were preserved in an east-west row west of the passage L. 823 (see below L.834). In the northern section of the chamber, traces of a beaten earth floor above the stone pavement L. 816 have been brought to light. The earthen floor, named L. 814 (bucket 206), corresponds to a medium-thin layer of compacted soil of yellowish colour. Traces of the same earthen floor were uncovered also north of the wall W.815, in the northern sector. From this floor derives the single radiocarbon dating available from $\mathrm{K}-3$ area (see belThe stone floor rests on a foundation deposit of small, irregularly shaped stones. Together with the stones of the floor, they lean against the walls W. 802 and W. 804 to the west and W. 808 to the south. ${ }^{77}$ Laid out in the small stone foundation is the drain D.817, which crosses the area from east to west. The drain is composed of a beaten earth channel, between 0.27 and 0.35 m large, framed by small-sized and irregularly shaped stones arranged with a vertical side as border. A row of large, flattened stones disposed side by side along the largest margin covers the summit. The channel was exposed over a length of ca. 0.81 m on the east-west axis in front of passage L.839, on the western section of the chamber; in the eastern section, three large stones of the covering - L. 834 - were preserved in situ and were not removed. The stones, which are set side by side on the long margin, form an east-west path ( $1.04 \times 0.53 \mathrm{~m}$ on the main axis; top at $+455.81 \mathrm{msl})$. The distribution of the lined-up covering stones in the stone paved floors of the eastern and western chambers evidently indicates the path of the drain throughout the other sectors of the gate area. In the eastern chamber, the drain covering L. 818 ( $1.8 \times 0.54 \mathrm{~m}$ on the main axis, top at +456.23 msl ) is composed of large, flattened stones disposed side by side to form a sort of semicircle with a southward-oriented convex side. In the western chamber, as already observed at the time of Turkish excavations, a mainly rectangular east-west oriented section of the paved floor L. 807 - isolated as L. 806 and made of flattened large stones mixed to medium-small ones $(2.20 \times 0.85 \mathrm{~m}$ on the main axis; between +454.74 and +455.03 msl ) may represent the drain covering in this part of the gate (Pl. XXIX: 2). The flanking stones of the drain D. 817 lean against

[^31]the pillars of the passage L. 839 to the west; to the east, instead, they are covered by the threshold of the passage L. 823 (Pl. XXXIII: 2).

The passage L.823, 0.9 m large per 0.9 m of depth, grants the transit between the central and the eastern chambers: with respect to the floor of the central chamber, it is located at a higher level, traversed by a 17 cm step. An elongated and flattened stone constitutes the doorstep on the western side of the passage ( $0.7 \times 0.25 \mathrm{~m}$ ). South of it, in front of the pier W. 822 western façade, the door-socket was still in place, indicating the passage was closed by a door opening counter-clockwise toward the central chamber. Basing on use-traces observation, we can say that the door socket, obtained from a small-sized, rounded stone ( $0.16 \times 0.16 \mathrm{~m}$ ), housed a hinge of 7 cm of diameter. The threshold covers the top stones of the drain L. 834 and is bound to the piers W. 813 to the north and W. 822 to the south. ${ }^{78}$

The norther pier of the passage, W.813, was preserved for 4 to 5 stone rows above surface over two lines. North-south oriented, it is 1.2 m long per 0.9 m large, and is composed of medium-sized, coarsely regularised and flattened stone scaffolds with a core of small stones (between +456.89 and $+455.81 \mathrm{msl})$. The building technique is definitely coarser compared to the pillars of the passage L. 839 pillars, and in general if compared to the structural elements of the western sector (Pls. XXXIII: 2, XXXIV).
The southern pier of the passage, W.822, was preserved only at the base level (between +456.02 and $+455.81 \mathrm{msl})$. North-south oriented, it has the same size of the northern pier, measuring $1.2 \times 0.9 \mathrm{~m}$ on the main axis, and is composed of mediumsized stone scaffolds with small, irregular stones at the core. To the south, it leans against the east-west wall W.808.

Between 0.8 and 0.9 m large, the wall W .808 has been brought to light over a length of 6.2 m : to the west, it leans against the north-south wall W.802; to the east, it continues beyond the excavation limit (Pls. XXXI: 2, XXXIV: 2, XXXV: 1). It was preserved between the fourth and the fifth stone row above the surface in the central room, while it was exposed until the third stone row above the surface in the eastern room, where the floor level was slightly higher (between +456.74 and +455.72 msl ). The base of the wall has not been exposed: leaning against its northern façade, in fact,

[^32]were the paved floors L. 816 and L.812, which have been left in place. Medium-large and medium, roughly squared stones constitute the outer scaffolds, enclosing a core of small and irregular stones and pebbles.
The structure W.815, delimiting the central chamber to the north, was unfortunately preserved raised at the base level, so that a sound interpretation of its precise character and texture has been impossible (Pls. XXXII, XXXV). However, it is probably to be interpreted as an east-west wall (3.70x0.90 m), leaning against the wall W. 828 to the west and the wall W. 826 to the east. The structure is probably interrupted by a passage, L. $835(0.90 \times 0.90 \mathrm{~m})$ granting communication between the central chamber to the south and a further room to the north. The passage is not located exactly in the middle of the wall, but slightly shifted on its western part (1.21 m from the western wall W. 828 and 1.60 m from the eastern wall W.826). A large, flattened stone ( $0.89 \times 0.45 \mathrm{~m}$ on the main axis, top at +455.93 msl ), constitutes the doorstep on the southern side of the passage, and grants transit between the central room and the northern room through a low step. The door-socket TH.05.O.39, found on the filling of the central room, may have been connected with a door device associated to this passage. ${ }^{79}$ Considering that the access to the central room L. 816 was probably closed by a door on the eastern passage L. 823 as well as on the western passage L. 839 (see above), an additional closing on the northern side would have resulted in a markedly cloistered and controlled space, apt, in this case, to reduce and regulate transit and mobility.

The northern room has been exposed over a surface of ca. $6.5 \mathrm{~m}^{2}$ (Pls. XXXII, XXXIII: 2, XXXV). It is delimited by the wall W. 815 to the south; wall W. 828 to the west; wall W. 826 to the east and continues beyond the northern limit of the excavation area. The space thus enclosed is almost rectangular in shape ( 3.80 m on the southern side; 1.76 m on the eastern side and 1.50 m on the western side). Traces of the beaten earthen floor L. 814 (see above) have been uncovered north of the passage L. 835 .
The north-south wall W. 828 has been brought to light over a length of 2.90 m for 0.53 m of width (Pls. XXXI, XXXV: 2). The western façade lays beyond the excavation limit, and the wall continues beyond the northern limit of the excavated area. On the cleared-up façade, on the eastern side, it was preserved between the third and the fourth stone row above the surface (between +456.75 and 455.93 msl ).

79 See below $\mathbb{\int}$ 4.5.1.

Since the western façade lays beyond the western limit of excavation, the wall texture was not entirely detectable, but the eastern façade denotes a rather accurate building technique, making large use of medium-large-sized, sometimes well-dressed stones, alternating with smaller and more flattened ones.

The north-south wall W. 826 (Pls. XXXII: 2, XXXV: 1) was brought to light over a length of 3 m per by 0.55 m of width, but it continues to the north and to the east beyond the excavation limit. The wall was preserved between eight and four stone rows above the surface (between +457.25 and +455.94 msl ). The cleared-up façade, to the west, is composed of medium and medium-small, irregularly shaped stones. To the east it is bounded to the east-west wall W.819; to the south, the structural relation with the north-south wall W. 813 is not clear, but the different texture of the two elements points to an architectural distinction.

### 4.2.3 The eastern sector

The passage L. 823 grants the transit between the central room L. 816 to the west and the eastern room L. 812 .

The eastern room has been exposed over a surface of ca $7.64 \mathrm{~m}^{2}$ (Pls. XXXIIIXXXIV). It is delimited by the wall W. 819 to the north; wall W. 808 to the south; and walls W. $813+822$ to the west; to the east, it continues beyond the excavation limit. The excavated portion is almost rectangular in shape ( 2.50 m on the northern side, 3.37 m on the eastern side and 2.24 m on the southern side).

The northern wall of the room, W.819, east-west oriented, has been brought to light over a length of 2.5 m per 0.55 m of width (Pl. XXXIII). To the west, the wall is bounded to W. 826 and W.813; to the east and to the north - here including the northern façade - it continues beyond the excavation limits. Preserved between the third and the fourth stone row above the surface, it is mainly composed of medium and medium-small stones, coarsely regularised (between +457.12 and +456.44 msl ). Against the wall leans a platform formed by B. 821 and B.820.

The platform, $2.10 \times 1.03 \mathrm{~m}$ on the main axis, between +456.44 and +456.23 msl , occupies all of the northern side of the room (Pls. XXXIII: 1, XXXIV). It is delimited by the north-south structure B. 820 to the west, $1.03 \times 0.28 \mathrm{~m}$ on the main axis, and by the east-west structure B. $821,1.82 \times 0.31 \mathrm{~m}$ on the main axis, to the south. The two small walls, preserved between one and two stone rows above the surface, are made by a single line of medium-small stones of rather irregular shape. The stones of
B. 821 are set side by side, connected on the short margin; in B. 820 they are set connected on the long margin.

On the southern side of the room, leaning against the wall W.808, large traces of a stone paved floor, L.812+L.818, have been brought to light (between +456.23 and $+456.44 \mathrm{msl})$. A row of six large, flattened stones, juxtaposed along the largest side (see above L.818) probably represent the stone covering of the drain exposed in the central chamber L.816, and continuing to the east in the eastern room.

### 4.2.4 Stratigraphy

Above the floor levels brought to light, three main deposits have been uncovered in the central and eastern sectors: the lowest one (F.825, F.811) composed of yellowish brown crumbly soil and stones; an intermediate one (F.810) more compact and darker in colour, with medium to large stones; and the upper one (F.800), incoherent, brown in colour, with different size stones. The three fills appear likely to be connected with different phases of debris accumulation and collapse of the stone structures, thus testifying to a long phase of abandonment.
In the central-northern part of the central sector, the beaten earth floor L. 814 is covered by the fill F. 825 (bucket 205), characterised by an incoherent and crumbly soil, yellowish-brown in colour, plus small stones. Concentrated in the central-northern part of the central sector, F. 825 leans against the walls W.804, W.828, W.815, W. 826 and W.813; in the central part of sector, where the beaten earth floor L. 814 was not preserved, it leans directly against the stone paved floor L.816.
In the southern part of the central sector and in the eastern sector, a similar fill is named F. 811 (buckets 202-203), characterised by incoherent, yellowish-brown soil and collapsed stones. It covers the stone paved floor L. 816 in the southern part of sector; the passage L.823; and the paved floor L.812; and leans against the structures W.813, B.820, W. 822 and W.808.

In the north-central part of the central sector, F. 825 is covered by a deposit of clayish and compact soil, darkish brown in colour, characterised by the presence of medium-large stones, named F. 824 (bucket 204). F. 824 covers the remains of wall W. 815 and leans against the structures W.828, W. 826 and W.813.

An accumulation similar to F.824, named F.810, characterised by darkish brown clayish and compact soil plus medium and large stones from the collapsed walls, extends over all the central and eastern sectors. It covers part of F. 824 in the central and
northern portion of the central sector; F. 811 in the southern part of the central sector and in the eastern sector (bucket 201) ${ }^{80}$, and leans against the walls W.828, W.826, W.813, W. 822 and W.808. In the northern part of the eastern sector, a collapse deposit including stones - probably from the nearby wall W. 819 - and darkish soil, named F. 832 (bucket 207), leans against the walls W. 819 and W.813.
In the south-eastern part of the area, the collapsed stones F.809, of medium and large size, probably deriving from the nearby structures W. 822 and W.813, covers part of the fill F.810.

The entire area is subsequently filled by superficial debris of soil of intense brown colour and stones from medium to large size, probably connected with the latest collapse events. The deposit, named F.800, has been identified immediately below the superficial stratum of hummus. It covers F. 809 and F.810, and leans against the walls W.802, W.804, W.808, W.828, W.813, W. 826 and the collapse F. 832.

### 4.2.5 Stratigraphic assessment and phasing

The data emerging from the structural and stratigraphic evidence presented above allows to draw a few substantial conclusions relating to the building sequence.
Under the structural and architectural profile, at least five stages of the building process can be distinguished.

The walls W. 805 and W.828, which correspond to the southern and eastern walls of the casemate block north of $\mathrm{K}-3$, appear the oldest elements of the building.
The north-south walls of the western sector W.830, W. 804 and W. 802 lay against them, and belong to a second structural stage. To the same stage are probably to be assigned the south-western walls W. 829 and W.803, but their poor state of preservation prevented a clear reading.

Against the southern pillar of the passage L. 839 - wall W. 802 - leans the east-west wall W.808, which delimits both the central and eastern rooms. Although built with the same technique envisaging outer scaffolds of larger stones and a pebble-filled core, the texture of wall W. 808 appears different from the walls just mentioned, made of remarkably larger stones. This technological difference suggests a distance of some sort between this third stage of the building process and the preceding one. Its expla-

[^33]nation, however, is not straightforward: in fact, either chronological, functional or other contextual factors might have been implied.
To a fourth building stage belong the floors, the floor foundations and the drain (L.817, L.806-807, L.816, L.834, L. 812 and L.818), which lean against the mentioned structures.
Subsequently, the staircase L. 801 with the staircase abutment W. 831 and the threshold L.823, laying on the paved floors, may be confidently assigned to a fifth structural phase.
Relating the other structural elements (W.822, W.813, W.826, W.819, W.815, B. $820-821$ ), ascertained architectural and stratigraphic relations are not adequate enough to track them down precisely on the building sequence, but they are probably to be located after the construction of the wall W.808. ${ }^{81}$
The building technique and texture of walls W.826, W. 819 and W. 808 appears quite similar, thus suggesting a probable proximity in terms of chronology or context. The piers W. 813 and W.822, being perfectly comparable to each other both in term of size and building technique, may be confidently considered part of the same building phase, in all likelihood connected to that of the threshold L.823. Despite attesting the use of some partially well-dressed stone, as usual in entryways and building corners, they appear more closely related to the other walls of the central and eastern sectors than to the walls of the western sector, especially because of reduced wall thickness and size of the building stones. The walls brought to light in the central and eastern sectors are all about 0.90 m thick (W.808, W.815, W. 813 and W.822), made of medium and small stones; ${ }^{82}$ the walls of the western sector range from 1.1 m of piers W. 804 and W. 802 to 1.70 m of the western wall W.830.
These data lead to three firm points: 1) the gate area was built when the casemate block to the north and, probably, the unit or the block to its south were already erected; 2) all the perimetral walls preserved in the western sector belong to an earlier architectural phase with respect to the other architectural elements of the gate area; 3) the structuring of the drain and the superimposed stone paved floors indicate that the

[^34]arrangement of the rooms exposed at least in the western and central sectors belong to a single building phase.

Given this evidence, further interpretative hypothesis may be advanced.
Identifying the time lapse incurred between the different building activities is arduous. Concerning the first and the second architectural stages - that is between the other casemate blocks of the wall and the western sector of K-3 - similarities in the texture of the walls and building techniques suggest the possibility they may have been laid in a relatively short chronological span. At the same time, the slight misalignment between the pier W. 804 and the walls W. 805 and W.828, although it may have been related to the necessity to adapt to soil conformation, apparently testifies to the absence of an architectural planning of the area at the time the block north of $\mathrm{K}-3$ was built. If the hypothesis is accepted that a sensible time-lapse incurred between the construction of the other casemate blocks and $\mathrm{K}-3$, the current configuration of K-3 should be considered the result of a secondary phase of arrangement of the area aimed at reducing the passage and the size of the access, at regulating the entrance space and, maybe, at the necessity or opportunity to increase the built environment. This event, in turn, may have been connected to socio-political changes of some sort, maybe related to the perception of an increased defensive necessity.

Identifying and evaluating a possible time lapse between the construction of the western sector and the construction of the other sectors of the area is challenging as well. However, comparing the areas, a general decrease in the quality of the building emerges from technological differences apparent in the use of substantially undressed stones of medium-small and small size. At the same time, a decrease in massiveness is testified by the reduction of the wall's thickness. The possibility of an uninterrupted construction sequence may not be excluded on the basis of the evidence gathered so far, but detected changes would largely befit a chronological distance. In this case, the building sequence would imply a shift from a context of relatively high technology investment to a context of low technology investment. Such a condition would, in turn, open further interpretative possibilities: the above-mentioned shift, in fact, might relate to a general economic or technological decline in Tilmen society or, in a context of either functional change or functional continuity, to a decrease in the demand for officiality connected to the function of the eastern sectors of the gate with respect to the western ones. The decrease in massiveness, be it in a context of chronological continuity or distance, might have
been either the result of similar processes, or of a functional change encompassing a reduced defensive capacity.

In relation to the exposed floors, the arrangement of the drain and of the stone pavements indicates the uncovered floors in the western, central and eastern rooms have been laid in the same chronological context. At the time that the stone pavements were laid down, the K-3 inner space securely included the western room and an additional room to the east. The partition of the space between the central and the eastern room through the building of the passage L. 823 with pillars W. 813 and W.822, however, may have been a secondary arrangement. In addition to that, especially considering the possibility that a time lapse occurred between the building of the western sector and the other sectors, it should be considered that an earlier pavement phase may have been present - maybe in some parts of the area - below the exposed floor level. There is no possibility to detect a potential lapse of time occurred between the laying down of the stone floors and the laying down, above them, of the earthen floor L. 814 but, apparently, they belong to the same phase of life of the building, and relate to its phase Above the stone pavements L.807, L. 816 and L.812, and above the earthen floor L.814, no other evidence of frequentation of the area has been gathered. It is not possible to exclude potential further phases of use of the area, maybe lighter than that exposed, to have been obliterated by the collapse of the stone structures. The analysis of associated pottery (for which see $\S 5.6 .1$ ) opens the possibility of an unpreserved secondary phase of use. However, the nature of deposits above the floors, ${ }^{83}$ would seem more likely to be related to different and progressive events of collapse of the stone structures and parallel accumulation of soil, thus suggesting a long phase of abandonment.

Given all the above, the excavated sequence in area K-3 may be summarised in three main phases: phase 1 , relating to architectural evidence, includes the architectural stages 1 and 2; phase 2, relating to architectural evidence and floors, includes the architectural stages 3-5, plus the earthen floor L.814; and phase 3, relating to the sole deposits, included fillings and collapse layers above the floors. The phase 2 encompasses the span of time of construction and use of the last building phase stratigraphically attested. The phase 1 encompasses the potential span of time occurred before phase 2 , not attested by deposits but extrapolated on the basis of the architectural sequence.

The phase 3, possibly, is the results of collapse and accumulation processes following the abandonment of the structure.

Among the main concerns, one possibility to be considered is that the building sequence of the gate area may have been extended over a relatively long chronological span. In this case, the western sector should be considered the oldest part of the building - Phase 1 - while to secondary building stages - Phase 2 - should be attributed the central and eastern sectors and the staircase L.801, whose construction is to be connected to the same phase of the exposed stone paved floors. The exposed architecture testifies to the arrangement of the last building phase at least, while the compacted earthen-floor L. 814 testified to its phase - or one of its phases - of use. The deposits above - phase 3 - testify to the collapse and long abandonment of the area.

### 4.3 RADIOCARBON DATING

A bone sample from the compacted earthen floor L.814, TH.05.K3.74, returned a calibrated dating to $1640-1490 \mathrm{BCE}$ at $92.9 \%$ probability. A second range at $68.2 \%$ probability corresponded to $1610-1510 \mathrm{BCE} .{ }^{84}$

Taking into account the most reliable range of dating at $92.9 \%$ probability, 14 C analysis indicate a range from mid-late $17^{\text {th }}$ cent. BCE to early $15^{\text {th }}$ cent. BCE that, in terms of Northern Levant phasing, ${ }^{85}$ corresponded to the period from mid-late MB IIB until the first century of the LB I according to traditional chronology (Sherrat 2013: table 33.1); from mid-late MB IIB until early LB I, but extending for the greatest part across MB III, according to the revised phasing proposed by M. Iamoni and D. Morandi Bonacossi (Table 1.1).

Considering the stratigraphic position of the sample, which derives from the beaten earth floor the central sector, the range may be considered indicative for the chronological attribution of K-3 phase $2 .{ }^{.86}$

[^35]

| Laboratory <br> Number | Sample Inventory | $\delta^{13} \mathbf{C}^{1,2)}$ <br> $\left[\%_{0}\right]$ | ${ }^{14}$ C-age $^{1)}$ <br> $[B P]$ | Calibrated age ${ }^{3)}$ |
| :---: | :---: | :---: | :---: | :---: |
| VERA-6547 | TH.05.K3.74 | $-19.1 \pm 1.6$ | $3278 \pm 34$ | $1640 \mathrm{BC}(92.9 \%) 1490 \mathrm{BC}$ |

1) $1 \sigma$ - error
2) $\delta^{13} \mathrm{C}$ determined with the AMS-system
${ }^{3)}$ determined with the calibration program OxCl and the calibration curve INTCAL13; data correspond to the $2 \sigma$-confidence level; probability of the individual time periods is in brackets; calibrated ages are rounded by 10 with OxCal .

### 4.4 THE POTTERY

No pottery samples were reported from 1960s investigations in the sector A of the area. In the course of the 2000s Turco-Italian excavations in the Area K-3, extending over the central and eastern sectors of the gate area, a total number of 139 diagnostic potsherds were collected. Of these, 42 have been selected as indicators.

Most of the ceramic samples derives from fillings and collapse layers - K-3 phase 3 - and especially from fill F. 811 ( $23.74 \%$ of K-3 diagnostic ceramic inventory), extending across the central-south and eastern sectors, and the above the fill F. 810 ( $20.14 \%$ ), brought to light over the entire area investigated. Although phase 3 potsherds may not be related to a primary context of use, their presumable connection with the last phase of use of the building makes them nonetheless to some extent val-
uable in terms of either chronology, culture or function. A small number of potsherds however derive from the beaten earth floor L. 814 (12.23\%), immediately above the stone pavements, and may be considered representative of $\mathrm{K}-3$ phase 2 - the structure phase of use (Table and Diagram 4.1).

The largest part of diagnostic ceramic inventory is composed of rim-sherds, which amount to 78 samples ( $56.12 \%$ ); additional samples of rim belong to potsherds including rim and handle ( 9 samples; $6.47 \%$ ). The fragments of base amount to 38 samples, accounting for $27.34 \%$ of the K-3 ceramic inventory. Pottery samples with handle also represent a relatively significant component of the corpus, accounting for $12.23 \%$ of the assemblage ( 17 samples) (Table and Diagram 4.2).

With the exception of a single sample of a miniaturist handmade bowl (Fig. 4.4), all the vessels are wheel-made.

As far as function is concerned, the largest part of the K-3 inventory may be ascribed to the simple ware ceramic class (79.14\%), while only a minority of potsherds may be sorted into kitchen ware (12.23\%) and storage ware classes (8.63\%) (Table 4.3 and Diagram 4.4). Although relatively fine pottery samples are attested, proper fine ware has not been recovered from K-3, thus suggesting that activities with high display and official implications were likely not performed in the area, or that such activities, in the specific range of time when the area was settled, did not involve the use of a specialised assemblage. Instead, despite being relatively rare, kitchen and storage ware potsherds attest to the performance of cooking and storage activities. Considering the low incidence of the two categories, it would seem appropriate to hypothesise low intensity activities, but the relatively small size of the exposed rooms may in part balance this impression.

Most kitchen ware samples derive from F. 810 ( $35.29 \%$ of K-3 inventory, Table 4.4 and Diagram 4.6), but its incidence in the different units appears rather homogeneous (Table 4.3 and Diagram 4.5): a slightly higher concentration is registered in F.825, above the floor L.814, ( $25 \%$ of F. 825 inventory), and in F. 810 (21.43\%). The incidence in the other units, instead, is between $5 \%$ and $14 \%$.

The largest clusters of storage ware samples derive from F. 810 , F. 811 and F. 825 ( $25 \%$ of K-3 inventory each) (Diagram 4.6): the highest incidence of this category in the different stratigraphic units in contrast was registered in F. 825 ( $25 \%$ of F. 825 inventory), followed by F. 810 ( $10.71 \%$ of F. 810 ceramic inventory) and F. 811 ( $9.09 \%$ of F. 811 ceramic inventory) (Diagram 4.5).

Concerning simple ware, most of the samples derive from F. 811 ( $24.55 \%$ of K-3 ceramic inventory) (Diagram 4.6). Its incidence in the different stratigraphic units is always very high, usually comprising between around 70 and $90 \%$ of the ceramic inventory of the unit: the only exception is represented by F. 825 , where the simple ware accounts only for $50 \%$ of the unit assemblage (Diagram 4.5).
Concerning the range of attested morphologies, which might bear significant meanings in term of chronology, culture, and function, the incidence of each shape has been calculated relative to the total number of potsherds where a general shape of reference was detectable, comprising 104 diagnostic samples (Table 4.5; Diagram 4.7). Most of them derive from F. 811 (24.04\%), followed by F. 810 (21.15\%), F. 824 (17.31\%) and F. 832 (14.42\%); smaller rates, between 5 and $10 \%$, are associated to L.814, F. 825 and F. 800 (Table 4.6; Diagram 4.9).

The largest part of K-3 inventory of morphologically detectable potsherds consists of fragments of jars, accounting for $34.62 \%$ of K-3 ceramic inventory. The rate of bowls is also relatively high (20.19\%), followed by cooking pot rates (13.46\%). A lower incidence is presented by the jugs $(9.62 \%)$ while small-jars and kraters are only sparsely attested ( $2.88 \%$ ). The remaining $16.35 \%$ of the rim-sherds inventory belongs to other shapes (Diagram 4.7).
The distribution of jar-fragments by stratigraphic unit substantially reflects that of morphologically classified potsherds: the largest number of jars derives from F. 811 ( $25 \%$ of jar-potsherds), followed by F. 810 (19.44\%), F. 832 and F. 824 (16.67\%); their number is lower in the other units but, all the same, they are attested everywhere (Table 4.6 and Diagram 4.10). However, their incidence per unit assemblage, which may reflect a cultural significance to be associated to the specific archaeological context, is the highest in F.800, where they account for $83.33 \%$ of the unit inventory. Jars also represent the first shape in order of occurrence in F.832, F.811, F. 824 and F. 810 , where they account for between $40-30 \%$ of the unit inventories; their incidence instead is lower in L. 814 and F. 825 where, comprising between 14 and 18\%, they represent only the second and third shape in order of occurrence (Table 4.5; Diagram 4.8).
Like jars, bowls also derive to the largest share from F.811, F. 810 and F. 824 (Diagram 4.10), which are the richest stratigraphic units in terms of morphologically detectable potsherds concentration (Diagram 4.9), but their highest incidence per unit assemblage is registered in F. 825 ( $42.86 \%$ of F. 825 inventory), where they rep-
resent the first shape, together with cooking pots, in order of occurrence (Diagram 4.8). Accounting for 18 and $22 \%$, the incidence of bowls in the other units is rather homogeneous, mainly corresponding to the second shape in order of occurrence. An exception to this rule is registered in F.810, where they represent the third shape in order of occurrence, and in F.800, where they are not recorded (Diagram 4.8).
Unlike jars and bowls, the distribution of cooking pots (Diagram 4.10) diverges substantially from the morphologically detectable potsherds distribution (Diagram 4.9), thus suggesting some functional diversification. The incidence of cooking pots, in fact, is remarkably high in F. 825 where, as said above, they represent, together with bowls, the first shape in order of occurrence. The incidence of cooking pots is between 23 and 13\% on F.810, F. 800 and F.832, where they represent the second or third shape in order of occurrence. Their incidence is instead lower in F. 811 and F. 824 (5-8\%) and, remarkably, absent in L. 814.

Relating jugs, small jars and kraters, the rates value is in any likely affected by the small amount of reference samples. The main incidence of jugs is recorded in L.814, while they are absent in F. 800 and F.825. Small jars have a higher incidence in L.814, while they are absent in F.800, F.810, F. 824 and F.825. Kraters are sparsely attested in L. 814 , F. 824 and F. 832.
Potsherds only generally classified as open, closed or intermediate shapes, together with uncertain morphologies, are grouped in the category of 'other'.

Morphologically classified base-sherds account to 38 samples. Ring bases (Fig. 4.5: 4; Fig. 4.6: 9), accounting for ca $55 \%$ of bottom inventory, are the most common, followed by flattened bases (ca. 37\%). With the exception of F.810, ring bases are predominant in most of the archaeological units. Flat bases (Fig. 4.6: 8) are predominant in F. 810 and absent in F. 800 and F.824, while L. 814 flat and ring bases have the same incidence (Table 4.7 and Diagram 4.11).
The largest part of the K-3 ceramic inventory consists of undecorated vessels (96\%) but samples with applied or applied-plus-incised decoration (1.44\%) and painted decoration $(2.16 \%)$ are also sparsely attested. With the exception of a single potsherd with applied decoration from F.810, it seems worth noting that all other decorated samples derive from L. 814 (Table 4.9).

|  | Selected Potsherds |  | Unselected Potsherds |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| F. 800 | 2 | $4.76 \%$ | 5 | $5.15 \%$ | 7 | $5.04 \%$ |
| F.832 | 6 | $14.29 \%$ | 16 | $16.49 \%$ | 22 | $15.83 \%$ |
| F.810 | 6 | $14.29 \%$ | 22 | $22.68 \%$ | 28 | $20.14 \%$ |
| F.811 | 13 | $30.95 \%$ | 20 | $20.62 \%$ | 33 | $23.74 \%$ |
| F.824 | 5 | $11.90 \%$ | 15 | $15.46 \%$ | 20 | $14.39 \%$ |
| F.825 | 5 | $11.90 \%$ | 7 | $7.22 \%$ | 12 | $8.63 \%$ |
| L.814 | 5 | $11.90 \%$ | 12 | $12.37 \%$ | 17 | $12.23 \%$ |
| Total | $\mathbf{4 2}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{9 7}$ | $\mathbf{1 0 0} \%$ | $\mathbf{1 3 9}$ | $\mathbf{1 0 0 \%}$ |

Table 4.1 - Area K-3: Distribution of diagnostic potsherds by stratigraphic unit.

|  | F. 800 |  | F. 832 |  | F. 810 |  | F. 811 |  | F. 824 |  | F. 825 |  | L. 814 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% |
| Bottom | 1 | 14.29\% | 7 | 31.82\% | 6 | 21.43\% | 10 | 30.30\% | 3 | 15\% | 5 | 41.67\% | 6 | 35.29\% | 38 | 27.34\% |
| Complete |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rim | 6 | 85.71\% | 13 | 59.09\% | 16 | 57.14\% | 19 | 57.58\% | 11 | 55\% | 7 | 58.33\% | 6 | 35.29\% | 78 | 56.12\% |
| Rim+ |  |  | 1 | 4.55\% | 2 | 7.14\% | 2 | 6.06\% | 2 | 10\% |  |  | 2 | 11.76\% | 9 | 6.47\% |
| Handle |  |  | 1 | 4.55\% | 4 | 14.29\% | 1 | 3.03\% | 2 | 10\% |  |  |  |  | 8 | 5.76\% |
| Wall |  |  |  |  |  |  | 1 | 3.03\% | 2 | 10\% |  |  | 3 | 17.65\% | 6 | 4.32\% |
| Total | 7 | 100\% | 22 | 100\% | 28 | 100\% | 33 | 100\% | 20 | 100\% | 12 | 100\% | 17 | 100\% | 139 | 100\% |

Table 4.2 - Area K-3: Potsherds' state of preservation. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F. 800 |  | F. 832 |  | F. 810 |  | F. 811 |  | F. 824 |  | F. 825 |  | L. 814 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | \% | n. | \% | n . | \% | n. | \% | n. | \% | n. | \% | n . | \% | n. | \% |
| Kitchen Ware | 1 | 14.29\% | 2 | 9.09\% | 6 | 21.43\% | 3 | 9.09\% | 1 | 5\% | 3 | 25\% | 1 | 5.88\% | 17 | 12.23\% |
| Simple Ware | 6 | 85.71\% | 18 | 81.82\% | 19 | 67.86\% | 27 | 81.82\% | 18 | 9\% | 6 | 50\% | 16 | 94.12\% | 110 | 79.14\% |
| Storage Ware |  |  | 2 | 9.09\% | 3 | 10.71\% | 3 | 9.09\% | 1 | 5\% | 3 | 25\% |  |  | 12 | 8.63\% |
| Total | 7 | 100\% | 22 | 100\% | 28 | 100\% | 33 | 100\% | 20 | 100\% | 12 | 100\% | 17 | 100\% | 139 | 100\% |

Table 4.3 - Area K-3: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | Kitchen Ware |  | Simple Ware |  | Storage Ware |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |
| F.800 | 1 | $5.88 \%$ | 6 | $5.45 \%$ |  |  |
| F.832 | 2 | $11.76 \%$ | 18 | $16.36 \%$ | 2 | $16.67 \%$ |
| F.810 | 6 | $35.29 \%$ | 19 | $17.27 \%$ | 3 | $25.00 \%$ |
| F.811 | 3 | $17.65 \%$ | 27 | $24.55 \%$ | 3 | $25.00 \%$ |
| F.824 | 1 | $5.88 \%$ | 18 | $16.36 \%$ | 1 | $8.33 \%$ |
| F.825 | 3 | $17.65 \%$ | 6 | $5.45 \%$ | 3 | $25.00 \%$ |
| L.814 | 1 | $5.88 \%$ | 16 | $14.55 \%$ |  |  |
| Total | 17 | $100 \%$ | 110 | $100 \%$ | 12 | $100 \%$ |

Table 4.4 - Area K-3: Functional classes. Distribution of functional classes by stratigraphic unit.

|  | F. 800 |  | F. 832 |  | F. 810 |  | F. 811 |  | F. 824 |  | F. 825 |  | L. 814 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% | n . | \% | n . | \% | n. | \% |
| Bowl |  |  | 3 | 20.00\% | 4 | 18.18\% | 5 | 20.00\% | 4 | 22.22\% | 3 | 42.86\% | 2 | 18.18\% | 21 | 20.19\% |
| Jar | 5 | 83.33\% | 6 | 40.00\% | 7 | 31.82\% | 9 | 36.00\% | 6 | 33.33\% | 1 | 14.29\% | 2 | 18.18\% | 36 | 34.62\% |
| Small jar |  |  | 1 | 6.67\% |  |  | 1 | 4.00\% |  |  |  |  | 1 | 9.09\% | 3 | 2.88\% |
| Jug |  |  | 1 | 6.67\% | 2 | 9.09\% | 4 | 16.00\% | 2 | 11.11\% |  |  | 2 | 18.18\% | 11 | 10.58\% |
| Krater |  |  | 1 | 6.67\% |  |  |  |  | 1 | 5.56\% |  |  | 1 | 9.09\% | 3 | 2.88\% |
| Cooking pot | 1 | 16.67\% | 2 | 13.33\% | 5 | 22.73\% | 2 | 8.00\% | 1 | 5.56\% | 3 | 42.86\% |  |  | 14 | 13.46\% |
| Other |  |  | 1 | 6.67\% | 4 | 18.18\% | 4 | 16.00\% | 4 | 22.22\% |  | 0.00\% | 3 | 27.27\% | 16 | 15.38\% |
| Total | 6 | 100\% | 15 | 100\% | 22 | 100\% | 25 | 100\% | 18 | 100\% | 7 | 100\% | 11 | 100\% | 104 | 100\% |

Table 4.5 - Area K-3: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  | Bowls |  | Jars |  | Small Jars |  | Jugs |  | Kraters |  | Cooking pots |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | \% | n. | \% | n. | \% | n . | \% | n . | \% | n . | \% | n. | \% | n. | \% |
| F. 800 |  |  | 5 | 13.89\% |  |  |  |  |  |  | 1 | 7.14\% |  |  | 6 | 50.77\% |
| F. 832 | 3 | 14.29\% | 6 | 16.67\% | 1 | 33.33\% | 1 | 9.09\% | 1 | 33.33\% | 2 | 14.29\% | 1 | 6.25\% | 15 | 14.42\% |
| F. 810 | 4 | 19.05\% | 7 | 19.44\% |  |  | 2 | 18.18\% |  |  | 5 | 35.71\% | 4 | 25.00\% | 22 | 21.15\% |
| F. 811 | 5 | 23.81\% | 9 | 25.00\% | 1 | 33.33\% | 4 | 36.36\% |  |  | 2 | 14.29\% | 4 | 25.00\% | 25 | 24.04\% |
| F. 824 | 4 | 19.05\% | 6 | 16.67\% |  |  | 2 | 18.18\% | 1 | 33.33\% | 1 | 7.14\% | 4 | 25.00\% | 18 | 17.31\% |
| F. 825 | 3 | 14.29\% | 1 | 2.78\% |  |  |  |  |  |  | 3 | 21.43\% |  |  | 7 | 6.73\% |
| L. 814 | 2 | 9.52\% | 2 | 5.56\% | 1 | 33.33\% | 2 | 18.18\% | 1 | 33.33\% |  |  | 3 | 18.75\% | 11 | 10.58\% |
| Total | 21 | 100\% | 36 | 100\% | 3 | 100\% | 11 | 100\% | 3 | 100\% | 14 | 100\% | 16 | 100\% | 104 | 100\% |

Table 4.6 - Area K-3: Morphology. Distribution for stratigraphic unit of morphological categories (Bowls; Jars; Small jars; Jugs; Kraters; Cooking pots; Other) and of potsherds with classified shapes
(Total).

|  | F. 800 |  | F. 832 |  | F. 810 |  | F. 811 |  | F. 824 |  | F. 825 |  | L. 814 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | \% | n. | \% | n. | \% | n. | \% | n . | \% | n. | \% | n. | \% | n . | \% |
| Base-flat |  |  | 3 | 42.86\% | 4 | 66.67\% | 2 | 20\% |  |  | 2 | 40\% | 3 | $50 \%$ | 14 | 36.84\% |
| Base-ring | 1 | $100 \%$ | 4 | 57.14\% | 2 | 33.33\% | 6 | 60\% | 2 | 66.67\% | 3 | 60\% | 3 | $50 \%$ | 21 | 55.26\% |
| Other |  |  |  |  |  |  | 2 | 20\% | 1 | 33.33\% |  |  |  |  | 3 | 7.89\% |
| Tot | 1 | 100\% | 7 | 100\% | 6 | 100\% | 10 | 100\% | 3 | 100\% | 5 | 100\% | 6 | 100\% | 38 | 100\% |

Table 4.11 - Area K-3: Bottoms morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified base-sherds.

|  | Base-flat |  |  | Base-ring |  |  | Other |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ | n. | $\%$ |  |  |  |
| F.800 |  |  | 1 | $4.76 \%$ |  |  | 1 | $2.63 \%$ |  |  |  |
| F.832 | 3 | $21.43 \%$ | 4 | $19.05 \%$ |  |  | 7 | $18.42 \%$ |  |  |  |
| F.810 | 4 | $28.57 \%$ | 2 | $9.52 \%$ |  |  | 6 | $15.79 \%$ |  |  |  |
| F.811 | 2 | $14.29 \%$ | 6 | $28.57 \%$ | 2 | $66.67 \%$ | 10 | $26.32 \%$ |  |  |  |
| F.824 |  |  | 2 | $9.52 \%$ | 1 | $33.33 \%$ | 3 | $7.89 \%$ |  |  |  |
| F.825 | 2 | $14.29 \%$ | 3 | $14.29 \%$ |  |  | 5 | $13.16 \%$ |  |  |  |
| L.814 | 3 | $21.43 \%$ | 3 | $14.29 \%$ |  |  | 6 | $15.79 \%$ |  |  |  |
| Total | $\mathbf{1 4}$ | $100 \%$ | 21 | $100 \%$ | $\mathbf{3}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{3 8}$ | $100 \%$ |  |  |  |

Table 4.8 - Area K-3: Bottoms morphology. Distribution by stratigraphic unit of bottoms typologies (flat; ring; other) and of potsherds with classified bottom (Total).

| Decoration Type | F. 800 |  | F. 810 |  | F. 811 |  | L. 814 |  | F. 824 |  | F. 825 |  | F. 832 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | n. | \% |
| Applied |  |  | 1 | 3.57\% |  |  |  |  |  |  |  |  |  |  | 1 | 0.72\% |
| Applied and Incised |  |  |  |  |  |  | 1 | 5.88\% |  |  |  |  |  |  | 1 | 0.72\% |
| Painted |  |  |  |  |  |  | 3 | 17.65\% |  |  |  |  |  |  | 3 | 2.16\% |
| Undecorated | 7 | 100\% | 27 | 96\% | 33 | 100\% | 13 | 76.47\% | 20 | 100\% | 12 | 100\% | 22 | 100\% | 134 | 96.40\% |
| Total | 7 | 100\% | 28 | 100\% | 33 | 100\% | 17 | 100\% | 20 | 100\% | 12 | 100\% | 22 | 100\% | 139 | 100\% |

Table 4.9 - Area K-3: Decoration. Distribution of decorated potsherds by stratigraphic unit.

### 4.4.1 The ceramic inventory of phase 2 (MB II)

## L. 814 - Bucket 206

L. 814 is a beaten earth floor brought to light in the central and northern parts of the central sector. It covers the stone pavement L. 816 in the northern part of room 2 and it is covered by F. 825 . From the stratigraphic point of view, it represents the most ancient unit to have yielded ceramic samples. The ceramic inventory is composed of samples either directly resting above the compacted surface of the floor or from its
bulk. It includes 17 diagnostic potsherds ( $12.23 \%$ of the K-3 ceramic inventory), of which six are base-sherds, six rim-sherds, two potsherds inclusive of rim and handle, and three decorated body-sherds (Diagram 4.2). From the functional point of view, the greatest majority of the ceramic inventory belongs to simple ware that, accounting for $94.12 \%$ of the unit inventory, makes up the highest incidence compared to other units. It additionally includes a single sample of kitchen ware (Table 4.3 and Diagram 4.5). The morphological range includes bowls, jars and jugs, which have the same incidence in L. 814 shape inventory. It further includes a sample of small jar and a krater. Cooking pots, in contrast, are absent.

Five samples were selected as indicators (Fig. 4.3; Pl. C: 1).
The open shapes inventory includes two simple ware large bowls - with around 25 cm diameter - characterised by an anti-splash device, probably to be ascribed to serving activities. In the bowl Fig. 4.3: 1 the anti-splash device is engendered by an inner bend of the body's upper sides, further grooved outside. The general morphology of the bowl is largely attested in MB II ceramic inventories of Northern Levant sites, but similar shapes continue to be attested until the LBA. ${ }^{87}$ Close comparisons with the sample from phase 2 are attested at Alalakh VIII (Heinz 1992: Cat. A, pl. 18: 17-18), where they are characterised by a more markedly carinated upper section (see also Heinz 1992: Cat. A, pl. 35: 24-25, Alalakh IX), but closer comparisons seem to be recognised with some samples from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 83: 9, type 2341; pl. 5: 23, type 1122), ${ }^{88}$ attributed to the very end of MBA. ${ }^{89}$ Comparisons, however, are also found in Tilmen Höyük upper town, area K-5 LB I levels. ${ }^{00}$ Further comparisons with MB IIB and LB I morphologies are found with the bowl Fig. 4.3: 2, characterised by inside and outside thickened rim. ${ }^{91}$

[^36]The closed fragment Fig. 4.3: 4, ${ }^{92}$ characterised by a simple, everted rim with rounded profie and straight shoulders, despite being relatively thin, is probably to be interpreted as a deep cup - of biconical shape - or as a small jar with large opening (17 cm diameter). A similar shape, with a slighlty smaller opening ( 11 cm diameter), was found in F. 810 (Fig. 4.7: 1, see below), as well as in in the inventory of area P phase 3a (Fig. 5.9: 3). General comparisons range from MB IB until LBA, but the main distribution of the shape seems to be concentrated in the MB IIA. Close similarities are visible in MB IB and IIA layers of Tuqan area N (Ascalone 2011: fig. 42: 5; fig. 40: 6, 10); in MB IIA layers of Qatna (Iamoni 2012: pl. 12: 12) and MBA leyers of Oylum Höyük (Özgen, Helwing 2001: 17: c). Realted morphologies in the Euphrates area are attested in Lidar Höyük phase 5b (Kaschau 1999: pl. 137: 2-3) attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE, and in the Balikh area in Hammam et-Turkman period VII: 4 (Cuvers 1988: pl. 127: 55). ${ }^{93}$
A parallel with K-3 sample may be recognised also in the Alalakh level X ceramic inventory, attributed to MB IIA (Heinz 1992: Cat. A, pl. 60: 45). Some general similarity is further visible with some late MBA and early LBA specimens from the Northern Levant and Euphrates area, and from North Cetral Anatolian assemblages. ${ }^{94}$
Closed shapes in simple ware include a sherd of high-necked jar with everted and elongated, double rim (Fig. 4.3: 5). Similar morphologies find comparison also in F. 811 (Fig. 4.6: 7); F. 810 (Fig. 4.7: 3) and F. 800 (Fig. 4.9: 2, Fig. 4.6: 6). High-necked jars with double rim are largely widespread in the MBA Northern Levant and Up-

[^37]per Upper Mesopotamian ceramic assemblages. ${ }^{95}$ Close comparisons with an L. 814 specific variant may be found in Alalakh X (Heinz 1992: Cat. A, pl. 62: 56), Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 34: 4, 18, type 1412; pl. 35: 9, 14, type 1414) and in Qatna MB IIB and III ceramic assemblages (Iamoni 2012: pl. 21: 12-13). ${ }^{96}$

Four samples, accounting for $24 \%$ of L. 814 ceramic inventory, are decorated. With the exception of an incised potsherd, the other samples exhibit blackish or brownish painted decoration. One of them, Fig. 4.3: 3, is among selected potsherds. From the morphological point of view, it may be ascribed to large mouthed jars - it is 20 cm in diameter - with a short, curved neck and everted, pointed rim. The painted decoration, in darkish-red colour, includes geometric patterns of short strokes above the rim; a band on the neck; and a row of hatched triangles filled with oblique lines on the shoulder. A further horizontal line crosses one of the triangles. The painted pottery at Tilmen Höyük constitutes only a minor component of the ceramic corpus. Only a small number of sherds derive from the lower town - from fortress P and from gate K-3. The greatest majority of Bronze Age painted potsherds, instead, derive from the upper town and, in particular, from the areas G, the K-5 residency and the area L. ${ }^{77}$ Hatched triangles are among the most common Tilmen Höyük painted patterns, usually found in a single row between bands. They are mainly associated to mediumsize jars with short, curved neck and medium-large mouth, storage jars with everted or banded rim, and on a two-handled jug. The trait of the paint is usually rather rough, like in K-3 potsherd, but a few samples with thinner and more accurate traits are also attested. ${ }^{98}$ The large morphological comparisons that may be found between

[^38]the vessels of this painted typology and the local common, unpainted wares, storage wares, and, rather frequently, in the inventory of the kitchen wares, support the hypothesis of a local production. Although attested in MBA Cilicia, ${ }^{99}$ hatched triangles do not appear to be a substantial component of the Syro-Cilician painted pottery. On the other hand, they are a common trait of either the Khabur ware, ${ }^{100}$ and of painted productions attested in Western Syria, such as the local Common Painted Ware or Simple Painted Ware ${ }^{101}$ or, although more rarely, of the Levantine Painted Ware, ${ }^{102}$ this latter type paralleling the Syro-Cilician painted tradition in the Syrian Coast and Palestine. Typical Syro-Cilician Painted Ware - or Amuq-Cilician, or Cilician Painted Ware, ${ }^{103}$ darkish painted, in the well-known type of the trefoil-spouted 'eye' pitcher - is attested also at Tilmen upper town in area K-5 (Marchetti 2008a: fig. 10), ${ }^{104}$ but this painted variant appears only a minor component of the painted pottery assemblage. The largest part of Tilmen Höyük painted samples, in fact, characterised by red or darkish red color paint, appears more likely to be associated to the different painted productions of local origin largely attested at MBA Northern Levant sites.

### 4.4.2 The ceramic inventory of phase 3 (MB IIB - LB I)

## F. 825 - Bucket 205

F. 825 is a filling of yellowish-brown crumbly soil and stones brought to light in the central and northern part of the central sector. It rests above the beaten earth floor

[^39]L. 814 in the central-northern part of the sector and leans directly above the stonepaved floor L. 816 in the central part of sector. It corresponds to F.811, recognised in the southern part of the central and eastern sectors, and is covered by F. 824.

The ceramic inventory includes 12 diagnostic potsherds, corresponding to $8.63 \%$ of $\mathrm{K}-3$ ceramic corpus. Of these, seven are rim-sherds and five are bottoms (Diagram 4.2). From the functional point of view, the incidence of simple ware, accounting for $50 \%$ of the unit inventory, is relatively lower than the other units. The low simple ware incidence matches a parallel markedly high incidence of kitchen ( $25 \%$ ) and storage ware ( $25 \%$ ) (Table 4.3 and Diagram 4.5). Concerning shapes, the same incidence of bowls and cooking pots is registered; in addition, only a single fragment of jar is registered (Diagram 4.14).

Five samples were selected as indicators (Fig. 4.4; Pl. C: 2).
The miniaturistic bowl Fig. 4.4: 1, the only entirely handmade sample recovered in the area, resembles the miniaturistic production typical of Central North Anatolian Hittite centres, frequently ascribed to the votive inventory. ${ }^{105}$ Hittite samples, handmade as well, are generally coarser than the K-3 sample, which belongs to the simple ware production.

The inventory of simple ware open shapes includes large, curved bowls with either inturned upper sides or inside thickened rim. The bowl Fig. 4.4: 2, with inside curved upper side and outside thickened rim, finds some general comparison with Alalakh X and, especially, with Alalakh IX bowls, mainly of MB IIA dating (Heinz 1992: Cat. A, pl. 35: 21, phase IX; Heinz 1992: Cat. A, pl. 55: 10, phase X). ${ }^{106}$ More frequent in MBA Northern Levant assemblages are bowls with a hammer-like rim - inside and outside thickened, with a rounded upper side, like that of F. 825 large bowls Fig. 4.4: 3. General morphological comparisons may be observed, for example at in MB II layers of Tuqan P (Peyronel 2008: fig. 11: 3), while a close parallel is found in the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 78: 7, type 2312). Bowls with

[^40]similar rim morphologies are attested in Tilmen area P (Fig. 5.10:1) $)^{107}$ and in the gate $\mathrm{K}-1-\mathrm{K}-6$ inventory (Fig. 2.3: 6).

Two cooking pot rim-sherds are included in the kitchen ware inventory: Fig. 4.4: 4-5. Although largely attested also in simple ware (see below), the rim morphology with double thickening is typical of Tilmen Höyük Middle and Late Bronze Age cooking pots, finding large comparisons in well-stratified contexts from the upper town areas K-5 and G. ${ }^{108}$ Further cooking pots with double rim are attested in K-3 F.824, F. 811 and F. $810 .{ }^{109}$ The general morphology of large-mouthed jars with double rim - which may present either an intermediate or high neck, and medium-small to large mouths - is largely widespread in Northern Levant and Euphrates area in simple ware. ${ }^{110}$ The use of double rim in association to kitchen ware pots is rarer, but samples are known from Cilicia, the Northern Levant and the Euphrates area dating from MB II until early LBA. ${ }^{111}$ The sample Fig. 4.4: 4 is characterised by squared profile rim and thinner walls, with an inner groove probably functional to accommodate a lid. A more rounded profile of rim thickenings and thicker walls is presented by Fig. 4.4: 5. Both pots had a flared neck and medium-small size opening ( $16-18 \mathrm{~cm}$ ).

[^41]F. 824 - Bucket 204
F. 824 is a deposit of clayish and compact soil, darkish brown in colour, characterised by the presence of medium-large stones, identified in the central and northern parts of the central sector. It covers F. 825 and is partially covered by F. 810 .

The ceramic inventory includes 20 diagnostic potsherds, corresponding to $14.39 \%$ of K-3 ceramic corpus. Most of them ( $65 \%$ ) belong to samples comprehensive of rim (11 rim-sherds and 2 potsherds comprehensive of rim and handle). Further included are three bottoms, two fragments of handle and two decorated body-sherds (Diagram 4.2). The frequency of handles appears relatively high, accounting for $20 \%$ of the inventory. From the functional point of view, the largest part of the ceramic inventory is composed of simple ware ( $90 \%$ of the F. 824 inventory), while kitchen and storage ware are only sparsely attested (Table 4.3 and Diagram 4.5). Concerning morphology, the highest incidence is attained by jars, followed by bowls and jugs. Cooking pots and kraters were sparse (Diagram 4.15).

Five samples were selected as indicators (Fig. 4.5; Pl. CI: 1).
Among the simple ware open shapes inventory, a small, curved bowl with simple, unthickened rim is attested - Fig. 4.5: 1 - most likely to be ascribed to the class of table ware, in particular intended for serving. The morphology, characterised by slightly inturned upper sides, is similar to well-stratified samples from the MBA and LBA layers of Tilmen Höyük upper town area K-5. ${ }^{112}$ A rooting in MB II Northern Levant morphologies seems highly likely, ${ }^{113}$ but F. 824 sample appears slightly closer to LBA variants. ${ }^{114}$ A second open shape variant - Fig. 4.5: 2 - is a large bowl with straight sides, carinated, inturned upper section, and outside thickened rim engendering a groove on the upper portion of the body. The morphology appears largely rooted in the MBA Northern Levant ceramic tradition, ${ }^{15}$ but closer similarities seem to be identified with samples from late MBA or transitional Middle-Late Bronze Age

[^42]contexts. ${ }^{116}$ The closest comparison is found from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 21: 5, type 11312).

The inventory of closed shapes in simple ware includes a rim-sherd - Fig. 4.5: 3 belonging to a large-mouthed jar with short, closed neck - or shoulder - and everted rim with squared profile. Considering the relatively large diameter of the opening, from the functional point of view it may have been connected to processing, mixing, or short-term storage. Altough the limited state of preservation of the sample does not allow for a sound interpretation of morphology, close similarities appear with late MBA and early LBA Northern Levant samples, frequently attested in kitchen ware. The closest comparisons may be observd in the inventpry of Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 89: 4, type 2520; pl. 86: 5-6, type 2511). ${ }^{117}$
Among the kitchen ware inventory, a typical large-mouthed cooking pot with double thickening rim - Fig. 4.5: 5 - is characterised by an open, flaring neck. The closest rim morphology among K-3 kitchen ware inventory is probably to be identified with F. 810 Fig. 4.7: 5. ${ }^{118}$
F. 811 - Buckets 202, 203
F. 811 is a filling of incoherent, yellowish-brown soil and collapsed stones identified in the southern part of the central and eastern sectors. It covers the stone-paved floor L. 816 in the southern part of the central sector and the passage L. 823 and the paved floor L. 812 in the eastern sector. It corresponds to F.825, brought to light in the central and northern part of the central sector, and it is covered by F.810.
The ceramic inventory includes 33 diagnostic potsherds, corresponding to 23.74 $\%$ of the K-3 ceramic corpus. Most of them (63.64\%) are potsherds comprehensive of rim, among which 19 rim-sherds and two potsherds include rim and handle. The

[^43]ceramic inventory additionally includes 10 bottoms, one handle and one decorated body-sherd (Diagram 4.2). From the functional point of view, the inventory is composed for the largest part by simple ware ( $81.82 \%$ ), and by minor amounts of kitchen ( $9.09 \%$ ) and storage ware ( $9.09 \%$ ) (Table 4.3 and Diagram 4.5). Concerning the range of shapes, jars registered the highest incidence ( $36 \%$ on F. 811 inventory of classified shapes), followed by bowls (20\%). Jugs have a low incidence, while sparse and very sparse are cooking pots and small jars (Diagram 4.16).
Eleven samples were selected as indicators (Fig. 4.6; Pl. CI: 2).
The inventory of open shapes includes a medium-size shallow bowl - Fig. 4.6: 1 - with a peculiar inside and outside thickened, flaring rim forming a short, obliquus band. The shape finds some element of comparison with MB II Northern Levant ceramic inventories; ${ }^{119}$ further parallels may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 46: 4, type 2212). ${ }^{120}$

The deep bowl - or small krater - Fig. 4.6: 2 - has almost vertical, carinated sides. The inside and outside thickened rim is grooved on the upper margin, recalling the treatment of the bowl Fig. 4.3: 1 upper sides (see above L.814). The same grooving is attested in Fig. 4.9: 1 (F.800). It presents a painted decoration in red of simple, geometric patterns: two horizontal bands on the neck, one above the carination and one almost below the rim, and a sparse chevron on the rim. The sample may be ascribed, as well as Fig. 4.3: 3 (see above, L.814) to the category of simple painted wares, but the simple painted pattern would seem closer to Khabur ware traditions. ${ }^{121}$ Concerning morphology, kraters or deep bowls with grooved rim are largely attested in the MBA Northern Levant and Euphrates area, continuing, in some variants, into the LBA. ${ }^{122}$ Parallels for the specific morphology of Fig. 4.6: 2, with inside and outside thickened, grooved rim, may be observed in the MB II layers of Oylum Höyük (Özgen, Helwig 2001: fig. 16: a); of Şaraga Höyük, where it is considered part of the peculiar cluster of grooved rim pottery (Ezer 2009: fig. 5: 7-8, 10); in Hammam et-Turkman period

[^44]122See commentary and comparisons for Fig. 2.3: 8, Area K-1.

VII: 3 (Cuvers 1988: pl. 136: 139), and VII: 5 (Cuvers 1988: pl. 136: 143); ${ }^{123}$ and in the LBA layers of Tell Rifa'at (Heinz 1992: Cat. B, pl. 63: 1).
The inventory of closed shapes includes jugs with a high neck (Fig. 4.6: 6-7), medi-um-size necked jars (Fig. 4.6: 4-5), and a jar without neck (Fig. 4.6: 3). The jar without neck Fig. 4.6: 3 is characterised by small opening and outside thickened, pointed rim. ${ }^{124}$ Jars with medium-size neck include a fragment of jug, poorly preserved, with flaring neck, simple rim and vertical, strong handle - Fig. 4.6: 4 - and a jar with straight, open neck and everted, thickened rim, pointed lower side - Fig. 4.6: 2. None of them, especially in the absence of better-preserved body, are particularly significant in terms of chronological or geographical distribution: jugs with straight, open neck and vertical handles may be found in both MBA and LBA contexts, ${ }^{125}$ as well as Fig. 4.6: 5's rim morphology, although associated to different body shapes. ${ }^{126}$ The highnecked jugs are both characterised by a rim with double thickening (see discussion in L.814), although light and elongated, finding comparison from MB to LBA. ${ }^{127}$ The samples testify to two morphological variants: a first one with rounded shoulder, with the upper side expanded or with a globular body (Fig. 4.6: 7), and a second one with a straight shoulder, possibly related to a pear-shaped body (Fig. 4.6: 6).

Storage ware jars present short, straight-closed neck and everted, outside thickened rim (Fig. 4.6: 10) or high, curved neck and thickened, banded rim (Fig. 4.6: 11). The

[^45]first variant finds some parallels in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 98: 4, type 3112; pl. 106: 3, type 3143). ${ }^{128}$ The second variant, attested also in F. 832 (Fig. 4.8: 5), may be better compared with MB IA specimens from Mardikh (Nigro 2002b: fig. 3: 24).

The kitchen ware inventory includes a further example of a cooking pot with a double rim (Fig. 4.6: 12) similar to the F. 825 variant.

## F.810 - Bucket 201

F. 810 is a deposit of darkish brown clayish and compact soil plus medium and large stones from collapsed walls that extends over all the central and eastern sectors. The ceramic materials (Bucket 201) derive from the southern part of the sectors. In contrast, no materials were recovered during the excavation of F. 810 in the central and northern part of the central sector, where the deposit was thinner. It covers F. 811 and part of F.824, and it is covered by F. 800 .

The ceramic inventory includes 28 diagnostic potsherds, corresponding to $20.14 \%$ of K-3 ceramic corpus. Of these, 16 are rim-sherds and two are potsherds comprehensive of rim and handle ( $64.29 \%$ ). The inventory additionally includes six bottoms and four handles (Diagram 4.2). The frequency of potsherds comprehensive of handle is relatively high, accounting for $21.43 \%$ of the inventory. From the functional point of view, despite the usual prevalence of simple ware ( $67.86 \%$ ), the incidence of kitchen ( $21.43 \%$ ) and storage ware (10.71\%) is relatively higher than in the other stratigraphic units (Table 4.3 and Diagram 4.5). Concerning the range of shapes, the highest incidence is registered by jars ( $31.82 \%$ on F. 810 inventory of classified shapes), followed by cooking pots ( $22.73 \%$ ) and bowls (18.18\%). A minor incidence is registered by jugs (DiagramSix samples were selected as indicators (Fig. 4.7).
Among the simple ware inventory, a closed fragment is included - Fig. 4.6: 1 similar to that found in L. 814 (Fig. 4.3: 4, see discussion above) and is characterised by simple, everted rim with rounded profile and straight, low shoulder. It is probably to be ascribed to the category of small jars or deep, biconical cups. ${ }^{129}$

[^46]The inventory of closed shapes further includes two jars with high - Fig. 4.7: 3 and medium-size neck - Fig. 4.7: 2. The high-necked jar shows a typical double rim (see above Fig. 4.3: 5, L.814), while the medium-necked one, outside thickened and lightly grooved on the inner side, so far remains an unicum in K-3 inventory.
The large-mouthed vessels to which the fragment Fig. 4.7: 4 belongs, characterised by outside thickened rim with squared profile and a single groove on the inner side - maybe for hosting a lid - is probably to be interpreted as a sort of bowl or krater, appearing mainly comparable with LBA morphologies. ${ }^{130}$
The kitchen ware ceramic inventory includes a fragment - Fig. 4.7: 5 - that, despite its peculiar sharp rim profile, may be ascribed to the category, discussed above, of double rim cooking pots. ${ }^{131}$ The sample Fig. 4.7: 6, in contrast, testifies to a second morphological cooking pot variant attested at Tilmen Höyük lower town characterised by short, closed neck and simple, everted rim with squared profile. Something vaguely similar may be found in LB I contexts of Mardikh, approximately dated to the $2^{\text {nd }}$ half of $16^{\text {th }}$-beginning of $15^{\text {th }}$ cent. BCE (Colantoni 2014: 22 and pl. 2: g, with rim typology continuing from MBA period) and in Tell Bazi citadel, North Slope, phase 4, attributed on comparative basis to the late MBA in the local sequence (late $17^{\text {th }}$ cent. BCE) (Coppini 2018: fig. 4: 6).

## F. 832 - Bucket 207

F. 832 is a collapse deposit including stones - probably from the nearby wall W. 819 - and darkish soil brought to light in the eastern sector. It leans against the walls W. 819 and W. 813 and it is covered by F. 800 .

The ceramic inventory includes 22 diagnostic potsherds, corresponding to15.83 $\%$ of K-3 ceramic corpus. The largest part of the inventory - 13 rim-sherds and one fragment comprehensive of rim and handle - belong to rim-sherds (63.64\%). It additionally includes seven bottoms and one handle (Diagram 4.2). From the functional

[^47]point of view, F. 832 presents a large prevalence of simple ware ( $81.82 \%$ ), and very small rates of kitchen (9.09\%) and storage ware (9.09\%) (Table 4.3 and Diagram 4.5). Concerning the range of shapes, the highest incidence is registered by jars ( $40 \%$ of F. 832 inventory of classified shapes), followed by bowls (20\%). The incidence of the other morphological categories is sparse (Diagram 4.18).

Six samples were selected as indicators (Fig. 4.8; Pl. CII: 1).
The inventory of open shapes in simple ware includes one medium-small size bowl - Fig. 4.8: 1 - and one large, shallow bowl or plate - Fig. 4.8: 2 - with inside thickened rim. The medium-small size bowl ( 18 cm diameter), with inside pointed profile rim, belongs to a morphology that, although attested in a number of variants in MBA - and especially MB II - contexts in the Northern Levant and nearby areas, closely resembles LBA specimens, ${ }^{132}$ themselves typical of the intermediate phase of the Hittite ceramic sequence. ${ }^{133}$ Relating the shallow bowl Fig. 4.8: 2, some similarity may be observed in the material from the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 69: 6, type 2215), ${ }^{134}$ and, in the Euphrates area, in Lidar Höyük phase 4 (Kaschau 1999: pl. 283: 9), attributed to MB IIIA in the local sequence, around the $2^{\text {nd }}$ half of $17^{\text {th }}$ cent. BCE. A similar shape, although with a different rim, is further attested in Tilmen area P phase 3a (Fig. 5.12: 3).

The simple ware potsherd Fig. 4.8: 3, with slightly everted sides and inside thickened rim, is probably to be ascribed to a typology of small jar - sometimes referred to as 'S-curved jars' (Horowitz 2015: fig. 7.4: 6), and 'shoulder' or 'carinated goblets'

[^48]134See also Pinnock 2005: pl. 68: 13, type 2215.
(Horowitz 2015: fig. 7.4: 4-5; Morgan, Soldi 2021: fig. 19: 4)- with flaring rim that are widespread in the Northern Levant and nearby areas. Typical of MB II assemblages, and especially of the late phases, they continue to be attested in the LBA. ${ }^{135}$ Further samples from Tilmen lower town derive from area P phase 3a (see for example Fig. 5.12: 5), and from area P2 phase 1 (Fig. 6.2: 1-2).
The last simple ware sample - Fig.4.8: 4 - belongs to a large-mouthed jar with curved, flaring neck and simple rim. The morphology finds relatively close comparisons with Tuqan L-South MB IB-IIA kitchen ware samples (Peyronel 2006: fig. 31: 1-3), but connections may be observed also in the Qatna MB IIB ceramic inventory (Iamoni 2012: pl. 22: 9). ${ }^{136}$
Th fragment Fig. 4.3: 4 belonging to a typical double rim cooking pot - for which see above F.825, F.824, F. 811 and F. 810 - represents the F. 832 kitchen ware inventory.

## F. 800 - Bucket 200

F. 800 is an accumulation of superficial debris of intense brown colour soil and stones from medium to large size brought to light over the whole central and eastern sectors. It covers F. 810 and F.832, and it is covered by the superficial stratum of hummus.
The ceramic inventory includes seven diagnostic potsherds, corresponding to $5 \%$ of K-3 ceramic corpus. Of these, six are rim-sheds and one is a bottom (Diagram 4.2). From the functional point of view, F. 800 is almost entirely composed of simple ware, plus a minor incidence of kitchen ware (Table 4.3 and Diagram 4.5). Considering the small size of the sample of reference, however, incidence values should not be

[^49]considered particularly relevant. The same holds true for morphological rate analysis (Table 4.5): with the exception of a single sample of cooking pot, the entire unit is composed of jar-potsherds (Diagram 4.19).
Two samples were selected as indicators (Fig. 4.9).
Both samples belong to well-known typologies. The fragment of large-mouthed vessel with open upper sides and grooved rim Fig. 4.9: 1 may be generally ascribed to the same morphological cluster of Fig. 4.6: 2 (F.811).

The sample of high-necked jar with everted, slightly incised rim Fig. 4.9: 2 may be associated to the general cluster of Fig. 4.3: 5 (L.814) and Fig. 4.7: 3 (F.810).

### 4.5 SMALL FINDS (by Vittoria Cardini)

Excavations in the Area K-3 brought to light 23 objects, of which 15 were fragmentary, five nearly complete and three complete.
The finds from Area K-3 were rather homogeneous, with a chronology ranging from Middle Bronze Age II to Late Bronze Age I. The inventory was entirely composed of lithic instruments, ${ }^{137}$ most of them probably to be related to the preparation of food, ${ }^{138}$ and by one architectural stone element. As far as function is concerned, the high number of grinding stones, grinders and pestles brought to light in area K-3 indicated that this sector hosted food processing activities, and in particular activities related to seeds and grain grinding. The morphology of many stone instruments seems to have a long-term conservative tendency from Bronze Age to Iron Age, therefore a chronology based on typology is not always possible (Merluzzi 2007: 327-331). The major part of the objects of Area K-3 belong to category of ground stone. The term 'ground stone' is not entirely correct, as ground stone artefacts includes a variety of tools, vessels, and decorative objects created through a variety of modification techniques, including flaking, pounding, abrasion, pecking, and grinding (Ebeling, Rowan 2008: 1-15; Rowan 2014: 917). These artefacts are both modified to create the initial tool and, in many cases, further modified through continual use. Unfortu-

137For the classification system and terminology see Wright 1992.
138 Thanks to Nicoletta Volante - University of Siena - for suggestions and advices in the field of production and experimental archaeology.
nately, the scarcity of published comparative material hinders ground stone studies despite their ubiquitous presence at ancient sites (Rowan 2014: 917).

### 4.5.1 Pivot stones

In the stratigraphic unit F. 810 a door-socket - TH.05.K3.39 - was found made with coarse-grained stone. The presence of a rounded hollow on two opposite sides of the object indicated two phases of use divided by an intermediate displacement.
A close comparison for TH.05.K3.39 has been observed with a door-socket found at Tell Atchana/Alalakh on the surface (Yener, Yazıcıoğlu 2010: 253, A03-R1053 Area 1); however, in this case, the object had a hollow only on one side while the other surface was flat.
Considering the door-socket of the door closing the passage L. 823 was still in place, on the western side of the passage, the door-socket TH.05.K3.39 was likely to be connected with a closing device located in the passage L. 839 or, more likely, considering the find-spot of the object, in the passage L.835. Another hypothesis is that this door-socket comes from an external context, although it is unlikely. No doorsocket was found in situ on the passage L.839, but the presence of indentations on the doorjambs suggested it might have been equipped with a closure device. Considering the possibility the door-socket TH.05.K3.39 was used in the passage L.835, one may suppose that this room to have been closed with doors on each access.

### 4.5.2 Grinders

In the stratigraphic units F.800, F.810, F. 811 and F. 824 six grinders were found TH.05.K3.43, TH.05.K3.44, TH.05.K3.122, TH.05.K3.128, TH.05.K3.150, TH.05. K3.172 - that can be distinguished into two morphological typologies in relation to the transversal section, which may be thin plane-convex - TH.05.K3.43, TH.05. K3.128, TH.05.K3.150, TH.05.K3.172 - or thick plane-convex - TH.05.K3.44.
We find comparisons in the Northern Levant sites with contexts dating MB II and LB such as Tell Afis (Mazzoni 1998: 34-37), Tell Tuqan (Ascalone 2008: 100-106; Dobran, Vacca 2011: 111-118) and Tell Mardikh (Merluzzi 2000: 1065; Merluzzi 2007: 338) where, from the end of the Bronze Age, it is possible to notice an increase of oval-shaped grinders with a plane-convex cross-section, which is mainly smaller and thinner than the previous ones with an elongated or rectangular shape. This morphology is better suited to the types of grinding stones with saddle profile,
facilitating the grip and movement of the stone on the convex surface of the grinding stones. In the $2^{\text {nd }}$ millennium BCE , the dimensions of the grinders increased constantly, appearing thicker, heavier and longer, in line with the higher dimensions of the types of contemporary grinding stones (Merluzzi 2007: 338). The texture of the basalt appeared variable as well, either large or medium, but this did not seem to affect the typology. Together with the grinding stones, the grinders were used to grind cereals and often they have traces of use-wear, appearing with smooth surfaces.

### 4.5.3 Grinding stones

In the stratigraphic units F.810, F. 811 and F. 824 five grinding stones were found - TH.05.K3.126, TH.05.K3.127, TH.05.K3.131, TH.05.K3.147, TH.05.K3. 157 made of basalt with a medium or large texture.

Comparisons that present a chronology from MB II to LB Age in the Northern Levant include sites likes Tell Atchana/Alalakh (Yener 2010: 101-102, A04-R694 Area 2, Phase 2, Room C/1), Tell Mardikh (Merluzzi 2000: 1064-1065; Merluzzi 2007: 338), Tell Tuqan (Ascalone 2008: 100-106; Dobran, Vacca 2011: 111-118) and Ras Shamra (Elliott 1991: 9-99). Comparisons from neighbouring areas where the materials have been published and where have the same chronologies are, for Cilicia, Kilise Tepe (Heslop 2017: 77-86), for the Upper Euphrates River, Arslantepe (Lemorini 2013: 234-241) and Tille Höyük (Summers 1993: 53-54) and for Southern Levant, Megiddo (Sass 2000: 349-423) and Tell Jemmeh (Rowan 2014: 917-969).
They are characterised by a convex shape: the length of the grinding stones is generally twice the width, although this is difficult to establish with certainty since most of them were found in a fragmentary preservation state. The morphology of grinding stones in the Northern Levant changes from the $3^{\text {rd }}$ to $2^{\text {nd }}$ millennium BCE: the saddle-shaped grinding stones tend to be replaced by a larger rectangular type with straight or rounded ends, often asymmetrical and with a flat or slightly concave surface (Merluzzi 2007: 338).

### 4.5.4 Pestles

In the stratigraphic units F.810, F. 811 and L. 814 five pestles were found that present a very variable morphological typology: elongated shape - TH.05.K3.50 - or pyramidaltrunk - TH.05.K3.114, TH.05.K3.115, TH.05.K3.116 - or prismatic - TH.05.K3.196.

Comparisons are found at sites from contexts dating to MB II-LB of Tell Mardikh (Merluzzi 2000: 1066-1067), Tell Afis (Mazzoni 1998: 34-37), Tell Tuqan (Ascalone

2008: 100-106), Ras Shamra (Elliott 1991: 9-99) and Tell Atchana/Alalakh (Yener 2010: 101-102, A04-R682 Area 3, Phase 1b, Installation 3 and A03-R1564 Area 2, Phase 2, Room A/1) and on the surface (Yener 2010: 101-102, A04-R110 Area 2; A03-R1037 Area 2; A03-R1048 Area 2; A03-R1067 Area 3; A04-R39 Area 2).

The cross-section is rectangular - TH.05.K3.114, TH.05.K3.115, TH.05.K3.116 or trapezoidal - TH.05.K3.196. Even the raw material is variable, including, in addition to basalt, other types of fine-grained stones as well. Some of these pestles showed signs of use-wear - TH.05.K3.50, TH.05.K3.115, TH.05.K3.116 - that come from continuous use as common tools.

### 4.5.5 Mortars

A semicircular mortar - TH.05.K3.173 - and an oval shaped instrument - TH.05. K3.207 - come from the stratigraphic units F. 810 and F. 832 .
Comparisons at sites with contexts dating MB II-LB of Tell Mardikh (Merluzzi 2000: 1065-1066; Merluzzi 2007: 334), Tell Afis (Mazzoni 1998: 34-37), Tell Tuqan (Ascalone 2008: 100-106) and, from Cilicia, Kilise Tepe (Heslop 2017: 77-86).
The first has a shallow hollow and is made with vesicular basalt while the second is made with fine-grained stone with a rectangular cross-section and shows traces of use-wear both at the ends and on the side surfaces, as well as a central hollow. All these signs suggested that this object was used both as a pestle and as a mortar.

### 4.5.6 Whetstones

A rectangular instrument - TH.05.K3.49 - made with fine texture stone and a smooth surface has been interpreted as a whetstone, as it has thin and elongated marks, probably traces of sharpening.

### 4.5.7 Perforated Tools

An object was found with a circular shape - TH.05.K3.53 - in vesicular basalt with a hole that has a diameter of 1.8 cm . Comparisons come from the sites of Tell Mardikh (Merluzzi 2000: 1067-1068) and Tell Atchana/Alalakh from the context dating to LB (Yener, Yazıcıoğlu 2010: 258, A04-R695 Area 2, Phase 2, Room C/1). Considering the internal width of the hole, its function could be to stretch wires, such as a counterweight for the loom or to counterbalance for fishing nets.

### 4.5.8 Weights/Polishers

An object with a truncated-conical shape - TH.05.K3.161 - in fine-textured basalt has a hole and signs of use-wear are on the lower surface: the traces of use-wear present on the lower surface testify to the rubbing of the object on surfaces. Two functional interpretations may be proposed: ${ }^{139}$ the instrument could have had the function of weight, pestle or polisher. In all these cases the through-hole indicates the presence of a rope that allowed one to hang and transport the object. It is also possible that the object had been reused after having lost its primary function, for example if it was made as a pestle and afterwards reused as a weight or vice versa. Furthermore, as regards the traces of use-wear present on the lower surface and the hole, it is not possible to establish whether they were in use at the same time. In the event that the hole does not pass all the way through, it could be an unfinished object that had lost its original function and that had been reworked to be used in another way.

### 4.5.9 Stone Vessels

A fragmentary base - TH.05.K3.123 - in vesicular basalt may be part of a stone vessel or a stand, however the shape is not well identified.
4.5.10 Catalogue of small finds

TH.05.K3.39, Door-socket (Pl. CXXI: 1)
Bucket: TH.05.K3.200
Material: stone
Dimensions: h. 7.3 cm ; 1.10 .3 cm ; w.
11.4 cm ; d. 3.3 cm

SU: F. 810
Bucket: TH.05.K3.201
Preservation: nearly complete

TH.05.K3.43, Grinder (Pl. CXVII: 1)
Material: basalt
Dimensions: 1. $18.8+\mathrm{cm}$; w. 11.7 cm ;
th. 5.3 cm
SU: F. 800

Preservation: fragmentary

TH.05.K3.44, Grinder (Pl. CXVII: 2)
Material: basalt
Dimensions: 1. $20.8+\mathrm{cm}$; w. 13.4 cm ; th. 8 cm
SU: F. 800
Bucket: TH.05.K3.200
Preservation: fragmentary

TH.05.K3.49, Whetstone (Pl. CXX: 2)
Material: stone

[^50]Dimensions: $1.7 .6+\mathrm{cm}$; w. 6.3 cm ; th.
1.6 cm

SU: F. 800
Bucket: TH.05.K3.200
Preservation: fragmentary

TH.05.K3.50, Pestle (Pl. CXIX: 1)
Material: basalt
Dimensions: h. 16.6 cm ; w. 4.6 cm ; th.
3.8 cm

SU: F. 810
Bucket: TH.05.K3.201
Preservation: nearly complete

TH.05.K3.53, Perforated Tool (Pl. CXXI: 3)
Material: basalt
Dimensions: d. 6.7 cm ; th. 3.8 cm
SU: F. 800
Bucket: TH.05.K3.200
Preservation: fragmentary
TH.05.K3.114, Pestle (Pl. CXIX: 2)
Material: stone
Dimensions: h. $11+\mathrm{cm}$; w. 7 cm ; th. 3.5 cm

SU: F. 811
Bucket: TH.05.K3.202
Preservation: fragmentary

TH.05.K3.115, Pestle (Pl. CXIX: 3)
Material: stone
Dimensions: h. 8.1 cm ; w. 5.6 cm ; th. 4.5 cm

SU: F. 811
Bucket: TH.05.K3.202
Preservation: complete

TH.05.K3.116, Pestle (Pl. CXIX: 5)
Material: basalt
Dimensions: h. 15.2 cm ; w. 6.4 cm ; th.
4.9 cm

SU: F. 811
Bucket: TH.05.K3.202
Preservation: nearly complete
TH.05.K3.122, Grinder (Pl. CXVII: 3)
Material: basalt
Dimensions: l. $13.2+\mathrm{cm}$; w. 10.8 cm ;
th. 5.7 cm
SU: F. 811
Bucket: TH.05.K3.202
Preservation: fragmentary
TH.05.K3.123, Stone Vessel (Pl.
CXXI: 2)
Material: basalt
Dimensions: h. $6.3+$ cm; d. 5.6 cm
SU: F. 810
Bucket: TH.05.K3.201
Preservation: fragmentary

TH.05.K3.126, Grinding Stone (Pl.
CXVIII: 5)
Material: basalt
Dimensions: 1.26 .3 cm ; w. 18.5 cm ; th.
4.8 cm

SU: F. 811
Bucket: TH.05.K3.202
Preservation: complete

TH.05.K3.127, Grinding Stone (Pl. TH.05.K3.150, Grinder (Pl. CXVII: 6)

CXVIII: 3)
Material: basalt
Dimensions: $1.20 .8+\mathrm{cm}$; w. 24.5 cm ;
th. 5.1 cm
SU: F. 811
Bucket: TH.05.K3.202
Preservation: fragmentary

TH.05.K3.128, Grinder (Pl. CXVII: 4)
Material: basalt
Dimensions: $1.25+\mathrm{cm}$; w. 11.3 cm ; th.
8.3 cm

SU: F. 810
Bucket: TH.05.K3.201
Preservation: fragmentary

TH.05.K3.131, Grinding Stone (Pl.
CXVIII: 1)
Material: basalt
Dimensions: 1. $20.3+\mathrm{cm}$; w. $13.3+\mathrm{cm}$;
th. 5.4 cm
SU: F. 811
Bucket: TH.05.K3. 202
Preservation: fragmentary

TH.05.K3.147, Grinding Stone (Pl. CXVIII: 2)
Material: basalt
Dimensions: 1. $44.5+\mathrm{cm}$; w. $39.3+\mathrm{cm}$;
th. 12.5 cm
SU: F. 824
Bucket: TH.05.K3. 204
Preservation: fragmentary

Material: basalt
Dimensions: 1.31 .2 cm ; w. 11.5 cm ; th.
7.7 cm

SU: F. 824
Bucket: TH.05.K3.204
Preservation: complete

TH.05.K3.157, Grinding Stone (Pl. CXVIII: 4)
Material: basalt
Dimensions: 1. $19.5+\mathrm{cm}$; w. $19.1+\mathrm{cm}$;
th. 9 cm
SU: F. 824
Bucket: TH.05.K3. 204
Preservation: fragmentary TH.05.K3.161, Weight/Polisher (Pl. CXX: 4)
Material: basalt
Dimensions: h. 4.3 cm ; d. 5.4 cm
SU: F. 811
Bucket: TH.05.K-3.203
Preservation: nearly complete

TH.05.K3.172, Grinder (Pl. CXVII: 5) Material: basalt
Dimensions: $1.22 .4+\mathrm{cm}$; w. 15.4 cm ; th. 14.8 cm
SU: F. 811
Bucket: TH.05.K3.202
Preservation: fragmentary

TH.05.K3.173, Mortar (Pl. CXX: 1)
Material: basalt

Dimension: h. 10 cm
SU: F. 810
Bucket: TH.05.K3.201
Preservation: fragmentary

TH.05.K3.196, Pestle (Pl. CXIX: 4)
Material: stone
Dimensions: h. 11.9 cm ; w. 8.4 cm ; th.
4.6 cm

SU: F. 814
Bucket: TH.05.K3.206
Preservation: fragmentary

TH.05.K3.207, Pestle/Mortar (Pl. CXX: 3)
Material: stone
Dimensions: 1.12 .8 cm ; w. 7 cm ; th. 3.3 cm

SU: F. 832
Bucket: TH.05.K3.207
Preservation : nearly complete

### 4.6 SYNTHESIS

4.6.1 Materials and chronology

The materials brought to light in the course of the 2005 Turco-Italian excavations in the Area K-3 derive from the K-3 central and eastern sectors. A small cluster of materials deriving from the compacted earthen floor L.814, in phase 2 , is to be related to the phase of use of the last architectural arrangement of the area. Obviously, the presence of potential residuals materials - from K-3 phase 1, for example, or earlier - may not bThe largest part of the K-3 ceramic inventory however derives from the layers of accumulation and collapse above the floors, attributed to K-3 phase 3. Concerning phase 3 , two possible interpretations may be proposed. Considering that no evidence of a structured phase of use was preserved in situ after phase 2, the materials from phase 3, although displaced, may have derived, entirely or in part, from the occupation of phase 2 . At the same time, it is not possible to exclude that the materials from phase 3 may be, at least in part, the remains of a form of occasional and light frequentation of $\mathrm{K}-3$ ruins. The analysis of the ceramic inventory, in fact, seems in part to support this interpretation. The occurrence in these deposits of residual materials from potential earlier layers, related to the first architectural arrangements of the area (phase 1), may not be excluded, but the presence of large-stone paved floors should have largely hampered the resurgence of earlier material.

The state of preservation and the typology of archaeological deposits do not allow for a functional distinction of the different rooms excavated, but the analysis of pottery and finds supports the hypothesis that different ranges of activities might have been performed in the area in its last phase of use. Among these, lithic finds point in particular to grinding activities, while pottery finds attest to cooking and storage activities. Overall, the processing of grains and food with or without the use of heat seem to be considered predominant. Raw or mid-processed supplies were probably at least in part stored in the same area. Additionally, the presence of tableware, together with the attestation of animal bones remains, would seem to indicate the possibility that meals were also consumed in the area.

## Chronology of K-3 phase 2

The radiocarbon dating from phase 2 earthen floor L. 814 returns a range including mid-late $17^{\text {th }}$ cent., $16^{\text {th }}$ cent. and early $15^{\text {th }}$ cent. BCE. This span of time corresponds to the period that, from mid-late MB IIB, extends until advanced LB I according to traditional chronologies, or until MB III ( $16^{\text {th }}$ cent. BCE) early LB I (early $15^{\text {th }}$ cent. BCE) according to Qatna revised chronology (see $\$ 1.4$ ).
The marked continuity, noticeably in morphology, recognised in the ceramic production along this chronological span, and, with the exception of a few cases, the absence of extensive published sets of well-stratified and chronologically referenced ceramic assemblages for the area, affects in part the degree of reliability of ceramic comparisons. In fact, the range of ceramic parallels, either internal or external, is quite large, spanning from MB I until LB I, and the shapes, although with some modifications, appear to be characterised by a strong continuity. The period in which most of the shapes are widespread seems to be the MB IIA but, considering the aspects of continuity and the associated chronological range of the radiocarbon sample, a dating range extending also to the MB IIB may be hypothesised.

## Chronology of K-3 phase 3

The ceramic inventory from K-3 collapse layers (phase 3) is not entirely homogenous from the point of view of morphology, attesting a great variety, especially visible in the inventory of open shapes. A few elements however appear consistent. Open shapes, despite varied, may be in large part related to anti-splash morphologies. Most of them were medium-large or large, indicating a similar functional context
of reference. The large mouthed vessels, jars or kraters also occur quite frequently, and this aspect too would seem likely to be connected to a specific range of function, probably in the sphere of communal meals.

Relating chronology, a large part of the phase 3 ceramic inventory, especially from the lower deposits F.825, F. 824 and F.811, appears substantially coherent with that from phase 2, thus supporting the hypothesis of a connection between the bulk of phase 3 materials and K-3 phase 2.

The significant comparisons with LBA ceramic assemblages that would seem to be registered in the inventory of the upper accumulations F. 810 and F.832, however, might be the evidence of some form of frequentation of the area well into the LBA. A dating between MB IIB and LB I may then be hypothesised.

### 4.6.2 Architecture and layout

K-3 constitutes a lower town secondary gate oriented toward the west and the Amanus Mountains.

## Architectural elements

The gate structure appears to be the product of a fragmented building program, probably extended over time. The walls that comprise the different sections of the complex have different texture and, to some extent, orientation; the perimeter of the rooms is not perfectly regular, and the access path is slightly curved, presumably as a consequence of adjustments to earlier structures and morphology of the ground.
Although no direct evidence was gathered from Area K-3, the upper portion of the walls were most likely built with mudbricks or mudbrick and timber. The inner chambers, in most city gates, were probably roofed. ${ }^{140}$ In K-3, the western and the central chamber, small in size and maybe equipped with doors on every passage, were in fact most likely roofed; no evidence allows for a final interpretation of the eastern and northern sectors, only partially excavated, but roofing would have been largely endured considering the short distance between the recovered walled sides.
The presence of a door socket still in place at the base of L. 823 attests to the presence of a door between the central and the eastern chamber, located on the side of the cen-

[^51]tral chamber and opening toward the inner side. A further door socket found displaced in the central sector may have been related to a door dividing the central chamber from the northern one or from the western one. Relating the passage between the western and the central chamber, the presence of the niches on the pillars of the passage L. 839 would nicely comply with the presence of a door opening toward the inside of the chamber, but no definite evidence of its presence has been gathered. Usually, in typical three-pier gates, the central piers are substantially considered load-bearing elements rather than the setting of additional doors: the number of door-sockets preserved, in fact, suggests that door devices were mainly limited to the outer piers (Burke 2008: 72). In Ebla city gates, for example, attested doors are located on the inner side of the outer passage, opening toward the inside, and on the outside of the inner passage, opening toward the outside (Matthiae 2002b: 34). Concerning K-3, while the location of the door and its opening direction in the passage L. 823 comply with this scheme, the presence of a door in the passage between the outer and the inner chamber, as hypothesised for L.839, would be unusual. Considering the possibility of a chronologically extended building process, it is not possible to exclude the existence of a door in $L .837$ in a first phase of use that was then eliminated after the construction of the central room, but this hypothesis may also be criticised. In fact, as already observed in the case of $\mathrm{K}-1$, the single chamber gates also usually attest a single closure device on the outer passage, and do not function as self-contained forts.
As seen already in the case of K-1, Middle and Late Bronze Age passages through city gates were usually equipped with double doors, mainly opening toward the inner side of the chamber (Mielke 2011). The small passages between K-3 piers - around 90 cm on the inner passages and probably ca. 1 m large on the outer passage - in contrast were more likely closed by single doors, presumably opening toward the inner side of the chamber as well.

Concerning the summit of the doorways, either a straight lintel or an arch or parabola shapes may be hypothesised. Arched gates and corbeled vaults, although this second typology required thicker walls to support comparable weight, are particularly appropriate as weight-bearing substructures, for example in the case of upper stories. ${ }^{141}$ In fact, arch or parabola shapes are registered quite frequently in LBA

[^52]Anatolian fortifications. ${ }^{142}$ Barrel vaulted arches, in particular, are considered a specific component of MBA six-pier gate morphologies, but they are largely attested in Mesopotamia and the Levant since the $3^{\text {rd }}$ millennium BCE. ${ }^{143}$ The better reference for the MBA Levant is the case of Ashkelon, where the gate from phase 14 featured four arched piers, in stone on the outside and mudbricks on the inner side, enclosing an opening of 3.6 m width (Burke 2008: 70). ${ }^{144}$ The small size of the K-3 opening would have had to comply with either a straight or arched lintel. An arched lintel might be hypothesised due to the parallelism with gate $\mathrm{K}-2$, where such a summit has been hypothesised for the recovery of a possible keystone, but a conclusive evidence is also lacking in the case of $\mathrm{K}-2$ (see chapter 3).
In any case, the use of stone for large parts of the superstructures is remarkable. The texture of the inner pillars W.802-W.804, characterised by large and regularly squared stones, appears suitable to grant a great degree of stability, and their state of preservation at the time of first excavations was indeed clear evidence of their original stability. The use of well-dressed stones in the masonry of sensitive components, either in structural and cultural terms, is largely documented in the first excavations on the site (Duru 2013: 81, 90), and the new investigations in the lower town add further insight. So as in gate K-2 (Duru 2013: 82), in fact, the carefully shaped stones of K-3 piers mark a different building technique with respect to other walls of the structure, denoting a higher quality workmanship. The use of dressed stones in gate foundations finds large comparisons in MBA Levantine contexts, ${ }^{145}$ while the superstructures are most likely largely built of mudbrick (Burke 2008: 72). In this respect, Tilmen Höyük gateway K-3, as well as K-2, may have constituted a peculiarity. According to comparative studies (Burke 2008: 71), the only gate typology in the Northern Levant where the use of well-dressed stone masonry is attested from floor to ceiling is the corbel vaulted, postern gate ${ }^{146}$. Although not comparable under many architectural

[^53]respects, in addition to the large use of well-dressed stones, postern gates might have been related to Tilmen K-3 in terms of function, as a secondary gate mainly for pedestrians and small-size flocks.

The presence of a drain, as already seen for $\mathrm{K}-1$ and $\mathrm{K}-2$, is almost a constant in city gates, and K-3 is no exception.

The staircase is also a typical element of main city gates and in general of six-pier gates, but definitely not of single chamber gates (for which see below). However, it is worth noting that the staircase might have been related to the last architectural phase of the gate. Despite the relatively large number of excavated rooms in the lower town that probably hosted a staircase, this is the only case where stone steps were preserved. If the other staircases were built of wood, the K-3 staircase stands out for the use of stone, which might be evidence of a functional distinction of some sort, related to more intensive use or display.

Relating to transit, a person entering the city would have followed a direct path through the first chamber. A door probably regulated the access to the second chamber, maybe roofed and closed on every passage by doors. Entrance to the inner city might have been granted by a $90^{\circ}$ turn toward the northern sector or, more probably - considering the location of the drain - by a continuation of the path toward the east with a minimal curve toward the right side.

The access through the gate's outer chamber was not located on the midpoint of the courtyard but decentred and shifted toward the right side of the room for visitors entering the city. Once they entered the inner courtyard, the visitor would have found a larger space on their left side and a wall closer to the right. The additional presence of the staircase on the courtyard's narrowest side indicates the chamber's southern side was used for transit, while more space for gate activities was left on the northern, larger side of the chamber.

Rooms within city-gates and city gate bastions might serve multiple purposes (Burke 2008: 68), among which the accommodation of guards was specifically attested (Mielke 2018: 73). Comparative studies shows that the frequency of inner cham-

[^54]bers in purely militaristic contexts must have been related to a military or defensive potential of some sort but suggest that police and/or toll activities might have been among their main functions (Keeley et al. 2007: 67). Concerning K-3, the small size of rooms and the limited permeability suggested by the probable large presence of doors seems to point to the necessity for transit regulation and control. The inventory of materials recovered in the rooms, presumably in large part belonging to the last architectural phase of the fabric, additionally, would indicate the performance of food processing activities, with a specific emphasis on grinding.

Unlike the gate K-1 (for which see $\int 2.5 .2$ ), the width of K-3 openings, ranging from 1 m on the outer access to 0.9 m on the inner ones, was surely not suitable for the transit of chariots and carts which, in all likelihood (Burke 2008: 71) needed a space of at least 2.5 m of width. Given the relatively small size of the openings, one may suppose that the K-3 gate, although granting the possibility of a frequent use of the passage, probably related to daily activities, was not devoted to massive transit and was probably intended as a secondary gate. The probable high number of passages blocked by doors granted a remarkable degree of transit regulation and control, allowing at the same time the implementation of defensive capacity through the sealing of multiple elements.

Layout
Tilmen Höyük gate K-3 is embedded in the lower town fortification wall, obtained by the construction of tongue walls between two existing casemate blocks. The defensive value is increased by the location on the high slope of the terrace. The exploitation of natural reliefs or the building up of artificial ramparts is in fact typical of Middle Bronze Age Levantine fortified cities.

The original arrangement of the gate K-3 (phase 1), which most likely corresponds to the western sector, envisages an inner courtyard, almost squared, with two openings, one toward the outer side and one toward the inner side of the city, disposed on the southern section of the western and eastern walls. The outer doorways consist of plain passages cut into the courtyard walls, the doorjamb depth corresponding to the wall width. The access to the city consists of a direct east-west-oriented path, perpendicular to the lower town fortification wall.

In this first architectural phase, K-3 belongs to so-called flanked gate typologies, characterised by straight or direct entrances flanked by 'defenders' walls on both sides creating a passage that, in this case, might be blocked or gated at both ends. Specifi-
cally, K-3 chambered layout is quite common in main city gates from the Neolithic until historical times, probably as a good compromise between defence, fluency for peaceful transit, and access regulation and control (Keeley et al. 2007: 66-67).

Single chamber gates, also indicated as four-pier gates or double-entry gates, constitute a particularly widespread MBA gate morphology, probably to be traced back to the EBA (Gregori 1986: 90; Burke 2007: 70). ${ }^{147}$ Examples of this gate morphology may be largely found in the Levant, like at Akko area F (Herzog 1986: fig. 38a), Ashdod area G (Dothan, Porath 1993: plans 1-2; Herzog 1986: fig. 49), Megiddo XIIIA, Area AA (Loud 1948: fig. 378, top; Burke 2008: fig. 88), all dating to Southern Levant (VLC) MB IIA (Northern Levant MB I); Ashkelon XXIV-XXIII (Voss 2002: figs. 1-3), dating to Southern Levant (VLC) MB IIA (Northern Levant MB I) and XXI (Voss 2002: fig. 5), dating to SL (VLC) MB IIB (NL MB IIA); Rukais II.2.I (McLaren 2003: figs. 45a-b) dating to SL (VLC) MB IIB (NL MB IB-IIA); Beit Mirsim E-D (Herzog 1997: fig. 4.15), dating to SL (VLC) MB IIB-C (NL MB II); Shechem XV, East Gate (Herzog 1986: fig. 45; Wright 1984: fig. 3; Herzog 1997: fig. 4.14; Campbell 2002: 131ff) and Tell el-Far'ah North (Herzog 1997: fig. 4.19), dating to SL (VLC) MB IIC (NL MB IIB), and probably Yavneh-Yam area H gate II (Kaplan 1969: 121; Herzog 1986: 52-53; Burke 2008: 316), dating to SL (VLC) Late MB IIA or MB IIB (Burke 2008: 316), corresponding to NL MB IB-MB IIA. In Inner Syria a single chamber access is included in area A Damascus Gate at Mardikh (Pinnock 2001: fig. 14), in use in Mardikh phases IIIA and B (MB I-II). Anatolian portals are usually constructed as chamber gates as well, but they are mainly associated with two protruding massive towers on each side (Mielke 2018: 72-73).

The exact profile of $\mathrm{K}-3$ access sector with respect to the outer line of the fortification wall remains partially uncertain: surely it envisages at least a 0.90 m protruding block, maybe a tower, between 1.42 or 2.70 m north of the access. On the southern side of the access, instead, the profile of the outer wall was probably straight. Additional protection to the gate front area could have been provided from upper storey or wall-walks corresponding to the gate sector itself and/or on the protruding sector to the north - on the left side of potential assailants. The presence of an elevated body on a fortification line, in fact, serves the double function of increasing the force of

[^55]missiles projected from the top of their curtains and enhancing the defenders' view of their field of fire. The projection of the structure outside of a curtain wall, additionally, would have allowed flanking fire on the attackers (Keeley et al. 2007: 68).

The poor state of preservation of the K-3 outer wall at the time of excavation had been certainly in large part triggered by a leaching process due to its proximity to the terrace slopes, but its bulkiness would have largely been apt to support a heavy and high superstructure. Being about 1.70 m thick, the outer, western wall of the gate - W.829-W. 830 - is the most massive with respect to the other walls of the block, which ranged from 1.20 m on the northern wall W. 805 , to $1.15-1.18 \mathrm{~m}$ on the eastern piers W.802-W.804. As already observed in the case of K-1, the employment of a larger wall for the outer side of structure could have been related to the necessity to strengthen the first barrier encountered by potential assailants. Interestingly, the employment of larger walls on the outer sides of the chambers does not appear to be a constant feature of city gates. For example, at Beit Mirsim E-D (Herzog 1997: fig. 4.15), dating to SL (VLC) MB IIB-C (NL MB II) (Burke 2008), the outer pillars of the gate chamber are considerably thinner with respect to the massive city wall through which the inner acces is cut. Differently from Tilmen Höyük K-3, however, Beit Mirsim E-D gate is an architectural unit entirely jutted from the city wall.
Something comparable to Tilmen K-3 layout may be found at Boğazköy, where a similar gate plan seems to be rather codified in the LBA shape of the northern and western gates of Büyükkaya (Neve 2004: fig. 6: e-f) and in the northern gate of the lower city Abschnittsmauer (Puchstein 1912: fig. 373), whose construction is approximately dated toward the $16^{\text {th }}$ cent. BCE. ${ }^{148}$ All these gates, single chambered with four piers, were not directly integrated with jutting flanking structures but, all the same, they were positioned adjacent to a tower of the fortification wall (Mielke 2018: 73). Unlike Tilmen $\mathrm{K}-3$, where the jutting section was located on the access right side, the towers of Boğazköy gates were located on the access left side, the right side for a person entering or assaulting the fortified area.
In this respect, while the location of the elevated device on the assaulters' right side - like in the Boğazöy samples - would have granted intensified fire on their

[^56]unshielded flank, the disposition of the protruding unit on the assailants' left side in gate K-3 would have resulted in a relatively lower defensive capacity. From the architectural point of view, however, it seems worth noting here that the outer layout of Tilmen K-3 appears in large part the result of an agglutinative building process: belonging to the architectural block north of the gate, the construction of the jutting body north of the gate is likely to be related to an older architectural phase than that of the gate chamber. According to this hypothesis, the protruding element, although present at the time gate K-3 was in use, should be considered the outcome of the socalled 'inset-outset' lower town fortification wall morphology more than the result of a unitary gate planning. In these terms, K-3 conforms with the MBA Levantine single chamber gates where, differently from so-called six-piers gates - for which see below - the absence of towers was considered a typical element The absence of flanking towers has been in some cases related to low defensive capacity gates (Naumann 1971: 299). In the Levant, the SL (VLC) MB IIC (NL MB IIB) single chamber gates of Tell el-Far'ah North (Herzog 1997: fig. 4.19) and Ashdod area G (Herzog 1986: fig. 49; Dothan, Porath 1993: plan 1, 2), for example, lack flanking sections, but they are mainly shaped as jutting bodies from the city wall, ${ }^{149}$ the projection of the structures being only apparently mitigated by the presence of the rampart lined up to the gate,,$^{150}$ and might have acted themselves as guard spots for the fortification section close to them.

More close comparisons with Tilmen K-3 not-jutting outline would seem visible in the layout of Akko's gate chamber (Dothan, Raban 1980: 38; Herzog 1986: fig. 38a), dating to the SL (VLC) MB IIA (NL MB I), that probably corresponds to the earliest configuration of the gate: the chamber, in fact, is only minimally protruding with respect to the city wall, while a markedly jutting avant-corps would seem to belong to a secondary architectural phase (Gregori 1986: 90). A comparison in this respect is found also with Rukais II.2.I's gate (McLaren 2003: figs. 45a-b), dating to

[^57]SL (VLC) MB IIB (NL MB IB-IIA), which is entirely aligned to the fortification wall without protruding elements. ${ }^{151}$ In this case, however, a distance from the K-3 layout is evident in the presence of flanking towers that grant a higher defensive value. In fact, in the absence of massive towers, the defensive rate of single chamber gates appears frequently raised by a retracted position with respect to the outer fortification line, be it a wall or an earthen rampart. ${ }^{152}$

In Anatolia, the single chamber Sphinx Gate at Yerkapı in Boğazköy upper city, whose construction is probably to be located between the $15^{\text {th }}$ and $14^{\text {th }}$ cent. BCE (Schachner 2011: 92-93), lacked flanking sections as well but, also in this case, the gate itself is shaped as a projected body (Puchstein 1912: fig. 372 and pl. 9). Quite significantly, none of the Boğazköy examples quoted above for comparison - namely the Büyükkaya northern and western gates, the northern gate of the lower city $A b$ schnittsmauer and Yerkapı's Sphinx Gate - are located on the outer fortification line.

Given all the above, the Tilmen Höyük western terrace gate does not appear to display a great defensive potential, finding larger comparison with intermediate fortification structures than with elements typical of the outer fortification lines. Relating to the military strength granted by elevation, it can be observed that massive flanking towers are not integrated into the gate layout: the thickness of the outer wall however would accord with the presence of an upper storey, and the same holds true for the architectural block north of the gate, which may have granted and elevated a field of fire. Additional effectiveness is granted by the location on the high slopes of the terrace. In relation to the military strength granted by protrusion, only a limited projection was offered by the casemate block north of the gate. This architectonical component is not to be ascribed to the original gate planning, but its military potential might all the same have been exploited at the time the gate $\mathrm{K}-3$ was in use.
In the last structural phase exposed in Area K-3 (Phase 2), the plan of the gate system includes with certainty at least two chambers: the western and the central chamber. Additional rooms, the nature of which is difficult to interpret because they are only partially excavated, are located to the north and the east. The three east-west

[^58]sectors - the western, the central and the eastern rooms -are divided by the six piers of passages L.838, L. 839 and L.823. This layout resembles to some extent of so-called 'six-piers gates', or 'bipartite gate chamber'. ${ }^{153}$
This gate typology, known from Middle and Late Bronze Age Northern and Southern Levant, North-Western Mesopotamia and Anatolia, is characterised by a direct-axis passage internally divided into chambers by three sets of piers and flanked by rectangular bastions. The employment of the long passage probably responded to the double function of overcoming the massive urban fortifications and increasing the disadvantage of a narrow crossing for assailants. ${ }^{154}$ The oldest, codified samples have been recognised in the MBA I Northern Levant (Gregori 1986: 95; Burke 2008: 69); their primary distribution dates back to the MBA II, but different samples continued to be in use until the LBA (Burke 2008: 69). The origin of the morphology is considered to be sought in large, four-piers gates variants like Byblos level VI - dating to SL EB III-IVA - and Ashkelon XXIV phase 14 - dating to SL (VLC) early MBA IIA/NL MB I (Burke 2008: 70). Middle and Late Bronze Age Anatolian samples, in contrast, are mainly considered an independent, local evolution (Gregori 1986: 87; Mielke 2018: 72). According to different scholars (Mielke 2018: 73, quoting Rahtz 1975; Burke 2008: 69-70) middle tongue walls or piers in multiple-chamber gates were primarily constructed for structural purposes, answering the need to strengthen the long, roofed passages of the gateways, thus supporting rooms or wall-walks above the gate chambers (Mielke 2018) and enhancing defensive capacities against the use of battering rams (Burke 2008).
In the case of Tilmen Höyük gate K-3, although composed by inner chambers divided by six piers, many elements mark a difference from original six-pier gates. The considerably smaller size and reduced massiveness of K-3 fabrics is among the major distinctive elements, ${ }^{155}$ but perhaps the building process should be considered more significant. Unlike the six-pier gates that, as observed by P. Matthiae (1980: 204), presented highly standardised features, complying with a precise architectural planning,

[^59]the Tilmen Höyük gate K-3 does not appear the result of an original, comprehensive plan, but of a gradual, agglutinative building process. The presence of the staircase is a feature common to six-pier gates, but K-3 lacks massive towers, usually integrated into this kind of gate, and an additional opening with respect to the classical six-pier gate layout is probably present on the northern side of K-3 inner chamber.

Although the Tilmen gate $\mathrm{K}-3$ is clearly not to be considered a proper six-pier gate, the structure may be of some relevance in the process of development of this peculiar gate type. The comparison between Tilmen K-3 and the MBA gate of Akko, in Southern Levant, appears in this respect worth noting. Akko's gate has been interpreted by B. Gregori $(1986: 90,95)$ as a sort of hybrid example between a cham-ber-gate and a six-pier gate layout. In fact, to the simple chamber is prepended an elongated corridor, creating a double-room passage. Drawing on proportional irregularities and differentiated building techniques, Gregori hypothesises that the two sections of the gate belong to different building phases, and the complex represents evidence of the continuity between the old chambered gate typology and the later typology of six-pier gate.
Available data are not adequate to chronologically detail the architectural sequence of Tilmen Höyük K-3 gate, and a more extensive exposure of the architecture would be suitable for a finer understanding of the nature of the rooms and of the paths, but the architectural development of Tilmen K-3 could reflect, comparably to Akko, a form of evolution from a four-pier gate toward a six-pier gate model.

### 4.7 RESTORATION WORKS

A restoration season took place in 2008 and was focused on some of the architectural elements brought to light in the 1960s, which were largely deteriorated (Marchetti et al. 2020). In particular, the restoration concerned the pillars of the access L.839, the walls W. 804 and W.802, and the abutment of the staircase L.801, the wall W.831. 1960s pictures were used as a reference for the reconstruction. A lead band worked with a hammer was applied between the original sections of architecture and the restored sections. The lead band granted an immediate distinction between original and restored parts.
The northern pillar W.804, which was preserved until the $6^{\text {th }}$ stone row above the surface in the 1960s (Alkım 1972: fig. 8; Duru 2003: pl. 21: 2; Duru 2013: fig. 32: 2-3),
was collapsed until the third stone row in 2005 and restored until the fifth in 2008; the southern pillar W.802, preserved until the fourth stone row above the surface in the 1960s, was collapsed until the second row in 2005, and restored until the third in 2008.

The staircase abutment L.831, preserved until the fourth stone row above surface in the 1960s (Duru 2003: pl. 21: 2), was deteriorated until the first stone row in 2005 and was restored up to the third row in 2008.

Fig. 4.1. Plan of area K-3.

Fig. 4.2. Detail plan of area K-3.

| N. | Year | Area | Locus <br> Type | Locus N. | Bucket <br> N. | P.N. | Class | D | T | Fab. |  | req. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | L | 814 | 206 | 2 | Simple Ware | 25 | W | M | S | M- | 5YR 7/8 | 5YR 7/8 | 5YR 6/8 |
| 2 | 2005 | K3 | L | 814 | 206 | 1 | Simple Ware | 25 | W | M | M | M | 5YR 7/8 | 5YR 7/8 | 5YR 6/8 |
| 3 | 2005 | K3 | L | 814 | 206 | 3 | Simple Ware | 20 | W | M | S | M- | $\begin{gathered} 2.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 7 / 6 \\ \hline \end{gathered}$ | 2.5YR <br> 6/1 |
| 4 | 2005 | K3 | L | 814 | 206 | 5 | Simple <br> Ware | 17 | W | M | S | M- | 5YR 7/6 | 5YR 7/6 | 5YR 6/1 |
| 5 | 2005 | K3 | L | 814 | 206 | 4 | Simple Ware | 13 | W | M | M | M- | 5YR 6/6 | 5YR 6/6 | 5YR 6/2 |

Fig. 4.3


3


Fig. 4.3. K-3, phase 2. Pottery assemblage of L.814.

| N. | Year | Area | Locus <br> Type | Locus N. | Bucke N. |  | Class | D |  | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | F | 825 | 205 | 3 | Simple <br> Ware | 7 | H | M | S | M- |  |  | 5YR 5/6 |
| 2 | 2005 | K3 | F | 825 | 205 | 1 | Simple <br> Ware | 19 | W | M | S | M |  |  | 5YR 6/6 |
| 3 | 2005 | K3 | F | 825 | 205 | 2 | Simple <br> Ware | 27 | W | M | S | M- |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ |
| 4 | 2005 | K3 | F | 825 | 205 | 4 | Kitchen Ware | 8 | W | M | S | M- |  |  |  |
| 5 | 2005 | K3 | F | 825 | 205 | 5 | Kitchen Ware | 18 | W | M | M | M | 10R 4/1 | 10R 5/6 | 10R 5/6 |

Fig. 4.4


Fig. 4.4. Area K-3, phase 3. Pottery assemblage of L.825.

|  | Year | Area | Locus <br> Type | Locus N. | Bucket N. | P.N. | Class | D |  |  | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | F | 824 | 204 | 1 | Simple <br> Ware | 15 | W | M | S | M- | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 2 | 2005 | K3 | F | 824 | 204 | 2 | Simple <br> Ware | 29 | W | M | S | M | 5YR 6/8 | 5YR 6/8 | 5YR 6/1 |
| 3 | 2005 | K3 | F | 824 | 204 | 3 | Simple <br> Ware | 26 | W | M | S | M- | 5YR 6/8 | 5YR 6/8 | 5YR 6/2 |
| 4 | 2005 | K3 | F | 824 | 204 | 4 | Simple <br> Ware | 3.7 | W | M | S | M- |  |  | 10YR 7/3 |
| 5 | 2005 | K3 | F | 824 | 204 | 5 | Kitchen Ware | 32 | W | M | M | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 4 / 2 \end{gathered}$ |

Fig. 4.5


Fig. 4.5. Area K-3, phase 3. Pottery assemblage of L.824.

| N. | Year | Area | Locus Type | Locus N. | Bucket N. | P.N. | Class | D | T F |  | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | F | 811 | 202 | 1 | Simple Ware | 26 | W | M | M | M- | 5YR 6/6 | 5YR 6/6 |  |
| 2 | 2005 | K3 | F | 811 | 202 | 3 | Simple <br> Ware | 20 | W | M | M | M |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ |
| 3 | 2005 | K3 | F | 811 | 202 | 5 | Simple Ware | 12.6 | W | M | S | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ |
| 4 | 2005 | K3 | F | 811 | 202 | 4 | Simple Ware | 12 | W | M | S | M- | 5YR 6/6 | 5YR 6/6 | 5YR 5/1 |
| 5 | 2005 | K3 | F | 811 | 203 | 2 | Simple <br> Ware | 12.6 | W | M | M | M+ | 5YR 7/8 | 5YR 7/8 | 5YR 6/2 |
| 6 | 2005 | K3 | F | 811 | 202 | 10a | Simple Ware | 15 | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ |  |  |
| 7 | 2005 | K3 | F | 811 | 203 | 1 | Simple Ware | 13.7 | W | M | M | M | 5YR 6/8 | 5YR 6/8 | 5YR 6/2 |
| 8 | 2005 | K3 | F | 811 | 202 | 10b | Simple Ware | 11 | H | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ |  |  |
| 9 | 2005 | K3 | F | 811 | 202 | 6 | Simple Ware | 5 | W | M | S | M- |  |  | 5YR 6/8 |
| 10 | 2005 | K3 | F | 811 | 202 | 8 | Simple <br> Ware | 23 | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 7 / 4 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 2 \end{gathered}$ |
| 11 | 2005 | K3 | F | 811 | 202 | 9 | Storage Ware | 33 | W | M | M | M | 5YR 6/6 | 5YR 6/6 | 5YR 6/1 |
| 12 | 2005 | K3 | F | 811 | 202 | 7 | Kitchen Ware | 16 | W | M | M | M+ | 7.5YR <br> 6/4 | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | 5YR 6/6 |

Fig. 4.6


Fig. 4.6. Area K-3, phase 3. Pottery assemblage of L.811.

| N. | Year | Area | Locus <br> Type | Locus <br> N. | Bucket N. | P.N. | Class |  |  | Fab. |  | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | F | 810 | 201 | 1 | Simple <br> Ware |  | W | M | S | M- |  |  | $\begin{gathered} 10 \mathrm{YR} \\ 8 / 3 \end{gathered}$ |
| 2 | 2005 | K3 | F | 810 | 201 | 3 | Simple <br> Ware | 9 | W | M | S | M- |  |  | $\begin{gathered} \hline 10 \mathrm{YR} \\ 8 / 3 \end{gathered}$ |
| 3 | 2005 | K3 | F | 810 | 201 | 4 | Simple <br> Ware | 15 | W | M | S | M- | 5YR 6/6 | 5YR 6/6 | 5YR 6/1 |
| 4 | 2005 | K3 | F | 810 | 201 | 2 | Simple <br> Ware | 29 | W | M | M | M | $\begin{gathered} 10 \mathrm{YR} \\ 7 / 4 \end{gathered}$ | $\begin{gathered} \hline 10 \mathrm{YR} \\ 7 / 4 \end{gathered}$ | $\begin{gathered} 10 \mathrm{YR} \\ 7 / 2 \end{gathered}$ |
| 5 | 2005 | K3 | F | 810 | 201 | 5 | Kitchen <br> Ware |  | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 5 / 4 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 6 | 2005 | K3 | F | 810 | 201 | 6 | Kitchen Ware | 22 | W | M | S | M |  |  | 5YR 5/4 |

Fig. 4.7

## $\geqslant$ <br> 1



3


Fig. 4.7. Area K-3, phase 3. Pottery assemblage of L.810.

| N. | Year | Area | Locus Type | Locus N . | Bucket N. |  | Class | D |  |  |  | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | F | 832 | 207 | 3 | Simple <br> Ware | 18.4 |  |  | M | M- | 5YR 7/6 | 5YR 7/6 | 5YR 6/1 |
| 2 | 2005 | K3 | F | 832 | 207 | 2 | Simple <br> Ware | 32.6 |  |  | M | M | 5YR 7/6 | 5YR 7/6 | 5YR 7/1 |
| 3 | 2005 | K3 | F | 832 | 207 | 1 | Simple Ware | 16 | W | M | S | M- |  |  | 5YR 7/8 |
| 4 | 2005 | K3 | F | 832 | 207 | 4 | Simple <br> Ware | 33 | W | M | M | M | 5YR 7/6 | 5YR 7/6 | 5YR 5/1 |
| 5 | 2005 | K3 | F | 832 | 207 | 6 | Storage Ware | 39 | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 3 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 6 | 2005 | K3 | F | 832 | 207 | 5 | Kitchen Ware |  |  | M | M | M | $\begin{gathered} \text { 7.5YR } \\ 4 / 4 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 4 / 2 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 4 / 2 \end{gathered}$ |

Fig. 4.8


Fig. 4.8. Area K-3, phase 3. Pottery assemblage of L.832.

| N. | Year | Area | $\begin{aligned} & \text { Locus } \\ & \text { Type } \end{aligned}$ | $\begin{gathered} \text { Locu } \\ \mathrm{N} . \end{gathered}$ | ucket <br> N. | P.N. | Class | D |  | Fab. | Size | Freq. | Colour (out) | Colour <br> (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2005 | K3 | F | 800 | 200 | 1 | Simple <br> Ware | 20 | W | M | M | M- | 5YR 6/6 | 5YR 6/6 | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ |
| 2 | 2005 | K3 | F | 800 | 200 | 2 | Simple <br> Ware | 14 | W | M | S | M- | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |

Fig. 4.9


1


2

Fig. 4.9. Area K-3, phase 3. Pottery assemblage from F. 800 .

## Chapter 5

## AREA P

The area of the fortress P , on the north-western corner of Tilmen lower town, was first surveyed by the Alkım team, who detected the orientation of the outer fortification line and hypothesised a possible internal distribution of walls and rooms on the basis of the surface remains (Duru 1987: fig. 1). An extensive excavation program was subsequently carried out by the Turco-Italian team between 2006 and 2007 (Marchetti 2008a: 391-392, and fig. 12; 2008c: 469 and fig. 10; 2009: 389-390 and figs. 10-11; 2010: 372).
The remains of further casemate blocks were preserved above the surface to the east $(\$ 5.7)$ and south of the fortress ( $\$ 5.6$ ).
In the records from the Turkish expedition, the fortress P and the adjoining casemates to the south belonged to the first block of the western sector of the lower town terrace wall. The Turco-Italian investigations revealed that the fortress P constituted a single, independent block; to a second, intermediate block belonged the adjoining casemate to the south.

### 5.1 THE SETTING

Area P fortress is located on the northwest fringe of the site. To the north, it is oriented toward the northern trajectory of the Islahiye valley, in the direction of the Taurus mountains (Pls. XXXVII, XL: 2); to the west, it faces the western side of the valley and the Amanus chain (Pls. XXXVIII: 1, XXXIX: 1). Its location and orientation, like the other buildings of the lower town fortification wall, is tightly connected to the site topography. Being set at the very edge of the lower terrace slope, almost
north-south oriented, the building forms the northwest corner of the fortification system. In fact, the northern and western perimetral walls of the building coincide with the outer line of the lower town fortification wall, and are based on the low sides of the hill, between ca. +354.30 and +455 msl; the walking floor of the building, instead, is set ca. 3.60 m above. Sharp angles are notably weak and thus tend to be avoided in a fortification line (Macqueen 1986: 71): the angle engendered by fortress P in the fortification wall in fact is one the very few abrupt directional changes detected so far along the terrace wall, explaining the massiveness of the building set in a such sensitive spot, as well as giving us an idea of its key role in the fortification system (Pls. I-II, VI: 2). ${ }^{156}$ The building is bound to the adjacent casemate blocks to the east and to the south. The adjoining casemate block to the east is almost aligned to the fortress P northern wall, being only slightly retracted. The adjoining casemate block to the south is retracted further, but its poor state of preservation does not allow for a sound evaluation (Figs. 5.1-5.5; Pls. XXXVII-LXIII, LXIV: 1).

### 5.2 ARCHITECTURE AND STRATIGRAPHY

The walls and the inner spaces of the building are substantially north-south and east-west oriented. ${ }^{157}$ Through foundations set at different levels, they conform to the topography of the ground, sloping down toward the north and west (Pls. LX-LXI; Figs. 5.3-5.5). All architectonical elements brought to light are built of basaltic stones without mortar, but the soil from degraded fired bricks in some of the fortress fills attests to the use of mudbrick upper masonries (PI. XLVIII: 3). As in the other buildings of the lower town fortification system, the building technique of the walls from area P envisages a double-shell stonework, but compared to most of the other buildings they appear substantially larger in average size, and make broader use of well-dressed stones for the outer façades of the shells. The core is normally filled with unfinished stones and rubble.

[^60]The fortress has a rectangular plan of $12.23 \times 17 \mathrm{~m}$ on the main axis, and is delimited by walls W. 1639 and W. 1610 to the north and south, respectively, and by walls W. 1611 and W. 1609 to the west and east. The northern and western walls correspond to the outer fortification line of the lower town (Figs. 5.1-5.2).
A single opening - L. 1629 - located on the southern façade of the structure makes the building accessible from the inside of the lower town. The inner layout of the building is regularly planned and geometrically organised with rooms disposed on a perpendicular grid. Two main sectors can be distinguished: two large rooms oriented north-south - L. 1640 and L. 1641 - represent the northern sector; the southern sector hosts two parallel, narrow rooms - L. 1646 and L. 1645 - oriented east-west, plus a third room, a long corridor - L. 2017 - oriented north-south that connects the northern and southern sectors.
As a consequence of the hillside ground, the northern sector is badly preserved: large parts of the masonry are preserved only at the foundation levels, covered by large stones and boulders collapsed and washed away along the slope. The masonry is slightly better preserved on the western slope, where the gradient is milder.

### 5.2.1 The sequence

The building process of the fortress $P$ envisaged first the laying down of the main stonework structures: the fortress walls, gateways and gateway piers jutting from the walls. Subsequently, the rooms within the walls and the passages were filled with massive foundation deposits made of medium-large undressed stones and soil. Set above the foundation deposits are the floors, either beaten earth or partially stone-paved. Concerning the phases of life of the structure, two different architectural layers have been brought to light in the access sector, while a single floor phase is preserved in the rest of the building. On the basis of the pottery sequence, we can suppose that a further walking floor might have been located above the two already mentioned, but if so, none of its remains were preserved in situ.
Above the floors, different deposits fill the rooms of the building and attest to an articulated process of deposition.
The depositional sequence may be consequently schematised in four main phases and seven sub-phases, summarised as follows:

Phase 4: Later deposits
Phase 3: Earlier deposits b: Stone and soil deposits
a: Earth deposits
Phase 2: Walking floors
c: Later floors
b: Intermediate deposits
a: Earlier floors

Phase 1: Foundation deposits
b: Earth foundation deposits
a: Large stone foundation deposits

To phase 1 belong the foundation deposits that fill the rooms between the walls and form the groundwork of the walking floors. They usually include a lower deposit of medium and medium-large undressed stones, which corresponds to the sub-phase 1a, and an upper deposit made predominantly of fine soil, which corresponds to the sub-phase 1 b .

To phase 2 belong the walking floors of chambers and gateways. In the access sector, where two subsequent floor stages were preserved, the earlier floors have been summarised under the sub-phase 2a; the deposits above the earlier floors in the subphase 2 b , and the later floors in the sub-phase 2 c .
To phase 3 belong the first deposits above the floor. In some cases, two sub-phases have been isolated, a first one, named 3a, corresponding to soil accumulations above the floors, and a second one, named 3b, including soil accumulations and stones from wall collapses.

To phase 4 belong the later, superficial deposits of collapsed stones and darkish soil.

### 5.2.2 Walls

The perimetral wall to the north, W. 1639 , which is 12.23 m for 3 m on the main axis, is the most massive of the building, probably necessitated by the steep slope on that part of the site (Fig. 5.3; Pls. LI, LII: 1, LIII: 1, LIV, LX: 2, LXI, LXII: 1). The base of the northern, outer façade of the wall is located on the low slope of the terrace at +457.94 msl ; the base of the inner façade is located 3 m to the south, around 1 m above the base of the outer façade (Fig. 5.3). The outer scaffolds are made of particularly large boulders but of these, only one or, rarely, two stone
rows were preserved in place above the modern surface. The core of the wall is not particularly well preserved but on the northern section, it would seem possible to detect the presence of a third, intermediate line of large stones between the outer and the inner scaffolds: that would represent an inner, smaller wall bordering to the north the room L. 1641 and whose northern scaffold would have been used as the southern scaffold of a parallel wall to the north. To the west, the wall W. 1639 bounds to the north-south wall W. 1611 that delimits the fortress to the west on the slope (between +454.40 and +456.41 msl ) (Figs. 5.4-5.5; Pls. LIV, LV: 1, LVI: 1, LIX, LX: 1). The wall W. 1611 is $2.60 \times 17 \mathrm{~m}$ on the main axis but appears slightly larger in the northern section and thinner $(2.1 \mathrm{~m})$ in the southern part. On the western façade, it is preserved until the third stone row. Remarkably well-dressed stones, as already observed in other key-spots in the buildings of the lower town fortification system, are employed on the south-west corner (Pl. LIX: 1). To the east, the fortress is delimited by the north-south wall W. 1609 (Figs. 5.4-5.5; Pls. LVIII: 2, LXI: 2, LXII-LXIII, LXIV: 1). Built in a double-shell stonework, the wall is $17.35 \times 2.50 \mathrm{~m}$ on the main axis, but its width varies between 2.36 and 2.50 m . In the corridor L.2017, six stone rows have been exposed for a height of more than 2 m (top between +459.35 and +459.59 msl ; base between +458.03 and +458.26 msl ). The delimiting wall to the south is W.1610: also built as a double-shell stonework, it extends over $8.54 \times 2.37 \mathrm{~m}$ on the main axis (Fig. 5.3). From 4 to 6 stone rows of this wall have been exposed above the surface (top between +459.05 and +459.42 msl ; bottom between +458.20 and +458.29 msl ).
Inside the fortress, the east-west wall W. $1634-6.27 \times 1.80 \mathrm{~m}$ on the main axis divides the northern and southern sectors of the building (Fig. 5.5; Pls. XLIX: 2, L, LIII: 2, LV: 2-3). On the eastern end, it has been exposed over 4 stone rows above surface (between +458.98 and +459.03 msl ) but at its western end, on the lower part of the slope, only two stone rows are preserved above the foundation levels, evidently as a consequence of washing away processes ( +457.46 msl ). Built in double-shell stonework, the wall W. 1634 presents facades with accurately flattened face stones, and a core made of irregular, smaller stones. Particularly accurate is the stone dressing of the eastern end, which coincides with the western pier of the passage L. 1636 (see below) (Pl. L: 1; Fig. 5.3); more irregularly shaped stones are employed in the long facades. To the north and south, the southern and northern piers of the passages L. 1637 and L. 1635 respectively are built as thin extensions of the wall, apparently constructed
together with it (Pls. XLVI, XLIX: 2, L). To the west, it is bound to the perimetral wall W.1611; the southern face delimits the northern side of the room L. 1645 and the passage L.1635; the northern face delimits the southern sides of the rooms L. 1640 and L. 1641 and the passage L.1637; the eastern end corresponds to the western pier of the passage L.1636.

In the northern sector of the building, along the northern slope, the north-south wall W. 1638 ( 3.2 m length x 1.8 m width on the main axis) divides the rooms L. 1640 and L. 1641 (Pls. LI-LIII, LIV: 1). Built in double-shell stonework, it has been exposed over two stone rows on the southern section (between +457.72 and +457.90 msl ) and over three stone rows on the northern section (between +456.94 and +457.01 msl ). To the north, it is bound to the perimetral wall W.1639; its southern face instead delimits the passage L. 1637 to the north.
In the southern section of the building, the east-west wall W. 1613 ( 6.3 m length x 2.9 m width on the main axis), built in double-shell stonework, divides the two long rooms L. 1645 and L.1646, and delimits the north-south corridor L. 2017 to the west (Figs. 5.3-5.4; Pls. LVI: 2, LVII). Its eastern face has been exposed over 7 stone rows above the L. 2017 floor level, over a height of ca. 2.20 m (between +459.67 and $+457.44 \mathrm{msl})$. In contrast, toward the west and the terrace slope, where the wall W. 1613 is bound to the perimetral wall W.1611, probably as a consequence of washing away processes, only 1 to 2 stone rows were preserved above the foundation layers of the room (between +458.24 and +457.81 msl ) (Fig. 5.4). To the north, as well as in the case of the parallel wall W.1634, the southern pillar of the passage L. 1635 is built as an extension of the wall, while no pillar protrudes from the southern side, where the access to the room L. 1646 is located. Also similarly to the wall W.1634, remarkably well-dressed stones, with flattened sides and sharp angles, are employed in the corners of the eastern side, while the texture of the long facades north and south is more irregular.
Among the inner walls, the walls W. 1638 and W. 1634 , each ca. 1.80 m wide, are considerably thinner than the perimetral walls, which usually are between 2.50 and 3 m wide. The inner wall W.1613, however, with a thickness of 2.90 m , is more similar to the perimetral than to the inner walls. Considering the relative regularity and consistency of the building masonries, such a distinction in the wall width must have had a precise reason. The specific function of supporting an upper structure is plausible: if the two elongated rooms L. 146 and L. 1645 hosted a double-ramp staircase, the
wall W. 1613 should have had the function of supporting the staircase structure. The marked thickness of this inner wall, however, remains odd: in general, in fact, unless they supported more than two staircase ramps, the staircase cage walls do not appear necessarily thicker than normal walls. ${ }^{158}$
5.2.3 The access L. 1629 and the north-south corridor L. 2017

| Fortress |  |  |  | P, access | L. 1629 - Distribution of loci and fills by phase |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Area |  |  |  |  |  | Unit $\quad$ Phase Location

Area P, room L. 2017 - Distribution of loci and fills by phase
Area Unit Phase Location
P F. 16304 L.1629, L.2017, L.1635, L.1636, L.1637, L.1640, L. 1641
P F. 16324 L.2019, L.2015, L.2017-South, L. 1646
P F. 20354 L.2017-North
P F. 16314 L.1629, L.2019, L.2015, L.2017-South
P F. 2033 3b L.2017-North
P F. 1633 3b L.2019, L.2015, L.2017-South
P L. 2015 2c L.2017-South
P L. 2019 2c L.2017-South
P F. 2021 2b L.2017-South
P F. 2023 2b L.2017-South
P L. 2017 2a-c L. 2017
P L. 2024 2a L.2017-South
P F. 2025 1b L.2017-South
P F. 2026 1a L.2017-South

[^61]The access to the building, named L. 1629 (phase 2a), 0.90 m wide and 2.40 m deep, is opened through the wall W. 1610 at its junction with the wall W. 1609 (Pls. XLIXLII). The lateral piers are built of accurately well-dressed stones preserved over 4 stone rows above the surface on the western side and on 5 stone rows on the eastern side. Sharp-angled stones are employed in the pier's edges; the pier's core is instead built with varied typologies of stones, all of them with flattened outer faces but either regularly squared sides or irregular profiles (Fig. 5.3, W.1610). To the east, the presence of a pier jutting from the wall W. 1609 denotes a specific intention to devise a niche -23 cm wide - at the north-eastern edge of the access. This may have been functional for the installation of a door hinge. Two monolithic stones, well-dressed and sharp-edged, shape an outer ( $1 \times 0.40 \mathrm{~m}$ ) and inner threshold ( $1.18 \times 0.50 \mathrm{~m}$ ), the latter fractured on the western part. The space in-between - F. 2028 - was filled with-small sized and irregularly shaped stones, presumably the basis of a beaten earth floor, only partially preserved (+357.73 msl).

North of the passage L.1629, the north-south corridor L. 2017 (phase 2) grants transit between the building's inner chambers (Figs. 5.3-5.4; Pls. XLV: 2-3). Shaped as a long and narrow corridor, it is 5.90 m long and ca 1.20 m wide. Admittance to the corridor is directly provided throughout the fortress gate L.1629. North of the gate, the corridor is opened to the west toward the room L.1646. Three meters to the north, it is opened toward the room L. 1645 and, at the northern end, the passage L. 1636 connects it with the room L. 1641 and the northern sector of the building. The corridor is delimited to the east by the perimetral wall W. 1609 and to the west by the eastern façade of the thick, inner wall W.1613, both preserved in this part of the building over more than 2 m height. The corridor's original floor is not well preserved: since no evidence of a stone paving has been recovered during excavation, it was presumably entirely earth-beaten, but the walking surface was substantially damaged by massive collapses of stones. In the northern section of the corridor, between the passage L. 1636 and the southern edge of the wall W.1613, the floor is composed of reddish-buff and sandy soil. The floor of the corridor (ca. +457.43 msl ) appears to be ca. $15-20 \mathrm{~cm}$ lower than the walking level of L. 1636 and L. 1635 , and the difference corresponds to the height of the upper stones of the doorsteps.
Further and clearer traces of a beaten earth floor, well compacted despite some gaps, have been uncovered on the southern part of the corridor, between the passages L. 1629 and L.2031. This portion of floor, named L. 2024 (phase 2a) ( +457.53 msl ),
is preserved over an area of ca. $1.30 \times 1.80 \mathrm{~m}$ on the main axis, and is one step below the walking floor of the passages L. 1629 and L. 2031 ( +457.73 msl ). The access to the room L. 1646 through the threshold L. 2031 and the access to the passage L. 1629 thus required overcoming one step. ${ }^{159}$ The floor L. 2024 rested on a thin, earth filling - F. 2025 (phase 1b) - that, in turn, lies on a foundation deposit of small, irregular stones - F. 2026 (phase 1a) (Pl. XLIII). F. 2026 has been exposed only on the southern part of the corridor L. 2017 over a surface of ca. 2 m length, north of the access L. 1629 ( +357.44 msl ).
Just in the southern part of the corridor, as well as in the access L.1629, evidence has been gathered of a secondary architectural arrangement of the area (phase $2 b-c$ ). In fact, the walking surface of the access L. 1629 and that of the southern sector of the corridor L.2017, in front of the room L.1646, were raised of ca. $10-20 \mathrm{~cm}$. The floor L. 2024 was covered by a thin deposit - around 10 cm thick - of loose, fine soil with ashy spots, named F. 2023 (phase 2b). F.2023, in turn, was covered by a deposit of medium-small size stones and soil - F. 2021 (phase 2b) - on which rested a second beaten-earth walking floor: L. 2019 (phase 2c) (+457.74 msl). L. 2019 formed a sort of raised landing above the earlier floor of the corridor. To the north, it was delimited by an east-west line of three flattened stones, L. 2015 (Phase 2c), lined up on their short side (Pl. XLV: 1-2). The stones, whose southern side was aligned to the wall W. 1613 southern façade, formed a step around $15-20 \mathrm{~cm}$ above the floor of the corridor, probably functional to reinforce the margin of the landing. To the west, the floor L. 2019 covered the threshold L. 2031 that, evidently, was no longer in use at that time. To the south, the landing was delimited by two flattened and sharp angled stones - L. 2027 (phase 2c) - that, set above the inner threshold of the access L. 1629 (1.18x0.65 m on the main axis), formed a step above the landing (Pl. XLV: 2). On the basis of this secondary arrangement of the floors, a person entering the fortress through the passage L. 1629 would have descended a first stone step (L.2027); walked on a beaten earth landing (L.2019), stone-paved at its northern end (L.2015); and descended, down another step, onto the earthen floor of the north-south corridor.

No walking floor connected with the step L. 2027 is preserved in the access sector L.1629. Deposits of medium-size stones and sandy soil of buff to reddish colour

159See Pl. XLIII for the detail of the passages L. 2031 and L. 1629 and, in the middle, the foundation deposit F. 2016 above which the floor L. 2024 was laid. Additionally see Fig. 5.3.
(phase 3b) cover all the area: F. 2032 (buckets 311 and 314) covers the access sector L. 1629+L.2027; F. 1633 (buckets 337 and 363) covers the southern part of the corridor L. 2017 and the landing L.2019+L.2015; F. 2033 (buckets 312 and 325) covers the northern part of the corridor L. 2017.
Above them, further deposits of large stones from the collapse of the walls are accumulated (phase 4): F. 1631 (buckets 361 and 362) covers F. 2032 in the access sector L. 1629 and F. 1633 in the landing area and in the southern part of the corridor; F. 2035 (bucket 310), made of large stones and clumps of darkish soil, covers F. 2033 in the northern part of the corridor. Above them, F. 1632 (phase 4) covers F. 1631 in the landing area and in the southern part of the corridor L.2017. F. 1632 is concentrated in the room L.1646, and it is made of loose, darkish soil and large stones that probably derive from the collapse of walls W. 1613 and W. 1610 (see below). A superficial level of collapsed stones and compacted, darkish soil - F. 1630 (phase 4) (bucket 359 and 360) - seals all the area, covering F. 1632 in the southern part of the corridor, F. 2035 in the northern part, and F. 1631 in the access sector. An additional and more superficial concentration of collapsed stones probably fallen from the wall W. 1612 and named F. 1612 further covers F. 1630 in the gate area.

### 5.2.4 The room L. 1646 and the passage L. 2031

Area P, room L. 1646 - Distribution of loci and fills by phase
Area Unit Phase Location
P F. 16324 L.2019, L.2015, L.2017-South, L. 1646
P F. 2001 3a L. 1646
P F. 2003 3a L. 1646
P L. 2031 2a L. 1646
P L. 1646 2a-c L. 1646
P F. 2029 1a L. 1646
The room L. 1646 - east-west oriented, $6.50 \times 1.50 \mathrm{~m}$ on the main axis - is located on the southern section of the fortress and is shaped as a long and narrow chamber, parallel to room L. 1645 (Pls. XLIII-XLIV, XLV: 1). It is delimited to the north by the large, inner wall W.1613, and to the west and south by the perimetral walls W. 1611 and W.1610. Admission to the room is from the east, where the stone paved passage L. 2031 (phase 2a) connects the room to the north-south corridor L.2017. L. 2031 1.35 x 0.90 m on the main axis ( +457.73 msl ) - is shaped almost like the other door-
ways of the building, but some main distinctions may be highlighted (Fig. 5.3). The presence of two stone thresholds delimiting L. 2031 to the east and to the west presumably indicated the spots meant to support the main use, which would configure L. 2031 like the other raised passages of the building intended to be accessed from two sides. The inner fill of small stones also matches the structure of the other passages. However, unlike them, no jutting piers and, consequently, no niches or indentations at the access sides are present, thus suggesting, in the absence of either niches for door sockets or door sockets dug on the doorstep (like in L.1634), that the passage was most probably not sealed by a door. Also different from the other doorways was the use in L. 2031 of two smaller stones for both doorsteps while the other doorways present, at least on the outer sides, a single, well-dressed stone.

At the time of the secondary architectural arrangement of the access sector, concerning L.2017, L. 2019 and L. 2015 (phase 2c), the landing passage L. 2031 was no longer in use: the raised walking floor L.2019, in fact, covered all of the passage (see above).

The foundation deposit F. 2029 (phase 1a), made of medium-small to mediumlarge size stones, fills the room between the walls. The upper surface of the deposit presents an arched profile. In fact, the top of the stone layer, which is ca. 47 cm above the layer of the passage L.2031, is located around the middle of the room ( +458.20 msl ), while it decreases toward the east and the west (Fig. 5.4; Pl. XLIV: 3). No trace of earth-beaten floor has been recovered in the room. Instead, lenses of grey/buff F. 2003 (bucket 329) - and reddish soil - F. 2001 (buckets 302, 319 and 331) - (phase 3a) rather fine and loose, cover the stone foundation deposit (Pl. XLV: 1).
Above them, the area is covered by the superficial collapse layer F. 1632 (phase 4) (buckets 300 and 330), made of medium and large stones, probably from the walls W. 1613 and W. 1610 (Pl. XLIV: 1). At the junction with the corridor L.2017, F. 1632 is covered by the more superficial stone collapse F. 1630 (see above).

Considering morphology, the two parallel, narrow chambers L. 1646 and L. 1645 might correspond to a staircase cage. Concerning the chamber L.1646, the absence of any trace of beaten earth floor and the presence of a foundation filling - F. 2029 higher than L. 2031 in the middle of the room would accord with the possibility that a staircase was hosted in the narrow room L.1646. The evidence is not clear enough for a certain interpretation, but L. 2031 might be construed as a sort of small landing giving access to the staircase while F. 2029 might have constituted the base of a sup-
porting ramp or a simple filling under the stairs. The staircases, in this kind of architectural context, tend to be mainly in woods, anchored between two flanking walls. They may present from one to four ramps, mainly conjectured on the basis of the disposition of the rooms and masonry: in general, in fact, their state of preservation is not ideal to supply a precise reconstruction (Mielke 2018: 69; Burke 2008: 68;). In the case of P fortress, L. 1646 might have hosted the first ramp, while the parallel room L. 1645 (see below) might have hosted a second, upper ramp.

### 5.2.5 The room L. 1645 and the doorway L. 1635

| Area P, room L. 1645 - Distribution of loci and fills by phase |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Area |  |  |  |  |
|  Unit Phase Location  <br> P F. 2011 4 L. 1645 <br> P F. 2012 3b L. 1645 <br> P F. 2013 3a L. 1645 <br> P L. 1645 2 L. 1645 <br> P F. 2020 1a L. 1645. |  |  |  |  |



The room L. 1645 - east-west oriented, $4.6 \times 1.2 \mathrm{~m}$ on the main axis - is located on the southern section of the building and constitutes a long and narrow chamber parallel to the room L. 1646 (Fig. 5.3; Pls. XLVI-XLVIII, XLIX: 1). It is delimited to the north by the inner wall W.1634, to the west by the perimetral wall W.1611, and to the south by the thick, inner wall W.1613. Access to the room was from the east through the passage L.1635, which connects the narrow room L. 1645 with the northsouth corridor L.2017. L. 1635 (phase 2) ( +457.63 msl ) is framed by a couple of indentations on both sides of the passage. 1.15 m deep and 0.97 m wide on the main axis, it presents a large, monolithic stone with slightly rounded edges as the eastern threshold and two smaller, squared and well-dressed stones as the western threshold. The inner space -28 cm in width - is filled, as usual, with unfinished stones and rubble. The northern and southern piers, accurately built in well-dressed and sharp-edged stones
as a projections of walls W. 1634 and W.1613, form two pairs of niches on both sides of the passage: 20 and 29 cm wide on the western side; 30 and 25 cm wide on the eastern side. On the western side, the removal of part of the foundation deposit of the room allowed for a more in-depth investigation of the doorway construction process (Pl. XLVIII: 1). The threshold appears substantially intersected with the stones of the side pillars, thus suggesting a building process envisaging an integrated planning and construction. Below the upper doorstep, a second stone row was additionally cleared out, leaning against which was the stone foundation deposit of the room. This context suggests a building process that encompassed the planning and construction of walls and doorways, the laying of stone foundation deposits within the rooms, and subsequently the laying of the beaten earth or stone paved floors.

The stone foundation deposit of the room, F. 2020 (phase 1a), is composed of irregular shaped stones of medium and medium-small size, leaned against the walls of the room and the southern threshold of the access. Among the stones of the deposit, a fragmentary stone tripod - O. 167 - is included, evidently discarded and reused as a filling stone (Pl. XLVIII: 2).

Sparse traces of a probable beaten earth floor have been observed on the eastern portion of the room (Pl. XLIX: 1). On the western portion of the room, instead, the stone foundation filling is covered by a deposit of loose, reddish soil from shattered fired mudbricks - F. 2013 (phase 3a) (Pl. XLVIII: 4). Such a deposit, while confirming the use of mudbricks in addition to - and presumably above - stonework, is a clear evidence of a fire event that, in all likelihood, brought about the collapse of the upper masonry. The state of preservation of the room deposits does not allow us to determine with certitude if the fire event corresponded to the final destruction and abandonment of the room, but it seems likely. Sherds of vitrified basaltic stones, further evidence of a heavy fire destruction, derive from the same deposit F.2013, ${ }^{160}$ together with the two stone grinders O.324/a and O.324/b. A collapse deposit of small to large stones, probably from the collapsed walls, and brown soil - F. 2012 (phase 3b) - covers F. 2013 to the east and in the central portion of the room. ${ }^{161}$ Remains of the fire

[^62]event are included also in F.2012: vitrified sherds of basaltic stones, ${ }^{162}$ found already in F.2013, and ashes. A remarkable concentration of fine ashes, additionally, is registered on the north-western edge of the passage L.1635. Above the passage L. 1635 is located a deposit characterized by brown, fine-textured, loose soil named F. 2007 (bucket 308) (phase 3b). A superficial level of compacted, darkish soil - F. 2011 (phase 4) — seals most of the room, covering F. 2012 in the middle and eastern part of the chamber, and F. 2013 in the western part of the chamber.

From the structural point of view, the room L. 1645 might have constituted the second chamber of a double ramp staircase, hosting the upper section of the staircase located in the adjacent room L.1645. Although the staircase chambers are frequently filled with soil or scree in support of the ramp, the presence of the doorway L. 1635 suggests that the under-stair room L. 1645 was also used for other purposes, which would offer a comparison with other contexts (Naumann 1971: 179-181).

### 5.2.6 The room L. 1641 and the doorway L. 1636

Area P, room L. 1641 - Distribution of loci and fills by phase
Area

| Unit | Phase | Location |  |
| :---: | :---: | :---: | :--- |
| P | F. 1630 | 4 | L.1629, L.1635, L.1636, L.1637, L.1640, L.1641, L. 2017 |
| P | F. 2006 | 3a | L. 1641 |
| P | F. 2002 | 1b | L. 1641 |
| P | F. 2004 | 1a | L. 1641 |

Area P, doorway L. 1636 - Distribution of loci and fills by phase
Area
P Unit
P F. 1630 Phase Location $\quad 4 \quad$ L. 1629 , L.1635, L.1636, L.1637, L.1640, L.1641, L. 2017

The room L. 1641 - north-south oriented, $4.38 \times 2.92 \mathrm{~m}$ on the main axis - is located on the north-eastern sector of the building (Pls. L-LI, LII: 1. Additionally, see Fig. 5.5 for a frontal view, from the north; Fig. 5.3 for a north-south section of the room). It is delimited by the perimetral walls W. 1639 and W. 1609 to the north and

[^63]to the east; to the south and to the west it is delimited by the inner walls W. 1638 and W.1634. Two accesses are opened in the room, thus configuring it as a transit chamber. On the south-eastern corner, the passage L. 1636 connects the northern and the southern sectors of the building; on the south-western corner, the passage L. 1637 grants a connection with the room L. 1640 .
L. $1636,1.78 \mathrm{~m}$ deep and 0.97 m wide on the main axis ( +457.56 msl ), presents a monolithic threshold on each side of the passage and an inner filling - 0.8 m in width - of unfinished stones and rubble (see Fig. 5.5 for a view from the north and Fig. 5.3 for a view from the east). The passage is framed by two stone piers on both sides: the western one corresponds to the eastern end of the wall W. 1634 (Fig. 5.3) and the eastern one juts out from the wall W. 1609 (Fig. 5.5). Well-dressed stones were used to build the pier's edges, characterised by well-flattened surfaces and sharp, squared angles. The core, instead, is made of more irregular stones with flattened outer faces. While the eastern pier is perfectly vertically preserved, the western pier, as is clearly visible on the cross-section drawing, is markedly inclined on the inner side, probably as a consequence of the wall displacement. The piers form two niches on each side of the L. 1636 southern access, 30 cm wide on the western side and 20 cm wide on the eastern side. On the northern part of the passage, instead, a single niche -30 cm wide - is located on the eastern side.
A compacted soil of buff colour was concentrated on a small portion of the southeastern edge of the access. Above it, L. 1636 was filled by two different layers of collapse: a first one, made of stones of different size and shape including large boulders among fine and loose soil of brown to darkish-brown colour - F. 2036 (bucket 307) (phase 3b) - and a second one, more superficial, made of medium and large stones plus brown, compact soil - F. 1630 (phase 4).
Sparse basaltic stones recovered on the southern part of the room, ca. 80 cm northwest of the passage L. 1636 ( $1 \times 1.43 \mathrm{~m}$ on the main axis, +457.46 msl ), are the probable remains of an original paved floor. Considering the fact that, in all the building, the room L. 1641 is the only one in which traces of a stone paved floor have been uncovered, it is possible to hypothesise a function distinguished from that of the other chambers of the structure, probably paved with beaten earth. ${ }^{163}$ The presence of a stone-paved floor in fact denotes the need for a more robust paving, and this may be

[^64]related to an open area or, more likely, to a chamber intended for a more intense use. The stones were laid upon a groundwork fill of small stones and reddish soil - F. 2002 (bucket 303) (phase 1b) - which, in turn, rested on the foundation of medium and medium-large stones F. 2004 (bucket 304) (phase 1a).
F. 2002 has been exposed on the central and southern part of the room, while it was not preserved on the northern part. Together with the vestiges of the floor, it was covered by a rather similar accumulation of medium loose and sandy soil - F. 2006 (bucket 306) (phase 3a) - spotted in yellowish and reddish colour. F. 2006 covered most of the southern side of the room: it was not preserved east of the stone pavement portion, probably obliterated by the collapse of large stones immediately above, and on the northern section of the room, where it had been probably washed away. On the southern side of the room, F. 2006 was covered by F. 1630 (phase 4), made of collapsed stones and darkish, compacted soil.

The foundation deposit F. 2004 was completely cleared out on the northern section of the room, where it was exposed over a depth of ca. 80 cm (Fig. 5.3). The thick filling in fact was employed to overcome the sloping ground on that part of the site, thus providing a regular base for the floor of the room L.1641. F. 2004 laid directly below the superficial levels of collapsed stones and soil to the north, while on the southern side of the room, where the soil accumulations above it were better preserved, it was not investigated. It leant on the wall W. 1639 to the north and on the walls W. 1638 and W. 1609 to the west and east respectively.

### 5.2.7 The room L. 1640 and the doorway L. 1637

Area P, room L. 1640 - Distribution of loci and fills by phase

| Area |  | Unit | Phase Location |  |
| :---: | :---: | :---: | :---: | :--- |
| P | F. 1630 | 4 | L. 1629, L.1635, L.1636, L.1637, L.1640, L.1641, L. 2017 |  |
| P | L. 1640 | 2 | L. 1640 |  |
| P | L. | 1641 | 2 | L. 1640 |
| P | F. | 1643 | 1a | L. 1640 |

Area P, doorway L. 1637 - Distribution of loci and fills by phase
Area Unit Phase Location
P F. 16304 L.1629, L.1635, L.1636, L.1637, L.1640, L.1641, L. 2017
P F. 2005 3a L. 1637
P L. 1637 L. 1637

The room L. 1640 - north-south oriented, $3.81 \times 2.78 \mathrm{~m}$ on the main axis - is located on the north-western corner of the building (Pls. LIII: 2, LIV. See Fig. 5.5 for a view from the north). It is delimited by the perimetral walls W. 1639 to the north and W. 1611 to the east. To the south and west it is delimited by the inner walls W. 1634 and W.1638. Access to the room is from the south-eastern corner, throughout the passage L.1637.
The passage L. 1637, 1.72 m deep by 0.92 m wide ( +457.56 msl ), connects the northern rooms L. 1641 and L. 1640 (Pls. XLIX: 2, L: 1). The eastern and western thresholds are constituted by single, monolithic stones, well-flattened on the upper side, with slightly rounded borders. The space delimited by the thresholds - ca. 0.55 m wide - is filled by small, irregularly shaped stones, but two larger flattened stones are also employed. To the north, the passage is delimited by the southern façade of the wall W.1638, built up of irregularly shaped stones with refined and sharp-angled faces. On the southern side, instead, a stone pier jutting from the wall W. 1634 forms two niches - ca 20 cm wide - east and west of the passage. On the western niche, the presence of a stone door-socket -30 cm external diameter; 15 cm internal diameter - attests to the existence of a door, presumably single, sealing the room L. 1640 and opening counter-clockwise toward the room's inner side. L. 1637 is covered by the thin and slightly loose accumulation level of brown soil F. 2005 (bucket 305) (phase 3a). Above it, all the area is occupied by a level of collapsed stones, probably from the walls W. 1634 and W.1638, and darkish-brown, compact soil.
Although the location of the door-socket gives a precise reference for the floor level, the original pavement of the room L. 1640 was not preserved, probably obliterated by collapsed stones and washing-away processes. The sole remains of what may have composed the floor were sparse traces of fine, buff-to-reddish soil, comparable to similar accumulations found in most other contexts of the building in connection to floors, floor accumulations and preparations. North of the wall W.1634, in fact, the ground declines rather steeply toward the north and the west, and the superficial level of collapsed stones and soil rest directly and mix with the stone foundation filling of the room - F. 1643 (phase 1a). Unlike the other stone foundation deposits of the fortress, F. 1643 is composed of stones of slightly larger average size. The foundation filling rests against the walls W.1611, W. 1639 and W. 1638.

The southern section of the area is covered by the superficial level of collapse F. 1630 (phase 4); surface deposits covers F. 1630 to the south and the stone foundation filling F. 1643 to the north.

### 5.3 THE POTTERY

In the course of the 2006 and 2007 Turco-Italian investigations in fortress P , a total number of 377 diagnostic potsherds were collected. Of these, 106 have been selected as indicators for detailed analysis. ${ }^{164}$ Analysed data has been modelled in statistical distributions, but the reliability of the results is in many cases affected by the meagreness of the reference sample. ${ }^{165}$
The largest part of the ceramic collection derives from the fillings of phases 3 and 4, connected with the collapse and abandonment of the structure. Most samples ( $57 \%$ of diagnostic pottery) derive from phase 3, followed by phase 4 (33\%). A limited number of samples derive from the foundation levels, summarised in phase $1(6 \%$ of diagnostic pottery), and only a minimal percentage may be more directly associated to one of the phases of use, summarised in phase 2 ( $3 \%$ of diagnostic pottery).

With the exception of a few vessels in kitchen ware - a fragment of a large bowl (Fig. 5.8: 5), and 3 'backing' plates or 'trays' (Fig. 5.20: 8) - all the vessels are wheel-made.

Concerning the functional classification, the largest part of the ceramic inventory from building P is to be related to the general functional horizon of the simple ware, which accounts for $62 \%$ of the corpus of diagnostic pottery. Only smaller clusters may be ascribed to the kitchen ware functional horizon ( $22 \%$ of diagnostic pottery) and to the storage ware ceramic horizon ( $16 \%$ of diagnostic pottery). Proper fine ware has not been recovered from Area P, thus suggesting that activities with high display and official value were not substantial in the building, or that such activities, in the specific range of time when the area was settled, did not involve the use of specialised wares. ${ }^{166}$ The presence of storage and kitchen ware samples instead attests to the

[^65]performance of cooking and storage operations, but the low incidence of the clusters seems likely to be related to low intensity activities.

Concerning morphology, the incidence of each shape has been calculated relative to the total number of building P potsherds wherever a general shape of reference was detectable, which amounts to 173 samples. Of these, 7 samples are distributed in phase 1 ( $4 \%$ of building $P$ inventory of potsherds with a detectable shape); 4 samples in phase 2 ( $2 \%$ of phase P inventory); 96 samples in phase 3 ( $55 \%$ of building P inventory) and 66 samples in phase 4 ( $38 \%$ of building P inventory).

According to the same principle, the distribution of base typologies has also been calculated relative to the total number of building P potsherds with preserved a base, which comes to 65 samples. Of these, 4 samples are distributed in phase 1 ( $2 \%$ of potsherds with preserved base); 2 samples in phase $2(3 \%) ; 31$ samples in phase $3(48 \%)$ and 28 samples in phase 4 (43\%).

|  |  | Selected Potsherds |  | Unselected Potsherds |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | $n$. | \% | $n$. | \% | $n$. | \% |
| Phase 4 | F. 1630 | 14 | 34.15\% | 30 | 35.29\% | 44 | 34.92\% |
|  | F. 1631 | 7 | 17.07\% | 14 | 16.47\% | 21 | 16.67\% |
|  | F. 1632 | 11 | 26.83\% | 36 | 42.35\% | 47 | 37.30\% |
|  | F. 2011 | 7 | 17.07\% | 4 | 4.71\% | 11 | 8.73\% |
|  | F. 2035 | 2 | 4.88\% | 1 | 1.18\% | 3 | 2.38\% |
|  | Total | 41 | 100\% | 85 | 100\% | 126 | 100\% |
| Phase 3 | F. 1633 | 5 | 8.47\% | 20 | 12.74\% | 25 | 11.57\% |
|  | F. 2001 | 10 | 16.95\% | 22 | 14.01\% | 32 | 14.81\% |
|  | F. 2003 | 3 | 5.08\% | 18 | 11.46\% | 21 | 9.72\% |
|  | F. 2005 | 4 | 6.78\% | 6 | 3.82\% | 10 | 4.63\% |
|  | F. 2006 | 6 | 10.17\% | 13 | 8.28\% | 19 | 8.80\% |
|  | F. 2007 | 5 | 8.47\% | 6 | 3.82\% | 11 | 5.09\% |
|  | F. 2012 | 11 | 18.64\% | 23 | 14.65\% | 34 | 15.74\% |
|  | F. 2013 | 2 | 3.39\% | 9 | 5.73\% | 11 | 5.09\% |
|  | F. 2032 |  |  | 8 | 5.10\% | 8 | 3.70\% |
|  | F. 2033 | 9 | 15.25\% | 19 | 12.10\% | 28 | 12.96\% |
|  | F. 2036 | 4 | 6.78\% | 13 | 8.28\% | 17 | 7.87\% |
|  | Total | 59 | 100\% | 157 | 100\% | 216 | 100\% |
| Phase 2 | F. 2023 |  |  | 2 | 18.18\% | 2 | 16.67\% |
|  | L. 2019 | 1 | 100\% | 9 | 81.82\% | 10 | 83.33\% |
|  | Total | 1 | 100\% | 11 | 100\% | 12 | 100\% |
| Phase 1 | F. 2002 | 5 | 100\% | 4 | 22.22\% | 9 | 39.13\% |
|  | F. 2004 |  |  | 3 | 16.67\% | 3 | 13.04\% |
|  | F. 2025 |  |  | 11 | 61.11\% | 11 | 47.83\% |
|  | Total | 5 | 100\% | 18 | 100\% | 23 | 100\% |

Table 5.1 - Area P: Distribution of diagnostic potsherds by stratigraphic unit.

The largest part of the P ceramic inventory is undecorated, but sparse samples of decorated potsherds, accounting for $5 \%$ of the inventory of diagnostic potsherds, are also attested. The painted decoration, which amounts to $53 \%$ of decorated potsherds (10 samples), is the most common, followed by applied decoration ( 5 samples), usually in form of rope decoration, and combed decorations ( 2 samples), usually in the form of horizontal bands, although a sample of festoon is also attested. Furthermore, one sample presents a double decoration pattern, combed and applied, and one - a handmade kitchen ware plate - presents incisions on the rim. Most of the decorated samples are concentrated in phase 3 ( 12 samples); more sparse concentrations are registered in phase 4 ( 4 samples), in phase 1 ( 2 samples) and in phase 2 ( 1 sample) (Tables 5.9, 5.14, 5.19 and 5.24).

|  |  | Kitchen Ware |  | Storage Ware |  | Simple Ware |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | $n$. | \% | $n$. | \% | $n$. | \% |
| Phase 4 | F. 1630 | 10 | 35.71\% | 3 | 33.33\% | 31 | 35.23\% |
|  | F. 1631 | 5 | 17.86\% |  |  | 16 | 18.18\% |
|  | F. 1632 | 10 | 35.71\% | 5 | 55.56\% | 32 | 35.96\% |
|  | F. 2011 | 3 | 10.71\% | 1 | 11.11\% | 7 | 7.95\% |
|  | F. 2035 |  |  |  |  | 3 | 3.41\% |
|  | Total | 28 | 100\% | 9 | 100\% | 89 | 100\% |
| Phase 3 | F. 1633 | 8 | 17.78\% | 6 | 13.95\% | 11 | 9.40\% |
|  | F. 2001 | 6 | 12.77\% | 8 | 18.18\% | 18 | 14.40\% |
|  | F. 2003 | 8 | 17.78\% | 6 | 13.95\% | 7 | 5.98\% |
|  | F. 2005 | 1 | 2.22\% | 3 | 6.98\% | 6 | 5.13\% |
|  | F. 2006 | 6 | 13.33\% | 1 | 2.33\% | 12 | 10.26\% |
|  | F. 2007 | 3 | 6.67\% |  |  | 8 | 6.84\% |
|  | F. 2012 | 2 | 4.26\% | 9 | 20.45\% | 23 | 18.40\% |
|  | F. 2013 | 1 | 2.22\% | 4 | 9.30\% | 6 | 5.13\% |
|  | F. 2032 |  |  |  |  | 8 | 6.84\% |
|  | F. 2033 | 3 | 6.67\% | 4 | 9.30\% | 21 | 17.95\% |
|  | F. 2036 | 9 | 20.00\% | 3 | 6.98\% | 5 | 4.27\% |
|  | Total | 47 | 100\% | 44 | 100\% | 125 | 100\% |
| Phase 2 | F. 2023 |  |  |  |  | 2 | 33.33\% |
|  | L. 2019 | 6 | 100.00\% |  |  | 4 | 66.67\% |
|  | Total | 6 | 100\% |  |  | 6 | 100\% |
| Phase 1 | F. 2002 |  |  | 1 | 16.67\% | 8 | 57.14\% |
|  | F. 2004 |  |  |  |  | 3 | 21.43\% |
|  | F. 2025 | 3 | 100.00\% | 5 | 83.33\% | 3 | 21.43\% |
|  | Total | 3 | 100\% | 6 | 100\% | 14 | 100\% |

Table 5.2 - Area P: Functional classes. Distribution of functional classes by stratigraphic unit.

|  |  | Bowls |  | Cooking pots |  | Jars |  | Jugs |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% | n. | \% |
| Phase 4 | F. 1630 | 7 | 38.89\% | 4 | 36.36\% | 4 | 12.90\% |  |  | 2 | 75.00\% | 17 | 25.76\% |
|  | F. 1631 | 3 | 16.67\% | 3 | 27.27\% | 5 | 16.13\% |  |  |  |  | 11 | 16.67\% |
|  | F. 1632 | 5 | 27.78\% | 2 | 18.18\% | 17 | 54.84\% | 1 | 33.33\% | 1 | 25.00\% | 26 | 39.39\% |
|  | F. 2011 | 2 | 11.11\% | 2 | 18.18\% | 4 | 12.90\% | 2 | 66.67\% |  |  | 10 | 15.15\% |
|  | F. 2035 | 1 | 5.56\% |  |  | 1 | 3.23\% |  |  |  |  | 2 | 3.03\% |
|  | Total | 18 | 100\% | 11 | 100\% | 31 | 100\% | 3 | 100\% | 3 | 100\% | 66 | 100\% |
| Phase 3 | F. 1633 | 6 | 23.08\% |  |  | 1 | 1.89\% | 1 | 20.00\% | 1 | 33.33\% | 9 | 9.38\% |
|  | F. 2001 | 4 | 15.38\% | 1 | 11.11\% | 7 | 13.21\% | 1 | 20.00\% |  |  | 13 | 13.54\% |
|  | F. 2003 | 2 | 7.69\% |  |  | 6 | 11.32\% |  |  |  |  | 8 | 8.33\% |
|  | F. 2005 |  |  |  |  | 6 | 11.32\% |  |  |  |  | 6 | 6.25\% |
|  | F. 2006 | 4 | 15.38\% | 1 | 11.11\% | 4 | 7.55\% | 1 | 20.00\% |  |  | 10 | 10.42\% |
|  | F. 2007 | 1 | 3.85\% | 2 | 22.22\% | 5 | 9.43\% |  |  | 1 | 33.33\% | 9 | 9.38\% |
|  | F. 2012 | 4 | 15.38\% | 1 | 11.11\% | 8 | 15.09\% | 1 | 20.00\% | 1 | 33.33\% | 15 | 15.63\% |
|  | F. 2013 | 1 | 3.85\% | 1 | 11.11\% | 4 | 7.55\% | 1 | 20.00\% |  |  | 7 | 7.29\% |
|  | F. 2032 |  |  |  |  | 1 | 1.89\% |  |  |  |  | 1 | 1.04\% |
|  | F. 2033 | 3 | 11.54\% | 2 | 22.22\% | 8 | 15.09\% |  |  |  |  | 13 | 13.54\% |
|  | F. 2036 | 1 | 3.85\% | 1 | 11.11\% | 3 | 5.66\% |  |  |  |  | 5 | 5.21\% |
|  | Total | 26 | 100\% | 9 | 100\% | 53 | 100\% | 5 | 100\% | 3 | 100\% | 96 | 100\% |
| Phase 2 | F. 2023 | 1 | 50.00\% |  |  |  |  |  |  | 1 | 50.00\% | 2 | 50.00\% |
|  | L. 2019 | 1 | 50.00\% |  |  |  |  |  |  | 1 | 50.00\% | 2 | 50.00\% |
|  | Total | 2 | 100\% |  |  |  |  |  |  | 2 | 100\% | 4 | 100\% |
| Phase 1 | F. 2002 | 2 | 100.00\% |  |  | 3 | 60.00\% |  |  |  |  | 5 | 71.43\% |
|  | F. 2004 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F. 2025 |  |  |  |  | 2 | 40.00\% |  |  |  |  | 2 | 28.57\% |
|  | Total | 2 | 100\% |  |  | 5 | 100\% |  |  |  |  | 7 | 100\% |

Table 5.3 - Area P: Morphology. Distribution by stratigraphic unit of morphological categories (Bowls; Cooking pot; Jars; Jugs; Other) and of potsherds with classified shapes (Total).

|  | Unit | Disk |  | Flat |  | Ring |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $n$. | \% | $n$. | \% | $n$. | \% | n. | \% | $n$. | \% |
| Phase 4 | F. 1630 |  |  | 2 | 20.00\% | 2 | 25.00\% | 6 | 100.00\% | 10 | 35.71\% |
|  | F. 1631 | 1 | 33.33\% | 3 | 30.00\% | 3 | 37.50\% |  |  | 7 | 25.00\% |
|  | F. 1632 |  |  | 5 | 50.00\% | 1 | 12.50\% |  |  | 6 | 21.43\% |
|  | F. 2011 |  |  |  |  |  |  |  |  |  |  |
|  | F. 2035 | 2 | 66.67\% | 1 | 100.00\% | 2 | 25.00\% |  |  | 5 | 17.86\% |
|  | Total | 3 | 100\% | 11 | 100\% | 8 | 100\% | 6 | 100\% | 28 | 100\% |
| Phase 3 | F. 1633 |  |  | 2 | 100.00\% |  |  | 1 | 33.33\% | 3 | 10.34\% |
|  | F. 2001 |  |  | 1 | 11.11\% | 1 | 9.09\% | 1 | 33.33\% | 3 | 10.34\% |
|  | F. 2003 |  |  |  |  |  |  |  |  |  |  |
|  | F. 2005 |  |  | 3 | 33.33\% |  |  |  |  | 3 | 10.34\% |
|  | F. 2006 | 1 | 25.00\% | 1 | 11.11\% | 1 | 9.09\% |  |  | 3 | 10.34\% |
|  | F. 2007 |  |  |  |  | 2 | 18.18\% |  |  | 2 | 6.90\% |
|  | F. 2012 | 1 | 25.00\% | 4 | 44.44\% | 3 | 27.27\% |  |  | 8 | 27.59\% |
|  | F. 2013 |  |  |  |  |  |  |  |  |  |  |
|  | F. 2032 |  |  |  |  |  |  |  |  |  |  |
|  | F. 2033 | 2 | 50.00\% |  |  | 4 | 36.36\% | 1 | 33.33\% | 7 | 24.14\% |
|  | F. 2036 |  |  |  |  |  |  |  |  |  |  |
|  | Total | 4 | 100\% | 11 | 100\% | 11 | 100\% | 3 | 100\% | 29 | 100\% |
| Phase 2 | F. 2023 |  |  |  |  |  |  |  |  |  |  |
|  | L. 2019 |  |  | 1 | 100.00\% | 1 | 100.00\% |  |  | 2 | 100.00\% |
|  | Total |  |  | 1 | 100\% | 1 | 100\% |  |  | 2 | 100\% |
| Phase 1 | F. 2002 |  |  | 1 | 100.00\% |  |  |  |  | 1 | 25.00\% |
|  | F. 2004 |  |  |  |  | 1 | 33.33\% |  |  | 1 | 25.00\% |
|  | F. 2025 |  |  |  |  | 2 | 66.67\% |  |  | 2 | 50.00\% |
|  | Total |  |  | 1 | 100\% | 3 | 100\% |  |  | 4 | 100\% |

Table 5.4 - Area P: Bottoms morphology. Distribution by stratigraphic unit of bottoms typologies (disk; flat; ring) and of potsherds with classified bottom (Total).

### 5.3.1 The ceramic inventory of phase 1 (MB I - MB IIA)

Only 23 diagnostic potsherds derive from P phase 1 foundation fillings, and specifically from F. 2004 (phase 1a) and F. 2002 (phase 1b), in room L. 1641 - 12 potsherds, $46 \%$ of phase 1 ceramic inventory - and from F. 2025 (phase 1b), in the southern part of the corridor L. 2017 - 11 potsherds, $48 \%$ of phase 1 ceramic inventory (Table and Diagram 5.1). Considering the marked restriction of the corpus, distribution and classification percentages provide only limited evidence.
The largest part of diagnostic ceramic inventory is composed of body-sherds, which comprise 10 samples. Five samples are inclusive of rim; 4 are inclusive of handles and 4 are base-sherds (Table 5.5).

As far as function is concerned, the largest part of phase 1 ceramic inventory may be ascribed to the simple ware ceramic horizon ( 14 samples, $61 \%$ of phase 1 inventory of diagnostic pottery). Small clusters, mostly deriving from F.2025, may be ascribed to the storage ware category ( 6 samples, $26 \%$ of phase 1 inventory) and a few samples ( 3 samples, $13 \%$ of phase 1 inventory) to the kitchen ware category (Tables 5.2, 5.6; Diagram 5.4).

|  | F.2004 |  | F.2002 |  | F.2025 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Bottom | 1 | $33.33 \%$ | 1 | $11.11 \%$ | 2 | $18.18 \%$ | 4 | $17.39 \%$ |
| Complete |  |  |  |  |  |  |  |  |
| Handle |  |  | 2 | $22.22 \%$ | 2 | $18.18 \%$ | 4 | $17.39 \%$ |
| Rim | 1 | $33.33 \%$ | 4 | $44.44 \%$ |  |  | 5 | $21.74 \%$ |
| Rim+Handle |  |  |  |  |  |  |  |  |
| Wall | 1 | $33.33 \%$ | 2 | $22.22 \%$ | 7 | $63.64 \%$ | 10 | $43.48 \%$ |
| Total | $\mathbf{3}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{9}$ | $100 \%$ | $\mathbf{1 1}$ | $100 \%$ | $\mathbf{2 3}$ | $100 \%$ |

Table 5.5 - Area P, Phase 1: Potsherds state of preservation. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F.2004 |  | F.2002 |  | F.2025 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Kitchen Ware |  |  |  |  | 3 | $27.27 \%$ | 3 | $13.04 \%$ |
| Storage Ware |  |  | 1 | $11.11 \%$ | 5 | $45.45 \%$ | 6 | $26.09 \%$ |
| Simple Ware | 3 | $100.00 \%$ | 8 | $88.89 \%$ | 3 | $27.27 \%$ | 14 | $60.87 \%$ |
| Total | $\mathbf{3}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{9}$ | $100 \%$ | $\mathbf{1 1}$ | $100 \%$ | $\mathbf{2 3}$ | $100 \%$ |

Table 5.6 - Area P, Phase 1: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F.2004 |  | F.2002 |  | F.2025 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Bowl |  |  | 2 | $40.00 \%$ |  |  | 2 | $28.57 \%$ |
| Cooking Pot |  |  |  |  |  |  |  |  |
| Jar |  |  | 3 | $60.00 \%$ | 2 | $100.00 \%$ | 5 | $71.43 \%$ |
| Jug |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| Total |  |  | $\mathbf{5}$ | $100 \%$ | $\mathbf{2}$ | $100 \%$ | 10 | $100 \%$ |

Table 5.7 - Area P, Phase 1: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  | F.2004 |  | F.2002 |  | F.2025 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Disk |  |  |  |  |  |  |  |  |
| Flat |  |  | 1 | $100.00 \%$ |  |  | 1 | $25.00 \%$ |
| Ring | 1 | $100.00 \%$ |  |  | 2 | $100.00 \%$ | 3 | $75.00 \%$ |
| Other |  |  |  |  |  |  |  |  |
| Total | 1 | $100 \%$ | 1 | $100 \%$ | 2 | $100 \%$ | 4 | $100 \%$ |

Table 5.8 - Area P, Phase 1: Bottoms morphology. Incidence of different potsherd categories for stratigraphic unit and on the total inventory of classified base-sherds.

| Decoration Type | F.2004 |  | F.2002 |  | F.2025 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Painted |  |  | 2 | $22.22 \%$ |  |  | 2 | $8.70 \%$ |
| Applied |  |  |  |  |  |  |  |  |
| Combed |  |  |  |  |  |  |  |  |
| Undecorated | 3 | $100.00 \%$ | 7 | $77.78 \%$ | 11 | $100.00 \%$ | 21 | $91.30 \%$ |
| Total | $\mathbf{3}$ | $100 \%$ | $\mathbf{9}$ | $100 \%$ | 11 | $100 \%$ | 23 | $100 \%$ |

Table 5.9 - Area P, Phase 1: Decoration. Distribution of decorated potsherds by stratigraphic unit.

Five samples deriving from F. 2002 have been selected as indicators for detailed analysis (Pl. CII: 2; Fig. 5.6).
The inventory of simple ware open shapes includes morphologies with out-turned rim: a large bowl with curved sides and elongated, ledge rim with squared profile (Fig. 5.6: 1) and a vessel, probably a deep vessel or a krater, with out-turned, grooved rim and outer vertical profile (Fig. 5.6: 2). The general morphology of the bowl with ledge rim is well attested in MBA Northern Levant and, in some variants, continues to be attested in the LBA. Some similarity with Tilmen P samples, although mainly with oblique rim, may be recognised in contexts attributed to MB IB-IIA, ${ }^{167} \mathrm{MB}$

[^66]IIB ${ }^{168}$ and late MBA-early LBA. ${ }^{169}$ Close parallels may be found in Qatna J13-12 (MB IIB) with type B9B, considered typical of MB IIB-MB III period (Iamoni 2012: pl. 4: 9, 2), and Hama G (Fugmann 1958: fig. 143: O 55). ${ }^{170}$

Concerning the vessel with grooved rim (Fig. 5.6: 2), kraters or deep bowls with grooved rim are largely attested in the MBA Northern Levant and Euphrates area, continuing, in some variants, into the LBA. Similar rim morphologies are attested in the assemblage of area K-1 (Fig. 2.3: 8), K-3 (Fig. 4.9: 1, Fig. 4.6: 2), P2 phase 2 (Fig. 6.3: 2) and in the area $P$ in phase 3a (Fig. 5.12: 4), 3b (Fig. 5.14: 6, Fig. 5.8: 2) and 4 (Fig. 5.18: 3). ${ }^{171}$ Close comparisons with the specific morphology of P phase 1 rim may be observed in Mardikh IIIA (MB I, Matthiae 1995: fig. 46: 4 and, to some extent, n. 3) but also with later samples from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 32: 1, type 1346; and pl. 31: 1, type 1344). A close similarity may also be observed with types considered diagnostic for MB II Middle and Upper Euphrates ceramic provinces by L. Nigro (1998: fig. 6: 6), although this last example bears a slightly more elongated rim.

Out-turned or outside-thickened rims further recur in the inventory of closed shapes. A simple ware large-mouthed vessel with closed upper sides - a largemouthed jar or a sort of krater - is characterised by an outside-thickened rim with pointed profile, sometimes indicated as a 'triangular rim' (Fig. 5.6: 3). A similar rim morphology is found in Mardikh IIIA1, attributed to MB IB (Nigro 2002a: pl. 47: 17), associated to a vessel with a slightly more restricted mouth. As far as it can be deduced from the relatively limited state of preservation of the samples from Tilmen and from comparison sites, closer similarities for the vessel morphology may be observed in the MB II Damascus area (Nicolle 2002: pl. 26:35, with more pointed rim) and Euphrates area, like for example at Lidar Höyük phase 1 (MB IA in the local

[^67]sequence, Kaschau 1999: pl. 34: 4; pl. 37: 6) and in MB IIA layers of Hadidi (Dormemann 2007: pl. 2: 19). ${ }^{172}$

In phase 1, two samples of painted pottery are attested (Fig. 5.6: 4-5). The painted ware inventory includes two different variants of probable local painted ware: a large-mouthed vessel, probably a jar, with a solid band below the rim and hatched triangles filled with oblique lines (Fig. 5.6: 4), a typology already observed in the inventory of the Tilmen area K-3 (Fig. 4.3: 3), and a carinated vessel with solid wolfteeth motifs together with a band framed by two thick lines with a rough wavy line running among them (Fig. 5.6: 5). Both samples are decorated in reddish paint: a dark-red paint in the first case and a brownish-red paint in the second case. The style of the two decorated potsherds appears slightly different: with the exception of the band below the rim, the first sample, which belongs to the most widespread variant of Tilmen MBA painted ware, is characterised by thin and relatively accurate lines while the second sample, in addition to the preference for solid motifs, is characterised by wide lines, mostly irregular and relatively coarse. Relating the wolf-teeth motifs, it cannot be ascertained if irregularities - like bulging or curving traits - are intentional and finalised to reproduce a specific design, or are the consequence of some inability or a rushed decorator who intended to produce straight lines, but the decorated band below them, widely inconsistent, gives the idea of a rough production. Despite differences in production, however, both shapes are to be referred to large vessels with closed mouth probably related to kraters and presumably finalised for similar purposes.

The first sample was characterised by a curved-close, large shoulder, short, curved neck and an outside downward-folded rim with squared profile. The specific morphology seems to be limited to painted samples, but some general similarity may be further observed with other ware types. ${ }^{173}$ While triangles filled with oblique lines

[^68]constitute a widespread pattern in painted ceramic traditions of MBA Northern Levant and Nearby areas, ${ }^{174}$ the large, wolf-teeth motif is rarer, but ${ }^{175}$ all the same the sample is probably to be ascribed to the cluster of local painted pottery productions.

The ceramic inventory of area P phase 1 is composed of a relatively limited number of diagnostic potsherds, but it is all the same quite relevant, since it supplies a coherent and homogeneous assemblage of materials that may be of reference to evaluate the building sequence and function. Phase 1 deposits, in fact, are rather finely sealed by sandy accumulations (F.2006) and floors (L.2024) of later phases. ${ }^{176}$ The range of general ceramic parallels is quite large, extending from MB I until late MBA and, to some extent, the LBA. This, however, do not seem related to the long span of time covered by the deposit of phase 1 , but rather connected to the marked continuity, at least on the basis of the state of art, in Northern Levant MBA (and early LBA) ceramic productions. The closest set of comparisons for Tilmen P phase 1, however, is located between MB I and MB IIA, while later parallels are mainly related to types in continuity from earlier periods. Then, on the basis of ceramic comparison and internal sequence, the most recent set of materials from the foundation deposits are probably to be attributed to a very late phase of the MB I or, more likely, to the MB IIA. The presence of residual pottery may not be excluded.

It is not possible to ascertain if the vessels had been in use at the same time, in a single context, or if they arrived in the final depositional spot through differentiated paths. The assemblage, however, seems relatively homogeneous, thus suggesting the possibility of a circumscribed context of origin.

Short-term storage, mixing and serving are all activities that we can expect to have been performed in the context of origin of the assemblage. The presence of largemouthed vessels in painted pottery, probably of local origin, is also relevant.

[^69]Further reflections may be considered. In fact, in respect to the phase of occupation preserved on the site and clustered in phase 2 , phase 1 vessels might have been in use in an older phase of occupation of the building whose floors were eventually dismantled. On this hypothesis, phase 1 vessels might had been discarded below the new, raised floors. Alternatively, they may derive from previous structures occupying the same area or its proximity. In both cases, it can be stated that the area or its vicinity was already settled during late MB I or MB IIA.

### 5.3.2 The ceramic inventory of phase 2 (MB IIA - early MB IIB)

Only a very small number of potsherds derive from building $P$ phase 2 , which corresponds to the phases of use of the structure. The group gathers the scarce materials deposited on the preserved portions of floors and from the thin accumulation layer deposited between the two floors identified in the southern sector of the corridor L.2017. The inventory of diagnostic pottery amounts to 12 samples. These were collected in the southern sector of the corridor L.2017, in the intermediate deposit F. 2023 (phase 2b), and in the later floor L. 2019 (phase 2c). Unfortunately, no materials were recovered from the first earth-beaten floor L. 2024 (Table 5.1; Diagram 5.12). Both deposits, however, are stratified above the phase 1 deposit F. 2025 (see above). As well as for the ceramic inventory of phase 1 , the meagreness of phase 2 ceramic inventory provides only a limited value in terms of distribution analyses.
The largest part of phase 2 inventory of diagnostic pottery belongs to body-sherds, which comprise 7 samples. Only one sample - from L. 2019 - is comprehensive of rim, and the remaining samples belong to handles ( 2 samples) and bottoms ( 2 samples) (Table 5.10).
Relating to function, $50 \%$ ( 6 samples) of the phase 2 ceramic inventory may be ascribed to the simple ware ceramic horizon, and the remaining $50 \%$ to the kitchen ware ceramic horizon. No sample is to be ascribed to the storage ware functional horizon. The meagreness of phase 2 sample, however, largely invalidates distributional values (Tables 5.2, 5.11; Diagrams 5.15, 5.16).
A single sample of decorated pottery is attested and corresponds to a simple ware body-sherd of a large vessel with a festoon combed pattern from F. 2023 (unselected).

|  | F.2023 |  | L.2019 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Bottom |  |  | 2 | $20.00 \%$ | 2 | $16.67 \%$ |
| Complete |  |  |  |  |  |  |
| Handle | 1 | $50.00 \%$ | 1 | $10.00 \%$ | 2 | $16.67 \%$ |
| Rim |  |  | 1 | $10.00 \%$ | 1 | $8.33 \%$ |
| Rim+Handle |  |  |  |  |  |  |
| Wall | 1 | $50.00 \%$ | 6 | $60.00 \%$ | 7 | $58.33 \%$ |
| Total | $\mathbf{2}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 2}$ | $\mathbf{1 0 0 \%}$ |

Table 5.10 - Area P, Phase 2: Potsherds state of preservation. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F.2023 |  | L.2019 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Kitchen Ware |  |  | 6 | $60.00 \%$ | 6 | $50.00 \%$ |
| Storage Ware |  |  |  |  |  |  |
| Simple Ware | 2 | $100 \%$ | 4 | $40.00 \%$ | 6 | $50.000 \%$ |
| Total | $\mathbf{2}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0}$ | $\mathbf{1 0 0 \%}$ | 12 | $\mathbf{1 0 0 \%}$ |

Table 5.11 - Area P, Phase 2: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | E.2023 |  | L.2019 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Bowl | 1 | $50.00 \%$ | 1 | $50.00 \%$ | 2 | $50.00 \%$ |
| Cooking Pot |  |  |  |  |  |  |
| Jar |  |  |  |  |  |  |
| Jug |  |  |  |  |  |  |
| Other | 1 | $50.00 \%$ | 1 | $50.00 \%$ | 2 | $50.00 \%$ |
| Total | 2 | $100 \%$ | 2 | $100 \%$ | 4 | $100 \%$ |

Table 5.12 - Area P, Phase 2: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  | F.2023 |  | L.2019 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Disk |  |  |  |  |  |  |
| Flat |  |  | 1 | $50.00 \%$ | 1 | $50.00 \%$ |
| Ring |  |  | 1 | $50.00 \%$ | 1 | $50.00 \%$ |
| Total |  |  | 2 | $100 \%$ | 2 | $100 \%$ |

Table 5.13 - Area P, Phase 2: Bottoms morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified base-sherds.

| Decoration Type | F.2023 |  |  | L.2019 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n. | $\%$ | n. | $\%$ | n. | $\%$ |  |
| Painted |  |  |  |  |  |  |  |
| Applied |  |  |  |  |  |  |  |
| Combed | 1 | $50.00 \%$ |  |  | 1 | $8.33 \%$ |  |
| Undecorated | 1 | $50.00 \%$ | 10 | $100.00 \%$ | 11 | $91.67 \%$ |  |
| Total | $\mathbf{2}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0}$ | $\mathbf{1 0 0 \%}$ | 12 | $\mathbf{1 0 0 \%}$ |  |

Table 5.14 - Area P, Phase 2: Decoration. Distribution of decorated potsherds by stratigraphic unit.

The single potsherd comprehensive of rim plus part of the body, which derives from the floor L.2019, has been selected as indicator (Fig. 5.7: 1).
The potsherd belongs to a large-size kitchen ware bowl, 39 cm in rim diameter, with intermediate wall thickness, and is characterised by slightly carinated upper sides, with a short, vertical upper section of the walls engendering a typical anti-splash device. The rim is thickened inside and outside with a grooved profile. Similar grooved rim bowls, although lacking the outside thickening of the rim, are attested in the K-3 phase 2 assemblage (Fig. 4.3: 1), while inside and outside thickened rim bowls with a grooved profile also derive from P phase 4 (Fig. 5.19: 2), but none of them match accurately the profile of Fig. 5.7: 1. Grooved-rim open shapes are largely attested in the MBA Northern Levant and Euphrates area. ${ }^{177}$ A specific comparison with P phase 2 inventory may be observed in Alalakh level IX (Heinz 1992, cat. A, pl. 36: 30-34, but see esp. n. 32), ${ }^{178}$ and in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 2: 20, type 1112) in Northern Levant, and with Lidar Höyük phase 3 (Kaschau 1999: pl. 90: 12), phase 4/3 (Kaschau 1999: pl. 293: 7) and phase 4 (Kaschau 1999: pl. 118: 10), in the Euphrates area, respectively attributed to MB IIA, MB IIB and MB IIIA in the local sequence, approximately dated between the $18^{\text {th }}$ and the $2^{\text {nd }}$ half of the $17^{\text {th }}$ cent. BCE.
The ceramic inventory of building P phase 2, which corresponds to the phases of use of the structure, is quite limited. Unfortunately, no materials derive from the earliest floor L. 2024 (phase 2a), and only a small group of unselected potsherds derive from the intermediate deposits (F.2023, phase 2b). A single indicator derives from the later floor L. 2019 (phase 2c). Therefore, almost no primary data are available in

[^70]relation to the first phase of use (phase 2 a and b ), while those related to the second phase of use (phase 2c) are inadequate to support a sound chronological evaluation. However, considering the range of dating of the indicators from phase 2 c , centred in MB II, and the range of dating of the ceramic assemblages from $P$ phases 1 and 3a, it may be hypothesised the two preserved layers of use of the building (phase 2) can be dated between the MB IIA and the early MB IIB.

### 5.3.3 The ceramic inventory of phase 3 (MB IIB - early LBA)

A total number of 216 diagnostic potsherds derive from building $P$ phase 3, which summarises the firsts deposits above the floors. The samples are scattered in all the fills of phase 3, but larger clusters derive from F.2012, in room L. 1645 ( $16 \%$ of phase 3 total number of potsherds and $19 \%$ of phase 3 selected potsherds) and from F.2001, in room L. 1646 ( $15 \%$ of phase 3 total number of potsherds and $17 \%$ of phase 3 selected potsherds). Similar percentages derive from the fills of the corridor L.2017: F. 2033 and F. 1633 (13-12\% ca of phase 3 total number of potsherds and $15-8 \%$ of phase 3 selected potsherds). The fills F.2003, F. 2006 and F.2036, in room L.1646, L. 1641 and in the passage L.1636, respectively, account for percentages around $8-10 \%$ of the phase 3 ceramic inventory, while the remaining fills - F.2013, F.2007, F. 2005 and F. 2032 - account for smaller percentages, around $4-5 \%$ of phase 3 ceramic inventory (Table 5.1).

As far as the rooms of the building are concerned, the largest part of the phase 3 ceramic inventory derives from the corridor L. 2017 and from the rooms L. 1646 and L. 1645.

The phase 3 ceramic inventory from the corridor L.2017, associated to the fills F. 1633 and F. 2033 (phase 3b), comprehensively accounts for $25 \%$ of total phase 3 potsherds and $24 \%$ of selected phase 3 potsherds.

The phase 3 ceramic inventory of room L.1646, associated to fills F. 2001 and F. 2003 (phase 3a), accounts comprehensively for $25 \%$ of total phase 3 potsherds and $22 \%$ of selected phase 3 potsherds.

The phase 3 ceramic inventory of room L.1645, associated to fills F. 2013 (phase 3a) and F. 2012 (phase 3b), accounts comprehensively for $21 \%$ of total phase 3 potsherds and $22 \%$ of selected phase 3 potsherds (Table 5.1; Diagram 5.23).

The largest part of phase 3 inventory of diagnostic pottery is composed of rimsherds, which amount to 89 samples ( $41 \%$ of phase 3 inventory of diagnostic pottery),
followed by body-sherds, which total 86 samples ( $40 \%$ of phase 3 inventory of diagnostic pottery) and by base-sherds, comprising 31 samples ( $14 \%$ of phase 3 inventory of diagnostic pottery). Sparse potsherds belong to fragments of handles (7 samples, $3 \%$ of phase 3 inventory of diagnostic pottery) and fragments comprehensive of rim and handle ( 3 samples, $1 \%$ of phase 3 inventory of diagnostic pottery) (Table 5.15; Diagram 5.24).

Regarding function, the largest part of phase 3 inventory of diagnostic pottery may be ascribed to the general category of simple ware ( 125 samples, $58 \%$ of phase 3 ceramic inventory). Concerning other functional classes, the kitchen ware and the storage ware have similar incidence, accounting respectively for the $22 \%$ of the diagnostic pottery of phase 3 inventory ( 47 samples) and to $20 \%$ of the diagnostic pottery of phase 3 inventory ( 44 samples).

12 samples of decorated pottery are attested and correspond to $6 \%$ of the diagnostic pottery of phase 3 inventory. These include 5 samples of painted decoration; 5 samples of applied decoration; 1 sample of combed decoration; and 1 sample of combed and applied decoration. The highest incidence of decorated pottery is registered in F.2013, in the room L.1645, where it accounts for $36 \%$ of the unit inventory (Table 5.19).

59 samples have been selected as indicators. 5 ceramic lots are associated to the phase 3a, and 5 ceramic lots are associated to the phase 3 b .

Since the ceramic lots associated to the phase 3 a, which derive from earth deposits immediately above the floors of the building, might be more directly related to the last phase of use preserved in situ, the commentary on the assemblage indicators is organised according to rooms and loci of the building. The composition of each fill, however, is further commented at the end of the paragraph, and can be examined in the figures, which are always arranged by fill.

Relating to phase 3 b , which includes the large collapse of stones, the connection to original rooms and loci is presumable feebler: for this reason, the commentary on the assemblage indicators has been organised not by context but by typology. A comment on the distribution of types by context and by fill, however, is given at the end of the paragraph, and the specific composition of each fill may be examined in the ceramic figures.

|  | F. 1633 |  | F. 2001 |  | F. 2003 |  | F. 2005 |  | F. 2006 |  | F. 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Bottom | 3 | 12.00\% | 3 | 9.38\% |  |  | 3 | 30.00\% | 3 | 15.79\% | 2 | 18.18\% |
| Complete |  |  |  |  |  |  |  |  |  |  |  |  |
| Handle | 1 | 4.00\% | 1 | 3.13\% |  |  |  |  |  |  |  |  |
| Rim | 7 | 28.00\% | 11 | 34.38\% | 8 | 38.10\% | 6 | 60.00\% | 9 | 47.37\% | 9 | 81.82\% |
| Rim+Handle | 1 | 4,00\% | 1 | 3.13\% |  |  |  |  |  |  |  |  |
| Wall | 13 | 52.00\% | 16 | 50.00\% | 13 | 61.90\% | 1 | 10.00\% | 7 | 36.84\% |  |  |
| Total | 25 | 100\% | 32 | 100\% | 21 | 100\% | 10 | 100\% | 19 | 100\% | 11 | 100\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | F. 2012 |  | F. 2013 |  | F. 2032 |  | F. 2033 |  | F. 2036 |  | Total |  |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Bottom | 8 | 23.53\% |  |  |  |  | 7 | 25.00\% | 2 | 11.76\% | 31 | 14.35\% |
| Complete |  |  |  |  |  |  |  |  |  |  |  |  |
| Handle | 1 | 2.94\% |  |  | 1 | 12.50\% | 2 | 7.14\% | 1 | 5.88\% | 7 | 3.24\% |
| Rim | 15 | 44.12\% | 6 | 54.55\% |  |  | 13 | 46.43\% | 5 | 29.41\% | 89 | 41.20\% |
| Rim+Handle |  |  | 1 | 9.09\% |  |  |  |  |  |  | 3 | 1.39\% |
| Wall | 10 | 29.41\% | 4 | 36.36\% | 7 | 87.50\% | 6 | 21.43\% | 9 | 52.94\% | 86 | 39.81\% |
| Total | 34 | 100\% | 11 | 100\% | 8 | 100\% | 28 | 100\% | 17 | 100\% | 216 | 100\% |

Table 5.15 - Area P, Phase 3: Potsherds state of preservation. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F. 1633 |  | F. 2001 |  | F. 2005 |  | F. 2003 |  | F. 2006 |  | F. 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Kitchen Ware | 8 | 32.00\% | 6 | 18.75\% | 1 | 10.00\% | 8 | 38.10\% | 6 | 31.58\% | 3 | 27.27\% |
| Storage Ware | 6 | 24.00\% | 8 | 25.00\% | 3 | 30.00\% | 6 | 28.57\% | 1 | 5.26\% |  |  |
| Simple Ware | 11 | 44.00\% | 18 | 56.25\% | 6 | 60.00\% | 7 | 33.33\% | 12 | 63.16\% | 8 | 72.73\% |
| Total | 25 | 100\% | 32 | 100\% | 10 | 100\% | 21 | 100\% | 19 | 100\% | 11 | 100\% |
|  | F. 2012 |  | F. 2013 |  | F. 2032 |  | F. 2033 |  | F. 2036 |  | Total |  |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Kitchen Ware | 2 | 5.88\% | 1 | 9.09\% |  |  | 1 | 5.26\% | 9 | 52.94\% | 45 | 21.74\% |
| Storage Ware | 9 | 26.47\% | 4 | 36.36\% |  |  | 4 | 21.05\% | 3 | 17.65\% | 44 | 21.26\% |
| Simple Ware | 23 | 67.65\% | 6 | 54.55\% | 8 | 100.00\% | 14 | 73.68\% | 5 | 29.41\% | 118 | 57.00\% |
| Total | 34 | 100\% | 11 | 100\% | 8 | 100\% | 19 | 100\% | 17 | 100\% | 207 | 100\% |

Table 5.16 - Area P, Phase 3: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F. 1633 |  | F. 2001 |  | F. 2005 |  | F. 2003 |  | F. 2006 |  | F. 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Bowl | 6 | 66.67\% | 4 | 30.77\% |  |  | 2 | 25.00\% | 4 | 40.00\% | 1 | 11.11\% |
| Cooking Pot |  |  | 1 | 7.69\% |  |  |  |  | 1 | 10.00\% | 2 | 22.22\% |
| Jar | 1 | 11.11\% | 7 | 53.85\% | 6 | 100.00\% | 6 | 75.00\% | 4 | 40.00\% | 5 | 55.56\% |
| Jug | 1 | 11.11\% | 1 | 7.69\% |  |  |  |  | 1 | 10.00\% |  |  |
| Other | 1 | 11.11\% |  |  |  |  |  |  |  |  | 1 | 11.11\% |
| Total | 9 | 100\% | 13 | 100\% | 6 | 100\% | 8 | 100\% | 10 | 100\% | 9 | 100\% |
|  | F. 2012 |  | F. 2013 |  | F. 2032 |  | F. 2033 |  | F. 2036 |  | Total |  |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Bowl | 4 | 26.67\% | 1 | 14.29\% |  |  | 3 | 23.08\% | 1 | 20.00\% | 26 | 27.08\% |
| Cooking Pot | 1 | 6.67\% | 1 | 14.29\% |  |  | 2 | 15.38\% | 1 | 20.00\% | 9 | 9.38\% |
| Jar | 8 | 53.33\% | 4 | 57.14\% | 1 | 100.00\% | 8 | 61.54\% | 3 | 60.00\% | 53 | 55.21\% |
| Jug | 1 | 6.67\% | 1 | 14.29\% |  |  |  |  |  |  | 5 | 5.21\% |
| Other | 1 | 6.67\% |  |  |  |  |  |  |  |  | 3 | 3.13\% |
| Total | 15 | 100\% | 7 | 100\% | 1 | 100\% | 13 | 100\% | 5 | 100\% | 96 | 100\% |

Table 5.17 - Area P, Phase 3: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  | F. 1633 |  | F. 2001 |  | F. 2005 |  | F. 2003 |  | F. 2006 |  | F. 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | n. | \% |
| Disk |  |  |  |  |  |  |  |  | 1 | 33.33\% |  |  |
| Flat |  |  | 1 | 33.33\% | 3 | 100.00\% |  |  | 1 | 33.33\% |  |  |
| Ring | 2 | 66.67\% | 1 | 33.33\% |  |  |  |  | 1 | 33.33\% | 2 | 100.00\% |
| Other | 1 | 33.33\% | 1 |  |  |  |  |  |  |  |  |  |
| Total | 3 | 100\% | 3 | 67\% | 3 | 100\% |  |  | 3 | 100\% | 2 | 100\% |
|  | F. 2012 |  | F. 2013 |  | F. 2032 |  | F. 2033 |  | F. 2036 |  | Total |  |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Disk | 1 | 12.50\% |  |  |  |  | 2 | 28.57\% |  |  | 4 | 12.90\% |
| Flat | 4 | 50.00\% |  |  |  |  |  |  | 1 | 50.00\% | 10 | 32.26\% |
| Ring | 3 | 37.50\% |  |  |  |  | 4 | 57.14\% | 1 | 50.00\% | 14 | 45.16\% |
| Other |  |  |  |  |  |  | 1 | 14.29\% |  |  | 3 | 9.68\% |
| Total | 8 | 100\% |  |  |  |  | 7 | 100\% | 2 | 100\% | 31 | 100\% |

Table 5.18 - Area P, Phase 3: Bottoms morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified base-sherds.

| $\begin{gathered} \text { Decoration } \\ \text { Type } \end{gathered}$ | F. 1633 |  | F. 2001 |  | F. 2005 |  | F. 2003 |  | F. 2006 |  | F. 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Painted |  |  |  |  | 1 | 10.00\% | 1 | 4.76\% |  |  |  |  |
| Applied |  |  | 1 | 3.13\% |  |  |  |  | 1 | 5.26\% | 1 | 9.09\% |
| Combed |  |  |  |  |  |  |  |  | 1 | 5.26\% |  |  |
| Undecorated | 25 | 100.00\% | 31 | 96.88\% | 9 | 90.00\% | 20 | 95.24\% | 17 | 89.47\% | 10 | 90.91\% |
| Total | 25 | 100\% | 32 | 100\% | 10 | 100\% | 21 | 100\% | 19 | 100\% | 11 | 100\% |
| Decoration Type | F. 2012 |  | F. 2013 |  | F. 2032 |  | F. 2033 |  | F. 2036 |  | Total |  |
|  | $n$. | \% | $n$. | \% | $n$. | \% | n. | \% | n. | \% | $n$. | \% |
| Painted |  |  | 2 | 18.18\% |  |  |  |  | 1 | 5.88\% | 5 | 2.31\% |
| Applied | 1 | 2.94\% | 1 | 9.09\% |  |  |  |  |  |  | 5 | 2.31\% |
| Applied and combed |  |  | 1 | 9.09\% |  |  |  |  |  |  | 1 | 0.46\% |
| Combed |  |  |  |  |  |  |  |  |  |  | 1 | 0.46\% |
| Undecorated | 33 | 97.06\% | 7 | 63.64\% | 8 | 100.00\% | 28 | 100.00\% | 16 | 94.12\% | 204 | 94.44\% |
| Total | 34 | 100\% | 11 | 100\% | 8 | 100\% | 28 | 100\% | 17 | 100\% | 216 | 100\% |

Table 5.19 - Area P, Phase 3: Decoration. Distribution of decorated potsherds by stratigraphic unit.

## The phase 3a

Pottery from phase 3a deposits derives from the rooms L. 16446 (F. 2001 and F.2003), L. 1645 (F.2013), L. 1641 (F.2006) and from the passage L. 1637 (F.2005).

The assemblage of phase $3 a-$ Room L. 1646
In the room L.1646, 53 diagnostic potsherds derive from phase 3a deposits F. 2003 and F.2001: of these, 13 have been selected as indicators (Fig. 5.9-10).

The inventory of simple ware open shapes includes medium-size bowls with inturned upper sides and simple rims (Fig. 5.9: 1-2) and medium-large size bowls with thickened rims (Fig. 5.10: 1).
The bowl Fig. 5.9: 1 has thin walls and short, curved upper sides, with an inside slightly folded rim. Similar bowls are attested with thicker walls, in the area K-1 inventory (Fig. 2.3: 7). Similar morphologies find large comparisons in the Middle and Late Bronze Age Northern Levant and nearby areas, especially Anatolia, Cilicia and Euphrates. ${ }^{179}$ A close variant to the sample from P phase 3a may be observed in Tell Mardikh contexts dated to LB I in the local sequence (Colantoni 2014: pl. 1: d). The assemblage is attributed mainly to the $2^{\text {nd }}$ half of $16^{\text {th }}$-beginning of $15^{\text {th }}$ cent. BCE, and the type is considered an evolution from MB II typologies. Further comparisons
may be observed in MBA and LBA Tarsus, ${ }^{180}$ and in Lidar Höyük phase 5 (Kaschau 1999: pl. 171: 11), attributed to MB IIIB in the local sequence and approximately dated toward the $1^{\text {st }}$ half of the $16^{\text {th }}$ cent. BCE.

The bowl Fig. 5.9: 2 is characterised by thin walls in the lower part of the body, and thickened upper sides, bent toward the inside of the vessel, with a simple rim refined by an inside bevelled profile. The shape finds close comparisons in early LBA layers of the Tilmen upper town area K-5 (Bonomo 2011: fig. 5: 6), ${ }^{181}$ although related morphologies with in-turned upper sides were already known in MBA Northern Levant ceramic horizons. ${ }^{182}$ Close comparisons may be observed in contexts dating between the $2^{\text {nd }}$ half of the $17^{\text {th }}$ and the early $16^{\text {th }}$ cent. BCE in the Euphrates area, ${ }^{183}$ and in the $15^{\text {th }}$ cent. BCE Cilicia. ${ }^{184}$
The medium-large-size bowl Fig. 5.10: 1 has curved walls with inside and outside thickened rim, a rounded upper side and a pointed outer side. Similar rim morphologies are diffused in MBA Northern Levant ceramic horizons since MB IB, ${ }^{185}$ but the closest comparisons seem mainly concentrated in late MBA and early LBA contexts. The same rim morphology, although associated to a larger bowl variant, is found in the Tilmen lower town area K-1 (Fig. 2.3: 6) and in the LBA layers of Tilmen upper town area G. ${ }^{186}$ A similar rim, although more thickened on the inner side, is further attested in the phase 3 of area K-3 (Fig. 4.4: 3). In the Euphrates area, close parallels are found in Lidar Höyük from phases 3 to 4, ranging from MB IIA until MB IIIA

[^71]in the local sequence and approximately dated between the $18^{\text {th }}$ and the $17^{\text {th }}$ cent. BCE, ${ }^{187}$ but further parallels are found also in phase 5 (Kaschau 1999: pl. 128: 4; pl. 160; pl. 161:3), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.
The upper section of a large-mouthed vessel with closed sides and probably a deep body is also included in the simple ware inventory (Fig. 5.9: 3). The vessel has 16 cm of rim diameter and is characterised by a simple, everted rim. It is probably to be ascribed to a carinated cup, a small jar or a small krater, comparable to the type already attested in the inventory of area K-3 phase 2 (Fig. 4.3: 4). ${ }^{188}$ Related morphologies were widespread between MB IB and early LBA layers of Northern Levant ceramic horizons, ${ }^{189}$ but the closest variants to P inventory seems to belong to MB II contexts. ${ }^{190}$

Other simple-ware rim-sherds of large-mouthed vessels with everted, thickened rim (Fig. 5.9: 4-5) probably belonged to medium-size kraters.

The outside thickened rim with curved upper side and pointed outer side profile of Fig. 5.9: 3 finds comparisons with specimens from Northern Levant or Syrian Euphrates contexts whose range of dating is probably centred between the $17^{\text {th }}$ and the $16^{\text {th }}$ cent. BCE. ${ }^{191}$ Similarities may also be observed with specimens from the Lidar Höyük phase 4/3 (Kaschau 1999: pl. 192: 5), attributed to MB IIB in the local sequence and approximately dated toward the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE, and phase 5 (Kaschau 1999: pl. 140: 4; pl. 232: 3), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE. However, a relation to

[^72]older types, like those documented at Umm el-Marra IIId (Schwartz et al. 2000: fig. 8: 2), attributed to MB I in the local sequence, cannot be excluded.
The second rim that probably belongs to a large-mouthed vessel (Fig. 5.9: 5) presents a markedly everted rim with squared profile and outer, lower margin slightly pointed. An upper indentation is probably functional for hosting a lid. Similar large-mouthed vessels with everted rim and lid housing are known since MB I. ${ }^{192}$ In Tilmen area P they are also attested, in different morphological variants, in phase 3b (Fig. 5.14: 7) and 4 (Fig. 5.22: 2, Fig. 5.20: 3). A close comparison for the sample from phase 3a, however poorly preserved, may be observed in some Tell Arqa late MBA vessel typologies, ${ }^{193}$ and in LBA assemblages from Northern Levant and Euphrates area. ${ }^{194}$ Some similarity may be further observed in MBA assemblages from the Balikh area. ${ }^{195}$
Three main variants of high-necked jar with restrained mouth are attested in phase 3a simple ware inventory from room L. 1646 (Fig. 5.9: 6-8; Fig. 5.10: 3). The diameter of the rims, which ranges from 9 to 12 cm , may be consistent with the containment of liquids for storage and transport - mainly in short-distance transport or serving. The sample Fig. 5.10: 3, however, stands out for its remarkably restricted opening, ca. 8 cm large.
Variants with simple, everted rim are rarer (Fig. 5.9: 6), while more common are the variants where the rim engenders a short band thanks to outside thickening or eversion (Fig. 5.9: 7-8, Fig. 5.10: 3). Among them, the most widespread typology is represented by medium-small walled specimens with outside rolled rim engendering a short band at the top of the neck (Fig. 5.9: 7, Fig. 5.10: 3). ${ }^{196}$
Samples of high-necked jars with curved neck and simple, everted rim (Fig. 5.9: 6) are found also in P phase 4 inventory (Fig. 5.21: 5). The type finds a parallel in Hama silos 16 (Nigro 2009: pl. 56: 9), approximately dated to the MB IB (Nigro 2009:

[^73]196But see also Fig. 6.3: 4.
324). Something similar, however, is also attested in late MBA contexts, ${ }^{197}$ while related morphologies in the Euphrates area are widespread also at the beginning of the LBA. ${ }^{198}$

High-necked jars with banded rim (Fig. 5.9: 7, Fig. 5.10: 3) are also found in area P2 phase 2 ceramic inventory (Fig. 6.3: 4), while related rim variants, although associated to larger mouthed vessels, are attested in P phase 4 ceramic inventory (Fig. 5.18: 5). ${ }^{199}$ Attested in some variants since the MB I, ${ }^{200}$ probably deriving from EBA prototypes, ${ }^{201}$ the banded rims are largely widespread in middle and late phases of MBA Northern Levant and Upper Mesopotamia, ${ }^{202}$ and continue to be attested in LBA. ${ }^{203}$

The sample Fig. 5.10: 3, with markedly restricted mouth and well-thickened rim, finds a close parallel in the upper section of two juglets from the Mardikh Tomb of the Lord of the Goats (Nigro 2002a: n. 88-89), ${ }^{204}$ with globular jugs from MB II layers of

[^74]198See Dornemann 1979: fig. 19: 10, Hadidi, LB I.
199Further samples in area P phase 3a are attested, in addition to F. 2003 (Fig. 5.10: 3) and F. 2001 (Fig 5.9: 7), in F.2006, and in undistinguished phase 3 contexts in F. 2032.

200See for example Mardikh IIIA (Matthiae 1995: fig. 45: 13-14), or Lidar Höyük phase 2 (Kaschau 1999: pl. 60: 12-17). A related morphology may be considered also a variant from Afis area E level 15, which is considered typical MB I (Mazzoni 1998: fig. 20: 4).

201See Dornemann 1979: fig. 13: 17, Hadidi tomb 1972, and Tilbeshar III D (Kepinski-Lecomte 2007: fig. 4: 14), attributed to ca. 2300-2100 BCE, where the band on the rim is engendered by the everted rim.
202See for the very late phase of MBA and early LBA, Qatna MB III layers (Iamoni, Morandi Bonacossi 2010-2011: fig. 12: 13; Iamoni 2012: pl. 21: 5); Mardikh IIIB2 destruction layers (Pinnock 2005: type 1431, 1432, 1433, 1435, and esp. pl. 42: 6, type 1431); Lidar Höyük phase 5 (Kaschau 1999: pl. 131: 5, 8-10; pl. 152: 2) and Hadidi H XIII (Dornemann 1981: fig. 15: 13-16). For the intermediate phases of MBA (MB IIA-B), see Tuqan area A (Fiorentino 2006: fig. 31: 9-12); Oylum Höyük (Özgen, Helwig 2001: fig. 18: d); Lidar Höyük phase 3/2 (Kaschau 1999: pl. 72: 5, pl. 333: 4-5), phase 3 (Kaschau 1999: pl. 97: 2-7; pl. 99: 2), phase 4/3 (Kaschau 1999: pl. 295: 4; pl. 307: 1-2) and phase 4 (Kaschau 1999: pl. 114: 20; pl. 115: 2, 5, 12); Zeytinli Bahçe Höyük (Balossi et al. 2007: fig. 12); Emar upper town UT4 (Sakal 2018: fig. 5: 15) and Chagar Bazar (McMahon, Frane 2009: pl. 52: 12-13).

203See Qatna K12 (LB IIA), type BT3, considered typical LBA (Iamoni 2012: pl. 53: 2); Qatna, K12-10, LB II (Luciani 2002: fig. 9: MSH 00 K 1151-79; MSH 00 K 1022-14; MSH 99 D 39-48); Qatna BU, phase 7b, LB IIA (Döpper 2019: pl. 86: K 2162), and Qatna T9, LB I (Iamoni 2012: pl. 52: 12).

204The Tomb has been related to Mardikh IIIB1 (MB IIA) and dated to the $2^{\text {nd }}$ half of the $18^{\text {th }}$ cent. BCE by the excavator and the Ebla team (Matthiae 1989: 304; Nigro 2002a: 109 note 152; Pinnock 2014: 231); this date, however, has been questioned by Gates (2000: 86; 2011: 187) who, also on the basis of comparisons with Kinet Höyük ceramic sequence, hypothesises a later chronology toward the $2^{\text {nd }}$ half of the $17^{\mathrm{h}}$ cent. BCE. A further

Zeytinli Bahçe Höyük (Balossi et al. 2007: fig. 12), and with the Lidar Höyük phase 5 (Kaschau 1999: pl. 22: 1; pl. 230: 2), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE. Further comparisons may be observed in Emar upper town UT4 (Sakal 2018: fig. 5: 15), attributed to late MBA in the local sequence (ca. late $17^{\text {th }}$ cent. BCE), Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 43: 21, type 1433) and the LBA context of the Northern Levant and nearby areas. ${ }^{205}$

The larger sample Fig. 5.9: 7 finds good parallels in MB II and early LBA Northern Levant ceramic horizons, also continuing to be attested, in some variants, in later stages of the LBA. A good comparison may be observed with specimens from Mardikh IIIB, dating to MB II (Matthiae 1995: fig. 51: 7); from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 42: 6, type 1431); and from MB III Qatna (Iamoni, Morandi Bonacossi 2010-2011: fig. 12: 13). Close variants, however, derive also from Alalakh IX (Heinz 1992: cat. A: pl. 44: 93, 95), ${ }^{206}$ and Lidar Höyük phases 2, 3 and $4 .{ }^{207}$ In association to jars with a slightly larger mouth, similar everted necks and thickened rims are attested in MB II layers of Tuqan area A (Fiorentino 2006: fig. 31: 9-12). ${ }^{208}$ The last typology of the high-necked jar (Fig. 5.9: 8) belongs to a thicker wall variant, featuring an everted and elongated rim with a squared, vertical profile and applied band with incised decoration at the basis of the neck. A similar morphology is attested in a larger vessel in storage ware from MBA layers of Tilmen upper town area G. ${ }^{209}$ The simple typology is widespread in the Northern Levant and Euphrates area during a long span of time, ranging from transitional EBA-MBA layers until

[^75]209See TH05G267-24 (Archives of Turco-Italian expedition to Tilmen Höyük).
the LBA. ${ }^{210}$ Close comparisons with P sample, however, may be observed in the Euphartes area in Lidar Höyük phase 5, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE, where a decorated band at the base of the neck seems a recurring trait (Kaschau 1999: pl. 150: 1, 4; pl. 178: 1, 9; pl. 198: 3). A similar rim morphology is shared also by decorated jars from the Cilician and Eufrates area diffused aorund the $16^{\text {th }}$ cent. BCE. ${ }^{211}$

An unselected body-sherd belonging to a carinated vessel from F. 2001 is probably to be related to a 'shoulder' or 'carinated goblet'. A better preserved sample of the same typology, in fact, is attested in another deposit of phase 3a (Fig. 5.12: 5, F.2006).
Among the simple ware, the phase 3a ceramic inventory of room L. 1646 attests the use of painted decoration (Fig. 5.10: 2). ${ }^{212}$ The painted potsherd belongs to a largemouthed vessel ( 18 cm of rim diameter), probably a small krater for mixing, serving, and, in general, for communal use. It has a short, closed neck, defined by a carination on the upper part of the body, and an everted, elongated rim, with flat upper side and rounded, outer profile. The painted decoration is located on the upper surface of the flat rim, and consists of simple, thin strokes of paint transverse to the rim. In the Northern Levant, similar vessel morphologies can be observed in assemblages attributed to MB II and early LBA. ${ }^{213}$ Although the shape does not show a high carination

[^76]comparable to the Tilmen P sample, a similar painted vessel with strokes above the rim is found in Alalakh VIII ceramic inventory (Heinz 1992: cat. A: pl. 22: 37). The type, however, seems to also recall Euphrates and, especially, Khabur MBA plain and Khabur painted ware specimens. ${ }^{214}$

The phase 3a kitchen ware ceramic inventory includes typical large mouthed pots with double rim (Fig. 5.9: 10), largely attested in the Tilmen MBA ceramic horizon. ${ }^{215}$ Close comparison for the remarkably large-mouthed sample Fig. 5.9: 10 may be observed in MB II layers of Tuqan area E (Fiorentino 2006: fig. 47: 10-11).

## The assemblage of phase 3a - Room L. 1645

Further material from phase 3a derives from F. 2013 in room L.1645. Here the curved bowl Fig. 5.8: 2, characterised by a hammer-head rim and inside and outside thickened and bulging upper side, closely resembles the samples recovered in room L. 1646 (Fig. 5.10: 1) as well as hammer-head rim specimens already observed in area K-3 (Fig. 4.4: 3) and K-1 (Fig. 2.3: 6). ${ }^{216}$ Close similarities with L. 1645 sample may be observed in MB IB-IIA layers of Tuqan L-South (Peyronel 2006: fig. 26: 6), with MB II layers of Tuqan area P (Peyronel 2008: fig. 11:3) and with Lidar Höyük phase 5 (Kaschau 1999: pl. 258: 4), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.
The painted vessel Fig. 5.8: 1, found in the same context, is poorly preserved, and the building technique is not clear. The sample has orange fabric with intermediate frequency of mineral inclusions of medium size. The surface is slipped in reddish brown colour and presents a darkish paint. The painted pattern includes a solid band

[^77]on the rim and below it. In addition to that, three large, multiple-brush wavy lines are preserved on the body; a further independent wavy line is located below the band of the rim. The sample might belong to an MBA painted production, ${ }^{217}$ but it might also represent a residual from earlier periods. ${ }^{218}$

The assemblage of phase $3 a-$ Room L. 1641
A further lot of phase 3a pottery, F.2006, derives from the northern room L.1641. The inventory of simple ware open shapes includes medium-size bowls with antisplash device (Fig. 5.12: 1-2) and large, shallow bowls or plates with horizontal rim (Fig. 5.12: 3).
The two bowls with anti-splash device belong to two different types well attested in the MBA Northern Levant and nearby areas. Fig. 5.12: 3 (diameter 20 cm ) is characterised by a thickening of the upper section of the vessel - including wall and rim - which results in a carination of the outer surface of the vessel body. A large and smooth concavity connects the thickened, upper section of the wall with the lower section. A similar appearance is found in different bowl typologies of area K-3 (Fig. 4.4: 2) and area P phase 4 (Fig. 5.20: 1). In this last example, however, the smooth concavity is replaced by a small indentation that divides the body from the rim. Although externally similar, this is probably the mark of a difference in the operative chain. Close comparisons for the sample from F. 2006 (Fig. 5.12: 1) may be observed in Mardikh IIIB1 (Nigro 2002a: 67; Nigro 2002b: fig. 20: 6), attributed to MB IIA in the local sequence: here the shape is classified among 'inturned rim bowls' (Nigro 2002b: fig. 20: 4-6), that, since they are not attested in the previous period, are regarded as a specific hallmark of MB IIA (Nigro 2002b: 316). ${ }^{219}$ Similar shapes, however, are also attested in the Northern Levant in later contexts attributed to the end of the MBA. ${ }^{220}$

[^78]The second typology of bowl with anti-splash device, slighly larger than the previous one (diamter 25 cm ), is characterised by straight sides and inside bent rim with squared profile (Fig. 5.12: 2). Close comparisons in the Northern Levant may be observed in MB IIA assemblages of Mardikh, ${ }^{221}$ but the type appears to be attested at least since the MB IB in the local sequence, and close variants continue to be attested also in later periods. The morphology is typical of so-called 'blackburnished slip ware' of Mardikh (Nigro 2002a: pl. 49: 44-45, Mardikh IIIA2, MB IB), and samples recently uncovered from the Zincirli Complex DD destruction layer, dating to mid$17^{\text {th }}$ cent. BCE, are also characterised by carefully polished surfaces (Morgan, Soldi 2021: fig. 19: 1-2).

Large plates - or shallow bowls - are also attested (Fig. 5.12: 3) (diameter 34 cm ), and are characterised by a horizontally oriented, inside and outside thickened rim. A similar shape, although with a different rim, is attested in area K-3 (Fig. 4.8: 2). Comparable morphologies may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 72: 10, type 2224, but see also pl. 68: 7-8, 10, type 2215).
Large-mouthed vessels with a grooved rim (Fig. 5.12: 4) represent another morphology attested in simple ware in F.2006. As seen already (see above the inventory of phase 1), kraters and deep bowls with grooved rim are largely attested in the MBA Northern Levant and Euphrates area, with some variants that continue in LBA. Similar rim morphologies are attested in the assemblage of area K-1 (Fig. 2.3: 7), K-3 (Fig. 4.9: 1, Fig. 4.6: 2), P2 phase 2 (Fig. 6.3: 2) and in the area P in phase 1 (Fig. 5.6: 2), 3b (Fig. 5.14: 6, Fig. 5.13: 2) and 4 (Fig. 5.18: 3). ${ }^{222}$ The specific typology from F. 2006 closely recalls the sample attested in area K-3 (Fig. 4.9: 1). Close comparisons may

[^79]222See commentary and comparisons for Fig. 2.3: 8, area K-1.
further be observed in MB II layers of Tuqan area H (Fiorentino 2006: fig. 36: 9) and in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 29: 1, type 1341). ${ }^{223}$

Two body-sherds of carinated vessels, one of which was selected as indicator (Fig. 5.12: 5), probaby belong to so-called 'shoulder' or 'carinated goblets' (Horowitz 2015: fig. 7.4: 4-5; Morgan, Soldi 2021: fig. 19: 4), widespread in the MB IIB Northern Levant and continuing in the LBA. ${ }^{224}$ Further attestations in Tilmen lower town, in addition to the already mentioned sample from area P phase 3a (F.2001), surely include the area P2 phase 1 (Fig. 6.2: 1-2), but other less preserved samples are probably to be ascribed to the same category (see Fig. 4.8: 3, area K-3; Fig. 5.20: 1, area P phase 4, and Fig. 6.4: 1, from area P2 phase 3). The sample from F. 2006 is characterised by a decorated band in relief with additional incised strokes. The rim is not preserved, but close comparisons for the carinated body may be found in Zincirli Complex DD destruction layer, attributed to the mid-17 ${ }^{\text {th }}$ cent. BCE (Morgan, Soldi 2021: fig. 19: 5, 7), while the presence of the band in relief finds comparisons in Alalakh VII (Heinz 1992: cat. A: pl. 6: 31, pl. 7: 33), Mardikh (Heinz 1992: cat. B: pl. 15: 2) and Ugarit (Heinz 1992: cat. B: pl. 21: 6) in the Upper Levant, and in Lidar Höyük phase 4 in the Euphrates area (Kaschau 1999: pl. 113: 7-9). ${ }^{225}$
Among the storage ware inventory, a rim of a large-mouthed vessel (diameter 28 cm ) presents an outside thickened, double rim (Fig. 5.12: 6). The morphology finds a close comparison in the simple ware inventory of area K-1 (Fig. 2.3: 11) and K-3 (Fig. 4.5: 3), while comparable storage ware samples derive from MBA contexts from Tilmen area G, in the upper town. ${ }^{226}$ Similar rim morphologies are found also in storage vessels from MB II Kinet Höyük East Terrace Building (Gates 2000: fig. 5: 1).

## The assemblage of phase $3 a-$ Gateway L. 1637

To the same stratigraphical phase 3a belongs the deposit F.2005, located immediately above the passage L.1637, in the northern sector of the building. The ceramic inventory includes simple ware, storage ware and kitchen ware samples.

[^80]The simple ware ceramic inventory includes large-mouthed vessels with everted, collared rim and grooved profile (Fig. 5.11: 1). The specific morphology of the rim, common also in late $3^{\text {rd }}$-early $2^{\text {nd }}$ millennium BCE Northern Mesopotamia ceramic horizons, has been sometimes considered functional to facilitate the process of securing the vessels with ropes. In the Middle Euphrates area, vessels with comparable rim, although mainly vertically oriented, derive from EBA and continue into the MBA. ${ }^{227}$ A parallel for the everted rim of the Tilmen sample may be observed in Emar upper town UT4 (Sakal 2018: fig. 6: 1), attributed to late MBA in the local sequence (ca. late $17^{\text {th }}$ cent. BCE) and to some extent in Munbāqa level II-Mbq-4 (Blocher, Werner 2018: fig. 11: 7102), attributed to LB IB in the local seqeunce (ca. $2^{\text {nd }}$ half of $15^{\text {th }}$ cent. BCE). In the Northern Levant, the shape finds a close parallel in the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 40: 8, type 1423). Further comparison may be observed with the Toprakhisar Building II ceramic assemblage, dating to MB II (Akar, Kara 2018: fig. 15: 21), and in MB II layers of Oylum Höyük (Özgen, Helwig 2001: fig. 6: a).
The inventory of kitchen ware includes the typical cooking pots with double rim (Fig. 5.11: 2), already attested in area P phase 3a in F. 2001 (Fig. 5.9: 10). ${ }^{228}$ A close comparison for the squared profile of the sample from F. 2005 may be observed in area K-3 (Fig. 4.7: 5).

The storage ware inventory (Fig. 5.11:3-4) includes two distinct variants of largemouthed vessel with outside thickened rim.

The sample with a smaller opening (Fig. 5.11:3) presents an outside thickened rim, elongated, bent downward, with curved profile, disposed above a slight carination. Something similar is attested in the Mardikh IIIA1 ceramic inventory, dating to MB IB (Nigro 2002a: 17). However, some parallels can also be seen in contexts dating to late phases of MBA, like in the destruction layers of Mardikh IIIB2 (Pinnock 2005: pl. 27: 4, type 1332), and Lidar Höyük phase 5 (Kaschau 1999: pl. 169: 1), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

[^81]Of the storage ware vessel with a larger opening (Fig. 5.11: 4), only the rim is preserved, and it is shaped as a short band with double bulging and upper-pointed profile. The same typology is attested in Tilmen upper town in the MBA layers of area G. ${ }^{229}$ Similar rim variants are largely widespread in the MBA Northern Levant, although maybe more frequently associated to slightly smaller rim vessels. Storage jars with medium-size mouth and everted double rim, in fact, are frequent in the Mardikh IIIB2 destruction layers (Pinnock 2005: type 1422, 1423, 1424, 1425), as well as in Mardikh IIIA, generally attributed to MB I (Matthiae 1995: fig. 45: 15-16) and Mardikh IIIA1, dating to MB IA (Nigro 2002a: 16, 22).

Concerning the assemblage from the phase 3a, the inventory from the northern room L. 1641 (F.2006) reflects a relatively homogenous MB II assemblage: it mainly includes types common to both MB IIA and IIB (Fig. 5.12: 1-2), but also some typology that seems more peculiar of MB IIB (Fig. 5.12: 5). Based on parallels and stratigraphy, therefore, a dating in the MB IIB seems likely. A date to the MB IIB would also accord with the range of parallels identified for F.2005, on the passage L.1637, although in this case good chronological indicators are missing. The range of parallels, in fact, is quite large, extending from MB I until LBA (Fig. 5.11: 1); from MB I until early LBA (or 'MB III' according to different terminologies, see Table 1.1) (Fig. 5.11: 3); and from MB I until MB II (Fig. 5.11: 4). Scarcely informative in terms of chronology is the small inventory of room L.1645, represented by F.2013, whose range of parallels spans from MB I until early LBA (/MB III). The assemblage from the room L.1646, represented by F.2001, F. 2003 and F.2005, is richer. The range of ceramic comparisons however is quite large, spanning from MB I until well into the LBA (around ca. the $15^{\text {th }}$ cent. BCE), a pattern that testifies to the strong continuity of the ceramic production. Many of the attested types seem to remain in use for long periods, being attested at least until around the end of LB I ( $15^{\text {th }}$ cent. BCE) and starting to be widespread since MB II (Fig. 5.9: 1-2, 5, ${ }^{230} 7$; Fig. 5.10: 3) or even MB I (Fig. 5.9: 3, 6, 8, Fig. 5.11: 2). The range of comparisons of a few indicators however does not extend beyond the early LBA (/MB III), and reflects types widespread already in MB II assemblages (Fig. 5.10: 1-2, Fig. 5.9: 4). Based on parallels - despite their poor

[^82]informative value - and stratigraphy, therefore, a dating of the most recent set of potsherds to the MB IIB seems likely.

The presence of residual MB IIA samples in the assemblage of the phase, however, cannot be excluded.

## The assemblage of phase $3 b$

Concerning the phase 3b, associated with the stone and soil deposits above the first accumulation on the floors, the largest set of inventories derives from the fills of the north-south corridor L.2017: F. 1633 and F.2033. Further potsherds have been gathered from the room L. 1645 (F.2012), from the access L. 1635 (F.2007) and from the access L. 1636 (F.2036).
The simple ware inventory of open shapes includes medium-small-size shallow bowls with straight sides (Fig. 5.14: 1), medium-size bowls with curved sides (Fig. 5.16: 1), carinated bowls (Fig. 5.20: 1, Fig. 5.14: 3-4, Fig. 5.17: 1) and bowls with anti-splash device (Fig. 5.14: 2, Fig. 5.16: 2-3, Fig. 5.13: 2).

The shallow, conical bowl with pointed rim Fig. 5.14: 1 is unusual in the MBA Northern Levant, but close similarities are attested with Central Anatolian Old and Middle Hittites specimens. ${ }^{231}$ The curved bowl with simple, rounded rim Fig. 5.16: 1 also finds comparison in Central Anatolian Old and Middle Hittites assemblages, ${ }^{232}$ but similar morphologies are known also from the Northern Levant, from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 8: 10, type 1170), and from Qatna T12 (MB III in the local sequence), type C2, considered typical MB III (Iamoni 2012: pl. 13: 4).
Two main variants of carinated bowls are attested, one with thin walls (Fig. 5.15: 1) and one with thick walls (Fig. 5.19: 5, Fig. 5.14: 4, Fig. 5.17: 1).

The carinated bowl with thin sides Fig. 5.15: 1 finds a close comparison in Alalakh IX (Heinz 1992: cat. A: pl. 39: 64), although some similarities may also be recognised with typical MB I carinated bowls of Qatna (Iamoni, Morandi Bonacossi 2010-2011: fig. 6: 6, 8) and typical 'Gublite' bowls common in MB IB layers of Tell Mardikh

[^83](Nigro 2002a: pl. 47: 14-15). The morphology, usually associated to a pedestal base, is also common to Cilician plain and painted cups attributed to the Karum period. ${ }^{233}$ Carinated bowls with thick walls usually have concave, short, upper sides, mainly vertical (Fig. 5.14:3) or internally oriented (Fig. 5.14: 4). A similar morphology finds comparison in the assemblage of area P2 phase 2 (Fig. 6.3: 1). It resembles typical bowls from Mardikh IIIA1 (Nigro 2002a: fig. 46: 4-5), attributed to MB IA, and further similarities can be observed with MB I carinated bowls from Qatna (Iamoni, Morandi Bonacossi 2010-2011: fig. 6: 1) and from the Euphrates area. ${ }^{234}$ Good parallels, however, may be observed also with MB IIB and early LBA (/MB III) Northern Levant assemblages. ${ }^{235}$

Similar carinated bowls with in-turned upper sides (Fig. 5.17: 1) find a good match in MB IIB Qatna as well. ${ }^{236}$

Three main variants of bowls with anti-splash device are attested: medium-size bowls (diameter 20 cm ) with inside folded rim (Fig. 5.14: 2, Fig. 5.16: 3), which are the most common; larger bowls (diameter 23 cm ) with inside thickened rim (Fig. 5.13: 1); and small, shallow bowls (diameter 16 cm ) with inside pointed rim.

Among the bowls with inside folded rim, in some cases the inward bent of the upper part of vessel engenders a carination of the outer sides which is further characterised by a thin groove (Fig. 5.14: 2). A close comparison is found in MB II layers of Tuqan area D (Baff 2011: fig. 6: 18) and in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 5: 5, type 1122). Close similarities, however, may be observed also with specimens from MB IIB contexts of Qatna, ${ }^{237}$ as well as from Cilicia and Upper Mesopotamia. ${ }^{238}$

[^84]In Fig. 5.16: 3, the upper side of the rim is slightly corrugated. Close comparisons are attested in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 1: 4, 11; pl. 2: 3, type 1111; pl. 4: 14-15, type 1121), and in LB I contexts of the same site (Colantoni 2014: pl. 1: i), probably to be attributed to the $2^{\text {nd }}$ half of $16^{\text {th }}$-beginning of $15^{\text {th }}$ cent. BCE, where it is considered a transitional MBA/LBA type. Further comparisons, in fact, may be observed in the Euphrates area in LB I layers of Hadidi (Dornemann 1979: fig. 20: 14). ${ }^{239}$ Moreover similarities can be found in MB II Upper Mesopotamian contexts as well. ${ }^{240}$

Medium-large bowls with inside thickened rim such as Fig. 5.13: 1 find some general comparison in Qatna contexts attributed to MB III in the local sequence. ${ }^{241}$

The last variant of bowl with anti-splash device, the small, shallow bowl with inside pointed and upper side rounded rim Fig. 5.16: 2, belongs to a typology close to one already observed in area K-3 (Fig. 4.8: 1). Close comparisons from the sample from area P may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 1: 15; pl. 2: 5, type 1111), but similar morphologies in the same site continue also in contexts attributed to LB I according to the local sequence, and approximately dated between the $16^{\text {th }}$ and $15^{\text {th }}$ cent. BCE (Matthiae 2011: fig. 20: 6) or the $2^{\text {nd }}$ half of $16^{\text {th }}-$ beginning of $15^{\text {th }}$ cent. BCE (Colantoni 2014: pl. 1: g, considered an MBA-LBA transitional shape).

More frequently, however, similar profiles are associated to larger vessels, whose typology seems remarkably widespread in early LBA and LBA contexts from Anatolia to the Euphrates area. ${ }^{242}$

[^85]240See for example Chagar Bazar (McMahon, Frane 2009: pl. 11: 12).
241See Qatna J10 (MB III), type B3B, considered typical MB IIB-MB III (Iamoni 2012: pl. 1: 2) and type B4, considered typical late MBA (Iamoni 2012: pl. 2: 2).
242Similar morphologies are attested for example at Umm el-Marra in pre-destruction pit contexts, attributed to mid $15^{\text {th }}-14^{\text {th }}$ cent. BCE ca. (see Schwartz 2018b: fig. 5: 6-9, and related comparisons); in the Euphrates area in Lidar Höyük phase 5 (Kaschau 1999: pl. 155, esp. n. 5), attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE., and in Hadidi contexts attributed to LB I (Dornemann 1979: fig. 20: 15-16, 21). Close similarities may also be observed in Central Anatolian assemblages with some variants of the bowl type S5 (see for example Kuşaklı/Sarissa West Slope, Mielke 2006: pl. 53: 11, type S5c; 14, type S5d; 20, type S5f; pl. 55: 1, type S5p; and esp. n. 9, type S5q), attested along the entire Hittite sequence but particularly typical of Middle Hittite and early Imperial period.

Large mouthed vessels with corrugated rim probably to be related to kraters or deep bowls, already attested in phase 1 (Fig. 5.6: 2) and 3a (Fig. 5.12: 4), are also well represented in the inventory of phase 3b (Fig. 5.14: 6, Fig. 5.13: 2), and will continue in phase 4 (Fig. 5.18: 3). Similar rim morphologies are attested in the assemblage of area K-1 (Fig. 2.3: 8), K-3 (Fig. 4.9: 1, Fig. 4.6: 2), and P2 phase 2 (Fig. 6.3: 2)..$^{243}$ The samples from area P phase 3 b , despite the poor preservation of most of them, attest the use of a corrugated rim in association to vessels of different sizes and, probably, morphologies. The openings range from 21 cm (Fig. 5.14: 6) to 51 cm (Fig. 5.13: 3). The sample Fig. 5.14: 6 is quite close, in terms of size, to the sample from phase 3a (Fig. 5.12: 4), while specific comparisons for the rim morphology, downward bent, may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 23: 7, type 1321). The larger sample Fig. 5.13: 2 has a closer parallel in MB II layers of Tuqan area A (Fiorentino 2006: fig. 32: 2, 8). The vessel Fig. 5.13: 3, distinguished by an elongated, everted rim with squared profile and multiple grooves, is the largest grooved vessel attested in the lower town so far. A comparison for the rim morphology may be observed in MB II contexts of Tuqan area H (Fiorentino 2006: fig. 38: 12), altough a similar smaller variant is also attested in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 30: 3, type 1343). ${ }^{244}$

Another large-mouthed vessel typology in phase 3 b presents an everted rim with a squared, vertical outer margin and a curved upper side. An internal ridge is probably functional for hosting a lid (Fig. 5.14: 7). A vaguely similar type is also attested in phase 3 a (Fig. 5.9: 5). ${ }^{245}$ This second, better preserved variant from phase 3b has a curved neck and a band in relief that marks the passage between neck and shoulder. A very similar morphology, with the addition of painted decoration, is attested in phase 4 (Fig. 5.20: 3). The rim morphology finds a close comparison in a large vessel from Lidar Höyük phase 5 (Kaschau 1999: pl. 271: 1), attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE, but general similarities may also be observed with specimens from Hammam et-Turkman

[^86]periods VII: 3 (Cuvers 1988: pl. 136: 136) and VII: 5 (Cuvers 1988: pl. 135: 132), ${ }^{246}$ as well as with MB II ceramic assemblages from the Damascus area (Nicolle 2002: pl. 26: 34). Other variants of rim with internal ridge belong to late MBA and LBA Northern Levant assemblages. ${ }^{247}$
Medium to medium-small (diameter from 16 to 21 cm ) closed vessels with large mouth are attested with curved or everted shorth neck and everted rim (Fig. 5.14: 8 and Fig. 5.16: 5). The rim profile is vertical and double in the smaller sample (Fig. 5.14: 8), and vertical and downward pointed in the larger sample (Fig. 5.16: 5). The general morphology of the sample Fig. 5.14: 8 is largely attested in late MBA and early LBA Northern Levant assemblages, frequently attested in kitchen ware (see also commentary and comparisons for the sample Fig. 4.5: 3, from area K-3), ${ }^{248}$ but the small size of the specimen from phase 3 b is unusual. A close comparison, however, is attested in the MBA layers of Tilmen upper town area $\mathrm{G},{ }^{249}$ and a further medium size sample may be identified in Qatna J10 (MB III) in type GJ17, considered typical of MB II (Iamoni 2012: pl. 20: 2). The sample Fig. 5.16: 5, larger and with thicker walls, represents a more common vessel typology, presumably functional for medi-um-short-term storage. Related morphologies are attested in area P2 phase 3 (Fig. 6.5: 2), in area K-3 (Fig. 4.5: 3). ${ }^{250}$

Other closed vessels with a large mouth present a short curved neck and everted rim with outside bevelled profile. This typology recurs in large-size vessels (Fig. 5.14: 9) and small jars (Fig. 5.16: 4). The large-size sample Fig. 5.14: 9 is poorly preserved, but it might be similar to MB IIB medium-large globular jars attested in MB IIB Ala-

246Respectively attributed to MB IIA and IIB according to Nigro 2009: table 6: 1.
247See for example Alalakh area 3, phase 2, tentatively attributed to Woolley level VIB and to the MB IIC according to the sequence of reference (16 ${ }^{\text {th }}$ cent. BCE) (Mullins 2010: fig. 3.2: 5); Hadidi (Dornemann 1981: fig. 9: 13); Qitar building 17 (McClellan 2007: pl. 3: 4) and Qitar Building 15, Locus 31.44 (McClellan 2018: fig. 4: 4231), attributed to LB II in the local sequence, ca. around the late $14^{\text {th }}$ cent. BCE and the early $13^{\text {th }}$ cent. BCE.

248 See in addition the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 89: 1-5, esp. n. 5, type 2520); Qatna J13-12 (MB IIB), type STJ4, considered typical MB III in the local sequence (Iamoni 2012: pl. 26: 5); Hammam et-Turkman period VII: 5 (Cuvers 1988: pl. 134: 122), MB IIB according to Nigro 2009: table 6: 1.

249TH07G252-7; TH07G252-8 (Archives of Turco-Italian expedition to Tilmen Höyük).
250Further comparisons may be observed with Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 87: 7, type 2512), and with specimens from Qatna considered typical early LBA, or early $15^{\text {th }}$ cent. BCE according to the local sequence (Iamoni 2012: pl. 58: 6, Qatna K12 [LB IIA], type CK3B).
lakh (Horowitz 2015: fig. 7.4: 10). ${ }^{251}$ Similar typologies are attested also in the Cilician area from the Karum to the Old-Hittite period. ${ }^{252}$ The small jar Fig. 5.16: 4 is also poorly preserved, but similar morphologies seem to be largely widespread between the MBA Northern Levant and the Old Hittite period in Cilicia. ${ }^{253}$

A large-mouthed vessel of medium size with closed upper sides and outside thickened, triangular rim from F. 2036 (Fig. 5.17: 2) presents a coarse, painted decoration that is probably to be ascribed to the group of Tilmen local painted pottery. ${ }^{254}$ The irregular painted pattern, preserved in a band below the rim and in a series of three pendent lines plus three diagonal lines, partially intersecting, recalls some Siro-Cilician painted specimens from Alalakh XII (Heinz 1992: pl. 76: 20-21), while a general similarity with the shape may be observed in a Siro-Cilician painted vessel with large mouth and triangular rim from Alalakh XIII (Woolley 1955: pl. 92: ATP/47/115).. ${ }^{255}$ However, although usually related to larger vessels, a similar triangular rim is found also in later assemblages dating from MB II and late MBA until LBA from the Northern Levant and Upper Mesopotamia. ${ }^{256}$
The simple ware inventory of closed shapes includes three main variants of highnecked jars: with open neck (Fig. 5.16: 7), with vertical neck and everted rim and with corrugated neck (Fig. 5.14: 10). The sample with open, everted neck (Fig. 5.16: 7) is exemplified by a well preserved potsherd that may be related to a jar with low, straight shoulders and large, flat, vertical handle extending from the rim to the shoul-

[^87]der. The rim is simple, with bevelled profile. Fragments of rim plus handle belonging to similar morphologies are quite frequent in the inventory of area P , and, in addition to F.2033, where the indicator (Fig. 5.16: 7) belongs, they derive from F. 1633 (phase 3b), F. 2001 (phase 3a) and F. 2011 (phase 4), and from F. 1626 in area P2 (phase 1). A comparable morphology, although without handle, derives from area K-3 (Fig. 4.8: 4). Similar rim and neck morphologies are further attested in MBA jars from the Cilician area, ${ }^{257}$ and from early LBA (/MB III) contexts of the Euphrates area. ${ }^{258}$

The jar with vertical neck and everted rim (Fig. 5.15: 2) presents a thin groove on the rim outer margin that recalls the double rim samples from area $\mathrm{K}-3$ (Fig. 4.7: 3, Fig. 4.3: 5), widespread along the entire MBA sequence of Northern Levant and Euphrates. Simple everted rim with straight profile, instead, derive also from phase 3a (Fig. 5.9: 8, with thicker sides) and phase 4 (Fig. 5.20: 5-6).
The high-necked jar Fig. 5.14: 10, with a remarkably restricted mouth, has a gently grooved neck. Similar rim and neck morphologies are found in typical medium-small size MB IIA biconical vessels from Tell Mardikh (Nigro 2002a: pl. 52: 56). ${ }^{259}$ A close comparison for the preserved section of the Tilmen vessel, however, may be observed also in the openings of some typical jar morphologies of the Southern Levant, here including variants of the so-called Canaanite Jar category. ${ }^{260}$ The presence of such a shape at Tilmen, in fact, would not come unexpected: the same jars, indeed, are also attested in the Cilician area. ${ }^{261}$ In addition to comparisons with transport jars, however, some similarity may be also observed with peculiar jugs morphologies widespread in the Northern Levant between late MBA and early LBA. ${ }^{262}$ In fact, similar corru-

[^88]gated necks are attested also Qatna MB III layers. ${ }^{263}$ A sample, also poorly preserved, of a high-necked jar with more accentuated corrugation of the neck and eversion of the rim is further attested in P phase 4 (Fig. 5.18: 8).

Two main variants of storage vessels are attested: short-necked jars (Fig. 5.17: 3, Fig. 5.14: 11, Fig. 5.20: 6), and large kraters (Fig. 5.20: 3). The jars are mainly characterised by outside thickened, double rim, a typology already attested in the phase 3a (Fig. 5.12: 6; Fig. 5.11: 4). Close comparisons for the sample Fig. 5.17:3 are attested in the phase 3 of Tilmen lower town area M. ${ }^{264}$ The morphology, which is attested in the Northern Levant also in late phases of MBA, seems to closely derive from the MB I predecessor. ${ }^{265}$ The same range of comparisons may be related to the sample Fig. 5.14: 11, of which a close variant is attested also in MB IB contexts of Tilmen upper town area K-5 (Bonomo 2011: fig. 3: 13). ${ }^{266}$ The double rim variant of Fig. 5.16: 6, more widespread in kitchen ware in the Tilmen ceramic inventory, is also quite common in Northern Levant MBA storage ware. ${ }^{267}$

The large-mouthed vessel (diameter 44 cm ) with elongated, everted rim Fig. 5.15: 3, probably a krater, is not attested before phase 3 b and belongs to a morphology quite widespread in LBA in the Northern Levant and Cilicia. ${ }^{268}$ At Tilmen Höyük, similar morphologies are already known from the LBA layers of area $M$, in the lower

[^89]town, and of area G, in the upper town. ${ }^{269}$ The rim, however, closely resembles variants recurring in MBA kraters (see Fig. 6.3: 7, area P2, phase 2), and are known from assemblages from MB II and late MBA early LBA. ${ }^{270}$

Concerning the kitchen ware inventory, the most widespread type is represented by typical kitchen ware pots with everted, double rim (Fig. 5.16: 8-9, Fig. 5.17: 4), largely attested in Tilmen lower town MBA and LBA ceramic inventory. ${ }^{271}$ However, different open shape morphologies are additionally attested: a jar with simple everted neck; a large plate with inside thickened rim engendering an anti-splash device (Fig. 5.13: 4); a large open vessel with deep sides and inside pointed rim (Fig. 5.13: 5) and a thick walled basin with almost vertical sides and slightly corrugated rim (Fig. 5.15: 5). A sample of handmade 'backing' plate or 'tray' (for which see Fig. 5.20: 8, phase 4, and Fig. 6.2: 4, P2 phase 1) is also attested and derives from F.2033. ${ }^{272}$ The jar with simple, everted neck, not shown, derives from F.2012, and belongs to a typology better represented by a sample from phase 4 (Fig. 5.21: 7), attested in MB IA and II Northern Levant ceramic assemblages. The plate (Fig. 5.13: 4) bears traces of a rope impression on the outer side of the upper body, a typical mark of a building technique widespread in LBA Anatolian production (Orsi 2019), although it is registered also in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 73). In the Northern Levant, the shape finds large comparisons in MB IIB and late MBA ceramic contexts, ${ }^{273}$ but it seems to continue, in some variants, also in the following LBA (Mazzoni 2002: pl. 57: 6, Afis, LB I). The large open vessel with deep sides and inside pointed rim (Fig. 5.13: 5) finds comparisons in MB II levels as well. ${ }^{274}$ The basin, instead, appears to be a local production.

269TH07M203-5; TH06G77-4 (Archives of Turco-Italian expedition to Tilmen Höyük).
270See for example Qatna MB IIA (Iamoni, Morandi Bonacossi 2010-2011: fig. 9: 2), or Kinet Höyük period 15 (Gates 2001: fig. 2: 14-15), LB I in the local sequence, approximately dated to ca. $16^{\text {th }}$ cent. BCE.

271See comparisons and commentary for area K-3 Fig. 4.4: 4-5.
272Not shown.
273See Tuqan L-South - MB IB-IIA (Peyronel 2006: fig. 321-6); Tuqan H - MB II (Fiorentino 2006: fig. 40: 1); Tuqan A, MB II (Fiorentino 2006: fig. 32: 6); Tuqan, Area G, MB II (Fiorentino 2006: fig. 26: 5); Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 70: 9, type 2223; Pinnock 2005: pl. 74: 5, type 2225).
274See for example Tuqan area G, MB II (Fiorentino 2006: fig. 28: 5); Tuqan D, MB II (Baffi 2011: fig. 11: 9, 12); Alalakh (Bulu 2016: fig. 6: 11).

Despite the presence of many elements common to the phase 3a, the presence in the assemblage of phase 3 b of typologies that find substantial comparisons in assemblages attributed in Northern Levant to the early LBA (/MB III) suggests that the most recent set of materials from these fills is at least to be attributed to the $16^{\text {th }}$ cent. BCE. Comparisons with later, LBA assemblages, probably to be approximately dated around the $15^{\text {th }}$ cent. BCE , instead, are limited to typologies in continuity from earlier periods, and thus, they may not be considered as direct evidence of a date to that period. Most more probable early LBA (/MB III) typologies derive from the northsouth corridor L.2017, and especially from F.2033, ${ }^{275}$ but sparse specimens derive also from F. 2007 in the access L. 1635 (Fig. 5.13: 1) and from F. 2012 in the room L. 1645 (Fig. 5.14: 9). Other typologies may be also related to early LBA (/MB III) period but, at least in some variants, they appear to be in continuity with earlier phases, ${ }^{276}$ and thus they cannot be considered precise chronological indicators. Interestingly enough, the number of indicators with parallels in MB II and those with parallels with early LBA (/MB III) is almost equal, and this would seem a further proof of a form of continuity in the Northern Levant in the ceramic production between the $17^{\text {th }}$ and the $16^{\text {th }}$ cent. BCE, at least on the basis of the state of the art. The production of more accurate and extensive seriations, however, might undoubtedly change or refine this view. Based on ceramic comparisons, many types may be only generally related to MB II Northern Levant ceramic assemblages, ${ }^{277}$ while a few conservative typologies may belong to MB II (Fig. 5.14: 10, Fig. 5.17: 1) or more specifically to MB IIB ceramic horizons (Fig. 5.17: 1; Fig. 5.14: 3-4), but derive from MB I prototypes: the hypothesis that they may be residual from earlier occupational phases, however, cannot be excluded. More probable residual samples, in fact, have a range of distribution mainly centred between MB IB and MB IIA periods (Fig. 5.17: 2, Fig. 5.15: 11)..$^{278}$

[^90]277Fig. 5.13: 2-3 and 5, Fig. 5.14: 8-9.
278Although the range of distribution of Fig. 5.17: 12 may include the late LBA (/MB III) period.

### 5.3.4 The ceramic inventory of phase 4 (early LBA - LB II)

A total number of 126 diagnostic potsherds derive from building P phase 4, which corresponds to the latest deposits and collapses. With the exception of the superficial collapse F.1612, located in the access sector (L.1629), all other phase 4 contexts returned a collection of potsherds.
The largest cluster of potsherds, accounting for $37 \%$ of phase 4 total number of potsherds and 27\% of phase 4 selected potsherds, derives from the collapse layer F.1632, identified in the room L. 1646 and in the southern sector, named L.2019, of the corridor L.2017. A large sample, accounting for $35 \%$ of phase 4 total number of potsherds and $34 \%$ of phase 4 selected potsherds, further derives from the superficial fill F.1630, which covers most of the building sectors (L.1629, L.1635, L.1636, L.1637, L.1640, L.1641, L.2017). These large lots are followed in progression by F.1631, located in the access sector L. 1629 and in the corridor L.2017, which accounts for $17 \%$ of total phase 4 potsherds and selected phase 4 potsherds; F.2011, located in the room L.1645, which accounts for $9 \%$ of total phase 4 potsherds and $17 \%$ of selected phase 4 potsherds; and F.2035, located in the northern sector of the corridor L.2017, which accounts for $2 \%$ of total phase 4 potsherds and $5 \%$ of selected phase 4 potsherds (Table 5.1; Diagram 5.34).

The largest part of the phase 4 ceramic inventory is composed of rim-sherds, which amount to 65 samples ( $50 \%$ of the diagnostic pottery of the phase 4 inventory). Further clusters include base-sherds, which comprise 23 samples ( $18 \%$ of phase 4 diagnostic pottery), and handles and walls, which amount to 19 samples each ( $15 \%$ of phase 4 diagnostic pottery) (Table 5.20; Diagram 5.35).

Concerning function, the largest share of phase 4 diagnostic pottery may be ascribed to the general category of simple ware ( 89 samples, $71 \%$ of phase 4 diagnostic pottery); a small cluster may be related to the kitchen ware ceramic horizon (28 samples, $22 \%$ of phase 4 ceramic inventory), while the storage ware is mainly sparse ( 9 samples, $7 \%$ of phase 4 ceramic inventory) (Table 5.2; 5.21; Diagram 5.37). The composition of the assemblages from the different stratigraphic units is quite homogeneous (Diagram 5.38), with the simple ware accounting for between the $64 \%$ and the $70 \%$ of the ceramic inventory of the unit, the kitchen ware accounting for between the $23 \%$ and the $27 \%$, and the storage ware accounting for $7 \%$ to $11 \%$. An exception is represented by F.2035, which is composed of sole simple ware, and by F.1631, which does not include any storage ware.

The largest part of phase 4 inventory is composed of undecorated potsherds ( $98 \%$ of phase 4 inventory of diagnostic pottery), but three samples of painted pottery, deriving from F. 1632 and F.1631, are also attested (Table 5.24).

|  | F.1630 |  | F.1631 |  | F.1632 |  | F.2011 |  | F.2035 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Bottom | 10 | $22.73 \%$ | 7 | $33.33 \%$ | 6 | $12.77 \%$ |  |  |  |  | 23 | $18.25 \%$ |
| Complete |  |  |  |  |  |  |  |  |  |  |  |  |
| Handle | 9 | $20.45 \%$ | 2 | $9.52 \%$ | 7 | $14.89 \%$ | 1 | $9.09 \%$ |  |  | 19 | $15.08 \%$ |
| Rim | 16 | $36.36 \%$ | 10 | $47.62 \%$ | 26 | $55.32 \%$ | 9 | $81.82 \%$ | 2 | $66.67 \%$ | 63 | $50.00 \%$ |
| Rim+Handle |  |  | 1 | $4.76 \%$ |  |  | 1 | $9.09 \%$ |  |  | 2 | $1.59 \%$ |
| Wall | 9 | $20.45 \%$ | 1 | $4.76 \%$ | 8 | $17.02 \%$ |  |  | 1 | $33.33 \%$ | 19 | $15.08 \%$ |
| Total | $\mathbf{4 4}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{2 1}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{4 7}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 1}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{3}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 2 6}$ | $100 \%$ |

Table 5.20 - Area P, Phase 4: Potsherds state of preservation. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F.1630 |  | F.1631 |  | F.1632 |  | F.2011 |  | F.2035 |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |  |
| Kitchen Ware | 10 | $22.73 \%$ | 5 | $23.81 \%$ | 10 | $21.28 \%$ | 3 | $27.27 \%$ |  |  | 28 | $22.22 \%$ |  |
| Storage Ware | 3 | $6.82 \%$ |  |  | 5 | $10.64 \%$ | 1 | $9.09 \%$ |  |  | 9 | $7.14 \%$ |  |
| Simple Ware | 31 | $70.45 \%$ | 16 | $76.19 \%$ | 32 | $68.09 \%$ | 7 | $63.64 \%$ | 3 | $100,00 \%$ | 89 | $70.63 \%$ |  |
| Total | $\mathbf{4 4}$ | $100 \%$ | 21 | $100 \%$ | 47 | $100 \%$ | 11 | $100 \%$ | 3 | $100 \%$ | 126 | $100 \%$ |  |

Table 5.21 - Area P, Phase 4: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F.1630 |  | E.1631 |  | F.1632 |  | F.2011 |  | F.2035 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Bowl | 7 | $41.18 \%$ | 3 | $27.27 \%$ | 5 | $19.23 \%$ | 2 | $20.00 \%$ | 1 | $50.00 \%$ | 18 | $27.27 \%$ |
| Cooking Pot | 4 | $23.53 \%$ | 3 | $27.27 \%$ | 2 | $7.69 \%$ | 2 | $20.00 \%$ |  |  | 11 | $16.67 \%$ |
| Jar | 4 | $23.53 \%$ | 5 | $45.45 \%$ | 17 | $65.38 \%$ | 4 | $40.00 \%$ | 1 | $50.00 \%$ | 31 | $46.97 \%$ |
| Jug |  |  |  |  | 1 | $3.85 \%$ | 2 | $20.00 \%$ |  |  | 3 | $4.55 \%$ |
| Other | 2 | $11.76 \%$ |  |  | 1 | $3.85 \%$ |  |  |  |  | 3 | $4.55 \%$ |
| Total | 17 | $100 \%$ | 11 | $100 \%$ | 26 | $100 \%$ | $\mathbf{1 0}$ | $100 \%$ | 2 | $100 \%$ | $\mathbf{6 6}$ | $100 \%$ |

Table 5.22 - Area P, Phase 4: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  | F.1630 |  | F.1631 |  | F.1632 |  | F.2011 |  | F.2035 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Disk |  |  | 1 | $14.29 \%$ |  |  |  |  |  |  | 1 | $4.35 \%$ |
| Flat | 2 | $20.00 \%$ | 3 | $42.86 \%$ | 5 | $83.33 \%$ |  |  |  |  | 10 | $43.48 \%$ |
| Ring | 2 | $20.00 \%$ | 3 | $42.86 \%$ | 1 | $16.67 \%$ |  |  |  |  | 6 | $26.09 \%$ |
| Other | 6 | $60.00 \%$ |  |  |  |  |  |  |  |  | 6 | $26.09 \%$ |
| Total | 10 | $100 \%$ | 7 | $100 \%$ | $\mathbf{6}$ | $100 \%$ |  |  |  |  | 23 | $100 \%$ |

Table 5.23 - Area P, Phase 4: Bottoms morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified base-sherds.

| Decoration Type | F. 1630 |  | F. 1631 |  | F. 1632 |  | F. 2011 |  | F. 2035 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Incised Decoration |  |  |  |  | 1 | 2.13\% |  |  |  |  | 1 | 0.79\% |
| Painted |  |  | 1 | 4.76\% | 2 | 4.26\% |  |  |  |  | 3 | 2.38\% |
| Applied |  |  |  |  |  |  |  |  |  |  |  |  |
| Combed |  |  |  |  |  |  |  |  |  |  |  |  |
| Undecorated | 44 | 100.00\% | 20 | 95.24\% |  | 95.74\% | 11 | 100.00\% | 3 | 100.00\% | 122 | 96.83\% |
| Total | 44 | 100\% | 21 | 100\% | 47 | 100\% | 11 | 100\% | 3 | 100\% | 126 | 100\% |

Table 5.24 - Area P, Phase 4: Decoration. Distribution of decorated potsherds by stratigraphic unit.

The simple ware inventory of open shapes includes a large variety of mediumsmall and small bowls, presumably aimed at serving and consuming food, and as table ware (Fig. 21: 1-2, Fig. 5.15: 2, Fig. 5.19: 1) and a few medium-large bowls (Fig. 5.19: 2, Fig. 5.15: 4), more likely aimed at serving or mixing communal food portions. Almost all the morphological variants present an anti-splash device of some sort, thus suggesting the possibility that the content of the vessels might have been not entirely arid.

The bowls with inside folded - or 'hooked' - rim Fig. 5.15: 2, with groove below the carination, belongs to a morphology already attested in phase 3b (Fig. 5.16: 4): this sample from phase 4, however, is slightly shallower. It finds a close comparison also in the area K-3 (Fig. 4.4: 2, phase 3), and something similar derives also from area P phase 3a (Fig. 5.12: 1). External parallels may be observed with specimens considered typical MB IB-IIA in Inner Syria (Nigro 2002a: pl. 52: 70, Mardikhh IIIA2), largely attested also in the MB IB-IIA (Peyronel 2006: fig. 25: 10) and MB II layers of Tuqan (Fiorentino 2006: fig. 26: 5, area G; fig. 34: 20, area H). Similar types, or
maybe an evolution of them, may be further observed in early LBA (/MB III) contexts of the Northern Levant and Upper Euphrates. ${ }^{279}$
In addition, the thin-walled bowl Fig. 5.21: 1, characterised by an inside and outside thickened rim, attests a close similarity, at least in term of morphology, with specimens from area K-3 (Fig. 4.3: 2, phase 2). The small bowl has a peculiar yellowish fabric, different from the most common reddish-orange fabrics. Close comparisons are widespread between the late MBA and early LBA Inner Syria and Euphrates area. ${ }^{280}$
A more accentuated thickening of the rim's outer side characterises the larger bowl Fig. 5.19: 1. A possible evolution of the same type is probably to be identified in the variant attested in the area K-3 phase 3 (Fig. 4.6: 1). Parallels for the morphology may be observed in bowl types attested in plain and painted ware in the Cilician area in contexts whose dating ranges from the Karum until the Old-Hittite period -, and in early LBA contexts. ${ }^{281}$
The large, shallow bowl Fig. 5.10: 2, with inside thickened rim, belongs to a typical LBA morphology widespread between Central Anatolia, Cilicia, the Northern

279See Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 5: 16, type 1122) and Qatna T12 (MB III), type B20, considered typical MB III in the local sequence (for which see Table 1.1) (Iamoni 2012: pl. 8: 8). Similar shapes in the Euphrates area are attested in Lidar Höyük from phase $4 / 3$ until phase 5 (Kaschau 1999: pl. 192: 1, phase 4/3; pl. 118: 2 and pl. 283: 4, phase 4; pl. 157: 8, phase 5), ranging from MB IIB to MB IIIB in the local sequence, approximately dated between the $1^{s t}$ half of $17^{\text {th }}$ and the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

280A close comparison is found in Mardikh reuse of royal citadel E, attributed to LB I in the local sequence and approximately dated between 1600 and 1400 BCE (Matthiae 2011: fig. 20: 2). Similar morphologies but larger in size and with more thickened rim can be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 78: 2, type 2311), and in the Euphrates area in contexts attributed to $17^{\text {th }}$ and $16^{\text {th }}$ cent. BCE. They are attested, for example, in Lidar Höyük phase $4 / 3$, attributed to MB IIB in the local sequence and approximately dated toward the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE. (Kaschau 1999: pl. 287: 8), and phase 5c, attributed to MB IIIB and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE (Kaschau 1999: pl. 164: 6).

281See for example Tarsus, levels A.1-3 (Slane 1987: pl. 24: 93, pl. 25: 96, level A.2; pl. 44: 185, level A.2; pl. 56: 265; pl. 57: 266, level A.3) and levels A.5-6 (Slane 1987: pl. 93: 416, level A.5; pl. 96: 444; pl. 115: 502, level A.6). In the Northern Levant, related typologies are attested from Alalakh VIII (Heinz 1992: cat. A, pl. 19: 19-20), Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 66: 7, type 2212) and Mardikh contexts attributed to LB I in the local sequence and approximately dated between the $2^{\text {nd }}$ half of $16^{\text {th }}$ and beginning of $15^{\text {th }}$ cent. BCE (Colantoni 2014: pl. 1: n). For a similar shape, see also Mazzoni 2002: pl. 57: 11, from Hama, attributed to LB I.

Levant and the Euphrates area, ${ }^{282}$ but earlier variants, probably to be attributed to the early LBA (/MB III) in the Northern Levant, are also attested. ${ }^{283}$
The corrugated rim profile of the large bowl Fig. 5.19: 2, characterised by inside and outside thickened rim, is common to a widespread category of vessels that includes medium-size bowls (Fig. 5.7: 1, phase 2; Fig. 4.3: 1, area K-3) and largemouthed vessels (see below Fig. 5.18: 3). Close comparisons for the sample Fig. 5.19: 2 range from MB I Northern Levant until the first half of $16^{\text {th }}$ cent. BCE Euphrates area. ${ }^{284}$

Fragments of deep, open vessels with grooved rim (Fig. 5.18: 3), similar to specimens encountered already in building P phases 3a (Fig. 5.12: 4) and 3b (Fig. 5.14: 6, Fig. 5.13: 2-3), are attested in phase 4 as well, and are probably connected to shortterm storage and mixing activities. The sample Fig. 5.18: 3 is probably an early LBA (/MB III) variant in continuity with previous phases. ${ }^{285}$
Further large-mouthed vessels are attested with short, everted neck and folded rim (Fig. 5.19: 3, Fig. 5.20: 7, Fig. 5.18: 5 and 7).
The jar rim Fig. 5.19: 3 presents a peculiar red fabric with large and abundant mineral inclusions that differs from the majority of MBA simple ware fabrics. Some general parallels may be observed in the LBA Northern Levant. ${ }^{286}$ Also peculiar are the yellowish fabrics of the samples Fig. 5.19: 7 and Fig. 5.21: 3. Fig. 5.19: 7 is a

282See for example, from LBA Euphrates area, McClellan 2007: pl. 6: 6-8, but also Dornemann 1979: fig. 20: 17-18 (Hadidi), and Sakal 2018: fig. 10: 11 (Emar, upper town UT2, late LB I, ca. $1^{\text {st }}$ half of $14^{\text {th }}$ cent. BCE). For the Cilician area see for example Tarsus level B. 9 (Slane 1987: pl. 141: 608), attributed to LB II, hypothesised to be dated to the $14^{\text {th }}$ cent. BCE.

283Similar samples from LB I Ebla, although slightly different, with the body apparently deeper than the sample from Tilmen, are reported as deriving from the MBA local tradition (Colantoni 2010a: fig. 5: 3, and see also Matthiae 2011: fig. 20: 8). In the Euphrates area, a large inventory is reported from Lidar Höyük phase 5b (Kaschau 1999: pl. 155; pl. 227: 3; pl. 239: 10; pl. 246: 8), attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

284See for example the MB I layers of Tuqan area G (Fiorentino 2006: fig. 25: 8) and MB II layers of Tuqan area H (Fiorentino 2006: fig. 40: 7, kitchen ware). In the Euphrates area, see Lidar Höyük phase 3 (Kaschau 1999: pl. 90: 12) and phase 5b (Kaschau 1999: pl. 158: 4), and Hadidi MB IIC (Dornemann 2007: pl. 5: 7).

285Similar rim morphologies are attested in the assemblage of area K-1 (Fig. 2.3: 8), K-3 (Fig. 4.9: 1, Fig. 4.6: 2), P2 phase 2 (Fig. 6.3: 2) and in the area $P$ in phase 1 (Fig. 5.6: 2), 3a (Fig. 5.12: 4), 3b (Fig. 514: 6, Fig. 5.13: 2) and 4 (Fig. 518:3). See in particular commentary and comparisons for Fig. 2.3: 8. Close comparisons for the sample Fig. 518: 3 may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 29: 1, type 1341; pl. 30: 5, type 1343).

286See for example Qatna K12 (LB IIA), type SNJ6, considered typical LBA (Iamoni 2012: pl. 48: 7).
fragment of rim and neck of a jar with medium-high neck and markedly everted, folded-over rim engendering a thin band with pointed ends. The same morphology is attested in MBA layers of Tilmen upper town area G. ${ }^{287}$ The configuration of the mouth is remarkably similar to that of typical Southern Levant MB IIA jars typology (NL MB I), but similar typologies are also attested in late MBA contexts. ${ }^{288} \mathrm{~A}$ similar everted, banded rim is also attested in a large mouthed storage jars of area P2 phase 3 (Fig. 6.5: 2).
Two further variants of banded rim are attested in association to medium- and large-mouthed vessels. Fig. 5.20: 7 is a rim and neck fragment of a necked jar with medium-large mouth characterised by curved neck and outside thickened and elongated double rim. The morphology is close to that of Tilmen typical kitchen ware pots, but similar shapes also find comparisons in simple ware jars of Northern Levant and Inner Syria, associated either to narrow-mouthed or medium-large- and largemouthed typologies, and range from MB I until LBA. ${ }^{289}$

More rare is the morphology of Fig. 5.21: 3, characterised by a large mouth and double rim with pointed ends. The yellow fabric is also distinguished from common simple ware fabrics. ${ }^{290}$

A fragment of a jar with curved neck and simple rim with squared profile presents an inner indentation presumably functional for hosting a lid (Fig. 5.22: 2). Although they are associated to different morphologies, similar devices are also common to the inventory of phase 3a (Fig. 5.9: 7) and 3b (Fig. 5.14: 7). The general morphology of the vessel should perhaps be related to medium-size, large-mouthed vessels compa-

[^91]rable to specimens from Arqa phase M (Thalmann 2002: Fig. 7: phase M, top line, on the right side). ${ }^{291}$ Something similar, however, is found also in the LBA Euphrates area (McClellan 2007: pl. 9: 3). ${ }^{292}$

The rim of the large-mouthed vessel Fig. 5.20: 3 is likely also functional for hosting a lid. The vessel is characterised by curved, open neck and outside thickened rim with squared profile. A large depression on the upper side of the rim might correspond to a lid lodgement. Another peculiarity of the vessel is the corrugated decoration of the high section of the shoulder, and the presence of two darkish brown painted bands, one on the corrugations and one on the low section of the neck. The general morphology recalls the vessel Fig. 5.14: 7 already mentioned from phase 3b. A close similarity seems recognisable with a rim-sherd from Lidar Höyük phase 5a, in the Euprhates area (Kaschau 1999: pl. 134: 4), ${ }^{293}$ which is characterised by both a squared rim profile and lid lodgment together with painted decoration. ${ }^{294}$ Despite the different morphology of the rim, some similarity can also be established with K-3 painted vessel Fig. 4.6: 2, which might represent a form of predecessor with respect to Fig. 5.20: 3: in fact, the similarity in shape and size, as well as the presence of the painted decoration, would seem to point to an identical function and a shared cultural tradition.
Two other samples of large-mouthed vessel with short neck belong to rim and neck fragments of shapes with a curved neck and a slighlty folded rim with a rounded profile (Fig. 5.21: 4 and Fig. 5.18: 4). The morphology of Fig. 5.21: 4 is quite common, and similar specimens may be observed in the Northern Levant since MB I and MB IIA contexts. Close similarities to the sample from Tilmen, however, are also observable in contexts contemporary to early LBA (/MB III) in the Northern Levant, Cilicia and Euphares areas. ${ }^{295}$ Close similarities for the sample Fig. 5.18: 4, character-

[^92]293Attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.
294Curiously, the same association of rim with lid lodgement and painted decoration is found also in Southern Levant high-necked jars; see for example Tell Arqa phase N (Thalmann 2002: fig. 9: phase N, second row), attributed to ca. 2000-1750 BCE (MB I in the local sequence; MB I-IIA in the NL sequences). Further similarities with plain ware samples may observed in the LBA layers of Tilmen upper town area G (TH06G86-4, Archives of Turco-Italian expedition to Tilmen Höyük).

295See for example in the Northern Levant the MB I-II layers of Tuqan area A (Fiorentino 2006: fig. 30: 7); Afis area E level 15, samples attributed to MB IIA (Mazzoni 1998: fig. 25: 19) and Mardikh IIIB2 destruction
ised by thinner sides and more clear distinction between neck and sholuder, can also be observed in contexts from the Cilicia and Euphrates area contemporary to NL early LBA (/MB III) MB III. ${ }^{296}$

The open neck with banded rim Fig. 5.18: 5 continues a typology attested since the phase 3a (see Fig. 5.9: 7, phase 3a) but the specific sample from phase 4 belongs to a vessel with larger mouth, characterised by a more marked eversion of rim and neck. A close comparison for this specific typology may be observed in Tarsus level A. 5 (Slane 1987: pl. 94: 430), attributed to the Old-Hittite period. Other similarities, however, may be observed with specimens from Euphrates area. ${ }^{297}$
The rim of large-mouthed vessel Fig. 5.18: 6, with lid accomodation, in contrast is definitely unusual: however, something similar can be observed in LB II Cilicia. ${ }^{298}$

The inventory of closed shapes attests a strong continuity with the previous phases, and is characterised by the presence of high-necked jars with simple, everted rim (Fig. 5.21: 5, compare with Fig. 5.9: 6, phase 3a) and high-necked jars with everted and elongated rim (Fig. 5.20: 5-6, compare with Fig. 5.15: 2, phase 3b, and Fig. 5.9: 8, phase 3a). The morphology of the high-necked jar with simple, everted rim and rounded profile (Fig. 5.21:5) is quite common, and the parallels range from MB I to LBA assemblages. Close comparisons, however, may be observed in the Northern Levant and Euphrates area in contexts probably contemporary to late MBA and early LBA (/MB III) in the Northern Levant. ${ }^{299}$ The same morphology is widespread in

[^93]297See Lidar Höyük phase 5b (Kaschau 1999: pl. 152), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE, and phase $4 / 3$ (Kaschau 1999: pl. 298: 1), attributed to MB IIB in the local sequence and approximately dated toward the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE.

298See for example comparisons with Tarsus LB II (Goldman 1956: fig. 388: 1205).
299See Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 49: 7, 10); and Lidar Höyük phase 5 (Kaschau 1999: pl. 130: 4), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE. Additionally, more general comparisons include specimens from Hama silos 16, approximately dated to the MB IB (Nigro 2009: 324 and pl. 56: 9); Hadidi MB IIA (Dornemann 2007: pl. 2: 10, 14) and MB IIB

MB II contexts of Giazira in both painted Khabur ware and simple plain ware (McMahon, Frane 2009: pl. 50: 2; pl. 52: 15-16).

The high-necked jars with everted and elongated rim (Fig. 5.15: 5, Fig. 5.20: 6) are characterised by a squared profile of the rim. A close comparison is found in Mardikh Tombs attributed to MB IIB (Nigro 2009: pl. 49: 9 and pg. 335).. ${ }^{300}$
The high-necked jar with upper everted rim Fig. 5.18: 8 is probably a form of variant of phase $3 b$ sample Fig. 5.14: 10, whose range of comparisons spans from MB IIA to LB I. Close parallels for the sample Fig. 5.18: 8 may be observed with LBA jugs from the Northern Levant, Inner Syria and Cilicia, frequently associated to $14^{\text {th }}$ cent. BCE contexts. ${ }^{301}$

In addition, the outside thickened and elongated rim Fig. 5.19: 4 probably belongs to a high-necked jar. The yellowish fabric is to be ascribed to the minority group already mentioned. Some similarity in terms of morphology can be observed with the rim of a jar from Mardikh tombs attributed to MB I (Nigro 2009: pl. 53: 8 and pg. 327) altough some general similarity may be recognised also in later finds. ${ }^{302}$

The fragment of a straight-necked vessel with pointed rim, Fig. 5.20: 4, which is probably to be ascribed to small carinated jars or cups - known as 'shoulder' or 'carinated goblets' - is similar to typical Northern Levant late MB II and early LB I simple

[^94]and fine ware typologies found in LB I levels of Mardikh (Matthiae 2011: fig. 20: 10), Ugarit (Heinz 1992: cat. B: pl. 9: 2-3; pl. 10: 1-3) and MB II Tuqan (Fiorentino 2006: fig. 35: 18). The fine, yellowish fabric of the sample Fig. 5.20: 4 is probably to be related to the typical production attested in Mardikh referred to as the hallmark of the last MBA phase (Peyronel 2000, with further references). To the same morphological family are probably to be ascribed the samples from phase 3a such as Fig. 5.12: 5 and relatedly the samples from area K-3, Fig. 4.8: 3, and from area P2, Fig. 6.2: 1-2.

The morphology of the closed rim Fig. 5.22: 1, belonging to a carinated vessel probably to be related to another variant of small jar or goblet, is definitely unusual in the inventory of MBA Tilmen lower town. A close parallel, however, may be observed in MBA layers of the Euphrates area. ${ }^{303}$
Storage ware indicators are rare. However, a fragment of the mouth of a large vessel, probably to be related to a krater is attested (Fig. 5.20: 11), and is characterised by an outside thickened rim with squared profile, pointed downward. The typology is probably an evolution of samples already attested in the phase 3b (Fig. 5.15: 3). Close parallels for the sample from phase 4 derive mainly from LBA assemblages from the Northern Levant and nearby areas mainly attributed to the $14^{\text {th }}$ cent. BCE. ${ }^{304}$

The kitchen ware inventory of phase 4 is remarkably rich in morphological variants, an aspect that may be related to a long chronological span. Typical double rim jars, widespread in Tilmen Middle and Late Bronze Age layers with comparisons in the Northern Levant and nearby areas from MB II until LBA, are also widely represented in area P phase 4 (Fig. 5.18: 11-13, Fig. 5.20: 9). ${ }^{305}$ In addition to typical double rim jars, however, simple pots with outside thickened rim (Fig. 5.19: 5-6, Fig. 5.18: 10) are also attested, sometimes with triangular lugs extending from the rim. Attested in the area P since phase 3a, similar types are found also in phase 1 and 3 of area P2 (Fig. 6.2: 3 and 5) and in the MB IA layers of Tilmen upper town area K-5 (Bonomo 2011: fig. 2: 5-6). The morphology seems to be particularly typical of MB IA con-

[^95]texts ${ }^{306}$ - and especially at Tilmen and Mardikh - but comparisons with symilar typolgies in the Northern Levant and neraby areas can also be observed in MB II and III contexts. ${ }^{307}$ The variants attested in area P phase 4 include a hole-mouth pot with large opening and almost no neck (Fig. 5.19: 5); a thin-walled pot with oblique rim (Fig. 5.19: 6); and a short-necked pot with smaller opening (Fig. 5.18: 10). Both variants Fig. 5.19: 5 and Fig. 5.18: 10 find a close comparison in lugless specimens from layers of Hadidi attributed to MB IIB (Dornemann 2007: pl. 3: 28-30). The shorthnecked variant Fig. 5.18: 10 finds a close comparison in a specimen comprehensive of triangular lugs from MB IA layers of Mardikh Midden EE (Peyronel 2019: fig. 8: 5); in MB IA layers of Tilmen upper town area K-5 (Bonomo 2011: fig. 2: 5); in Alalakh palace kitchen (Bulu 2016: fig. 7: 19, fig. 7: 20), that predates Alalakh level VII and the late $17^{\text {th }}$ cent. BCE; and in Toprakhisar Building II, attributed to MB II (Akar, Kara 2018: fig. 15: 10). Closer comparisons for the hole-mouth variant Fig. 5.18: 10, in addition to the MB IA layers of Tilmen upper town area K-5 (Bonomo 2011: fig. 2: 6), may be observed in Tarsus level A. 1 (Slane 1987: pl. 8: 24), attributed to the Karum period; in MB I-II layers of Tuqan area A (Fiorentino 2006: fig. 30: 10); and in Lidar Höyük phase 1 (Kaschau 1999: pl. 31: 11) and 2 (Kaschau 1999: pl. 61: 5). A close parallel for the thin-walled pot Fig. 5.19: 6 may be observed in Lidar Höyük phase 4 (Kaschau 1999: pl. 109: 1), attributed to MB IIIA in the local sequence and approximately dated around the $2^{\text {nd }}$ half of $17^{\text {th }}$ cent. BCE.
Unusual in the MBA inventory of Tilmen lower town is the rolled rim of the hole mouth pot Fig. 5.21: 6, which is further characterised by a light buff-color fabric. Some general morphological similarity, however, may be observed in Alalakh VIII (Heinz 1992: cat. A: pl. 22: 38).
The large-mouthed pot Fig. 5.19: 7, characterised by medium-high curved neck and everted rim with straight profile, is prossibly a variant or an evolution of typical double-rim pots (compare for example with Fig. 5.18:12). Close comparisons may be observed in Mardikh contexs attributed to LB I in the local sequence, approximately dated to the $2^{\text {nd }}$ half of $16^{\text {th }}$ or the beginning of $15^{\text {th }}$ cent. BCE, with specimens con-

[^96]sidered conservative, and deriving from MBA traditions (Colantoni 2014: pl. 2: g, and related parallels and commentary). ${ }^{308}$ The peculiarity of the fabric with respect to the largest majority of MBA kitchen ware inventory would also support a dating in the LBA.
A further variant of cooking pot attested in phase $4-$ and continuing from phase 3 b - is represented by a rim fragment of a restricted mouthed jar with straight, everted neck and simple rim with curved profile (Fig. 5.21: 7). Similar mouth morphologies are attested in storage ware in MB IA layers of Tilmen upper town area $\mathrm{K}-5$ and, in simple ware, in MBA layers of Tilmen upper town area G. ${ }^{309}$ Possible parallels, however, may also be observed in MB II contexts of Euphrates area. ${ }^{310}$

The conical bowl with step-beaded rim Fig. 5.18:2 also belongs to the inventory of phase 4 kitchen ware. The typology is unusual, but some similarity may be remarked with the phase 3 b simple bowl Fig. 5.16: 1 . The shape, to some extent, recalls typical MBA painted pottery from Cilicia and probable late $17^{\text {th }}-16^{\text {th }}$ cent. BCE morphologies from the Euprates area. ${ }^{311}$
The inventory of kitchen ware further includes two samples of handmade 'baking' plate or 'tray' (Fig. 5.20: 8), already found in phase 3. ${ }^{312}$ The type is well attested in Early to Late Bronze Age contexts from the Southern and Northern Levant (see Zukerman 2014), but related morpholgies are known from Anatolian area as well even since the Late Chalcolitic period and continue throughout LBA. ${ }^{313}$ The same type is attested in Tilmen lower town in the area P2 phase 1 (Fig. 6.2: 4, see below), and in the upper town, in the Area G. ${ }^{314}$ Remarkably well-preserved samples have recently been uncovered in the nearby site of Zincirli, in the Complex DD mid-17 ${ }^{\text {th }}$

[^97]cent. BCE destruction layer (Morgan, Soldi 2021: fig. 21: 3-4). Further attestations include MBA layers of Hama (Fugmann 1958: fig. 120:2 C 941; 2 C 936), ,315 Mardikh tombs (Nigro 2009: pl. 36: 7; pl. 41: 7); Lidar Höyük phase 1 (Kaschau 1999: pl. 25: 1-2), phase 4 and 5 a (Kaschau 1999: pl. 126: 8, phase 4; pl. 133: 1, phase 5a), attributed respectively to MB IA and MB III in the local sequnce, and probably in MB I layers of Tuqan area E (Fiorentino 2006: fig. 43: 8). They are usually in coarse fabrics, similar or equivalent to standard kitchen ware, and are hypothesised to be intented for use with heat, mainly for baking activities.
The sample from Tilmen phase 4 Fig. 5.20: 8 is characterised by reddish fabric with medium-high frequency of mineral inclusions of large size, rough surface and thick walls. The rather limited state of preservation and the coarse manufacture impedes the identification of the rim diameter, but the samples known from Tilmen as well as from sites of comparison are usually quite large, around 40 cm . The flat, slighlty concave base is 1.6 cm thick, while the low, slighlty everted sides, 2.8 cm high, are 1.9 cm thick. The inner wall extends only 1 cm above the vessel inner floor, which means that the content would need to be appropriate to this very limited anti-splash device. A darkening on the inner side of the rim might be evidence of its use with heat. The upper side of the rim is concave: a line incised transversally is probably the remain of a decorative pattern of parallel, oblique lines, similar to that found in a sample from the already mentioned mid- $17^{\text {th }}$ cent. BCE destruction layer of Zincirli Complex DD (Morgan, Soldi 2021: fig. 21: 3). The concave upper side of the rim finds a close comparison in the same context (Morgan, Soldi 2021: fig. 21: 4).
The presence of different samples with close parallels in the $14^{\text {th }}$ cent. BCE assemblages of the Northern Levant and nearby regions suggest the possibility that the area P might have experienced a form of occupation during this advanced phase of the LBA. ${ }^{316}$ No layer of use related to this period, however, was preserved in situ. Nonetheless it is worth nothing in this respect that some of the above-mentioned ceramic types appear to be in continuity with — or an evolution from - previous periods. ${ }^{317}$

315MB1B according to Nigro 2009: table 6: 1-2; late MB IIA-early MB IIB according to Iamoni 2012: table VI: 1.

316See for example Fig. 5.18: 6 and 8, Fig. 5.20: 2 and 10-11.
317 See for example Fig. 5.20: 2, attested since $16^{\text {th }}$ cent. BCE, or Fig. 5.20: 7, with comparisons ranging from MB I until LBA.

A small group of ceramic types presents a relatively short range of comparisons centred in assemblages that are approximately attributed to the $16^{\text {th }}$ and $15^{\text {th }}$ cent. BCE, that is around the early LBA (/MB III) - LB I periods in term of NL chronology (Fig. 5.21: 1, Fig. 5.20: 4, 5.19: 7), while others present a longer range, spanning from MB II until advanced LBA (Fig. 5.22: 2, Fig. 5.19: 1).
Various types, despite presenting elements of continuity with previous assemblages, have strong connections with assemblages approximately attributed to the $16^{\text {th }}$ cent. BCE (Fig. 5.20:3, Fig. 5.18: 3 and 5, Fig. 5.21: 5), but the largest group of types from P phase 4 is comprised of morphologies that appear to be attested over a long span of time that ends in the $16^{\text {th }}$ cent. BCE, and starts from MB II (Fig. 5.20: 5-4, Fig. 5.18: 2 and 4) or MB I (Fig. 5.21: 4, Fig. 5.19: 2 and 5, Fig. 5.20: 1, Fig. 5.18: 7 and 10). Among these, the kitchen ware pots with triangular lugs Fig. 5.19: 5 and Fig. 5.18: 10, though they are attested in the early LBA (/MB III), seem to be more widespread in MB I and II.
Only a small number of types presents a range of parallels limited to periods that predate the early LBA (/MB III) (Fig. 5.19: 6, Fig. 5.21: 6-7).

The largest share of indicators with parallels in the $14^{\text {th }}$ cent. BCE assemblages is concentrated in F. 1632 (3 indicators, Fig. 5.20: 2, 7 and 11). The same fill, in addition to a large number of indicators with parallels in the $16^{\text {th }}$ cent. BCE assemblages, ${ }^{318}$ also holds the largest share of indicators with parallels in the $15^{\text {th }}$ cent. BCE assemblages. ${ }^{319}$ However, most of indicators with parallels in $14^{\text {th }}$ cent. BCE (Fig. 5.20: 2 and 7) have parallels also with $16^{\text {th }}$ and $15^{\text {th }}$ cent. BCE contexts, while the latter indicator with $15^{\text {th }}$ cent. BCE parallels (Fig. 5.20: 4) is also attested in the $16^{\text {th }}$ cent. BCE. Thus, in summary, the largest and most sound range of comparisons for the assemblage is located in the $16^{\text {th }}$ cent. BCE. However, an extension of the dating range of the fill in the $15^{\text {th }}$ cent. BCE is also possible, especially considering the conituity generally attested in the Northern Levant assemblages along this span of time. The sparse samples with a range of parallels centered in the $14^{\text {th }}$ cent. BCE might be interpreted as 'evolved' $15^{\text {th }}$ typologies anticipating later developments in the Northern Levant, or the evidence of a form of occupation of the area in that period. The inadequate degree of accuracy

318 That is 6 indicators: Fig. 5.20: 2-5 and 7, which have the same range of comparisons, and Fig. 5.20: 1.
319 That is 3 indicators: Fig. 5.20: 2, 4 and 7.
of datings of most ceramic parallels, and local change of Northern Levant ceramic productions, prevent a more accurate reading of the evidence.
However, the presence of sparse $14^{\text {th }}$ cent. BCE indicators in F. 1630 (bucket 359, Fig. 5.18: 6 and 8) might represent a support for this second hypothesis: F.1630, in fact, is characterised by the presence of many indicators with parallels centered in the $16^{\text {th }}$ cent. BCE (Fig. 5.18: 2-5, 7 and 10), most of them clearly in continuity with MB II (Fig. 5.18: 2, 4, 7 and 10) or even MB I (Fig. 5.18: 7 and 10), but clear parallels with $15^{\text {th }}$ cent. BCE contexts are missing, so that possible $14^{\text {th }}$ cent. BCE samples, rather than 'evolved' typologies found in $16^{\text {th }}$ cent. BCE contexts, might represent the sparse remains of a poorly preserved phase of occupation.
A dating range centred in the $16^{\text {th }}$ cent. BCE with possible extension into the $15^{\text {th }}$ seems likely also in the case of F. 1631, ${ }^{320}$ and, to some extent, in the case of F.2011, although in this last assemblage, comparisons with $15^{\text {th }}$ cent. BCE assemblages are fewer. ${ }^{321}$ Evidence for F. 2035 is more precarious, with the range of comparinsons spanning from MB II until the $14^{\text {th }}$ cent. BCE.

It appears to be quite significant that all the types whose range of comparison is limited to early LBA (/MB III) - LBI present a different fabric than the typical Tilmen lower town MBA pottery: their fabrics in fact are mainly yellowish, either medium (Fig. 5.21: 1) or fine (Fig. 5.20: 4). Futher differences with respect to typical MBA fabrics are recorded in relation to typologies whose range of parallels include the LBA, such as Fig. 5.19: 4, which is also yellowish, or Fig. 5.19: 3, which presents a gritty-red fabric. This suggests the possibility of a change, at least in some sections of the production, between traditional MBA and late early LBA pottery.

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### 5.4 SMALL FINDS (by Vittoria Cardini)

Excavations in the Area P brought to light 16 objects, of which 6 were fragmentary, 3 nearly complete, and 7 complete. Most of the objects from this area are ground stones and stone tools as in the other areas of the lower town of Tilmen Höyük.
The objects are divided by phases (see the details of P sequence $\llbracket 5.2 .1$ ) and typologies.

### 5.4.1 Phase 1

## Stone vessels

A deep tripod - TH.07.P. 167 - with short vertical feet made with fine-grained basalt was found in the stratigraphic unit F. 2020 in the room L. 1645.
The definition of tripod is an 'everted bowl supported by three defined feet' (Squitieri 2017: 39). This type comprises free-standing tripod bowls whose legs can start from just under the rim or under the body. Their maximum diameter is between c .10 cm and ca. 40 cm , and their height usually is between ca. 5 and 25 cm (Squitieri 2017: 72).

Concerning the chronological distribution of tripods and three-legged vessels in the Bronze Age of the Northern Levant, only a few specimens are dated to the late Early Bronze (III-IV), compared to those found in the Middle Bronze (especially from Middle Bronze II) and in the Late Bronze Age contexts, where this typological group is predominant (Merluzzi 2007: 334-336). Later, this type is documented up to the Iron Age. At Tell Mardikh, the medium-depth tripods and medium-to-high tronco-conical legs are diffusely attested from the beginning of the $2^{\text {nd }}$ millennium (Merluzzi 2007: 334-336). In the southern Levant, the tripod bowl appears at the beginning of the $2^{\text {nd }}$ millennium: vessels and mortars with three legs or feet appear at sites in the southern Levant in the Middle Bronze and are common throughout the Iron Age (Ebeling, Rowan 2004: 108-117).

Concerning the use of tripod bowls, use-wear and residues examined on some of the excavated examples indicate that they were used in food processing (Ebeling, Rowan 2004: 108-117). Often were found them in association with pestles, suggesting they were used to crush, grind, or pound solid substances, especially food. This use is also suggested by the use of basalt as the preferred raw material, a hard stone that would have suited these activities. They were evidently a common tool for everyday domestic activities (Squitieri 2017: 73). From the published evidence (Ebeling, Row-
an 2004: 108-117), it appears that vesicular basalt remained the preferred material for certain ground stone implements from the Middle Bronze II through later periods. Moreover this is demonstrated by the presence of certain types of basalt grinding implements at sites some distance from basalt sources (Ebeling, Rowan 2004: 113).

## Perforated tools

A perforated tool with a donut-shape - TH.07.P.56 - made with medium-grained basalt is probably a counterweight with through-hole. The internal diameter of tool is 4 cm .
The typology of these objects more frequently encountered is the medium-sized circular type with a central hole. Perforated stones are circular tools roughly cut with a circular perforation in the centre. Their diameters range between 10 and 15 cm . The perforations have a diameter of about 3-4 cm (Merluzzi 2007: 338-340; Squitieri 2019: 217). The function of these tools is not well understood. Similar perforated stones were common in the Near Eastern stone tool assemblage from prehistoric times. Various theories for their use have been offered: weights for hammers, lathe fly-wheels, postsockets, net-weights, or weights for digging sticks which were mounted on ploughs to help loosen the soil (Squitieri 2017: 156-157; Squitieri 2019: 217).

## Indeterminate tools

A small tool of spherical shape made with fine-grained basalt - TH.07.P. 46 probably a bullet or weight, was found in the stratigraphic unit F. 2004.

### 5.4.2 Phase 3

## Grinders

In the stratigraphic unit F. 2006 one grinder was found - TH.07.P. 141 - that can be assigned to the morphological typology of the stone objects of plane-convex section. It is made with coarse-grained basalt.
This type of object is the upper and mobile stone in a pair of grinding tools for broad use surfaces. They are named by number of faces, plane shape, and transverse section shape defined by the degree of convexity (Wright 1992: 53-81).
Comparisons are found at sites from contexts dating to the MB II and LB I such as Tell Afis (Mazzoni 1998: 34-37), Tell Tuqan (Ascalone 2008: 100-106; Dobran, Vacca 2011: 111-118) and Tell Mardikh (Merluzzi 2000: 1065; Merluzzi 2007: 338).

## Pestles

In the stratigraphic units F. 2005 and F. 2013 two pestles were found that present the morphological type of truncated-conical shape - TH.07.P.58, TH.07.P.164. The raw material in only fine-grained basalt. TH.07.P. 164 shows signs of use-wear and also a dual function, presenting the use-wear signs of a polisher as well as pestle.
Pestles are connected to pounding actions usually in association with mortars, but they are not always found together during an excavation (Squitieri 2019: 217).
Concerning Northern Levant sites, comparison contexts are found dating to MB II and LB I of Tell Mardikh (Meruzzi 2000: 1066-1067), Tell Afis (Mazzoni 1998: 3437), Tell Tuqan (Ascalone 2008: 100-106), Ras Shamra (Elliott 1991: 9-99) and Tell Atchana/Alalakh (Yener 2010: 101-102).

## Perforated tools

One object with a donut-shape - TH.07.P. 139 - is made with medium-grained basalt; it could be a counterweight with through-hole. The internal diameter of the tool is 5.4 cm .

## Handstones

A rectilinear bifacial tool - TH.07.P. 57 - has a flat use surface, made with unidentified fine-grained stone. It presents use-wear signs as a mortar and these signs suggest that this object was used both as a base for a pestle and as a mortar or had a secondary use or reuse.

## Indeterminate tools

In this phase were found two unidentified objects: TH.07.P. 163 and TH.07.P.251. The former is a small sphere made with medium-grained basalt, probably a bullet or weight while the second is an hourglass-shape object made with coarse-grained basalt, the hollow top perhaps used like a mortar.

### 5.4.3 Phase 4

The larger part of stone tools of the later phase and upper levels of P part of area are made of unidentified stones, not in basalt.

## Grinders

In the stratigraphic unit F. 1632 one grinder was found - TH.07.P. 45 - that can be assembled in the morphological typology of plane-convex section. It is made with medium-grained basalt.

## Pestles

In the later deposits two pestles were found that present a variable morphological typology: rounded and flattened - TH.07.P. 36 - or nearly cylindrical and elongated - TH.07.P.44. The raw materials are unidentified fine-grained stones.

## Stone tools

An hammer head - TH.07.P. 247 — is made with fine-grained unidentified stone. It shows a groove for handle and signs of use-wear, probably for a secondary use as a polishing pebble.

From Tell Mardikh and Tell Afis (Merluzzi 2003: 29-61), the majority of percussion tools are large ovoid objects with one tapering end, sometimes blunt and smooth, and with a groove running around all or part of the body. There are also specimens that are smaller with rounded ends and a wide central groove. Artefacts of different sizes with a groove have been found in other Near Eastern sites, but rarely is the archaeological context well documented. These artefacts represent what remains of implements originally provided with a handle fixed in a groove.
Comparisons are found from Tell Munbāqa (Czichon,Werner 1998: pl. 149), Zincirli (Andrae 1943: pl. 2), Alaça Höyük (Koşay 1966: pl. 36), Boğazköy (Boehmer 1972: pl. 96); Byblos (Dunand 1954: 262), Hazor (Yadin 1989: pl. 294) and Nuzi (Starr 1937: pl. 124A).

## Stone vessels

A flat base of stone vessel - TH.07.P. 6 - made with a soft stone, probably steatite, was found in a secondary context. It presents a decoration of carved bands on the outer wall, composed by chiselled small holes. The holes seem to be arranged in an irregular way and some are deeper than others: therefore it has been hypothesized that it could represent a reuse or a reworking of the vessel.

In any case, in the Bronze Age Levant the soft stone and steatite vessels usually appear carved with a punch or a chisel (Squitieri 2017: 118; Bevan 2018: 62-69). Few
sites around the Levant present any steatite stone vessels for the Middle and Late Bronze Age: usually this raw material was used for seals and scarabs because it was a soft material, suitable for working.

## Horse bits

A modern iron horse bit - TH.06.P. 138 - was found in secondary context, with an undefined chronology. In any case, the transition of materials from bronze to iron mouthpieces took place in the eighth century BCE (Curtis 2013: 93).

The horse bits consist of two levers: this object is the right lever of a fragmentary bit. One side, the upper part of the bit, presents a permanent ring. The other side of the object presents a loose ring used for reins. In the upper half of the lever there is the canon in a fragmentary state: this is the part that was inserted inside the horse's mouth. In the lower half of the lever there is a small hole that could perhaps serve as an element to further connect this lever with its twin, to allow one to have more control of the horse.

### 5.4.4 Catalogue of small finds

TH.06.P.138, Horse Bit (Pl. CXXII: 1) Dimensions: h. 4 cm ; d. 6.9 cm
Material: iron
Dimensions: 1.16 .3 cm
SU: F. 1625
SU: F. 1632
Bucket: TH.07.P. 300
Preservation: complete
Bucket: -
Preservation: fragmentary

TH.07.P.6, Stone Vessel (Pl. CXXII:
3a-3b)
Material: stone
Dimensions: h. $3.7+\mathrm{cm}$; d. 6.5 cm
SU: F. 1632
Bucket: TH.07.P. 300
Preservation: fragmentary

TH.07.P.36, Pestle (Pl. CXXII: 2)
Material: stone
TH.07.P.44, Pestle (Pl. CXXII: 4)
Material: stone
Dimensions: h. 15.5 cm; d. 5.6 cm
SU: W. 1609
Bucket: -
Preservation: complete

TH.07.P.45, Grinder (Pl. CXXII: 5)
Material: basalt
Dimensions: l. $19.8+\mathrm{cm}$; w. 9.7 cm; th.
5.7 cm

SU: F. 1632

Bucket: TH.07.P. 300
Preservation: fragmentary

TH.07.P.46, Indeterminate (Pl. CXXIII: 5)
Material: basalt
Dimensions: d. 3.2 cm
SU: F. 2004
Bucket: TH.07.P. 304
Preservation: complete

TH.07.P.56, Perforated Tool (Pl.
CXXIII: 2)
Material: basalt
Dimensions: d. 15.8 cm ; th. 5.7 cm
SU: F. 2002
Bucket: TH.07.P. 303
Preservation: complete

TH.07.P.57, Handstone (Pl. CXXII: 6)
Material: stone
Dimensions: h. 9.6 cm ; l. 4.8 cm ; w.
2.65 cm

SU: F. 2005
Bucket: TH.07.P. 305
Preservation: nearly complete

TH.07.P.58, Pestle (Pl. CXXII: 7)
Material: basalt
Dimensions: h. $2.7+$ cm; d. 4.7 cm
SU: F. 2005
Bucket: TH.07.P. 305
Preservation: fragmentary

TH.07.P.139, Perforated Tool (Pl. CXXIII: 4)
Material: basalt
Dimensions: d. 12 cm ; th. 8.2 cm
SU: F. 2006
Bucket: TH.07.P. 306
Preservation: nearly complete

TH.07.P.141, Grinder (Pl. CXXIII: 3)
Material: basalt
Dimensions: $1.7+\mathrm{cm}$; w. 10.7 cm ; th.
6 cm
SU: F. 2006
Bucket: TH.07.P. 306
Preservation: fragmentary

TH.07.P.163, Indeterminate (Pl. CXXIII: 6)
Material: basalt
Dimensions: d. 4.4 cm
SU: F. 2013
Bucket: TH.07.P. 324
Preservation: complete

TH.07.P.164, Pestle (Pl. CXXIII: 1)
Material: basalt
Dimensions: h. 4.3 cm ; d. 5.8 cm
SU: F. 2013
Bucket: TH.07.P. 324
Preservation: complete

TH.07.P.167, Stone Vessel (Pl. CXXIV: 1a-1b)
Material: basalt

Dimensions: h. 12.5 cm ; d. 26 cm
SU: F. 2020
Bucket: -
Preservation: fragmentary

TH.07.P.247, Hammer (Pl. CXXIV: 2)
Material: stone
Dimensions: 1.14 .2 cm ; w. 10.9 cm ; th.
6.4 cm

SU: F. 1632
Bucket: TH.07.P. 330
Preservation: complete

### 5.5 SYNTHESIS

### 5.5.1 Materials and chronology

The ceramic inventory from the foundation fills, corresponding to building P phase 1, is very small. Only a very limited number of potsherds derive from the preserved phases of use of the building, summarised in building $P$ phase 2 , while the largest amount of materials derive from the first layers of accumulation and collapse, corresponding to building P phase 3 , and from later deposits, corresponding to building P phase 4.

Despite the overall limited number of diagnostic samples recovered, considering the entire sequence of the building, the ceramic inventory associated to the building P foundation layers seems likely to be related to a late phase of the MB I or beginning of IIA. The materials, obviously, have been recovered in a secondary context of deposition but they attest that the area, or its vicinity, at that time was already settled.
The building P phase 2 corresponds to the phases of use of the structure, whose floors are preserved in situ. From the stratigraphic point of view, the phase 2 includes the oldest beaten-earth floor (phase 2a), the small deposits above it (phase 2b) and a second and more recent floor (phase 2c). Unfortunately, almost no materials derive from the oldest loci, and also those related to the later ones are very scanty. However, based on stratigraphy, the phase 2 seems surely to be related to the MB II, and probably to MB IIA or early MB IIB periods.

The ceramic lots associated to the phase 3a, which derive from earth deposits immediately above the floors of the building, might be closely related to the last phase of use preserved in situ and documented by the floors of phase 2 . The ranges of ceramic parallels are in most cases quite large, ranging in some cases from MB I until LBA. Nevertheless, a dating of the most recent set of materials to the MB IIB seems likely. The presence of residual MB IIA samples in the assemblage, however, cannot be excluded, and this leaves some space for doubts concerning the date of the poorly documented phase 2. In fact, if the samples with main comparisons in NL MB IIA are considered as belonging MB IIA, the dating of phase 2 is likely to be attributed to MB IIA. If those samples, instead, are considered MB IIB specimens - in continuity with MB IIA - then the phase 2 might be also attributed with more certainty to the MB IIB period. However, it must be stressed that the whole sequence of occupation of the building is not necessarily reflected in the ceramic sequence. At the same time, the ceramic assemblage may not be representative of all the periods of occupations and all the range of activities performed in the building. Even in case of primary contexts of depositions, we would still be dealing mainly with a sample of a last phase of use of a defined context. In case of secondary contexts - as it is the case with most of the building P materials - the interpretation is even more complex. In the case of building P , two layers of walking floors are documented at least in the southern part of the corridor L.2017, which implies at least two phases of occupation of the building. The first deposits (phase 3a) above them might be related to the last use of the second layer of floors (phase 2c). The most probable dating range is located in the MB IIB period but, considering the whole sequence, and considering the probable date of the assemblage of the foundation layers (phase 1), it may be hypothesised that the building was already in use in the MB IIA, and that to that period probably belonged at least the arrangement of the first beaten-earth floors (phase 2a). We have no possibility to tell if the second layer of floors was already built in the MB IIA or the MB IIB since we do not have enough direct evidence but, at least, on the basis of phase 3a ceramic inventory, we can state that a consistent phase of occupation - probably making use of the second layer of walking floors - must have dated to the MB IIB.
Relating the phase 3 b , connected with stone and soil deposits above the earth deposits of phase 3a, the largest part of the assemblage is well rooted in the MB IIB Northern Levant ceramic horizon. The presence of typologies that find substantial comparisons in Northern Levant early LBA (/MB III), however, suggests that the
building, or some part of it, was probably still in use toward the $16^{\text {th }}$ cent. BCE. Any evidence, however, derives from collapse layers, while no floor was preserved in situ. This hypothesis seems to be confirmed by the assemblage deriving from the more superficial contexts of phase 4 , where the number of indicators more closely related to $16^{\text {th }}$ cent. BCE assemblages is even higher. On the basis of internal stratigraphy and the range of internal and external ceramic parallels of phase 4 assemblage, in fact, the most substantial, last phases of occupation of the building are approximately dated to the $16^{\text {th }}$ cent. BCE. An extension of this phase of occupation in the $15^{\text {th }}$ cent. BCE is possible, but scarcely documented.
The sparse samples with a range of parallels centred in the $14^{\text {th }}$ cent. BCE might instead be related to a form of occupation of the area in that period. Evidence of this period is mainly concetrated in the corridor L.2017, and in the room L.1646.

On the basis of stratigraphy and ceramic analysis, therefore, the superficial deposits of phase 4 probably include the remains of the last substantial phase of use of the building, whose walking floor was not preserved, and possibly the traces of a subsequent light form of occupation of the ruins.

Concerning function, the presence of kitchen and storage ware clusters would seem to be connected to the performance of low-intensity practices of cooking and storage. No remarkable difference can be seen in the composition of the assemblage from the different phases: the most notable distinction may be observed in the distribution of functional classes in phase 2, which registers a higher incidence of kitchen ware, but the value of statistics is deeply affected by the meagreness of the sample. The general group of simple ware accounts for between $57 \%$ and $71 \%$ of all phase inventories; kitchen ware, overlooking the peak in phase 2 , accounts for between $13 \%$ and $22 \%$ of phase inventories, and storage ware, overlooking its absence in phase 2 , varied between $7 \%$ and $26 \%$.

In many cases, general parallels for morphologies and specific components of Tilmen vessels may be easily traced in the assemblages from MB II early LBA (/MB III) assemblages of the Northern Levant and nearby areas. Perfect matchings, however, are not extremely frequent, thus suggesting at least some degree of localisation in the ceramic production of the period at Tilmen Höyük. This impression, however, might change with the potential increase of discoveries and publications, as for example the recent preliminary publication of MBA assemblage of the nearby site of Zincirli seems to suggest.

In addition to the area of inner Syria, which seems to be considered the closest one in term of similarity in ceramic production, the range of comparisons with the Euphrates area also seems to be remarkably large. This clearly suggests a form of cultural proximity and exchanges between the two regions. Apparent stronger connections between the Islahiye valley and the middle Euphrates area than with the Cilician milieu, however, may derive from the different state of research and the differences in the strengths of published material related to this period.
The wide chronological range of parallels for many of the pottery indicators is evidently connected to the state of the art, and it is not always clear to what extent this state of the art reflects the realities of the past. This being said, the wide chronological range of parallels attests to a strong continuity, at least in term of morphology, between the ceramic production of the late phases of the MBA and the beginning of the LBA, and especially between $17^{\text {th }}$ and $16^{\text {th }}$ cent. BCE productions.

### 5.5.2 Architecture, layout and stratigraphy

Building process and use (P phases 1-2)
The fortress P layout and building technique denote a rather accurate architectural planning, making use of regular modules and schemes. Rooms and walls are disposed on orthogonal trajectories. The walls are built in double-shell stonework without mortar: larger stones with dressed outer face are used for the external scaffolds, while smaller, undressed stones and rubble are used for core filling. Remarkably well-dressed stones, with flattened sides and sharp angles, are employed in the wall's corners and in the doorway pillars, protruding from the walls. As confirmed by the recovery of deteriorated fired mudbricks in the room L.1646, the upper portions of the masonry were most likely built in mudbricks. The perimetral walls ranged between 2.5 and 3 m in width: the northern wall W. 1639 and the northern section of the western wall W.1611, which shape the outer edge of building P and of the lower town fortification wall, are the most massive. With the exception of the wall W.1613, 3 m thick, the inner wall width is around 1.80 m .
The walls are markedly massive with respect to the inner spaces, the area devoted to voids quite less than that occupied by full bodies. In fact, the width of the elongated rooms L.1645, L. 1646 and L. 2017 is even less than the thinnest walls.

Judging by the building technique and massive walls, the presence of an upper storey is likely, but it is also possible that they only supported a roof used as a wall-walk. The marked width of the inner wall W. 1613 would match a function of support - although its marked width does not appear fully justified at present - while access to the upper level would have been granted by a double ramp staircase starting from the room L.1646.
The doorways are shaped as short corridors, their length mainly corresponding to the wall's width. Well-dressed stone pillars embedded in the walls, either jutting from their long sides - like the pillars of the access L.1635, the southern pillar of the access L. 1637 or the eastern pillars of the passages L. 1636 and L. 1629 - or corresponding to their short facades - like the northern pillar of the passage L. 1637 and the western pillars of the passages L. 1636 and L. 1629 - frame the long sides of the gateways. The gateway walking floors are always one step above the level of the room's floor, so that one step was to be climbed in order to enter the passage, and one step was to be descended in order to access the rooms. The doorsteps on either side of the doorway are made of one or two large, regularised and flattened stones, sometimes sharp-angled, that surely provided a good resistance to frequent and intense use. The space between the doorsteps is filled with smaller, irregularly shaped stones and in all likelihood was covered by a thin beaten-earth floor. According to the evidence gathered from the excavation in the room L.1645, the doorways were planned and built almost together with the walls, while later on the stone foundation fillings were laid. When the pillars jut from the wall's facades, niches are crafted at the doorway sides that frame the passages and create a bottleneck effect. The niches might have been used as seats for door-sockets, as attested in the south-western corner of the passage L.1637, but the doors might be also directly installed on the door-steps, as documented in the passage L. 1644, south of the building.

The floors of the rooms are in large part beaten-earth, although the use, at least sparse, of flattened, basaltic stones in the rooms paving is also attested, as recorded in the north-eastern chamber L.1641. The floors, vestiges of which were observed in the southern parts of the northern chamber L.1641, and in the north-south corridor L.2017, were scarcely preserved and, in some cases, severely damaged by the later collapse of the stones of the walls; to the north, on the slope, they had probably in large part been washed away.

In the access sector, in the gateway L. 1629 and in the southern part of the corridor L.2017, two distinct architectural phases have been recorded: to the oldest phase
(phase 2a) belongs the beaten-earth floor L.2014; to the earlier phase (phase 2c) belongs the stone step L. 2017 in the entryway L.1629, and the landing made by the beaten-earth floor L. 2019 plus the stone step L.2015, which obliterated the access L.2031. No other evidence of architectural phasing was uncovered such that, presumably, the other sectors the building remained in use without substantial modifications during both architectural phases.
The floors were set above stone foundation fillings that, leaning against the walls, were made of medium to medium-large stones of irregular shape and were probably intended to regularise the ground - like in the case of gradients, as on the northern slope - and strengthen it. Stone foundation fillings of this sort (phase 1a) were exposed in the rooms L. 1640 (F.1643), L. 1641 (F.2004), L. 1645 (F.2020), L. 1646 (F.2029) and in part of the corridor L. 2017 (F.2026). In some cases, like in the southern sector of the corridor L. 2017 (F.2025) and in the northern room L. 1641 (F.2002), a further, thinner deposit of soil and smaller stones (phases 1 b ) has been found above the lower stone foundation.
Almost no vestiges of the phase of use of the structure were preserved in situ. With the exception for a small lot of materials recovered on the raised floor L. 2019 (bucket 328), all the archaeological findings derived from the deposits, mainly collapse deposits, that filled the rooms of the building.

Considering the small width of the room - around 1.20 m - and its role in connecting rooms and building sectors, the function of the north-south corridor L. 2017 was presumably mainly limited to transit.
The two parallel, narrow rooms L. 1645 and L. 1646 may have hosted a double staircase; the first ramp is housed in the chamber L. 1646 and a second one located above the chamber L.1635. Here, in addition to the structural role of stair cage, a further functional purpose is in fact attested by the presence of a doorway (L.1635) and of walking floor remains. However, the existence of a single ramp staircase in the room L. 1646 leading to the roof or an upper floor, is also possible.

Relative to the other beaten-earth paved chambers, the remains of a stone paved floor in the room L. 1641 suggest the possibility of a functional differentiation of the chamber that, necessitating a more resistant flooring, may have been connected to a more intense use - more frequent, by a higher number of people, and or more invasive - or to open-air contexts. Additionally, the possibility may be considered that stone paving or partial stone paving may have been generally reserved for larger
rooms; since nothing is known about the flooring type of the parallel room L.1640, the room L. 1641 is also the largest chamber of the fortress where traces of paving were preserved.
In addition to the different set of activities that may have been hosted in the building chambers, the setting, namely protecting the north-western edge of the lower town fortification wall, and the massiveness of the stonework suggest the building likely played a role in the military scheme of defending the city. To the south-east, a single gateway gave access to the building from the inner, lower city: to the north and west, the massive perimetral walls embodied the lower town fortification wall outer line. The military advantage conferred by elevation was certainly exploited. No further military advantage was gained by the protrusion of the fortress with respect to the lower town fortification wall, but its angular location guarding made the building pivotal in the defence system, as it would enable action towards both the north and the west.

## Abandonment and depositional processes (P phases 3-4)

Considering the uneven character of the deposits above the chamber floors, the end of the fortress phase of use is difficult to interpret. The presence of mainly earthen accumulation layers of fine soil - summarised in phase 3 a - in some of the building chambers, as in L. 1646 (F.2001) and L. 1641 (F.2006), may support the hypothesis of a period of abandonment before the collapse of the structure. The presence of evident traces of a fire event brought to light in the room L.1645, however, suggests the hypothesis of a violent destruction by fire.
In fact, the presence of degraded fired mudbricks in the narrow room L. 1645 (F.2013), together with fragments of vitrified basalts - widespread among the deposits of degraded fired mudbricks in F. 2013 and the stone collapse in F. 2012 and ashes, some of which are concentrated on the north-western edge of the access L.1635, testify to a severe fire event. Spots of reddish and grey soil deposits, like those registered on the floor of the room L.1641, might be faint traces of the same event, but evidence outside of the room L. 1645 appears considerably sparse. The scarce preservation of original deposits in the northern rooms of the fortress, however, does not allow for a totally comprehensive evaluation. A destruction by fire toward the end of MBA period like that observed in the room L. 1645 might be part of the violent destruction that affected most of the city by that time: the concentration of the fire in a single room remains somewhat peculiar but, if that chamber hosted the upper land-
ing of a wood staircase, as suggested above, it may have been particularly receptive to possible fire. In any case, on the basis of the ceramic sequence, it can be said that the fire event probably does not seal the final abandonment of the entire structure.

The upper deposits, made of large stones and darkish, compacted soil, attest to the final collapse of the stone walls. The distinctions between different collapse deposits may reflect in part the long period of abandonment and a gradual process of collapse of the structures. However, according to the pottery sequence, which registers a slight fluctuation in the range of internal and external parallels between phases 3a, 3 b and 4, the heavy collapses of stones might have obliterated a potential additional phase of use. It is also possible that the extensive distribution of collapsed stones and the absence of mudbrick remains may have been connected to a long period of exposure and surface run-off processes.

### 5.6 ADJOINING CASEMATES TO THE SOUTH

Between fortresses P and P2, remains of an intermediate casemate block belonging to the western sector of the lower town fortification wall are preserved above the surface. From north to south, considering the fortress P as the first block, these adjoining casemates south correspond to the $2^{\text {nd }}$ structural block of the western section of the wall. A reconstruction of the layout was first proposed by the Turkish team (Duru 1987: fig. 1). Further information was gathered by a topographic survey undertaken during the excavation of fortresses P and P2 in the 2000s and by a test trench opened in the access sector of the northern building in 2006 (Fig. 5.1; Pls. I-II, VI: 2, XL: 1, LXVI: 2, LXVII-LVIII).
The block, rectangular in shape, north-south-oriented, is set on the high slopes of the lower terrace. While the eastern sector was rather clearly detectable above the surface, only a few elements of the western sector, set lower on the slope, were recognisable above surface in 2000s (Pl. VI: 2).
Tongue walls connecting the fortresses P and P 2 shape the casemate perimeter, its northern encircling wall corresponding to fortress P southern wall W.1610, and its southern perimetral wall corresponding to fortress P2 northern wall W.1606. The structure is consequently not self-contained, but obtained by closing the space between buildings presumably already in place.

On the north-south axis, the block is 16 m long. On the east-west axis it is probably around 8 m , but since the surface remains of the western wall were substantially deteriorated its extension is more doubtful. ${ }^{322}$
The block is delimited to the north by the fortress P wall W. 1610 southern façade; by the fortress P2 wall W. 1606 northern façade to the south; and by the north-south walls W. 1605 and W. 2016 to the east and west, respectively. The wall W.1605, $16.15 \times 1.70 \mathrm{~m}$ on the main axis, presented five stone rows visible above the modern surface. The western wall W.2016, which should correspond to the outer line of the lower town fortification wall, was largely missing. Possible vestiges of the wall's scaffolds are likely to be identified in a double line of stones, around 3 m in length and 1.3 to 1.5 m in width, located ca. 8 m west of the eastern perimetral wall (Pl. XXXIX: 2). The concentration of stones along this trajectory south of the alignment would support this hypothesis. The situation is more confused to the north: sparse stones were located along the western scaffold trajectory, but nothing remained of the eventual core of the wall. A further line of stones leaning against the wall W. 1610 southern façade, however, could correspond to the encircling wall's eastern or western scaffold. If this wall section corresponds to the eastern (internal) scaffold, the casemate block should be slightly outward-protruding with respect to P and P 2 western facades; if it corresponds to the western (external) one, the casemate block should be, at least in this part of the building, slightly retracted (see below).
The block is composed of two main sectors: a northern sector - L. 1647 - which hosted a single, squared room, and a southern, larger sector of rectangular shape.

The southern block is delimited by walls W. 1607 to the north, by W. 1605 to the east, and by W. 1606 to the south. The encircling wall west, instead, is largely vanished. The inner chamber is ca. 9.40 m long on the north-south axis and probably around 5.40 m large on east-west axis. To the east, a lessening concentration of stones along the wall W. 1605 located ca. 4.70 m south of the intersection with wall W. 1607 might have corresponded with the access of the chamber ( $\mathrm{Pl} . \mathrm{XL}: 1$ ). The inner disposition of the casemate was not detectable, but two east-west rows of big stones, each 2 m thick, suggest the possibility of a subdivision into three elongated rooms, east-west oriented (Pl. VI: 2).

[^99]The northern sector L. 1647 - approximately $5.30 \times 5.40 \mathrm{~m}$ on the main axis - is delimited to the north by the P fortress wall W.1610, by wall W. 1605 to the east, and by wall W. 1607 to the south. The western encircling wall is severely deteriorated. An alignment of large stones -2.71 m long (between +456.84 and +456.94 msl ) was preserved above the surface south of P wall W.1610. The alignment is ca. 85 cm retracted from the fortress P western façade: since it seems almost aligned with the eastern side of a segment of wall found nearby to the south, it might constitute the remains of the eastern scaffold of the same structure, covered by stones collapsed toward the room's inner side. Alternatively, the segment might also be part of the western scaffold of the encircling wall west that, in this point, would then be retracted with respect to W.1611.
The southern wall W.1607, east-west oriented, around 1.70 m large, was detectable above surface over a length of ca. 5 m . To the east, it is linked to the north-south wall W.1605. The northern portion of the wall W. 1605 was partially cleared in 2006. Two architectural phases were clearly revealed: and older phase, probably contemporary to P and P 2 , and a later raising. In the older phase, exposed to a length of ca. 2.20 m , the wall is around 1.65 m large, built, as well as P and P 2 , in double shell stonework technique. In the later phase, when it probably represented a late phase of occupation, the wall was thinner, around 1 m large, made of two lines of mediumsmall stones of irregular shape.
Access to the room L. 1647 is from the north-east through the gateway L.1644, which was partially cleared out in 2006. Like the other gateways of the fortress P , L. 1644 is shaped as a short passage cut throughout the wall W. 1605 , to the length of the wall depth, that is $\mathrm{ca} .1 .50 / 1.60 \mathrm{~m}$, and ca .90 cm large. To the north, it is framed by a pillar leaning against the wall of fortress P W.1610. The pillar is built of scaffolds in regular size stones with well-dressed outer faces and sharp angles and a central row of smaller, more irregularly shaped stones. This row, $0.85 \times 1.56 \mathrm{~m}$ on the main axis, was preserved for 4 to 5 stone rows above surface (Fig. 5.3). The southern pillar, corresponding to the wall W. 1606 northern face, was shaped the same way, preserved for 4 stone rows above surface. A monolithic doorstep was located on each side of the access, the space in-between filled with small, irregular stones and soil ( +457.66 msl ). The eastern doorstep stone, entirely brought to light, is remarkably well dressed, with flat and regular faces and sharp angles. A circular depression on its southern side - ca. 10 cm in diameter - attests to its use as a door-socket: the access to the room L. 1647
was thus equipped with a single door aligned to the wall outer façade that opened counter-clockwise toward the inner side of the chamber (Pls. LXVI: 2, LXVII). Like in fortress P , the gateway walking floor was probably around $20-25 \mathrm{~cm}$ above the level of the floor outside of the room, so that a step had to be climbed and descended in order to cross the passage.

As already ascertained in the fortress $P$, in the adjoining casemate south as well, the gateways and walls appear to be organically planned: the stone doorsteps of the passage L. 1644 in fact correspond precisely to one of the stone rows of the wall W.1605, of which they appear to be an integrated part.
Above the gateway floor, a deposit of large stones, probably collapsed from the wall W. 1605 and from nearby structures, and superficial, darkish soil, named F.2014, filled the passage.

East of L. 1644 and south of L.1629, a small area -2 m on the north-south axis by 1.50 m on the east-west axis - was additionally excavated in order to clear out the fortress P and the casemate south access system (Pl. LXVI: 2). Clear evidence of the outer walking floor has not been uncovered in front of the two accesses, but the compacted deposit of brown soil free of collapsed stones F.2022, cleared out at the base of the L. 1629 and L. 1644 outer doorsteps, might presumably correspond to it. Above F.2022, the deposit of large stones and darkish, compacted soil F. 1648 filled the area.
From the architectural point of view, the adjoining casemate South is built as an attachment to the adjacent fortresses P and P 2 , shaped through tongue walls securing the area between the adjoining buildings. At present, it is not possible to determine the span of time occurred between the building of the outer fortresses and that of the annex casemates, but it might have been rather short. Specifically, the architectural continuity between the access to the adjoining casemate L. 1644 and the access to the fortress P L.1629, which are located on the same level and present the same building process, denote that the two buildings, if not exactly built at the same moment, shared at least a phase of use. Surely the military value of building P and P2 would have been ineffective if the surrounding perimeter were unsecured. A long and progressive building process, however, may not be excluded.

### 5.6.1 Small Finds (by Vittoria Cardini)

Excavations in the adjoining casemates south brought to light one fragmentary object.

## Pestles

Just one pestle was found, which present a prismatic morphological typology: TH.07.P.165. The raw material is an unidentified fine-grained stone. This pestle shows signs of use-wear and probably a dual function: TH.07.P. 165 presents usewear signs as a mortar and these signs suggest that this object was used both as a pestle and as a mortar or had a secondary use or reuse.

Catalogue of small finds
TH.07.P.165, Pestle (Pl. CXXIV: 4)
Material: stone
Dimensions: h. $11.1+\mathrm{cm}$; w. 4.8 cm ; th. 3.5 cm
SU: F. 2022
Bucket: TH.07.P. 354
Preservation: fragmentary

### 5.7 ADJOINING CASEMATES TO THE EAST

The adjoining casemate block east of the fortress P corresponds to the last casemate block of the lower town fortification wall's northern sector, of which it represented the westernmost element. Following the rows of casemate blocks of the northern sector, it constitutes the $9^{\text {th }}$ block of the series (see chapter 6). Unfortunately, the wall section between the $8^{\text {th }}$ and the $9^{\text {th }}$ casemate block was completely deteriorated, so the connection between the two sectors remained unclear (Fig. 5.1; Pls. I-II; V: 2, VI: 1, LXI-LXII, LXIV-LXVI).
The layout of the adjoining casemate east of the fortress P was not entirely detectable above the surface. The area was first surveyed by the Turkish team in the context of lower town fortification system investigations, but it was not excavated. According to first reliefs, a single, elongated block occupied the area. The northern, outer line of the wall, since it is marked in full colour, was apparently detectable above surface
and presented a straight layout, NW-SE oriented. The inner space was hypothesised as divided into five rooms (Duru 1987: fig. 1).

Traces of the presence of casemate structures adjoining the eastern side of fortress P were clearly visible on the field in 2000s, but their poor state of preservation did not allow for a sound evaluation of the building plan. With the exception of a few architectural elements, in fact, surface evidence was limited to few stone alignments and clusters of displaced stones (Fig. 5.1; Pls. V: 2, VI: 1).
Although the precise outline was not readable in some spots because of collapsed and displaced stones, the location of the northern, outer line of the fortification wall could be distinctly identified. The northern face of the wall is based at around +456.14 msl on the slope. The wall retains the same orientation as the fortress P northern façade, but is slightly retracted. It proceeds on an east-west/north-west trajectory for ca. 26 m : here, a north-south wall intersects the northern wall and marks the casemate eastern perimeter. The outer line of the south inner wall is located around 5.60 m to the south. The width of the northern wall is probably between 1.21 and 1.45 m ; that of the southern wall is probably around 1.33 m .
The distribution of inner blocks is not clear, but three main rooms may be distinguished.

A north-south large, tongue wall - ca. $5.47 \times 1.30 \mathrm{~m}$ on the main axis - is probably located ca. 80 cm east of fortress P wall W. 1609 and constitutes the western limit of a first, large room. A second tongue wall - ca. $5.60 \times 1.74 \mathrm{~m}$ on the main axis - is probably located ca. 10.20 m east of wall W. 1609 , and divides the first, large room from a second, smaller one to the east. A further, third room to the east is probably a self-contained sector, delimited on each side by a proper wall. Its western wall, in fact, probably leans against the eastern wall of the adjoining room.
The first room, rectangular in shape, east-west oriented, was ca. $8.20 \times 3 \mathrm{~m}$ on the main axis. An opening located around the middle of the southern wall gives admission to the chamber, granting access to the casemate from the inner city. The passage, located around 6 m east of the fortress wall W.1609, was clearly recognisable above the surface (Pl. LXIV: 2, LXV). Ca. 70 cm large, it is delimited by typical piers built in well-dressed stones with flattened faces and sharp angles, preserved on two stone rows above the modern surface to the east and on two stone rows above the surface to the west. The chamber's inner layout was not detectable, but extensive clusters of collapsed stones indicate the area may have been subdivided into more chambers.

The second, intermediate room, also rectangular in shape, east-west oriented, is ca. $4.70 \times 2.40 \mathrm{~m}$ on the main axis, with no detectable access; the third room, ca. $2.80 \times 2.90$ m on the main axis, probably corresponds to the small, self-contained room typology attested in the northern sector of the terrace wall ( $(\mathbb{\$} 7.4)$.
A troublesome point remains the relation and the architectural connection between the casemate sector and the fortress P . While the southern wall of the casemate sector abuts the fortress wall W.1609, forming with it a right angle and securing any space between the buildings, apparently there is a space of 80 cm dividing the eastern wall of the fortress $P$ from the western wall of the adjoining casemate (Pl. LXII: 1). 1.40 m north of the southern wall of the casemate, a second, short section of wall was revealed after the cleaning of a trench, 1.30 m large, along the eastern façade of P wall W.1609. The short wall, $0.84 \times 1.29 \mathrm{~m}$ on the main axis, secures any passage between the two buildings but creates a small, blind room - ca. $0.84 \times 1.42 \mathrm{~m}$ - to its south, and leaves a 'niche' to the north, along the outer line of the lower town fortification.
The connection between the buildings of the lower town fortification wall is frequently obtained throughout the construction of walls between two main building units, thus shaping new rooms and chambers, or by simply placing two self-contained architectural units side by side, thus redoubling the tongue walls. The configuration of the connection between the fortress P and the adjoining casemate east therefore seems definitely unusual. In the absence of stratigraphic investigations conducted in this sector, it is not possible to define a precise building sequence, but probably the two architectural units belonged to different architectural phases, not organically planned. The connection between the fortress P and the adjoining casemate to the east might represent a secondary arrangement finalised to join two independent architectural blocks, or it may be the remainder of an earlier building phase - to which the construction of the adjoining casemate to the east belongs - partially obliterated by the construction of the fortress.


Fig. 5.1. Plan of area P.


Fig. 5.2. Plan of building P.


Fig. 5.3. Section A-A' of building P.

## TILMEN HÖYÜK <br> BUILDING P，2ロロ6－2ロロ7 SECTIUN B



Fig．5．4．Section B－B＇of building P．


Fig．5．5．Section C－C＇of building P．

| N. | Year | Area | Locus Type | Locus N. | Bucket N. |  | Class | D | T |  | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2002 | 303 | 2 | Simple <br> Ware | 28 | W | M | M | H | $5 \mathrm{YR}$ | $5 \mathrm{YR}$ | $5 \mathrm{YR}$ |
| 2 | 2007 | P | F | 2002 | 303 | 1 | Simple Ware | 18 | W | M | S | L | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 2 \\ \hline \end{gathered}$ |
| 3 | 2007 | P | F | 2002 | 303 | 4 | Simple Ware | 18 | W | M | M | L |  |  | $\begin{gathered} \text { 7.5YR } \\ 7 / 4 \end{gathered}$ |
| 4 | 2007 | P | F | 2002 | 303 | 3 | Simple Ware | 33 | W | M | M | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 2 \end{gathered}$ |
| 5 | 2007 | P | F | 2002 | 303 | 5 | Simple <br> Ware |  | W |  |  |  |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 1 \\ \hline \end{gathered}$ |

Fig. 5.6

| N |  | Area | Locus Type | Locus N. | Bucket N . | P.N. | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | L | 2019 | 328 | 2 | Kitchen Ware | 39 | W | M | M | M | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |

Fig. 5.7


Fig. 5.6. Area P, phase 1. Pottery assemblage of F.2002.


Fig. 5.7. Area P, phase 2. Pottery assemblage of L.2019.

| N. | Year | Area | Locus Type | $\begin{aligned} & \text { Locus } \\ & \mathrm{N} . \end{aligned}$ | Bucket N. |  | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour <br> (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2013 | 324 | 2 | Simple <br> Ware | 37 | W | M | L | L | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} \text { 2.5YR } \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 2 | 2007 | P | F | 2013 | 324 | 1 | Simple Ware |  | W | M | L | M |  |  | $5 \mathrm{YR}$ |

Fig. 5.8

| N. | Year | Area | $\begin{aligned} & \text { Locus } \\ & \text { Type } \end{aligned}$ | Locus <br> N. | Bucket N. |  | Class | D | T |  | Size |  | Colour (out) | Colour <br> (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2001 | 302 | 1 | Simple Ware | 21 | W | M |  |  |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ |
| 2 | 2007 | P | F | 2001 | 302 | 2 | Simple <br> Ware | 21 | W | M | S | L | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} \hline \text { 5R } \\ 6 / 1 \\ \hline \end{gathered}$ |
| 3 | 2007 | P | F | 2001 | 302 | 3 | Simple Ware | 16 | W |  |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 2 \end{gathered}$ |
| 4 | 2007 | P | F | 2001 | 302 | 4 | Simple Ware | 19 | W | M | S | L |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ |
| 5 | 2007 | P | F | 2001 | 331 | 1 | Simple <br> Ware | 19,4 | W | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ |  |  |
| 6 | 2007 | P | F | 2001 | 319 | 1 | Simple <br> Ware | 11 | W | M |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 7 | 2007 | P | F | 2001 | 331 | 2 | Simple <br> Ware | 12 | W | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ |  |  |
| 8 | 2007 | P | F | 2001 | 331 | 3 | Simple <br> Ware | 10,6 | W | M |  |  | $\begin{gathered} \text { 10YR } \\ 6 / 6 \end{gathered}$ |  |  |
| 9 | 2007 | P | F | 2001 | 319 | 2 | Simple Ware |  | W | M | S | L |  |  | $\begin{gathered} 10 \mathrm{YR} \\ 7 / 3 \end{gathered}$ |
| 10 | 2007 | P | F | 2001 | 331 | 4 | Kitchen Ware | 23 | W | M |  |  | $\begin{gathered} \hline 10 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |  |

Fig. 5.9

| N. | Year | Area | Locus Type | Locus N. | Bucket N. |  | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2003 | 329 | 2 | Simple Ware | 29 | W | M | M | L | $\begin{gathered} 2.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ |
| 2 | 2007 | P | F | 2003 | 329 | 1 | Simple <br> Ware | 18 | W | M | M | M- |  |  | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ |
| 3 | 2007 | P | F | 2003 | 329 | 3 | Simple <br> Ware | 9 | W | M | S | L | 5YR 5/2 | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ |  |

Fig. 5.10


Fig. 5.8. Area P, phase 3a. Pottery assemblage of F.2013.




Fig. 5.9. Area P, phase 3a. Pottery assemblage of F.2001.


Fig. 5.10. Area P, phase 3a. Pottery assemblage of F.2003.


Fig. 5.11

| N. | Year | Area | $\begin{aligned} & \text { Locus } \\ & \text { Type } \end{aligned}$ | Locus N. | Bucket N. |  | Class | D | T |  | Size |  | Colour (out) | Colour <br> (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2006 | 306 | 3 | Simple <br> Ware | 20 | W | M | S | L |  |  | $\begin{gathered} 10 \mathrm{YR} \\ 5 / 2 \end{gathered}$ |
| 2 | 2007 | P | F | 2006 | 306 | 2 | Simple <br> Ware | 25 | W | M | S | L |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 4 / 4 \end{gathered}$ |
| 3 | 2007 | P | F | 2006 | 306 | 1 | Simple <br> Ware | 34 | W |  |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 4 | 2007 | P | F | 2006 | 306 | 4 | Simple <br> Ware | 22 | W | M | S | L |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 8 \end{gathered}$ |
| 5 | 2007 | P | F | 2006 | 306 | 5 | Simple <br> Ware | 11,6 | W | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 8 / 4 \end{gathered}$ |  |
| 6 | 2007 | P | F | 2006 | 306 | 6 | Storage Ware | 28 | W | M | M | M- |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |

Fig. 5.12


Fig. 5.11. Area P, phase 3a. Pottery assemblage of F.2005.


Fig. 5.12. Area P, phase 3a. Pottery assemblage of F.2006.

| N. |  | rea | Locus Type | Locus N. | Bucket N. | P.N. | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2007 | 308 | 2 | Simple <br> Ware | 23 | W |  |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |  |
| 2 | 2007 | P | F | 2007 | 308 | 3 | Simple <br> Ware | 37 | W | M | M | M | 10YR 6/1 | $\begin{gathered} 10 \mathrm{YR} \\ 6 / 3 \end{gathered}$ |  |
| 3 | 2007 | P | F | 2007 | 308 | 1 | Simple <br> Ware | 51 | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 4 | 2007 | P | F | 2007 | 308 | 4 | Simple <br> Ware | 57 | W | M | M | M- |  |  | $\begin{gathered} 10 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |
| 5 | 2007 | P | F | 2007 | 308 | 5 | Simple <br> Ware | 47 | W | M | M | M- |  |  |  |

Fig. 5.13


Fig. 5.13. Area P, phase 3b. Pottery assemblage of F.2007.

|  |  |  | Locus <br> Type | Locus N. | Bucket N. | P.N. | Class | D | T |  | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | P | F | 2012 | 317 | 2 | Simple <br> Ware | 20 | W |  | M | M |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 8 \end{gathered}$ |
|  | 2007 | P | F | 2012 | 326 | 1 | Simple <br> Ware | 20 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |  |
| 3 | 2007 | P | F | 2012 | 326 | 4 | Simple <br> Ware | 16 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |  |
|  | 2007 | P | F | 2012 | 317 | 4 | Simple <br> Ware | 31 | W | M | S | L |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ |
| 5 | 2007 | P | F | 2012 | 317 | 1 | Simple <br> Ware | 17 | W | M | S | L | 10YR 6/4 | $10 Y \mathrm{Y}$ 6/ | OYR 5/1 |
| 6 | 2007 | P | F | 2012 | 326 | 2 | Simple <br> Ware | 21 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ |  |  |
| 7 | 2007 | P | F | 2012 | 326 | 3 | Simple <br> Ware | 20,5 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |  |
|  | 2007 | P | F | 2012 | 326 | 5 | Simple <br> Ware | 18,6 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |  |
| 9 | 2007 | P | F | 2012 | 326 | 6 | Kitchen Ware | 28 | W | M |  |  | $\begin{gathered} \text { 7.5YR } \\ 5 / 4 \end{gathered}$ |  |  |
|  | 2007 | P | F | 2012 | 317 | 3 | Simple <br> Ware | 11 | W |  | S | L | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 3 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 3 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
|  | 2007 | P | F | 2012 | 326 | 7 | Storage Ware | 25 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |  |

Fig. 5.14


Fig. 5.14. Area P, phase 3b. Pottery assemblage of F. 2012.

| N. | Year | Area | Locus <br> Type | $\begin{aligned} & \text { Locus } \\ & \text { N. } \end{aligned}$ | Bucket N. | P.N. | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 1633 | 363 | 1 | Simple | 14 | W | M | S | L |  |  | 5YR |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7/6 |
| 2 | 2007 | P | F | 1633 | 300 | 2 | Simple <br> Ware | 14 | W | M | S | M- |  |  | $2.5 \mathrm{YR}$ |
| 3 | 2007 | P | F | 1633 | 300 | 4 | Simple Ware |  | W | M | M | M |  |  | $\begin{gathered} \text { 2.5YR } \\ 6 / 4 \end{gathered}$ |
| 4 | 2007 | P | F | 1633 | 300 | 3 | Simple <br> Ware | 44 | W | M | M | M+ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} \hline 5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 5 | 2007 | P | F | 1633 | 300 | 5 | Kitchen Ware | 38 | H | M | M | M |  |  | $\begin{gathered} \hline \text { 5R } \\ 6 / 4 \\ \hline \end{gathered}$ |

Fig. 5.15

| N. | Year | Area | Locus Type | Locus <br> N . | Bucket N. |  | Class |  |  | Fab. |  |  | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2033 | 325 | 1 | Simple <br> Ware | 20 | W | M | L | L |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 2 | 2007 | P | F | 2033 | 312 | 1 | Simple <br> Ware | 16 | W | M | L | M | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 3 | 2007 | P | F | 2033 | 325 | 3 | Simple <br> Ware | 20 | W | M | S | L |  |  | $\begin{gathered} \text { 2.5YR } \\ 6 / 6 \end{gathered}$ |
| 4 | 2007 | P | F | 2033 | 325 | 2 | Simple <br> Ware | 13 | W |  |  |  | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 5 / 1 \\ \hline \end{gathered}$ |
| 5 | 2007 | P | F | 2033 | 325 | 4 | Simple <br> Ware | 21 | W | M | S | L |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ |
| 6 | 2007 | P | F | 2033 | 325 | 5 | Simple <br> Ware | 22 | W | M | M | M | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |  |
| 7 | 2007 | P | F | 2033 | 312 | 2 | Simple <br> Ware | 27 | W |  |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} \hline \text { YR } \\ 5 / 2 \\ \hline \end{gathered}$ |
| 8 | 2007 | P | F | 2033 | 312 | 3 | Kitchen Ware | 19 | W | M | S | M + |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |
| 9 | 2007 | P | F | 2033 | 325 | 6 | Kitchen Ware | 20 | W | M | L | M + | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |

Fig. 5.16


-     -         - 

Fig. 5.15. Area P, phase 3b. Pottery assemblage of F.1633.


Fig. 5.16. Area P, phase 3b. Pottery assemblage of F.2033.

| N. Year Area Locus | Locus <br> Type <br> N. | Bucket | N. | P. | Class | D | T | Fab. | Size | Freq. | Colour <br> (out) | Colour <br> (in) | Colour <br> (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 2007 | P | F | 2036 | 307 | 4 | Simple <br> Ware | 25 | W |  |  |  |  |
| $\mathbf{2}$ | 2007 | P | F | 2036 | 307 | 3 | Simple <br> Ware | 19 | W | M | L | L |  |
| $\mathbf{3}$ | 2007 | P | F | 2036 | 307 | 1 | Storage <br> ware | 28 | W | M | S | L |  |
| $\mathbf{4}$ | 2007 | P | F | 2036 | 307 | 2 | Kitchen <br> ware | 30 | W | M | M | L |  |

Fig. 5.17


Fig. 5.17. Area P, phase 3b. Pottery assemblage of F. 2036.

| N. |  |  | Locus Type | Locus N. | Bucket N. | P.N. | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1630 | 364 | 5 | Simple <br> Ware | 14 | HW | M | M | M | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $2.5 \mathrm{YR}$ $4 / 2$ |
| 2 | 2006 | P | F | 1630 | 315 | 1 | Simple <br> Ware | 22 | W | M | S | M |  |  | $2.5 \mathrm{YR}$ <br> 4/1 |
| 3 | 2006 | P | F | 1630 | 364 | 1 | Simple <br> Ware | 41 | W | M | S | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | 7.5YR <br> 6/4 |
| 4 | 2006 | P | F | 1630 | 364 | 2 | Simple <br> Ware | 22 | W | M | S | M |  |  |  |
| 5 | 2006 | P | F | 1630 | 359 | 4 | Simple <br> Ware | 24 | W | M | M | M |  |  | 2.5YR <br> 6/6 |
| 6 | 2006 | P | F | 1630 | 359 | 2 | Simple <br> Ware | 20 | W | M | S | M |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 7 | 2006 | P | F | 1630 | 359 | 5 | Simple <br> Ware | 12,6 | W | M | M | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ |
| 8 | 2006 | P | F | 1630 | 359 | 3 | Simple <br> Ware | 10 | W | M | M | M | $\begin{gathered} \text { 5YR } \\ 6 / 8 \end{gathered}$ | $\begin{gathered} \text { 5YR } \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ |
| 9 | 2006 | P | F | 1630 | 364 | 3 | Simple <br> Ware |  | W | M | S | L | $\begin{gathered} \text { 7.5YR } \\ 5 / 1 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ | $\begin{gathered} \text { 7.5YR } \\ 5 / 1 \end{gathered}$ |
|  | 2006 | P | F | 1630 | 364 | 4 | Kitchen Ware | 20 | W | M | M | M | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 11 | 2006 | P | F | 1630 | 359 | 6 | Kitchen Ware | 18 | W | M | S | M | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 4 / 2 \end{gathered}$ |
|  | 2006 | P | F | 1630 | 359 | 7 | Kitchen Ware | $23,6$ | W | M | M | M + | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 4 / 2 \end{gathered}$ |
| 13 | 2006 | P | F | 1630 | 315 | 2 | Kitchen Ware | 24 | W | M | S | L |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 4 / 3 \end{gathered}$ |

Fig. 5.18


Fig. 5.18. Area P, phase 4. Pottery assemblage of F.1630.

| N. | Year | Area | Locus <br> Type | Locus N. | Bucke N. |  |  | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1631 | 362 | 1 | Simple Ware | 24 |  | M | S | L | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 2 | 2006 | P | F | 1631 | 362 | 2 | Simple <br> Ware | 40 | W |  | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 3 | 2006 | P | F | 1631 | 361 | 2 | Simple Ware | 20 | W | M | M | M + | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |
| 4 | 2006 | P | F | 1631 | 361 | 1 | Simple <br> Ware | 11 | W | M | M | M |  |  | $\begin{gathered} \text { 7.5YR } \\ 7 / 4 \\ \hline \end{gathered}$ |
| 5 | 2006 | P | F | 1631 | 362 | 4 | Kitchen Ware |  | W | M | M | M + | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 3 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 3 \end{gathered}$ |
| 6 | 2006 | P | F | 1631 | 362 | 3 | Kitchen Ware | 27 | W | M | M | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 3 \end{gathered}$ |
| 7 | 2006 | P | F | 1631 | 361 | 3 | Kitchen Ware | 33 | W | M | S | M + | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |

Fig. 5.19


Fig. 5.19. Area P, phase 4. Pottery assemblage of F.1631.

| N. | Year | Area | Locus Type | Locus <br> N . | Bucket N. |  | Class | D | T | Fab. | Size |  | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 1632 | 300 | 2 | Simple <br> Ware | 21 | W | M | S | L | 10YR 6/4 | 10YR 6/4 | $\begin{gathered} 10 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 2 | 2007 | P | F | 1632 | 300 | 3 | Simple Ware | 28 | W | M | S | L | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 5 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 5 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 3 | 2007 | P | F | 1632 | 300 | 4 | Simple <br> Ware | 23 | W | M | S | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 3 \end{gathered}$ |
| 4 | 2007 | P | F | 1632 | 300 | 1 | Simple Ware | 12 | W |  | M | M |  |  | $\begin{gathered} 10 \mathrm{YR} \\ 8 / 3 \end{gathered}$ |
| 5 | 2007 | P | F | 1632 | 300 | 5 | Simple Ware | 14 | W | M | S | L | $\begin{gathered} 5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} \hline 5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 6 | 2007 | P | F | 1632 | 330 | 1 | Simple Ware | 13 | W | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ |  |  |
| 7 | 2007 | P | F | 1632 | 300 | 6 | Simple <br> Ware | 17 | W | M | S | L |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 8 | 2007 | P | F | 1632 | 300 | 7 | Kitchen Ware |  | W | M | L | M + |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ |
| 9 | 2007 | P | F | 1632 | 300 | 9 | Kitchen Ware | 24 | W | M | L | M + | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 4 \\ \hline \end{gathered}$ |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 3 / 1 \\ \hline \end{gathered}$ |
| 10 | 2007 | P | F | 1632 | 300 | 8 | Kitchen Ware | 40 | W | M | M | M | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 5 / 4 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 3 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 3 / 1 \end{gathered}$ |
|  | 2007 | P | F | 1632 | 300 | 10 | Storage Ware | 49 | W | M | L | M + |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |

Fig. 5.20


Fig. 5.20. Area P, phase 4. Pottery assemblage of F.1632.

| N. | Year | Area | Locus Type | Locus N. | Bucket N. |  | Class | D | T | Fab. | Size | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2011 | 316 | 2 | Simple <br> Ware | 13 | W | M | S | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 2 | 2007 | P | F | 2011 | 316 | 1 | Simple <br> Ware | 17,3 | W | M | M | M |  |  | $\begin{gathered} \hline \text { 10R } \\ 5 / 6 \end{gathered}$ |
| 3 | 2007 | P | F | 2011 | 316 | 5 | Simple <br> Ware | 30 |  | M | L | M + | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |  |
| 4 | 2007 | P | F | 2011 | 316 | 4 | Simple <br> Ware | 25 | W | M | M | M- | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 5 | 2007 | P | F | 2011 | 316 | 3 | Simple <br> Ware | 13 | W | M | S | M |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 6 | 2007 | P | F | 2011 | 316 | 6 | Kitchen Ware | 29 | W | M | L | M + |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ |
| 7 | 2007 | P | F | 2011 | 316 | 7 | Kitchen Ware | 22 | W | M | L | M + | $\begin{gathered} 2.5 \mathrm{YR} \\ 4 / 4 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 4 / 4 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 3 / 1 \end{gathered}$ |

Fig. 5.21

| N. | Year | Area | $\begin{aligned} & \text { Locus } \\ & \text { Type } \end{aligned}$ | $\begin{gathered} \text { Locus } \\ \mathrm{N} . \end{gathered}$ | Bucket N. |  | Class | D | T | Fab. | Size | Freq. | $\begin{array}{r} \text { Colour } \\ \text { (out) } \end{array}$ | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2007 | P | F | 2035 | 310 | 1 | Simple <br> Ware | 11 | W | M | S | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ |
| 2 | 2007 | P | F | 2035 | 310 | 2 | Simple <br> Ware | 19 | W | M | M | M | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ |  |

Fig. 5.22

Area P


Fig. 5.21. Area P, phase 4. Pottery assemblage of F.2011.



- = -

Fig. 5.22. Area P, phase 4. Pottery assemblage of F.2035.

## Chapter 6

## AREA P2

The area of the fortress P2, on the western sector of the lower town fortification wall, was first surveyed by the Turkish expedition in the contexts of investigations in the lower town fortification system. In the Turkish records (Duru 1987: fig. 1), what is now known as fortress P2 belonged to the second casemate block of the western sector of the lower town fortification wall. Apparently, the outer line of the fortification wall was clearly detectable in this area, and presented a straight outline, northsouth oriented.
The excavation undertaken by the Turco-Italian team in 2006 (Marchetti 2008a: 391-392; Marchetti 2008c: 469; Marchetti 2009: 389-390; Marchetti 2010: 372) revealed that P 2 constituted a single, independent block, probably the third of the lower town fortification wall's western sector (Pl. I).

### 6.1 THE SETTING

The fortress P 2 is located on the fringe of the lower terrace western border, facing the western side of the Islahiye valley and the Amanus chain beyond. The structure is located south of the main fortress P , to which it is connected by the north-south wall W. 1605 and by an intermediate casemate block - the adjoining casemate south ( $\$ 5.6$ ), now largely disrupted (Fig. 5.1; Pl. LXVIII: 2). The building, rectangular in shape, almost north-south oriented (N-NE-S-SW) is set at the edge of the lower terrace flat area, the ground gradually sloping down toward the west (Pls. LXIX-LXX). The eastern walls, facing the inner side of the lower city, are set around +458 msl ; the western walls, facing the outer area, are founded ca. 1.5 m below, on the slope,
around +456.5 msl . The western, enclosure wall was largely deteriorated in 2006 but the preservation above surface of what would seem to correspond to the north-western corner of the building allowed us to reconstruct the probable perimeter of the structure. The western, outer line of the fortification wall is probably almost aligned or slightly retracted with respect to the western, outer façade of the casemate block to the north. The layout of the western wall of the casemate block to the south, in contrast, was unclear (Pls. I, VI: 2).

### 6.2 ARCHITECTURE AND STRATIGRAPHY

As well as in the fortress P , the walls and the inner spaces of the building are substantially north-south and east-west oriented. ${ }^{323}$ All the masonries are built in basaltic, dry stonework. The walls present the typical configuration in double shell stonework with small stones and earth core fillings. Medium-large and large stones with single flattened face are employed for the wall scaffolds, while well-dressed stones with flattened facades and sharp angles are employed in the gateway piers.

The fortress has a rectangular plan of 12 m on the north-south trajectory by 10 m on the east-west trajectory. The eastern portion - for ca 7 m width — was relatively well preserved, but all the western portion was lost, probably as a consequence of surface run-off and washing-away processes (Figs. 5.1, 6.1; Pls. I-II, VI: 2, LXIXLXXXIII).

### 6.2.1 The sequence

The P2 building process conforms to that of fortress P , encompassing the integrated panning and erection of stonework elements - walls, gateways and gateway piers jutting from the walls; the laying down, within the rooms, of stone foundation deposits and, above them, of earthen foundation deposits; and, lastly, the laying down of beaten-earth or paved floors. Concerning the phase of life of the structure, a single architectural phase has been isolated, although the recovery of a possible door-socket in a secondary functional context suggests the possibility that the area hosted a previous, different building.

The deposits above the floors were not particularly extensive, but two different fillings, a first made of soil and small stones, and second later one made of larger stones and compacted, darkish soil, have been recognised in some of the building sectors.
After the building collapse and abandonment, sparce evidence attests to the occupation, in later times, of the area to the east of the building, and the use of its eastern walls as a basis for new structures.
The sequence of the area may be consequently schematized into five main phases and four sub-phases, summarised as follows:

| Phase 5: Late reuse | b: Accumulations above the walls |
| :--- | :--- |
| a: Late walls |  |

Phase 4: Later deposit
Phase 3: Earlier deposits

## Phase 2: Walking floors

$$
\begin{array}{lll}
\text { Phase 1: } & \text { Foundation deposits } & \begin{array}{l}
\text { b: Earth foundation deposits } \\
\text { a: Large stone foundation deposits }
\end{array}
\end{array}
$$

6.2.2 Phases 1-2: the building construction and the phase of use

Building P2, room L. 1627 - Distribution of loci and fills by phase

| Area |  | Unit | Phase | Location |
| :---: | :---: | :---: | :---: | :--- |
| P2 | F. | 1600 | 3-4 | L.1627 |
| P2 | L. | 1627 | 2 | L. 1627 |
| P2 | F. | 1622 | 2 | L. 1627 |
| P2 | F. | 1626 | 1b | L. 1627 |
| P2 | F. | 2037 | 1a | L. 1627 |

Building P2, staircase rooms L.1624-L. 1623 — Distribution of loci and fills by phase

| Area |  | Unit | Phase |
| :---: | :--- | :---: | :--- | | Location |
| :--- |
| P2 | F. 1614 L.1623, L.1617, L.1620, L. 1618

Building P2, access sector - Distribution of loci and fills by phase

| Area | Unit | Phase | Location |
| :---: | :--- | :---: | :--- |
| P2 | F. 1614 | 4 | L.1623, L.1617, L.1620, L. 1618 |
| P2 | F. 1616 | 3 | L.1617, L.1620, L.1618 |
| P2 | L. $1617,1620,1618$ | 2 | L.1617, L.1620, L. 1618 |

The building is composed of two main architectural sectors, almost equal in size: two narrow rooms perpendicular to the directrix of the fortification wall, probably a double ramp staircase, occupy the northern sector, while a larger chamber occupies the southern sector. The wall W. 1606 delimits the structure to the north; the wall W. 1602 to the south and the walls W. 2030 and W. 1603 to the east. The wall W.1606, east-west oriented, 1.5 m large, was clearly preserved for 6.50 m of length: the western portion was largely disrupted but some of the stones of the western corner were still detectable above surface, thus allowing us to reconstruct the approximate perimeter of the building. Remarkably large stones are employed in the masonry. Of the northern façade, a single stone row was preserved above the modern surface (Pl. LXXI: 2), but three stone rows were brought to light of the southern façade (Pl. LXXVIII: 2) (top between +458.9 and +458.97 msl ; bottom between +456.5 and +458 msl ).
The wall W.1602, delimiting the building to the south, east-west oriented, is 1.5 m large, as well as the northern wall W.1606. It was preserved for a length of ca. 4.90 m to the east, while the western portion was lost. From two to three stone rows above the surface were exposed (between +458.09 and +458.98 msl ) (Pl. LXXIX: 2, LXXXI: 2). The enclosure wall east is divided into two sections by the building access: the wall W. 2030 to the north and the wall W. 1603 to the south. The wall W.2030, exposed for a single stone row above the modern surface (bottom between +458 and +458.5 msl ; top between +458.9 and $+458.98 \mathrm{msl})$, is 1.55 m wide by 3.6 m of length. Remarkably large stones, some of them more than 1 m per side, are employed in the outer scaffolds (Pls. LXX: 2, LXXI: 1). The wall W.1603, exposed for three to four stone rows above the surface (between +459 and +458 msl ) is 1.6 m wide and 7.2 m long (Pls. LXXIX, LXXXI: 1).
The access to the building, L.1617, is from the east, toward the inner side of the lower city. The passage is ca. 90 cm wide and 1.5 m long. A monolithic stone ( Pl . LXXII: 2), ca. 40 cm high, shapes the largest part of the outer threshold, while the rest of the passage is paved with medium and large stones, coarsely flattened upper side (+458.39 msl) (Pl. LXXIV: 2). The southern edge of the wall W. 2030 and the
northern edge of the wall W.1603, both built with well-dressed face stones, delimit the passage to the north and south respectively. Two niches frame the inner side of the passage, thus producing the typical bottleneck gateway layout. The niches, produced by the joint between the walls W. 2030 an W. 1615 to the north and by the joint of walls W. 1603 and the eastern piers of the passage L. 1618 to the south, are 0.25 cm deep on the northern side and 0.30 cm deep on the southern side of the passage. At the basis of the northern niche, a 10 cm diameter door socket is dug into a stone of the pavement. A single door opening in counter-clockwise direction, toward the inner side of the building, was then located north of the passage: a peculiar recess in the wall W. $1615-1.25 \mathrm{~m}$ long by 33 cm wide - is probably shaped to host the door when opened (Pls. LXXIII, LXXIV: 2).
The gateway opens onto a small, stone paved entrance, L. 1620 (Pl. LXXIV: 2), almost squared in shape, $1.5 \times 1.45 \mathrm{~m}$ on the main axis ( +458.51 msl ), that connects it to the passage L. 1618 to the south and to the narrow room L. 1624 to the west (Pls. LXXV: 1, LXXVI: 2). A large, coarsely flattened stone occupies the centre of the entrance paving; two regularised, rectangular stones, one with the carved door-socket, pave the northern edge, cut as a recess on the wall W.1615, while smaller and irregular stones fill the remaining space.
The narrow room L. $1624,1.20 \mathrm{~m}$ wide, was preserved for a length of ca. 3.95 m on the east-west trajectory, but it originally should have been around 5 m long. The room hosted in all likelihood the first ramp of a double ramp staircase, comparable, under many respects, to that of fortress P (L.1646, L.1645). A large, coarsely refined stone, ca. 40 cm high (top at +358.51 msl ), located on the middle of the room entrance, together with two other smaller and irregular stones filling the gaps between the large stone and the walls delimiting the room to the north and the south, might have been part of the first step of the staircase, or the stone basis of a wood staircase structure (Pls. LXXIII, LXXIV: 1). The appearance of the step, in fact, would be definitely coarser if compared to the regularly shaped steps of the stone staircase attested in area K-3. The western part of the room was not preserved, but the eastern part was further filled with a layer of medium and large packed stones (top at +358.58 msl ), relatively regular in appearance, that might have been functional to the staircase structure (Pl. LXXVI: 1).
The staircase room L. 1624 is delimited by wall W. 1615 to the north and by wall W. 1601 to the south. The wall W.1615, east-west oriented, 1.35 m large, was pre-
served for a length of ca. 4.8 m but it was probably around 6.75 m originally. A $1.25 \times 0.33 \mathrm{~m}$ rectangular recess, probably functional to host the opened door (see above), is shaped on the eastern side of the southern façade, thus reducing the thickness of that part of the wall to 1 m width. The wall delimits the second staircase room L. 1623 to the south, but the small thickness of the masonry is definitely unusual for an intermediate wall between two staircase rooms that generally, in the casemates of the northern sector of the lower town fortification wall, are between 1.8 and 1.9 m in width. ${ }^{324}$

The second staircase room L.1623, parallel to the room L.1624, is 1 m large and was preserved for 4.40 m of length, but it was probably around 6.75 m long originally (Pls. LXXVII-LXXVIII). The western portion, in fact, was not preserved. The room, which in all likelihood hosted the second ramp of the staircase, is delimited by the enclosure wall North W. 1606 to the north; by the enclosure wall East W. 2030 to the east, and by the wall W. 1615 to the south. The room appears blind at the floor level, and thus it was presumably limited to the function of staircase cage. The stone foundation deposit F.2038, made of medium and medium-small stones of irregular shape, fills the room (top between +458.07 and +458.30 msl ). A large, well-dressed stone, ca. $97 \times 65 \mathrm{~cm}$ on the main axis, with a central, rounded hollow of 30 cm of diameter, is located on the NE edge of the room, partially covered by the stones of the walls W. 1606 and W.2030, and by the stone foundation filling F. 2038 (Pl. LXXVII: 2). It is not clear if the hollowed stone is to be interpreted as a large, grinding stone or a large door-socket. A comparable large, grinding stone is found in the MB layers of Oylum Höyük (Özgen, Helwig 2003: 68). As a door socket, it might have hosted a remarkably large hinge, even bigger than those - ca. 25 cm large - of the main city gate K-1. In both cases, the partial covering by the stones of the walls and the location in a room to all appearances blind would indicate that the stone is set in a secondary context. However, its secondary function in this context appears somewhat partial: it is only partially employed in the wall's masonry, and its usefulness as filler or support is limited by the retention of the hollowed face upper side. In addition, considering the size of the stone, it might not be inappropriate to hypothesise that the stone might had never been displaced from its original location. An abandoned door-socket might be the evidence that a city gate, or some other important building,

324In contrast, the intermediate wall (W.1613) of the stairway in the fortress P (see above) is much larger.
might have been located in this area before the last arrangement of the fortification line and of P2 building or, more generally, that a large and important building was located in the NW lower town before the final arrangement of the fortification wall. Another hypothesis is that the hollow stone might had been the support of a wood pole employed in the structure of the staircase, but this feature, which does not find proper comparisons, seems rather unlikely.
The passage L. 1618, 1 m wide and 1.35 m long, connects the entrance L. 1620 and the staircase L. 1624 with the southern chamber L. 1627 (Pls. LXXV, LXXX: 1). The passage is delimited to the west by the eastern edge of the wall W. 1601 (top at $+459.03 \mathrm{msl})$ (Pl. LXXIII: 1) and by a pier, 1.35 m large and 50 cm thick, jutting from the wall W. 1603 (top at +458.94 msl ) (Pl. LXXIX: 1). Both structures, preserved for two stone rows above the passage floor, are made of well-dressed stones, regularised on almost all sides. An exception however is to be noted for the sides of the stones opposite to the passage, which are sometimes left rough and irregular. The piers lean against the stone-paved floor of the passage. Three large stones, coarsely regularised and with a flattened upper side, pave the southern and eastern part of the area, while smaller, irregularly shaped stones pave the NE part, accurately disposed so as to fill the gaps left by irregularities in the perimeter of the larger stones ( +458.39 msl ). The building process of the passage confirms here the integration in planning between passages and walls already seen in the fortress P . The stones of the threshold, in fact, whose sections are clearly visible on the southern profile of the passage, are an integral part of one the wall's stone rows. In contrast, the stones of the piers, which are integrated into the wall's upper rows and leaned over the threshold, evidently were erected later, together with the upper part of the walls (Pl. LXXX: 1).
A niche, 38 cm deep, produced by the junction between the wall W. 1603 and the eastern pier on the gateway on the SE side of the passage, hosts, on the floor of the room L.1618, a stone door-socket, ca. 11 cm in diameter (Pl. LXXX: 2). A single door was consequently located on the southern side of the passage, opening counterclockwise, toward the inner side of the chamber.
The wall W.1601, 1.35 m large, east-west oriented, delimits the staircase room L. 1624 to the south, the passage L. 1618 to the east and the chamber L. 1627 to the north (Pl. LXXXI: 1). The wall, exposed for 4 stone rows above the surface (between +459.03 and +457.55 msl ), was preserved for ca. 4 m on the east-west axis, but it was presumably around 5.10 m long originally.

Some uncertainties remain concerning the arrangement of the southern sector of the building: a large chamber, L.1627, occupies the SE part of the area, but it is not clear if a further, narrow room, north-south oriented, occupied the western sector (see below). This latter arrangement, however, would not find any comparison in the other casemate blocks of the lower town fortification wall.
The large chamber L.1627, 4.22 m long on the north-south axis, is delimited by wall W. 1601 to the north, by wall W. 1603 to the east, and by wall W. 1602 to the south (Pls. LXXIX: 2, LXXX). The western limit remains doubtful. In fact, questions arose concerning the possibility that two stone alignments on the slope west, named W.1628, north-south oriented, perpendicular to the wall W.1601, might have corresponded to part of the stone foundations, although damaged and partially ranoff on the sloping ground, of a north-south wall delimiting L. 1627 to the west (Pl. LXXXIII). The stone alignments delimit an area of ca. 1.15 m width, which is slightly thinner if compared to the extension of the other casemate walls. It has been brought to light over 1.8 m on the north-south axis, the southern extension continuing beyond the southern limit of the excavated trench (top between +457.53 and +457.11 msl ). The aligned disposition of the stones and the detection of some well-dressed faces, usually employed in the wall scaffolds, planted the suspicion it might have been part of a wall.
If the wall W. 1628 delimited the chamber L. 1627 to the west, the room would have measured 4 m on the east-west axis. Considering the probable location of the western façade of P 2 enclosure wall west (see above), and considering the possibility that the enclosure wall west was ca. as thick as the enclosure wall east - like in the northern casemate sector - a further narrow room, north-south oriented, would have been located west of the wall W.1628. The resulting double chamber layout of the P 2 southern sector would find comparison in the northern sector of fortress P but, unlike P, the fortress P2 southern sector would not have been composed of two twin chambers, almost the same in size, but of a large chamber, ca. 4 m wide, and a narrow room, ca. 1.70 m wide. Such a narrow room does not find any comparison in the lower town casemates layout except for staircase rooms, but the presence of a staircase in this position appears highly unlikely.
In point of fact, another possibility is that the aligned stones belonged to the stone foundation filling F.2037, ran-off on the line of the sloping ground. According to this second hypothesis, the western wall of the chamber L. 1627 would, in all likelihood, have corresponded to the western enclosure wall of the building, and P2 southern
sector would have been occupied by a single, large chamber, L.1627, 4.22 m wide on the north-south axis and around 6 m wide on the east-west axis. Such a large chamber also finds only sparse comparison in the lower town casemate buildings (see below $\int$ 6.6.2). Despite some difference in size, however, the resulting P2 general layout would conform to the staircase block typology of the northern section of the fortification wall (see chapter 7).

Part of a stone paving of the chamber, including some large, flattened stones (between +458.06 and +458.13 msl ), has been uncovered in the eastern part of the room, ca. 20 cm below the threshold L. 1618 (Pl. LXXIX: 2). A compacted earth deposit, reddish brown in colour, named F.1622, covers the rest of the chamber. The deposit has been exposed on the eastern part of the chamber over an area ca. 2.7 m large on the east-west axis; to the west, it was partially washed away on the sloping ground. Its upper surface, although it was scarcely recognisable as that, probably corresponds to the beaten-earth floor of the chamber: above it, in fact, is laid the door-socket on the south-eastern side of the access. A remarkable quantity of carbon sherds - maybe derived from the burnt hinge of the door - was concentrated in the soil close to the door-socket. A carbon sample analysed from this context (see below) gave back a dating to 1740 BCE.
In order to investigate the archaeological sequence below the floor of the chamber, a test trench, 4 m on the east-west axis and 1 m on the north-south axis, subsequently enlarged 80 cm to the south on the western edge, was dug south of the wall W. 1601 (Pls. LXXXI: 2, LXXXII).
In the test-trench, the stone foundation deposit of the chamber, named F.2037, has been exposed. The deposit is composed of densely packed medium and mediumsmall stones, mainly irregular in shape (top between +457.68 and +457.83 msl ). To the north, it leans against the wall W. 1601 and to the south and the east it continues beyond the excavation limit. To the West, it is delimited by the stone alignment W. 1628 , which is probably an integral part of the stone foundation filling.
F.1626, a 15-20 cm thick earth foundation deposit, reddish-brown in colour, covers the stone foundation filling F.2037, and is covered by the similar deposit F.1622.
East of building P2, the wall W.1604, east-west oriented, touching at a right angle the northern end of wall W. 1603 eastern façade, belongs to a late phase of use of the area, but the presence of an earlier phase of the structure contemporary to P2 cannot be excluded (see below).

### 6.2.3 Phases 3-4: collapse and abandonment

F. 1616 (phase 3), a deposit of small and medium irregular stones and compacted soil of brown colours, covers the access sector of the building: the gateway L.1617, the entrance L.1620, the passage L. 1618 and the access - the 'first step' - of the staircase L. 1624.

In the second staircase room L.1623, the stone foundation deposit F. 2038 is covered by F. 1621 (phase 3), a deposit of various size stones and brown coloured, loose soil.
F. 1600 (phases 3-4) and F. 1614 (phase 4), collapse layers of large stones and darkish brown soil, mainly of compacted texture, cover the first accumulation layers and the walls of the area. F. 1600 extends above the chamber L.1627. F. 1614 rests on the northern sector of the building: it covers F. 1616 in the access area; F. 1621 in the room L.1623; the wall W.1615; and leans against the eastern façade of the wall W.2030. Slags of fired clay and a fragment of melted basaltic stone recovered in F.1614, in the area of the passage L.1618, may be related to a fire event, but other evidence of this kind is not widespread in other areas of the building.

### 6.2.4 Phases 5: late reuse

Area P2, eastern sectors, post-building P2 evidence - Distribution of loci and fills by phase

| Area |  | Unit | Phase | Location |
| :---: | :---: | :---: | :---: | :--- |
| P2 | F. | 1625 | 5 | Above building P2 W.1603 |
| P2 | F. | 1619 | 5 b | W.1604 |
| P2 | W. | 1604 | 5 a | P2 East |
| P2 | W. | 2040 | 5 | Above building P2 W. 2030 |

Traces of later phases of use of the area following the abandonment of building P2 have been uncovered in the eastern sectors. A thin stone wall - W. 2040 - was built above the remains of the P2 north-south wall W.2030. The structure consists of a single line over a single row of medium-small sized stones, coarsely regularised, set up without mortar and rather loosely on the eastern margin of the wall W.2030, and is probably functional to the delimitation of the area to the east (Pl. LXXI: 1).

South of it is located the east-west wall W.1604, touching at a right angle the wall W. 1603 (Fig. 5.1). The wall, 1.9 m wide, was partially exposed on the western portion over a length of ca. 2.9 m . Unlike the other walls of building P2, which belonged to
a single building operation, W. 1604 was not integrated into the general structure of P2, but came into contact with the wall W.1603. ${ }^{325}$ The wall texture, made of stones of different size, from small to medium-large, mainly irregularly shaped, and without well-delineated outer scaffolds, clearly distinguish the structure from all building P2 walls. Despite the evidence of belonging to a different building operation and despite the different set-up, the wall thickness does not conform to usual building schemes of late lower town structures, but to the patterns of the fortification wall buildings: this suggests that the presence of an earlier phase of the wall contemporary to P2 - not investigated -cannot be excluded.
Clearly attesting to the late use of the eastern sectors of the area is the ceramic inventory associated to the collapse layer F.1619, made of displaced stones and soil covering the top of the wall W.1604, and the findings from the stone accumulation layer F. 1625, which covered the wall W.1603.

### 6.3 RADIOCARBON DATING

A sample of a caprovine bone - TH.05.P. $357^{\star} 1$ - has been recovered from the floor of the southern room L. 1627 (F.1622, phase 2), and 14C analysis returned a calibrated range to $1740-1520 \mathrm{BCE}$ at $95.4 \%$ probability. ${ }^{326}$

| Laboratory <br> Number | Sample Inventory | $\delta^{13} \mathbf{C}^{1,2)}$ <br> $\left[\%_{0}\right]$ | ${ }^{14}$ C-age $^{1)}$ <br> $[B P]$ | Calibrated age ${ }^{3)}$ |
| :---: | :---: | :---: | :---: | :---: |
| VERA-4170 | TH.05.P.357^1 | $-23.6 \pm 0.6$ | $3355 \pm 40$ | 1740 BC (95.4\%) 1520BC |

${ }^{1)} 1 \sigma$ - error
2) $\delta^{13} \mathrm{C}$ determined with the AMS-system
${ }^{3)}$ determined with the calibration program OxCl and the calibration curve INTCAL13, data correspond to the $2 \sigma$ - confidence level, probability of the individual time periods in brackets, calibrated ages rounded by 10 with OxCal .

The range, covering a relatively long span of time, from the second half of the $18^{\text {th }}$ cent. until late $16^{\text {th }}$ cent. BCE, in terms of archaeological periodisations encompasses

[^100]the period from late MB IIA and MB IIB, until early LBA (or MB III according to the different systems) (Table 1.1).
In terms of stratigraphy, since it cannot be excluded that the sample represents a residual material, the sample may be contemporary to the phase 2 deposits from which it derives or earlier. Accordingly, it supplies a reference post quem for the dating of the deposits of phase 2 , which may be confidently considered later than the $1^{\text {st }}$ half of the $18^{\text {th }}$ cent. BCE.

### 6.4 THE POTTERY

In the course of 2006 Turco-Italian investigations in the fortress P2, a total number of 83 diagnostic potsherds have been collected. Of these, 25 have been selected as indicators for detailed analysis. ${ }^{327}$ Analysed data have been modelled in statistical distributions, but the effectiveness of the results is partially affected by the meagreness of the reference samples. The largest part of the ceramic collection (41 samples, corresponding to the $49 \%$ of P 2 inventory of diagnostic pottery) derives from phase 2 , which corresponds to the walking floor layers and to the phase of use, followed by phase 1, corresponding to the foundation deposits, and by phase 3, corresponding to the deposits above the floor layers, both accounting for the $19 \%$ of P2 ceramic inventory ( 16 samples). Sparse samples derive from phase 4 , corresponding to the upper deposits ( 9 samples, corresponding to the $11 \%$ of P2 ceramic inventory) and a single sample, although well-preserved, derives from phase 5 , corresponding to the late reuse of the area (Table and Diagram 6.1).
The largest part of the diagnostic ceramic inventory is composed of body-sherds, which constitute the $35 \%$ of the P 2 inventory of diagnostic pottery, followed by rimsherds ( $31 \%$ ) and base-sherds ( $24 \%$ ). Smaller clusters include fragments of handles ( $6 \%$ of P 2 inventory of diagnostic pottery) and fragments of rim plus handle (2\%). A single sample has a complete profile (Table and Diagram 6.2).
With the exception of a 'backing' plate or 'tray' in kitchen ware (Fig. 6.2: 4), all the vessels appear to be wheelmade.

327For a description of the Turco-Italian expedition sampling method see $\S 1.5$.

Concerning function, the largest part of the ceramic inventory from building P2 is to be related to the simple ware ceramic horizon, which accounts for $58 \%$ of the building P2 inventory of diagnostic pottery ( 48 samples). Smaller clusters may be ascribed to the kitchen ware ceramic horizon ( $27 \%$ of P2 ceramic inventory, corresponding to 22 potsherds) and to the storage ware ceramic horizon (17\% of P2 ceramic inventory, corresponding to 13 potsherds) (Table 6.3; Diagram 6.4). The largest clusters of simple, storage and kitchen ware are concentrated in the phase 2 fill F.1622, which corresponds to the largest ceramic lot (Table 6.8).

Only 34 samples were detectable in terms of morphology: the largest part of them derive from phase 2 , followed by phase 1 and 3 . Only sparse samples derive from phases 4 and 5 (Table 6.6 and Diagram 6.8). Most samples belong to jars ( $29 \%$ of P2 inventory of potsherds with detectable shape), followed by bowls (24\%), cooking pots $(15 \%)$ and jugs ( $9 \%$ ). The $24 \%$ of the inventory belongs to other shapes. The incidence of each category, however, is widely affected by the meagreness of the reference sample (Table 6.5, Diagram 6.6). The distribution of bowls is concentrated in phase 4 ( $38 \%$ of detected bowl samples), followed by phase 2 and 3 , where they are homogeneously distributed, and by phase 1 ; the jars are concentrated in phase 2 ( $40 \%$ of detected jar samples), followed by phase 3, phase 1 and phase 4 ; the samples of jug are concentrated in phase 2 ( $63 \%$ of detected jug samples), followed by phase 1 ; the samples of cooking pots are equally distributed in the phases 1 and 2 ( $40 \%$ each of detected cooking pot samples) and attested in phase 3 (Table 6.6 and Diagram 6.9).
The potsherds that include bases account for 22 samples: 20 base-sherds, a vessel with complete profile, and a fragment of plate in kitchen ware comprehensive of part of the rim and of the base. The meagreness of the reference sample affects the value of distributional analysis, but it may supply all the same offer a general idea of the assemblage. Most of the samples derive from phase $2(36 \%$ of potsherds comprehensive of base), followed by phase $3(27 \%)$, phase $1(18 \%)$, phase $4(14 \%)$ and phase $5(5 \%)$ (Table 6.8). The largest cluster corresponds to the general category of 'other', which refers to unselected base-sherds whose morphology has not been classified. Among classified morphologies, the ring bases are the most common. A single sample of a kitchen ware plate has a flat base (Tables 6.7, 6.8; Diagrams 6.10, 6.11).

The largest part of P 2 ceramic inventory is composed of undecorated potsherds ( $94 \%$ of P 2 inventory of diagnostic pottery). A few decorated samples however derive from phase 1 ( 1 sample) and, in particular, from phase 2 ( 4 samples). The decoration
used is mainly combing, applied in the form of horizontal bands located on the wall of large-mouthed vessels (Fig. 6.3: 7) and on the upper part of the body of cooking pots (Fig. 6.3: 6). Incised and applied decorated potsherds are also sparsely attested (Table 6.9).

|  |  | Selected Potsherds |  | Unselected Potsherds |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Phase 5 | F.1619 | 1 | $4.00 \%$ |  |  | 1 | $1.20 \%$ |
| Phase 4 | F.1614 | 3 | $12.00 \%$ | 6 | $10.34 \%$ | 9 | $10.84 \%$ |
| Phase 3 | F.1621 | 3 | $12.00 \%$ | 8 | $13.79 \%$ | 11 | $13.25 \%$ |
|  | F.1616 | 3 | $12.00 \%$ | 2 | $3.45 \%$ | 5 | $6.02 \%$ |
| Phase 2 | F.1622 | 9 | $36.00 \%$ | 32 | $55.17 \%$ | 41 | $49.40 \%$ |
| Phase 1 | F.1626 | 6 | $24.00 \%$ | 10 | $17.24 \%$ | 16 | $19.28 \%$ |
| Total |  |  | $\mathbf{2 5}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{5 8}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{8 3}$ |

Table 6.1 - Area P2: Distribution of diagnostic potsherds by stratigraphic unit.

|  | $\begin{aligned} & \text { F.1626 } \\ & \text { (Ph.1) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1622 } \\ & \text { (Ph.2) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1616 } \\ & \text { (Ph.3) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1621 } \\ & \text { (Ph.3) } \end{aligned}$ |  | F. 1614(Ph.4) |  | $\begin{aligned} & \text { F.1619 } \\ & \text { (Ph.5) } \end{aligned}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Bottom | 3 | 18.75\% | 8 | 19.51\% | 1 | 20.00\% | 5 | 45.45\% | 3 | 33.33\% |  |  | 20 | 24.10\% |
| Complete |  |  |  |  |  |  |  |  |  |  | 1 | 100\% | 1 | 1.20\% |
| Handle | 1 | 6.25\% | 2 | 4.88\% |  |  |  |  | 2 | 22.22\% |  |  | 5 | 6.02\% |
| Rim | 5 | 31.25\% | 12 | 29.27\% | 2 | 40.00\% | 4 | 36.36\% | 3 | 33.33\% |  |  | 26 | 31.33\% |
| Rim+Handle | 2 | 12.50\% |  |  |  |  |  |  |  |  |  |  | 2 | 2.41\% |
| Wall | 5 | 31.25\% | 19 | 46.34\% | 2 | 40.00\% | 2 | 18.18\% | 1 | 11.11\% |  |  | 29 | 34.94\% |
| Total | 16 | 100\% | 41 | 100\% | 5 | 100\% | 11 | 100\% | 9 | 100\% | 1 | 100\% | 83 | 100\% |

Table 6.2 - Area P2: Potsherds state of preservation. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  | F. 1626 (Ph.1) |  | $\begin{aligned} & \text { F.1622 } \\ & \text { (Ph.2) } \end{aligned}$ |  | F. 1616 (Ph.3) |  | F. 1621(Ph.3) |  | F. 1614 <br> (Ph.4) |  | F. 1619 (Ph.5) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Kitchen Ware | 6 | 37.50\% | 14 | 34.15\% |  |  | 2 | 18.18\% |  |  |  |  | 22 | 26.51\% |
| Storage Ware | 1 | 6.25\% | 9 | 21.95\% | 2 | 40.00\% | 1 | 9.09\% |  |  |  |  | 13 | 15.66\% |
| Simple Ware | 9 | 56.25\% | 18 | 43.90\% | 3 | 60.00\% | 8 | 72.73\% | 9 | 100\% | 1 | 100\% | 48 | 57.83\% |
| Total | 16 | 100\% | 41 | 100\% | 5 | 100\% | 11 | 100\% | 9 | 100\% | 1 | 100\% | 83 | 100\% |

Table 6.3 - Area P2: Functional classes. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of diagnostic potsherds.

|  |  | Kitchen Ware |  | Storage Ware |  | Simple Ware |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Phase 5 | F.1619 |  |  |  |  | 1 | $2 \%$ |
| Phase 4 | F.1614 |  |  |  |  | 9 | $19 \%$ |
| Phase 3 | F.1621 | 2 |  | $\%$ | 1 | $8 \%$ | 8 |
|  | F.1616 |  |  | 2 | $15 \%$ | 3 | $6 \%$ |
| Phase 2 | F.1622 | 14 | $64 \%$ | 9 | $69 \%$ | 18 | $38 \%$ |
| Phase 1 | F.1626 | 6 | $27 \%$ | 1 | $8 \%$ | 9 | $19 \%$ |
| Total |  | 22 | $100 \%$ | 13 | $100 \%$ | 48 | $100 \%$ |

Table 6.4 - Area P2: Functional classes. Distribution of functional classes by stratigraphic unit.

|  | $\begin{aligned} & \text { F.1626 } \\ & (\text { Ph.1) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1622 } \\ & \text { (Ph.2) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1616 } \\ & \text { (Ph.3) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1621 } \\ & \text { (Ph.3) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1614 } \\ & \text { (Ph.4) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1619 } \\ & \text { (Ph.5) } \end{aligned}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Bowl | 1 | 11.11\% | 2 | 14.29\% | 1 | 33.33\% | 1 | 25.00\% | 3 | 100.00\% |  |  | 8 | 23.53\% |
| Cooking Pot | 2 | 22.22\% | 2 | 14.29\% |  |  | 1 | 25.00\% |  |  |  |  | 5 | 14.71\% |
| Jar | 2 | 22.22\% | 4 | 28.57\% | 1 | 33.33\% | 2 | 50.00\% |  |  | 1 | 100,00\% | 10 | 29.41\% |
| Jug | 2 | 22.22\% | 1 | 7.14\% |  |  |  |  |  |  |  |  | 3 | 8.82\% |
| Other | 2 | 22.22\% | 5 | 35.71\% | 1 | 33.33\% |  |  |  |  |  |  | 8 | 23.53\% |
| Total | 9 | 100\% | 14 | 100\% | 3 | 100\% | 4 | 100\% | 3 | 100\% | 1 | 100\% | 34 | 100\% |

Table 6.5 - Area P2: Morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified shapes.

|  |  |  | Bowls |  | ing pots |  | Jars |  | Jugs |  | Other |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | n. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | $\%$ | $n$. | \% |
| Phase 5 | F. 1619 |  |  |  |  | 1 | 10\% |  |  |  |  | 1 | 2.94\% |
| Phase 4 | F. 1614 | 3 | 37.50\% |  |  |  |  |  |  |  |  | 3 | 8.82\% |
| Phase 3 | F. 1621 | 1 | 12.50\% | 1 | 20\% | 2 | 20\% |  |  |  |  | 4 | 11.76\% |
|  | F. 1616 | 1 | 12.50\% |  |  | 1 | 10\% |  |  | 1 | 12.50\% | 3 | 8.82\% |
| Phase 2 | F. 1622 | 2 | 25.00\% | 2 | 40\% | 4 | 40\% | 1 | 33.33\% | 5 | 62.50\% | 14 | 41.18\% |
| Phase 1 | F. 1626 | 1 | 12.50\% | 2 | 40\% | 2 | 20\% | 2 | 66.67\% | 2 | 25.00\% | 9 | 26.47\% |
| Total |  | 8 | 100\% | 5 | 100\% | 10 | 100\% | 3 | 100\% | 8 | 100\% | 34 | 100\% |

Table 6.6 - Area P2: Morphology. Distribution by stratigraphic unit of morphological categories (Bowls; Cooking pot; Jars; Jugs; Other) and of potsherds with classified shapes (Total).

|  | $\begin{aligned} & \text { F.1626 } \\ & \text { (Ph.1) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1622 } \\ & \text { (Ph.2) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1616 } \\ & \text { (Ph.3) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1621 } \\ & \text { (Ph.3) } \end{aligned}$ |  | $\begin{aligned} & \text { F. } 1614 \\ & \text { (Ph.4) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1619 } \\ & \text { (Ph.5) } \end{aligned}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% | $n$. | \% |
| Disk |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Flat | 1 | 25\% |  |  |  |  |  |  |  |  |  |  | 1 | 4.55\% |
| Ring | 3 | 75\% | 2 | 25\% | 1 | 100\% |  |  |  |  | 1 | 100\% | 7 | 31.82\% |
| Other |  |  | 6 | 75\% |  |  | 5 | 100\% | 3 | 100\% |  |  | 14 | 63.64\% |
| Total | 4 | 100\% | 8 | 100\% | 1 | 100\% | 5 | 100\% | 3 | 100\% | 1 | 100\% | 22 | 100\% |

Table 6.7 - Area P2: Bottoms morphology. Incidence of different potsherd categories by stratigraphic unit and relative to the total inventory of classified base-sherds.

|  |  | Flat |  | Ring |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit | n. | $\%$ | $n$. | $\%$ | $n$. | $\%$ | $n$. | $\%$ |
| Phase 5 | F.1619 |  |  | 1 | $14 \%$ |  |  | 1 | $5 \%$ |
| Phase 4 | F.1614 |  |  |  |  | 3 | $21 \%$ | 3 | $14 \%$ |
| Phase 3 | F.1621 |  |  |  |  | 5 | $36 \%$ | 5 | $23 \%$ |
|  | F.1616 |  |  | 1 | $14 \%$ |  |  | 1 | $5 \%$ |
| Phase 2 | F.1622 |  |  | 2 | $29 \%$ | 6 | $43 \%$ | 8 | $36 \%$ |
| Phase 1 | F.1626 | 1 | $100 \%$ | 3 | $43 \%$ |  |  | 4 | $18 \%$ |
| Total |  | 1 | $100 \%$ | 7 | $100 \%$ | 14 | $100 \%$ | 22 | $100 \%$ |

Table 6.8 - Area P2: Bottoms morphology. Distribution by stratigraphic unit of bottoms typologies (disk; flat; ring) and of potsherds with classified bottom (Total).

| Decoration Type |  | $\begin{array}{r} \text { E.1619 } \\ (\text { Ph.5) } \end{array}$ |  | $\begin{aligned} & \vdots 1614 \\ & \text { Ph.4) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1616 } \\ & \text { (Ph.3) } \end{aligned}$ | $\begin{aligned} & \text { F.1621 } \\ & \text { (Ph.3) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1622 } \\ & \text { (Ph.2) } \end{aligned}$ |  | $\begin{aligned} & \text { F.1626 } \\ & \text { (Ph.1) } \end{aligned}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Incised |  |  |  |  |  |  |  |  | 1 | 2.44\% |  |  | 1 | 1.20\% |
| Painted |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Applied |  |  |  |  |  |  |  |  | 1 | 2.44\% |  |  | 1 | 1.20\% |
| Combed |  |  |  |  |  |  |  |  | 2 | 4.88\% | 1 | 6.25\% | 3 | 3.61\% |
| Undecorated | 1 | 100\% | 9 | 100\% | 5 | $100 \%$ | 11 | 100\% | 37 | 90.24\% | 15 | 93.75\% | 78 | 93.98\% |
| Total | 1 | 100\% | 9 | 100\% | 5 | 100\% | 11 | 100\% | 41 | 100\% | 16 | 100\% | 83 | 100\% |

Table 6.9 - Area P2: Decoration. Distribution of decorated potsherds by stratigraphic unit.

### 6.4.1 The ceramic inventory of phase 1 (early MB IIB)

A total number of 16 diagnostic potsherds, corresponding to the $19 \%$ of the P2 inventory, derive from Area P2 phase 1, which corresponds to the foundation deposits of the building, and specifically from F. 1626 in the southern room of the building. The phase 1 inventory of diagnostic pottery is composed in equal percentages of rimsherds and body-sherds, both categories accounting for $31 \%$ of phase 1 ceramic inventory. Smaller clusters belong to base sherds ( $19 \%$ of phase 1 inventory), fragments of rim plus handle (13\%) and fragments of handle (6\%) (Table 6.2 and Diagram 6.3). ${ }^{328}$

Concerning functional classification, the largest part of phase 1 ceramic inventory is to be related to the general horizon of simple ware ( $56 \%$ of phase 1 ceramic inventory), but a large inventory of kitchen ware is also attested (38\%). A single sample of storage ware ( $6 \%$ of phase 1 ceramic inventory) attests to the storage functional horizon (Table 6.2, Diagram 6.5). The meagreness of the sample, however, widely affects the value of internal distributional analysis.

Concerning the range of attested morphologies, the small assemblage is quite varied, attesting two samples of jars, two samples of jug, two samples of cooking pot each representing $22 \%$ of phase 1 inventory of potsherds with detected shape - and one sample of bowl. Two samples belong to other shapes (Table 6.5 and Diagram 6.7).
Four samples have a detected base: three are ring bases and one is a flat base ( $\mathrm{Ta}-$ ble 6.7).
A single sample presents a decoration, and corresponds to a cooking pot with straight combed lines (Fig. 6.2: 5).
The inventory of simple ware bowls includes a sample of medium-small curved bowl with thickened rim with triangular profile. ${ }^{329}$
The inventory of simple ware closed shapes includes two samples of small, carinated vessels with high neck largely widespread in the MB IIB Northern Levant and continuing into the LBA, alternatively referred to as 'S-curved jars' (Horowitz 2015: fig. 7.4: 6), and 'shoulder' or 'carinated goblets' (Horowitz 2015: fig. 7.4: 4-5; Morgan, Soldi 2021: fig. 19: 4). ${ }^{330}$ At Mardikh, they are attested in both a simple ware and in a fine ware described as 'palatial ware', and this last variant is considered a hallmark of the last MBA phase (Peyronel 2000, with further references). In addition to Fig. 4.8: 3 (area K-3, see above), to the same general category are probably to be ascribed also Fig. 5.12: 5 and Fig. 5.20: 4 (Area P), and Fig. 6.4: 1 (F.1616, see below). The two samples from F. 1626 (Fig. 6.2: 1-2), however, are quite different from one another. Fig. 6.2: 1, characterised by a restricted opening ( 6.4 cm ), is more closely to be related to a small jar or goblet, with distinct shoulder, curved-closed neck, and slightly marked rim. Fig. 6.2: 2, with thicker walls and a larger opening ( 12.6 cm ), is
been collected, but since they apparently belonged to the same vessels, they have been grouped and each group has been counted as a single sample.

329Not selected. The shape, however, is comparable to Lidar Höyük specimens like those published in Kaschau 1999: pl. 120: 10 and pl. 121: 1, from phase 4, attributed to MB IIIA in the local seqeunce.

330See comparisons and discussion for Fig. 4.8: 3 (Area K-3).
more similar to a carinated bowl with biconical body, vertical upper side, and outside bevelled rim.

A close comparison for the small goblet Fig. 6.2: 1 may be found in LB IIB shoulder goblets of Alalakh (Horowitz 2015: fig. 7.4: 4) and in the Euphrates area at Emar upper town UT4, attributed to late MBA in the local sequence (ca. late $17^{\text {th }}$ cent. BCE, Sakal 2018: fig. 5: 9 and esp. n. 8). A remarked similarity in terms of profile can also be seen with a sample from the Mardikh LB I layers - attributed to the second half of $16^{\text {th }}$-beginning of $15^{\text {th }}$ cent. BCE - that is considered a typical shape of transition between MBA and LBA (Colantoni 2014: pl. 1: h): the Mardikh vessel, however, presents an opening almost double the size of the Tilmen sample. Further similarity in term of profile - if not in size, since the Tilmen P2 sample appears remarkably small in comparison to most of published specimens of this kind - may be observed with Ugarit tomb 53 (Heinz 1992: cat. B: pl. 6: 3); Oylum Höyük MB II layers (Özgen, Helwig 2001: fig. 6: d); Lidar Höyük phase 4 (Kaschau 1999: pl. 113: 2) and phase 5 (Kaschau 1999: pl. 166: 2; pl. 237: 7; pl. 265: 2; pl. 279: 7), attributed respectively to MB IIIA and IIIB in the local sequence (ca. mid $17^{\text {th }}-$ mid $16^{\text {th }}$ cent. BCE), and Hammam et-Turkman period VII: 5 (Cuvers 1988: pl. 127: 59), probably to be attributed to the first part of MB IIB (Nigro 2009: table 6: 1). ${ }^{331}$
The larger vessel Fig. 6.2: 2 finds closer comparisons with typologies described as 'S-curved jars' (Horowitz 2015: fig. 7.4: 6) or 'small kraters' (Horowitz 2015: fig. 7.4: 7). Further comparisons may be observed with samples from MB II layers of Zeytinli Bahçe Höyük (Balossi et al. 2007: fig. 10: c, with closed neck) and Şaraga Höyük (Sertok et al. 2005: fig. 14); from Lidar Höyük phase 4 (Kaschau 1999: pl. 113: 1-5, 7-13, see esp. 1, 4), and 5 (Kaschau 1999: pl. 132: 3-8, esp. 5-6; pls. 135-136, 147; pl. 166: 1; pl. 171: 3; pl. 181: 3; pl. 196: 4; pl. 250: 1; pl. 254: 4; pl. 261: 2) and from LB I layers of Tell Hadidi (Dornemann 1979: fig. 20: 35).
A further typology of jar attested in phase 1 has everted neck, simple rim and vertical handle deprating from the rim. The same morhology is attested in area P in the inventory of phase 3 (for which see Fig. 5.16: 7, with commentary and comparisons) and of phase 4.

[^101]The kitchen ware ceramic inventory includes 3 distinct vessel typologies; two wheelmade cooking pots, one with short, closed neck, outside thickened rim with pointed profile and triangular lugs (Fig. 6.2: 5) and one with high, curved neck and double rim (Fig. 6.2: 6), and a handmade plate or 'baking tray' (Fig. 6.2: 4).

The cooking pot with double rim belongs to the typical Middle and Late Bronze Age morphology of Tilmen. ${ }^{332}$ Distinctive of this sample from phase 1 is the curved trajectory of the rim, similar to Fig. 6.3: 8-9, and its relatively good state of preservation: while the state of preservations of most of cooking pots with a double rim from the lower town fortification areas is limited to rim-sherds or fragments of rim plus neck, in Fig. 6.2: 6 the upper part of the body was also preserved and presents a combed decoration of straight lines. A rather close comparison for profile and decoration is found in the late MBA levels of Tell Umm el-Marra (Schwartz et al. 2003: fig. 29: 9), where double rim cooking pots seem to be quite widespread (see also Schwartz et al. 2003: fig. 29: 10), continuing into the LBA. ${ }^{333}$ Different forms of decoration on cooking pots or on kitchen ware in general, including combing, incision or application, seem to be relatively widespread in MBA Northern Levant and nearby areas. ${ }^{334}$
Even if a functional significance cannot be excluded, the horizontal groovings on the outer side of the rim in the cooking pot Fig. 6.2: 5 are probably to be interpreted as a form of decoration. Rim groovings do not seem to be particularly frequent, but examples of cooking pots with triangular lugs on the rim are quite widespread at Tilmen, attested in area P2 also in F. 1621 (Fig. 6.5: 3, phase 3), in area P phase 4 (Fig. 5.19: 5; Fig. 5.18: 10) and in the MB IA layers of area K-5 Tilmen upper town (Bonomo 2011: fig. 2: 5-6). Comparisons for this type are widespread between MB I and MB II in the Northern Levant and nearby areas. ${ }^{335}$ A further similarity with Fig. 6.2: 5 may be observed with a simple ware krater with triangular rim and vertical

332For which see comparisons and commentary for area K-3 Fig. 4.4: 4-5.
333See the Umm el-Marra destruction level (Cuvers et al. 1997: fig. 19: 14), mid/late $14^{\text {th }}$ cent. BCE, ca. 13601340 BCE.

334See for example in Tilmen Höyük upper town, the MB II layers of area K-5 (Marchetti 2010: fig. 8; Bonomo 2011: fig. 4: 2); Kinet Höyük East Terrace Building (Gates 2011: fig. 10: b, c), late MBA; Zincirli Complex DD destruction level (Morgan, Soldi 2021: fig. 21:3-4; fig. 22: 1), mid. 17 ${ }^{\text {th }}$ cent. BCE; general MBA Alalakh assemblages (Bulu 2017a: fig. 3: 9), Alalakh palace kitchen (Bulu 2016: fig. 7: 20), and Alalakh level VIII (Heinz 1992: cat. A, pl. 22: 41); the late MB II layer of Umm el-Marra (Schwartz et al. 2003: fig. 29: 9) and the MB IIB layers of Hadidi (Dornemann 1979: fig. 21: 28).

335See commentary for area P phase 4 Fig. 5.19: 5 and Fig. 5.18: 10.
handles from Alalakh palace kitchen (pre-level VII, prior to late $17^{\text {th }}$ cent. BCE, Bulu 2016: fig. 6: 17).
The handmade 'backing' plate (Fig. 6.2: 4) is charaterised by reddish brown fabric with medium-high mineral inclusions of large size. It presents a coarsely flattened base and low, vertical sides ( 1.7 cm high) with a midden, large groove and outside bevelled rim, and large diameter ( 44 cm ). The curved, inner wall is only a few millimeters high above the vessel base, which surely affected the intended use of the vessel.
Concerning Fig. 6.2: 4, a function as a backing device is probable, but the inner sides are defintely shorter than most of the samples known from the Northern Levant area. Comparison for this characteristic, however, may be observed in Lidar Höyük phase 1 (Kaschau 1999: pl. 25: 1), and phase 4 (Kaschau 1999: pl. 126: 8), attributed respectively to MB IA and MB III in the local sequence.

### 6.4.2 The ceramic inventory of phase 2 (MB IIB [- early LBA])

A total number of 41 diagnostic potsherds, corresponding to the $49 \%$ of Area P2 inventory of diagnostic pottery, derives from phase 2, and specifically from F.1622, a compacted earth deposit whose surface probably corresponds to the beaten-earth floor of the southern chamber of the building. The ceramic sample, therefore, may be contemporary with the last phase of use of the room or slightly earlier. More specifically, the storage ware large-mouthed vessel in Fig. 6.3: 7, although incomplete, was smashed on the floor of the chamber between the door socket and the wall W.1603, and may be considered a remains of the last phase of use of the chamber. The largest part of the phase 2 inventory of diagnostic pottery is composed of body sherds, which accounts for $46 \%$ of the ceramic inventory, followed by rim-sherds (29\%) and base-sherds (20\%). A smaller cluster is composed of fragments of handle (5\%) (Table 6.2; Diagram 6.3). ${ }^{336}$

Concerning function, the largest part of phase 2 ceramic inventory is to be ascribed to the general horizon of simple ware ( $44 \%$ of the phase 2 ceramic inventory), followed by the kitchen ware ceramic horizon (34\%) and by the storage ware ceramic horizon (9\%) (Table 6.3; Diagram 6.5).

336In addition to the diagnostic pottery, ca. 30 simple ware body-sherds from the bucket 354-355 and 30 from the bucket $356-357$ and ca. 20 storage ware body-sherds from bucket $356-357$ were collected, but since they were apparently a portion of already selected potsherds, or belonged to the same vessels, they have been grouped and each group has been counted as a single sample.

Concerning the range of attested morphologies, the small assemblage presents a high, relative incidence of jars ( $29 \%$ of the phase 2 inventory of potsherds with detected shape, corresponding to four elements), equal percentages of bowls and cooking pots ( $14 \%$ each of the phase 2 inventory of potsherds with detected shape, corresponding to two samples each), and a single fragment of jug ( $7 \%$ of phase 2 inventory of potsherds with detected shape). Five samples belong to other shapers (Table 6.5; Diagram 6.7).
Eight samples have a portion of base preserved: two of them are ring bases; the remaining six samples, however, are unselected samples whose precise typology has not been identified (Table 6.7).
The largest part of the phase 2 ceramic inventory is undecorated ( $90 \%$ of phase 2 inventory of diagnostic pottery), but decoration is also sparsely attested. Decorated pottery includes two samples of combed decoration, characterised by single (Fig. 6.3: 7) or multiple bands of straight, combed lines; one sample of body-sherd with incised decoration (Fig. 6.3: 6); and one sample of kitchen ware with applied decoration (Table 6.9).
The inventory of simple ware open shapes includes large bowls with carinated upper side (Fig. 6.3:1) and large-mouthed vessels, presumably deep, with thickened, grooved rim (Fig. 6.3:2). A second sample of large-mouthed vessel, presumably deep, but more likely to be morphologically related to a jar, is represented by Fig. 6.3: 3.
The fabric of the carinated bowl Fig. 6.3: 1, characterised by remarkably large and abundant mineral inclusions of different colours and large voids, would seem to be set apart from the rest of simple ware ceramic assemblage, characterised by smaller and less frequent inclusions and only sparse voids. Similar types of carinated bowls with short upper section, mainly vertically or internally oriented and concave in profile, usually with thick walls, have been uncovered in area P phase 3b (see Fig. 5.14: 3-4 and related commentary), and find good comparisons in MB IIB ceramic contexts of the Northern Levant, but considering the peculiarity of the fabric it is not possible to exclude the sample Fig. 6.3: 1 from being a residual from earlier periods. ${ }^{337}$
Deep vessels with grooved rim (Fig. 6.3: 2) here present an outside thickened rim with squared profile and a wide groove below the rim, marked by a carination.

[^102]Grooved rim vessels are quite common in the Tilmen lower town assemblage. ${ }^{338} \mathrm{~A}$ close comparison for this variant may be observed in the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 23: 3, type 1315); in MB II layers of Tuqan area H (Fiorentino 2006: fig. 36: 4) and in Afis area E level 15, where similar speccimens are considered typical MB IIA (Mazzoni 1998: fig. 25: 22). ${ }^{339}$
The second sample of large-mouthed vessel (Fig. 6.3: 3) has a short, flaring neck, squared rim profile, outside bevelled, and a groove on the inner side, probably functional to support a lid. A comparable specimens may be observed in the MB II levels of Tuqan area G (Fiorentino 2006: fig. 27: 11).
The simple ware inventory of closed shapes includes high-necked jars with flaring neck and thickened, banded rim (Fig. 6.3: 4) and high-necked jars with curved neck and everted rim (not shown). Further examples of necked jars with curved neck have been recovered, but the rim was not preserved.

The necked jars with thickened, banded rim (Fig. 6.3: 4), attested from the Middle and Late Bronze Age in the Northern Levant and Upper Mesopotamia, are quite widespread in area P (see for example in phase 3a Fig. 5.9: 7, and Fig. 5.18: 5 in phase 4 , with extended commentary). Close comparisons for this specific variant, however, seem likely to be related to late MBA assemblages. ${ }^{340}$
The handle typology includes a twin handle with rounded profile rods (Fig. 6.3: 5). This is characterised by a reddish, mineral fabric with a medium-high incidence of small inclusions and a light-brown/yellowish slip. This sample might be an import at Tilmen. The presence of such yellowish slip, in fact, is rather unusual in the assemblage of the Tilmen lower town Fortification system. In addition to that, comparable handles - twin, with rounded profile rods - recur frequently in MBA globular flasks or 'pilgrim flasks', ${ }^{3+1}$ most of which are hypothesised to have been devoted to wine

[^103]transportation, and in MBA painted wares of the Northern Levant, such as SyroCilician painted pottery and local painted potteries, ${ }^{342}$ some of which surely circulated along the Levant outside of their sites of production. Concerning pilgrim flasks and related types, the handle from Tilmen finds many comparisons in the Kültepe Karum II assemblage - which was to be expected, since it is one of the richest sites in term of pilgrim flask attestations ${ }^{343}$ - and in sites from the Euphrates Area. Further parallels, however, can also be observed with simple ware jugs from the Mardikh Tomb of the Lord of the Goats (Nigro 2002a: n. 88-90).

The inventory of storage ware includes a large-mouthed vessel, comparable to a krater, with an elongated, everted rim - rounded upper side, flat on the lower side and corrugated on the outer lip - a curved-closed neck, separated from the body by a thin band in relief, and an expanded body, decorated with a band of straight, combed lines (Fig. 6.3: 7). As mentioned already, the vessel was found in fragments smashed on the floor of the southern room, close to the door-socket, thus suggesting a probable relation with the last phase of use of the room. The large mouth probably testifies to the high frequency of use. Associated to the remarked capacity and relative thinness of the sides, it might suggest medium-short term storage or, more likely, the use in communal meals. The shape is well attested MB II and late MBA ceramic assemblages of the Northern Levant and Euphrates area, ${ }^{344}$ with some elements, like the
handles from Tell Bi’a (Einwag 2007: fig. 6: b), Karum Kaneš (fig. 6: c), Hadidi (fig. 6: e), and Mari (fig. 6: f). For twin handle globular flasks see additionally Kültepe Karum level II (Emre 1994: fig. 1, pl. 12b; fig. 3, pl. 12e; fig. 3, pl. 12c; fig. 4, pl. 12d; fig. 5); the MBA layers of Zeytinli Bahçe Höyük (Balossi et al. 2007: fig. 12); Lidar Höyük phase 3 (Kaschau 1999: pl. 99: 13), phase $4 / 3$ (Kaschau 1999: pl. 288: 2) and phase 5 (Kaschau 1999: pl. 150: 1, 4; pl. 206: 4; pl. 257: 3) and Tilbeshar chantier J (Kepinski-Lecomte, Ergeç 1999: fig. 4: 1).

342For examples of painted ware jugs with unpainted double handles that can be compared with the Tilmen sample, see Tell Sukas MBA collective Grave (Thrane 1978: fig. 80-81); Ugarit (Schaffer 1938: fig. 26.Z; fig. 36.T) and Ebla Tomb of the Lord of the Goats (Matthiae 1989: fig. 7). The double handle with round section is also largely attested in Levantine Painted Ware, for which see for example Bagh 2013: fig. 57: $f$ (Hazor), fig. 68: d-f (Sidon), fig. 80: a, f(Tell Arqa).

343A painted variant is attested also in the Tilmen lower town northern wall (see chapter 7).
344 Close parallels may be observed in Mardikh IIIB (MB II, Matthiae 1995: fig. 52: 1, with a different rim) and in Ebla tombs (Nigro 2009: pl. 36: 6; pl. 59: 2- 6; pl. 63: 1-2), as well as in Emar, upper town UT4, late MBA in the local sequence, that is late $17^{\text {th }}$ cent. BCE ca. (Sakal 2018: fig. 6: 10), Lidar Höyük phase 5 (Kaschau 1999: pl. 220: 2), attributed to MB III in the local sequence, and, to some extent, with Hammam et-Turkman period VII: 5 (Cuvers 1988: pl. 134: 123-124). General similarities may be observed also with MB II levels of Oylum Höyük (Özgen, Helwig 2001: fig. 16: c).
elongated, everted rim, , ${ }^{345}$ that seem to anticipate later evolutions. ${ }^{346}$ Close similarities are also visible with Middle and Late Bronze Age kitchen ware morphologies, ${ }^{347}$ evidence of a technological choice that, if independent from specific kitchen behaviours, might relate to the already proposed standardisation of MBA Northern Levant Ceramic production. The fact that combed and applied decorations seem to be concentrated in association to kitchen and storage ware would seem a further element of proximity between the two ceramic classes, which might suggest that the production was located in the same workshops.
The kitchen ware inventory of P 2 phase 2 includes the typical cooking pots with double rim (Fig. 6.3: 8-9). ${ }^{348}$ Fig. 6.3: 8 was heavily darkened, thus suggesting a use on the fire.

### 6.4.3 The ceramic inventory of phase 3 (MB IIB [- early LBA])

The phase 3 in area P 2 corresponds to the first deposits above the floor's layers. A total number of 16 potsherds, representing $19 \%$ of the Area P2 inventory of diagnostic pottery, derives from this phase. Specifically, the samples derive from F.1616, in the access sector ( 5 samples) and F.1621, in the northern chamber ( 11 samples). The phase 3 inventory of diagnostic pottery is composed of equal percentages of rim-sherds and body-sherds, both categories accounting to $38 \%$ of phase 3 ceramic inventory. A smaller cluster is base-sherds ( $4 \%$ of phase 3 ceramic inventory). ${ }^{349}$
Concerning function, the largest part of the phase 3 ceramic inventory is to be ascribed to the general horizon of simple ware ( $69 \%$ of phase 3 ceramic inventory); only sparse samples may be related to the storage ware ceramic horizon (19\%) and to

[^104]the kitchen ware ceramic horizon (13\%). The meagreness of the sample, however, widely affects the value of internal distributional analysis.
Concerning the range of attested morphologies, the small assemblage is rather heterogeneous, featuring 3 samples of jar ( $43 \%$ of phase 3 inventory of potsherds with detected shape), 2 samples of bowl ( $29 \%$ ), and 1 sample of cooking pot. One sample belongs to other shapes.
Six samples have a preserved portion of base: one, from F.1616, is a ring base; the other 5 samples, from F.1621, belong to unselected samples whose precise typology has not been detected (Table 6.7).

No sample of decorated pottery is attested.
In the northern room, the simple ware inventory of F. 1621 includes a carinated bowl (Fig. 6.5: 1) and a small-size necked jar with banded rim (unselected) similar to Fig. 5.10: 3 (area P phase 3a, F.2003).
The carinated bowl is medium-large ( 19.2 cm of rim diameter) with extended, everted rim and thick walls (Fig. 6.5: 1). It is characterised by reddish fabric with an intermediate frequency of mineral inclusions of medium size and a burnished surface. A comparable carinated bowl of smaller size (Fig. 2.3: 1) and a thin-walled one (Fig. 2.3: 3) are attested in area K-1 (see commentary). Comparable morphologies are attested in MB I ceramic assemblages of Northern Levant, ${ }^{350}$ but close variants also characterise late MBA assemblages. Close similarities, in fact, are visible with type 1250 from the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 15), which is considered an evolution of typologies dating from MB I and II (Pinnock 2005: 38); with some variants of type 1232 (see Pinnock 2005: pl. 12: 28-29), 1231 (Pinnock 2005: pl. 12: 16) and 1222 (Pinnock 2005: pl. 10: 19), and with Qatna J11 (MB IIB), type B9B, considered typical MB IIB-MB III in the local sequence (Iamoni 2012: pl. 4: 12). Other variants of carinated bowls with extended rim belong to Mardikh type 1235 (Pinnock 2005, esp. pl. 14: 9) - first attested in Mardikh IIIB2 destruction layers (Pinnock 2005: 36).
The storage ware (Fig. 6.5: 2) presents unusual thin walls. The attested morphology belongs to a large-mouthed vessel with short, everted neck with curved profile, and folded-over rim engendering a thin band with pointed ends. It is characterised to MB IB (Nigro 2009: 335), or MB IA-B (Nigro 2009: 327 and pl. 53: 10). Further examples of carinated bowl morphologies are attested in MB I layers of Tuqan area P (Peyronel 2011: fig. 38: 4).
by brown-reddish core and brown fabric, which indicates an inaccurate firing, with intermediate frequency of mineral inclusions of medium size. Despite the limited state of preservation, a typical MBA Tilmen Höyük storage ware typology may be recognised: an almost complete jar with similar everted and banded rim has been uncovered in MBA layers of the area G, in the upper town. ${ }^{351}$ The same typology is widespread in the Northern Levant between MB IIB and early LBA (/MB III), ${ }^{352}$ and in the Southern Levant. ${ }^{353}$ As noted elsewhere, also in this case some similarity may be observed with typical MBA Northern Levant kitchen ware types. ${ }^{354}$ Some parallels in term of rim and neck morphology, however, may also be observed with other simple ware large-mouthed vessels from Tilmen lower town area P (Fig. 5.16: 5, phase 3; Fig. 5.18: 7, phase The kitchen ware inventory of P2 phase 3 includes a large mouthed pot ( 22 cm of rim diameter) with thick walls $(0.8 \mathrm{~cm}$ ), outside thickened, pointed rim and triangular lugs extending from the rim (Fig. 6.5: 3)..$^{355}$ Despite the smaller size, it definitely bears a close similarity with phase 1 cooking pot Fig. 6.2: 5 (see commentary above).
In the access sector, the simple ware inventory of F. 1616 includes a small jar (Fig. 6.4: 1) with restricted mouth ( 12 cm of rim diameter), high, everted neck and simple rim with curved profile. It has reddish-yellow fabric and a greyish core, which indicates inaccurate firing, with medium-low frequency of mineral inclusions of small size. The shape is probably to be ascribed to the cluster of so-called shoulder goblets. ${ }^{356}$ However, differently from the samples already observed from area K-3 (Fig. 4.8: 3), P (F. 5.20: 4) and P2 phase 1 (Fig. 6.2: 1-2), Fig. 6.4: 1 has slightly thicker walls, so that, considering the limited state of preservation, an attribution to a different morphological category may not be excluded. ${ }^{357}$

[^105]The storage ware inventory includes a large-mouthed vessel ( 38 cm of rim diameter) with curved, everted neck, and squared rim with a single groove on the outer, lower side (Fig. 6.4: 3). The shape does not seem to be widespread in the MBA Northern Levant. A close comparison is attested from layers attributed to LB II of Tarsus (Goldman 1956: fig. 389: K).

### 6.4.4 The ceramic inventory of phase 4 (LB I)

Only 9 samples, representing the $11 \%$ of the Area P2 inventory of diagnostic pottery, derive from phase 4, related to the more superficial deposits, and specifically from F.1614, in the access sector, above the fill of phase 3 F. 1616 (Table and Diagram 6.1). The phase 4 inventory of diagnostic pottery is composed of equal percentages of base-sherds and rim-sherds, both categories accounting for $33 \%$ of phase 4 ceramic inventory. Smaller clusters belong to fragments of handle ( 225 of phase 4 ceramic inventory) and wall (11\%) (Table 6.2; Diagram 6.3).

All the samples are to be related to the general functional horizon of simple ware (Table 6.3, Diagram 6.5).

Concerning morphology, the small assemblage of potsherds with detected morphology is composed of 3 samples of bowls (Table 6.5 and Diagram 6.7).

Three samples have a preserved portion of base, but they belong to unselected samples whose precise typology has not been detected (Table 6.7).
No sample of decorated pottery is attested.
The inventory of open shapes includes a miniaturist carinated bowl with in-turned, concave upper sides and simple, rounded rim (Fig. 6.6: 2), in grey fabric with reddish core and abundant mineral inclusions, and a medium-size shallow bowl with inside thickened rim (Fig. 6.6: 1).

Comparable carinated bowl profiles are attested in painted pottery in Alalakh level VIII (Heinz 1992: cat. A: pl. 20: 27), but they have larger diameters. Also slightly larger is a sample from Toprakhisar Building II (Akar, Kara 2018: fig. 15: 6), dating to MB II. The sample from Tilmen P2, however, might also be a residual from earlier periods.

[^106]The shallow bowl Fig. 6.6: 1 presents close similarities with specimens attested in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 4: 14-15, type 1121), ${ }^{358}$ continuing, in some variants, in the LBA. Similar typologies are also typical of LBA central Anatolia. ${ }^{359}$

The last indicator is an open rim-sherd (Fig. 6.6:3), ca. 11 cm of rim diameter, in reddish-yellow fabric, characterised by outside thickened rim with two, large groovings on the upper side. Grooved rim vessels are largely widespread in MBA Tilmen Höyük. ${ }^{360}$ The rim profile finds a close comparison in Tilmen lower town area $\mathrm{K}-1$ (Fig. 2.3: 8), and in area K-3 (Fig. 4.9: 1). The small opening, however, is unusual for this kind of vessel, ${ }^{361}$ so that an interpretation as a stand is highly likely. ${ }^{362}$
6.4.5 The ceramic inventory of Phase 5 ( $11^{\text {th }}-12^{\text {th }}$ cent.) (by Raffaella Pappalardo)

A single sample, representing ca. $1 \%$ of the Area P2 inventory of diagnostic pottery, derives from phase 5 , and is related to the late reuse of the area (Table and Diagram 6.1). The sample corresponds to an almost complete profile of a jug. Concerning function, it may be ascribed to the general horizon of simple ware (Table 6.3, Diagram 6.5). The preserved base has a ring profile.
The vessel (Fig. 6.7: 1) is a small jug, almost completely preserved in the lower part up to the neck; the rim and the handle are missing. The fabric is light red (MUNS. 2.5YR 6/6), with scattered mineral inclusions. The external surface of the upper part is covered by light green glaze over a thin layer of white slip, still evident where the glaze is not preserved; the bottom is unglazed.
No close comparison has been found so far: the shape seems to be related to the Abbasid tradition, but ware and fabrics would seem to point to a later date, probably to be located around the $11^{\text {th }}-12^{\text {th }}$ cent.

[^107]In fact, this type of green monochrome ware is fairly common in every Islamic context at least from the $12^{\text {th }}$ cent. until the $15^{\text {th }}$ cent. However, the morphology of the body, which is globular and slightly flattened, seems to be quite unusual in that type of ware. In fact, the shape seems to find comparison with Abbasid jugs in buff ware or with the earlier variants of mould-made filter jugs, dating to the $12^{\text {th }}$ cent. (Rousset 1996: pl. 67: 700-702; Özyar et al. 2017: figs. 10-12; Vokaer 2018 fig. 2: 2-3; Pappalardo 2015).

### 6.5 SMALL FINDS (by Vittoria Cardini)

Excavations in the Area P2 brought to light five objects, of which three were fragmentary and two complete. Like in the Area P, the greater part of objects from this area are ground stones and stone tools.
The objects are divided by phase (see the details of P2 sequence at $₫ 6.2 .1$ ) and typology.

### 6.5.1 Phase 1

## Pestles

In the stratigraphic unit F. 1626 one pestle was found that presented a truncatedconical morphological typology: TH.06.P.142. The raw material is fine-grained basalt.

## Stone tools

A prismatic stone tool was found - TH.06.P. 144 - made with unidentified stone type. Also the function is not well understood, but probably it was used as a mortar or polisher, as it shows signs of use-wear from polishing pebbles.
6.5.2 Phase 3

## Pivot stones

In the stratigraphic unit F. 1621 was found a socketed stone tool, maybe a doorsocket, with quadrangular shape - TH.06.P. 315 - made with coarse-grained basalt. The internal hollow is 15 cm in diameter. The context is secondary, and it is not possible to attribute it to a specific room.

Several pivoted and socketed stones have been found in the Near East in both Bronze and Iron Age sites, and ethnographic observations have helped to reconstruct their use (Squitieri 2019: 217). Pivot stones are objects with concavities on one or both faces that do not perforate the stone, sometimes called 'door sockets'. Some scholars distinguish between stones with concavities on one or both faces and those with heavy wear marks leaving traces of concentric wear and polish (Rowan 2014: 930).

### 6.5.3 Phase 4

## Stone vessels

A deep tripod with short inner feet made with fine-grained basalt - TH.06.P. 25 was found in the stratigraphic unit F.1614. The internal diameter is 13.5 cm .

## Stone tools

A prismatic stone tool was found - TH.06.P. 30 - made with unidentified stone type. It shows signs of polishing pebble use-wear, but the function is not clear; probably it was used as a mortar or polisher.

### 6.5.4 Catalogue of small finds

TH.06.P.25, Stone Vessel (Pl. CXXV: TH.06.P.142, Pestle (Pl. CXXV: 4)

1a-1b)
Material: basalt
Dimensions: h. 9.4 cm ; d. 16 cm
SU: F. 1614
Bucket: TH.06.P. 350
Preservation: fragmentary
Material: basalt
Dimensions: h. 6.8 cm ; d. 5.7 cm
SU: F. 1626
Bucket: TH.06.P. 358
Preservation: fragmentary

TH.06.P.144, Stone Tool (Pl. CXXV: 5)
TH.06.P.30, Stone Tool (Pl. CXXV: 2) Material: stone
Material: stone
Dimensions: h. $13.4+\mathrm{cm}$; w. 8.7 cm ; th.
Dimensions: h. 13.6 cm ; w. 6.6 cm ; th. 3.3 cm
5.4 cm

SU: F. 1614
Bucket: TH.06.P. 350
Preservation: complete

SU: F. 1626
Bucket: TH.06.P. 358
Preservation: fragmentary

TH.06.P.315, Pivot Stone (Pl. CXXV: 3)
Material: basalt
Dimensions: 1.35 cm ; w. 32 cm
SU: F. 1621
Bucket: TH.06.P. 353
Preservation: complete

### 6.6 SYNTHESIS

6.6.1 Materials and chronology

The ceramic assemblage from area P2 is limited to a restricted number of diagnostic samples, which widely affetcs the value of statistical distributions. A few contexts, however, supply homogeneous and well-stratified assemblages that provide important information on the possible range of activities performed in the area and on chronology. Remarkably telling, in fact, is the set of materials recovered from the foundation layers - clustered in phase 1 - of the southern room of the building (L.1627), and from the last phase of use preserved in situ in the same room - clustered in phase 2 ( F .1622 ) - for which a 14C date is also available.
The ceramic inventory of P 2 phase 1, deriving from the foundation levels of the southern room of the building (L.1627), is related to a secondary context of deposition, but presents a relatively homogenous inventory of kitchen and table ware, thus suggesting that preparing and consuming food should have played an important role in the area. On the basis of internal and external ceramic comparisons, the lot seems likely to be related to an early phase of the MB IIB period.
The ceramic inventory of P2 phase 2 clusters samples recovered in situ smashed on the floor of the room (Fig. 6.3: 7) and potsherds deriving from the beaten earth deposit of the floor. Cooking, serving, mixing, and short-term storage seem almost equally important activities. The 14C data associated to F.1622, which spans from the mid- $18^{\text {th }}$ until the late $16^{\text {th }}$ cent. BCE, covers a period ranging from MB IIA until early LBA (or MB III) in term of Northern Levant chronology. According to stratigraphy and ceramic comparisons, the area P2 phase 2 seem likely to be related to a MB IIB ceramic horizon. However, considering the high continuity between $17^{\text {th }}$ and $16^{\text {th }}$ cent. ceramic production, a slightly later date for the end of the period - in the first half of the $16^{\text {th }}$ cent. BCE - cannot be excluded.

The ceramic inventory of area P2 phase 3 is quite limited and not particularly consistent. In addition, despite a few exceptions, most of the indicators are scarcely preserved, so that a sound evaluation of the sample is arduous. Concerning F.1621, in the northern room L.1623, the location of the deposit above the foundation filling of the room and the range of comparisons, which spans from MB I until early LBA (/ MB III) periods, may support a dating of the deposit in the late MB II or early LBA. However, considering that no occupational layer was preserved later than F. 1622 in room L. 1627 (phase 2), and considering the continuity of ceramic types between MB II and III, it may be hypothesised that F. 1621 is contemporary to phase 2 and should be dated to MB IIB or MB IIB-early LBA. However, a connection of phase 3 materials with a later period of occupation - not preserved in situ - or with a form of light frequentation of the partially ruined building after the phase 2 occupation may also be assumed. In fact, the assemblage of F.1616, which in addition to typical MB II-early LBA types includes also a possible later LBA sample, might support this second set of suppositions.
The assemblage of P 2 phase 4 is also quite limited, but it appears homogenous at least from the functional point of view, since it is entirely composed of simple ware, and of morphologies presumably related to serving activity. The meagerness of the ceramic sample, however, clearly affects a sound evaluation of consistency and cronology: the indicators are deeply rooted in the MB II ceramic tradition of the Northern Levant, but the range of internal and external comparisons also includes possible $16^{\text {th }}$ and $15^{\text {th }}$ cent. BCE parallels (LB I/ MB III-LB I). Considering the absence in the stratigraphy of P 2 of occupational layers later than F. 1622 (phase 2), in the absence of punctual and short-lived cronological indicators or indisputable distribution of ceramic parallels supporting a different chronology of the assemblage of phase 4, it may be hypothesised that the materials from phase 4 are in large part to be related to the last stratigraphically documented phase of occupation of the building, and thus to phase 2 (MB IIB [-early LBA]). However, as already stated in the case of phase 3, a connection of phase 4 with a form of frequentation, maybe of light nature, of the area and of the ruins of the building in a later date (LB I) is also possible.
The phase 4 is the last one that can be connected to the depositional sequence and use of the fortress. The phase 5 , in fact, testifies to a late use of the area, probably to be located around the $11^{\text {th }}-12^{\text {th }}$ cent. CE, when the building was in all likelihood visible as a ruin.

### 6.6.2 Architecture, layout and stratigraphy

The building techniques employed in fortress P2 coincide exactly to those already seen in the other buildings of the lower town fortification wall, and in particular in the building P.
As already seen in the case of the fortress P , in the case of the fortress P 2 as well the layout and building technique denote an accurate architectural planning.
The building process envisages the planning of accesses and passages together with the walls; when detectable, in fact, the passage thresholds coincide with one of the walls' outer scaffolds rows, which was laid down before the upper rows of walls and piers were positioned. The paving of the passages, in fact, mirrors the building scheme of the walls, with well-dressed outer scaffolds, corresponding to thresholds, and smaller stones and earth fillings. Unlike fortress P , however, the paving of the access to the building P2 does not seem particularly accurate, and the same may be said for the entrance L. 1620 .

Concerning the building layout, the fact that the enclosure walls east, ca. 1.6 m thick, were slightly larger than the enclosure walls north and south, ca. 1.5 m large, finds wide comparisons in the patterns of the casemates of the northern section of the lower town fortification wall: here, in fact, the walls enclosing the casemate blocks on the outer and on the inner sides of the fortification line are constantly larger than the spine walls, perpendicular to the directrix of the fortification line (see chapter 7).
The northern section of the building P2 was surely occupied by two staircase rooms perpendicular to the direction of the lower town western fortification line. Some doubts remain relating the arrangement of the southern sector, but probably, a large chamber - belonging to long rooms typology, perpendicular to the to the directrix of the fortification line - occupied the entire area. Access to the building is from the east, toward the inner side of the lower city. It gives direct access to the first ramp of the staircase, thus suggesting the urgency and importance, in the building function, of the access to the upper layers. This finds a close parallel in the northern section of the lower town fortification wall in the staircase blocks (CN2, CN5 CN7). With the same blocks, the fortress P shares the typical tripartite layout made of two narrow staircase rooms plus a larger chamber on one side, but unequivocal differences may be observed in size and accessibility. In fact, the fortress P2, ca. 12x10 m, is slightly larger with respect to the staircase blocks of the northern terrace wall, whose size range between $10.5 \times 7.5$ and $11 \times 8 \mathrm{~m}$, and presents an access room, L. 1620 , absent in the other
structures, that leads to the staircase and to the large chamber L.1627. Furthermore, the large chamber is blind in the northern casemates, and accessible from the floor level in P2. The sizes of the two-staircase rooms mainly comply with those of the northern casemates and of fortress P , characterised by a blind and slightly narrower second-ramp stair cage. ${ }^{363}$ The large sizes of the southern chamber of building P2, probably around $4.20 \times 6 \mathrm{~m}$, instead find only sparse comparisons in the buildings of lower town fortification system: ${ }^{364}$ similar dimensions, however, are observed in the largest chamber of the four-chamber blocks of the northern section of the fortification wall (see L.1165, $5.5 \times 4.15 \mathrm{~m}$ on the main axis), or in the atypical chambers of the block 8 (see $\S 7.8$ ). The remains in the chamber of a stone paved floor are remarkable, considering that most of the chambers of the buildings from lower town fortification system are beaten-earth. These remains suggest a more intense intended use of the chamber, and hint at a parallel with the northern chamber of fortress P L.1641. ${ }^{365}$

Pottery and finds do not point to a markedly specialised function; instead the building seems to have hosted different sets of activities, like processing food, cooking, serving, eating and short-term storage. As in the case of the building P, however, the setting and the relative massiveness of the stonework suggest the building may have played a role in the military scheme of defence of the city. Sherds of fired clay and a fragment of melted basaltic stone recovered in the superficial layer F.1614, in the area of the passage L.1618, evidently are to be related to a fire event, but widespread evidence of the same type is missing.

[^108]

Fig. 6.1 Plan of building P2.

| N. | Year | Area | Locus <br> Type | $\begin{aligned} & \text { Locus } \\ & \mathrm{N} . \end{aligned}$ | Bucket N. |  | Class | D |  |  |  |  | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1626 | 358 | 2 | Simple Ware | 6,4 | W | M | S | M- | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 2 | 2006 | P | F | 1626 | 358 | 1 | Storage Ware | 12,6 | W | M | S | M- |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ |
| 3 | 2006 | P | F | 1626 | 358 | 3 | Storage Ware |  | W | M | M | M |  |  | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \end{gathered}$ |
| 4 | 2006 | P | F | 1626 | 358 | 4 | Kitchen Ware | 44 | H | M | M | M + |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ |
| 5 | 2006 | P | F | 1626 | 358 | 6 | Kitchen Ware | 30 | W | M | S | M | $\begin{gathered} \text { 7.5YR } \\ 6 / 3 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |
| 6 | 2006 | P | F | 1626 | 358 | 5 | Kitchen Ware | 30 | W | M | M | M + | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 5 / 5 \\ \hline \end{gathered}$ | $\begin{gathered} \text { 2.5YR } \\ 4 / 2 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2.5 \mathrm{YR} \\ 4 / 2 \\ \hline \end{gathered}$ |

Fig. 6.2


Fig. 6.2. Area P2, Phase 1. Pottery assemblage of F. 1626.

|  |  | Area | Locus Type | Locus N. | Bucket N. | P.N. | Class | D | T |  |  | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1622 | $\begin{gathered} 354+ \\ 355 \end{gathered}$ | 3 | Simple Ware | 22 | W | M | M | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 2 | 2006 | P | F | 1622 | $\begin{gathered} 356+ \\ 357 \end{gathered}$ | 1 | Simple Ware | 18 | W | M | S | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 4 \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ |
| 3 | 2006 | P | F | 1622 | $\begin{gathered} 356+ \\ 357 \end{gathered}$ | 2 | Simple Ware | 18 | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ |
| 4 | 2006 | P | F | 1622 | $\begin{gathered} 356+ \\ 357 \end{gathered}$ | 3 | Simple Ware | 13 | W | M | M | M | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 1 \end{gathered}$ |
| 5 | 2006 | P | F | 1622 | $\begin{gathered} 354+ \\ 355 \end{gathered}$ | 2 | Simple Ware |  | W | M | S | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 6 | 2006 | P | F | 1622 | $\begin{gathered} 354+ \\ 355 \end{gathered}$ | 4 | Simple Ware |  | W | M | S | M+ |  |  | $2.5 \mathrm{YR}$ <br> 6/4 |
| 7 | 2006 | P | F | 1622 | $\begin{gathered} 356+ \\ 357 \end{gathered}$ | 5 | Storage Ware | 35 | W | M | M | M | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 6 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |
| 8 | 2006 | P | F | 1622 | $\begin{gathered} 354+ \\ 355 \end{gathered}$ | 1 | Kitchen Ware | $24,4$ | W | M | M | M+ | $\begin{gathered} 7.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 4 / 4 \end{gathered}$ | $\begin{gathered} \hline 7.5 \mathrm{YR} \\ 4 / 1 \end{gathered}$ |
| 9 | 2006 | P | F | 1622 | $\begin{gathered} 356+ \\ 357 \end{gathered}$ | 4 | Kitchen Ware | 24 | W | M | M | M+ |  |  | 2.5YR <br> 6/4 |

Fig. 6.3


7


Fig. 6.3. Area P2, phase 2. Pottery assemblage of F.1622.

| N. Year | Area | Locus <br> Type | Locus <br> $\mathbf{N}$. | Bucket <br> N. | P.N. | Class | D | T | Fab. Size Freq. Colour | Colour <br> (out) | Colour <br> (in) | (core) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1} 2006$ | P | F | 1616 | 351 | 1 | Simple <br> Ware | 12 | W | M | S | $\mathrm{M}-$ | 5 YR <br> $6 / 6$ | 5 YR <br> $6 / 6$ | 5 YR <br> $6 / 6$ |
| $\mathbf{2} 2006$ | P | F | 1616 | 351 | 2 | Simple <br> Ware | W | M | S | M | 5 YR <br> $6 / 8$ | 5 YR <br> $6 / 8$ | 5 YR <br> $7 / 4$ |  |
| $\mathbf{3}$ | 2006 | P | F | 1616 | 351 | 3 | Storage <br> Ware | 38 | W | M | M | M | 7.5 YR <br> $6 / 4$ | 7.5 YR <br> $6 / 4$ |

Fig. 6.4

|  | Year | Area | Locus Type | Locus N. | Bucket N. | P.N. | Class | D | T |  |  | eq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1621 | 353 | 1 | Simple <br> Ware | 19,2 | W | M | M | M |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |
| 2 | 2006 | P | F | 1621 | 353 | 2 | Storage Ware | 20,4 | W | M | M | M | $5 / 2$ | 6/6 | $\begin{gathered} 7.5 \mathrm{YR} \\ 5 / 2 \end{gathered}$ |
| 3 | 2006 | P | F | 1621 | 353 | 3 | Kitchen Ware | 22 | W | M | M | M | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 4 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 5 / 4 \end{gathered}$ |

Fig. 6.5


Fig. 6.4. Area P2, phase 3. Pottery assemblage of F.1616.


Fig. 6.5. Area P2, phase 3. Pottery assemblage of F.1621.

| N. | Year | Area | Locus Type | Locus N. | Buck N. |  | Class |  | T |  |  |  | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1614 | 350 | 2 | Simple <br> Ware | 21 | W | M | S | M- |  |  | $\begin{gathered} 5 \mathrm{YR} \\ 3 / 2 \end{gathered}$ |
| 2 | 2006 | P | F | 1614 | 350 | 1 | Simple <br> Ware | 8 | W | M | S | M- | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} \hline 5 \mathrm{YR} \\ 6 / 8 \end{gathered}$ | $\begin{gathered} 5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |
| 3 | 2006 | P | F | 1614 | 350 | 3 | Simple <br> Ware | 11 | W | M |  | M- | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 7 / 6 \end{gathered}$ | $\begin{gathered} 7.5 \mathrm{YR} \\ 6 / 1 \end{gathered}$ |

Fig. 6.6

| N. | Year | Area | Locus <br> Type | Locus <br> N. | Bucke N. |  | Class | D | T |  |  | Freq. | Colour (out) | Colour (in) | Colour (core) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2006 | P | F | 1619 | 352 | 1 | Simple <br> Ware | 8,2 | W | M | S | L |  |  | $\begin{gathered} 2.5 \mathrm{YR} \\ 6 / 6 \end{gathered}$ |

Fig. 6.7


Fig. 6.6. Area P2, phase 4. Pottery assemblage of F.1614.


Fig. 6.7. Area P2, phase 5. Pottery assemblage of F.1619.

## Chapter 7

## THE NORTHERN CASEMATE FORTIFICATION WALL

On the northern margin of the lower terrace, a conspicuous sector of the lower town fortification wall, ca. 126 m long, is preserved. ${ }^{366}$ The fortification line in this part of the site corresponds to a series of independent casemate blocks, each around $7-8 \mathrm{~m}$ in length, tightly adjoined along the short sides and forming an inset-outset layout. Intensive investigations in the area were conducted between 1971 and 1972 by Turkish archaeologists, who distinguished and brought to light 23 rooms divided into 8 casemate blocks over a length of ca 140 m (Alkım 1972: fig. 1; Alkım 1973: 62-63; Alkım 1974a: 5-6 and figs. 1-2; Alkım 1974b: 23 and figs. 1-4; Duru 1987: fig. 1; Duru 2003: 55-57; Duru 2013: 79 and pls. 21-22, 63). Original records attest to a particularly good state of preservation of walls and masonry, around 2 m high in some cases, and massive deposits. The stratigraphic investigations revealed a long occupational history that, according to ceramic evidence, was resumed in two main phases: one dating back to the Middle Bronze Age and one dating back to Late Bronze Age (Alkım 1974a: 5-6; Alkım 1974b: 23). The recovery of a typical pilgrim flask with bichrome painted decoration in one of the chambers, in particular, according to parallels with Karum Kanesh phase 1b, was the basis of the proposal dating of the construction to the first quarter of the $2^{\text {nd }}$ mill. BCE (Alkım 1974c; Duru 1987: 43).
Between 2003 and 2008, investigations in the area were resumed by the Turco-Italian expedition, which envisaged a cleaning of structures and masonry still preserved above surface and a detailed registration process. ${ }^{367}$ Unfortunately, by the 2000s the

[^109]structures were severely damaged. Increased vegetation followed the augmented water supply in the area, and the setting of paths along and through the lower terrace skirts has consistently accelerated the effects of natural disruption processes. A dense row of small trees and bushes grew close to and above most of the northern line of the wall, while the western edge of the northern sector has almost completely vanished. However, the meticulous topographic survey of the masonry, integrated with original plans and pictures from the Turkish excavation where the structures were excessively disrupted, enabled an accurate evaluation of building plans and, in some cases, of building processes, allowing us to clarify, detail and enrich the first schematic plan of the area. In the Turco-Italian topographic survey, the original numeration established by Turkish archaeologists of casemate blocks from 1 to 8 has been retained. However, the numbering of inner chambers - numbered 1 to 23 in the Turkish reports - and of the structures - without number in the Turkish reports - instead follows the Turco-Italian expedition recording system. The abbreviated form ' CN ' adopted in texts and plans stands for 'Casemates North'. ${ }^{368}$ The correspondence between Turkish and Turco-Italian denominations of the chambers, however, has been always specified in the text (Fig. 7.1; Pls. I-II, LXXXIV-XCVIII).
Two aerial shooting sets were carried out in 2004 (Pl. V) and 2008 (Pl. II) and allow for a global appraisal of the fortification system.
The presence of eight main casemate blocks has been confirmed by Turco-Italian investigations, although some changes with respect to the first investigations by the Turkish team have been proposed concerning the interpretation of blocks 7 and 8 . Twenty-one rooms have been clearly detected above the surface; two more rooms, whose intermediate walls were completely deteriorated at the time of Turco-Italian investigations, were further delineated on the basis of Turkish documentation.
The disposition of casemates blocks closely follows the ground configuration, developing along the margin of the lower terrace flat area. The terrace is around 3 m above the present day ground level in this part of the site: the wall is set around +455 and +456 msl , while north of it, the low slopes of the terrace decline consistently until +452.5 msl . Starting from the access K-2, the wall extends first toward the west, almost along an east-west trajectory. It turns gently toward the north-west from the third

[^110]casemate block onward, thus assuming a NW-SE orientation. Directional changes and adequate trajectories are obtained by mild variations in the block's orientation. Probably for this reason, in addition to the necessity to adapt to the sloping ground and to seal, as far as possible, intermediate gaps between blocks, some of the casemate units and chambers present a slightly irregular perimeter, which in some cases assumes an almost trapezoidal shape: considering the slight turn made by the fortification wall, the southern encircling walls of the blocks, which correspond to the outer perimeter of the turn, were always slightly longer than the blocks encircling the walls north, which corresponded to the inner perimeter of the turn. The walls of adjoined casemates are usually strictly joined to one another - see for example the northern casemate blocks 5 and 6, or 6 and 7 - but in a few cases, larger gaps are present, such as between the $2^{\text {nd }}$ and the $3^{\text {rd }}$ blocks. According to R. Duru (2013: 79) such gaps may have been the consequence of a displacement as a result of earth movements.
Access to the blocks, when attested at the floor level, is consistently from the south, toward the inner side of the lower city. The accesses are usually between 0.75 and 1.04 m large, their length corresponding to that of the encircling walls south, and are framed by well-dressed stone piers. A typical bottleneck layout is frequently engendered by two niches located on the inner side of the passage. Considering the location of niches, the doors sealing the access were probably located on the passage's inner side. Among the preserved gateways, a particularly accurate realisation of the piers is registered in the accesses to the staircase blocks. The preservation above surface of one of the doorsteps - L. 1150 in CN7 - indicates that the original floor level should have been located close to the actual surface level.
Considering the unlikelihood that windows opened in the encircling walls north, any lighting point must have been opened toward the south as well.

The absence of any kind of structure preserved above the surface south of the fortification wall suggests the possibility that a street developed along the casemate wall on the inner side of the lower city, thus allowing for a swift transit between the casemate blocks and along the fortification line.

A large section of the wall, from the $1^{\text {st }}$ casemate block to the $7^{\text {th }}$, is characterised by a marked regularity in building plans and size as well as materials, thus suggesting a rather intense and systematic building process making use of standardised modules. With the exception of some atypical blocks, the recurrence in modules and building techniques might be connected with a relatively short span of time of the building
phase, on the basis of which a sort of planning seems to be highly likely. In contrast, the western extremity of the wall's northern section resumed under the label of block 8 might have been connected with a different building phase. Differences in plans and building techniques, in fact, distinguish the $8^{\text {th }}$ block, thus suggesting a distance of some sort in chronology and/or function.
The walls are built in double-shell stone masonry without mortar. Medium and medium-small stones are employed in the building of casemate blocks 1 to 7; large and very large stones, instead, were employed in the building of the $8^{\text {th }}$ block. Ashlars or well-dressed stones, with flattened faces and sharped angles on the visible sides, are commonly employed in the corners of the buildings and as gateway piers. The same care is not observed in the wall facades, on the long sides of the walls, where stones with a single, coarsely flattened face are commonly employed. When the setup of the walls is clearly visible above surface, as in the $7^{\text {th }}$ block, the unbroken outline of the walls' outer scaffolds indicates a unitary planning and construction of the single casemate blocks. In fact, it envisages first the implementation of all wall's contour and, subsequently, the filling of the masonry core. According to this scheme, the walls perpendicular to the direction of the fortification line were not conceived as simple tongue walls, as they appear in other buildings of the lower town fortification system, but equal to perimetral walls. The encircling walls north, corresponding to the outer line of the fortification wall, range between 1.2 (CN7) and 1.6 m of depth (CN5-6): almost the same size are the encircling walls south that, with the exception of some smaller elements that are around 1.3 m thick, are usually around 1.6 m . Slightly thinner are the north-south walls, usually around 1.2 and 1.3 m thick. This characteristic too may be the result of an overall planning in which the juxtaposition of freestanding blocks - with the consequent juxtaposition and doubling of north-south encircling walls - was clearly foreseen.

Compared to the simple $\mathrm{N}-\mathrm{S}$ walls that divide the blocks inner chambers or delimit the blocks to the east and west, the walls between the double ramp staircase rooms stand out for their thickness, usually around 1.8 and 1.9 m , probably functional as support for the staircase structures.

With the exception of the unit 4, which is almost squared, the blocks 1-7 are mainly rectangular - or slightly trapezoidal - in shape, between 7 and 8 m large. The length of the units varies on the basis of their typology, ranging from the ca. $10-11 \mathrm{~m}$ of length of the three-chamber units to the 25 m of length of the longest four-chamber
units. A typical inset-outset layout is engendered by the juxtaposition of casemate blocks of different width, which creates niches and recesses, although not particularly accentuated, both on the inner and outer line of the fortification.

Concerning the casemate layout, three main typologies can be identified: the fourchamber type; the three-chamber type; and the single-chamber type.

The casemate blocks 1 and 6 belong to the four-chamber unit typology. The scheme of the blocks envisages two independent sectors, each composed of two chambers, accessed from the inner - like in CN1 - or outer chambers - like in CN6. Within the inner sectors, the circulation between the two chambers was surely at the floor level in the casemate block 6 , where the inner chambers were accessed through passages opened in the dividing walls, but it might have been from the upper stories in the casemate block 1. The four-chamber unit is the only one with a large chamber morphology, characterised by the disposition of the chamber's long sides along the same directrix as the fortification wall. All the other block typologies, in fact, depict long chamber layouts, characterised by the disposition of the chamber's long sides perpendicularly to the directrix of the fortification wall. The chambers, ranging from ca. 14 to $23 \mathrm{~m}^{2}$, might have been destined for different functions, among which domestic and/or working functions may be considered a possibility. The absence of staircase rooms does not prevent the presence of an upper floor or the use of the roof as wall walks: access to the upper layers, however, was functionally more crucial in other block typologies.
A functional focus on the upper layers is surely connected with the three-chamber block typology - the staircase blocks - to which the casemates blocks 2,5 and 7 belong. This building variant presents a remarkable uniformity in the three recovered samples: some variances are registered in the $7^{\text {th }}$ block in relation to walls and chamber sizes, but the overall layout appears consistent. The blocks 2 and 5, rectangular in shape, are around 10.5 m in width by 7.6 m in length; slightly larger is the block 7 , ca. $11 \times 8 \mathrm{~m}$ on the main axis. The blocks are composed of three parallel rooms of the long typology, joined on the long sides. The two narrowest rooms, which probably hosted a double ramp staircase in antiquity, occupied the central sector and one of the lateral sectors of the building; a larger chamber occupied the opposite side of the building. Access to the block is invariably from the central room, which corresponds to the first ramp of the staircase. The larger chamber may be located either on the eastern side - like in CN2 and CN7 - or in the western side of the block - like in CN5. The access and staircase room ranges between $1.2 \mathrm{~m}(\mathrm{CN} 7)$ and 1.44 m of
width (CN5) per 5.18 (CN7) and 4.30 m of length (CN5). The room of the second ramp stair cage, rigorously blind, is always slightly smaller in size, ranging from 0.85 m (CN2) to 1.3 m in width (CN5). The larger chambers, in the opposite side of the building, are between 3.34 m (CN7) and 4.47 m in width (CN2) by 4.50 (CN2) to 5.35 m in length (CN7), that is between ca. 11 and $17 \mathrm{~m}^{2}$. As well the other rooms of the building, they are blind at the floor level, and thus presumably accessed from the upper storeys or from the roof. A function as Kastenmauer sectors, destined to be filled with soils and scree for military purposes, may not be excluded, but it seems unlikely ( $\$ 8.4$ ). The recovery of graves in the chamber of blocks 2 and 7 is worth noting. The layout of the large chambers of the staircase blocks is remarkable too: in fact, compared with the chambers of the other blocks, they are always wider on the north-south axis. The slightly larger width of the staircase blocks with respect to the other units, while being responsible for the remarkably elongated layout of even the larger chambers, might have been related to the necessity to cope with the required length of the staircase ramps, perpendicular to the directrix of the fortification wall.

The staircase blocks are disposed at variable intervals among the other block typologies; in at least three cases, they are set in close relation to the four-chamber block typology - CN7 and CN6; CN6 and CN5; CN1 and NC2. A slightly shorter section of wall, ca. 16 m long, is set between the staircase blocks 2 and 5 , which hosted the single chamber block 4 and the block CN3 of dubious typology.
The casemate block 4 corresponds to a blind, single chamber. Considering the absence of clear material evidence, as already stated for the large chambers in the staircase blocks, in this case as well a function as Kastenmauer cannot be excluded but an access from the upper layers seems more likely. The chamber, of the long type, 3.6 m of length x 2.86 m of width and ca $10 \mathrm{~m}^{2}$ in extension, is slightly smaller than the block 6 smaller chambers but similar to the size of large chambers in the staircase blocks, although these last ones were characterised by a more elongated layout.
The poor state of preservation of the structures prevents a sound evaluation of the inner layout of the $3^{\text {rd }}$ casemate block. In fact, it might have belonged either to a double chamber typology, or to a staircase block. The double chamber layout does not find further comparison in the northern sector of the wall but, on the other hand, the location close to another staircase block immediately to the east - the CN2 - makes this latter interpretation somewhat dubious: the disposition of two adjoining staircase blocks, in fact, does not find any parallels.

Concerning the $8^{\text {th }}$ block, the typology of the layout does not find any parallel in the northern section of the fortification wall. The building includes three independent chambers of different shape and size opened at the floor level toward the inner side of the lower city. Overall, dissimilarities in the building process and layout suggest a difference of some sort from the other blocks of the northern section of the wall, which is probably to be explained in terms of chronology and/or function. The possibility of a long building process envisaging constructions and modifications of structures over a long span of time has been already suggested by Turkish archaeologists (Duru 2003: 55-57), who further report the evidence of either Middle and Late Bronze Age occupational phases at least in some of the blocks, as documented for the casemate 2 (Alkım 1974a). In addition to a chronological distance, which could support a change in building processes and conceptions in relation to a possible change in cultural or economic conditions, a functional distinction, either in a contemporary or chronologically distinct context, is also conceivable. The larger size of inner chambers would seem to point to a different functional intention than the majority of the chambers of the wall. Covering an area of ca $25 \mathrm{~m}^{2}$, the eastern chambers may be to some extent compared to those of the four-chamber blocks, but the western chamber L. 1159 , covering an area of ca. $42 \mathrm{~m}^{2}$, is definitely unusual. Thicker walls and larger building stones, which may be compared to those - megalithic - of the outer wall North and of the acropolis northern wall might have been related to more intense military or display necessities. One possibility is that more massive buildings may have been connected with a further access to the lower town located in this part of the terrace, but the complete disruption of the sector of the lower town fortification wall west of the $8^{\text {th }}$ block does not allow for a sound evaluation. The absence of any kind of associated material (Alkım 1974a) prevents any finer functional evaluation of the buildings.

### 7.1 BLOCK 1 - CN1

The first block of the northern sector of the lower town fortification wall, located immediately west of gate $\mathrm{K}-2$, is an elongated, rectangular unit, almost east-west oriented. Badly damaged at the time of Turco-Italian investigations, it originally belonged to a four-chamber casemate typology, composed of two independent double
chamber sectors with accesses at the floor level from the intermediate chambers (Fig. 7.2; Pls. LXXXVII-LXXXIX).

The block, parallel to the northern wall main axis, is 25 m long on the east-west axis and 6.37 m wide on north-south axis. ${ }^{369} \mathrm{It}$ is delimited by the wall W. 111 to the west, by the wall W. 1107 to the east and by the wall W. 110 to the south. At the time of the Turco-Italian investigations it was poorly preserved: the encircling wall north was completely lost, and only faint traces of some of the north-south tongue walls were still detectable above surface (Pl. LXXXVII: 1). The encircling wall west W.1111, north-south oriented, 1 m large, was preserved for 2.78 m of length (between +453.86 and $+454.44 \mathrm{msl})$. The encircling wall to the east W.1107, north-south oriented, 1.07 m large, was preserved for 2.89 m of length (between +453.80 and +454.32 msl ). Only a short portion of a further north-south wall, W. 1109 ( $0.65 \times 1.28 \mathrm{~m}$ on the main axis, +453.94 msl ), was preserved in the eastern part of the building, leaning against the encircling wall to the south W.1110. An access to the casemate block - 1.04 m width and 1.18 length, - located on the south-eastern side of the building, divides the encircling wall to the south, east-west oriented, into two sections: W. 1110 to the west, badly damaged, 16.74 m long ( $16.74 \times 1.34 \mathrm{~m}$ on the main axis, between +453.86 and +454.77 msl ), and W. 1108 to the east, 7.71 m long ( 7.71 x 1.22 m on the main axis, between +454.36 and $+454.56 \mathrm{msl})$.
A more articulated layout, however, is attested by photographic and topographic documentation of first investigations on the site, when the building was better preserved (Alkım 1974a) (Pls. LXXXVII: 2, LXXXVIII-LXXXIX). ${ }^{370}$ The casemate block 1 was composed of two main sectors, one to the west and one to the east, divided by an uninterrupted tongue wall, now disappeared. Each sector was composed of two adjoining, rectangular rooms of the large typology, east-west oriented: rooms 1-2 to the east, and rooms 3-4 to the west. According to the original plans, the two rooms were supposed to be connected at the floor level through a passage opened in the northern sector of the north-south dividing walls, but such passages are not straightforward from pictures, where the northern portions of the tongue walls between room 1 and 2 (Pls. LXXXVII: 2, LXXXVIII: 1) and between rooms 3 and 4

[^111](Pl. LXXXIX: 1, but compare with Pl. LXXXVIII: 2) would seem uninterrupted. In this case a connection from the upper stories or a function as a Kastenmauer may be further postulated.According to Alkım's plans, access to the two independent sectors was from the south, toward the inner side of the lower city, opened through the encircling wall south in the inner room 2 , to the east, still visible above the surface at the time of Turco-Italian investigations (Fig. 7.2), and in the inner room 3, to the west. Of all the internal tongue walls, only a small portion of the dividing wall between rooms 1 and $2-$ W. 1109 - was preserved in the 2000s.

The block adjoins the gate K-2 to the east and the casemate block 2 to the west. The northern face of the block is aligned to that of $\mathrm{K}-2$ to the east and retracted with respect to casemate block 2 (Pl. LXXXIX: 2) (Duru 2013: pl. 22: 1).

Although with an inverted circulation system, a similar internal layout recurs in the casemate north block 6 (see below).

### 7.2 BLOCK 2 - CN2

The casemate block 2 belongs to the three-room casemate typology, and corresponds to an independent unit composed of a double staircase room to the west with access from the first ramp, in the middle room, plus an adjoined larger chamber to the east (Fig. 7.3; Pls. XC-XCI).
The block, rectangular in shape, almost east-west oriented, parallel to the northern wall main axis, was originally $10.6 \times 7.6 \mathrm{~m}$ on the main axis. ${ }^{371}$ At the time of the Turco-Italian investigations, however, the northern half of the building was almost entirely deteriorated. The encircling wall north was completely lost, while the northsouth walls could be traced for ca. 4 m of length. The block is delimited by wall W. 1117 to the west $(2.15 \times 1.36 \mathrm{~m}$ on the main axis preserved, between +455.40 and $+455.43 \mathrm{msl})$, by wall W. 1112 to the east $(1.92 \times 1.27 \mathrm{~m}$ on the main axis preserved, between +454.75 and +455.15 msl ) and by walls W. 1113 ( $5.40 \times 1.63 \mathrm{~m}$, between +454.88 and $+455.44 \mathrm{msl})$ and W. 1123 to the south $(4.45 \times 1.51 \mathrm{~m}$, between +455.21 and +455.45 msl ).

371 The orientation of the unit was E-NE - W-SE to be precise.

The building hosts three parallel, long rooms, north-south oriented: L.1174, to the west ( 4.9 x 0.85 m ), corresponding to room 7 in Turkish excavations; L.1176 (4.47x2.44 $\mathrm{m})$, to the east - the room 5 in Turkish excavations - and L. 1175 ( $4.55 \times 1.13 \mathrm{~m}$ ) the room 6 in the Turkish excavations - in the middle. The central and western rooms, both narrow and elongated, probably hosted a double ramp stairway; the eastern room, slightly larger and extending over ca. $11 \mathrm{~m}^{2}$, may have been devoted to other purposes. No connection between the inner chambers was registered at the floor level at the time of first investigations: the room L. 1174 was in all likelihood blind, its function limited to that of staircase cage; the eastern chamber must be hypothesised to have been accessed from the upper storeys or to have functioned as a Kastenmauer sector. In any case, in addition to the presence of a simple earth burial, the recovery of either Middle and Late Bronze Age materials was registered by Turkish archaeologists who, on this basis, assumed the hypothesis that the fortification wall was occupied along the two phases (Alkım 1974a: 5-6).

Access to the block is by the middle room L.1775, throughout an opening in the encircling wall south. The gateway, 0.70 cm large and 1.67 cm long, is framed by well-dressed stones of regular shape, with flattened faces and sharped angled piers. Exposed for four to five stone rows at the time of first investigations (Pl. XC: 1), ${ }^{372}$ they were still preserved for two to three stone rows at the time of Turco-Italian investigations (Pl. XC: 2). Two niches, which may have been functional for the setting up of a door-socket, frame the passage inner side, to the north, thus reproducing the typical bottleneck layout.
Although the northern section of the building was lost by 2000s, documents from the first investigations attest that the block was slightly protruded with respect to the northern faces of blocks 1 and 3. In addition to gate piers, regular ashlars were also employed in the masonry of the protruding edges in this sector, which face the outer space (Pl. LXXXIX: 2). ${ }^{373}$
While perfectly adjoining to the casemate block 1 to the east, a considerable gap - ca 0.52 cm large - separates the block 2 from the block 3 to the west (Pl. XCI) (Duru 2013: pl. 22), which, as already suggested, may have been the result of masonry displacements connected to earth movements.

372But see also Duru 2013: pl. 22: 3.
373But see also Duru 2013: pl. 22: 1.

### 7.3 BLOCK 3 - CN3

The casemate block 3 apparently corresponds to a double chamber unit with access at the floor level from the western chamber, but an attribution to the three-room, staircase block typology cannot be excluded (Fig. 7.4; Pls. XCI: 2, XCIII-XCIV).
The block was originally ca $11 \times 6.9 \mathrm{~m}$ on the main axis, NW-SE oriented, parallel to the northern wall main axis. ${ }^{374}$ Pictures from the first investigations depict a thick deposit filling the rooms of the block, partially excavated in the eastern chamber (Pl. XCIV). The orientation of the preserved encircling walls east and west might support a slightly trapezoidal shape, comparable to that of some of the upper town casemate blocks whose plan needed to adapt to the slope, but at the time of Turco-Italian investigations, the northern half of the building was no more visible above surface, so that a precise evaluation was impossible. The encircling wall north was completely lost, while the north-south tongue walls - NE-SW oriented - were only partially preserved. The block is delimited by the north-south wall W. 1122 to the west, ca. 1.2 m wide, preserved for ca. 2.98 m of length (between +455.41 and +455.76 msl ), and by wall W. 1118 to the east, ca. 1.2 m wide as well, and preserved for ca. 2.02 m of length (between +455.44 and +455.55 msl ). The encircling wall south is divided into two portions by the access to the block: the wall W. 1121 west of the access, 3.75 m long and 1.5 m wide (between +455.68 and +455.76 msl ) and the wall W. 1119 east of the access, 6.42 m long and 1.7 m wide (between +455.51 and +455.63 msl ).
Traces of a further north-south tongue wall, W.1120, have been detected around the middle of the structure, close to the access. The wall, 1.30 m wide and preserved only over 0.93 cm of length, was jointed to the southern wall W.1119.
According to first investigations, the block inner space was divided into three adjoining inner rooms - room 8-10 from east to west - without connection at the floor level. The unit, however, was most probably composed of only two chambers divided by the wall W.1120: the chamber L. 1179 to the east, which corresponded to room 8 of Turkish reports ( $3.34 \times 4.09 \mathrm{~m}$ on the main axis, NE-SW oriented, $51 \mathrm{~m}^{2}$ ), and the chamber L. 1173 to the west ( $3.78 \times 4.17 \mathrm{~m}$ on the main axis, NE-SW oriented, $60 \mathrm{~m}^{2}$ ), corresponding to rooms 9-10 of the Turkish reports. ${ }^{375}$

[^112]375 No trace of a further NE-SW tongue wall north of W. 1120 were visible above the surface in 2000s. Moreo-

Access to the building is throughout a passage opened in the southern wall toward the western chamber L. 1173 . The passage, 0.89 m wide and 1.54 m long, is, as usual, framed by well-dressed stones with a rectangular base, preserved above surface on three stone rows (Pl. XCIII). On the inner side, a 35 cm wide niche is created by the joint with the tongue wall W. 1120.

The structure was too damaged to evaluate any possible connections between the inner chambers, but initial investigations did not register any connection between the rooms at the floor level, so that an access from the upper stories or a function as a Kastenmauer may be postulated.

As already observed, a relatively large gap divides the casemate block 3 from the casemate block 2 to the east; in contrast, the block 3 western wall and the block 4 eastern wall are almost adjoined.

With respect to the outer fortification line, block 3 was probably slightly retracted with respect to block 2, and almost aligned to block 4.

### 7.4 BLOCK 4 - CN4

The block 4 of the lower town northern casemates corresponds to a single chamber unit without access at the floor level (Fig. 7.5; Pl. XCII: 1).

The building, rectangular in shape and perpendicular to the northern wall main axis, is 5.6 m on the NW-SE axis and 6.6 m on the NE-SW axis. The orientations of the walls coincides with that of block 3. The inner chamber L.1172, which corresponds to the room 11 in the Turkish reports, belongs to the typology of long chambers. It is 3.6 m on NE-SW axis by 2.86 m on the SE-NW axis, and covers an area of ca. $10 \mathrm{~m}^{2}$. It is delimited by wall W. 1124 to the west, 1.3 m wide (NE-SW oriented, $3.63 \times 1.3 \mathrm{~m}$ on the main axis preserved, +455.70 msl ) and by the parallel wall W. 1126 to the east, 1.3 m large as well (NE-SW oriented, $3.91 \times 1.3 \mathrm{~m}$ on the main axis preserved, between +455.65 and $+455.74 \mathrm{msl})$. To the south, it is delimited by the wall W.1123, 1.6 m wide (NW-SE oriented, $5.74 \times 1.6 \mathrm{~m}$ on the main axis,

[^113]between +455.72 and +456.22 msl ). The encircling wall north W. 1125 , largely disrupted in 2000s, was probably ca. 1.4 m wide, almost aligned to the northern wall of the casemate block 3 to the east and, probably, slightly retracted with respect to the northern wall of the casemate block 5 to the west. The absence of any passage detected at the floor level suggests the possibility of an access made by the upper floors. Although parallels in the Tilmen Höyük lower town fortification system are very few, the possibility that the building might have functioned as a Kastenmauer cannot be excluded.

### 7.5 BLOCK 5 - CN5

The block 5 of the lower town northern casemates belongs to the staircase block typologies and corresponds to an independent unit composed of a double staircase room to the east with access from the first ramp, in the middle room, plus an adjoined, larger chamber to the west (Fig. 7.6; Pl. XCII: 1, XCV).

The block, rectangular in shape, NW-SE oriented, parallel to the fortification wall main axis, is 10.5 m long - on the NW-SE axis - and 7.7 m wide - on the NE-SW axis. The north-eastern corner of the building was largely disrupted by the 2000s, but the general layout was still detectable above the surface. The structure is delimited by wall W.1133, 1.1 m wide, to the west (NE-SW oriented, $4.76 \times 1.1$ on the main axis, +456.92 msl ) and by wall W.1129, 1.2 m wide, to the east (NE-SW oriented, $3.63 \times 1.2 \mathrm{~m}$ on the main axis preserved, $+456.80 \mathrm{msl})$. The encircling wall north-east, W.1130, ca. 1.6 m wide, was preserved only in the western part (NW-SE oriented, $7.26 \times 1.6 \mathrm{~m}$ on the main axis preserved, between +455.82 and $+455.95 \mathrm{msl})$. The encircling wall south-west, ca. 1.7 m wide, is divided into two sections by the access to the building: wall W. 1132 west of the access, 5.03 m long (NW-SE oriented, $5.03 \times 1.6 \mathrm{~m}$ on the main axis preserved, between +456.73 and +456.82 msl ) and wall W.1127, 4.65 m long, to the east (NW-SE oriented, $4.65 \times 1.6 \mathrm{~m}$ on the main axis preserved, between +456.29 and +457.02 msl ).

Access to the building is from the south, throughout a passage opened toward the middle chamber L.1170, which probably hosted the first ramp of a staircase leading to the upper floors. The passage, 0.8 m wide and 1.73 m long, is, as usual, framed by well-dressed stone piers, with flat faces and sharped angled sides which were still
preserved for three stone rows above surface in the 2000s. To the north, on the inner side, two niches ca. 30 cm large are engendered by the junction with the tongue walls W. 1131 and W.1128, thus reproducing the typical bottleneck layout.

Two parallel NE-SW tongue walls, W. 1131 to the west, 1.3 m wide $(4.15 \times 1.3 \mathrm{~m}$ on the main axis, +456.70 msl ) and W. 1128 to the east, 1.8 m wide, preserved only on the southern portion $(3.37 \times 1.8 \mathrm{~m}$ on the main axis preserved, between +456.27 and +456.70 msl ), divide the building inner space into three elongated, parallel rooms, NE-SW oriented, perpendicular to the fortification wall main axis. Among the rooms, no connection was detected at the floor level at the time of first investigations.

Two narrow rooms, L. 1171 and L.1170, corresponding respectively to rooms 12 and 13 of Turkish reports, occupy the central and eastern part of the building and, in all likelihood, featured a double ramp staircase functional for reaching the upper floors. The middle room L. 1170, $4.28 \times 1.44 \mathrm{~m}$ on the main axis, should have hosted the first ramp of the staircase; the eastern room L.1171, $4.59 \times 1.3 \mathrm{~m}$ on the main axis, was in all likelihood blind, its function limited to that of staircase cage.
A slightly larger chamber, L. 1169 ( 4.77 x 2.4 on the main axis, ca. $11.5 \mathrm{~m}^{2}$ ), corresponding to room 14 of the Turkish reports, is located on the western part of the building. This chamber too is apparently blind, thus suggesting the possibility of an access from the upper floor or, as already hypothesised for CN4, a function as a Kastenmauer sector.

The casemate block 5 is strictly adjoined to the casemate block 4 to the east and to the casemate block 6 to the west. The north-eastern façade, facing the outside of the city, probably jutted outward slightly with respect to the block 4 and was almost aligned to the block 6 .

### 7.6 BLOCK 6 - CN6

The block 6 of the lower town northern casemates belongs to the four-chamber casemate typology and corresponds to a long, rectangular unit composed of two double-chamber sectors with access at the floor level from the outer chambers (Fig. 7.7; Pl. XCVI).

The block, parallel to the fortification wall main axis, is NW-SE oriented, 25.8 m long and 7.3 m wide. The NE wall was severely damaged in 2000s, as was the

NW corner of the building (Pl. LXXXII: 1). The structure is delimited to the east by the wall W.1135, 1.2 m wide (NE-SW oriented, $4.55 \times 1.2 \mathrm{~m}$ on the main axis, +457.02 msl ) and by the wall W.1142, ca 1.3 m wide, to the west (NE-SW oriented, $4.15 \times 1.3 \mathrm{~m}$ on the main axis, $+457.03 \mathrm{msl})$. The encircling wall NE, W.1136, ca. 1.6 m wide, was entirely preserved for a small portion to the west but rather damaged for the remaining length. The southern, inner face, however, was clearly detectable above the surface (NW-SE oriented, $25.05 \times 1.6 \mathrm{~m}$ on the main axis, between +455.85 and $+456.75 \mathrm{msl})$. The encircling wall south-west, NW-SE oriented, ca. 1.6 m wide, is divided into three sections by the accesses to the block: W. 1141 to the west ( $5.44 \times 1.51 \mathrm{~m}$ on the main axis, between +457.08 and +457.26 msl ); W. 1138 in the middle ( $13.33 \times 1.58 \mathrm{~m}$ on the main axis, +456.97 msl ) and W. 1134 to the east ( 5.51 x 1.49 m on the main axis, between +456.55 and +456.76 msl ).
Although with an almost inversed circulation system (see above), the block 6 internal layout reflects that of block 1. The block 6 inner space is divided into two independent sectors, both further divided into two chambers. Access to each sector is from the south, throughout the external chambers; further access to the intermediate, inner chambers is granted by passages at the floor level flanking the inner façade of the north-eastern wall W.1136.
The tongue wall W. 1139 (NE-SW oriented, $3.87 \times 1.3 \mathrm{~m}$ on the main axis, +456.74 $\mathrm{msl}), 1.3 \mathrm{~m}$ wide, leaning against W. 1136 to the north and wall W. 1138 to the south, parts the two independent sectors, one to the east and one to the west (Pl. XCVI: 1).
In the eastern sector, a further tongue wall, W.1137, 1.3 m wide, leaning against wall W. 1138 to the south (NE-SW oriented, $3.20 \times 1.3 \mathrm{~m}$ on the main axis, +456.48 $\mathrm{msl})$, divides the inner space into two chambers of large typology: L. 1168 to the east, which corresponds to room 15 of Turkish reports, and L. 1167 to the west, which corresponds to room 16 of the Turkish reports. The eastern and external chamber L. 1168 is the smallest one, almost squared in shape (NW-SE oriented, $5 \times 4.4 \mathrm{~m}$ on the main axis; ca. $22 \mathrm{~m}^{2}$ ); the western and inner chamber L. 1167 , rectangular in shape (NW-SE oriented, $5.2 \times 4.3 \mathrm{~m}$ on the main axis; ca. $22.36 \mathrm{~m}^{2}$ ) is slightly larger. Access to the eastern sector is from the south, throughout an opening - 0.79 m wide and 1.4 m long - between the southern encircling walls W. 1134 and W.1138. The flanking piers were not particularly well-preserved, but a short niche -13 cm in depth - is engendered on the north-western edge of the passage by the junction between the tongue wall W. 1137 and the southern wall W.1138. The passage leads into the
eastern room L.1168, where it occupies the south-western corner. A further passage in the north-western corner of the room, opened throughout the northern section of the tongue wall W.1137, connects to the western room L.1167. The passage, 97 cm wide and 117 cm long, is framed to the NE by a short pier jutting from the wall W. 1136 that engendered two small niches on the NE and NW side of the passage; to the SW it was framed by the NE short face of the wall W.1137.
Specular to the eastern sector layout is the western sector layout. The tongue wall W. $1140,1.3 \mathrm{~m}$ large, leaning against the wall W. 1138 to the south (NE-SW oriented, $2.90 \times 1.3 \mathrm{~m}$ on the main axis, +456.52 msl ) parts the western sector inner space into two chambers: L. 1166 to the east, corresponding to room 17 of the Turkish reports, and L. 1165 to the west, corresponding to room 18 of the Turkish reports. Unlike the eastern sector, in the western sector, the western, external room L.1165, rectangular in shape, of the large typology (NW-SE oriented, $5.5 \times 4.15 \mathrm{~m}$ on the main axis; ca. $22.82 \mathrm{~m}^{2}$ ), is slightly larger, while the eastern, internal room L. 1166 , which belongs to the long typology ( 4.15 m on the NE-SW axis and 3.3 m on the NW-SE axis) is definitely smaller. As in the eastern sector, access to the western sector is from the south, through an opening -0.92 m wide and 1 m long - between the southern encircling walls W. 1141 and W. 1138 (Duru 2013: pl. 22: 5). On the north-eastern side of the passage, a short niche is produced by the junction between the tongue wall W. 1140 and the southern wall W.1138. The passage gives access to the external, western room L.1165, opening toward its south-eastern corner. A further passage in the north-eastern corner of the chamber, opened through the northern section of the wall W.1140, grants transit toward the eastern, inner room of the sector, L.1166. The passage, 70 cm wide and 135 cm long, is framed to the $S W$ by the northern, short face of the wall W.1140. A pier jutting from the NE wall W. 1137 frames the passage to the NE and produces two small niches on each side.
The eastern and western encircling walls of casemate block 6 are strictly adjoined to the parallel encircling walls of the casemate blocks to the east and to the west. The outer façade of the block - W. 1136 NE face - is almost aligned to the casemate block 5 to the east, while it is markedly retracted with respect to the block 7 to the west.

### 7.7 BLOCK 7 - CN7

The block 7 of the lower town northern casemates belongs to the three-chamber, staircase block typology and corresponds to a rectangular unit composed of a double staircase room to the west with access from the first ramp, in the middle room, plus an adjoined, larger chamber to the east (Fig. 7.8; Pls. XCVI: 1, XCVII: 1).

The unit, rectangular in shape, NW-SE oriented, parallel to the fortification wall main axis, is 11 m long - on the NW-SE axis - and 8 m wide - on the NE-SW axis. The outer, encircling wall NE was only partially detectable above the surface in 2000 s, forming the western portion of the building. At the time of first investigations, however, some of the masonry was preserved for ca 2 m height (Pl. LXXXVI: 1). The structure is delimited to the west by the 1.4 m wide wall W. 1149 (NE-SW oriented, $5.2 \times 1.4 \mathrm{~m}$ on the main axis, +457.91 msl ) and by wall W .1144 to the east, ca. 1 m wide (NE-SW oriented, $5.34 \times 1 \mathrm{~m}$ on the main axis,). Concerning the encircling wall NE, wall W.1145, ca. 1.2 m wide (NW-SE oriented, 11.09x1.2 m on the main axis, +456.47 msl ) both the southern face of the western section and the northern face of the eastern section were scarcely detectable above the surface, but the outer edges of the building and the southern face of the eastern section were still in place, thus allowing for a sound reconstruction of the wall volume. Relating to the encircling wall South-West, NW-SE oriented, ca. 1.3 m wide, the access to the building divides it into two sections: W. 1147 to the west ( 4.3 x .1 .3 m on the main axis, between +457.98 and +458.03 msl ) and W. 1143 to the east $(5.84 \times 1.3 \mathrm{~m}$ on the main axis, +457.88 mThe block's inner space was in all likelihood divided into three long, parallel rooms, NE-SW oriented, perpendicular to the fortification wall main axis: two narrow and elongated rooms on the western sector, L. 1169 to the west and L. 1163 in the middle, and a larger chamber to the east, L.1164. A double ramp staircase was in all likelihood hosted in the two narrow rooms, with the first ramp located in the middle room L.1163, where the access to the block is also located, and the second ramp staircase cage hosted in the western room L.1162. The thick wall W. 1148 (NE-SW oriented, $5.2 \times 1.8$ on the main axis, +457.11 msl ), 1.8 m wide, divides the two staircase rooms, its massiveness evidently functional to supporting the staircase structure. The western room L. $1162,5.16 \mathrm{~m}$ long and 90 cm wide, corresponding to the room 21 in the Turkish reports, is delimited by the encircling wall W. 1149 to the west; by the encircling wall W. 1145 to the north; by the encircling wall W. 1147 to the south; and by the tongue wall W. 1148 to the east. Although the delimiting masonry
of room L. 1162 was severely damaged above the surface at the time of the Turco-Italian investigations, the outline of the wall's scaffolds attests a single, original planning of the building layout that, instead of proceeding by building of a series of single walls, envisaged first the implementation of all wall contours and subsequently the filling of the masonry core. The central room L.1163, corresponding to the room 20 in the Turkish reports, is delimited by walls W.1148, W.1145, W. 1146 to the west, north and east respectively, and by the gateway L. 1150 to the south. With respect to the second ramp room, it is slightly larger, measuring $5.18 \times 1.2 \mathrm{~m}$ on the main axis. The tongue wall W.1146, 1.1 m large (NE-SW oriented, 5.11x1.1 on the main axis), divides the middle room L. 1163 from the eastern chamber L.1164. The chamber L.1164, corresponding to the room 19 in the Turkish reports, is delimited by walls W.1146, W.1145, W. 1144 and W. 1143 to the west, north, east and south respectively, and measures $5.35 \times 3.34 \mathrm{~m}$ on the main axis (NE-SW oriented; ca. $17.86 \mathrm{~m}^{2}$ ).
Access to the building is from the south, throughout the gateway L.1150, opened between the walls W. 1147 and W.1143. The passage, 0.95 m wide and 1.28 m long, is framed by well-dressed stone piers. Two niches ( 23 cm and 38 cm large to the east and to the west respectively) are engendered on each side of the inner threshold by the junction with the tongue walls W. 1146 and W.1148, thus reproducing the typical bottleneck layout. The outer ( +457.60 msl ) and inner doorstep ( +457.55 msl ), made of large, flattened stones, were still preserved above the surface.
The access leads directly to the middle room L. 1163 and, presumably, to the staircase, thus suggesting the main or the significant function of the building was connected to the upper storeys. No connection at the floor level was detectable between the rooms of the building: the function of the narrow room L. 1162 may have been limited to that of staircase cage; concerning the larger chamber L.1164, as for other large, blind chambers of the casemate system (see above CN4 and CN5), it might have been accessed from the upper floor or it might have functioned as Kastenmauer sector. The recovery in the chamber of a pit grave at the time of first investigations (Alkım 1974a; Duru 2013: pl. 54: 2), however, would point to the first hypothesis.
Concerning the setting of the block within the northern sector of the lower town fortification wall, the encircling wall east is apparently tightly adjoining to the encircling west wall of the casemate block 6 . The adjoining casemate block to the west, however, does not present any proper encircling wall to the east, and seems to lean directly against CN7 wall W.1149.

To the north, on the outer fortification line, the casemate block 7 is projected outward 1 m with respect to block 6 to the east, and retracted around 70 cm with respect to the block 8 to the west.
In the eastern chamber L.1164, a pit burial was uncovered by Turkish archaeologists below the chamber floor, at a depth of -1.40 m (Alkım 1974a: 6 and fig. 1; Duru 2013: pl. 54: 2), with one deceased person disposed in the hocker position. Among the funerary gifts, the presence of an almost complete 'pilgrim flask' with bichrome painted decoration of concentric, circular motifs is particularly worth noting (Alkım 1974a: fig. 2). Based on remarkably pertinent comparisons with Kültepe Karum level 1 b , in fact, a parallel dating to the first quarter of the $2^{\text {nd }}$ millennium BCE was hypothesised for the northern wall building phase (Alkım 1974c; Duru 1987: 43). The ceramic typology, which is known from different contexts from south-eastern Anatolia, the Syrian Euphrates and the Northern Levant, remains a peculiar and specialised production: frequently found in funerary contexts, it has been tentatively connected with wine distribution and consumption (see Einwag 2007: 202-205 and Einwag 1998, with extensive bibliography). A large inventory of almost entire shapes has been recently uncovered from the Zincirli Complex DD destruction layer, dating to mid-17 ${ }^{\text {th }}$ cent. BCE (Morgan, Soldi 2021: fig. 26). Related variants are known from both Middle and Late Bronze Age contexts, but a particularly fitting comparison for the Tilmen sample, presenting a double-handle morphology instead of the more common single handle morphology, and polychromic painting, may be found in the grave n. 4 from Kültepe lev.1a (Emre 1995: fig. 8, type A1b). The discovery, in any case, attests to the integration of Tilmen into the transregional trade networks.

### 7.8 BLOCK 8 - CN8

West of block 7, the $8^{\text {th }}$ block in the casemate northern sector corresponds to a series of three chambers, L.1161, L. 1160 and L. 1159 from east to west, without connections between them and probably all opened toward the inner side of the lower city (Fig. 7.9; Pl. XCVII: 2).
At the time of the Turco-Italian investigations, the western portion of the structure was completely disrupted, so that the complete layout and extent of the building was not detectable. Unlike the other blocks of the northern sector of the lower town
fortification wall, block 8 is not framed by a proper perimetral wall to the east but leans against the western wall of the adjoining block to the east. With the exception of a section north of the intermediate chamber, the encircling wall north is partially deteriorated, so that it is impossible to clearly identify the line of the outer fortification: according to the first investigations on the site, the wall was perfectly straight, but an indentation was probably present in correspondence to the western chamber L.1159. The larger size of building stones and walls is another aspect that marks a noticeable difference between block 8 and the other blocks of the northern section of the wall.
The block was preserved for $29.9 \times 8.5 \mathrm{~m}$ on the main axis, NW-SE oriented, parallel to the northern wall main axis. The eastern section of the northern wall W.1152, 2.30 m wide and 16.15 m long (NW-SE oriented, between +457.12 and +455.90 $\mathrm{msl})$, delimiting the central and eastern chambers L. 1160 and L. 1161 to the north. The tongue wall W.1153, 1.76 m wide and 4.3 m long (NE-SW oriented, +457.45 msl ), divides the two chambers, delimiting the chamber L. 1161 to the west and the chamber L. 1160 the east.
The chamber L.1161, which was attributed to block 7 in the Turkish reports, although almost squared, belongs to the large typology. Extending $4.75 \times 5.32 \mathrm{~m}$ on the main axis, NW-SE oriented, parallel to the northern wall main axis, it covers an area of $\mathrm{ca} .25 \mathrm{~m}^{2}$, thus representing, together with the adjoining chamber L. 1160 and, probably, the chamber L. 1159 to the west, the largest room of the northern wall. To the east, it is delimited by the casemate 7 western wall W.1149; to the south, it is delimited by the wall $\mathrm{W} .1151,1.68 \mathrm{~m}$ wide and 7.65 m long. A passage opened into the wall W. 1151 , ca. 1 m wide and 1.68 m long, is probably located around the middle point of the chamber and connects it with the inner side of the lower city.

The intermediate chamber L.1160, corresponding to room 22 of the Turkish reports, is characterised by an unusual layout, extremely large in terms of typology. In fact it is a narrow rectangle parallel to the main axis of the northern wall. The chamber, 9.44 m on the NW-SE axis by 2.67 m on the NE-SW axis, covers an area of ca. $25 \mathrm{~m}^{2}$. To the west, it is delimited by the tongue wall W. 1156 (NE-SW oriented, $3.35 \times 1.8$ on the main axis, between +456.61 and $+457.92 \mathrm{msl})$. The encircling wall south, retracted ca. 2 m with respect to the southern encircling wall of the chamber L.1161, 1.7 m wide, is divided into two sections by the access to the chamber: W. 1154 to the east, 6.82 m long, and W.1155, 3.55 m long, to the west (NE-SW ori-
ented, between +457.28 and $+458.41 \mathrm{msl})$. The access, 0.78 m wide and 1.5 m long, opens toward the western section of the room.
Only the eastern portion of the western chamber L. 1159 was preserved. The chamber, which corresponds to room 23 of the Turkish reports, is $5.4 \times 7.8 \mathrm{~m}$ on the preserved axis, NW-SE oriented, parallel to the northern wall main axis, and covers an area of ca. $42 \mathrm{~m}^{2}$. Although it is incomplete, the chamber is definitely outstanding in size, being remarkably more extensive than any other chamber so far delineated.
To the east, it is delimited by the tongue wall W.1156. The encircling north wall W. 1158 was badly damaged: preserved for 6.6 m length and 1.78 m depth (NW-SE oriented, +455.40 msl ), it was probably projected around 1.3 m with respect to wall W.1152. The encircling wall to the south, W. 1157 (NW-SE oriented, +457.05 msl ), 2 m wide, preserved for 6.67 m in length, is almost aligned to the intermediate chamber southern walls W. 1155 and W.1154. Access to the chamber is from the SE corner, throughout an opening between the southern wall W. 1157 and the wall W.1155. The opening, 1 m wide and ca. 1.9 m long, is framed to the west by the eastern short face of the wall W.1157; to the east it is framed by the western short face of the wall W.1155. On the northern, inner side of the passage, a 40 cm large niche is engendered by the junction between the walls W. 1156 and W.1155.

In addition to the unusual inner layout, also the perimeter of the $8^{\text {th }}$ block is remarkably irregular with respect to the other blocks of the northern sector, with indentations and niches on both the northern and southern facades. If the eastern and central chambers L. 1160 and L. 1161 appear to belong to a single block separated from the western chamber L. 1159 on the basis of the shared encircling wall to the north, the central and western chambers L. 1160 and L. 1159 would appear to belong to a single block independent from the eastern chamber L. 1161 on the basis of aligned southern walls.


Fig. 7.1. Plan of the northern casemate fortification wall.


Fig. 7.2. Plan of block $1-\mathrm{CN} 1$.


Fig. 7.3. Plan of block $2-\mathrm{CN} 2$.


Fig. 7.4. Plan of block $3-\mathrm{CN} 3$.


Fig. 7.5. Plan of block $4-\mathrm{CN} 4$.


Fig. 7.6. Plan of block $5-\mathrm{CN} 5$.


Fig. 7.7. Plan of block $6-\mathrm{CN6}$.


Fig. 7.8. Plan of block $7-\mathrm{CN} 7$.


Fig. 7.9. Plan of block $8-\mathrm{CN}$.

## Chapter 8

## CONCLUSIONS

Like in other contemporary centres of the Northern Levant, ${ }^{376}$ during the MBA the city of Tilmen was equipped with a complex defence system centred on two distinct fortification walls respectively encircling the upper/inner town and the outer/ lower town. The results of the investigations carried out on the site by the Turkish team directed by U. Bahadır Alkım (1959-1972) and Refik Duru (2002), and the new research program conducted by the Turco-Italian team directed by Nicolò Marchetti (2003-2008), provided an outstanding insight into the complexity of a fortification system of a small capital city. In fact, the extent of the exploration, integrating stratigraphic investigations and extensive topographic surveys, supplied very valuable datasets that have been assessed in strict correlation to the local and interregional cultural trajectories and the natural setting of the site and the region. The Tilmen lower town fortifications attest to a positive integration of the topography of the site and, probably, of the natural landscape into the requirements of a city fortification and its correlates in terms of defence, display of military capacity and of political and cultural strength, and in the delimitation and determination of space - in the tangible and intangible spheres - and its settlement.

In 1959, before excavations started at the site, some sections of the outer wall north were preserved up to the remarkable height of 4 m above the surface (Duru 2013: 77 and pl. 4: 1; Duru 2003: pl. 14: 1-2). ${ }^{377}$ However, after the Alkım team terminated the

[^114]work on the site, serious damages occurred to the structures. In particular, activities of systematisation of the water system, including the construction of a small dam (Duru 2003: pl. 42), had particularly invasive results, causing the destruction of previously well-preserved sections of the outer northern wall. Additional damages to the wall were registered as a consequence of the vegetation outbreak, particularly intense on the lower skirts of the höyük and on the western terrace thanks to the augmented water supply. On the eastern skirts of the höyük, instead, the arrangement of a path caused the dismantling of almost the entire remains of the massive towers flanking the main city gate K-6 (Duru 2003: 79; Duru 2013).
According to the observation of the Turkish archaeologists that first investigated the fortification system (Duru 2003: 56), the two walls suffered modifications and repairs also in ancient times, but the original plan seems to have been, to some extent, preserved. A reconstruction of the layout was firstly attempted by the Turkish team (Duru 1987: fig. 1) and subsequently refined on the basis of 2000s investigations (Marchetti 2010: fig. 1) (Pl. I).
The inner wall runs for around 500 m along the intermediate slopes of the höyük, in the south-eastern portion of the site. The outer wall, settled on the lower slopes of the site, follows the settlement profile and topography, encircling the western terrace and the eastern lower sides of the höyük over a length of ca. 900 m . The walls are composed of single, independent casemate blocks that are set in rows and angles following the topography of the slopes. At the time of first investigations on the site, around 50 blocks were recognised in the structure of the outer wall, while around 18 blocks had been counted in the inner wall (Duru 2003: 56).
Massive fortresses are located in key defensive spots, mainly in connection to sharp changes of the wall direction. On the low SE skirts of the höyük, a monumental gate (K-1-K-6), flanked by towers and guarded by two basalt lions, gives access to the city through the outer wall. Two small posterns are opened on the northern (K-2) and western sides (K-3) of the western terrace. A massive fortress $(\mathrm{P})$ guards the junction between the northern and the western sectors of the city wall and an additional smaller fortress or tower (P2) protects the western sector. A long section of the fortification wall has been exposed on the northern fringes of the western lower terrace.

### 8.1. SEQUENCE AND CHRONOLOGY

Turco-Italian stratigraphic investigations have concentrated in the area of the monumental gate $\mathrm{K}-1-\mathrm{K}-6$, of the gate $\mathrm{K}-3$, and of the buildings P and P 2 . The sequence of occupation brought to light spans from MB II to LB I. However, evidence of earlier occupation phases probably to be dated back to MB I has been recovered in the foundation layers of the building $\mathrm{P}(\mathbb{\$} 5.3$ ), while traces of possible forms of later frequentation of the area, dating back to the LB II, have been observed in the superficial deposits ( $\$$ 5.3.4). Evidence of the occupation of the site during the Roman Period has been documented in the area of the monumental gate $\mathrm{K}-1-\mathrm{K}-6(\$ 2.2 .1 ; \mathbb{\$}$ 2.3.2), while sparse traces of a reuse of the Bronze Age structures during the $11^{\text {th }}$ and $12^{\text {th }}$ cent. CE have been uncovered in area $\mathrm{P}(\mathbb{S}$ 6.2.4, 6.4.5). Unfortunately, most of the material derives from secondary contexts of deposition, and the evaluation of the typology and chronology of the assemblages must be most accurately extracted from the complex sequence of deposition. The correlation of pottery analysis, stratigraphy, and ${ }^{14} \mathrm{C}$ data allows us to set the main occupational phases archeologically documented between a late phase of the MBA and an early phase of the LBA, between the $17^{\text {th }}$ and $16^{\text {th }}$ cent. BCE (see Table 1.1). This span of time probably corresponds to the last substantial phase of use of the buildings of the lower town fortifications, but an integrated evaluation of stratigraphy and materials support the possibility of substantial earlier occupation phases dating back at least to the $18^{\text {th }}$ cent. BCE (MB IIA or MB IB-IIA). Evidence of a fire event that might be connected to the violent destruction of the MBA city archaeologically documented in the upper town, in addition to the indications registered by the Turkish team in the area of the monumental gate (Duru 2013: 81), is sparse in the new contexts excavated by the Turco-Italian team in the lower town fortification system, and is mainly limited to a single room of fortress $\mathrm{P}(\$ 5.2 .5)$. The site, however, continued to be inhabited also in the later LB II period: the area of the massive buildings of the lower town fortification system, although in large part ruined, probably also continued to be sparsely frequented.

### 8.2 BUILDING TECHNIQUES

The architecture is largely built of basaltic blocs, a stone particularly abundant in the area, with mud-bricks used for high section masonry. Turkish excavations docu-
ment the use in the foundation levels up to a height of 3-4 m of large and unshaped stones ranging from 1 up to 1.5 m in thickness weighing several tons (Duru 2003: 56). Photographs taken in 1959 before the beginning of excavations (Duru 2003: pl. 14: 1-2) and documenting the exceptional state of preservation of the outer wall before canalisation activities undertaken on the Karasu river provide clear evidence of this building technique.
The walls are usually made of a double shell of dry stonework, usually dressed on the outer face, with a core filled of smaller, irregular stones and sometimes scree. ${ }^{378}$ Also distinctive is the use of ashlars or well-dressed stones, with meticulously smoothed surfaces and sharped angles on the visible sides, corresponding to sensitive positions like the piers of the passages and the corners of the buildings, structurally significant and, probably, important in terms of display. The upper part of the structures, as documented by the collapse of fired mud-bricks found in K-1 bastions (Duru 2013: 81) and in the bastions south of it (Duru 2013: 78), were built in mudbricks, ${ }^{379}$ or mudbrick and timber, which is a building technique remarkably widespread but not exclusive in Anatolian contexts. ${ }^{380}$ Additional evidence of the use of mudbricks has been gathered from the area P. Considering the high availability and the ease of accessing basaltic stone directly on site, the choice to build the upper portions of the structure in mudbrick might be predominately connected with structural aspects. A cultural component, however, especially linked to the perception of the group identity, may have played a significant role as well.

### 8.3 THE LOWER TOWN: TOPOGRAPHY AND CIRCULATION

Except for the fortification system, which thanks to excavations and topographic surveys has been in large part identified, only a small portion of the lower city has

[^115]been investigated. ${ }^{381}$ Specifically, three sectors of the western terrace have been the object of geophysical investigations, but the superficial natural basalt rock hampered a clear reading of the buried evidence (Marchetti 2007a: 358). Extensive excavations instead have been concentrated in the area $M$, on the southern side of the terrace, and revealed the presence of a temple in antis (Marchetti 2006: 200-201; 2007a: 357-358; 2008a: 391; 2008b: 355-356; 2008c: 469; 2010: 371-372).
In fact, as far as it may assumed based on the topography of the site and the disposition of the fortifications, the largest part of the lower city was probably extended on the western, lower terrace. The fortification wall here encircles a flat area of ca. 1.7 ha . On the eastern side of the site, instead, the wall follows the profile of the low skirts of the höyük. Here, it encircles an area of ca. 1.5 ha, but most of this sector is occupied by rather steep slopes and, with the exception of the fortification structures, further buildings do not seem to be documented.

The scarcity and peculiarity of residential quarters brought to light in $2^{\text {nd }}$ mill. BCE urban centres in the Northern Levant and Northern Mesopotamia have suggested the possibility that these centres may have represented a sort of 'hollow cities', administrative cores characterised by dense official and high-status architecture, but low density of common residents. In this respect, the massive city fortifications would have served not only for the protection of the inner residents, but also of the rural inhabitants of the countryside (Morandi Bonacossi 2014: 283-284).
The use of the space and the circulation patterns in Tilmen lower city are not entirely clear. In addition to the defensive architecture, a key element in a fortification system is the organisation of transit, and the possibility to easily displace the number of defenders in critical points of the system in order to maintain their superiority in mobility and fire-power against the enemies (Macqueen 1986: 64-65).
The gates $\mathrm{K}-1-\mathrm{K}-6$, $\mathrm{K}-2$ and $\mathrm{K}-3$, opened in the outer wall, give access to the city. The main, monumental access to the city, $\mathrm{K}-1-\mathrm{K}-6$, is located to the SE . It is structured into two gate devices each shaped as a passage between two towers and connected by a paved path. A section projecting outward from the fortification wall constitutes the outer gate, on the Karasu river (K-6), flanked by massive towers with two lion-shaped stone blocks posed at their base. A transversal path leads to the inner gate (K-1), opened

[^116]in the lower town fortification wall. The northern (K-2) and western (K-3) lower city gates, although bearing clear evidence of quite an accurate building technique, constituted secondary access points, being structured as relatively narrow passageways through the casemate wall. A fourth access has been postulated on the southern side, opposite to K-2, but due to technical difficulties, investigations in the area remained circumscribed and direct evidence was never gathered (Duru 2013: 81, 83). ${ }^{382}$ Access to the acropolis, the seat of main monumental buildings, is granted by the passage K-5, opened in the inner wall, ca. 40 m north of K-1. This passage connects the eastern, lower skirts of the höyük to the upper city, but it is not clear if there was any connection between the eastern and the western sides of the lower city, or between the western side of the lower city and the upper city, and how it might have been shaped. In fact, an additional gate connecting the lower and the upper city has been hypothesised throughout the inner wall on the western slopes of the acropolis. A possible access was tentatively identified in a casemate block excavated on the skirts of the höyük by the Turkish team, in the area K-4 (Duru 1987: 41 and fig. 2: 3; Duru 2003: pl. 23: 2). This identification has never been confirmed, but the presence of a gate among the unexcavated casemates of the inner wall west and connecting the lower terrace and the acropolis remains quite plausible (Duru 2013: 83-84 and pl. 18). Discoveries made in Area M by the Turco-Italian team seem to further support this suggestion (Marchetti 2008b: 356). A further access to the acropolis from the lower city western terrace has been hypothesised in relation to the gate K-2. Unfortunately, the area on the inner side of the gate was impossible to investigate due to conspicuous deposits, and possible paths or infrastructures remained concealed (Duru 2013: 82). However, as observed by R. Duru (2013: 83), the complete segregation of upper and lower city, and the impossibility to access the lower city from the upper city and vice-versa, would appear unusual.
A street probably ran on the western terrace from the gate K-2 along the lower town fortification wall north (chapter 7). On the western side of the terrace, part of a path running east-west and connecting the lower town with the outside is documented for the length of the gate K-3 by the trajectory of a drain. The presence of a further path running from K-3 toward the north along the western wall, however, is not to be excluded (chapter 4).

382 The area, in fact, was selected as a dumping point during the first excavations on the upper town (Duru 2003: 57).

In addition to the streets at the ground level, it may be hypothesised that an additional path could have been located on battlements above the wall. In the northern sector of the terrace wall, the staircase blocks (CN2, CN5, CN7), that allow for a direct access to the upper storeys from the street, are located at close intervals, and also in the western sector of the wall, the staircase appears as a focal point in some of the main buildings, like P, P2 and K-3.

### 8.4 THE FORTIFICATION WALL

The city wall provides a defence for the inhabitants of the settlement against antagonists and defines and distinguishes in the physical and ideal spheres the inner and the outer space of a settlement. The presence of a fortified city is always primarily related to contexts of organised conflict, but the high symbolic value of $2^{\text {nd }}$ millennium BCE fortifications, their significance as markers of political and cultural power, either in the landscape, for the internal population, or in the context of peer polities, is not to be underestimated. ${ }^{383}$

The Tilmen lower town fortification system includes two main components: the wall encircling the lower terrace on the west, set on the high slopes of the terrace, and the wall encircling the low skirts of the höyük.
The additional height granted by the location on the upper slopes of the terrace increased the efficacy of the terrace wall. In fact, the Anatolian city walls were always positioned atop outcroppings or artificial ramparts (Mielke 2018: 72), and earthwork ramparts were one of the most peculiar features of MBA fortified cities of the Levant (Matthiae 2013: 286). The absence of a natural or artificial rise at the basis of the wall encircling the low skirts of the höyük to the east, instead, is unusual. In addition to the walls, the water beds of the Karasu river may also have played a role in the defence system of Tilmen. ${ }^{384}$

[^117]The terrace wall is composed of a northern and a southern sector, mainly oriented NW-SE, and a western sector, oriented N-S, that connects the others at right angles. The two secondary gates connecting the lower town with the outside are located on the northern sector ( $\mathrm{K}-2$ ) and the western sector ( $\mathrm{K}-3$ ).
The outer wall of the höyük was in some parts largely deteriorated already at the time of the first investigations on the site, but the outer perimeter was in large part drawn by the Turkish team (Duru 1987: fig. 1; 2013: pl. 18). The main city gate (K-1-K-6) is located on the SE sector. The connection between the terrace wall and the outer wall of the höyük is not entirely clear. The wall apparently adapts strictly to the ground conformation, and is shaped in linear segments placed side by side following the curved profile of the low skirts of the hill. A sharp angle was probably located to the south, to connect the SW and the SE sectors. Another sharp angle, almost squared, was located to the north, and formed a narrow niche at the junction with the northern sector of the terrace wall. The remains of this part of the fortification system are visible in the background of a picture from the Alkım excavations (Pl. LXXXVII: 2). Remains of the last casemate blocks to the NW, probably including at least two large rooms and two narrow rooms, have been detected by the Turco-Italian team at the margin of the water channel (Pls. I, LXXXVII: 2, on the right).
The conformation of the lower town fortification wall is at present best visible on the northern side of the lower terrace, where a long sector of the wall was excavated by the Turkish team during the first investigations of the site and subsequently cleared out and surveyed by the Turco-Italian team. In addition to the gate K-2, which constitutes an independent block at the eastern edge of the area (chapter 3), eight casemate blocks of the lower town fortification wall north have been detected (chapter 7). A ninth block ( $\$ 5.7$ ) has been identified at the western edge of the area, adjoined to the eastern side of the angular fortress $P$.
At least seven blocks have been identified on the western sector of the lower town fortification wall. Three of them have been extensively excavated: the first block to the north, which corresponds to the angular fortress P (chapter 5); the third block, which corresponds to the smaller fortress P2 (chapter 6); and the sixth block to the south, which corresponds to the gate K-3 (chapter 4). The second block of the sector, adjoined to the southern side of the fortress P , has been accurately surveyed and partially excavated ( $\$ 5.6$ ).

Less is known about the southern sector of the fortification system, but also in this area different walls and rooms have been detected above the surface (Pls. I, IV). The overall thickness of the fortification wall, given by the depth of the single casemate blocks, is impressive, and in the northern sector, where the wall is better detected, it is ca. 7-8 m large.

The length of the northern casemates varies on the basis of their typology, ranging from the ca. $10-11 \mathrm{~m}$ of length of the three-chamber units to the 25 m of length of the longest four-chamber units.

A typical inset-outset layout (Keeley et al. 2007) is engendered by the juxtaposition of casemate blocks of different width, which creates niches and recesses, although not particularly accentuated, both on the inner and outer line of the fortification. ${ }^{385}$

The analysis of the architecture and plans attests to a relatively long building process, envisaging constructions and modifications of structures over time. In the northern sector, the $8^{\text {th }}$ block to the west probably belongs to a building phase chronologically different from the other blocks of the area. In the western sector, the fortress P might belong to a secondary building phase with respect to adjoining casemates east, and the gate K-3 appears the result of a secondary arrangement of a space between two pre-existing casemate blocks.

Relating to sequence of use and chronology, the stratigraphic investigations in the northern sector of the wall made at the time of the first research on the site report the evidence of Middle and Late Bronze Age occupational phases at least in some of the blocks (Duru 2003: 55-57). The new data from the recent excavations in the areas P, P 2 and $\mathrm{K}-3$ confirms this reconstruction.

The Tilmen fortification wall may be generally classified as a 'casemate wall'. The term refers in general to a defensive building scheme, widespread since MBA in the Levant and Anatolia, envisaging two parallel walls, the inner and the outer façade of the fortification wall, connected by transverse walls. Openings toward the inner side of the city may also be present (Naumann 1971: 309-310; Gregori 1986; Burke 2008: 61-63; de Vincenzi 2014). The resulting rooms between the walls might be used for different purposes during peacetime, like dwelling or, maybe more frequently, storage (Burke 2008: 63; Mielke 2018: 70). However, when necessary, in case of attack

[^118]and siege, the rooms may be filled with rubble and debris, thus reinforcing the defensive power of the fortificatioAs already observed for similar fortification systems by H.-H. von der Osten (1937: 4), the distinction of the fortification front in different blocks divided by single or double transversal walls probably improved the defensive value of the structure, limiting the damage of a potential breach. The economic aspect, however, has been frequently considered the main concern in the choice of such a type of architecture: in fact, a large amount of building materials may be replaced by soil or scree without diminishing the efficacy of the structure (Mielke 2018: 69). In any case, the pervasiveness of similar massive fortification walls surely developed in conjunction with improved siege techniques, which in the MBA already included the use of earthen siege ramps, siege towers, and battering rams. Undermining fortifications and siege towers and burning defenders' and assailants' devices can be expected to have been part of the siege warfare repertoire as well. ${ }^{386}$
B. Gregori (1986) further distinguishes between effective and 'apparent' casemate walls. To this second typology, in fact, she ascribes all the cases in which buildings are rather regularly placed side by side along the perimeter of the city. This arrangement, in fact, would not relate to a coherent planning of a fortification system, but to a simpler and spontaneous answer to the necessity to circumscribe and protect a settled area that finds its roots in protohistoric practices. To a certain extent, the Tilmen wall, made of independent and functionally differentiated buildings, some of which, like the staircase blocks, were clearly not intended to be filled in case of siege, may be related to the category of 'apparent' casemate walls. ${ }^{387}$ On the other hand, despite evolutions and modifications over time, the planning effort, and the substantial military nature of many architectural components, put a visible distance between the Tilmen wall and more ancient fortification systems.

The term 'Kastenmauer', in German literally 'box-wall', usually refers to a building scheme comparable to the casemate wall, in which the transverse walls are mainly inserted at regular intervals, thus dividing the inner space into rectangular 'boxes'. In respect to 'casemate walls', the main focus in the Kastenmauer technique has been in-

386 For which see Melville, Melville 2008; Eph'al 2009; Melville 2020; Lorenz, Schrakamp 2011: 144-145; Wernick 2016.

387 Note that Gregori ascribed the fortifications of Tilmen Höyük to the category of 'effective' casemate walls (Gregori 1986: 217). However, the new data that emerged from the Turco-Italian excavations in 2000s led to a more accurate definition of the fortification system.
dicated in the inner filling of the boxes with soils and scree (De Vincenzi 2014: 853). In fact, consequently, the blocks compose a massive fortification structure perfectly fitted to withstand battering rams or siege attacks. ${ }^{388}$ The detection of the presence or the absence of an intentional filling of the boxes, however, is not free of any issues. During the - usually - long life of a fortification system, different architectural units may experience several functional changes that do not necessarily leave exhaustive evidence in the archaeological record, and the depositional sequence may be difficult to read.
In the Tilmen lower town fortification system, the employment of inner fillings in order to obtain almost 'solid' architectural blocks like in the Kastenmauer structures may not be excluded for some blind rooms of the blocks $1-5$, and 7 of the northern sector of the terrace wall, but it seems quite unlikely, while settlement functions are clearly attested. According to the first investigations on the site, instead, the employment of solid fillings in the towers of the outer gate K-6 is more probable.
The Kastenmauer building technique has been long taught to be originally Anatolian, but it finds large comparison also across different epochs and regions. Nevertheless, it seems to represent the preferred building system of $2^{\text {nd }}$ mill. BCE Anatolian fortification walls (Mielke 2018: 70). Despite the possible employment at Tilmen of some its principles, like the inner filling, typical Hittite Kastenmauer fortifications present a more 'evolved' layout than the Tilmen lower town fortification wall, and are characterised by bastions placed at regular intervals protruding 2-6 m from the actual wall (Mielke 2018: 71). The lower town wall of Tilmen, instead, is more closely similar to another, earlier, Anatolian example: the MBA Alişar Höyük city wall (von der Osten 1937: 3-47 and figs. 19-24). The Alişar city wall, which is between 5 and 6 m large, thus only slightly thinner compared to the northern section of Tilmen terrace wall, is made of boxes disposed in saw-tooth fashion, following the contour of the mound. Jutting bastions, typical of later, codified Kastenmauer walls, are absent here, while the only protruding elements are the teeth of the adjoining blocks. The lower town wall of Tilmen is quite similar: with the exception of the main city gate, probably in part jutting from the fortification line, the wall of Tilmen also lacks regular jutting bastions, and presents an inset-outset morphology given by the juxtaposition

388 See Puchstein 1912: 42; Naumann 1971: 249-256; Seeher 2007: 20-25; Seeher 2010: 27-30; and Mielke 2018: 69-70, with extensive literature.
of the casemate blocks. Since a large part of the Alişar city wall has been only partially investigated, and attention has primarily been devoted to its outer profile more than to the internal layout, some observations made on the basis of its presumed reconstruction may not be accurate, but despite general parallels there appear to be significant differences in the building technique with respect to the Tilmen wall. In fact, in Alişar city wall, the simple, single and standardised boxes, only slightly different in size, appear as the sole building units: no space is left between them, and the rooms are divided by single, tongue walls. In Tilmen wall, in contrast, the main building unit is represented by different typologies of casemate blocks that constitute, in most cases, actual, independent buildings, functionally differentiated. The juxtaposition of the blocks creates in some cases a typical inset-outset layout quite similar to the sawtooth profile of Alişar city wall. Only in some areas of Tilmen, like in the $8^{\text {th }}$ block of the terrace wall, do single instead of double walls divide the chambers. In this case as well, however, they do not constitute tongue walls but proper perimetral walls. In this respect, the Alişar terrace wall, made of simple, small, standardised modules, did not require a remarkably complex planning, and surely required a relatively less demanding realisation phase in terms of either time or materials. From the point of view of production, the solution of Alişar appears then more economical, and 'evolved'.

The architecture and urban planning-related features in Tilmen Höyük lower town fortification system seem to point mainly toward the Levantine areas more than to the Anatolians. The erection of the massive fortification system, whose main phase of occupation is surely to be attributed to the MB II, matches a phenomenon especially widespread throughout the Levant and Inner Syria regions that characterizes the entire span of the Middle Bronze Age. The identification of elements of possible Anatolian origin is to some extent affected by the scarcity of primary, well-dated sets of evidence. In fact, the marked continuity at different Anatolian centers between the Middle and the Late Bronze Age deeply affects the reconstruction of fine-grained urban sequences. However, several Anatolian fortifications that most likely are to be ascribed to the MBA or that probably, at least, reflect their MBA layout, like at Alişar Höyük (see above) and Karahöyük-Konya (Alp 1968: pl. 1: 2; Naumann 1971: fig. 323) the Kastenmauer scheme occupies a central role. At the basis of the Tilmen lower town fortification wall, instead, lies the juxtaposition - although with a certain degree of planning - of architecturally and functionally differentiated building units.

### 8.5 THE GATES

Enabling and regulating daily or exceptional transit, exchange or closure between the city and the rest of the world, and being the main device for managing permeability, either in the tangible and intangible spheres, between the inner and the outer space, the city gate embodies a plurality of meanings and functions. ${ }^{389}$ Chief significances are to be sought in the civilian (Mielke 2011: 95 quoting Herzog 1986: 157, 162-165; Otto 1995), symbolic and cultic domains (Ussishkin 1989; Mielke 2011: 96, with extended bibliography), but the military function is probably one of the main aspects affecting gate planning. ${ }^{390}$ Gates that were likely often frequented were mainly located where natural barriers to access were negligible or non-existent, making them a main target in case of aggression (Keeley et al. 2007: 62). Gates, thus, were a key element of any fortification system.
The location of city gates is mainly determined by natural settings, privileging areas were access and transit are easy (Keeley et al. 2007: 62) and by the orientation of communication routes (Burke 2008: 67).

Among the city gates, $\mathrm{K}-1-\mathrm{K}-6$ is characterised by the highest military efficiency, granted by flanking towers and protruding elements, and the highest symbolic significance. The basalt lions that were probably disposed at the two sides of the main and outermost city gate K-6, while granting to the city the additional protection of supernatural powers (Macqueen 1986: 64), attest to the high value in the intangible sphere of the gates in the urban landscape. The layout of the two gate buildings K-1 and K-6, shaped as chamber gates equipped with flanking towers, finds large comparisons in Middle and Late Bronze Age military architecture of Anatolia and the Levant. However, the overall appearance of the gate system, including an outer and an inner gate connected by a - probably - walled courtyard, might represent a form of prototype that will become more prevalent and standardised in the Iron Age fortifications ( $\$$ 2.5.2).

Unlike K-1 - K-6, K-3 and K-2 represent gates with a low defensive capacity ( $\$$ 4.6.2; chapter 3). In fact, despite their location on the high slopes of the terrace, which

[^119]adds to the military strength granted by elevation, the two postern gates find wider comparisons with intermediate fortification structures than with elements typical of the outer fortification lines. A short protruding element located to the north of K-3, instead, seems to be ascribed to the typical inset-outset lower town fortification wall morphology more than to a unitary gate planning aimed at the production of militarily valuable protruding elements. In fact, instead of being an independent and selfcontained building, like the gate $\mathrm{K}-2, \mathrm{~K}-3$ has been obtained through the insertion of tongue walls between two pre-existing casemate blocks.
K-2 and, at least in an early phase of use, K-3, belongs to the single-chamber or four-piers - gates morphology, largely widespread in the MBA Levant. The last phase of occupation of the area $\mathrm{K}-3$, however, documents the presence of at least two chambers divided by six piers. The so-called 'six-pier gates' or 'bipartite gate chamber' are typical of the Middle and Late Bronze Age military architecture from the Levant, NW Mesopotamia and Anatolia ( $\$$ 4.6.2).
The small gate $\mathrm{K}-3$, which lacks the codified architectural planning typical of the aforementioned typologies, is not to be considered a proper six-pier gate but, comparably to Akko (Gregori 1986: 90, 95) may represent a step in the evolution of the six-pier gate model from a simple four-pier gate. The employment of larger walls on the outer sides of the buildings, although it does not appear to be a constant feature of MBA city gates, recurs frequently in Tilmen gates. In fact, the use of this expedient may be clearly verified in K-1 and K-3. The use of larger perimetral walls than the inner walls, in contrast, is widespread in forts and fortresses. ${ }^{391}$

The orientation of Tilmen main city gate K-1-K-6 toward the SE and the south of the valley indicates that the connection with the south, with the Amuq and the inner Syrian area, likely played a central role in the socio-economic and political life of the settlement. In fact, in this regard its direct connection with the official and residential districts of the citadel, the traffic from which should have largely passed through this gate, also seems significant.

Considering their probable function as secondary gates, and their relation to daily transit of people and flocks without chariots, the location of the terrace gates $\mathrm{K}-2$ and K-3 was probably mainly related to the preferential directrix of transit between the inside and the outside of the city connected with the exploitation and use of lands

391 See for example Ebla (Peyronel 2014-2015: figs. 2, 6 and 8), or Gezer (Kempinski 1992: fig. 13).
and fields in the immediate surroundings. The use of these gates also for long distance connections toward the north and the west, however, is not to be excluded, especially in the absence of specific evidence for ancient routes connected to the site.

### 8.6 BASTIONS AND TOWERS

The buildings P and P 2 represent self-contained, independent buildings, organically integrated in the lower town fortification wall. The building P, ca. $17 \times 12 \mathrm{~m}$, is the larger and more complex structure of the sector; the building P2, ca. $12 \times 10 \mathrm{~m}$, is slightly smaller. Both buildings respond to a coherent planning based on principles of regularity and symmetry well documented in Tilmen lower town fortification system. The access is located on the long side in P2, and on the short side in P. Both buildings are divided into two sectors: one is occupied by the staircase, and another by one or two larger rooms. The staircases clearly represent a key element, probably related to the specific, military function of the buildings. In the building P, the large wall dividing the two staircase cages, larger than any other functionally comparable wall of the terrace fortification, suggests that the P stairway was probably composed of at least three ramps. The building, then, was probably also higher than the others of the terrace wall.
Both P and P2 closely match the architectural principles observed in the common casemate blocks of the northern sector of the terrace wall. However, both buildings stand out for accuracy of the building technique and, especially in the case of P , in size. P, additionally, presents a completely different layout; P2, although comparable in many respects to the staircase blocks of the northern sector of the terrace wall, likely also had a distinct character.
P and P 2 , in fact, in comparison to the other blocks of the fortification wall, are probably to be interpreted as towers or bastions. According to Burke's classification of military architecture, Tilmen P as well as P 2 would fit more closely the description of 'towers' than forts, or 'bastions', considered usually more than 20 m wide (Burke 2008: 65), but the terminology adopted in the literature is not standardised (see also below).

The typology, in any case, appears to belong to that of typical Syro-Palestinian MBA military buildings of rectangular shape integrated in the city fortifications.

Tell Mardikh, thanks to extensive excavations, is the site at present that best exemplifies the organization of a defensive system in a MBA city of the Levant. On the top of the earthen ramparts surrounding the city, four large fortification buildings have been investigated: the Fortress South-South-East in the area M; the Western Fort in the area V; the Northern Forth in the area AA; and the Fortress North-North-East in the area EE (Matthiae 1998; 2000; 2002a; 2002b Peyronel 2007; Peyronel 2014-2015; Nadali 2018). A fifth building has been identified by surface remains to the SouthWest (Peyronel 2014-2015: 193). In this context, a distinction has been proposed between fortresses, like the buildings of the area $E E$ and $M$, and forts, like the buildings of the area AA and V. The main purpose of both typologies was to provide active defence and protection of city gates or specific sectors of the fortifications. However, the rooms of the fortresses were mainly devoted to the storage of goods, weapons, and munitions; forts, instead, were multifunctional buildings that, in addition to storage sectors, also included areas, like barracks, that may regularly host a large number of soldiers.

P , and particularly P2, are smaller compared to structures of Mardikh, but the layout, especially of P , is quite similar. In addition to size and the number of rooms, a difference may be observed also in the circulation. In most comparable forts or fortresses, when attested, the access appears always to be located on the long side of the buildings, giving direct access to the staircase from the outside (Peyronel 2014-2015: figs. 2, 8). This is the same layout attested in P2 and in all of the staircase blocks of the northern sector of the terrace wall and, in fact, it would seem more convenient to reach the upper layers of the buildings - and the battlement - for hurrying defenders. The lateral access to the staircase attested in P , in this respect, appears peculiar, and possibly is to be connected with some specific, different aspect of the building function.

In addition to 'military' occupations generally speaking, the range of activities attested in forts and fortresses at Tell Markish is quite vast: small shrines and chapels are also attested, but most important appears the presence of administrative devices, like sealings, balance weights or cuneiform tablets, that point to a centralised control of the fortification (Peyronel 2014-2015, quoting Pinnock 2001: 25-33). The performance of administrative activities is clearly documented at Tilmen in the fortress Q, in the upper city (Marchetti 2009: 388). From the functional point of view, the materials recovered from P and P2 suggest different sets of mainly primary activities
like food processing, cooking, serving, eating and short-term storage. It may than be hypothesised that the buildings may have temporarily or regularly hosted at least a small number of people.

A rather close comparison for the fortress P may be observed in the Tower 5017 of Gezer (Kempinski 1992: 132-133, fig. 13; Burke 2008: 260-62; Herzog 1997: 156157). The bastion has been hypothesised to be ca. 26 m long, hence slightly larger than P. Unfortunately, the structure is badly preserved, and it is not clear where the access may have been located. ${ }^{392}$

The dating of the P and P 2 material sequence at the moment conforms with the chronology proposed for this kind of Syro-Palestinian military structures, which have been hypothesised to have been conceived for the first time during the MB II. The same tradition does not seem to be afterwards longer attested (Peyronel 2014-2015: 200; Akar 2013), but a form of continuity is registered at least in the Islahiye valley. In fact, Taşlı Geçit Höyük Fortress A, dated to the LB I, belongs to typology of rectangular bastions (Benati, Zaina 2013), and the continuity in the use of Tilmen fortress P , and to some extent P 2 , in the early LBA may represents a further piece of evidence.

### 8.7 THE CERAMIC EVIDENCE

In a diachronic perspective, the integrated analysis of the ceramic sequences and contexts of retrieval from Tilmen lower town fortification system provided significant insights into the regional ceramic tradition, making it possible to delineate and evaluate the nature and significance of the external traits and influences. A wide range of ceramic parallels have been identified in the Northern Levant and Inner Syria areas. Significant elements of comparison extend eastward to the Euphrates river region, including the Syrian Upper Euphrates area and the Turkish Lower Euphrates valley. Instead, elements of comparison common to the Cilician area, beyond the Amanus mountains, and with the Central Anatolian area do not seem to be substantial. The Taurus chains to the north and the Amanus mountains to the NW should therefore have represented, to some extent, a natural divide to the diffusion of large-scale traits

392 Precisely on the basis of comparison with Tilmen fortress P, Benati and Zaina (2013: fig. 16) proposed an access on the short side. The schematic plan as proposed by the two authors, in fact, would be remarkably similar to Tilmen P.
of material culture. A slight change in such cultural trajectories is probably to be located in the LBA, when a few traits common to the Northern Levant seem possibly to be traced into the central Anatolian regions, but a more substantial and LBA assemblage would be necessary to delineate this shift more clearly. In contrast, the territory east of the Islahiye valley, through the Kurt Dağları reliefs - either in the Middle and the Late Bronze Age - seems to have been more permeable. A marked continuity, which accords with the physical geography of the area, is visible with the 'Amuq depression to the south. An element of contact with the Cilician area is represented in the MBA by the presence at Tilmen Höyük of the Syro-Cilician painted ware, also known as 'Amuq-Cilician painted ware' or 'Cilician painted ware': this evidence, however, more than to a shared pottery tradition with the specific area of Cilicia, attests instead to the integration of Tilmen Höyük into superregional cultural trajectories involving large sections of the Eastern Mediterranean coastal areas, from the Levant to Inner Syria and Cilicia $(\$ 4.4 .1 ; \S 5.3 .3 ; \S 6.4 .2)$. On the other hand, the presence of a typical 'pilgrim flask' in the inventory of the northern casemates attests to cultural trajectories involving, in addition to the Northern Levant, large parts of south-eastern Anatolia and the Syrian Euphrates (\$7.7). This element accords with the setting of the city in a key area for transit routes between Anatolia, Mesopotamia, and the Levant. Nevertheless, in many respects, the ceramic inventory of Tilmen lower town fortification attests to a localized character. In fact, although the range of comparisons appears quite wide in term of general typologies and geographical distribution, the degree of similarity is in many cases intermediate if not low. This seems to suggest the presence of widely shared cultural elements, surely mirroring shared behaviors in the perception, use and, generally speaking, in the production of the pottery, alongside with the presence of local clusters of production. An extensive program of archaeometric analyses on pottery and clay samples of the area would surely supply a more authoritative appraisal on these issues.

## ABBREVIATIONS

```
ca. = circa
cent. = century
EBA = Early Bronze Age
Figs. \(=\) Figures
IB = Intermediate Bronze Age
LBA = Late Bronze Age
LC = Low Chronology
MBA = Middle Bronze Age
MC = Middle Chronology
MJ = Middle Jazirah
msl = Meters above Sea Level
NL = Northern Levant
OJ = Old Jazirah
Pls. = Plates
SL = Southern Levant
VLC = Very Low Chronology
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# KEY TO THE CATALOGUE OF SMALL FINDS 

d. $=$ diameter<br>h. = height<br>l. = length<br>SU = Stratigraphic Unit<br>th. = thickness<br>w. = width

## KEY TO THE POTTERY CATALOGUE

N. = Number of the potsherd in the figure

Year $=$ Year of excavation
Area $=$ Excavation Area
Locus Type $=$ Classification of the archaeological context ( $\mathrm{L}=$ Locus/Floor; $\mathrm{F}=$ Fill; $\mathrm{W}=\mathrm{Wall} ; \mathrm{D}=$ Drain; $\mathrm{P}=\mathrm{Pit}$ )
Locus N. = Number of the locus
Bucket N. = Number of the bucket
P. N. = Potsherd number. Progressive number of the potsherd within the specific bucket of origin
Class $=$ Functional classification of the potsherd
$\mathrm{D}=$ Diameter of the mouth (cm)
$\mathrm{T}=$ Technique ( $\mathrm{W}=\mathrm{Wheel} ; \mathrm{H}=$ Handmade )
Fab. = Fabric ( $\mathrm{M}=$ Medium; F = Fine; C = Coarse)
Size $=$ Size of visible inclusions ( $M=$ Medium; $S=$ Small; $L=$ Large $)$
Freq. $=$ Frequency of visible inclusions $(M=$ Medium; $H=H i g h ; ~ L=L o w)$
Colour (out) = Colour of the fabric on the outer side of the vessel (Munsell Soil Colour Chart)
Colour (in) = Colour of the fabric on the inner side of the vessel (Munsell Soil Colour Chart)
Colour (core) $=$ Colour of the fabric core (Munsell Soil Colour Chart)

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## DIAGRAMS

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## CHAPTER 5



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Diagram 5.7 - Area P, Phase 1: Morphology. Characterization of stratigraphic units (see Table 5.7 for totals).


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Diagram 5.29 - Area P, Phase 3: Morphology. Characterisation of stratigraphic units (see Table 5.7 for totals).


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## CHAPTER 6



Diagram 6.1 - Area P2: Distribution of diagnostic potsherds by stratigraphic unit (see Table 6.1 for totals).


Diagram 6.2 - Area P2: Potsherds state of preservation. Incidence of different potsherd categories relative to the total inventory of diagnostic potsherds (see Table 6.2 for totals).


Diagram 6.3 - Area P2: Potsherds state of preservation. Characterisation of stratigraphic units (see Table 6.2 for totals).


Diagram 6.4 - Area P2: Functional classes. Incidence of different potsherd categories relative to the total inventory of diagnostic potsherds (see Table 6.7 for totals).


Diagram 6.5 - Area P2: Functional classes. Characterisation of stratigraphic units (see Table 6.7 for totals).


Diagram 6.6 - Area P2: Morphology. Incidence of different potsherd categories on the total inventory of classified shapes (see Table 6.5 for totals).


Diagram 6.7 - Area P2: Morphology. Characterisation of stratigraphic units (see Table 6.5 for totals).


Diagram 6.8 - Area P2: Distribution of potsherds with classified shape by stratigraphic unit (see Table 6.6 for totals).


Diagram 6.9 - Area P2: Morphology. Distribution of morphological categories by stratigraphic unit (see Table 6.6 for totals).


Diagram 6.10 - Area P2: Bottoms morphology. Characterisation of stratigraphic units (see Table 6.7 for totals).


Diagram 6.11 - Area P2: distribution of base types by stratigraphic unit (see Table 6.8 for totals).

## PLATES



Topographic map of Tilmen Höyük. In lighter grey are the structures surveyed only by Alkım's team (updated from Marchetti 2010: fig. 1).


Aerial orthophoto (by M. Zanfini) of Tilmen Höyük taken in August 2008.


Aerial orthophoto of the area K-1-K-6 taken in August 2008
(original by M. Zanfini; adapted by M. Valeri).
10C100 ${ }^{\text {m }}$
Aerial orthophoto taken in August 2008 of area K-3 and of the structures of the southern section of the terrace wall visible on the surface (original
by M. Zanfini; adapted by M. Valeri).


Aerial orthophoto of the northern sector of the lower town fortification wall taken in 2004 (original by M. Zanfini; adapted by M. Valeri).


1. Aerial view of the northern edge of the western sector of the lower town fortification wall, taken in 2008.

Detail of building $P$.

2. Aerial view of the northern edge of the western sector of the lower town fortification wall, taken in 2008. Detail of the building P2 and of the adjoining casemates south.


1. The city gate K-1-K-6 from NW, from the slopes of the höyük.

2. The city gate K-1-K-6 from NW, from the slopes of the höyük. In the background the canal of the Karasu river and the Kurt Dağları (The Wolf Mountains) are visible.

1.The gate $\mathrm{K}-1$, from SE. The slopes of the citadel are visible in the background.

3. The gate K-6 during Alkım's excavations. The lion found on the left side of the gate is visible on the left, set up close to the gate. The second lion, now lost, is visible in the foreground
(after Alkım 1962c: fig. 17).

4. The gate $\mathrm{K}-6$, from SE, in a photo taken in 2006 . $\mathrm{K}-6$ access sector. The stone paving connecting the two gates $\mathrm{K}-1$ and $\mathrm{K}-6$ is visible in the background.

5. The gate K-6, from SE, in a photo taken in 2006. Detail of the basalt lion (TH.06.K6.6).
(after Alkım 1962c: fig. 17).

6. The gate K-6. Detail of the basalt lion, from SE, in 2006.

7. The gate K-6. Detail of the state of preservation of K-6 northern tower, from the north, in 2005.

8. The northern tower of the gate K-6. State of the structure in 2005.

9. The area between the two gates $\mathrm{K}-1$ and $\mathrm{K}-6$ in a photo taken in 2005 , before excavations. Detail of the surface remains of the wall W.1012. The gate K-1 is visible in the background.

10. The gate K-6. The stone pavement of the inner chamber L. 1005 and the western gateway L.1006. Detail of the inner chamber from south. The remains of the northern tower of the gate are visible in the background.

11. The gate K-6. The stone pavement of the inner chamber L. 1005 and the western gateway L.1006. Detail of the inner chamber from north. The remains of the southern tower of the gate are visible in the background.

12. The gate K-6. The inner gateway L. 1006 and the stone paved floor L.1334. Detail of L. 1334 from the north.

13. The gate K-6. The inner gateway L. 1006 and the stone paved floor L.1334. Detail of L. 1006 from the north.

14. Detail of the K-6 inner passage L. 1006 and the stone pavement L.1334, from the south.

15. The area connecting the two gates $\mathrm{K}-1-\mathrm{K}-6$ in a photo taken from the SE, from $\mathrm{K}-6$. The gate $\mathrm{K}-1$ is visible in the background.

16. The city gate K-1-K-6. The area between the gates. Detail of F.1333, from the NW.

17. The city gate $\mathrm{K}-1-\mathrm{K}-6$. The area between the gates. A view from $\mathrm{K}-1$ inner chamber. In the middle is visible the wall W.1330, from the SW.

18. The area in front of the gate K-1. Detail of the paved floor L. 1328 and of wall W.1330, from the SE.

19. The area in front of the gate K-1. Detail of the stone pavement L. 1328 and of wall W. 1330 from the north. A portion of the drain D. 1028 with its stone coverings is visible on the right.

20. The area in front of the gate K-1. Detail of the paved floor L. 1328 from the north. A portion of the drain D. 1028 with its stone coverings is visible on the right.

21. The area in front of the gate K-1. Detail of the paved floor L. 1328 from the east. A portion of the drain D. 1028 with its stone coverings is visible on the left.

22. The area in front of the gate K-1. Potsherds from F. 1327 during excavations.

23. The area in front of the gate K-1. Detail of the wall W. 1330 from the south.

24. The area in front of the gate K-1. Detail of the wall W. 1330 from the north, and the relation with L. 1328.

25. The area in front of the gate K-1. Detail of the wall W. 1330 from the south, and the relation with F. 1333.

26. The area K-1. The test-trench excavated in 2005. The passage L.1013, and the 2005 trench from the south. The pier W. 1335 is visible in foreground; the pier W. 1018 is visible in mid-ground, and the remains of wall W. 1019 are visible in the background.

27. The area K-1. The test-trench excavated in 2005. A view of K-1 inner chamber from the north. The stone pavement of the chamber L. 1048 and the passage L.1013, with the two door sockets preserved in situ, are visible in the foreground. The remains of the inner side of the southern gate of the area are visible in the back.

28. The gate K-1. A detail of the section of the drain D. 1028 exposed in the passage L.1013, from the SE.

29. The gate K-1. The inner chamber L. 1048 from the north. The gateways L. 1013 and L. 1049 are visible respectively on the left and right sides. Visible in the back are the remains of the southern tower.

30. The area K-1. The test-trench excavated in 2005. The passage L.1013, and the 2005 trench from the south. The pier W. 1335 is visible in foreground; the pier W. 1018 is visible in mid-ground, and the remains of wall W. 1019 are visible in the background.

31. The inner chamber of the gate K-1. The inner chamber L. 1048 from the NE. The gateway L. 1049 and the drain D. 128 are visible on the right. The remains of the structures to the SE of the gate are visible in the background, on the right side.

32. The inner chamber of the gate K-1. The inner chamber L. 1048 from SW. The pier W. 1017 is visible on the left. The remains of the inner walls of the northern tower are visible in the back.

33. The inner chamber of the gate K-1. The inner chamber L. 1048 from the south. The remains of the stone alignments delimiting the chamber to the south are visible in foreground. The remains of the pier W. 1335 are visible on the right.

34. Gate K-1, the inner gateway L. 1049 and the drain D. 1028 from the SW. The outer profile of the gate may be appreciated on the left.

35. Gate K-1, the inner gateway L. 1049 from the south. The structures north of the gate are visible in the back.

36. The gate K-3. General view of the area from the east. The Amanus mountains are visible in the background.

37. The gate K-3. General view of the inner and northern sectors of the area from the NW. The citadel is visible in the background, on the left side.

38. The western sector of the gate K-3, L.807, in a photo taken during the restoration season in 2008. The remains of the outer wall of the gate W .830 from the west. The large, flattened slab on the right is probably the remains of the threshold. Collapsed stones are visible on the left.

39. The western sector of the gate K-3, L.807, in a photo taken during the restoration season in 2008, from the SW. The wall W. 830 is visible on the left. The wall W. 831 is visible on the right.

40. The western chamber of the gate $\mathrm{K}-3, \mathrm{~L} .807$, during the restoration season in 2008. Detail of the chamber L.807, on the right, and of the remains of the gateway L.838, on the left, from the SW.

41. The western chamber of the gate K-3, L.807, during the restoration season in 2008. The chamber L. 807 from the south. Detail of the wall W. 805.

## Pl. XXVIII



1. The western sector of the gate $\mathrm{K}-3$ in a photo taken during the restoration season in 2008 . The inner chamber L. 807 from the SE. Detail of the walls W.805, on the right, and W.830, on the left.

2. The western sector of the gate $\mathrm{K}-3$ in a photo taken during the restoration season in 2008. A detail of the massive, outer wall of the gate, W.830, from the north.

3. The gate K-3. The excavation area in 2005, from the NW. The staircase L. 801 is visible on the right. The gateway L. 839 is visible in the middle.

4. The gate K-3. The western sector of the gate area in a photo taken in 2004, before the beginning of Turco-Italian investigations, from the north. The collapsed stones of walls and piers are visible piled up in the gateway L. 839 and on the NW edge of the chamber. The stones L. 806 , which probably cover the drain D.817, are visible in the middle.

## Pl. XXX



30 1. The gate K-3. The collapse layers in the gateway L. 839 in a photo taken in 2004, before the beginning of Turco-Italian investigations.


2-3. The gate K-3. The gateway L. 839 and the drain L. 817 , from the north. The pier W. 804 is visible in the foreground. (2) Detail of the relation between the drain and the paved floor L. 807 in the western room. (3) Detail of the relation between the drain and the paved floor L. 816 in the central room.


1. The gate K-3. The gateway L .839 from the east. The two adjoining walls W .828 on the right and W. 804 on the left are both visible on the right. The Amanus mountains are visible in the background.

2. The gate K-3. The central room L. 816 from the NE.

1.The gate K-3. The northern sector of the gate, from the south, and the remains of the possible wall W.815.

3. The gate K-3. The central and northern sector of the gate, from the NW. The remains of the possible wall W. 815 are visible in the middle.

4. The gate K-3. The central and western sectors of the gate, from the SW.

5. The gate K-3. The central and northern sectors of the gate, from the south.

6. The eastern sector of the gate K-3. B. 821 and
B. 822 , from the NE.

7. The eastern sector of the gate K-3. B.820, on the right, and the wall W.808, on the left, from the east.

8. The northern sector of the gate K-3. A view from the NE.

9. The northern sector of the gate K-3. A view from the east.

10. The area K-3. The central sector of the gate, from the NE.

11. The area K-3. The restoration of the pier W. 804 in 2008.

12. The area $P$. The state of preservation of the structures above the surface before excavations in photos taken in August 2006, from the south. The meter is located above the collapsed stones in the access L.1629. The northern part of the Islahiye valley and the basaltic outcrops are visible in the background.

13. The Amanus mountains are visible on the background, on the left, bordering the Islahiye valley.

14. The area P . The state of preservation of the structures above the surface before excavations in Au gust 2006. The SE edge of the fortress $P$, from the SE.

15. The area P. The state of preservation of the structures above the surface before excavations in August 2006. A view of the adjoining casemates south and of fortress $P$ from the south, from the building P2.

16. The fortress $P$ and the adjoining casemates east from the south. The structures visible above surface after the removal of the vegetation.

17. The area P. The adjoining casemate south. The preservation on the slope surface of walls W.2016, W. 1607 and W. 1605.

Pl. XL


1. The adjoining casemates south + and, in background, the fortress P, from the south. The wall W. 1605 is visible in the middle of the photo. The first meter indicates the possible access to the casemate.

2. The access to fortress P, L.1629, during the excavation. A detail of F. 1612.

3. The fortress P. The area in front of the access sectors L. 1629 and L.1644, from the SE.

4. The fortress P. The access sector and the corridor L. 2017 from the south. The superficial deposit of stones and soil outside of the building is visible on the right.

5. The adjoining casemates south + and, in background, the fortress $P$, from the south. The wall W. 1605 is visible in the middle of the photo. The first meter indicates the possible access to the casemate.

6. The access to fortress P, L.1629, during the excavation. A detail of F. 1612.

7. The fortress P. The southern part of the corridor L. 2017 and the room L.1646. View from the NW.

8. The fortress P. The southern part of the corridor L. 2017 and the room L.1646. A detail of the threshold L.2031, and of the deposits F. 2026 and F. 2029.

9. The fortress $P$, the room L.1646, from the east. A view from above.

10. The fortress $P$, the room L.1646, from the east. A detail of the threshold and the relation with wall W.1613.

11. The fortress P, the room L.1646, from the west. The stone foundation deposit F. 2029 and the walls W. 1610 , on the right, and W. 1613 , on the left, on the sloping ground. A stone of the wall W. 1611 is visible in foreground.

12. The fortress P . The southern part of the corridor L. 2017 and the access to the room L. 1646 during the excavation, from the east. Detail of the fill F.2021, from phase 2b, and of the deposits in the room L. 1646

13. The corridor L. 2017, from the SW.

14. The fortress P. Detail of the floor L. 2019 and of the stone step L.2015, from phase 2c.

15. The corridor L. 2019 from the NE.

16. The fortress P. The gateways L.1636, on the right, and L.1635, on the left, from the SE.

17. The fortress P. The room L. 1645 from the SE.

18. The fortress P. The gateway L.1635, from above.

19. The fortress P. The room L. 1645 , from the NW. Stones of the north-south wall W. 1611 are visible in the foreground.

20. The fortress P . The stone foundation deposit F. 2020 in the room L.1645. A detail of the threshold L.1635, from the NW, is visible in the background.

21. The fortress P. The stone foundation deposit F. 2020 in the room L. 1645 from the east.

22. The room L.1645. The tripod O. 167 in situ.

23. The room L.1645. The reddish soil from shattered fired mudbricks F. 2013 - phase 3 a - from the west.

24. The fortress $P$. The traces of the beaten earth floor in the room L.1645, from the SE.

25. The fortress P. The passageway L.1637, from the NE.

26. The fortress P , the northern room L.1641. The traces of the beaten earth floor north of the passage L.1636, from the NE.

27. The fortress P, the northern room L.1641. The stone foundation deposit F. 2004 and a section of the fill F.2002, by which it is covered, from the north.

28. The fortress P. The stone foundation deposit F. 2004 in the northern room L.1641. A view from the NE. The northern wall W. 1639 is visible on the right and the wall W. 1638 is visible on the background.

29. The fortress P. The stone foundation deposit F. 2004 in the northern room L.1641. A view from the west. The wall W. 1609 is visible in the background, and the wall W. 1639 is visible on the left.

30. The fortress P. The stone foundation deposit F. 2004 in the northern room L.1641, from the east. Detail of a displaced ashlar above the deposit.

31. The fortress P. The stone foundation deposit F. 2004 in the northern room L.1641, from the east. Detail of a displaced ashlar above the deposit.

32. The fortress P. The wall W. 1638 in the northern sector, from the SE. The iron meters on the left indicates the wall W. 1639 and W. 1611.

33. The fortress P. The passageway L. 137 from NW, during the excavation. The door socket still in situ is visible on the right.

34. The fortress P. The northern room L.1640. A view from the west. The northern wall W. 1639 is visible on the left.

35. The fortress P. The northern room L.1640. A view from the SE. The iron meters indicate the walls W. 1639 , on the right, and W.1611, on the left.

36. The fortress P. The western wall W.1611, from the SE.

37. The fortress P. The inner wall W.1634, from the east.

38. The inner wall W.1634, from the west.

39. The fortress P. Detail of the southern façade of the wall W.1634, from the SW.

40. The fortress P. The massive, inner wall W.1613, from the west. The wall probably supported at least a triple ramp staircase.

41. The fortress P. The southern wall W.1610. A view from the east. The iron meters in the background indicate the location of wall W. 1611 western façade.

42. The fortress P. The southern wall W.1610. A view from the NW.

43. The fortress P. The eastern wall W.1609. The northern section of the wall, from the SW.

44. The fortress P. The eastern wall W.1609. The southern section of the wall, from the SE.

45. The fortress P. The western wall W.1611. The southern edge of the wall, and the connection with the adjoining casemate south, from the SW.

46. The fortress P. The western wall W.1611. The southern edge of the wall, and the connection with the adjoining casemate south, from the SW.

47. The fortress P. The northern section of the western wall W.1611, from the NW.

48. The fortress P. The northern wall W.1639, from the north.

49. The fortress P. The northern wall W.1639, from the NE. Collapsed stones are visible on the left. The gateway L. 1636 is visible in the background.

50. The fortress P. The NE edge of the fortress, from the NE.

51. The fortress $P$. The NE edge of the fortress and the void space between the fortress and the adjoining casemates east, from the NE.

52. The fortress $P$. The SE edge of the fortress $P$ from the SE.

53. The fortress P. The norther wall W. 1609 from the south. Some remains of the adjoining casemates east are visible on the right.

54. The fortress P. The outer façade of the eastern wall W. 1609 and the remains of possible walls connecting the fortress to the adjoining casemates east

55. Area P , the adjoining casemates east. Remains of possible walls connecting to the fortress P , from the SE.

56. Area P, the adjoining casemates east. The southern wall of the casemates and the gateway preserved above the surface, from the south.

57. Area P , the adjoining casemates east. The southern wall of the casemates and the gateway preserved above surface, from the SE.


65 2. Area P, the adjoining casemates east. Detail of the piers of the gateway.


1. Area P. The southern wall of the adjoining casemates east, from the east.

2. Area P. The adjoining casemates south, detail of the access sector L.1644, from the east.

3. Area P , the adjoining casemates south.

The eastern threshold of the gateway L.1644, from the NE.

2. Area P , the adjoining casemates south. Detail of the door socket carved in the threshold.


1. Area $P$, the adjoining casemates south. The eastern wall W.1605, from the north.

2. Area P , the adjoining casemates south. The eastern wall W. 1605 from south, and the location of a possible access to the casemate.

3. Area P. The remains of the adjoining casemates south and of the building P2 above the surface before the excavation, from the north. The width of the Islahiye valley toward the south is visible in the background.

4. Area P. The remains of the building P2 above the surface before excavation, from the NE. The iron meter is positioned above the later wall W. 1604.

5. The building P2. The northern wall W. 1606 from the north.

6. The building P2. The northern wall W. 2030 from the NE. The later wall W. 1604 is visible on the left.

7. The building P2. The northern side of the building and the later wall W.1604, from the NE.

8. The building P2. The northern wall W.1606, from the NE.

9. The building P2. Detail of the northern wall W.1606, from the E-NE.

10. The building P2. The access L.1617, detail of the monolithic threshold, from the east.

11. The building P2, the access sector. The stone-paved floor L.1620, with the door socket, on the right, and the access to the staircase room L.1624, from the east.

12. The building P2, the access sector. The stone-paved floors L. 1620 and L.1618, from the north.

13. The building P2. The access to the room L.1624, from the NE.

14. The building P2. The access sector, from the west.

15. The building P2. The gateway L. 1618 from the north. The southern room L. 1627 is visible in he background.

16. The building P2. Detail of the gateway L. 1618 and of the preserved part of the room L.1627, from the north.

17. The building P2. The stone fill of the room L. 1624 and the wall W. 1615, from the south.

18. The building P2. Detail of the wall W.1615, with the niche of the door socket, from the SW.

19. The building P 2 , the room L.1623. A general view from the south.

20. The building P2, the room L.1623. Detail of the large hollow stone partially covered by the masonry.

21. The building P2, the room L.1623. General view of the room and the walls from the SE.

22. The building P2, the room L.1623. General view of the room SW.

23. The building P2. The gateway L. 1618 and the southern pier of the passage, from the west. The eastern part of the room L. 1627 is visible on the right.

24. The building P2. The eastern part of the room L. 1627 and the sparse remains of the floor. The western part of the room has been washed away.

25. The building P2. The eastern part of the room L. 1627 from the south.

26. The building P2. The door socket preserved in situ on the SE side of L.1618.

27. The building P2. The eastern wall W.1603, from the SE.

28. The building P2. The test trench excavated in the room L.1627, from the NE.

29. Building P2, the test trench excavated in the room L.1627. The stone foundation deposit F.2037, from the east.

30. Building P2, the test trench excavated in the room L.1627. Detail of the wall W.1601, from the SW. The lined-up stones of the possible wall W. 1628 are visible on the left.

31. Building P2, the test trench excavated in the room L.1627. The lined-up stones of the possible wall W. 1628 from the NW. A section of the sloping surface is visible on the right.

32. Building P2, the test trench excavated in the room L.1627. The possible wall W. 1628 and the relation with the stone foundation deposit F.2037, from the SW.

## Pl. LXXXIV



1. The northern sector of the lower town fortification wall. The northern casemates, from the east, from the upper town. State of preservation of the structures in 2004, and the modern canal of the river Karasu. In the background, the Amanus chain.

2. The northern sector of the lower town fortification wall from the east, from the upper town. On the right, detail of the natural basaltic outcrops north of the site.

3. The western terrace and the lower city area, from the east, from the upper city. The northern casemates are visible on the right.


85 2. Detail of the northern casemates, from the east, from the upper town. The structures visible on the surface in 2004.

## Pl. LXXXVI



1. The northern sector of the lower town fortification wall. The northern casemates, from the east, from the upper town. The structures visible on the surface in 2008, and the rich vegetation.

2. The northern casemates from the west. The citadel is visible on the background.

3. Aerial view of the northern sector of the lower town fortification wall, taken in 2004. On the right is visible the gate $\mathrm{K}-3$. On the middle and left are visible the casemate blocks $n .1-5$. On the top, right side, are visible the remains of the NW edge of the outer wall of the höyük.

4. CN1, from the west, in a picture from Alkım's excavations. The $3^{\text {rd }}$ chamber is visible on the left, the $2^{\text {nd }}$ chamber in the middle, and the $3^{\text {rd }}$ in the back. In the background are visible the remains of the NW edge of the outer wall of the höyük (Courtesy of Refik Duru, Istanbul).

5. The northern casemates, CN 1 , from the east, during Alkım's excavations. The $1^{\text {st }}$ chamber is visible in foreground, the $2^{\text {nd }}$ chamber on the middle, and the $3^{\text {rd }}$ chamber in the back (Duru 2013: pl. 21: 3)

6. The northern casemates, CN1, from the east, during Alkım's excavations. Detail of the $3^{\text {rd }}$ and $4^{\text {th }}$ chamber (Alkım 1974b: fig. 4).

7. The northern casemates. CN1, from the east, during Alkım's excavations. The $3^{\text {rd }}$ chamber is visible on the middle, and the $4^{\text {th }}$ chamber in the back (Courtesy of Refik Duru, Istanbul).

8. The northern casemates. The junction between CN1 and CN2 from the NE during Alkım's excavations (Courtesy of Refik Duru, Istanbul).

9. The northern casemates. CN1 and CN2 from the west, during Alkım's excavations. In the foreground is visible the access to CN2 (Courtesy of Refik Duru, Istanbul).

10. The northern casemates. Detail of the access to CN2 from SE. State of preservation of the structure in 2008.

11. The northern casemates, as preserved in 2008. The void space between CN2 and CN3, from south.

12. The northern casemates, as preserved in 2008. Detail of CN3 - in foreground, on the left - and CN2 - in the middle - from the W-SW.

13. Aerial view of a section of the northern casemates: $\mathrm{CN} 3, \mathrm{CN} 4$ and CN 5 are visible from right to left.

14. Detail of CN3, from the SE, in 2004.

15. The northern casemates, CN3. Detail of the access as preserved in 2008. The access, from SE.

16. The northern casemates, CN3. Detail of the access as preserved in 2008. The access from the NE.

17. The northern casemates, CN3, during Alkım's excavations. Detail of the access sector, from the SE (Courtesy of Refik Duru, Istanbul).

18. The northern casemates, CN3, during Alkım's excavations (Courtesy of Refik Duru, Istanbul). Detail of the eastern room and of the inner deposit.

19. The northern casemates, CN5 as preserved in 2008. CN5 from the south.

20. The northern casemates, CN5 as preserved in 2008. Detail of the SE edge, from the south.

21. The northern casemates. Aerial view of CN 6 - on the right - and CN7 - on the left, in 2008.

22. The northern casemates. CN6, from the SE, during Alkım's excavations (Courtesy of Refik Duru, Istanbul).

23. The northern casemates. Detail of the deposit in CN7 during Alkım's excavations (Courtesy of Refik Duru, Istanbul).

24. The northern casemates. Detail of CN8 in an aerial view of 2008.

25. Area K-1. Pottery assemblage from F.1327, phase 1 (TH.06.K1.226).

26. Area K-1. Pottery assemblage from F.1327, phase 1 (TH.06.K1.227).

27. Area K-1. Pottery assemblage from F.1327, phase 1 (TH.06.K1.228).

28. Area K-1. Pottery assemblage from F.1327, Phase 2 (TH.06.K-1.229).

Pl. C


1. Area K-3. Pottery assemblage from L.814, Phase 2 (TH.05.K-3.206).

2. Area K-3. Pottery assemblage from F.825, Phase 3 (TH.06.K-3.205).

3. Area K-3. Pottery assemblage from F.824, Phase 3 (TH.06.K-3.204).

4. Area K-3. Pottery assemblage from F.811, Phase 3 (TH.06.K-3.207).

Pl. CII


1. Area K-3. Pottery assemblage from F.832, Phase 3 (TH.06.K-3.207).

2. Area P. Pottery assemblage from F.2002, Phase 1b (TH.07.P.303).

3. Area P. Pottery assemblage from F.2001, Phase 3a (TH.07.P.302).

4. Area P. Pottery assemblage from F.2001, Phase 3a (TH.07.P.319).

Pl. CIV


1. Area P. Pottery assemblage from F.2001, Phase 3a (TH.07.P.331).

2. Area P. Pottery assemblage from F.2005, Phase 3a (TH.07.P.306).

3. Area P. Pottery assemblage from F.2006, Phase 3a (TH.07.P.306).

4. Area P. Pottery assemblage from F.2013, Phase 3a (TH.07.P.324).

5. Area P. Pottery assemblage from F.1633, Phase 3b (TH.06.P.363).

6. Area P. Pottery assemblage from F.2007, Phase 3b (TH.07.P.308).

7. Area P. Pottery assemblage from F.2012, Phase 3 b (TH.07.P.326).

8. Area P. Pottery assemblage from F.2033, Phase 3b (TH.07.P.312).

## Pl. CVIII



1. Area P. Pottery assemblage from F.2033, Phase 3b (TH.07.P.325).

2. Area P. Pottery assemblage from F.2036, Phase 3b (TH.07.P.307).

3. Area P. Pottery assemblage from F.1630, phase 4 (TH.06.P.315).

4. Area P. Pottery assemblage from F.1630, phase 4 (TH.06.P.359).

## Pl. CX



1. Area P. Pottery assemblage from F.1630, Phase 4 (TH.06.P.364).

2. Area P. Pottery assemblage from F.1631, Phase 4 (TH.06.P.361).

3. Area P. Pottery assemblage from F.1631, Phase 4 (TH.06.P.362).

4. Area P. Pottery assemblage from F.1632, Phase 4 (TH.07.P.300).

5. Area P. Pottery assemblage from F.2011, Phase 4 (TH.07.P.316).

6. Area P. Pottery assemblage from F.2035, Phase 4 (TH.07.P.310).

7. Area P2. Pottery assemblage from F.1622, Phase 2 (TH.06.P2.354+355).

8. Area P2. Pottery assemblage from F.1622, Phase 2 (TH.06.P2.356+357).

9. Area P2. Pottery assemblage from F.1616, Phase 3 (TH.06.P2.351).

10. Area P2. Pottery assemblage from F.1621, Phase 3 (TH.06.P2.353).

11. Area P2. Pottery assemblage from F.1614, Phase 4 (TH.06.P2.350).

12. Area P2. Pottery assemblage from F.1622, Phase 5b (TH.06.P2.352).

13. TH.05.K1.108.

14. First lion's relief (Alkim 1962c: 479, fig. 16).

15. First lion's relief (Alkim 1962c: 476, fig. 10).

16. Second lion's relief (Alkim 1962c: 477, fig. 11).

17. TH.05.K3.43.
18. TH.05.K3.122.


19. TH.05.K3.44.

20. TH.05.K3.128.

21. TH.05.K3.172.

22. TH.05.K3.150.


23. TH.05.K3.50.

24. TH.05.K3.114.

25. TH.05.K3.115.

26. TH.05.K3.196.

27. TH.05.K3.116.

28. TH.05.K3.207.

29. TH.05.K3.161.

30. TH.05.K3.39.

31. TH.05.K3.123.

32. TH.05.K3.53.

33. TH.06.P. 138.


3a. TH.07.P.6.

4. TH.07.P.44.

6. TH.07.P.57.

2. TH.07.P.36.


3b. TH.07.P.6, section.

5. TH.07.P. 45.

7. TH.07.P.58.

2. TH.07.P.56.

1. TH.07.P. 164.

2. TH.07.P. 141.

3. TH.07.P.139.
4. TH.07.P. 46.


5. TH.07.P. 163.


1a. TH.07.P. 167.

2. TH.07.P. 247.


1b. TH.07.P.167, upper view.

3. TH.07.P.251.

4. TH.07.P. 165.


1a. TH.06.P.25.

2. TH.06.P.30.

4. TH.06.P. 142.


1b. TH.06.P.25, section.

3. TH.06.P. 315.

5. TH.06.P. 144.


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[^0]:    1 For an outline of historical evidence relating to the Amanus area see Marchesi 2011. For references to specific aspects of historical geography see Marchetti 2008a: 393; Marchetti 2008c: 465; Marchetti 2010: 370-371.

    2 See Marchetti 2008a: 393; Marchetti 2008c: 465 on former hypothesis of identification of Tilmen with the city of Khaššum; see Marchetti 2010: 370-371, and esp. note 7 (quoting Forlanini 1985, Wilhelm 2006: 235, Charpin 2006) for current hypothesis of identification with Zalwar/Zalbar.

[^1]:    3 A king 'Anumkharwe' of Zalwar is mentioned in Mari archives. If he is to be identified with Anumkhirbi, king of Ma'ma, the city of Zalwar would have been part of the large Syro-Anatolian polity of Ma'ma (maybe modern Maraş), initiated by the Hurrian prince Anumkhirbi, and extending from the first eastern highlands of Taurus and Anti-Taurus till the Euphrates River (Marchesi 2011: 24).

[^2]:    4 The premature death of U. Bahadır Alkım interrupted the publication program, later resumed by R. Duru. The results of the first ten excavation seasons are documented by the yearly preliminary reports delivered by the director after each campaign (Alkım 1960a; 1960b; 1961; 1962a; 1962b; 1962c; 1962d; 1963a; 1963b; 1963c; 1964a; 1964b; 1964c; 1964d; 1964e; 1965a; 1965b; 1965c; 1967; 1970a; 1970b; 1970c; 1971a; 1971b; 1972; 1973; 1974a; 1974b), by the synthesis work of R. Duru (Duru 1987; Duru 1990; Duru 2003; Duru 2004) and by his final report (Duru 2013).

    5 Substantial evidence of the LBA occupation has been gathered from upper town excavations in the areas C, D, G, H, L and Q. Additional evidence was found in the lower town, in areas M, P, K-3 and K-1.

[^3]:    6 But MB IA $=2000-1900$ BCE; MB IB $=1900-1800 \mathrm{BCE} ;$ MB IIA $=1800-1700$ BCE; MB IIB $=1700-1600$ in Nigro 2002a; MB IA $=2000 / 1900-1850 / 1800$ BCE; MB IB $=1850 / 1800-1770$ BCE; MB IIA $=1770-$ 1700 BCE; MB IIB $=1700-1600$ BCE in Pinnock 2005: 136.

    7 That is: MB IA = ca. 2000-1850 BCE; MB IB = ca. 1850-1770 BCE; MB IIA = ca. 1770-1700 BCE; MB IIB = ca. 1700-1600 BCE; MB III = ca. 1600-1500 BCE; LB I = ca. 1500-1400 BCE; LB IIA = ca. 1400-1300 BCE; LB IIB = ca. 1300-1200 BCE (Morandi Bonacossi 2015: table 1).

[^4]:    8 See Sharon 2013 for a concise summary and related concordances.
    9 See for example Burke 2008: 19-20 for the MBA, and Panitz-Cohen 2013 for the LBA (Tables 1.2 and 1.3).
    10 A remarkable context from Hadidi frequently used as a reference for sequence comparisons (see for example Iamoni 2012) is Hadidi H XIII. This context was first attributed to the $2^{\text {nd }}$ half of the $16^{\text {th }}$ cent. BCE (Dornemann 1981: 241), but on the basis of a recent re-evaluation, a dating to the very end of the $16^{\text {th }}$ cent. has been proposed (Otto 2018: table 1). According to this review, the context is to be related in the Euprates regional sequence to the LB IA; in the analysis of Northern Levant ceramic production made by M. Iamoni, Hadidi H XIII is representative of typical Northern Levant MB III ceramic production (Iamoni 2012: table VI-1), which in fact covers the $16^{\text {th }}$ cent. BCE.

[^5]:    11 See for example Faivre, Nicolle 2007: 183, according to which MB IA $=\mathrm{ca} .2000-1900$ BCE; MB IB $=\mathrm{ca}$. 1900-1725 BCE; MB II = ca. 1725-1595 BCE, or Koliński 2014: table 1, according to which MB I = 20001800 BCE; MB II $=1800-1700 \mathrm{BCE} ;$ MB II $=1700-1500$ BCE.

    12 In Pfälzner, Dohmann-Pfälzner 2014 a distinction of the Old Jazirah period into two phases (2000-1550 BCE ) is found in table 4; however, a third phase (OJ III) is considered in table 3 and spans approximately from the early $17^{\text {th }}$ until the late $16^{\text {th }}$ cent. BCE. An OJ III phase was reported also in Pfälzner, Dohmann-Pfälzner 2002: fig. 3, where it corresponded to ca. 1800-1500 BCE, but it was not mentioned in the text, where the phase OJ II was equated to ca. 1800-1600 BCE (Pfälzner, Dohmann-Pfälzner 2002: 154). A slightly revised periodisation is proposed in Pfälzner 2017, according to which the Old Jazirah period I and II are dated respectively to ca. 2000-1850 and 1850-1650 BCE. The correspondences proposed with regard to general technological sequences however are substantially changed and advance the hypothesis of a correlation of Mardikh IIIA (MB IA) with the Early Jazira V and Ur III periods (2100-2000 BCE); OJ I (ca. 2000-1850 BCE) with MB IB (and Isin-Larsa period); and OJ II with MB II (Pfälzner 2017: table 7.2). A slightly different scheme is proposed in Koliński 2014: table 1.

[^6]:    13 For different periodisations and for a general overview of issues related to Hittite Chronology, however, see Genz, Mielke 2011: 14-19.

    14 In particular, the date of 1600 BCE as the divide between MBA and LBA is used in some of the sites of comparison geographically close to Tilmen such as, for example, Alalakh, Mardikh, Afis, and Tuqan. However, the reference to local sequences and chronologies has been specified when it relates to commentary on specific parallels (for which see also $\$ 1.5$ ).

[^7]:    15 Relating continuity, see in particular Mazzoni 2002: 134; Nigro 2002b; Colantoni 2014 (quoting Mazzoni 1998: 36); Iamoni 2012; Bulu 2017a: 188 (quoting Mc-Clellan 1989, Heinz 1992, Horowitz 2015); Sharon 2013. According to Colantoni, however, the transition from Middle to Late Bronze Age in the Mardikh ceramic sequence was at least marked by a neat change in pottery fabrics.

    16 Destructions are recorded, for example, at Mardikh III (Matthiae 2009); Alalakh VII (Woolley 1955), Hama H (Fugman 1958), Nebi Mend (Bourke 1993; Parr 1997); MBA Umm el-Marra (Schwartz et al. 2012: 179181). A smooth transition instead is registered at Qatna.

[^8]:    17 The complete database of Tilmen Höyük lower town ceramic inventory is open access at rDig - *Dig reloaded (orientlab.net). Additional information provided in the database includes the indication of the place where the sample is currently stored and museum inventory numbers.

    18 The composition of tables and charts has been kept consistent in all analysed contexts in order to facilitate the reader in the exploration. Minor changes however have been occasionally introduced in order to better adapt to the composition and peculiarity of the reference samples of the different areas.

[^9]:    20 For which see the final reports by R. Duru: Duru 2003: fig. 4 (plan); fig. 16 (attempted reconstruction of the masonry); pls. 18-20; pls. 43-46; Duru 2013: 81-82, 107-108 and pls. 23-24, 26, 55-57. For previous reports see Alkım 1959; Alkım 1960a: 715; Alkim 1960b: 8 and fig. 11; Alkim 1962c: 449-453, plan 2 and figs. 8-21; Alkım 1962d: 241 and figs. 4-5; Alkim 1969: 284; Alkım 1971a: 342; Alkım 1971b: 23; Alkım 1972: 39-40 and figs. 2-4; Alkım 1974a: 6-7 and fig. 3

[^10]:    21 On the state of preservation of the structures at the time of the first excavations on the site see Duru 2003 (here see Pl. VIII: 2). For the damaging and consequent restoration activities see Duru 2003: pls. 18-20; pls. 43-46.

[^11]:    22 In fact, evidence of an additional fortification line further outward with respect to that of K-1 has not been gathered so far.

[^12]:    24 A large gap is present between the stones on the southern side of the wall, but an interpretation in term of a passage appears unlikely.

    25 In fact, in 2000s, evidence of the potential wall W. 1023 was limited to an alignment of stones of $1.52 \times 1.14$ m on the main axis, preserved for one stone row, close to the western wall of the chamber. Evidence of the potential wall W.1027, at the same time, was limited to an alignment of stones of $2.10 \times 1.09 \mathrm{~m}$ on the main axis, preserved for two stone rows, close to the eastern wall of the tower. The layout of the two elongated rooms, as largely attested also in area P and in the northern casemate wall, is usually related to the presence of a staircase, but in this case it seems unlikely. In fact, there seems to be no evidence for a possible access to the staircase. This would also match the observations made by the Turkish archaeologists at the time of first investigations, who observed no evidence of a staircase (Duru 2013: 81).

[^13]:    27 Considering the above-mentioned uncertainties, the determination of inner courtyard perimeter remains challenging: the chamber should have been around 4.55 m on the western side by 4.60 m on the southern and northern sides by around 3.50 m on the eastern side if restricted by piers on the accesses; 7.75 m on the northern side by 4.75 on the western side, by 7.25 m on the southern side and 5.50 m on the eastern side if not restricted. The documentation of the first excavations, however, reports that the inner courtyard measured $4.6 \times 4.3 \mathrm{~m}$, while the outer access was 2.5 m wide (Duru 2013: 81).

[^14]:    29 For a description of the sampling method of Turco-Italian expedition, see $\$ 1.5$.
    30 Selected potsherds are currently stored at the Archaeological Museum of Gaziantep - Turkey.

[^15]:    31 See for example Nigro 2002b: fig. 3: 3-4, 6-8, 10-11 and Peyronel 2019: fig. 5: 2, Mardikh, MB IA layers; Pinnock 2014: fig. 4, Mardikh, MB IB; Heinz 1992: Cat. A, pl. 80: 2-4, Alalakh XII, MB IB.

    32 See for example Pinnock 2014: fig. 9, Mardikh, MB IIA; Horowitz 2015: 165 and fig. 7.4: 1-2, Alalakh MB IIB; Heinz 1992: Cat. A, pl. 2: 11, Alalakh VII - MB IIB.

    33 But see also Iamoni 2012: pl. 1: 1, type B3b, Qatna J13-12 (MB IIB), considered a typical shape MB IIB-III.

[^16]:    34 For which see, for example, Peyronel 2019: fig. 5: 4, Mardikh - MB IA.
    35 It seems worth noting, however, that Colantoni (2014) considers this morphology an evolution from MB II variants. Comparisons with LBA Euphrates assemblages were also proposed.

    36 The dating of Alalakh old excavations still poses some uncertainties (see for example Bergoffen 2005 table 9 or Yener 2013: fig. 2). The dating of level 9 is probably to be located between the $1^{\text {st }}$ half of the $18^{\text {th }}$ cent. BCE (MB IB or MB IIA according respectively to Morandi Bonacossi 2015: table 1 and Nigro 2009: table 6: 2); and the first half of the $17^{\text {th }}$ cent. BCE (Horowitz 2015), corresponding to MB IIB.

    37 For which see Table 1.1, Iamoni, Morandi Bonacossi.
    38 But see also in the Euphrates area Dornemann 1981: fig. 13: 31, Hadidi H XII ceramic horizon - MB IIC, ca. $16^{\text {th }}$ cent. BCE.

[^17]:    39 But see also Pinnock 2005: pl. 70: 11, type 2223, Mardikh IIIB2 destruction layers, and Iamoni 2012: pl. 36: 6; pl. 37: 4, Qatna, LB IIA. Related morphologies in Central Anatolia may be recognised in Boğazköy upper city, esp. phase 3 (Müller-Karpe 1988: pl. 36, type S51).

    40 See § 4.4.2, phase 3, F.825.
    41 See for example the bowl variants attested in Alalakh IX (Heinz 1992: Cat. A, pl. 34) and VIII (Heinz 1992 Cat. A, pl. 17: 4-10); Alalakh MB IIB variants, typically found in grey burnished ware (Horowitz 2015: 165 and fig. 7.4: 8); or typical MB IIB funnel-shaped bowls from Mardikh (Pinnock 2014: fig. 10).

[^18]:    42 See for example in the Northern Levant and Inner Syria areas, Alalakh IX (Heinz 1992: Cat. A, pl. 41: 74-76; pl. 43: 96) and VIII (Heinz 1992: Cat. A, pl. 26: 55), MB (IB)-II; Tuqan E - MB I-IIA (Fiorentino 2006: fig. 45: 2-3) and Tuqan L-South - MB IB-IIA (Peyronel 2006: fig. 28: 1-5, 8); Tuqan A (Fiorentino 2006: fig. 32: 2, 8), E (Fiorentino 2006: fig. 47: 2, 5-6) and H (Fiorentino 2006: fig. 36), dating to MB II; Mardikh IIIA, MB I (Matthiae 1995: fig. 46; Mantellini et al. 2013: fig. 8.15: TM10.SE.C/004; TM10.SE.C/006; TM10. SE.M/003); Mardikh IIIB2 destruction layers type 1341 (Pinnock 2005: pl. 28; pl. 29: 1-4); type 1342 (Pinnock 2005: pl. 28: 7-10); type 1343 (Pinnock 2005: pl. 30); type 1344, 1345 (Pinnock 2005: pl. 31) and 1346 (Pinnock 2005: pls. 31-32) and, in the LBA, Mardikh LB I layers (Colantoni 2014: pl. 2: a-d, $2^{\text {nd }}$ half of $16^{\text {th }}-$ beginning of $15^{\text {th }}$ cent. BCE); and Qatna type K2 (Iamoni 2012: pl. 55: 1), from LB IIA layers, considered typical LBA. In the region east of the Kurt Dağları, grooved rim vessels are attested in Oylum Höyük Y 11b, (Ozgen, et al. 1997: fig. 22:3-4), in layers attributed by the excavators to the end of MBA but featuring many LBA types, in addition to mittany-style cylinder seals; in Tilbeshar IV A (Kepinski-Lecomte 2007: fig. 6: 2, 4), ca. 2100-1800 BCE according to local cronology, and in the area J (Kepinski-Lecomte, Ergeç 1999: fig. 4: 3), attributed to MBA. In the Euphrates area see for example the types singled out as typically MB I by L. Nigro in 1998 (Nigro 1998: fig. 3: 5, 7, alltough n. 5 corresponds to Dornemann 2007: pl. 2: 3, attributed to Hadidi MB IIA), or Hadidi - MB IIA (Dornemann 2007: pl. 2: 1, 26, 29, 34), MB IIB (Dornemann 2007: pl. 4: 24, 29, 30, 32, 33-38, 42) and IIC layers (Dornemann 2007: pl. 5: 5, 7, 8; pl. 6: 3-4, 22-25); Habuba Kabira and Munbāqa MBA (see Heinz 1992: Cat. B, pl. 36: 1-3; pl. 51: 1-2; pl. 52: 1; pl. 75: 2-4). At Şaraga Höyük, grooved rim vessels have been considered as a specific cluster of pottery (see for example Ezer 2009: figs. 4-5). Further examples derive from the Şavi Höyük I transitional period, attributed to EB IVB-MBA (Dittmann 2007: fig. 2: TT1, TT27), and MBA period (Dittmann 2007: fig. 3: 10-11, lev. 12; Dittmann et al. 2002: fig. 8a, MB IIA; Dittmann 2007: fig. 3: 13, lev. 11b, MB IIB); Lidar Höyük phase 5 (Kaschau 1999: pl. 161: 4; pl. 165: 1; pl. 263: 6), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE; Lidar Höyük phase 4/3 (Kaschau 1999: pl. 289: 2; pl. 192: 7), attributed to MB IIB in the local sequence and approximately dated toward the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE; and Hammam et-Turkman period VII (Cuvers 1988: pl. 136: 138-143).

[^19]:    43 See in particular Iamoni 2012: pl. 59: 7, type STJ8, Qatna - LB I layers. Further parallels may be recognised in Qatna - MB IIB-III (Iamoni 2012: pl. 27: 7), and Hadidi Tablet building (Dornemann 1981: fig. 7: 9), attributed to the $15^{\text {th }}$ (Dornemann 1981; McClellan 2007: 57) or, more likely, according to a recent revision, to the $14^{\text {th }}$ cent. BCE (McClellan 2018: 140 and fig. 24; Otto 2018: 228 and table 1)

    44 See Müller-Karpe 1988: pl. 15, type T1p, Boğazköy upper city, esp. phase 2.
    45 Similar morphologies, although markedly smaller in size, may be recognised at Qatna in LBA types from LB IIA (Iamoni 2012: pl. 46: 10; pl. 47: 4, type SNJ2) or LB I layers (Iamoni 2012: pl. 59: 3 type STJ2).

    46 But see also Pinnock 2005: pl. 94: 5, type 2252; Qatna - MB IIA (Iamoni 2012: pl. 20: 1); Qatna - MB IIB-III (Iamoni 2012: pl. 26: 5) and Qatna - LB IIA (Iamoni 2012: pl. 45: 2).
    47 See Glatz 2012 for a comparative study and extensive bibliographical references.
    48 In this case, a further horizontal line crossing the three ones attested would be missing, maybe lost with the lower part of the sherd.

[^20]:    49 For a complete figurine see Duru 2003: pl. 36.
    50 For original position of lions see Alkım 1962c: 476-477. For the repositioned lion, see Alkım 1962c: 479.

[^21]:    Rukais II.2.I (Burke 2008: 305); Tell Mardikh NE Gate, area BB (Nadali 2018: fig. 3) in the Levant, or Troy VI (Naumann 1971: Abb. 356) and the southern gate of Boğazköy Lower City Abschnittsmauer (Naumann 1971: figs. 374, 376) in Anatolia.

    52 In the NE Gate in area BB, and probably in the Northern Gate in area DD (Nadali 2018: fig. 6 and pg. 298).
    53 The presence of additional, minor walls external to the main city wall is attested in a few points in front of the MBA Alişar city wall (von der Osten 1937: 4-5); in the Hittite capital (Puchstein 2012: 43-45; Mielke 2018: 71); and external fortification structures are frequently located outside of city gates to enhance their military efficacy. Any trace of a further wall, however, so far has been observed outside of Tilmen lower city walls

[^22]:    54 See in particular the South Gate (Koldewey 1898: pl. X), where a remarkably large courtyard is located between the outer and inner gate, with the outer gate completely protruding from the wall. The general plan is very distant from that of Tilmen K-1-K-6, but the same connection had been already noticed by R. Naumann (1971: 293).

    55 However, the state of preservation of the inner wall of the eastern tower of the gate was quite limited (see von der Osten 1937: fig. 83), so the inner layout of the structure is not entirely documented, and the results are, to some extent, hypothetical.

[^23]:    57 Since domesticated herd animals were likely stabled on the first floors of houses inside $2^{\text {nd }}$ and $1^{\text {st }}$ millennia BCE walled communities, animal traffic at gates is assumed by A. Burke to have been substantial (Burke 2008: 71, quoting Stager 1985: 13ff; Schloen 2001: 338ff). This model could be applied also to $2^{\text {nd }}$ millennium BCE Tilmen Höyük, but the lack of evidence relating to domestic districts at the site does not allow a proper evaluation.

[^24]:    60 See $\S 4.6 .2$ for detailed comparison and comments on the layout of single chamber gates.
    61 See in particular L. 839 in gate K-3.
    62 See for example the case of $\mathrm{K}-1$, and related commentary.

[^25]:    64 Different reconstruction hypotheses were proposed after the 1960s investigations. The access to the gate room was hypothesised to be framed to the north by the projection of the casemate block north of K-3 according to the schematic reconstruction in R. Duru 1987 (fig. 3: 2); the sector however was subsequently hypothesised as straight (Duru 2003: fig. 7). The western wall south of K-3 entrance, instead, has always been reported as straight.

    65 In other buildings of the lower town fortification system, like in the building P and P2, the thresholds raised a step with respect to the floor level are a structural feature.

[^26]:    66 According to the Tilmen Höyük registration system, rooms are labelled according to the number of locus of their floors.

[^27]:    67 The detection of architectural and stratigraphic relations connecting the features brought to light in area K-3 between the 1960s and 2000s investigations has been partially affected by the deterioration of some structures and, in some cases, by the excavation strategy based around conservation, which was a primary aspect in view of musealization. Consequently, since the stratigraphic investigations stopped on the building floors in order to preserve them in situ, the walls' foundations, below the floors, have not been reached.

    68 Since the architectonical block north of K-3 and, consequently, the northern façade of wall W. 805 were not excavated, the wall thickness has been estimated on the basis of surface evidence.

[^28]:    69 The wall was 1.6 m high according to preliminary overlays made in the 1960s (Duru 2013: pl. 32: 1) between +455.61 and +454.01 m . In the same sketch, it is worth nothing that the series of stones depicted in thin or hatching lines west of the wall W .830 were evidently to be considered an integrated part of the wall.

    70 The wall W. 829 was preserved for only 0.3 m above surface according to preliminary overlays made in 1960s (Duru 2013: pl. 32: 1), between +453.62 and +453.32 m .

[^29]:    72 For which see below, $\mathbb{\int}$ 4.6.2.
    73 Basing on the photographic documentation, the slightly rotated position of fourth and fifth stone rows in the pier W. 804 at the time of first excavations would point to an unintentional displacement of the masonry, at least in this section of the wall. Only a slight cantilevered disposition of the stone rows could be observed in 2000s excavations.

    74 See Alkım 1972: fig. 8; Duru 2003: fig. 2 and Duru 2013: pl. 32: 3 for the state of preservation of the structure at the time of first excavations.

    75 According to 1960 s plans, the upper rows of the wall were made of a single line of medium-sized, regular stones set side by side on the long margins (Duru 2003: fig. 7; Duru 2013: fig. 32: 1): the typological dissimilarity with respect to the layout of common, structural walls, made of two scaffolds plus an inner filling, would thus support a possible functional difference, compatible for example with a staircase abutment, but the

[^30]:    poor state of preservation of the structure in 2005 does not allow for a sound interpretation.
    76 The wall was restored during 2008 excavation season.

[^31]:    77 They probably lean against the wall W. 815 as well, but this last relation has not been ascertained.

[^32]:    78 Walls, piers and passages are usually part of the same building stage, while only secondarily were the foundation deposits of the chambers and the floors arranged. This building process is evident in the areas P and P 2 , where the foundation deposits were extensively exposed. Here, instead, the presence of a drain introduces a difference: in fact, the threshold of the passages appears to have been laid out after the disposition of the drain.

[^33]:    80 The materials from bucket 201 derive from the southern part of the central sector and from the eastern sector. In contrast, no materials have been recovered during the excavation of F. 810 in the central-northern part of the central sector, where the deposit was thinner.

[^34]:    81 The southern pillar of the access L. 823 , the wall W. 822 , surely leans against the wall 808 . The architectonical connections between walls and floors in this part of the area however were not ascertained.

    82 It was not possible to determine the thickness of walls W. 826 ad W. 819 since they were only partially excavated, but their texture appeared largely comparable to that of the other walls of the central and eastern sectors.

[^35]:    84 Analysis by E.-M. Wild and P. Steier, Vienna Environmental Research Accelerator - VERA Laboratorium, Fakultät für Physik der Universität Wien - Isotopenforschung, 2018.

    85 For which see $\S 1.5$.
    86 The event that the bone sample analysed might have been residual from K-3 phase 1 or before may not be excluded, but one may hypothesise that the presence of large-stone paved floors could have largely hampered the resurgence of earlier materials.

[^36]:    87 See for example Nigro 2002b: fig. 20: 7-8, Mardikh - MB IIA. In the Euphrates area, similar shapes are attested at Lidar Höyük from phase $4 / 3$ until 5 a, dating in the local sequence from $17^{\text {th }}$ until $16^{\text {th }}$ cent. BCE (see Kaschau 1999: pl. 193: 6, pl. 292: 3, phase 4/3; 118: 7-8, phase 4; pl. 129: 1, phase 5a).

    88 Mardikh type 2341, in particular, is considered a close variant of typical MB IIB funnel-shaped bowls (Pinnock 2005: 71; Pinnock 2014: fig. 10).

    89 Further similarities are visible with Alalakh IX (Heinz 1992, Cat. A, pl. 36: 30-34) and Alalakh X (Heinz 1992: Cat. A, pl. 55: 11-12) ceramic inventories.

    90 See F.1843-TH.07.K5.127-02 (Archives of Turco-Italian expedition to Tilmen Höyük). The K-5 sample, however, is characterised by a more accentuated carination.

    91 See for example in the Euphrates area Tell Hadidi MB IIB layers (Dornemann 2007: pl. 3: 3), and in Western Syria Tuqan P, LB I layers (Peyronel 2011: fig. 34: 3). Some similarities for rim morphologies are visible also with Hadidi - H XIII ceramic inventories (Dornemann 1981: fig. 14: 18, 21). Additionally, see Tarsus level

[^37]:    A. 2 (Slane 1987: pl. 37: 149), attributed to the Karum period and Şavi Höyük I (Dittmann 2007: fig. 3: 8-9, level 13), attributed to MBA. At Lidar Höyük, related morphologies are attested from phase 3 until phase 5b, dated in the local sequence from the $18^{\text {th }}$ until the first half of the $16^{\text {th }}$ cent. BCE (Kaschau 1999: 90: 1, phase 3; pl. 287: 8, phase 4/3; pl. 159: 1-6, phase 5b).

    92 In this case, 'closed' refers to the inclination of the preserved sections of the potsherd. In case of poorly preserved potsherds, a simple definition of the sample based on the fragment inclination - open or closed - is sometimes used before attempting a morphological interpretation of the shape of reference.

    93 To be related to the second part of MB IIA according to Nigro 2009: table 6: 1.
    94 For the Northern Levant, see the LB I levels of Qatna (Iamoni 2012: pl. 44: 5). In the Euphrates area, a similar morphology is probably to be recognised in the inventory of phase 2 from Tell Bazi citadel North Slope, attributed on a comparative basis to the first part of LBA in the local sequence, around $16^{\text {th }}-15^{\text {th }}$ cent. BCE (Coppini 2014: pl. 25: 8 and p. 192). For North Central Anatolia, see for example Kuşaklı/Sarissa type T20: the type is not particularly widespread, but it is attested along the entire sequence of the Westhang, which spans from the $2^{\text {nd }}$ half of the $16^{\text {th }}$ until $13^{\text {th }}$ cent. BCE (Mielke 2006: pl. 41: 48-52, type T20d). Additionally, see Boğazköy upper city type T20d-e (Müller-Karpe 1988: pl. 26), particularly typical of Upper City phase 3 (ca. $15^{\mathrm{h}}-14^{\mathrm{th}}$ cent. BCE).

[^38]:    95 See for example Hadidi MB IIB, IIC and LBA layers, and Munbāqa MB II-LB (Heinz 1992: Cat. B, pls. 59, 74, 76); Mardikh MB IB (Nigro 2002a: pl. 49: 46-49; pl. 50: 51-52); MB IB-IIA (Nigro 2002a: pl. 53: 72; pl. 55: 90) and late MB IIB, from Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 33: 17, 25-26, type 1412).

    96 Qatna Type NJ10, considered typical MB II-III, that is from the $2^{\text {nd }}$ half of the $18^{\text {th }}$ until the $16^{\text {th }}$ cent. BCE according to the local phasing (Iamoni 2012).

    97 A preliminary overview on Tilmen Höyük and Taşlı Geçit Höyük Middle and Late Bronze Age painted pottery traditions was the object of the paper 'Late Bronze Age Ceramic Traditions in the Islahiye Valley (South-Eastern Turkey). The Combined Evidence from Taşlı Geçit Höyük and Tilmen Höyük' presented by G. Giacosa and V. Orsi at the workshop 'Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State', organized by F. Manuelli and D.-P. Mielke on the occasion of 11ICAANE, Munich 2018.

    98 The same painted pattern, always in red colour, finds comparison in Tilmen Höyük fortress P (Fig. 5.6: 4). In the Upper Town, it finds comparison in the area K-5 (F.1827-TH.07.K5.117-3; F.1486-TH.06.K5.1305; F.1700-TH.07.K5.4-1) and, especially, in the area G (F.1971-TH.07.G.271-6; F.1963-TH.07.G.265-3; L.1968-TH.07.G.266-17; L.1968-TH.07.G.266-18; L.1968-TH.07.G.266-19). A closed comparison for Fig. 4.3: 3 morphology is found in kitchen ware samples from K-5 Middle and Late Bronze age layers (F.2302-TH.07.K5.154-7, MBA; F.1445-TH.06.K5.255-11) (Archives of Turco-Italian expedition to Tilmen Höyük).

[^39]:    99 See for example Mersin (Garstang 1953: fig. 144: 23, Tr. Xs-t, level XIb, MBA; MB I according to Novak et al. 2017: 182). Further examples are found at Tarsus (Goldman 1956: 291 n. 797 - MBA; 302: n. 992, LBA).

    100See for example Chagar Bazar (Mallowan 1937: fig. 21: 1-3, 9-10; fig. 23: 5-6, Chagar Bazar Level I; McMahon, Frane 2009: pl. 8: CB 2077, tomb 13; pl. 45: 12-13; pl. 59: 2 and pl. 60: 6, on large-mouthed vessels), and Lidar Höyük phase 3/2 (Kaschau 1999: pl. G: 1), attributed to MB IIA in the local sequence (around $18^{\text {th }}$ cent. BCE) and phase 5 (Kaschau 1999: pl. 162: 7; pl. 192: 3; pl. 216: 1; pl. 217: 7; fig. 41, type T16a: pl. H:1- 2), attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

    101 Gates 1976: fig. 28: 155, Alalakh VI-V; Nigro 2002b: 312 [MB IB], 321 [MB IIA], 327 [MB IIB], quoting Mazzoni 1988: 135-136. See additionally Heinz 1992: n. 167, Alalakh IX, with painted hatched triangles, of unspecified ware.

    102For which see Tubb 1983: 54; Nigro 2002b: 313, esp. notes $87-88$ and, more recently, Bagh 2013.
    103For which see See Novak et al. 2017: Gates 2013; Nigro 2002b: 312-313 (relating MB IB, with further bibliographical references), 321 (MB IIA), 327 (MB IIB); Gates 2000: 85, esp. note 31, with further bibliographical references.

    104Archives of the Turco-Italian expedition to Tilmen Höyük.

[^40]:    105See for example Müller-Karpe 1988: pl. 41, type N3, N4, N5, Boğazköy upper city, esp. phase 3; Schoop 2009: fig. 13: 2-3, esp. $14^{\text {th }}-13^{\text {th }}$ cent. BCE. Their frequency in contexts interpreted as sacrificial sites supported their interpretation as votive inventory - maybe connected with drinking rituals. Nevertheless, they are largely attested also in domestic contexts (Schoop 2009: 155).

    106General morphological similarities may also be observed with some shallower variants of Qatna type P6, considered typically MB III in the local sequence (Iamoni 2012: pl. 14: 12, Qatna MB IIB layers).

[^41]:    107Similar rim morphologies, or an evolution of them, derive from Tilmen Upper Town area K-5, fill F. 1445 (F.1445-TH.06.K5.265-11) and from area G fill F. 1284 (F.1284-TH.06.G.82-3), attributed, on a preliminary basis, to the LBA (Archives of Turco-Italian expedition to Tilmen Höyük).

    108In Tilmen Upper Town see for example the MB IB assemblage from the area K-5 (Bonomo 2011: fig. 3: 10), as well as the assemblage of MB II (Bonomo 2011: fig. 4:2) and LB I (Bonomo 2011: fig. $6: 7$ ).

    109But see also in the area P Fig. 5.9: 10, Fig. 5.11: 2, Fig. 5.16: 8, Fig. 5.17: 4 and Fig. 5.16: 9 (phase 3); Fig. 5.18: 11-13, Fig. 5.20: 9-10 (phase 4); and in the area P2 Fig. 6.2: 6 (phase 1), Fig. 6.4: 1 and Fig. 6.3: 9 (phase 2).

    110See for example Mardikh, MB IA (Pinnock 2014: fig. 3); Alalakh IX (Heinz 1992: Cat. A, pl. 42: 81) and VIII (Heinz 1992: Cat. A, pl. 22: 38-41), finding comparisons in MBA and early LBA Munbāqa and Habuba Kabira (Heinz 1992: Cat. B, pl. 32: 1-3; pl. 53); Hadidi MB IIC layers (Dornemann 1979: fig. 23: 40).

    111 See Kinet Höyük East Terrace Building (Gates 2011: fig. 10: b, c), late MBA; the Zincirli Complex DD destruction layer, mid-17 th cent. BCE (Morgan, Soldi 2021: fig. 21: 1); the Alalakh level VIII (Heinz 1992: Cat. A, pl. 22: 39-41); the MB II layers of Tuqan area P (Peyronel 2008: fig. 18: 6); Umm el-Marra late MB II layers (Schwartz et al. 2003: fig. 29: 9-10), and the Umm el-Marra destruction level, attributed to mid-late 14 ${ }^{\text {th }}$ cent. BCE (ca. 1360-1340 BCE) (Cuvers et al. 1997: fig. 19: 14); Hadidi MB IIB (Dornemann 2007: pl. 3: 33-34) and MB IIC layers (Dornemann 2007: 46 and pl. 5: 42-43).

[^42]:    112Namely F.793-TH.05.K5.160-6, MBA, with slightly carinated inner side (Archives of Turco-Italian expedition to Tilmen Höyük); Bonomo 2011: fig. 5: 6, LB I. Concerning MBA variants, see also Oylum Höyük (Özgen, Helwing 2001: fig. 17: h).

    113See Nigro 2002b: fig. 20: 7-8, Mardikh, MB IIA.
    114 See additionally F.1281-TH.06.G.77-7, Tilmen Upper Town area G, LBA (Archives of Turco-Italian expedition to Tilmen Höyük); Qitar, type A17, mainly LBA (McClellan 2018: fig. 20).

    115See MB I-II layers of Tuqan area A (Fiorentino 2006: fig. 30: 8-9); the MB IB-IIA of Tuqan area N (Ascalone 2008: fig. 30: 8, 12); and the MB IA assemblage of Mardikh (Nigro 2002b fig. 3: 5).

[^43]:    116See Alalakh area 3, phase 2, MB IIC or LB I (Mullins 2010: fig. 3.2: 1), and, in the Euphrates area, Hadidi H XIII (Dornemann 1981: fig. 13: 26-27) (2 $2^{\text {nd }}$ half/late $16^{\text {th }}$ cent. BCE). Related morphologies appeared also in Qatna MB III layers (Iamoni 2012: pl. 8: 2, T12, type B13B), where they were considered typical MB IIB-III.

    117 See the MB II layers of Tuqan area G (Fiorentino 2006: fig. 28: 6), in kitchen ware; the MB II layers of Tuqan area P (Peyronel 2008: fig. 12: 6-7); LB I contexts of Mardikh ( $2^{\text {nd }}$ half of $16^{\text {th }}$-beginning of $15^{\text {th }}$ cent. BCE), in kitchen ware (Colantoni 2010a: fig. 5: 8-9; Colantoni 2014: 22 and pl. 2: g, h), with rim typology continuing from the previous period; in the LB I contexts from Qatna, the type CK3B, considered typical early LBA (that is ca. $15^{\text {th }}$ cent. BCE) (Iamoni 2012: pl. 58: 3). In the Euphrates area, see Tell Bazi citadel, North Slope, phase 2 (Coppini 2014: pl. 25: 4), attributed on comparative basis to the first part of LBA (Coppini 2018: 192), correspondig to $16^{\text {th }}-15^{\text {th }}$ cent. BCE.

    118 For a discussion on the general morphology, see F. 825 ceramic inventory.

[^44]:    119See Alalakh VIII (Heinz 1992: Cat. A, pl. 19: 19-20), mainly MB IIA.
    120From the same context, see also Pinnock 2005: pl. 47: 6, type 2214, and pl. 74: 4, type 2224. Some similarity may be further observed in Mardikh LB I contexts (Colantoni 2010a: fig. 5: 5).

    121 See for example the large-mouthed vessels with simple painted bands from Chagar Bazar (Mallowan 1937: fig. 22: 11, Chagar Bazar Level I; McMahon, Frane 2009: pl. 61: 7, with simple bands on large mouthed vessels), or the large vessel with carinated upper sides, grooved rim and red painted band from Tell Taya (Faivre, Nicolle 2007: pl. 6: 170, Tell Taya, lev. IV, pre-Shamshi-Addu).

[^45]:    123Additional comparison for the rim morphology, although associated to a slightly different shape, may be observed in Hammam et-Turkman period VII: 3 (Cuvers 1988: pl. 136: 139), and VII: 5 (Cuvers 1988: pl. 136: 143), attributed respectively to the first part of MB IIA and to the MB IIB according to Nigro 2009: table 6: 1, and in MBA layers of Umm el-Marra (Schwartz 2018a: fig. 5: 3).

    124A closed comparison seems to be recognised at MB IA Mardikh (Peyronel 2019: fig. 6: 4). In the Euphrates area, see additionally the MB IIA layers of Hadidi (Dornemann 2007: pl. 1: 24; pl. 2: 19).

    125See for example Qatna, MB IIB (Iamoni 2012: pl. 28: 9) and LB I layers (Iamoni 2012: pl. 54: 6); Oylum Höyük MBA layer (Özgen, Helwing 2001: fig. 18: d, with slighlty thickend rim and trifoiled mouth), or Tell Bazi LB IB layers (Einwag, Otto 2018: fig. 6: 4).

    126See for example Alalakh VII - MB IIB (Heinz 1992 Cat. A, pl. 9: 39); Tarsus (Goldman 1956: n. 879); Hadidi MB IIC (Dornemann 2007: pl. 5: 46-47), H XIII (Dornemann 1981: fig. 15: 12, 14) and LB I layers (Dornemann 1979: fig. 20: 7); Mardikh MB IB layers (Nigro 2002b: fig. 10: 3), and Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 42: 11, type 1431; pl. 43: 22, type 1433), and Qatna LB IIA layers (Iamoni 2012: pl. 49: 2; pl. 54: 1).

    127See for comparison Hadidi MB IIB layers (Dornemann 2007: pl. 4: 7-11, 14-15, 17-23, 25), MB IIC layers (Dornemann 2007: pl. 5: 53-55,57) and LBA (probably $14^{\text {th }}$ cent. BCE) Tablet Building (Dornemann 1981: fig. 4: 11), with pear-shaped body; a large number of similar rim morphologies are found in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 33, type 1411; pl. 33, type 1412; pl. 34, type 1413 and pl. 35, type 1414) and Qatna LBA layers (Iamoni 2012: pl. 52).

[^46]:    128 Something similar is seen in the Tell Bazi citadel, North Slope, phase 2 (early LBA, $16^{\text {th }}-15^{\text {th }}$ cent. BCE) (Coppini 2014: pl. 25: 1).

    129In this case, a classification of the general morphology as krater would seem affected by the relatively small opening - 11 cm - of the sample. Related morphologies may be observed in Qatna MB II-III and LBA biconical cups (Iamoni 2012: pl. 9: 11, MB II-III layers; pl. 10: 1, MB III layers; pl. 12: 12, MB IIA; pl. 38: 13, LBA). Closer similarities however seem visible in the shapes of Tuqan N, MB IIA (Ascalone 2011: fig. 40: 6) and MB

[^47]:    IB layers (Ascalone 2011: fig. 40: 10; fig. 42: 5), or Oylum Höyük (Özgen, Helwing 2001: 17: c, MBA). As already seen for Fig. 4.3: 4, comparable morphologies seem to be recognised also in North Central Anatolian assemblages (see L.814).

    130See for example Qatna LB I layer (Iamoni 2012: pl. 50: 3). Something vaguely similar might be further recognised in Hittite assemblages (see for example Kuşaklı/Sarissa types T12-15; Mielke 2006: pls. 35-38, 40).

    131 A similar variant is found, for example, in late MBA layers of Munbāqa (see Heinz 1992: Cat. B, pl. 33: 2). In Tilmen Höyük Upper Town it finds comparison with well-stratified LBA assemblages from area K-5 (F1445-TH06K5265-13) (Archives of Turco-Italian expedition to Tilmen Höyük).

[^48]:    132See for example Alalakh VII (Heinz 1992: Cat. A, pl. 17: 10) and X (Heinz 1992: Cat. A, pl. 55: 13); Mardikh MB IIA (Nigro 2002b: fig. 20: 5); Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 72: 5, type 2223; pl. 83: 5, type 2341) and LB I layers (Colantoni 2010a: fig. 5: 3, considered as deriving from MB II local tradition (Colantoni 2014: 667); Tuqan P, MB II layers (Peyronel 2008: fig. 13: 6); MBA-early LBA levels at Ugarit and Munbāqa (see comparisons in Heinz 1992:C. B, pl. 42); Qatna MB II layers (Iamoni 2012: pl. 14: 5), considered typically late MBA (type P4) and LB IIA in the local sequence (Iamoni 2012: pl. 35: 12); Hadidi MB II layers (Dornemann 1979: fig. 22: 13; Dornemann 2007: pl. 3: 4); Hadidi H XIII (Dornemann 1981: fig. 13: 32); Emar, Upper town phase UT 4 - late MBA (Sakal 2018: fig. 5: 1, 3); Tell Bazi citadel, North Slope, phase 4, attributed on comparative basis to the late MBA (late 17 ${ }^{\text {th }}$ cent. BCE) (Coppini 2018: fig. 3: 2) and phase 3, attributed to the first part of LBA ( $16^{\text {th }}-15^{\text {th }}$ cent. BCE) (Coppini 2018: fig. 5: 1);
    Qitar type A07 - LBA (McClellan 2018: fig. 19: 1051, 1160, 1114, 4457); late MBA-early LBA layers from Hadidi (Dornemann 1979: fig. 22: 13; fig. 19: 2).

    133See for example Schoop 2011: fig. 1: c, which seems to emerge with the beginning of the Hittite ceramic sequence ( $17^{\text {th }}$ cent. $B C E$ ) and to reach a climax in the second part of the sequence ( $16^{\text {th }}-15^{\text {th }}$ cent. BCE ); or some type S 1 variants of Boğazköy and Kuşaklı, for which see for example Kuşaklı/Sarissa, where this general morphology is attested along the entire Westhang sequence ( $2^{\text {nd }}$ half of $16^{\text {th }}$ cent. $-13^{\text {th }}$ cent. BCE), but is considered particularly frequent in $15^{\text {th }} 14^{\text {th }}$ cent. BCE layers (Mielke 2006: pl. 49: 11, type S1b; pl. 51: 2, type S1q).

[^49]:    135See Nigro 2002a: pl. 56: 91Mardikh; Mazzoni 2002: pl. 58: 12-14. But see also Zincirli Complex DD, mid-17h cent. BCE destruction (Morgan, Soldi 2021: fig. 19: 4-9); Mardikh IIIB, MB II (Matthiae 1995: fig. 51: 1, 4); Mardikh, MB IIB, ca 1700-1600 BCE (Peyronel 2000: fig. 11); Mardikh IIIB2 destruction layers (Pinnock 2005: type 1290; 1291, 1291); Mardikh LB I layers (Reuse of Royal citadel E, 1600-1400 BCE, Matthiae 2011: fig. 20: 10); Ugarit (Heinz 1992: Cat. B: pl. 9: 2-3; pl. 10: 1-3); Alalakh MB IIB (Horowitz 2015: fig. 7.4: 4-5); Alalakh VII (Heinz 1992: Cat. A: pl. 5: 24-26; pls. 6-7); MBA Southern Syria (Braemer, al-Maqdissi 2002: pl. 15); Oylum Höyük, MB II (Özgen, Helwig 2001: fig. 17: b, c); Tilbeshar chantier J, MBA (Kepinski-Lecomte, Ergeç 1999: fig. 4: 2); Zeytinli Bahçe Höyük, MB II (Balossi et al. 2007: fig. 10: c-f); Şaraga Höyük, MB II (Sertok et al. 2005: fig. 14); Lidar Höyük phase 4 (Kaschau 1999: pl. 113: 1-5, 7-13) and 5 (Kaschau 1999: pl. 132: 3-8; pl. 135-136, 147, 162; pl. 166: 1, 2, 8; pl. 171: 1-6, 8; pl. 176: 1-4; pl. 181:3, 7; pl. 189: 1-8; pl. 196, 197; pl. 214: 1; pl. 145: 5; pl. 250: 1, 3; pl. 254:3-4; pl. 261: 2; pl. 279: 4-7); Tell Shiyukh Tahtani phase 7, tomb 54 (MB II, Sconzo 2007: fig. 25: 2).
    136Something vaguely similar, however, was also attested in well-stratified contexts of the Tilmen Höyük Upper Town area G (F.1290-TH.06.G.86-9) (Archives of Turco-Italian expedition to Tilmen Höyük).

[^50]:    139Due to the impossibility to revise the preliminary description of the object, it was not possible to determine whether or not the cavity visible on the picture corresponded to a hole passing all the way through.

[^51]:    140See Mielke 2011, with extensive bibliographical references.

[^52]:    141 Or subterranean structures, which would facilitate the use of the arch by removing the necessity to counterbalance the horizontal drives of the structure on the walls (on the use of the arch and corbelled vaults in the Ancient Near East see as a reference Leick 1988: 238-240; Anastasio 2011: 74-77).

[^53]:    142Regarding to this, D.-P. Mielke (2018: 73), notes that preserved gate structures at Boğazköy attest a parabolic closure, while the hieroglyphic-luwian sign for gate (Laroche 1960, no. 237) shows an arch-shaped gate lintel. The use of straight gate lintels, however, is also attested (Puchstein 1912: pl. 11, Der Äussere Eingang der Poterne Jer-Kapu).
    143See in particular Burke 2008: 70 for evidence of a barrel-vaulted arch in the Levant before the MBA.
    144 The addition of buttresses in the following phase 13 , however, is considered evidence of instability of the vault over such a large chamber (Burke 2008: 70).

    145See as example Mardikh, Tuqan, Qatna and Hazor (Burke 2008: 72).
    146For which see as example Ugarit (Schaeffer 1939: fig. 13; Schaeffer 1951: pl. 4; Yon 1997: fig. 18a), dating to

[^54]:    LBA, or to the end of MBA according to Burke chronological references (MB IIC according to Burke 2008: 71, that is 1600-1530 BCE according to VLC [Burke 2008: table 1]), and Akko (originally considered a drain in Dothan 1993: 19f, but see Burke 2008: 71, 235), dating to the end of MBA (MBA IIC - 1600-1550 BCE according to Burke 2008: 235). In Anatolia, postern gates - such as those attested at Boğazköy, Alaca Höyük, Alişar Höyük and Külhöyük (Naumann 1971: 124-129, 302-304; Mermerci 1994; Miglus 2005) - are considered among the most ancient element of the Hittite fortification concept (Mielke 2018: 75).

[^55]:    147See Naumann 1971: fig. 406 for an overview of Bronze Age gate morphologies; see additionally Mielke 2018:
    fig. 6.5 for a general outline of Hittite gates. On the same topics see Burke 2008: 67-72; Herzog 1986: 37-88.

[^56]:    148The dating of this section of the fortification wall of Hattuša lower city is considered to be related to the same building program for the construction of the Great Temple (Schachner 2011: 85). From at least the turn of the $16^{\text {th }}$ to the $15^{\text {th }}$ cent. BCE, the lower town was dominated by the Great Temple and the so-called $A b$ schnittsmauer (Schachner 2017), but the Temple might have been erected already in the early $16^{\text {th }}$ cent. BCE (Schachner 2021).

[^57]:    149 The contemporary Shechem XV East Gate (Herzog 1986: fig. 45; Wright 1984: fig. 3; Herzog 1997a: fig. 4.14) and Beit Mirsim E-D gate (Herzog 1997: fig. 4.15), are either partially or entirely built as jutting bodies as well but, unlike Tilmen K-3 and from the samples cited above, they are additionally integrated into a more complex layout including further rooms or towers. The same holds true for the slightly earlier Yavneh-Yam area H gate II (Kaplan 1969: 121; Herzog 1986: 5253; Burke 2008: 316).
    150Apparently on both sides of Ashdod's gate and on the left side - or assailants' right side - of Tell el-Far'ah North's gate.

[^58]:    151The outer façade however was flush with that of the fortification wall (Burke 2008: 305).
    152See for example Ashkelon XXIV-XXIII (Voss 2002: figs. 1-3), dating to SL (VLC) MB IIA (NL MB I) and XXI (Voss 2002: fig. 5), dating to SL (VLC) MB IIB (NL MB IB-IIA); Megiddo XIIIA, Area AA (Loud 1948: fig. 378, top; Burke 2008: fig. 88), dating to SL (VLC) MB IIA (NL MB I); Mardikh, Area A, Damascus Gate (Pinnock 2001: fig. 14), in use in Mardikh phases IIIA and B (MB I-II).

[^59]:    153For the definition of 'bipartite gate chamber', see Mielke 2018: 73. Additional definitions of the same gate layout surveyed by A. Burke (2008: 68), include: 'à tenaille type gate’ (Matthiae 1980 :120); 'three-entrance' gate (Gregori 1986); 'four-chamber gate' (Weippert 1988: 222); 'fort-gate' (Herzog 1997: 134); 'triple gate’ or 'three way gate' (Kaplan 1975 :12ff.) and 'Syrian' gate (Kempinski 1992: 134ff).

    154See in particular Gregori 1986 and Burke 2008: 68-70 for the Mesopotamia and the Levant; Mielke 2018: 73 for Anatolia.
    155See Burke 2008: table 9 for a survey of six-piers gate sizes.

[^60]:    156A further angular plan may have been adopted at the joint between the western and southern sections of the terrace wall south of gate K-3, but the poor state of preservation of the structures above the surface did not allow for a sound evaluation (Pl. I).

    157More specifically, they are all oriented north/northeast-south/southwest and east/southeast-west/northwest.

[^61]:    158A further hypothesis that may be proposed is that the wall W. 1613 might have constituted the southern perimetral wall in a first building phase in which the fortress P was limited to the northern rooms L. 1640 and L. 1641 and to the long room L.1645. No other evidence of this hypothetical building process, however, has been gathered on the field.

[^62]:    160One sherd has been collected as TH.07.P.324 SAMPLE 1 (F.2013) and is preserved at the Archaeological Museum of Gaziantep.

    161 To the west, F. 2013 is covered by the superficial layer F. 2011 (Phase 4).

[^63]:    162 One of which is collected as TH.07.P.326 SAMPLE 1 (F.2012) and preserved at the Archaeological Museum of Gaziantep.

[^64]:    163However, this may not apply to the adjacent room L.1640, where the floor levels were entirely missing, so that nothing may be presumed about their quality.

[^65]:    164For a description of the Turco-Italian expedition's sampling method see $₫ 1.5$
    165 See in particular the case of phases 1 and 2.
    166For a relatively fine sample, however, see Fig. 5.20: 4.

[^66]:    167See for example Tuqan L-South - MB IB-IIA (Peyronel 2006: fig. 26: 2, 3, 5), possible evolutions of MB I allmark bowls with expanded rim (Nigro 2002a: 102 and pl. 46: 9, Mardikh IIIAI, MB IA), and related to MB IB high carinated bowls with ledged rim (Nirgro 2002a: pl. 48: 43, Mardikh IIIAI, MB IB). For other related morphologies from MB I contexts see Ebla Archaic Palace phase II, attributed to MB IA (Matthiae 2006: fig. 10: 4); Mardikh IIIA2, attributed to MB IB (Nigro 2002a: pl. 48: 39); Hama H5 (Fugmann 1958: fig. 109: 3 B 721); Hama H, silos 10 (Fugmann 1958: fig. 110:3 D 571). Similar ledge rim, altough with curved profile, may be additionally found at Hama H1 (Fugmann 1958: fig. 127: O 41), dating to around MB IIA1 (according to Nigro 2009: table 6: 1-2) or MB IIB (according to Iamoni 2012: table VI: 1).

[^67]:    168See for example the Qatna variant in Iamoni, Morandi Bonacossi 2010-2011: fig. 10: 1, considered typically MB IIB (Iamoni, Morandi Bonacossi 2010-2011: 189), and Mardikh IIIB, MB II (Matthiae 1995: fig. 50: 10).

    169Many variants derive, in fact, from Mardikh IIIB2 destruction layers (Pinnock 2005: type 2331, esp. pl. 80: 3; pl. 24: 4, type 1322). Similar samples at Qatna, either deriving from MB IIB (Qatna J13-12, Iamoni 2012: pl. 1: 12, type B3B; pl. 4: 9, 2, type B9B) or MB III layers (Qatna J10, Iamoni 2012: pl. 6: 8, type B13B) were considered a typical MB IIB-III production. For Late Bronze age evolutions see Alalakh (Horowitz 2019: fig. 7.10: 5).

    170 To be attributed to MB IIB late (and continuing into the LBA) according to Nigro 2009: table 6: 1-2, or to LBA according to Iamoni 2012: table VI: 1.

    171 See in particular for commentary and comparisons Fig. 2.3: 8.

[^68]:    172For LBA Northern Levant variants, see for example Qatna type CK6, considered typical LB II, as attested in the period K13, attributed to LB I ( $15^{\text {th }}$ cent. BCE in the local sequence, Iamoni 2012: pl. 58: 9) and K12, attributed to LB IIA (Iamoni 2012: pl. 58: 8), or the type GJ6, considered typical of early LBA, in the variants attested in period K12, attributed to LB IIA (Iamoni 2012: pl. 45: 9).

    173 Specifically, the outside folded rim with squared profile may be observed in Tilmen lower town area M (TH07M507-9), probably to be ascribed to late MB IIA and MB IIB (Archives of Turco-Italian expedition to Tilmen Höyük); outside downward-folded rim jars may be observed in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 86: 6, 8, 9, type 2511). Some general similarity may be observed also with Northern Mesopotamia MB II Khabur ware vessels (for which see Chagar Bazar, McMahon, Frane 2009: pl. 59: 4, altough decorated with cross-hatched motives).

[^69]:    174 For which see Fig. 4.3: 3 (area K-3) and related commentary.
    175A double row of wolf-teeth attested on the shoulder of a peculiar carinated jug from Lidar Höyük (Kaschau 1999: pl. G: 6; pl. II: 66: 1, tomb 66) appears the closest comparison for the Tilmen P sample, but the two vessels likely relate to different productions. Further examples of painted upside-down triangles are attested, for example, in MBA Sirkeli (Haider 1999: fig. 29: a) or Alalakh level VII (Heinz 1992 cat. A, pl. 11: 44), and are typical of Chocolate on White Ware (MB II-LBA) (see for example Fischer 1999: fig. 10: 3; fig. 11: 2; fig. 5: 5), but no really close comparison with the Tilmen sample is recognisable. This seems to support the hypothesis of a local production.

    176 In the northern room L.1641, the northern portion of the foundation deposit F. 2002 is partially eroded, but it is rather finely sealed by the sandy soil of phase 3a F. 2006.

[^70]:    177See comparisons already shown for Fig. 4.3: 1 (K-3, phase 2); Fig. 4.6: 2 (K-3, phase 3).
    178 Approximately dated between $1^{\text {st }}$ half of the $18^{\text {th }}$ cent. BCE and the first half of $17^{\text {th }}$ cent. BCE (see commentary and comparisons to Fig. 2.3: 5).

[^71]:    180See Tarsus level A-2 (Slane 1987: pl. 42: 175) and A. 3 (Slane 1987: pl. 55: 254), attributed to the Karum period; level A. 6 (Slane 1987: pl. 96: 444), attributed to the Old Hittite period, and level A.7-8 (Slane 1987: pl. 118: 514) attributed to ca. $15^{\text {th }}$ cent. BCE.

    181 A further parallel is found in LBA layers of Tilmen area K-5 with TH07K5130-2 (Archives of Turco-Italian expedition to Tilmen Höyük).

    182See as example Nigro 2002b: fig. 20: 7-8, Mardikh MB IIA, or Özgen, Helwing 2001: fig. 17: h, Oylum Höyük, MBA.

    183See Lidar Höyük phase 4 (Kaschau 1999: pl. 117: 2), attributed to MB IIIA in the local sequence and approximately dated around the $2^{\text {nd }}$ half of $17^{\text {th }}$ cent. BCE and phase 5 (Kaschau 1999: pl. 263: 3), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

    184See Tarsus level A.7-8 (Slane 1987: pl. 118: 513), attributed to LB I/IIA in the local sequence and approximately dated around the $15^{\text {th }}$ cent. BCE.

    185See for example Ebla Archaic Palace phase IV (Matthiae 2006: fig. 12: 1-2, 7), attributed to MB IB, and Afis area E level 15 (Mazzoni 1998: fig. 20: 9), considered typical MB IB. Further comparisons are found in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 78: 4, 5, type 2311).

    186See TH06G86-2 (Archives of Turco-Italian expedition to Tilmen Höyük).

[^72]:    187See Lidar Höyük phase 3 (Kaschau 1999: pl. 89: 2), attributed to MB IIA in the local sequence (between the $18^{\text {th }}$ and the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE); phase $4 / 3$ (Kaschau 1999: pl. 299: 10; pl. 305: 7), attributed to MB IIB in the local sequence, approximately dated toward the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE, and phase 4 (Kaschau 1999: pl. 122: 5-7; pl. 124: 1) attributed to MB IIIA in the local sequence, approximately dated around the $2^{\text {nd }}$ half of $17^{\text {th }}$ cent. BCE.

    188 But see also p201-1 (Area K-3, phase 3) for a smaller variant.
    189See commentary and comparisons for Fig. 4.3: 4, Area K-3.
    190See for example the MBA layers of Oylum Höyük (Özgen, Helwing 2001: 17: c); MB IIA layers of Qatna (Iamoni, Morandi Bonacossi 2010-2011: fig. 8: 10; Iamoni 2012: pl. 12: 12, type C7D) and Alalakh X (Heinz 1992: cat. A, pl. 60: 45). A similarity is visible also in the profile of smaller cups from Tarsus level A. 1 (Slane 1984: pl. 6: 20-21), attributed to the Karum period.

    191See Pinnock 2005: pl. 49: 5-6, type 1444; pl. 47: 4, type 1620, Mardikh IIIB2 destruction layers; Dornemann 2007: pl. 6: 2, Hadidi MB IIC; Dornemann 1981: fig. 15: 11, Hadidi H XIII.

[^73]:    192See for example Alkhalid 2015: fig. 7: 26, Mardikh, MB I.
    193See Thalmann 2002: fig. 7: phase M, top line, on the right side, Tell Arqa phase M, attributed to ca. 1750-1550 BCE, MB II in the local sequence.

    194See for example Oylum Höyük (Özgen, et al. 1997: fig. 20: 1) and Munbāqa level II-Mbq-3 (Blocher, Werner 2018: fig. 19: 7737), attributed to LB IB in the local sequence (ca. $1^{\text {st }}$ half of $14^{\text {th }}$ cent. BCE). In the same region see also Lidar Höyük phase 5 (Kaschau 1999: pl. 180: 1), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

    195See Hammam et-Turkman period VII: 1 (Cuvers 1988: pl. 134: 121), MB IA according to Nigro 2009: table 6: 1.

[^74]:    197See for example Pinnock 2005: pl. 49: 7, 10, Mardikh IIIB2 destruction layers.

[^75]:    critique of the tomb chronology has been advanced by Lilyquist (1993: 45) on the basis of jewellery technology, rejected by Nigro 2002a.

    205See Iamoni 2012: pl. 53: 2- 3, Qatna K12, LB IIA, type BT3, generally considered LBA.
    206Approximately dated between $1^{\text {st }}$ half of the $18^{\text {th }}$ cent. BCE and the first half of $17^{\text {th }}$ cent. BCE (see commentary and comparisons to Fig. 2.3: 5).

    207See Kaschau 1999: pl. 60: 12 for phase 2; Kaschau 1999: pl. 97: 2-7, and esp. 3, 6, for phase 3; Kaschau 1999: pl. 114: 20 and pl. 115: 2, 5, 12 for phase 4, attributed respectively to MB IB, IIA and IIIA in the local sequence, and approximately dated between ca. the $2^{\text {nd }}$ half of the $19^{\text {th }}$ and the mid $17^{\text {th }}$ cent. BCE.

    208For additional comparisons see Pinnock 2005: pl. 43: 1, 12 type 1432, Mardikh IIIB2 destruction layers; Iamoni 2012: pl. 52: 12, Qatna T9, LB I (ca. 15 th cent. BCE in the local sequence), with squared rim profile; Luciani 2002: fig. 9: MSH 00 K 1151-79; MSH 00 K 1022-14; MSH 99 D 3948, Qatna, K12-10, LB II; Dornemann 1981: fig. 15: 13-16, Hadidi H-XIII.

[^76]:    210In the Northern Levant, comparable specimens are attested in Affs area E level 15, where they are considered typical MB IB (Mazzoni 1998: fig. 21: 19-20). Although characterised by slightly thinner walls, similar everted rims are attested in the ceramic inventory of Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 49: 11, 17, type 1445) and, in association to slightly larger mouthed vessels, in MB IB-IIA layers of Tuqan L-South (Peyronel 2006: fig. 30: 2). In the Middle Euphrates area, comparable typologies of rim plus neck belong to jars typical of transition between EBA and MBA (see Finkbeiner 2007: fig. 1, type 14; see fig. 4: a for the distribution chart). In the Şavi Höyük I transitional period (EB IVB-MBA) similar types further appear in association to banded decoration (Dittmann 2007: fig. 2: TT22). Comparable everted rims with vertical profile are attested in Lidar Höyük phase 2 (Kaschau 1999: pl. 60: 4), attributed to MB IB in the local sequence, and in phase 3/2 (Kaschau 1999: pl. 324: 5), attributed to MB IIA in the local sequence and approximately dated between the $18^{\text {th }}$ and the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE., and in phase 5 (Kaschau 1999: pl. 151: 4). As suggested by the assemblage of Munbāqa level II-Mbq-4 (Blocher, Werner 2018: fig. 15: 7782v), attributed to LB IB in the local sequence (ca. $2^{\text {nd }}$ half of $15^{\text {th }}$ cent. BCE), related morphologies seem to continue in LBA contexts.

    211 See Tarsus level A. 6 (Slane 1987: pl. 107: 468), probably to be attributed to the Old Hittite period, and Lidar Höyük phase 5b (Kaschau 1999: pl. 150: 1), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

    212For the use of painted decoration at Tilmen, see area K-3 Fig. 4.3: 3, area P phase 1 Fig. 5.6: 4-5, and related commentaries.

    213See for example the MB II layers of Tuqan area D (Baff 2011: fig. 9: 4-5); and in Qatna period J11, attributed

[^77]:    to MB IIB and J10, attributed to MB III in the local sequence and approximately dated to the $16^{\text {th }}$ cent. BCE, the types GJ5 (decorated) and GJ3, considered late MBA morphologies (Iamoni 2012: pl. 18: 3, with incised decoration, and pl. 16: 7-8, with incised decoration, and n. 10).

    214For which see Nigro 1998: fig. 5: 4, in plain ware, with incised decoration; Dornemann 1979: fig. 23: 23, Hadidi, MB IIC; Dornemann 1981: pl. 14: 20, Haididi H XIII. Concerning typical Khabur painted and plain ware see Faivre, Nicolle 2007: pl. 6: 158 (painted), Tell el-Rimah, from Early II millennium BCE until SamsiAddu period; pl. 8: 206 (painted), Tell Brak HH lev. 10, Old Babylonian period, ca. 1800 BCE; pl. 9: 299 (painted), Leilan Palace lev. 2, ca. 1726 BCE; and MB II layers of Chagar Bazar (McMahon, Frane 2009: pl. 16: 1, plain; pl. 32: 14, painted; pl. 34: 5 and pl. 57: 11, plain; pl. 60: 6, painted, and 11, plain). A further parallel for a large-mouthed vessel with extended rim and painted decoration may be observed in Lidar Höyük phase 2/3 (Kaschau 1999: pl. 66: 1), attributed to MB IIA in the local sequence.

    215See commentary and comparisons for area K-3 Fig. 4.4: 4-5; area P2 phase 1 (Fig. 6.2: 6), and 2 (Fig. 6.3: 8-9).
    216See commentary and comparisons above.

[^78]:    217 The shape, for example, is attested in MB II levels of Toprakhisar Building II (Akar, Kara 2018: fig. 15: 5).
    218 Multiple brush painted wares and wavy lines patterns, in fact, are largely attested in Amuq early periods (see Braidwood, Braidwood 1960, and esp. fig. 144: 11; fig. 223: 8-10). But see also the early chalcolithic pottery of Tarsus (Goldman 1956: fig. 221: I), and EB IIIB period pottery from Tuqan area P (Peyronel 2011: fig. 32: 2).

    219Further comparisons may be observed in MB II layers of Tuqan area A (Fiorentino 2006: fig. 31: 2) and, to some extent, in Afis area E level 15, where it is considered typical MB IIA (Mazzoni 1998: fig. 24: 7).

    220See for example the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 3: 3; pl. 2: 17-18, type 1112) and Qatna J11 (MB IIB), type B4, considered late MBA in the local sequence (for which see Table 1.1) (Iamoni 2012: pl. 2: 12).

[^79]:    221See Pinnock 2014: fig. 14, Ebla types from MB IIA. Further comparisons may be observed in Alalakh VIII (Heinz 1992: cat. A: pl. 17: 4) and IX (Heinz 1992: cat. A: pl. 34: 9), as well as in the MB IIB assemblage published by M. Horowitz (2015: fig. 7.4: 8); in MB IIA layers of Qatna (Iamoni, Morandi Bonacossi 20102011: fig. 8: 6, 7, 12), in Qatna phase T12 (MB III) with type B6, considered typical of the period MB II-III (Iamoni 2012: pl. 8: 3, 7); in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 5: 18, type 1122); in MB II layers of Tuqan area A (Fiorentino 2006: fig. 31: 4) and area P (Peyronel 2008: fig. 11: 1); in Afis area E level 15, considered typical MB IIA (Mazzoni 1998: fig. 24: 12, but see also Mazzoni 1998: fig. 21: 11, considered typical MB IB, and fig. 23: 6, considered typical MB I), and in late MBA contexts of Umm elMarra (Schwartz et al. 2003: fig. 29: 1, in grey fabric ware). Comparable morphologies in the Cilician area are attested in Tarsus level A.3, attributed to the Karum period (Slane 1987: pl. 70:316-317). In the Euphrates area, comparable types appear in Şavi Höyük level 12, attributed to MB IIA in the local sequence (Dittmann et al. 2002: fig. 8b: 5), and in Hadidi MB IIB contexts (Dornemann 2007: pl. 3: 2).

[^80]:    223The sample from F. 2006 is poorly preserved, but the orientation of the sides would seem to be related to the slightly more preserved sample from Hammam et-Turkman period VII: 5 (Cuvers 1988: pl. 136: 143) (MB IIB according to Nigro 2009: table 6: 1).

    224See comparisons and discussion for Fig. 4.8: 3 (Area K-3).
    225Attributed to MB IIIA in the local sequence and probably around the the $2^{\text {nd }}$ half of $17^{\text {th }}$ cent. BCE.
    226See F1240-TH07G200-18 (Archives of Turco-Italian expedition to Tilmen Höyük).

[^81]:    227See Finkbeiner 2007: fig. 1, type 01; see also chart 2 for distribution analysis. See also Lidar Höyük phase 1
    (Kaschau 1999: pl. 11: 8; pl. 26: 1) and Hammam et-Turkman period VII: 2 (Cuvers 1988: pl. 132: 105).
    228See commentary and comparisons for area K-3 Fig. 4.4: 4-5; area P2 phase 1 (Fig. 6.2: 6), and 2 (Fig. 6.3: 8-9).

[^82]:    229TH07G200-17 (Archives of Turco-Italian expedition to Tilmen Höyük).
    230Attested also in the LB II.

[^83]:    231See for example Kuşaklı/Sarissa West Slope type S12b (Mielke 2006: pl. 57: 22-23). Morphologies with closer sides, instead, are attested in Alalakh IX (Heinz 1992: cat. A: pl. 37: 39).

    232See Kuşaklı/Sarissa West Slope, type S12i (Mielke 2006: pl. 58: 36-37).

[^84]:    233See Tarsus level A. 1 (Slane 1987: pl. 6: 18; pl. 17: 64; pl. 33: 133), level A. 2 (Slane 1987: pl. 45: 194-195; 47: 212; pl. 48: 213) and level A. 3 (Slane 1987: pl. 56: 257, 259; pl. 57: 262).

    234See for example the Euphrates type 35 (Finkbeiner 2007: fig. 1; see chart 1 for distributional chart), attested from late EBA and continuing into the MBA.

    235See Iamoni 2012: pl. 3: 9, Qatna period J13-12 (MB IIB), type B7B, considered typical late MBA (for which see Table 1.1); Iamoni 2012: pl. 6: 2, Qatna period J13-12 (MB IIB), type B12B, considered typical early MB II.
    236See Iamoni 2012: pl. 3: 7, Qatna J11 (MB IIB), type B7B, considered typical late MBA. Some similarity, however, may be observed also in Tarsus level A. 2 (Slane 1987: pl. 48: 219), attributed to the Karum period.

    237See Qatna J13-12 (MB IIB), type B7, considered typical MB II-III in the local sequence (Iamoni 2012: pl. 3: 2), and Iamoni, Morandi Bonacossi 2010-2011: fig. 10: 8, without groove below the carination.

    238See Tarsus, level A. 5 (Slane 1987: pl. 78:349), attributed to the Old-Hittite period, and MB II layers of Chagar Bazar (McMahon, Frane 2009: pl. 10: 6). Similar morphologies from Tell Shiyukh Tahtani, in the Euprhates area, (Falsone, Sconzo 2010: fig. 7, sencond bowl from right), date to the MB I.

[^85]:    239A predecessor of the type, however, might be identified in samples from Ebla tombs attributed to MB IA-B
    (Nigro 2009: pl. 52: 4-6 and p.327).

[^86]:    243See in particular commentary and comparisons for Fig. 2.3: 8.
    244Further, general similarities are also attested with samples from Lidar Höyük phase 5b (Kaschau 1999: pl. 138: 2), attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

    245See commentary and comparisons.

[^87]:    251 The sample corresponds to that published in Bulu 2016: fig. 7: 21, from the pre-level VII Alalakh palace kitchen (before late $17^{\text {th }}$ cent. BCE).

    252See Tarsus, level A. 3 (Slane 1987: pl. 64: 296), attributed to the Karum period, and level A. 5 (Slane 1987: pl. 78: 350), attributed to the Old-Hittite period.

    253Close comparisons for the sample from Tilmen are attested in the Cilician area in Tarsus, level A. 5 (Slane 1987: pl. 91: 409; pl. 86:388), attributed to the Old-Hittite period. Further comparisons may be observed in Toprakhisar Building II (MB II) (Akar, Kara 2018: fig. 15: 4) and in MB II layers of Tuqan area A (Fiorentino 2006: fig. 31: 7). Something similar may be also identified in the Zincirli Complex DD destruction layer, attributed to mid-17 ${ }^{\text {th }}$ cent. BCE (Morgan, Soldi 2021: fig. 20: 3); Alalakh VII (Heinz 1992: pl. 4: 15). Vessels like those attested in Umm el-Marra IIId (MB I) (Schwartz et al. 2000: fig. 8: 8-9) are the probable predecessors.

    254See commentary and comparisons for Fig.4.3: 3 (area K-3); Fig. 5.6: 74-5 (area P phase 1).
    255To be attributed to MB IA according to Iamoni, Morandi Bonacossi 2010-2011: table 1; to MB IB according to Nigro 2009 table 6.2.
    256See for example the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 47: 6, type 1442; pl. 50: 6, type 1451); Lidar Höyük phase 5b (Kaschau 1999: pl. 140: 1); and Chagar Bazar (McMahon, Frane 2009: pl. 59: 3, 6). In addition, see Umm el-Marra, pre-destruction pit contexts, ca. mid $15^{\text {th }}-14^{\text {th }}$ cent. BCE (Schwartz 2018b: fig. 7: 17).

[^88]:    257See for example Tarsus lev. A. 1 (Slane 1987: pl. 14: 48; pl. 50: 225, and see also Goldman 1956: fig. 371: 892). Jugs with similar rim morphology, with the vertical handle departing from the neck instead than from the rim, derive also from Kinet Höyük East Terrace Building (Gates 2000: fig. 7: 2).

    258See Lidar Höyük phase 5 (Kaschau 1999: pl. 269: 1), attributed to MB IIIB in the local sequence, approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

    259But see also Ebla Tomb III, considered typical MB IA (Nigro 2009: pl. 50:3), with larger mouth, and Alkhalid 2015: fig. 7: 12 (MB I).

    260See for example the typical SL MB IIA jars from Tell El-Dab'a G/4 (Aston 2002: fig. 1: 1; fig. 3: 4; fig. 8:3; fig. 9: 6); Aphek/Tell Ras el-'Ain (Kochavi, Yadin 2002: fig. 17: 21; fig. 24: 4, 10).

    261 See for example Kinet Höyük East Terrace Building, MB II (Gates 2000: fig. 5: 7-9).
    262See for example the handled jugs with simple, curved rim and lower grove typical of Alalakh VI-V (Gates 1981: fig. 3: b; see also Mazzoni 2002: pl. 58: 19), or of LB II contexts in the new excavations (Horowitz 2019: fig. 7.18: 3). Similar types are attested also in Tarsus, level A. 6 (Slane 1987: pl. 111: 483), attributed to the Old Hittite period.

[^89]:    263See Qatna T12 (MB III), type NJ14, considered typical late MBA in the local sequence (for which see Table 1.1) (Iamoni 2012: pl. 22: 6).

    264TH07M507-16 (Archives of Turco-Italian expedition to Tilmen Höyük).
    265Possible predecessors for Tilmen P sample, in fact, might be recognised in MB IA contexts of Ebla (Nigro 2002a: n. 24; Peyronel 2019: fig. 7: 2), while closer comparisons may be recognised in Qatna J10 (MB III), type GJ12, considered typical MB IIA (Iamoni 2012: pl. 19: 4, and see also Iamoni, Morandi Bonacossi 20102011: fig. 9: 3, 9-10) and in Mardikh IIIB2 destruction layers type 1422 (Pinnock 2005: pl. 40: 2). Similarity for the rim morphology may further be recognised in the Balikh area in Hammam et-Turkman period VII: 2 (Cuvers 1988: pl. 137: 150), also to be attributed to MB IB in terms of Northern Levant cronology according to Nigro 2009: table 1.

    266For further comparisons see Mardikh MB1 (Mantellini et al. 2013: fig. 8.15: TM10.SE.F/006), and Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 40: 7, type 1423; pl. 39: 11, type 1322).

    267See for example comparisons in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 40: 2, type 1422); MB IIA layer of Qatna (Iamoni, Morandi Bonacossi 2010-2011: fig. 9: 3, 10) and Toprakhisar Building II (Akar, Kara 2018: fig. 15: 23). In the Balikh area, see for example Hammam et-Turkman period VII: 1 (Cuvers 1988: pl. 140: 186).

    268See for example Qatna, K12-10, LB II (Luciani 2002: fig. 8: MSH 00 K 1151-31; MSH 00 K 1151-35); Kinet Höyük burnt Building period 14 (Gates 2001: fig. 8: 15) and Kinet Höyük period 13 (Gates 2001: fig. 5: 15). Similar rim morphologies are attested also in different variants of large-mouthed vessels (Tarsus level A.9, Slane 1987: pl. 137: 593-594).

[^90]:    275Fig. 5.16: 1-3, 5, from F.2033, and Fig. 5.15: 3, from F. 1633.
    276Fig. 5.16: 4 and 7 from F.2033, in the northern corridor L.2017; Fig. 5.13: 3-4 from F. 2007 in the passage L.1635, and Fig. 5.14: 1, 6-7 and 10 from F. 2012 in the room L. 1645.

[^91]:    287TH05G267-14 (Archives of Turco-Italian expedition to Tilmen Höyük).
    288See Aphek/Tell Ras el-‘Ain (Kochavi, Yadin 2002: fig. 12: 13-14; fig. 17: 1-3, 6-10). In the Northern Levant, general comparisons for the sample Fig. 5.18: 7 are attested in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 45: 12, 18, type 1436; pl. 46: 6, type 1436).

    289See for example Mardikh IIIA, MB I (Matthiae 1995: fig. 45: 1-6, 9) and IIIB1, MB IIA (Nigro 2002a: pl. 53: 72); Afis area E level 15, samples attributed to MB I (Mazzoni 1998: fig. 20: 8; fig. 21: 2, 15-17; fig. 23: 3-5) and IIA (Mazzoni 1998: fig. 25: 24-27, 28-35); Afis area E, level 14 (Mazzoni 1998: fig. 26: 19-20), attributed to LBI in the local sequence; Umm el-Marra late MBA (Cuvers et al. 1997: fig. 24: 15) and Qitar variants of type D01 attested from period 3 until period 5 (LB IB-II, ca. $14^{\text {th }}-$ mid $13^{\text {th }}$ cent. BCE, according to local chronology) (McClellan 2018: fig. 22: 1737, 1303). In addition, see also Şavi Höyük I transitional period, EB IVB-MBA (Dittmann 2007: fig. 2 TT17); Hammam et-Turkman period VI-VII (Cuvers 1988: pl. 131: 97), period VII: 2 (Cuvers 1988: pl. 131: 98) and period VII: 4 (Cuvers 1988: pl. 131: 96), probably ranging from MB I until MB IIA.

    290A similar rim morphology finds a comparison in Alalakh levels VII and VI, but is probably associated to a different morphology of vessel (Woolley 1955: pl. 121, type 131a).

[^92]:    291 Attributed to ca. 1750-1550 BCE (MB II in the local sequence, MB II - early LBA [/MB III] in NL sequences).
    292For similar vessel typologies with lid accommodation, see also Lidar Höyük phase 5 (Kaschau 1999: pl. 228: $4)$, attributed to $16^{\text {th }}$ cent. BCE according to local chronology.

[^93]:    layers (Pinnock 2005: pl. 49: 13, type 1445). Additionally, see Lidar Höyük phase 5b (Kaschau 1999: pl. 140: 6), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE, and Hadidi MB IIC (Dornemann 2007: pl. 5: 38-39) in the Euphrates area, and Tarsus level A. 4 (Slane 1987: pl. 73: 336), attributed to Late Assyrian colony/early Old-Hittite period.

    296See for example Tarsus level A.4, (Slane 1987: pl. 73: 336), attributed to Late Assyrian colony/early Old-Hittite period, and Lidar Höyük phase 5 (Kaschau 1999: pl. 256: 8), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE. Further comparisons can be observed in Tarsus level A. 1 (Slane 1987: pl. 20: 73), attributed to the Karum period, and Afs area E level 15, attributed to MB IIA (Mazzoni 1998: fig. 25: 19).

[^94]:    (Dornemann 2007: pl. 4: 3-4); Afis level 14, attributed to LB I in the local sequence (Mazzoni 2002: pl. 58: 22), and MB II contexts of Damascus area (Nicolle 2002: pl. 28: 56).

    300But see also Alalakh IX (Heinz 1992: cat. A: pl. 44: 88); Qatna J11 (MB IIB), type BT1, considered typical late MBA (for which see Table 1.1) (Iamoni 2012: pl. 28: 5); Tarsus (Goldman 1956: fig. 379: 1044, late MBA according to Gates 2011: 187); Lidar Höyük phase 1 (Kaschau 1999: pl. 23: 18), attributed to MB IA in the local sequence, and phase 5b (Kaschau 1999: pl. 148: 3 and pl. 273: 1), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE. A connection is also visible with the mouth typology of plain ware globular flasks; see for example the Zincirli Complex DD destruction layer, attributed to the mid-17 ${ }^{\text {th }}$ cent. BCE (Morgan, Soldi 2021: fig. 26: 2) and Lidar Höyük phase 4/3 (Kaschau 1999: pl. 288: 2) attributed to MB IIB in the local sequence and approximately dated toward the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE.

    301See in particular Tarsus level A. 9 (Slane 1987: pl. 132: 577), attributed to LB II in the local sequence and hypothesised to be dated to the $14^{\text {th }}$ cent. BCE; Umm el-Marra destruction level (Schwartz 2018b: fig. 12: 6), dated to mid-late $14^{\text {th }}$ cent. BCE (ca. 1360-1340 BCE), in painted ware, and Tell Bazi level 4 (Einwag, Otto 2018: fig. 9: 2.2) attributed to LB IB in the local sequence and dated to ca. the $1^{\text {st }}$ half of $14^{\text {th }}$ cent. BCE. Further, more general parallels may be observed in Alalakh area 2 phase 1, tentatively attributed to Woolley level IV and to the late LB IIA (Mullins 2010: fig. 3.3: 4); Hadidi H XIII (Dornemann 1981: fig. 13: 3-5), attributed to the $16^{\text {th }}$ cent. BCE by Iamoni 2012, and to the end of the $16^{\text {th }}$ cent. BCE according to Otto 2018: table 1, and with MBA southern Syria (Braemer, al-Maqdissi 2002: pl. 9: 16, attested in Bosra levels 17 and 19, attributed to MB II intermediate phase in the local sequence).

[^95]:    303See for example the MB II layers of Zeytinli Bahçe Höyük (Balossi et al. 2007: fig. 10: c, with extensive commentary). The same rim profile, although associated to a larger type of vessel, is further attested in later contexts of Qatna attributed to LB II (Döpper 2019: pl. 52: K 1763, phase 7b).

    304See for example Hadidi Tablet building (Dornemann 1981: fig. 7: 9), attributed to the $15^{\text {th }}$ cent. BCE (Dornemann 1981; McClellan 2007: 57) or, more likely, according to a recent revision, to the $14^{\text {th }}$ cent. BCE (McClellan 2018: 140 and fig. 24; Otto 2018: 228 and table 1); Tarsus level A. 9 (Slane 1987: pl. 137: 593, 595), LB II, hypothesised to be dated to the $14^{\text {th }}$ cent. BCE.

    305For which see comparisons and commentary for area K-3 Fig. 4.4: 4-5.

[^96]:    306See for example Mardikh, Midden EE (Peyronel 2019: fig. 8: 5, MB IA); Lidar Höyük phase 1 (Kaschau 1999: pl. 31: 11) and Tilmen K-5, mentioned above.

    307See for example Toprakhisar Building II (Akar, Kara 2018: fig. 15: 10); Lidar Höyük phase 5a (Kaschau 1999: pl. 133: 2), attributed to MB IIIB in the local sequence and approximately dated around the $1^{\text {st }}$ half of $16^{\text {th }}$ cent. BCE.

[^97]:    308Similar morphologies, in fact, are attested, for example in MB II layers of Tuqan area A (Fiorentino 2006: fig. 33: 1-10, kitchen ware), and in Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 88: 6, type 2513 and p.74).

    309See TH05G267-15; TH05G267-16 (Archives of Turco-Italian expedition to Tilmen Höyük).
    310 See for example Lidar Höyük phase 3/2 (Kaschau 1999: pl. 336: 3), attributed to MB IIA in the local sequence and approximately dated between the $18^{\text {th }}$ and the $1^{\text {st }}$ half of $17^{\text {th }}$ cent. BCE.

    311 See for example comparisons with Tarsus level A. 2 (Slane 1987: pl. 47: 211) and level A. 3 (Slane 1987: pl. 56: 260), attributed to the Karum period, and Şavi Höyük I level 9 (Dittmann 2007: fig. 4: 1-2, 4), related to the Old-Hittite period.

    312 The second sample from P phase 4 derives from F. 2011 and it is not shown.
    313For which see Mielke 2006: 126-136, with extensive bibliography.
    314 TH06G87-8 (Archives of Turco-Italian expedition to Tilmen Höyük).

[^98]:    320F. 1631 is characterised by the presence of four indicators with parallels in the $16^{\text {th }}$ cent. BCE assemblages (Fig. 5.19: 1-2, 5 and 7), one of which also has parallels in MB II (Fig. 519: 1); two of them with MB II and I (362-2, 362-4); and two of them with further attestations in $15^{\text {th }}$ cent. BCE assemblages (Fig. 519: 1 and 7). In addition to that, two indicators present general parallels with LBA assemblages (Fig. 519: 2 and 4).

    321F. 2011 is characterised by the presence of three indicators with parallels in $16^{\text {th }}$ cent. BCE assemblages (Fig. 5.21: 1, 4-5), one of them with further clear parallels in the $15^{\text {th }}$ cent. BCE assemblages (Fig. 5.21: 1) and another one in continuity from MB I and II periods (Fig. 5.21: 4). Two more indicators have a range of parallels centred in MB II (Fig. 5.21: 6-7) and MB I (Fig. 5.21: 7).

[^99]:    322This measurement would coincide with the sketch elaborated at the time of first investigations in the 1960s. In this plan, the outer line of the western wall was fully marked, thus indicating that the alignment was detectable on the field at that time.

[^100]:    325 Technically speaking, the relation in term of architectural stratigraphy between the walls W. 1604 and W. 1603 cannot be ascertained. In any case, they clearly belonged to a different building operation.

    326Analysis by E.-M. Wild, Vienna Environmental Research Accelerator - VERA Laboratorium, Fakultät für Physik der Universität Wien - Isotopenforschung.

[^101]:    331 Comparisons in term of profile with larger vessels from LBA contexts are also attested, see for example Qatna (LB 2A), type C3C, considered residual or early LBA (Iamoni 2012: pl. 38: 6) and Hadidi (Dornemann 1979: fig. 19: 23).

[^102]:    337Some similarity, in fact, may be observed with MB I carinated bowls from Qatna (Iamoni, Morandi Bonacossi 2010-2011: fig. 6: 4-5) and with Euphrates type 35, which is attested from late EBA and continues into the MBA (Finkbeiner 2007: fig. 1. See chart 1 for the distribution of the type). Close similarities, in fact, may be observed also with specimens from Hadidi tomb 1972, dating to the EBA (Dornemann 1979: fig. 12: 1-3, 6-8).

[^103]:    338 See in the area K-3 Fig. 4.6: 2 and Fig. 4.9: 1; Fig. 2.3: 8 in area K-1; and, in the area P, Fig. 5.6: 2, phase 1; Fig. 5.12: 4, phase 3a, Fig. 5.14: 6, Fig. 5.13: 2-3 in phase 3; and Fig. 5.18: 3 in phase 4. See in particular commentary and comparisons for Fig. 2.3: 8.

    339Further similarities may be observed with Northern Mesopotamia Khabur ware vessels from Tell Taya level 4 (pre-Shamshi-Addu) (Faivre, Nicolle 2007: pl. 6); MB II layers of Şaraga Höyük (Ezer 2009: fig. 5: 3) and with sepcimens considered typical MB IB from Afs area E level 15 (Mazzoni 1998: fig. 21: 14).

    340And, in particular, to the Mardikh IIIB2 destruction layers (Pinnock 2005: pl. 42: 6, type 1431) and Qatna T12 (MB III), type NJ8, considered typical late MBA (Iamoni 2012: pl. 21: 5). A close similarity, however, can also be observed with Mardikh IIIA (MB I) specimens (Matthiae 1995: fig. 45: 13-14).

    341 For pilgrim flasks see for example Einwag 2007 (with extended bibliography), and esp. the samples with twin

[^104]:    345See for example Kinet Höyük period 15 (Gates 2001: fig. 2: 14-15), ca. 16 ${ }^{\text {th }}$ cent. BCE; Kinet Höyük period 14 (Gates 2001: fig. 3: 7), LB I-II in the local sequence (Novak et al. 2017: 183), and Qatna K-12-10, LB II (Luciani 2002: fig. 8: MSH 00 K 1151-31).

    346Similar elongated, everted rims, associated to large-mouthed vessels, are attested also in area K-1 (Fig. 2.3: 9) and P (Fig. 5.15: 3).

    347General similarities, in fact, may be observed with MB II kitchen ware specimens of Tuqan area G (Fiorentino 2006: fig. 28: 8). A close proximity may be additionally observed with some early LBA kitchen ware shapes considered from MBA derivation from Mardikh area FF (Colantoni 2010a: fig. 5: 8-9).

    348For which see comparisons and commentary for area K-3 Fig. 4.4: 4-5.
    349In addition to the diagnostic pottery, ca. 20 simple ware body-sherds and 20 storage ware body sherds were recorded from F.1616, and ca. 15 simple ware body-sherds and 7 kitchen ware body sherds from F. 1621 were collected, but since they probably belonged to the same vessels, they have been grouped and each group has been counted as a single sample.

[^105]:    351 F938-TH5G265-3 (Archives of Turco-Italian expedition to Tilmen Höyük).
    352See Qatna J13-12 (MB IIB), type GJ19, considered typical MB IIB-III (Iamoni 2012: pl. 20: 6), and type SNJ8, attributed to the late MBA in the local sequence (for which see Table 1.1) (Iamoni 2012: pl. 25: 11); Qatna J11 (MB IIB), type CK9B (Iamoni 2012: pl. 25: 12).

    353See for example the SL MB IIA levels of Tel el-Ifshar, (Cohen 2002: fig. 2: 9) and Aphek (Cohen 2002: fig. 4: 11).

    354See for example Mardikh IIIB2 destruction layers type 2513 (Pinnock 2005: pl. 88: 6).
    355See commentary for Fig. 5.19: 5, Fig. 5.18: 10, area P, phase 4.
    356For which see commentary for Fig. 4.8: 4, area K-3, and Fig. 6.2: 1-2, P2 phase 1.
    357See for example Lidar Höyük phase 5 jars (Kaschau 1999: pl. 190: 6), or Qatna K13 (LB I), type J1, considered

[^106]:    typical LBA (Iamoni 2012: pl. 54: 6). Further parallels may be observed in Tarsus, level A. 1 (Slane 1987: pl. 13: 46), attributed to the Karum period; Umm el-Marra late MBA (Cuvers et al. 1997: fig. 23: 1, 10) and Hadidi MB IIC (Dornemann 2007: pl. 5: 44).

[^107]:    358See Hadidi H XIII for further comparisons (Dornemann 1981: fig. 13: 31).
    359See for example, Boğazköy upper city, esp. phase 3 (Müller-Karpe 1988: pl. 36, type S51).
    360See for example Fig. 2.3: 8, in area K-1; Fig. 4.9: 1, Fig. 4.6: 2 in area K-3; Fig. 5.6: 2; Fig. 5.12: 4, Fig. 5.14: 6, Fig. 5.13: 2-3, Fig. 5.18: 3 in area P, and Fig. 6.3: 2 in area P2, phase 2, with related commentaries.

    361 Another vessel with relatively small opening, however, is Fig. 5-6: 2 (area $P$ phase 1), which has 18 cm of rim diameter.

    362In MB II Chagar Bazar, for example, most of ridged rim open shapes are stands (McMahon, Frane 2009: pl. 42: 10-13).

[^108]:    363The second-ramp stair cages range from 0.85 to 1.3 m of width in the northern casemates; in the P fortress is 1.2 m large, and in the fortress P 2 it is 1 m large.

    364But see $₫ 6.2 .2$ for possible layout alternatives.
    365See commentary above.

[^109]:    366From the casemate block 1 to the east until the last remains of the casemate block 8 to the west.
    367The topographic survey of the area was conducted by M. Zanfini, who also elaborated the preliminary plan of the area.

[^110]:    368 The abbreviated form in the text and in plans refers to the northern section of the lower town terrace wall, according to which capital letter ' CN ' stands for 'Casemates-North' (ex: CN1 = Casemate North Block 1).

[^111]:    369To be precise, the block is WNW-ESE oriented, with NNE-SSW tongue walls.
    370A stratigraphic investigation of the unit was undertaken between 1971 and 1972 (Alkım 1974a: 5; Alkım 1974b: 23). The excavations of deep soundings in the southern part of room 1 and close to the access to room 2 are visible in the pictures Pls. LXXXVII: 2 and LXXXVIII: 1.

[^112]:    374 WNW-ESE oriented, with NNE-SSW perpendicular walls.

[^113]:    ver, judging on the basis of some original pictures, the presumed tongue wall dividing room 9 to the east from room 8 to the west, was most likely an alignment of collapsed stones or some later stonework (Pl. XCIV: 1). In fact, no evidence of a well-dressed stone façade is apparent, and the thickness of the structure, which is irregular, appears considerably smaller than usual tongue walls.

[^114]:    376 See for example Umm el-Marra (Nichols, Weber 2006: 47-49), Ebla (Matthiae 1997), Afis (Mazzoni et al. 2005: 9; Affanni, di Michele 2007: 12-15), Tuqan (Baffi 2006), and probably Qatna (Morandi Bonacossi 2014: 279). See additionally Matthiae 2013: 288.

    377 In relation to the state of preservation of the outer wall until the beginning of 1980s, see also Duru 2013: pl. 19: 1-3.

[^115]:    378 See the MBA city wall of Oylum Höyük for the same building technique (Özgen et al. 1997: 67; Özgen, Helwig 2003: 67).

    379 Basing on the evidence, although limited, from the deep sounding excavated by the Turkish team in the upper town, the use of stone for building foundations at Tilmen dates back to the EBA period. Instead, LCbeginning of EBA structures brought to light in the same area were entirely built with mudbricks (Duru 2013: 103).

    380 The use of the mudbrick and timber building technique is particularly typical in Anatolian contexts, possibly as a consequence of the high earthquake risk of the region (Mielke 2018: 69).

[^116]:    381 The investigation by the Alkım team concentrated on the upper city, and especially on the excavation of the palace complex. In addition to that, however, they identified the inner fortification wall encircling the citadel, the outer wall enclosing the lower town, and the city gates.

[^117]:    383 P. Matthiae (2014: 125), for example, considers the definition of the space, defence, and symbolism, three equally important objectives of fortifications.

    384 R. Duru hypothesises the water channels registered at the time of first excavations to be the results of deliberate modifications and arrangements carried out to comply with the defence system. No direct evidence however has been found so far (Duru 2013: 77, note 28).

[^118]:    385 Slightly different, instead, is the so-called 'saw-toothed' or 'serrated' layout (Keeley et al. 2007), which is typical, for example, of Alişar Höyük fortifications (see below.)

[^119]:    389 On the topic of city gates, see in particular Nauman 1971: 266-304; Wright 1984; Herzog 1986; Gregori 1986; Damerji 1987; Burke 2008: 67-73; Chadwick 2001; Mazzoni 1997; Otto 1995; May 2014; Nadali 2018.

    390 There is no agreement if civilian aspect did affect the gates layout or not (Mielke 2011: 95 quoting Herzog 1986: 157, 162-165; Otto 1995).

