

## Corso di Dottorato di Ricerca in Scienze dell'Antichità

Tesi di Ricerca

# The Iron Age II and III Ceramic Production of Mishrifeh in the Regional Context of the Northern Levant

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This is my small contribution to peace and to a future where Syria will remember and be proud of its past.

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- PLATE 25 DB10, DB11
- PLATE 26 DB12, DB13
- PLATE 27 DB14
- PLATE 28 KR1
- PLATE 29 KR1
- PLATE 30 KR1
- PLATE 31 KR1
- PLATE 32 KR2
- PLATE 33 KR3
- PLATE 34 JU1, JU2, JU3
- PLATE 35 JU4, JU5, JU6
- PLATE 36 J1
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- PLATE 56 CP8
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- PLATE 58 CP10
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- PLATE 70 Basins
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PLATE 72 – "Teapot" type Juglets
PLATE 73 – Spouts, Zoomorphic Vessels
PLATE 74 – Krater?, miscellaneous Bowls
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PLATE 76 – Painted Decorations, Cypriot pottery PLATE 77 – Incised handle, Aramaic inscriptions

### 1. INTRODUCTION

The new excavation project of Mishrifeh, which started in 1999 and continued until 2010, was part of the renewed intensive movement of archaeological research activity in Syria in the last decades of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century (Akkermans, Schwartz 2003: 11). Before that, archaeological research in the Iron Age sites of southeastern Anatolia and western Syria had been particularly intense from the end of the 19<sup>th</sup> century to the start of World War II, with for example the excavations of Zincirli, Tell Tayinat, Alalakh, Karkemish, Tell Ahmar, Hama, Tell Nebi Mend, and Mishrifeh itself (Akkermans, Schwartz 2003: 9-10).

For the Iron Age, the reference site is Tell Afis, in the modern province of Idlib in northwestern Syria, which furnished an uninterrupted settlement sequence from the Late Bronze Age to the Iron Age III (Cecchini, Mazzoni 1998a; Venturi 2020). In Northern Syria, other centres with an Iron Age occupation are Tell Mardikh (Mazzoni 1992b; Pizzimenti 2014-2105, 2018), Tell Tugan (Baffi 2006a, 2008a, 2011a), Tell Mastuma (Iwasaki et al. 2009), Tell Qarqur (Dornemann 2003a, 2012) and Tell Abou Danne (Lebeau 1983, Tefnin 1980), excavated in the late of the 20th century and the first decade of the 21st century. In Inner Syria, the most significant excavations are those of Hama (Fugmann 1958; Riis 1948; Riis, Buhl 1990), a site which has been a hallmark for Iron Age chronology (Whincop 2009: 21). More recent research has been conducted at Tell 'Acharneh (Fortin 2006a), Homs (Moussli 1984) and Tell Nebi Mend (Whincop 2007).<sup>2</sup> Iron Age sequences have also been found on the Syro-Lebanese Coast at Tell Sukas (Lund 1986; Riis et al. 1996), Tell Kazel (Capet, Gubel 2000), Tell Tweini (Al-Magdissi et al. 2008; Al-Magdissi et al. 2010c; Bretschneider, Van Lerberghe 2008a), Tell 'Arqa (Chaaya 2000; Charaf 2020-2021; Thalmann 1978) and more southward at Sarepta (Anderson 1988; Khalifeh 1988; Pritchard 1975) and Tyre (Aubet, Núñez, Trellisó 2014, 2016; Bikai 1978).

Before these new excavation projects, the Iron Age pottery from the Northern Levant was known almost exclusively from the excavations of Hama (Fugmann 1958; Riis 1948) and the Syro-Hittite Expedition in the 'Amuq Valley (Swift 1958). Unfortunately, Swift's work was never published and maintained a PhD dissertation form. One of the first typologies created

<sup>1</sup> Tell Mardikh/Ebla has been excavated since the 1960s (Davico et al. 1965), however the Iron Age occupation and pottery have been described particularly by Stefania Mazzoni (Mazzoni 1992b) and Sara Pizzimenti (Pizzimenti 2014-2015, Pizzimenti 2018) in more recent years.

<sup>&</sup>lt;sup>2</sup> The excavations at Tell Nebi Mend/Qadesh were undertaken in the 1920s by Maurice Pézard (Pézard 1931) and continued in 1975 by Peter Parr (Parr 1983). The Iron Age occupation and pottery have been studied and published by Matthew Whincop (Whincop 2007).

for inland Syria was Marc Lebeau's study of the ceramic assemblage from Tell Abou Danne (Lebeau 1983), where the dating of the pottery was based exclusively on the comparisons with the Southern Levant. Due to its relying on problematic sequences in the Southern Levant and to the fact that architecture and small finds were not included in the analysis, Lebeau's study has been criticised by Lehmann (Lehmann 1996: 99) and Whincop (Whincop 2009: 35).

Thanks to the large number of new stratigraphic sequences and pottery typologies, more often linked to the absolute chronology by radiocarbon dating programmes (Morandi Bonacossi 2008a; Osborne et al. 2019; Venturi 2020: 154-167), knowledge of the Iron Age pottery of the Northern Levant has vastly improved in recent decades.

In recent years in fact, the Iron Age in Syria has been the focus of renewed interest. The attention of the scholars has been long attracted by the transition from the Late Bronze Age to the Iron Age (Cline 2014: 163), with the upheaval caused by the disappearance of the Mycenaean Kingdoms and the Hittite Empire and the decline of the Egyptian Kingdom. The narrative of the Sea Peoples, migrants from the West arriving on the coasts of the Levant and causing the fall of the great kingdoms of the Great Kingdoms of the Late Bronze Age, has always fascinated both the scholars and the wider public (Cline 2014; Killebrew, Lehmann 2013b: 1-2; Knapp, Manning 2016: 99). The definition "Sea Peoples" derives especially from the inscription of the temple of Medinet Habu in Egypt, where the Pharaoh Ramses III describes his victory over a confederation of invaders, the Peleset, Tjekker, Shekelesh, Danuna, Washesh (Cline 2014: 18-19), and from the so-called "Harris Papire", where also the Shardana are cited (Cline 2014; 23). Other sources mention also the Teresh, the Lukka and the Eqwesh (Adams, Cohen 2013; Bryce 2005: 370-372; Cline 2014: 23-24; Millek 2019b: 29, 61-66). These names have been identified with the Philistines (Peleset), the Sardinians (Shardana), the Sicilians (Shekelesh), the Lycians (Lukka), the Achaeans (Danuna and Eqwesh) and the Etruscans (Teresh. Bryce 2005: 370-371; Dothan 1998; Finkelstein 1998; Niemeier 1998: 46-49; Van de Moortel 2020: 315-317).

A long debate on their origins, presence and true impact on Cyprus and the Levant has taken place in the scientific community (Ben-Dor 2017; Gitin, Mazar, Stern 1998; Gilboa, Yasur-Landau 2020; Lehmann, Killebrew 2013; Tusa 2018; Ward, Joukowsky 1992; Zorea 2020). The large quantity of studies focused on the transitional period between the Late Bronze Age and the Iron Age has in part reduced the perceived impact of these migrations on the Levant (Millek 2019a, 2021). While the arrival of peoples from the West seems certain, their identity is not, albeit Aegean elements are quite strong and they have been often

identified as immigrants of Mycenaean culture (Bunimovitz 1998; Dothan, Ben-Schlomo 2013; French 2013; Lehmann 2013; Sherratt 2013; Venturi 2011: 59-61).

Furthermore, the causes that brought to an end the Hittite Empire, the Mycenean Kingdoms and the Late Bronze city-states system in Syria appear to have been more complex and wide-ranging than postulated at the beginning of the research.

The destruction and collapse of the Hittite Empire and the Myceneans palaces were more probably caused by internal conflicts, rather than exclusively external invasions (Doumas 1998: 130; Millek 2019b: 43)<sup>3</sup>. It seems in fact that the Hittite capital, Hattuša, was abandoned in the late 13<sup>th</sup> – early 12<sup>th</sup> century BC and was not destroyed (De Martino 2011: 192; Millek 2019b: 43-44; Müller-Karpe 2009: 260), but that deteriorating climatic conditions during the 13<sup>th</sup> and 12<sup>th</sup> centuries must have hastened the decline of the Empire (Müller-Karpe 2009: 260-261).

Regarding the Mycenaean palaces, their destruction at the beginning of the 12<sup>th</sup> century BC was probably the final result of an internal crisis that started earlier than this period,<sup>4</sup> although it is difficult to recognize a precise cause for this widespread and generalized collapse of the whole Mycenaean system in continental Greece (Deger-Jalkotzy 2008: 389-392).

Climate change and natural phenomena such as earthquakes in the Levant may have caused destructions and years of drought and food shortage, therefore spurring also social unrest, though the precise dating of the changing weather conditions is not always possible (Cline 2014: 163-174; Knapp, Manning 2016: 102-111, 112-113).

The collapse of the Late Bronze Age system may consequently have been the result of what Cline defines as "a perfect storm of calamities" (Cline 2014: 163): the arrival of migrants – not certainly violent invaders – from the West, climate change, earthquakes and internal strife may have all contributed to destabilizing the Levantine societies.

However, this collapse was probably not as dramatic or catastrophic as imagined: trends of continuity in the material culture between the Late Bronze Age and the Iron Age are well documented in the Levant, indicating that the change may have been political, but not cultural (Chapter 2.1. Lehmann 2013: 327-328).

In conclusion, due to the problematic matter of the transition between the Late Bronze Age and the Iron Age, the Iron Age I has often been the main focus of many studies,<sup>5</sup> whereas

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<sup>&</sup>lt;sup>3</sup> See also Millek 2019b: 36-45.

<sup>&</sup>lt;sup>4</sup> At the end of the Late Helladic IIIB1 (c. first half of the 13<sup>th</sup> century BC) the palaces register a first series of destructions, after which the fortifications were reinforced (Deger-Jalkotzy 2008: 387-388).

<sup>&</sup>lt;sup>5</sup> See Akkermans, Schwartz 2003: 360-366; Killebrew 2014a; Gilboa 2014; Sader 2014a; Venturi 2007: 23-119 for a summary of the studies and excavations of transitional Late Bronze Age/Iron Age and Iron Age I periods in Syria and the Levant.

the Iron Age II has only recently been the subject of more pertinent archaeological researches (Morandi Bonacossi 2006: 76).

Several questions exist regarding Iron Age Northern Levant: one of the most problematic matters concerns its chronology, for which a general consensus has not yet been reached (Akkermans, Schwartz 2003: 363-366). While the extremities of the period (12<sup>th</sup> – mid-6<sup>th</sup> century BC, with a Persian Age dated to c. 550-330 BC) are widely accepted, different hypotheses for its inner partition have been proposed.

Particularly important for the establishment of chronological subdivisions have been the already mentioned excavations at Tell Afis. Thanks also to the stratigraphy documented at Tell Afis, in fact, Stefania Mazzoni established her chronology for the Syrian Iron Age (Mazzoni 2000b, 2000c). Mazzoni's subdivision consists of a tripartition of the period into Iron Age I (c. 1200-900 BC), Iron Age II (c. 900-700 BC) and Iron Age III (c. 700-550 BC), followed by a Persian period (c. 550-330 BC); while not universally accepted by all scholars, this subdivision is now widespread (Akkermans, Schwartz 2003: 363; Whincop 2009: 32). Gunnar Lehmann, in his pioneering work on the study of the pottery in Syria and Lebanon in the Late Iron Age and Persian period (Lehmann 1996, 1998), instead of a division between Iron Age II and III, saw continuity in the pottery assemblages. He therefore proposed to call the period dating to c. 720-580 BC Iron Age IIC, followed by a Persian period (c. 580-330 BC).

Marc Lebeau (1983: 21-26) has also proposed a slightly different chronological subdivision into Iron Age I (c. 1200-1000 BC), Iron Age II (c. 1000-700 BC), Iron Age IIIA (c. 700-550 BC) and IIIB (c. 550-330 BC).

The chronology of the 'Amuq Valley depends instead on the subdivision developed by the Syro-Hittite Expedition in the early 20<sup>th</sup> century BC (Chapter 2.2.3). The cultural phases are indicated with a capital letter and the Iron Age corresponds to Phases N and O (Haines 1971: 1-2; Pucci 2013: 90). The first to study the 'Amuq ceramic assemblages was Gustav Swift (1958), who dated Phase N to 1150-950 BC and Phase O to 950-550 BC on the basis of the pottery. Phase O was further subdivided into Oa (950-900 BC), Ob (900-800 BC), Oc (800-725 BC) and Od (725-550 BC. Swift 1958: 140-141, 198-199, Table 11). Marina Pucci has recently re-analysed the stratigraphy and finds from Chatal Hüyük (Pucci 2013, 2019) and has re-defined the correspondence between the 'Amuq Phases and the absolute chronology. The transition from Phase M (Late Bronze Age) to Phase N is set around the mid-12<sup>th</sup> century BC (Pucci 2013: 97; Pucci 2019: 186), while the beginning of Phase O dated to the mid-late 9<sup>th</sup> century BC, with the appearance in large quantities of Red Slip (Pucci 2019:

188-189, 191-192, Table 5). Each phase has been further subdivided into "beginning", "middle" and "late" sub-phases (Pucci 2019: 194-195), resulting in the following chronology: N\_beg (1150-1100 BC), N\_mid (1100-950 BC), N\_late (950-850 BC), O\_beg (850-750 BC), O\_mid (750-600 BC), O\_late (600-500 BC. Pucci 2019: 186-193, Table 5).

The chronological problems do not concern only the internal divisions, but also whether it is the case to adopt a general timeline, by nature artificial, for the whole Northern Levant (Osborne 2021: 22-23). Furthermore, the chronological subdivision seems to be influenced by the types of sources – whether written, iconographic or archaeological – used to reconstruct the historical timeline. Mazzoni's subdivision, based on a large set of data comprising archaeological evidence, monumental art and written sources (Mazzoni 2000b, 2000c), appears to be the most complete and most closely adherent to historical reality, at least regarding Syria.

Other issues concern the periodization of the Iron Age II. While the latter part of this period (middle and second half of the 8<sup>th</sup> century BC) is particularly well documented by archaeological evidence and pottery from stratified contexts (Lehmann 1998), the earlier part is less known (Mazzoni 2000c: 125). Moreover, the continuity observed in material culture, perhaps due to standardization in response to a higher demand for products, gives an idea of the homogeneity of the pottery assemblage of the period in the Levant, and thus it is difficult to further subdivide the Iron Age II as it occurs for example in the Southern Levant (Mazzoni 2000c: 125).

Another of the most pressing problems is the definition of the polities emerging in Syria and Southern Anatolia starting from the disappearance of the Hittite Empire at the end of the Late Bronze Age. They have been considered kingdoms/principalities (Sagona, Zimansky 2009: 294-295), states (Akkermans, Schwartz 2003: 366; Liverani 1988: 718; Mazzoni 2014a: 683) or city-states (Osborne 2021), and they have been referred to as "Neo-Hittite" (Liverani 1988: 736; Sagona, Zimansky 2009: 294-295), "Syro-Hittite" (Herrmann 2017: 286-287; Venturi 2007: 417), "Luwian-Aramaean" (Akkermans, Schwartz 2003: 366) or simply "Aramean" (Mazzoni 2014a: 683-684). The question has been addressed at last by James Osborne (2021: 4-11), who proposed the definition "Syro-Anatolian Culture Complex" (SACC; Osborne 2021: 9), which seems to be the most fitting description, together with "Syro-Anatolian City-States". First of all, Osborne utilises a geographical indication and avoids an ethnographic definition like Luwian or Aramaean. Second, the use of "Culture Complex" concerns the identification of these polities as participating in a "shared heritage

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<sup>&</sup>lt;sup>6</sup> Osborne offers an exhaustive overview on the topic, Osborne 2021: 21-29.

<sup>&</sup>lt;sup>7</sup> For an up-to-date summary of the various definitions used by scholars see Osborne 2021: 6-7.

and material expressions" (Osborne 2021: 9), without forgetting their local particularities and differences. The definition "city-state" is also fitting, as the capital cities of these kingdoms were of course the foci of royal power but, as Herrmann aptly said, they "also became the centre of the kingdom's population and economic life" (Herrmann 2017: 287). The ethnicity of these kingdoms, that is the presence and importance of Aramean or Luwian components, their relations with the Assyrians and the Phoenician Coast, their society and inner hierarchies are still matters under discussion.<sup>8</sup>

Particularly important are also their relations with the Assyrians and their impacts on the Syro-Anatolian polities. The study of the Iron Age Northern Levant has long been dominated by the importance rightly given to the Neo-Assyrian Empire. The excavations of the royal capitals of Nimrud, Khorsabad and Nineveh and the numerous texts found there have influenced the archaeology of the Northern Levant, as well exemplified by the matter of the *bit hilani*. The Syro-Anatolian City-States have often been left in the background compared to the Assyrian Empire and their archaeological evidence has often been considered according to the way it highlighted the history of the Assyrians (Osborne 2021: 2). For example, in her "Introduction to the Levant during the Iron Age II Period" (Steiner 2014) Margreet Steiner discusses primarily the Assyrian expansion and its impact on the Levant.

In conclusion, scholars have focused their attention on the Assyrian material culture and its influence over the neighbouring areas: terms such as "Assyrianizing" or "Assyrianization" are common in works discussing the Iron Age in the Levant, sometimes at the expense of the local productions and developments.

The need to study and give an organic form to the Iron Age pottery corpus from the Italian excavations of Mishrifeh was spurred by the fact that it was one of the few sites in Central-Western Syria excavated in relatively recent years without a comprehensive publication regarding the Iron Age pottery. Worthy of mention are the preliminary presentations of the pottery from Operation J (Besana, Da Ros, Iamoni 2008) and other Operations (Da Ros, Iamoni 2003), the study of the pottery from the German excavations (Russo 2018) and the study of the stratigraphy, with an analysis of the finds included, from Operation O of the

<sup>&</sup>lt;sup>8</sup> Once again, Osborne 2021 offers an up-to-date, precise and insightful analysis of all the questions regarding the Syro-Anatolian City-States.

<sup>&</sup>lt;sup>9</sup> Buildings with a front portico characterized by one to three columns have been defined by scholars as "*bit hilani*" or "*bit hilani*" palaces". This term was found in Assyrian texts and referred to an architecture derived from the "land of Hatti" or "land of the Amorites", intending thus the Syro-Anatolian region. Akkermans, Schwatz 2003: 368-370; Frankfort 1952; Kertai 2017; Lehmann, Killebrew 2010: 24-27; Mazzoni 2014a: 689; Novák 2014: 265-267; Osborne 2021: 151-152, 182-192.

Syrian excavations (Ziedan 2013). However, an exhaustive and comprehensive diachronic analysis of the pottery assemblages from the Italian excavations was still lacking.

The Italian team has excavated numerous different contexts related to the Iron Age occupation of the site. All the areas dug in both the upper (H, J, T) and lower town (K) have yielded Iron Age contexts and finds. Operation H-T1 returned a detailed stratigraphic sequence embracing the whole Iron Age II until the initial Iron Age III with various productive contexts (Garna 2011; Morandi Bonacossi 2019). Operation J shed light on both the Iron Age II and Iron Age III occupation (Morandi Bonacossi 2008a), while Operation K is especially interesting because it is the only area in which an Iron Age I occupation was exposed (Luciani 2002, 2003). In Operation T domestic (Areas T3 and T4. Morandi Bonacossi 2009: 124, 126) and productive contexts (Areas T2 and T3. Morandi Bonacossi 2019: 17-18) were uncovered.

The importance of the Iron Age pottery from the Italian excavations is thus due to the large quantity of finds from well-defined stratigraphic sequences and in the fact that the combination of the different contexts explored in the areas excavated provides an uninterrupted sequence spanning from the late Iron Age I to the Iron Age III that is functionally differentiated (see Table 82 in Chapter 3.10).

This project was thus undertaken with a few precise objectives, in the hope of answering at least some of the open questions regarding Iron Age Northern Levant. The main aim of the research was to create a typology of the Iron Age pottery from Mishrifeh, with also a diachronic dimension. The second objective is to contribute to the relative and absolute chronology of Syria, especially regarding the Iron Age II, which is the most documented period of Mishrifeh. Third, a typological-functional analysis was carried out, hoping to find correlations between specific contexts and specific pottery types. This investigation has been particularly interesting, as in Iron Age Mishrifeh many different contexts, from productive ones to domestic, cultic and funerary ones are present.

Last but not least, the pottery and all the archaeological documentation at our disposal provide an opportunity to try to understand the role of Mishrifeh in the Iron Age and investigate its connections with the contemporary sites in the Levant.

A few difficulties were encountered while undertaking this research. First of all, I have not actually worked at Mishrifeh: therefore, I needed to acquaint myself with the documentation regarding the eleven years of excavations and research on the site, in order to better understand and reconstruct the stratigraphy of the excavated areas.

Second, the outbreak of the Syrian civil war in March 2011 abruptly interrupted all archaeological research, making it impossible to retrieve part of the records left at Mishrifeh and to analyse the pottery first-hand. Fortunately, part of the pottery from the first two campaigns

(1999 and 2000), together with most of the documentation (drawings, pottery descriptions and photos), was conserved at the University of Udine, Italy, and was available for the analysis.

Third, the outbreak of the Covid-19 pandemic and the various lockdowns and restrictions during the research caused an unavoidable slowing-down of the analysis and prevented in a first moment a more extensive bibliographic research for some of the sites considered.

The Iron Age pottery of Mishrifeh comes from Operations J, K, H-T1, T2, T3, T4 and T5 of the Italian excavations.

To approach the study of the pottery assemblages, it was necessary to create a database of all the stratigraphic units from the Iron Age levels. The stratigraphic units can be divided into three categories: first there are the most reliable stratigraphic units, that is floors, especially with pottery and ceramic vessels on them and jars embedded in the floors. The second category consist of the deposits that accumulated immediately over the floors. The third category consists of stratigraphic units from particular contexts, not as reliable as the former types, but useful for the analysis, e.g. pit fills and collapse debris in closed structures.

This subdivision has been particularly useful for the typological-functional analysis, while it has influenced only marginally the analysis of the ceramic finds in every phase, where all the materials at our disposal have been studied.

The pottery was then analysed with regard to both fabric and morphology. Fabrics follow the subdivision created in the field of 64 macroscopically recognized fabrics, divided in two main categories: fabrics with only mineral temper and fabrics with both mineral and vegetal temper. These 64 fabrics have been subsequently assembled into 9 petrographic groups (later called "macrogroups") recognized by means of archaeometrical analyses by Lara Maritan and Claudio Mazzoli<sup>10</sup> (Maritan et al. 2005; Maritan, Mazzoli, Speranza 2007). This subject will be further discussed in the dedicated chapter (Chapter 4.1).

Regarding the morphological analysis, generic forms are based on the classifications by Rice (Rice 2015: 232-240, 412-425) and by Orton and Hughes (Orton, Hughes 2013: 190-196). At first, a general subdivision between open and closed forms was made: open forms are usually distinguished by a diameter larger than the height of the vessel. The diameter of closed forms on the contrary is smaller than their height and they usually have a more restricted orifice. There are of course exceptions to these general rules, e.g. bowls with incurved walls and inward rim, resulting in an opening narrower than the maximum diameter.

<sup>&</sup>lt;sup>10</sup> Department of Geosciences of the University of Padua.

Kraters lie in the middle of these two macro-categories and may be considered "mixed" forms, due to their wide mouth and body with straight walls and a normally wider ovoidal basin (Chapter 4.2.4).

The forms were then subdivided into generic groups as indicated in the following Table 1. In specialist literature the difference between plates and shallow bowls is not always clear, as sometimes the term "shallow bowl" is also used to indicate plates (Arie 2008: 17 – BL3; Dornemann 2003a "platter-bowls"). Another term used to define plates is "platter" (Lehmann 1998; Osborne et al. 2019; Pizzimenti, Zaina 2016; Whincop 2007). Here I have decided to use the terms "plate", "shallow bowl" and "deep bowl". The fragmentary state of most of the vessels does not allow precise measurements especially of the height of the specimens: however, plates and shallow bowls usually have a height that is not greater than their radius, bases excluded. Plates are very wide, open shapes with straight or slightly curved walls strongly inclined outwards, often with the internal surfaces decorated with paint or red slip. A few typologies have been indicated as plates/shallow bowls because their fragmentary state does not allow distinction between these categories. Bowls have been divided into shallow and deep depending on their height and the curvature of the walls, with deeper bowls usually characterized by high vertical walls, reaching a height greater than the radius. The difference between jars and jugs, which may appear similar when in a fragmentary state (especially when a long neck is present), is expressed by their diameters and the thickness of the walls. Jugs, since they have a serving function rather than being used for transport and/or storage like jars, usually have thinner walls and diameters of less than 8 cm, albeit specimens with 10-12 cm of diameter are also attested, and their general dimensions are smaller than jars.

Large storage jars are those forms referred to also as pithoi (Arie 2008; Oggiano 1997; Osborne et al. 2019; Pucci 2019; Whincop 2007).

OPEN	MIXED	CLOSED
Plates (PL)	Kraters (KR)	Jugs (JU)
Shallow bowls (SB)		Jars (J)
Deep bowls (DB)		Cooking pots (CP)
		Large storage jars (P)

Table 1: Generic shapes present in the assemblage of Mishrifeh.

Considering the fragmentary state of most of the pottery, the formal typologies were classified on the basis of the rim shapes; each generic shape has been organized from simpler to more complex rims. Cooking pots have been divided into holemouth pots (CP2-5) and shortnecked ones (CP6-11), while CP1 is a mixed form.

The pottery was subsequently inserted into a database with the following criteria:

- Form. It is specified which part of the vessel it is, that is rim, base or body sherd. In case of a rim, the generic shape (plate, shallow bowl, jar and so on) it belongs to is stated.
- Ware. Classified as Common, Fine, Kitchen or Storage Ware.
- Firing. Classified as H (homogeneous), D (dishomogeneous), O (oxidised) or R (reduced).
- Fabric
- Macrogroup
- Type of external and internal surface. Classified as SS (self-slip) and S (slip).
- Surface treatment. Classified as SM (smoothed), B (burnished) and NT (not treated)
- Colour. Classified by means of a Munsell Colour Chart.
- Production Technique. Described as HM (handmade), W (wheelmade) or HM+W (pottery produced partly with purely manual techniques and partly using a wheel).
- Decoration and presence/absence of red slip
- Diameter
- Typology

The pottery was subdivided into Common, Kitchen, Storage and Fine Ware on the basis of the analysis of the fabrics, particularly their granulometry and the thickness of the walls, to determine the functional classes (Rice 2015: 416-417). Fine Ware is characterised by very fine-grained fabrics, devoid of large inclusions and usually with thin walls, and it is typical of serving vessels. Kitchen Ware presents large inclusions, corresponding often to mineral temper, to reduce thermal shock and withstand exposure to heat (Cuomo di Caprio 2007: 101; Orton, Hughes 2013: 250; Rice 2015: 85, 424; Skibo 2013: 40) and the walls often have a greyish or reddish colour due to the exposure to or direct contact with fire. Storage Ware usually has thick walls and large, frequent inclusions used to reinforce the clay (Rice 2015: 418) and vessels tend to be large. Common Ware includes also painted pottery and Red Slip Ware (Chapters 4.3, 4.4).

Simultaneously with the analysis, parallels from other sites in the Levant were searched. First, the centres of Inner Syria closest to Mishrifeh like Hama, Tell 'Acharneh and Tell Nebi Mend. Then, sites further away like those in Northern Syria, the Syrian Coast, South-Eastern Anatolia, and on the Middle Euphrates, such as Tell Mardikh, Tell Afis, Tell Mastuma, Tell Tuqan, Tell Qarqur, Tell Abou Danne, 'Ain Dara, Ras al Bassit, Ras Ibn Hani, Tell Sukas, Tell Kazel, Tell Tweini, Tell Tayinat, Chatal Hüyük, Zincirli, Karkemish, Tell Shiukh Fawqani, Tell Ahmar, Tell Jurn Kabir and Tell Sheikh Hassan. Lastly, the extra-regional centres on the Lebanese Coast and in Northern Israel, such as Tell 'Arqa, Sarepta, Tyre, Tel Dan, Tel Dor, Hazor and Megiddo. Parallels and the topic of ceramic regions will be extensively discussed in Chapters 4.2 and 5.

The geographical area considered in this work and defined as the Northern Levant encompasses a large part of Syria and the south-eastern part of modern Turkey: more precisely, it corresponds to the area between the River Euphrates to the east and the Taurus and Amanus mountains to the north, while to the south the limit can be considered the region of Damascus, following the border between modern Syria and Lebanon. The Lebanese coast represents a different cultural area, both historically and regarding its material culture. The analysis of parallels includes also Northern Israel, in order to study the interactions of Mishrifeh with sites in a wider area and try to understand better the relations between Northern and Southern Levant.

The chronological subdivision follows that of Stefania Mazzoni (Mazzoni 2000b, 2000c), already adopted since the beginning of the excavations (Besana, Da Ros, Iamoni 2008: 142), in Iron Age I (c. 1200-900 BC), Iron Age II (c. 900-700 BC), Iron Age III (c. 700-550 BC). In both the discussion of the chronology of the archaeological contexts and in the pottery analysis I have separated the Late Iron Age II (mid-late 8<sup>th</sup> century BC) from the earlier Iron Age II period. As already discussed previously in this chapter, this is due to the fact that the later part of the Iron Age II is well documented and the pottery assemblages are better known (Lehmann 1998; Mazzoni 2000c: 125); this allows a distinction to be made.

The notes and citations follow the Harvard Referencing System, however when discussing the ceramic parallels the references will be cited in footnotes, in order not to fill the text with too many parenthesis and to allow an easier reading.

### 2. SYRIA AND THE NORTHERN LEVANT IN THE IRON AGE



Fig. 1: Satellite map of the Northern Levant and the Eastern Mediterranean (from Google Earth).

### 2.1 HISTORY, ARCHAEOLOGY AND POTTERY

The Iron Age (c. 1200-550 BC) in the Northern Levant, and Syria especially, represents more than six hundred years full of transformations, flourishing and decline. The transition from the Late Bronze Age, in the period called by Venturi "The Age of Transformations" (Venturi 2007), with the collapse of the Hittite Empire and the retreat of the Egyptian Kingdom, resulted in the Syro-Anatolian City-States finding a new degree of independence.

Historiography has long considered the first centuries of the Iron Age a "Dark Age", in which the disappearance of the great powers of the Late Bronze Age had caused instability and cultural regression (Akkermans, Schwartz 2003: 358-359; Mazzoni 2000d: 1043; Liverani 1988: 640-641).<sup>11</sup>

While a political crisis had surely occurred, modern research has downsized its impact on the Syro-Anatolian region (Killebrew 2014a: 595; Killebrew, Lehmann 2013b: 6-7; Mazzoni 1982; Millek 2019a, 2021). Some cities effectively register extensive destructions, such as Ugarit and Emar (Akkermans, Schwartz 2003: 358; Liverani 1988: 635; Mazzoni 2000c:

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<sup>&</sup>lt;sup>11</sup> See also the definition "The Crisis Years" in Ward, Joukowsky 1992.

122). 12 However, many sites display occupational continuity, like Tell Afis (Venturi 2007: 125-126; Venturi 2020: 19), 'Ain Dara (Mazzoni 2000d: 1044-1048; Stone, Zimansky 1999), Hama (Riis, Buhl 1990: 18), Tell Qargur (Dornemann 2012: 171-172). Occupational continuity is attested also in the 'Amug Valley (Gates 2013; Janeway 2006-2007: 125-127), at Chatal Hüyük (Pucci 2013) and also at Alalakh, which for a long time has been considered abandoned at the end of the Late Bronze Age (Millek 2019a: 163; Montesanto 2020a, 2020b; Montesanto, Pucci 2019-2020). Continuity is further attested on the Syro-Lebanese Coast, at Ras al-Bassit (Courbin 1986: 187; du Piêd 2006-2007) and Ras Ibn Hani (Bounni et al. 1978: 246; du Piêd 2006-2007), Tell Sukas (Riis 1970, Riis et al. 1996), Tell Tweini (Bretschneider, Jans, Van Vyve 2010; Bretschneider, Van Lerberghe 2010), Tell Kazel (Chiti, Pedrazzi 2014), Sarepta (Anderson 1988: 424) and Tyre (Bikai 1978: 65-66), while Tell 'Arga displays a regression of urbanisation, but with pottery continuity (Charaf 2020-2021: 63-64). The polities emerging after the instability of the end of the Late Bronze Age have been commonly considered "ethnic States", distinguished especially into Aramean and Luwian States (or also, Luwian-Aramean). For most scholars the terminology used for the names of the Aramean city-states found in textual sources, that is "Bit" followed by a personal name (Bit Adini, Bit Zamani, Bit Agusi and so on), indicates that they were a tribal society (Dion 1997: 240-241; Liverani 1988: 656-660, 717-718). However, epigraphic sources give a picture of societies that were not homogeneous, in the ethnic sense: for example, kings with non-Aramaic names reigning over "Aramaean" kingdoms (Osborne 2021: 41).

In any case, for some sites the Iron Age I represents a renewed vitality, with the growth of population and new construction programs as seen at Karkemish, Tell Tayinat and 'Ain Dara (below. Mazzoni 2001: 100-101). Late Bronze Age traditions were not forgotten or cancelled and sculpted limestone and/or basalt orthostats were used to decorate gateways, processional ways, enclosures and buildings (Bonatz 2014: 208-209; Gilibert 2011; Pucci 2015; Osborne 2012: 96-123; Sagona, Zimansky 2009: 297), just as the Hittites used to do in Anatolia (e.g., Hattuša, Alaça Hüyük. Akurgal 1962: 109-122; Mazzoni 2000d: 1045-1048; Pucci 2015: 61-63, 69-70; Sagona, Zimansky 2009: 267-270). This artistic and cultural lineage, which can be observed also in the continued use of Luwian hieroglyphics in the inscriptions (Mazzoni 1982: 202; Sagona, Zimansky 2009: 297), has prompted the definition of "Neo-Hittite" or "Syro-Hittite" for these political entities.<sup>13</sup>

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<sup>&</sup>lt;sup>12</sup> See also discussion in Millek 2019a.

<sup>&</sup>lt;sup>13</sup> Akurgal, in his monography on the "Art of the Hittites" (Akurgal 1962), includes also the Iron Age attestations. Regarding Karkemish and the legacy of the Hittite Empire, see also Aro 2013, De Martino 2011: 193.

The Syro-Anatolian city-states were Que (or Hiyawa) in Cilicia. Gurgum (Marash), Kummuh (Samsat), Melid (Arslantepe) in the north in the Taurus mountains, and Bit Zamani, further east on the Upper Tigris. Then southward, there were Sam'al (Zincirli) in the Kara Su Valley, Karkemish on the Euphrates, probably seat of a dynasty of Hittite origin, and Bit Baḥiani with Guzana (Tell Halaf) to the east on the River Khabur. The kingdom of Palastin/Walastin (or Patina/Unqi in the 9<sup>th</sup> century BC according to Assyrian texts. Harrison 2009a: 175) had its capital at Kunulua (Tell Tayinat) in the 'Amuq Valley and included Aleppo.

In Northern Syria there were the kingdoms of Bit Agusi, with its capital Arne first and Arpad (Tell Rifa'at) after, and Lu'ash, with capital at Hazrek (Tell Afis), which appeared around the 9<sup>th</sup> century and under the reign of Zakkur around the 8<sup>th</sup> century BC also included Hamath (Mazzoni 2001: 105-106; Mazzoni 2014a: 684; Niehr 2019: 380; Riis, Buhl 1990: 14). Lastly, Bit Adini was centered on Til Barsip (Tell Ahmar) on the Euphrates.

In the Orontes Valley, Hamath emerged in the 9<sup>th</sup> century as an independent city-state with king Urhilina (Mazzoni 2014a: 689; Morandi Bonacossi 2019: 5; Niehr 2019: 374).



Fig. 2: The Syro-Anatolian city-states (after Akkermans, Schwartz 2003: 366-367; Liverani 1988, fig. 136; Mazzoni 2014a, fig. 45.1; Novák, Fuchs 2020; Osborne 2021, fig. 1.1; Sagona, Zimansky 2009, fig. 8.1. map from Google Earth)

The pottery of the Iron Age I in the Northern Levant is still partly related to the Late Bronze Age ceramic horizon (Mazzoni 2000d: 1050). At Tell Tayinat, plain wares display relations

with the Late Bronze Age Anatolian traditions indicating continuity between the pottery of these two periods (Welton et al. 2019: 301). An Anatolian influence is visible also during the last part of the Late Bronze Age and in the Iron Age I at Tell Afis (Mazzoni 2001: 100; Venturi 2020: 184-186). The Iron Age I pottery from Tell Tuqan also displays relations with the Late Bronze Age productions, in particular the presence of vessels with a brown fabric and expanded rims (Peyronel 2006b: 199).

The Iron Age I in the Northern Levant is also characterized especially by painted decorations, both monochrome and less frequently bichrome (Dornemann 2012: 172; Pucci 2019: 179; Venturi 2007: 404; Venturi 2020: 115): common traits of the Syrian painted pottery are in fact monochrome decorations, geometric patterns and burnishing. However, it has a strong local character that varies from site to site (Venturi 2007: 404). On the Syrian coast, at Ras al-Bassit, Ras Ibn Hani, Tell Tweini and Tell Kazel, vessels coated with white slip (Syrian White Slip) appear to be common in the very early Iron Age I (Vansteenhuyse 2010: 99).

New forms derived from the Aegean pottery horizon are also attested, especially serving wares, such as shallow bowls with simple rims or amphoroid kraters at Tell Afis (Venturi 2020: 115). At Chatal Hüyük, Tell Qarqur, 'Ain Dara and Tell Tayinat the Iron Age I is also distinguished by forms and decorations influenced by Aegean productions (Dornemann 2021: 172; Janeway 2006-2007, 2017; Pucci 2019: 179-180; Stone, Zimansky 1999: 30-31). The influence of Cypro-Aegean productions is in fact quite strong in this period (French 2013; Lehmann 2013) and may be noted especially in certain decorative motifs (antithetic tails, connected semi-circles, wavy lines), which blend in with the decorations already present in the Levantine tradition from the Middle Bronze Age, particularly geometric patterns (Lehmann 2013: 279-286, 290, 292-299; Pucci 2019: 181-182; Venturi 2020: 115). Aegean contacts are confirmed by the presence of the Mycenaean III:C pottery, which is another hallmark of the period, in many sites such as Chatal Hüyük (Pucci 2019: 183-184), Tell Tayinat (Janeway 2006-2007: 129-134), 'Ain Dara (Stone, Zimansky 1999: 30) and Tell Afis (Mazzoni 2001: 100). Aegean or Aegeanizing local pottery is also present on the Syrian coast, such as at Ras Bassit (Courbin 1986: 187; Courbin 1990: 505) and Ras Ibn Hani (Bounni et al. 1978: 280; Bounni et al. 1981: 260). Therefore, according to Venturi, the early Iron Age I (12th – 11th centuries BC) in Northern Syria and in the 'Amuq Valley is distinguished by a cultural koiné with common Aegean traits most probably due to migrations of people from the West (Venturi 2020: 231-232). This cultural koiné characterised by Aegean features has been noted also by Lehmann, who explains this homogeneity by the political control exerted by the Kingdom of Palastin in this area of the Northern Levant during the Iron Age I (Lehmann 2013: 327).

The appearance of Aegeanizing pottery in the Levant has long been considered proof of invasions – or better, the arrival – of the Sea Peoples. However, now that modern research has downsized the destructions and more Iron Age I ceramic assemblages have been studied, the presence of these types of vessels may not indicate exclusively the effective arrival of people from the west, but may also indicate commercial and cultural contacts and the acceptance and integration by the Levantine peoples of new external traditions (Charaf 2020-2021: 64; Lehmann 2013: 316-327; Sherratt 2013).

The Iron Age II in some ways represents continuity with the previous phase. Monumental buildings with decorated orthostats continue to be erected in the Northern Levant, at Hama, Tell Halaf and Zincirli (Mazzoni 2001: 101; Pucci 2015) and there is an urban development with new settlements or increasing urbanization in existing sites (Novák 2014: 258), as at Tell'Acharneh (Cooper 2006: 155), Tell Afis (Mazzoni 2014b), Tell Mastuma (Wada 2009b), Tell Qarqur (Dornemann 2012), Zincirli (Herrmann 2017: 287-288), Karkemish (Pizzimenti, Zaina 2018) and Mishrifeh (Morandi Bonacossi 2007b: 86).

With the beginning of the 9<sup>th</sup> century BC and especially during the 8<sup>th</sup> century BC, the Assyrians erupt on the scene and start their relentless expansion westwards (Steiner 2014: 677). The centres closest to the Assyrian core in modern Iraq, for example the Syrian Jezireh (Anastasio 2010: 14-20; Mazzoni 2000c: 129-130), enter the Assyrian sphere of influence relatively early in the 9<sup>th</sup> century BC. Examples are Tell Halaf (Novák 2013: 298-301), Tell Shiukh Fawqani (Bachelot, Fales 2005b: XXXIV-XXXV), Tell Ahmar (Bunnens 2009: 67) and Tell Jurn Kabir (Eidem, Ackermann 1999: 315), while Karkemish seems to still retain a certain degree of independence (Bachelot, Fales 2005b: XXXVI; Wilkison, Wilkison 2016: 214).

Central-Western Syria and the Southern Levant fell prey to Tiglath-pileser III (744-727 BC), Shalmaneser V (726-722 BC) and Sargon II (721-705 BC) in the 8<sup>th</sup> century BC. Afterwards, the Assyrians established their control more firmly over the conquered territories transforming them into provinces (Hamath, Israel, Damascus) and vassal States (Judah, Moab. Mazzoni 2014a: 697-699; Niehr 2019: 375; Steiner 2014: 678). The Phoenician Coast maintained its independence, although it had to pay tribute to the Assyrians (Lehmann 1998: 31). The Iron Age II is a period of great homogeneity in the pottery production of the Northern Levant (Baffi, Peyronel 2014: 24-25; Lebeau 1983: 126-127; Mazzoni 2000c: 125; Soldi 167-168). In Syria and Southern Anatolia, Common Ware appears to be almost the same everywhere, with an orange-red-roseate fabric and common forms such as plates with round,

squared or tapered rims, hemispheric bowls, bowls with triangular rims, jars with collared or double rims and large storage jars with swollen rims.

Local differences are however attested, such as the diffusion of the Red Slip and the presence or absence of painted decorations. Red Slip has been considered the hallmark for the beginning of the Iron Age II in Syria (Mazzoni 2000b: 41-42), however in some sites it actually appears already in Iron Age I levels, such as at Chatal Hüyük (Pucci, Soldi 2019: 354), Tell Tayinat (Osborne et al. 2019: 277) and Tell Qarqur (Dornemann 2012: 172). A substantial difference regarding Red Slip vessels in the Southern and Coastal Levant opposed to the North Levant is that in the former area Red Slip can also be found on closed forms, like jugs and jars, while in the latter it is mostly attested on open shapes such as plates and bowls (Chapter 4.3). Furthermore, the more we move northward and eastward from the coast, the less the Red Slip is present. In sites like Tell Shiukh Fawqani, Tell Ahmar, Tell Jurn Kabir, Karkemish and Zincirli, red slipped vessels represent a minority in the ceramic assemblage (Eidem, Ackermann 1999: 313; Jamieson 2012: 25-28; Makinson 2005: 465; Pizzimenti, Zaina 2016: 370; Soldi 2019: 176-177).

The increasing occurrence of Red Slip in the Iron Age II corresponds to a strong decrease in painted wares and the diminishing number of types of patterns (Mazzoni 2014a: 686). In this period in fact painted decorations in Central-Western Syria mostly consist in horizontal or vertical monochromatic bands, albeit in some sites bichrome decorations increase slightly compared to the Iron Age I ('Ain Dara - Stone, Zimansky 1999: 29; Chatal Hüyük - Pucci 2019: 186).

In a few North Syrian and South Turkish sites like Zincirli, Tell Afis and Tell Sheikh Hassan, painted vessels in the Iron Age II are almost completely absent (Soldi 2019: 171-172). This is quite different from the centres of Inner Syria, such as Tell 'Acharneh, Mishrifeh and Hama, which share a tradition especially of painted plates (Cooper, Fortin 2004: 34-35), or in Central-Northern Syria, like Tell Mastuma (Wada 2009b, 2009d).

The Iron Age III is the period of Assyrian direct control over Syria and the Levant, in what Mazzoni defines the "Assyrian *koiné*" (Mazzoni 2014a: 697),<sup>14</sup> followed by the Babylonian and Persian dominations (Akkermans, Schwartz 2003: 389-394). The most prominent change from an archaeological point of view is the regression of the urbanisation or the total abandonment of sites like Hama (Ingholt 1942: 474; Riis, Buhl 1990: 14-16), Tell 'Acharneh

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<sup>&</sup>lt;sup>14</sup> Although, according to Akkermans and Schwartz, in Western Syria local features are still dominant in the material culture, as opposed to the homogeneity documented in Assyria itself and the Syrian Jezireh (Akkermans, Schwartz 2003: 382-384).

(Cooper 2006: 155), Mishrifeh (Morandi Bonacossi 2007b: 86). On the contrary, other sites are transformed into Neo-Assyrian centres, like Tell Jurn Kabir (Eidem, Putt 1999: 196), Tell Ahmar (Roobaert, Bunnens 1999: 168-172), Tell Shiukh Fawqani (Makinson 2005), Karkemish (Wilkison, Wilkison 2016: 214), Zincirli (Herrmann 2017: 288-289; Herrmann, Schloen 2016) and Tell Tayinat (Harrison 2005b; 2016).

The Levant was subjected to mass deportations, which may partly explain the depopulation of some sites and also the intense cultural interchange between Assyria and the Levant, which is represented also in the adoption of architectural features such as the *bit hilani* (Chapter 1) and the incorporation of Aramaic into the written texts of Assyrian administration (Akkermans, Schwartz 2003: 384), as at Tell Shiukh Fawqani (Fales et al. 2005).

Assyrian influence on the material culture of the Levant is a debated matter.<sup>15</sup> For certain, a few pottery types connected to Assyrian production start to appear during the Iron Age II and while they increase during the 7<sup>th</sup> century BC, in Central Western Syria they remain sporadic findings (Akkermans, Schwartz 2003: 379; Anastasio 2010: 23; Baffi, Peyronel 2014: 24-25; Lehmann 1998: 29, 31).<sup>16</sup> The most significant of these Late Assyrian materials is the "Palace Ware", consisting of thin-walled vessels, often bowls and tall-necked jars (Hausleiter 2010: 12, 258-260).<sup>17</sup> The material culture far from the Assyrian heartland and its closest neighbours remains in general local, as attested by Central Western Syrian and Lebanese sites, where the pottery production of the Iron Age III continues to follow the Iron Age II tradition, with a large degree of standardization (Lehmann 1998: 30-31).

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<sup>&</sup>lt;sup>15</sup> See Steiner 2014: 678-680 for an overview.

<sup>&</sup>lt;sup>16</sup> See also the pipe funnels from Tell Afis (Soldi 2009: 108-112).

<sup>&</sup>lt;sup>17</sup> On the Palace Ware see also Hunt 2015.

# 2.2 CATALOGUE OF THE SITES 2.2.1 AREA 1 – INNER SYRIA



Fig. 3: Satellite view of Inner Syria with the sites considered (from Google Earth).

#### 2.2.1.1 HAMA

Hama, corresponding to ancient Hamath, was excavated in the 1930s by a Danish expedition which exposed a large part of the settlement and the cemeteries (Fugmann 1958; Ingholt 1942; Riis 1948; Riis, Buhl 1990). The Iron Age I and II occupation was found in Période F and Période E of the citadel and in Phases I-IV of the cremation cemeteries. The chronology was revised by Poul J. Riis and Marie-Louise Buhl, who also correlated the citadel levels with the phases of the necropolis (Riis, Buhl 1990: 18): I = F2 (c. 175/50 - 1075/50 BC); II = F1 (c. 1075/50 - 900 BC); III = E2 (c. 900 - 800 BC); IV = E1 (c. 800 - 720 BC).

Période F yielded only scant remains (Fugmann 1958: 136-146), while in Période E (fig. 4) a large "Royal Quarter" composed of *Bâtiments* I, II, II, IV and V (Fugmann 1958: 150-264, fig. 185) was found and interpreted by Ingholt as an Aramean citadel (Ingholt 1942: 472). *Bâtiment* I was a towered gate, *Bâtiments* II and V have been interpreted as "palaces", while

Bâtiment III was a temple. Bâtiment IV was first interpreted as the residence of an official (Ingholt 1942: 472), then as a small gate (Fugmann 1958: 237-245) and finally as a temple (Ussishkin 1966); however it remains a structure of unclear function. The four Buildings I-IV were arranged around a large open area (probably a square) with a small sanctuary (Fugmann 1958: 191-209, fig. 244). The large basalt orthostats, often in the form of lions (Bonatz 2014: 223-225; Fugmann 1958: figs. 188-189, 215, 245, 256, 261; Ingholt 1942: 472-473; Riis, Buhl 1990: 34-54), are clearly derived from the Syro-Hittite or Syro-Anatolian tradition (Bonatz 2014: 215-216).

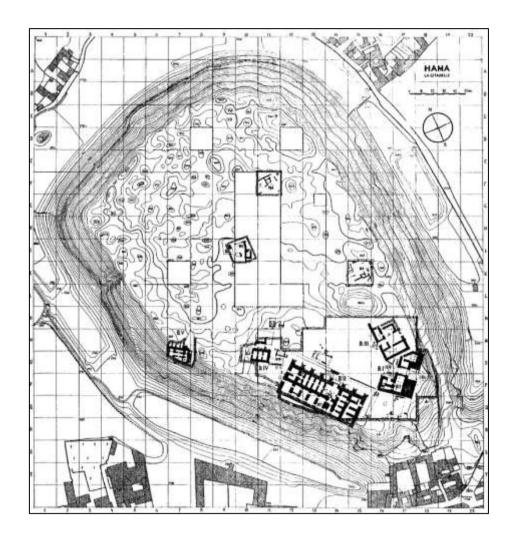


Fig. 4: Hama, plan of Périod E (Fugmann 1958, fig. 185).

The citadel was destroyed by a massive conflagration attributed to the conquest of Sargon II in 720 BC (Ingholt 1942: 472).

The pottery from Hama was presented by Fugmann together with the architecture, while the Iron Age material was published in more detail by Riis and Buhl (Riis, Buhl 1990). The assemblage contains many open forms, that is painted plates, red slipped platters (the so-

called "Hama stands" or fruit-stands), carinated bowls and bowls with S-shaped profile and a central hole (Riis, Buhl 1990 figs. 75-80). Large storage jars with swollen rim are also attested (Riis, Buhl 1990: 136-138, fig. 61), as are Greek imports (Riis, Buhl 1990 fig. 84). The Hama excavations are considered a hallmark for Syrian Iron Age chronology, although issues with the stratigraphy and the dating of some contexts (such as the famous destruction of 720 BC) have been raised (Riis, Buhl 1990: 17-26; Whincop 2009: 21-23, 56). The finds from the level dated to the 720 BC destruction have been considered guides for the Late Iron Age II (Lehmann 1998: 13), although some scholars have raised doubts about the precise date of the destruction of Période E (Whincop 2009: 21-23). Doubts about the stratigraphy have been expressed also by Dornemann (Dornemann 1997: 467).

#### 2.2.1.2 TELL 'ACHARNEH

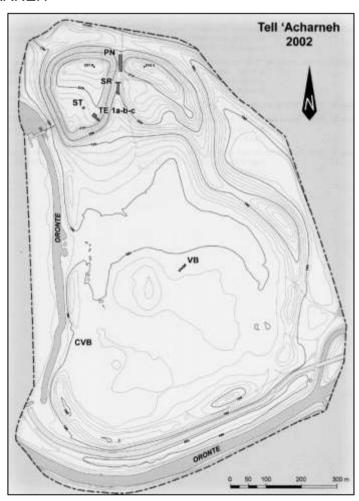


Fig. 5: Tell 'Acharneh (Fortin 2006f, fig. 1).

Tell 'Acharneh, identified with ancient Tunip, is located in the Ghab Valley, on the east bank of the River Orontes. Excavations by a Canadian mission directed by Michel Fortin started

in 1998 and continued until 2006 (Fortin 2006b). The site is composed of two hills in the northern part and a large southern area occupied by the lower city (Fortin 2006c: 3, 12). Various sondages were dug in 1998 (Fortin 2006d): in particular, the excavation area in the lower town called "Coupe dans la Ville Basse" (=CVB) yielded a large quantity of Iron Age pottery fragments (Fortin 2006d: 92).

The step-trench excavated on the north-east tell of the site (*"Tranchée en Escalier"* =TE 1) exposed a *glacis* fortification wall built to protect the upper town and dated to the Iron Age II (Fortin 2006e: 114). A building with mudbrick walls and stone foundations and a large pebbled court covered by Iron Age II pottery sherds (fig. 6) abutted the *glacis*. The structure was interpreted as part of the defensive system of the city in the 8<sup>th</sup> century BC, perhaps a public building (Fortin 2006e: 114; Fortin 2006f: 125). The glacis was also found in the *"Chantier de la Porte Nord"* (=PN), where it had been used to block the North Gate (Fortin 2006f: 130): according to Fortin, this was a way to defend the city against the Assyrian army of Sargon II (Fortin 2006f: 130, 133).

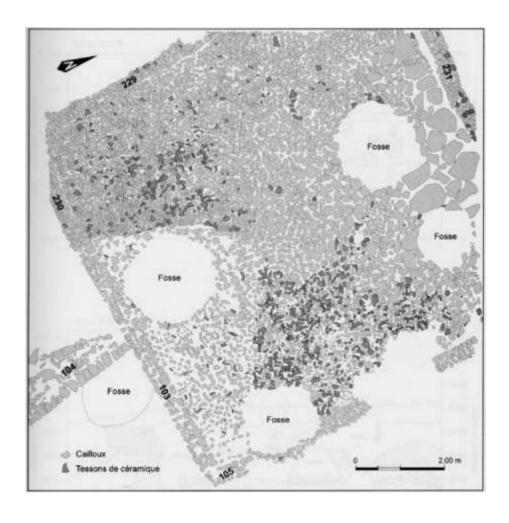


Fig. 6: Tell 'Acharneh, TE 1, the court. (Fortin 2006f, fig. 8)

In the CVB area three occupation levels were found: in the upper one a large, perhaps public building with mudbrick walls and stone foundations was exposed. In the lower level the remains of a probable domestic building were found (Fortin 2006f: 136).

The pottery from Tell 'Acharneh was studied by Lisa Cooper (Cooper 2006; Fortin, Cooper 2004: 25-48). Most of the Iron Age pottery is dated to the 8<sup>th</sup> century, that is the Iron Age II (Cooper 2006: 143, 155); however, painted fragments dated to the 12<sup>th</sup> – 11<sup>th</sup> centuries BC, the Iron Age I, were also retrieved (Cooper 2006: 155, fig. 15). The assemblage of Tell 'Acharneh has many typological parallels with other Western Syrian sites and shows affinities also with the Coastal Levant: a large quantity of the pottery is red slipped and burnished (Cooper 2006: 143-155, figs. 1-3, 5-7; Cooper, Fortin 2004: 35-36, 48).

#### 2.2.1.3 TELL NEBI MEND

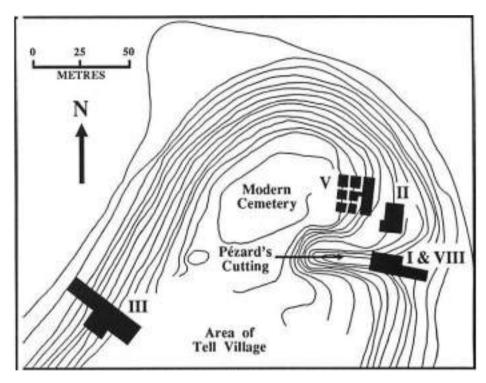


Fig. 7: Tell Nebi Mend (Parr 1991: 8).

Located not far from the modern city of Homs and on the west bank of the River Orontes, the village of Tell Nebi Mend was probably the ancient city of Qadesh-on-the-Orontes. The site was first excavated in the 1920s by Maurice Pézard (Pézard 1931) and then subsequently from 1975 by Peter Parr (Parr 1983, 1991, 2015).

The Iron Age in the site was found in Trench V, in three levels A-C. Level A corresponded to

the Iron Age III and levels B-C to the Iron Age II (Whincop 2007: 186, 190). <sup>18</sup> In level B, a large multi-storey building (Building B, fig. 8) built with mudbricks and associated with cobbled and plastered floors, with open and roofed areas, was brought to light. The presence of a staircase, added in a later moment, proves that the building had at least a second floor (Whincop 2007: 186-189). A further later addition was a small room formed by walls B14 and B15, in which three superimposed ovens were found, together with many cooking pot fragments, indicating cooking activities. These cooking activities were later moved to the external courtyard, as attested by the oven B1. The inner courtyard was originally a large rectangular space, successively divided into two areas by the erection of a wall (B11, Whincop 2007: 189-190). A violent fire caused the destruction of the building, although it was not immediately abandoned (Whincop 2007: 190).

Phase C was the earlier Iron Age II level and is represented by isolated attestations: three ovens pre-dating wall B14, two associated floor levels and three walls indicating the presence of an earlier building (Whincop 2007: 190)

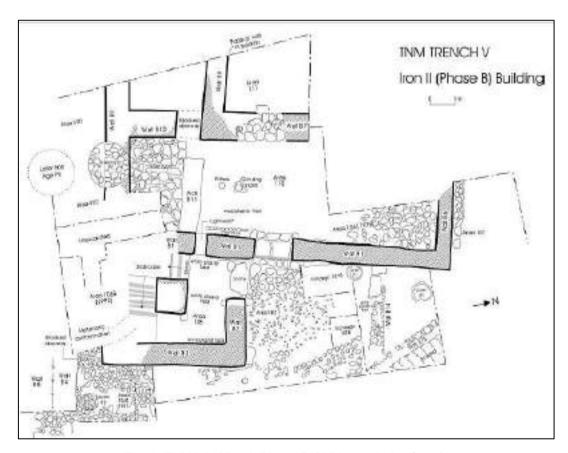


Fig. 8: Tell Nebi Mend, Phase B (Whincop 2007, fig. 4).

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<sup>&</sup>lt;sup>18</sup> Radiocarbon dates were obtained from three charcoal samples from Building B of Phase B. However they proved to be inconclusive: the time interval provided by the uncalibrated dates was too wide, while the calibrated dates were insufficient for a precise chronology, but confirmed that the building belonged to the Iron Age. Whincop 2007: 186.

Building B was replaced by another one during the Iron Age III, Level A, a structure which was also destroyed and abandoned (Parr 1991: 85).

The Iron Age II pottery from Tell Nebi Mend (Phases B and C) was analysed by Matthew Whincop (Whincop 2007). He identified five types of wares: Coarse Common Ware (CCW) with many inclusions, reddish-yellow and pale brown in colour, and represented by large storage jars with swollen rims and knobbed bases (Whincop 2007: 193). Buff Common Ware (BCW) is similar to CCW but with thinner walls and less coarse fabrics; it comprises a wide array of open and closed forms, with a few specimens decorated with monochrome paint (Whincop 2007: 195). Red Common Ware (RCW) characterizes open forms with ring bases and small jugs and has a more red-reddish brown colour, with self-slipped or wet-smoothed surfaces; bichrome painted vessels are part of this group (Whincop 2007: 195, 197). Cooking Pot Ware (CPW) consists of cooking vessels, devoid of decorations and surface treatments, with highly tempered coarse fabrics (Whincop 2007: 197). Red Slip Ware is divided into a buff version (RSW-b) and a red one (RSW-r): RSW-b has a red to brown slip, usually burnished horizontally and found on both surfaces and is distinctive of platters and bowls (Whincop 2007: 197, 201). RWS-r is similar to the previous one, but it has a more reddish colour and one or both surfaces may be slipped: this ware is also typical of platters and bowls (Whincop 2007: 201).

#### 2.2.2 AREA 2 - NORTHERN SYRIA

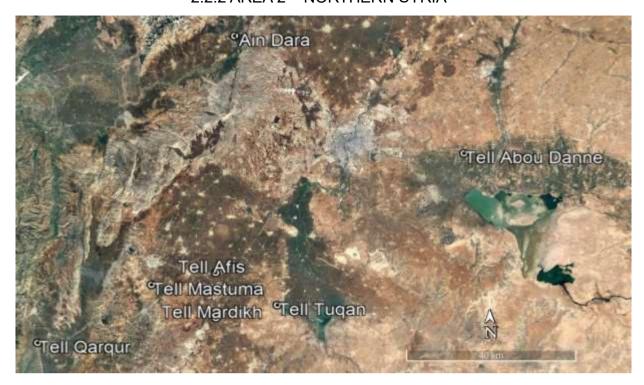


Fig. 9: Satellite view of Northern Syria with the sites considered (from Google Earth).

#### 2.2.2.1 TELL MARDIKH

Tell Mardikh, better known as ancient Ebla, is a site located in North-Western Syria, not far from Aleppo. Excavated since the 1960s by an Italian mission of the University of Rome La Sapienza under the direction of Paolo Matthiae (Davico et al. 1965), it is famous especially for its Early and Middle Bronze Age occupation. Tell Mardikh is one of the few sites which shows a clear decline and a regression of the settlement in the Iron Age, when it was named La'as (Mazzoni 1992b: 99; Pizzimenti 2018: 476).

The Iron Age occupation was found in Areas G, E and F on the upper town, in three main phases from the Iron Age I to Iron Age III. Phase 3 corresponds to the Iron Age I (Mardikh VA: 1200-900 BC) and was found in Area E, with scant traces of a domestic structure, rural open areas and waste-disposal pits. It was a very small village located on the upper town (Pizzimenti 2018: 478, 481).

The Iron Age II (Phase 2, Mardikh VB: 900-720 BC) was found in all the excavation areas and consisted of domestic structures associated with waste pits and, in Area G, a silos, indicating that in this period the settlement seemed to have expanded to include also the lower town (Mazzoni 1992b: 100; Pizzimenti 2018: 478, 481). Phase 1, the Iron Age III (Mardikh VC: 720-535 BC), is represented by domestic structures with waste pits exposed in all the three Areas. The buildings in Areas E and F were composed of at least two

rectangular rooms and an open courtyard. In Area G a building with a trodden floor courtyard containing a fireplace was found: the courtyard was bounded on the southern side by a casemate wall, probably without any defensive purpose (Mazzoni 1992b: 105; Pizzimenti 2018: 477-478, 481). The continuity between Phase 2 and Phase 1 is proven by the presence of buildings with the same orientation, plan and construction technique (Pizzimenti 2018: 477-478).

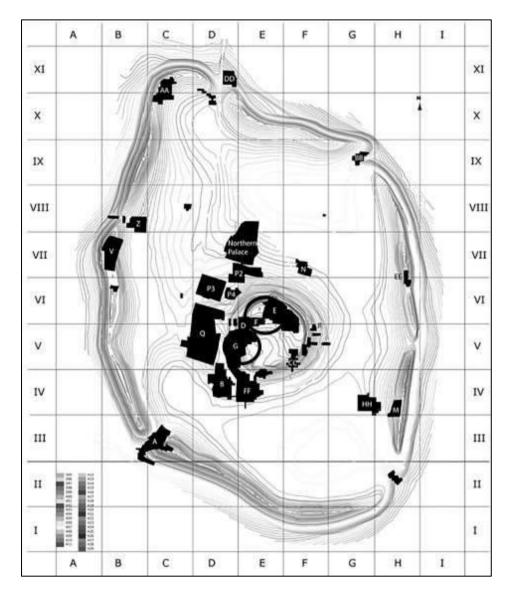


Fig. 10: Tell Mardikh (Pizzimenti 2018, fig. 1).

The pottery from Tell Mardikh has many parallels with Tell Afis, Tell Tuqan and Tell Mastuma, which are very close to the site. Two types of fabric are attested, an Orange Simple Ware typical of other North-Western Syrian settlements and a Light Brown Simple Ware, which is made with local clay. The assemblage is divided into a frequent (75%) Simple Ware, consisting of open forms, and then Kitchen Ware and Preservation Ware, the latter consisting of storage vessels (Pizzimenti 2018: 478-479).

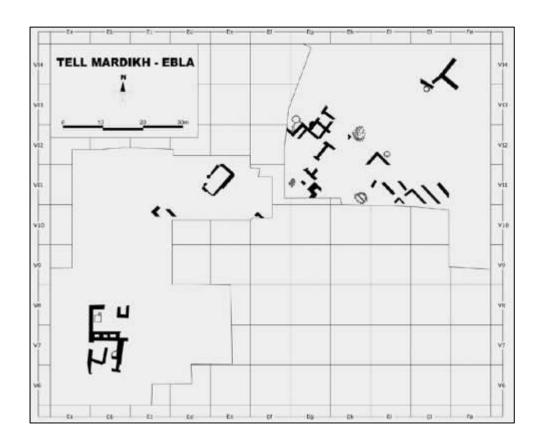


Fig. 11: Tell Mardikh, Areas G-E-F, Phase 1 (Pizzimenti 2018, fig. 2).

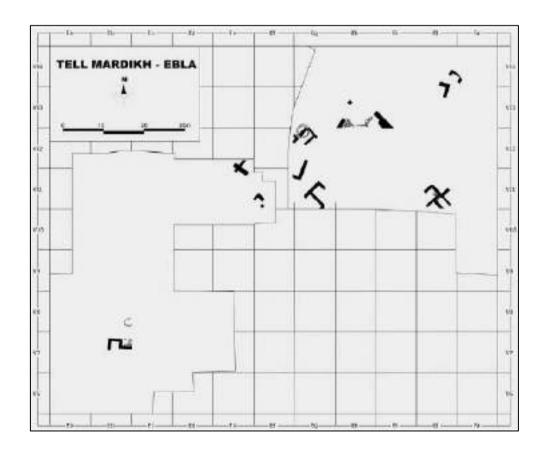


Fig. 12: Tell Mardikh, Areas G-E-F, Phase 2 (Pizzimenti 2018, fig. 3).

### 2.2.2.2 TELL AFIS

Tell Afis, an important site for the archaeology of the Iron Age in Syria, is situated in the modern region of Idlib, in North-Western Syria, not far from Aleppo and Tell Mardikh. The archaeological excavations – which began in the 1970s under the direction of Paolo Matthiae for the University of Rome La Sapienza and continued in 1986 with a combined project between the Universities of Rome La Sapienza, Pisa and Bologna directed by Stefania Mazzoni – brought to light a continuous stratigraphy stretching from the Late Chalcolithic to the late Iron Age (Soldi 2009: 98; Venturi 2007: 123-124).

The discovery in 1903 of a stele with an Aramaic inscription (the so-called Zakkur stele) led to the hypothesis that Tell Afis was the ancient Hazrek, Assyrian Hatarikka, capital city of the Aramaic Kingdom of Lu'ash (Avanzini 1987; Mazzoni 2001: 99-100; Soldi 2009: 98).

Iron Age remains are ubiquitous in the site and the pottery assemblage is one the most important for the period, as it is one of the few sites with a stratigraphy which goes from Late Bronze Age to Iron Age III without interruptions.

Various excavation areas were opened on the upper and lower town (fig. 13).

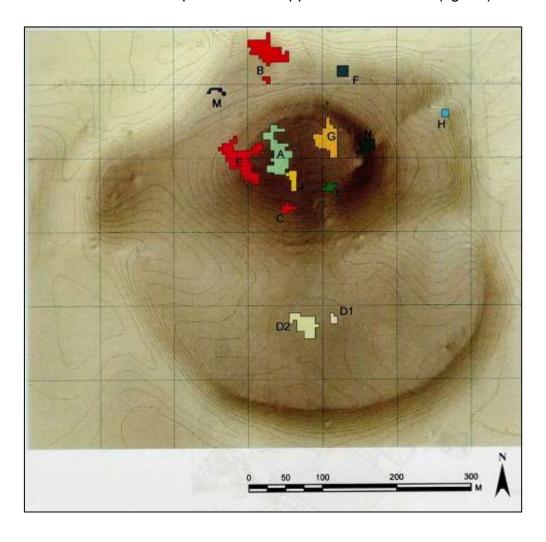


Fig. 13: Tell Afis (Venturi 2020, Pl. 2:1).

In area A on the upper town, a badly preserved building dated to the Iron Age II-III was found. The entrance was flanked by two towers and the interior was composed of a rectangular central room with smaller rooms on the eastern and western sides. Heavily damaged by the Hellenistic and Byzantine occupations, the building was first interpreted as a *bit hilani* palace and only with the continuation of the research in the 2000s was it identified as an *in antis* temple with a tripartite plan (D'Amore 2005; Soldi 2005; Soldi 2009: 105-106). The Iron Age III temple, called A1 (fig. 14), was built on the remains of two previous cultic structures, Temples A2 and A3: the few remains of Temple A2 do not allow a secure reconstruction, while Temple A3 had a plastered shrine and was probably of Iron Age I date, to the 11<sup>th</sup> – 10<sup>th</sup> centuries BC (Soldi 2009: 108). 19

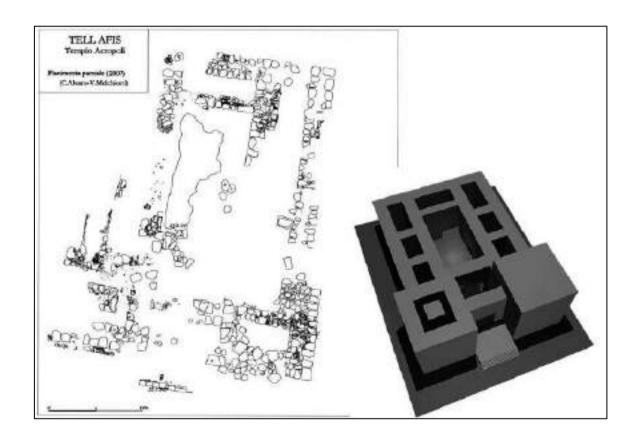


Fig. 14: Tell Afis, Area A, plan of Temple A1 and 3D reconstruction (Soldi 2009, fig. 6).

Close to Temple A2 there was an open-air sacred terrace (Terrace J), with a structure (Building C) dated to the Neo-Assyrian period. The ritual space of Terrace J was flanked by two walls and on the north-eastern side there were plastered floors and an altar in mudbricks and plaster. Another two cultic installations destroyed by the foundations of the later Building C were found in the western wall. From these installations come hundreds of animal bones,

<sup>&</sup>lt;sup>19</sup> Soldi 2009 defined the temples "AI", "AII", "AIII", while Cecchini 2014 "A1", "A2", "A3".

indicating that the area was a sacred area related to the Temple, where ritual activities were carried out. The pottery dates the construction of Terrace J to the late Iron Age I and early Iron Age II; the terrace was later enlarged and then abandoned before the construction of Temple A1 (Cecchini 2014: 58-60).

Area B2 in the lower town has been site of an Iron Age II occupation, with a defensive fortification in mudbricks and white mortar (fig. 15). South of the defensive wall, a series of floors were connected to the fortification and followed its circuit (Virgilio 2005: 37-38, 41). Under the fortification wall was found a domestic structure, composed of a long rectangular space divided into two rooms: storage installations related to the use of fire were unearthed in the western room, and textile weaving and cooking activities were carried out in the eastern room (fig. 16. Virgilio 2005: 38-40). A similar situation was also found in Area B3, confirming the chronology of late 9<sup>th</sup> – first half 8<sup>th</sup> centuries BC for the domestic buildings (Scigliuzzo 2005). The archaeological evidence from Area B thus indicates that around the end of the 8<sup>th</sup> or beginning of the 7<sup>th</sup> century BC, a defensive wall was built suddenly over a domestic quarter, obliterating it (Virgilio 2005: 41; Soldi 2009: 100).

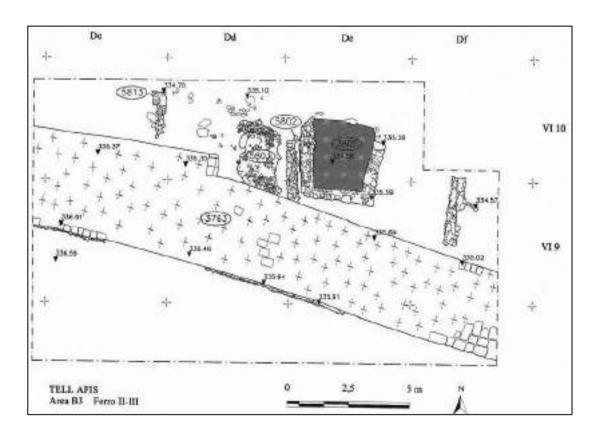


Fig. 15: Tell Afis, Area B2, fortification wall (Soldi 2009, fig. 3c).

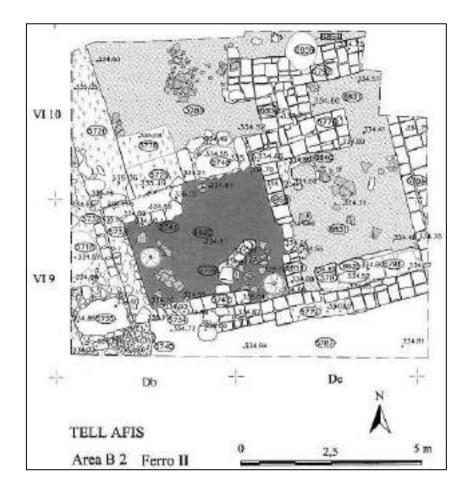
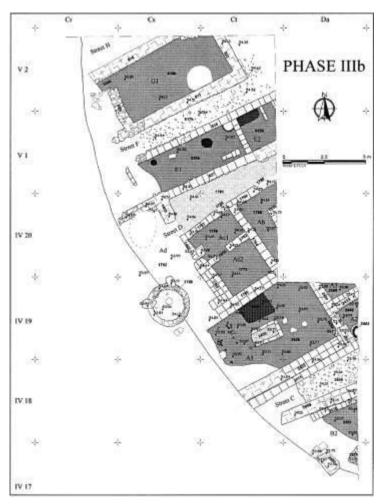


Fig. 16: Tell Afis, Area B2, domestic building (Soldi 2009, fig. 2c).

In the lower town Area D was also excavated, with the discovery of six levels relating to a building dating to the Iron Age II and III. The building, at least in level 4 where it was better preserved, was divided into three areas with different uses: the southern part was devoted to storage activities and one room was a kitchen, in the central zone there was a squared courtyard with a long stone-paved corridor and the northern sector was devoted to food processing (Mazzoni 1987: 27).

Area E, in the upper town, was divided into four sub-areas (E1-4). Areas E1 and E2-E4 gave evidence of a violent conflagration which destroyed the Late Bronze Age II residences around the end of the 12<sup>th</sup> century BC (Phase Vb. Venturi 2020: 10-15, 231; Mazzoni 2000c: 122). During the Iron Age I the area was immediately resettled, first with a squatters' occupation, and then later with silos, pits and installations (Venturi 2020: 19-21). Afterwards, new buildings were erected (Venturi 2020: 22) and the new urban planning resulted in a denser layout (fig. 17. Venturi 2020: 33-34, 44). With the Iron Age II (Phase Ic-b), a last reorganization of the area is attested, with the re-planning of some buildings, followed by the abandonment of the area and the installation of pits (Venturi 2020: 44-46).

Fig. 17: Tell Afis, Areas E2-E4, Plan of Phase IIIb (Iron Age I. Venturi 2020, Pl. 26).



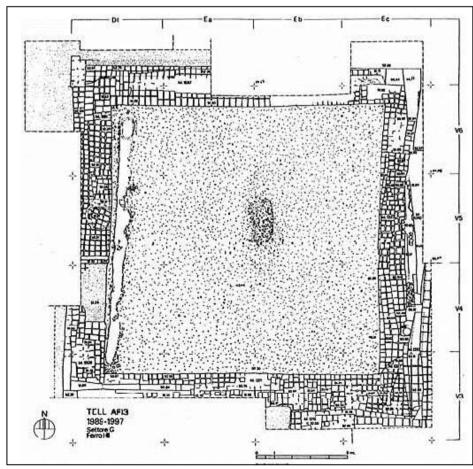


Fig. 18: Tell Afis, Area G, the courtyard (Cecchini 2014, fig. 10).

Area G, on the eastern side of the mound of the upper town, was excavated at the end of the 1980s and a collapsed courtyard dated to the Iron Age II was exposed. It was originally paved with cobbles and surrounded by mudbrick perimeter walls 8 meters high (fig. 18). The collapse of those walls completely covered the courtyard and sealed it. The function of this structure remains unknown; perhaps it was a ceremonial courtyard. After the collapse, the courtyard became a waste dump and was filled during the 7<sup>th</sup> and the beginning of the 6<sup>th</sup> centuries BC with pottery, ash and animal bones (Cecchini 1998: 282-284, 295-296; Cecchini 2014: 60-62, Soldi 2009: 103-104). The phases preceding the courtyard concerned a domestic quarter of the Iron Age I, bordered by a street which connected the lower part of the upper town and the eastern summit (Cecchini 1998: 273-275: Venturi 2007: 125). From Area G came a complete Iron Age stratigraphy with abundance of Red Slip pottery similar to the domestic material from Area D (Cecchini 1998; Soldi 2013).

Iron Age II and III remains were also unearthed in Area L, represented by productive installations and storage silos, levels with ash deposits, and in the later phase an open area devoted to food production (D'Amore 1998: 371-372).

The pottery production in the Iron Age I displays strong continuity with the Late Bronze Age, but there are innovations such as the appearance of monochrome painted pottery. These painted ceramics are similar to the Mycenaean LHIIIC:1 pottery and show parallels with simultaneous assemblages from the 'Amuq and Hama (Mazzoni 1998: 166; Venturi 2007: 389-395, 404; Venturi 2020: 115, 228, 231).

The pottery of the Iron Age II is characterized by the sharp decrease of painted ware (D'Amore 1998: 374; Degli Esposti 1998: 239; Mazzoni 1998: 167) and the presence of a Common Ware with an orange colour (the Orange Simple Ware. D'Amore 2005: 19; Degli Esposti 1998: 241-242; Venturi 2020: 230) and of the Red Slip. The Red Slip Ware appears between the mid-9<sup>th</sup> and the mid-8<sup>th</sup> century BC (Soldi 2013; Venturi 2020: 230) and it is particularly well attested in Area G Central zone in the Iron Age II and III (Cecchini 1998: 284-287; Soldi 2013). The Orange Simple Ware is present also in Iron Age III levels (D'Amore 1998: 374) and pottery probably related to Late Assyrian productions appears during the 7<sup>th</sup> century BC, especially in Area G (Cecchini 1998: 285-287; Soldi 2009: 104)

#### 2.2.2.3 TELL MASTUMA

Tell Mastuma is situated in North-Western Syria, in the modern Governorate of Idlib, on the bank of a small wadi and along the old route connecting Aleppo and the Mediterranean Coast. It was excavated between 1980 and 1995 by a Japanese expedition of the Ancient Orient Museum of Tokyo (Wakita 2009a).

The excavations exposed an extensive domestic settlement, with two main phases: Strata I-2 and I-1 <sup>20</sup>

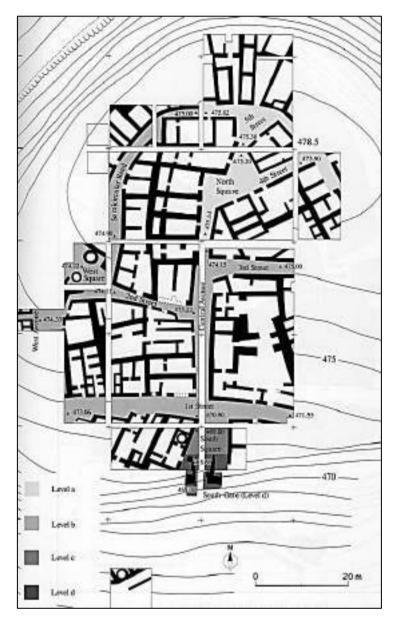


Fig. 19: Tell Mastuma, Stratum I-2 (Wada 2009b, fig. 4.1)

Stratum I-2 (fig. 19. Wada 2009b) corresponds to the Iron Age II occupation. The settlement in this period was organized according to a precise plan, with houses grouped in ten quarters or blocks separated by streets or alleys. The central area of the hilltop (North Square) probably served as a public square. In Stratum I-2 were found four architectural and

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<sup>&</sup>lt;sup>20</sup> A Stratum I-3, dated to the Iron Age I, is cited in a few publications (e.g., Wakita et al. 1995). However it is not discussed in the final publication (Iwasaki et al. 2009) and in the stratigraphic chart Iron Age I corresponds to a hiatus. The radiocarbon dating program also returned three Iron Age I dates (11<sup>th</sup> – 10<sup>th</sup> century BC. Nishiyama 2009: 523). In Stratum I-3 there was a modest gate and the residential quarter was already installed, however with smaller rooms (Wakita et al. 1995: 12-14).

chronological levels, from a to d: level a was exposed in particular on the northern sector of the hilltop, level b on the southern part, while levels c and d were found in limited areas (Wada 2009b: 98).

Stratum I-1 (fig. 20. Wada 2009c), with its two architectural levels x and y, represents a sharp decline of the site in the late Iron Age II and especially the Iron Age III. First of all, the settlement reduced in size. Then, the southern sector was characterized by several pits and traces of stone foundations, while in the northern area were found badly preserved buildings which seemed to follow the plan of Stratum I-2. Scattered in the settlement were also some graves (Wada 2009c: 303-305).

The pottery from Tell Mastuma (Wada 2009d: 339-391) corresponds perfectly with Central-Western Syrian tradition, with large storage jars with swollen rims, red slipped plates and bowls, carinated bowls, bowls with bevelled rims, holemouth cooking pots. Painted vessels, particularly closed forms such as jars and juglets, are well attested, especially in Stratum I-2 (Wada 2009b).

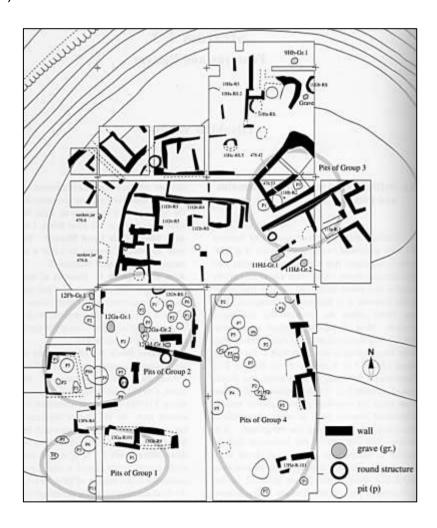


Fig. 20: Tell Mastuma, Stratum I-1 (Wada 2009c, fig. 5.1).

### **2.2.2.4 TELL TUQAN**

The site of Tell Tuqan, perhaps ancient Urshu, is located not far from Tell Mardikh and Tell Afis, in the Matkh Basin, a natural depression where the River Nahr el-Queweyd overflows (Baffi 2006b: 9, 13). The stratigraphy brought to light stretches from the Early Bronze Age to the Byzantine period (Baffi 2006b, Tab. 1.1).

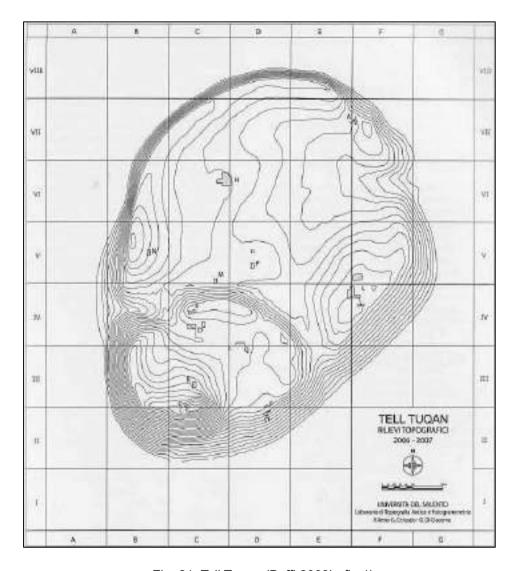


Fig. 21: Tell Tuqan (Baffi 2008b, fig.1).

The Iron Age I (Tuqan VA), perhaps Late Iron Age I/Early Iron Age II, was found in Area L in the lower town. It corresponded to a small settlement with pits and storage installations and simple stone walls perhaps belonging to buildings used for productive purposes (Baffi 2006b: 13; Peyronel 2006a: 192, 195).

The Iron Age II and III periods (Tuqan VB-C) were unearthed in the upper town. In Area F, during the Iron Age II the early Middle Bronze Age gate which connected the upper town to the southern countryside was reactivated and then radically altered in the Iron Age III (Baffi 2006b: 13; Baffi 2006g: 154). In Area D, a series of levels connected to simple domestic

structures was found, indicating the presence of a modest settlement (Baffi 2006b: 13; Baffi 2006e: 48; Baffi 2008b: 10-11). Phases 4-7 of Area D are attributed to the Iron Age II. Phases 6-7 yielded scarce remains (Baffi 2008b: 11; Baffi 2008c: 112-115, 119-124). The structure in phase 5 was carefully built with walls with a base of small stones, stone-paved floors and mudbrick workbenches, while in phase 4<sup>21</sup> the dwelling was surrounded by an open space. Phase 3 belongs to the transition between the Iron Age II and III, while in the Iron Age III, that is phases 1-2, in the area open area activities with clay hearths, which probably started in phase 3, were carried out (Baffi 2008b: 11-12; Baffi 2008c: 110-112, 116-119).

Two phases of domestic structures in Area Q, with also attestations of craft activities such as textile weaving and production belonged to the Iron Age III (7<sup>th</sup> century BC). These units seemed to be of better quality compared to Area D. The settlement in the Iron Age III appears to have been densely occupied by domestic buildings, variably organized. There were no traces of destruction, therefore they were probably abandoned at the end of the period and subsequently collapsed (Baffi 2008b: 11-12; Fiorentino 2008: 159-166; Fiorentino, Marinelli 2011: 174-182).

In Area T, Iron Age III remains were uncovered: these were modest domestic structures built on terraces sloping towards the east with thick filling layers. Here, as in Area Q, the continuity of occupation from the Neo-Assyrian domination to Persian control is attested (Baffi 2011b: 10; Baffi 2011d: 232-239).

The pottery from Area L has been attributed to the Iron Age I, especially due to the absence of the Red Slip and Orange Simple Ware. Furthermore, the pottery presents red or brown painted decorations on bowls, jugs and jars, which point to an Iron Age I date. The Common Ware has a pinkish colour and is typical of open forms such as bowls with triangular expanded rim. Specimens with a brown coloured of the fabric and a rim expanded both externally and internally show relations with the Late Bronze Age pottery (Peyronel 2006b: 199).

The Iron Age II-III assemblage shows parallels with other sites of the region, such as Tell Afis and Tell Mardikh (Baffi 2008c: 126; Fiorentino 2008: 165-166; Fiorentino, Marinelli 2011: 184). The pottery from Area D is quite homogeneous in all the phases, displaying a slow evolution rather than clean breaks. Orange Simple Ware characterizes both these periods and Red Slip is present as well, especially in phases 1-4. A few painted fragments are attested too (Baffi 2008c: 126-130). Orange Simple Ware is attested also in the Iron Age III

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<sup>&</sup>lt;sup>21</sup> The documentation is inconsistent, since in the general summary Baffi attributes this phase to the Iron Age II (Baffi 2008b: 11), as she does also at the beginning of the discussion about the architecture (Baffi 2008c: 116), while in the description of the stratigraphy it is indicated as Iron Age III (Baffi 2008c: 112, 119)

levels of Area Q, especially characterizing medium and small-sized vessels, as is the Red Slip Ware (Fiorentino 2008: 167-170; Fiorentino, Marinelli 2011: 155-156). In both areas Storage Ware is not much documented, and in some phases it is practically absent (Baffi 2008c: 127; Fiorentino 2008: 168-170). In the late Iron Age III documented in Area T, Assyrian imitations are well attested, as is the decline of the Red Slip, indicating that the assemblage belonged to a more globalized material culture due to Assyrian rule (Baffi 2011b: 10; Baffi 2011d: 232). In the very late part of the period, it seems that two pottery traditions coexisted: the local Syrian tradition, which common people continued to use, and a "Persian" imported pottery utilized instead by the upper classes. Thus a clear passage from Iron Age III to Persian Age is not recognizable (Baffi 2011b: 10; Baffi 2011d: 231-232).

#### 2.2.2.5 TELL QARQUR

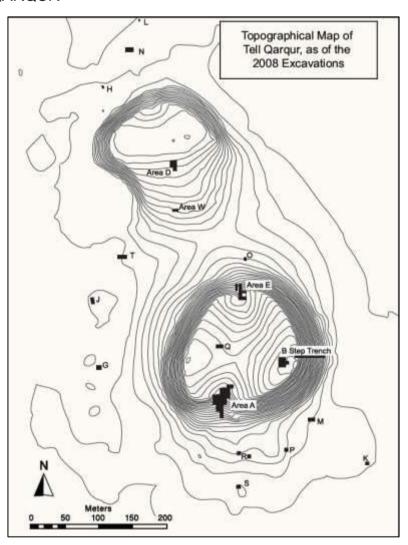


Fig. 22: Tell Qarqur (Dornemann 2012: 166).

Tell Qarqur is situated in the northern sector of the Ghab Valley and is identified with the ancient Karkara/Qarqar (Dornemann 2003a: 3). The site has been inhabited for a long time, as surface pottery collections and archaeological excavations attest an almost continuous occupation from the pottery Neolithic to the Mamluk period (Dornemann 2003a: 10; Dornemann 2012: 162-163).

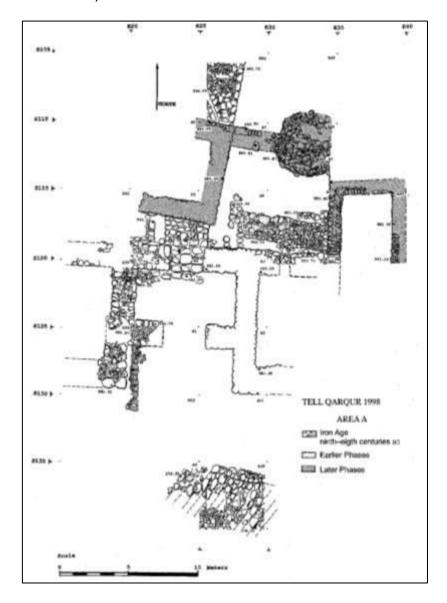


Fig. 23: Tell Qarqur, Area A, the gateway (Dornemann 2003a, fig. 8).

Iron Age levels have been found in Area A. While Iron Age I pottery is present, no structures dating to the period were found, as they had been erased by the later activity (Dornemann 2012: 167). The major architecture is an Iron Age II gateway with a porch (fig. 23), of which several phases have been exposed: the gateway was composed of an open entrance room or porch and a single chamber, with four stairs leading to a paved area northward identified as a street. A couple of rooms were associated with the gateway, but a fortification wall was

not found. The floor of the western room was covered with finds, especially pottery jars fragments as well as metal objects (iron spear points, bronze and iron nails), and was characterized by traces of a fire and the collapse of the stone walls (Dornemann 2003a: 10-27; Dornemann 2012: 167). In the north-east area some buildings were unearthed: one of them had a mudbrick wall 2.5 m thick reminiscent of the Hama citadel (Dornemann 2012: 168).

Area B furnished evidence of the Iron Age I and II occupation of the site. The Iron Age I remains consist of courtyards with pits and storage installations, while the Iron Age II is represented by domestic structures (Dornemann 2003a: 29-33; Dornemann 2012: 171). On the slope of the tell (Area C) a casemate wall of a fortification dating to the Iron Age II was excavated (Dornemann 2003a: 20; Dornemann 2012: 171).

Iron Age II buildings were also found in Area E: one of the structures, interpreted as a temple, was characterized by a large wall with a doorway and a room with a stone-paved floor (Dornemann 2003a: 39; Dornemann 2012: 170-171).

The Iron Age I pottery found in Area B is distinguished by the strong influence of Aegean productions on the forms and in the painted decorations, although it was locally made. Cups with s-shaped profiles, kraters with geometric motifs, decorated flasks and potstands with red or brown painted bands are typical of the assemblage. In the earliest Iron Age I levels forms with a blend of Late Bronze and Iron Age features occur. Between the Iron Age I and II there is not a clean break, but rather a slow evolution, with common Iron Age II forms already present in Iron Age I levels. The Red Slip is not found exclusively in the Iron Age II, but already occurs in the Iron Age I, albeit not in large quantities and with a more pinkish-red colour (Dornemann 2003a: 47, 58-59, Dornemann 2012: 172). The Iron Age II pottery has been dated generally to between the late 10<sup>th</sup> and 8<sup>th</sup> centuries BC (Dornemann 2003a: 41). The assemblage of this phase is composed especially of platters and carinated bowls, often red slipped with burnishing, but wine storage jars are quite frequent as well (Dornemann 2003a: 41-47).

## 2.2.2.6 TELL ABOU DANNE

Archaeological excavations at Tell Abu Danne, located in the region of the Lake Jabbul not far from Aleppo, started in the 1970s with Roland Tefnin (Tefnin 1980). Iron Age levels were unearthed in Chantier A and precisely in Niveaux IId and IIc (Tefnin 1980: 177; Lebeau 1983: 16). Niveau IIc represents the Iron Age III occupation of the site. The archaeological evidence consists of structures, perhaps of a domestic nature, with mudbricks walls and stone foundations arranged around a central court paved with large stones (fig. 25, Tefnin

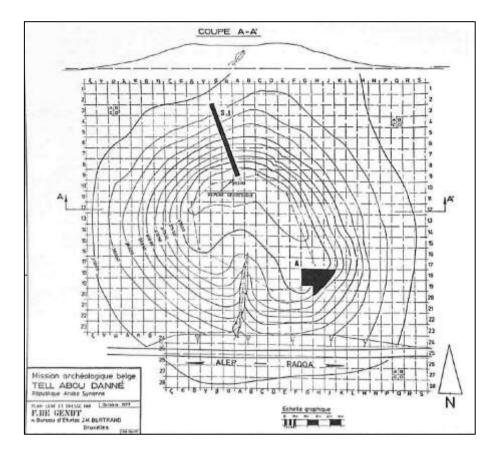


Fig. 24: Tell Abou Danne (Tefnin 1980, fig. 2).

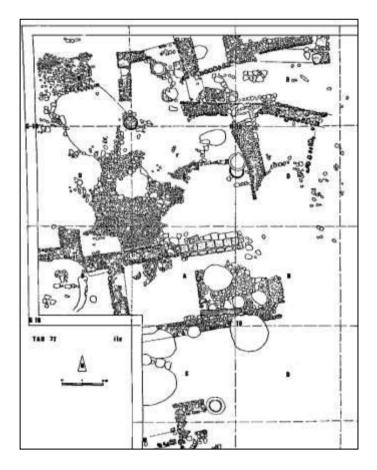


Fig. 25: Tell Abou Danne, Niveau IIc (Tefnin 1980, fig. 7).

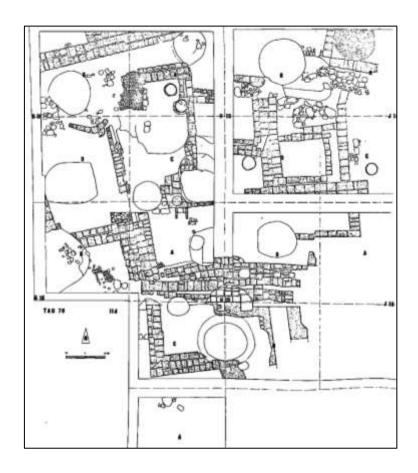


Fig. 26: Tell Abou Danne, Niveau IId (Tefnin 1980, fig. 8).

The Iron Age II was found in the underlying Niveau IId, characterized by domestic buildings better preserved than the level above. The construction material of this phase is exclusively the mudbrick, while stone is practically absent. A paved court is also present, with two tannurs, and a small alley (Tefnin 1980: 127).

The pottery was studied by Marc Lebeau (Lebeau 1983), who created what was at that time one of the first pottery typologies of inner Syria, also thanks to parallelisms with the Southern Levant (Lebeau 1983: 24). The final chronology of the two levels was established by Lebeau after studying of the Common Ware: Niveau IId was dated to c. 875-750/700 BC and Niveau IIc to c. 750/700-600 BC (Lebeau 1983: 24).

The pottery finds from Tell Abou Danne show many typological parallels with other Levantine Iron Age assemblages, such as Tell Rifa'at, Tell Nebi Mend, Tell Afis and Tell Mardikh, while the Late Assyrian and Phoenician pottery appears quite distinct (Lebeau 1983: 126-127). Painted and red slipped pottery are attested in the site. Painted decorations are mostly monochrome black or brown horizontal bands (Lebeau 1983: 129) and Red Slip is present in both phases, exclusively on open forms like plates and bowls (Lebeau 1983: 39-41, 49-50, 54-55, 32).

#### 2.2.2.7 'AIN DARA

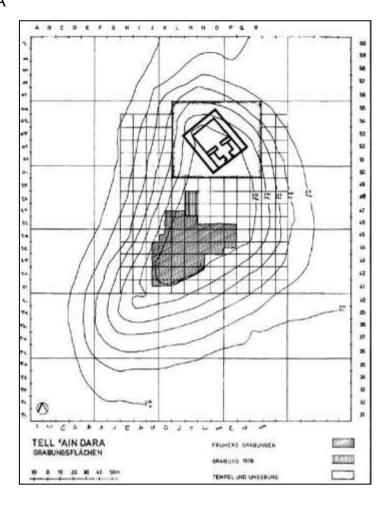


Fig. 27: 'Ain Dara (Abou Assaf 1990, Abb. 3).

The site of 'Ain Dara is located in the 'Afrin Valley, on the eastern bank of the river and about 70 km from Aleppo. The discovery of a monumental basalt statue of a lion in 1955 led to the start of systematic excavations the following year, which unearthed part of the upper town. The importance of the site lies especially in its exceptional temple (Abou Assaf 1990; Novák 2012), which was found inside the city fortification walls together with an unfinished monumental gate complex. The temple (fig. 28) is composed of three main units: a portico flanked by two columns, an antecella and a cella with a raised platform at the back. The rooms had limestone-paved floors and the thresholds of the antecella and the cella were decorated with the footprints of the deity (Abou Assaf 1990: 13-19). While according to Abou Assaf, who excavated the temple, it was built in three phases (Abou Assaf 1990: 20), some scholars have pointed out that it was possible it was built all at once (Osborne 2021: 116). The outer wall of the temple and the front façade of the cella platform were decorated with monumental and elaborate orthostat reliefs, which have long been the exclusive focus of scholars, who discuss their artistic style and chronology (Novák 2012: 48-50; Orthmann

1971). The style of the reliefs is clearly related to the Hittite art, which is why some scholars have called them "Late Hittite" or "Syro-Hittite" and dated them to the very early Iron Age I, around 1200 BC (Orthmann 1971: 136-138).

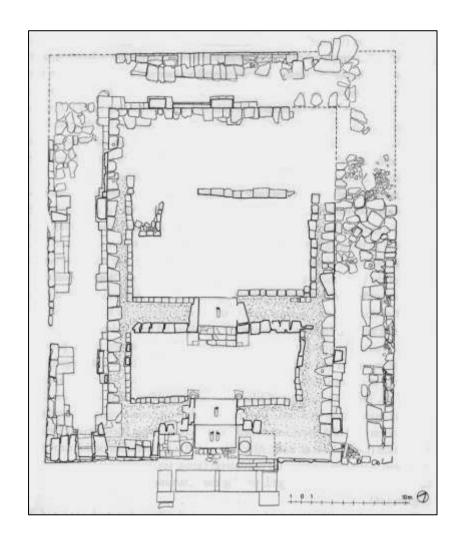


Fig. 28: 'Ain Dara, the temple (Osborne 2021, fig. 3.15).

According to Abou Assaf, some of the sculptures may date back even to the Hittite Empire, while others may be much later, around the mid-8<sup>th</sup> century BC (Abou Assaf 1990: 39-41). Osborne instead suggests that most of the reliefs were probably part of a single program to dating to the final Late Bronze Age and early Iron Age I, and that while there is evidence of the reuse of some orthostats (Abou Assaf 1990: 61; Stone, Zimansky 1999: 3), they were not moved significantly (Osborne 2021: 116-117).

The settlement in the lower town was virtually unexplored until 1981, with the start of a project intended to investigate the area surrounding the temple (Stone, Zimasky 1999: 1-3). Surface finds dated the occupation of the lower town to the Late Bronze Age, Iron Age I and II, Hellenistic and Byzantine periods (Stone, Zimansky 1999: 10-13). The trenches excavated in the North-west Quadrant did not yield much Iron Age evidence, just a few

simple mudbrick walls (that from Trench 3 had stone edges, one of which was perhaps a door socket) and an oven dated to the Iron Age II, indicating simple domestic structures (Stone, Zimansky 1999: 25-29). In Trench 1 Iron Age I levels were reached, but the architectural remains were poor (Stone, Zimansky 1999: 30-31).

Research in the North-east Quadrant involved the excavation of an extensive area. Twenty occupation phases were uncovered, all belonging to the Iron Age, with an alternating succession of major buildings, probably domestic but with productive activities also documented, and open areas. Phase XX was attributed to the Iron Age I and was characterized by pyrotechnical installations. Phases XIX-XVIII were dated to the transitional Iron Age I/II period, Phases XVII-IX to the Iron Age II, Phases VIII-VII represented probably the passage from the earlier to the later Iron Age II and Phases VI-I all belonged to the Iron Age II (Phase I was dated to c. 700 BC. Stone, Zimansky 1999: 35-55).

The Iron Age I pottery is characterised by several "Granary style" painted sherds, which indicated Aegean influence, and cooking ware with open profiles tempered with ground shell. A stylistic evolution in the colour of the wares and the paint can be observed: in the upper layers black or brownish decorations are more common, while in the middle levels there is an increase in red decorations on orange ware and large vessels and more complex motifs appear. In the lower levels cross-hatched patterns and fine vessels occur (Stone Zimansky 1999: 30-31, 65). The Iron Age II pottery was divided into three groups: red slipped burnished sherds (both open and closed forms), plain ware (mostly large vessels) and painted sherds. Cooking pots gradually become more holemouth. Parallels are possible, especially with the assemblages of the 'Amuq Plain (Stone, Zimansky 1999: 26-27).

A few general trends can be observed. The Red Slip and the plain ware with impressions decrease gradually from the upper (Iron Age II) to the lower layers (Iron Age I), while conversely painted wares become more common. More bichrome painted sherds are present in the upper layers (Stone, Zimansky 1999: 29).

# 2.2.3 AREA 3 - 'AMUQ VALLEY AND SOUTHERN ANATOLIA

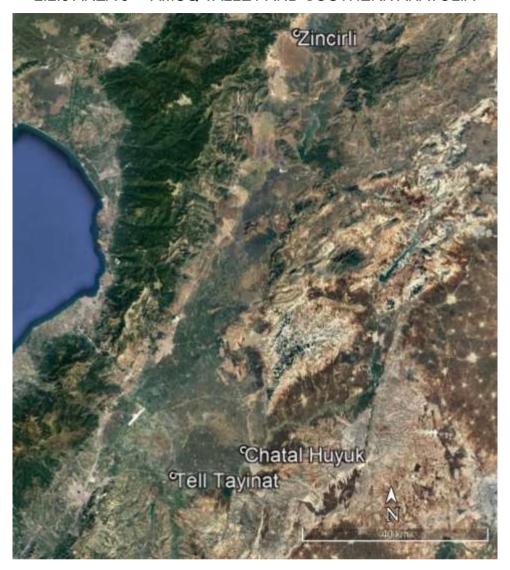


Fig. 29: Satellite view of South-Eastern Anatolia with the sites considered (from Google Earth).

The 'Amuq Valley was explored first by the Oriental Institute of Chicago between 1932 and 1938 by means of an extensive survey of 178 sites, together with the 'Afrin and Kara Su Valleys (Braidwood 1937; Braidwood, Braidwood 1960: vii-viii; Heines 1971: 1). The name of the project was the "Syro-Hittite Expedition", indicating that one of the main objectives was the search for monumental Syro-Hittite Architecture (Whincop 2009: 44). The research resulted in the creation of a long pottery sequence for the Northern Levant, from Phase A (Neolithic) to Phase V (Modern Arab), with Phases N and O corresponding to the Iron Age (Heines 1971: 1-2). The main excavated sites were Tell Tayinat, Chatal Hüyük and Tell Judaidaih (Heines 1971; McEwan 1937) and the pottery was studied by Gustavus Swift for his PhD dissertation (Swift 1958). Swift noted that the transition from the Iron Age I to II (Phases N and O) was a gradual one without significant breaks in the stratigraphy of the

sites: the only remarkable change in the ceramic tradition is the introduction of the Red Slip Burnished Ware, whereas Common Painted and Simple Ware continued with little differences (Swift 1958: 124-126). Swift further subdivided Phase O into four sub-phases, that is Oa (ca. 950-900 BC), Ob (ca. 900-850 BC), Oc (800-725 BC) and Od (725-550 BC). According to Swift, the later sub-phases saw the appearance of Greek pottery, such as Attic Geometric pottery (Stage Oc) and Corinthian and Attic Black Figures pottery (Stage Od). In the last sub-phase Assyrian Palace Ware was also present.

Research in the 'Amuq Valley continued in 1995 with the "Amuq Valley Regional Projects" (AVRP. Yener 2005a).

The north-western side of the plain of Antioch is connected with the Kara Su Valley, where is located Zincirli, ancient Sa'mal, capital of one of the most important Syro-Anatolian kingdoms.

#### 2.2.3.1 TELL TAYINAT

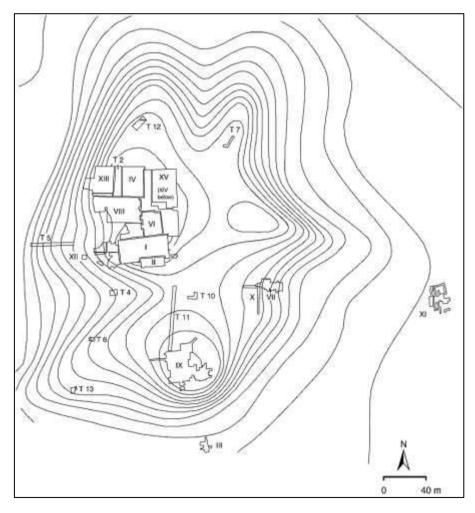


Fig. 30: Tell Tayinat, after the excavations of the Oriental Institute (Buildings I-II, IV, VI, IX-X, XIII-XIV; Gateways III, VII, XI-XII; Courtyard VIII; Platform XV; Batiuk, Harrison, Pavlish 2005, fig. 7.2).

Tell Tayinat, ancient Kunulua capital of the Kingdom of Palistin/Walistin<sup>22</sup> and later Assyrian Kinalia of the Kingdom of Patina/Unqi (Harrison 2001: 128-129; Harrison 2009a: 175; Osborne et al. 2021: 262), was one of the tells excavated by the Syro-Hittite Expedition of the Oriental Institute in the 1930s (Braidwood 1937: 33, AS 126). The research was continued by a Canadian mission of the University of Toronto, first with a survey from 1999 (Harrison 2001: 124) and then with excavations from 2004 (Osborne et al. 2019: 262).

The site is a low tell situated on the bank of the River Orontes and composed of an upper mound and an extensive lower mound, the latter now hidden by alluvial deposits (Harrison 2001: 124). Tell Tayinat, with 35ha occupied, was the largest site of the area in Phase O, that is the Iron Age from *ca.* 950-550 BC (Harrison 2001: 123).

The Syro-Hittite Expedition focused on the upper mound and recognized five architectural phases, named "Building Periods", belonging to Phase O (Haines 1971: 64-66). The "First Building Period" (c. 875-825 BC) contained limited evidence, with two structures arranged around a central court. Building XIII was a *bit hilani* palace with a porticoed entrance and a central rectangular hall, while Building XIV was not well preserved (Haines 1971: 38-39).

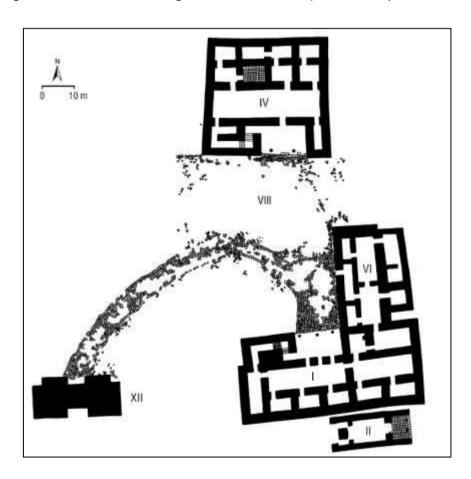


Fig. 31: Tell Tayinat, Second Building Period according to Haines (Batiuk, Harrison, Pavlish 2005, fig. 7.3).

<sup>&</sup>lt;sup>22</sup> About Palistin/Walistin, see Harrison 2009a: 179 and Weeden 2013.

In the "Second Building Period" (c. 825-720 BC) the pre-existing structures were levelled and in their place two other *bit hilani* palaces, Buildings I and IV, were erected. Adjacent to Building I there were a megaron-style temple (Building II) and a northern annex (Building VI). Buildings I, IV and VI were organized around a paved central square, Courtyard VIII, while the area was accessible by means of a paved street through Gateway XII.<sup>23</sup> Gateways III and XI also belonged to this phase (Batiuk, Harrison, Pavlish 2005: 172; Haines 1971: 64-65).

The "Third Building Period" (c. 720-680 BC) was a time of renovations (Haines 1971: 65). To this phase was also tentatively ascribed Building IX (Haines 1971: 65), which resembled an Assyrian-style building due to the presence of two large mudbrick-paved courtyards surrounded by the other rooms. It has been thus interpreted as the residence of the Assyrian governor (Harrison 2005b).

Buildings I and IX continued to be in use, whereas Building II was abandoned, during the "Fourth Building Period" (7<sup>th</sup> century BC. Haines 1971: 65-66), while only fragmentary ruins of other structures (e.g. Building X) represented the "Fifth Building Period" (6<sup>th</sup> century BC, Haines 1971: 66).

The renewed excavations of the University of Toronto identified three major cultural horizons: the Early Bronze Age, the dense early Iron Age occupation of the late 2<sup>nd</sup> millennium and the monumental Iron Age settlement of early 1<sup>st</sup> millennium (Osborne et al. 2019: 262). Iron Age levels have been uncovered especially in Fields 1, 2, and 4.

The most important and complete Iron Age I sequence comes from Field 1. The earliest occupation (mid-12<sup>th</sup> – 11<sup>th</sup> centuries BC) is characterised by the presence of pits and installations for the storage of agricultural produce, simple constructions and pyrotechnical installations interpreted as *tannur*-type ovens (fig. 33. Welton 2019-2020: 73-74; Welton et al. 2019: 299, 322).

The later Iron Age I evidence was destroyed in the southern sector by the foundations of Building II (the temple of the "Second Building Phase") and by an Iron Age II street predating Building II and paved with pebbles and pottery sherds, that connected Gateways VII and XII (Harrison 2021: 337; Welton et al. 2019: 299). In the northern sector a series of storage pits and silos and waste-disposal pits was attested. During the later Iron Age I (FP4 = Field Phase 4, late 11<sup>th</sup> – early/mid-10<sup>th</sup> centuries BC) a building with mudbrick walls and foundations trenches similar to the Iron Age II Buildings II and XIV was erected (Welton et al. 2019: 322).

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<sup>&</sup>lt;sup>23</sup> Marina Pucci re-analysed the evidence and attributed Gateway XII to the "First Building Period", see reconstruction in Osborne et al. 2019, fig. 6, fig. 34 here.

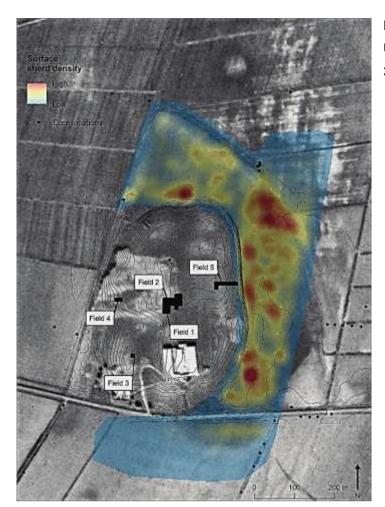


Fig. 32: Tell Tayinat, after the excavations of the University of Toronto (Osborne et al. 2019, fig. 3)

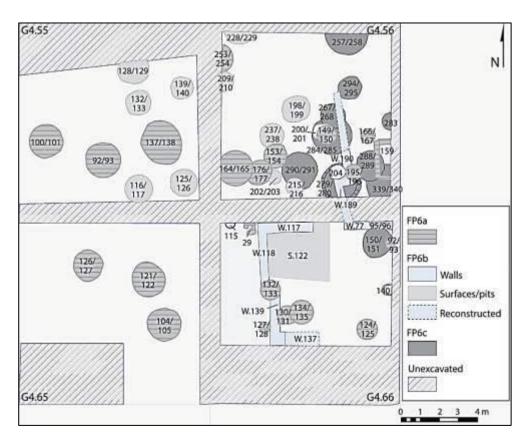


Fig. 33: Tell Tayinat, Field 1, the earliest Iron Age I phase (FP 6. Welton et al. 2019, fig. 3).

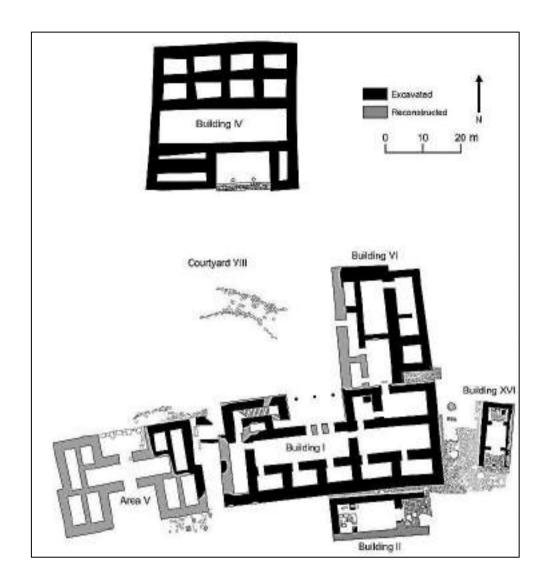


Fig. 34: Tell Tayinat, Second Building Period according to the new discovers (Osborne et al. 2019, fig. 6).

A monumental structure, which would be revealed to be the south-eastern corner of Building XIV, was exposed in Field 2. The foundations of the walls cut into the underlying late Iron Age I mudbrick structures, sparing however a wall with an associated floor dated to the late Iron Age I or transitional Iron Age I/II period (Harrison 2021: 337-338). A cobbled floor, which sealed a surface full of red slipped sherds, was found close to the eastern wall of Building XIV: the deposit over the cobbled floor returned a ceramic assemblage comparable with the 9<sup>th</sup> – early 7<sup>th</sup> centuries BC pottery from the 1930s excavations (Harrison 2021: 338; Osborne et al. 2019: 283-286). The cobbled floor ended against another monumental building: this structure, Building XVI, had been destroyed by a fire and has been interpreted as a temple. On the front there was a staircase which led to a porch with a carved basalt column base; after the porch there were a central room and a back room (the cella) with a platform or podium which filled almost completely the space. Two main phases have been recognized: the first construction dated back to the Iron Age II (9<sup>th</sup> – 8<sup>th</sup> centuries BC), while

the second phase coincided with the Neo-Assyrian occupation, that is late  $8^{th} - 7^{th}$  centuries BC (Osborne et al. 2019: 277-283).

In Field 4 a metallurgic workshop, possibly dated to the 11<sup>th</sup> century BC, was exposed, where both iron and copper were worked (Welton 2019-2020: 75; Welton et al. 2019: 319-320).

A radiocarbon dating programme was also undertaken, which validated the relative sequence of the ceramic assemblage (Harrison 2021: 339- 341, Table 1).

The pottery from the Iron Age I is characterized by strong Aegeanizing influences in both the general forms and the decorations of the painted wares (Janeway 2006-2007, 2017; Welton et al. 2019: 305-308). However, plain wares with buff to pinkish colours occur commonly and seem to have connections with the Hittite Monochrome Ware and the Late Bronze Age Anatolian ceramic traditions (Welton et al. 2019: 301-305). Anatolian influences are documented also in the presence of a limited quantity of Grey Ware (Welton et al. 2019: 311-312). Local Painted Ware is also attested: the decorations are mostly red in colour, but dark brown-black ones are present as well, featuring geometric designs, such as hatched triangles and straight and wavy lines, displaying a hybrid character with influences from various ceramic traditions (Welton et al. 2019: 308-311).

The new excavations partly confirmed Swift's conclusion that the appearance of the Red Slip Burnished Ware coincided with the beginning of the Iron Age II ('Amuq Phase O, Harrison 2021: 338-339). However, some red slipped vessels occur already in the transition between the Iron Age I and II, as documented by the assemblage related to Building XIV, which has now been dated to this transitional period (Osborne et al. 2019: 277). The Iron Age II and III pottery is comparable to assemblages from other contemporary sites (Tell Afis, Tell Mastuma, Tell Abou Danne, Tell 'Acharneh) and consists mainly of Common Ware (especially kraters), jars, large storage jars and cooking pots. Painted decorations, both monochrome and bichrome, occur as well (Osborne et al. 2019: 283-286).

# 2.2.3.2 CHATAL HÜYÜK

The site is located on the western bank of the River 'Afrin and was excavated from 1933 to 1936 by the Syro-Hittite Expedition. McEwan considered Chatal Hüyük "disappointing" as no monumental remains were uncovered, although a large pottery assemblage was collected (Haines 1971: 3; McEwan 1937: 8-9).

The upper town of Chatal Hüyük has been extensively excavated (c. 65%. Pucci 2019: 9), with six areas dug, and the results have been published by Richard Haines (Haines 1971: 3-25) and recently revised by Marina Pucci, who further subdivided both Phases N and O into "beginning", "middle", "late" sub-periods each (Chapter 1, Pucci 2019). The tell was

fortified in both Phases N and O, with the later wall being partly superimposed on the earlier one (Haines 1971: 4; Pucci 2019: 61).

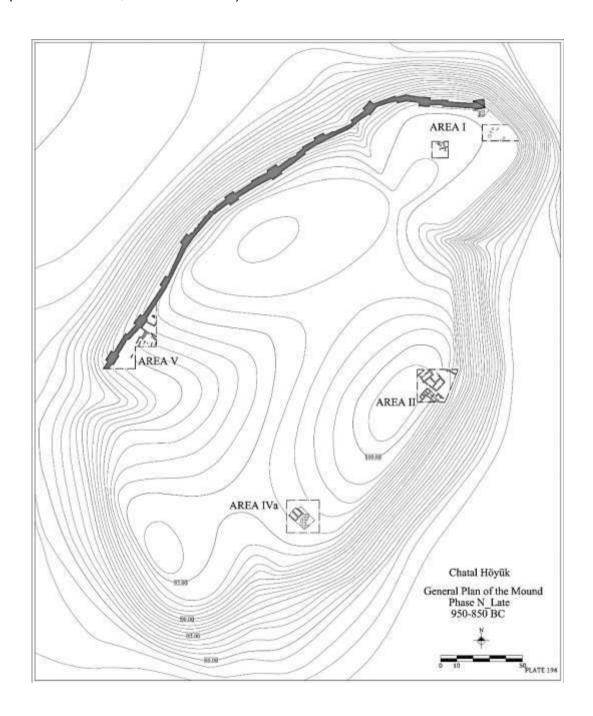


Fig. 35: Chatal Hüyük, Phase N\_late (Pucci 2019, Pl. 194).

In Area I a residential quarter belonging to 'Amuq Phases N (levels 10-7) and O (levels 6-3) was uncovered. In Phase N, the houses were generally well-built, while the quarter in Phase O was densely inhabited. Regarding the latter phase, no precise urban planning can be recognized and the domestic units were arranged in an almost chaotic way (Pucci 2019: 43, fig. 6). They were mostly of small dimensions, except for a building from level 4 which has been interpreted as a public structure due to its larger size and more complex internal

subdivision (Haines 1971: 6-9; Pucci 2019: 49). The unequal disposition and different orientations of the houses observed in level 5 may be interpreted as the result of intensifying occupation and urbanization (Pucci 2019: 43).

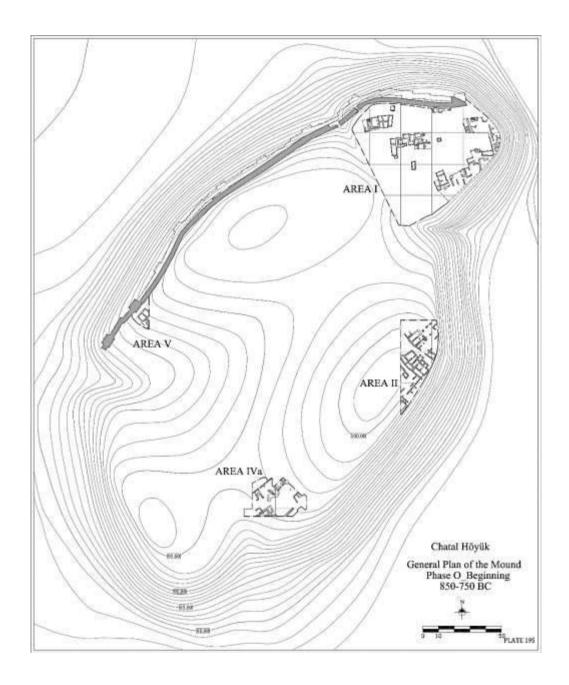


Fig. 36: Chatal Hüyük, Phase O\_beginning (Pucci 2019, Pl. 195).

In Area II another domestic occupation in both Phases N (levels 9-7) and O (levels 5-1)<sup>24</sup> was found, with more or less well-preserved residential structures and with inner partitions of varying complexity. The evidence of Phase O is attested on a larger area than Phase N, especially in levels 4 and 3 (Haines 1971: 13-16; Pucci 2019, figs. 21-22).

<sup>&</sup>lt;sup>24</sup> Level 6 was dated by Pucci to the transition between Phase N and O (Pucci 2019: 91).

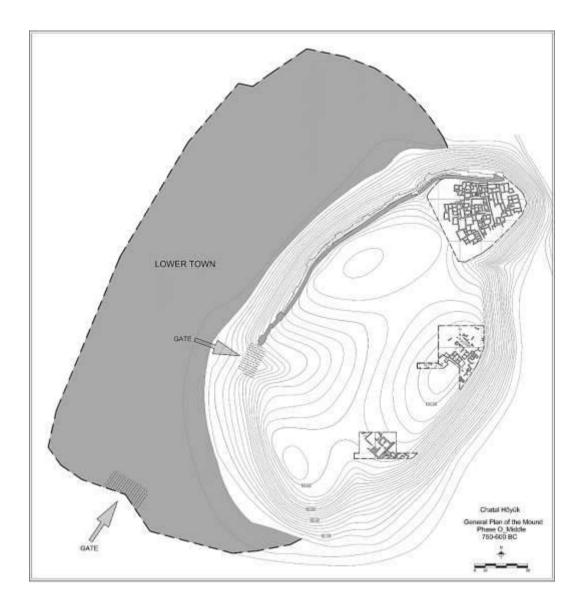


Fig. 37: Chatal Hüyük, Phase O mid (Pucci 2019, Pl. 191).

Area III contained scarce remains, probably of domestic buildings (Haines 1971: 17).

In Area IVa the most significant evidence was a well-built structure found in sub-level 2d (Phase O) with a plan reminiscent of a *bit hilani* (fig. 38). It was a rectangular building, with a stone staircase and a porticoed entrance flanked by two towers. It was hypothesized that it had a public function (Haines 1971: 18-20; Pucci 2019: 126-128).

In Area V were uncovered the remains of a fortification wall, built at the end of Phase N and still in use in Phase O: in both phases domestic structures abutted the interior face of the wall (Haines 1971: 24).

Area VI furnished evidence of domestic buildings (Haines 1971: 24-25).



Fig. 38: Chatal Hüyük, Area IVa, level 2d, Phase O. 3D reconstruction of the "bit hilani" (Pucci 2019, fig. 32).

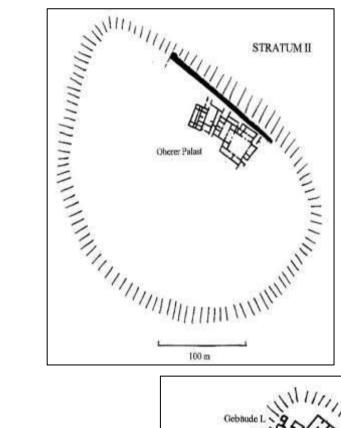
The pottery, after the PhD study by Swift, was accurately analysed by Pucci (Pucci 2013, 2019). As already seen for Tell Tayinat, the pottery from the Iron Age I (Phase N) was strongly influenced by the Aegean tradition and particularly by the Late Helladic IIIc horizon, in both forms and painted decorations (Pucci 2013: 97-99; Pucci 2019: 179-183). Small quantities of red slipped vessels are already documented in this phase (Pucci, Soldi 2019: 353-355). Phase O is characterized by the affirmation of Red Slip Burnished Ware in open forms, the gradual decrease of painted monochrome pottery and the slow increase of bichrome decorations. Pottery shapes becomes more standardized, especially open forms (Pucci 2019: 186-189). Painted decorations are still attested during the mid and late Phase O (late Iron Age III and Iron Age III), however they appear more standardized and bichrome ware continues to increase, while the Red Slip starts to occur also on closed forms (Pucci 2019: 189-191).

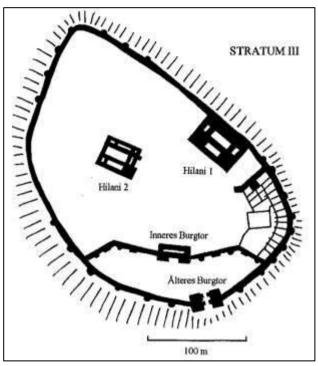
### 2.2.3.3 ZINCIRLI

Zincirli Hüyük, ancient Sa'mal, is situated in South-Eastern Turkey, in the Kara Su Valley: the southern extension of the valley opens onto the valleys of Antioch and the 'Amuq (Soldi 2019: 165). The tell was resettled around 900 BC, after a period of abandonment, and was chosen as the royal capital of a new kingdom (Herrmann 2017: 288-289).

The site was excavated by a German expedition between 1888 and 1902 (Herrmann 2017: 288; Lehmann 1994; Lehmann 1996: 272-274; Von Luschan, Andrae 1943): a massive

double fortification wall with three gates and evenly spaced towers surrounded the whole site, which consisted of an extensive lower city and a fortified upper town (Pucci 2015: 35-36). The upper town has been extensively excavated and revealed multiple *bit hilani* and public buildings, with the gateways decorated with basalt orthostats and statues (Gilibert 2011: 55-96).





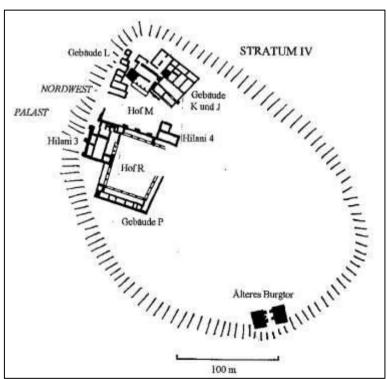


Fig. 39: Zincirli, Strata II-IV (Lehmann 1994: 108).

Five building phases have been recognized (fig. 39). Stratum V represented the finds predating the end of the 8<sup>th</sup> century BC, *Gebäude J* and *K*, which were built in the 9<sup>th</sup> century. To Stratum IV were attributed the *Hilani 3-4*, *Gebäude K*, *L*, *P* and *Höfe M* and *R*. In Stratum III were exposed *Hilani 1-2*, the *Inneres* and *Aussered Burgtore*, the *Burgmauer* and the *Kasematte*. In Stratum II were found the *Oberer Palast* and the *Burgmauer über der Mauer mit Balkenrost*. Stratum I was attributed to the Late Achaemenid and Hellenistic periods (Lehmann 1994: 107-112; Lehmann 1996: 274; Herrmann 2017: 294).

The evidence of the citadel thus reflects a gradual increase in monumental buildings from the 9<sup>th</sup> to the 7<sup>th</sup> century, as newer constructions were added without abandoning the older ones (Osborne 2021: 160).

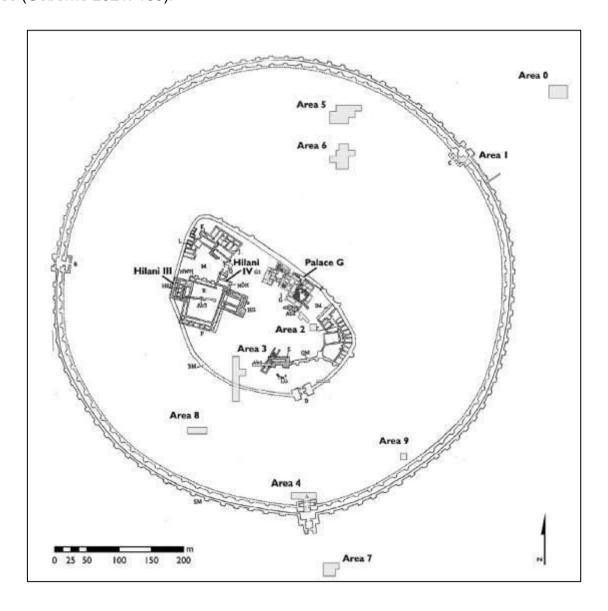


Fig. 40: Zincirli, all the excavated areas in both the upper and lower city (Herrmann 2017, fig. 2).

Research on the site was continued in 2006 by an expedition of the Oriental Institute of

Chicago (Herrmann 2017; Soldi 2019, 2020): the mission reconsidered the discoveries of the German expedition and explored for the first time the lower town.

The geomagnetic analysis and the excavations of the lower town shed light on the urban planning. The street system was orderly and comprised two concentric roads around the outer sectors and radial streets from the gateways to the citadel. While the street system and the fortifications were probably part of a planning program of the central administration, the residential quarters appear more chaotic, irregular and agglutinating, like the 9<sup>th</sup> century Complex A (Herrmann 2017: 290-292, 294-295).

The northern sector of the lower city was characterised in its last phase by large buildings with rooms arranged around two or more central courtyards, which have been interpreted as elite residences. The geomagnetic map suggests that these buildings seemed to share many similarities with Neo-Assyrians residences, however there were also local elements which could indicate a date earlier than the 7<sup>th</sup> century, such as the presence northwards of a *bit hilani* structure, an architectural type already attested at Zincirli from the 9<sup>th</sup> century (Herrmann 2017: 290-294).

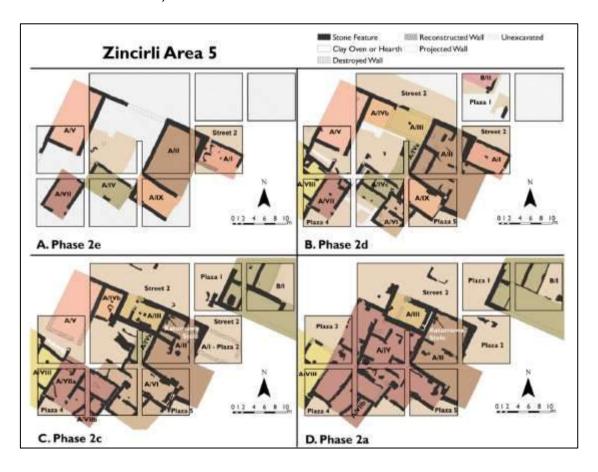


Fig. 41: Zincirli, Area 5, Northern lower town: 2e is the earliest phase (9<sup>th</sup> century BC, Complex A), 2a the latest (late 7<sup>th</sup> century BC. Herrmann 2017, fig. 7).

The excavations confirmed the trend already observed on the citadel of a progressive

aggregation of buildings: the dense residential quarter of the 9<sup>th</sup> century BC, when Sam'al was an independent polity, was substituted by larger monumental buildings arranged around central courtyards already in the late 8<sup>th</sup> century and especially in the 7<sup>th</sup> century (fig. 41. Herrmann 2017: 294-299). According to Herrmann, the gradual monumentalization of the area indicates socio-economic changes and a progressive centralization, with a true requisition of the land for the elite under control of the central power (Herrmann 2017: 299-301).

The Iron Age pottery and discoveries from the German expedition have been published by Von Luschan and Andrae (1943), while the pottery from the Oriental Institute research was studied by Sebastiano Soldi (2019, 2020). From a chronological point of view, the pottery spans between the Iron Age II and III (9<sup>th</sup> – 7<sup>th</sup> century BC), with only a few sherds dated to the final Iron Age I coming from filling deposits in the upper town. The general homogeneity between the Iron Age II and III assemblages makes it difficult to recognize a diachronic sequence (Soldi 2019: 167-170). The assemblage is practically local, with the Orange Simple Ware being the most common, and many parallels with other Northern Levantine sites, such as Tell Abou Danne, Tell Afis, Tell Mastuma, Tell Tuqan, Tell 'Acharneh, Tell Tayinat, Tell Shiukh Fawqani, Karkemish. Zincirli is therefore one of the northernmost centres belonging to the Northern and Central-western Syrian koiné of the Iron Age, bordering with the Anatolian culture, while Assyrian influence is visible starting from the 8th century, especially in the bowl types (Soldi 2019: 168-171). Large storage jars with swollen rim and biconical profile also have parallels with Late Assyrian productions (Soldi 2019: 174; Von Luschan, Andrae 1943 pls. 29:d, 30:a). Painted decorations are completely absent, as confirmed by the Iron Age II and III assemblages in other North Syrian sites (Tell Afis, Tell Sheikh Hassan), while Red Slip vessels are attested, although they are not common (Soldi 2019: 171-172, 176-177).

### 2.2.4 AREA 4 - MIDDLE EUPHRATES



Fig. 42: Satellite view of the Middle Euphrates with the sites considered (from Google Earth).

# 2.2.4.1 KARKEMISH

The site, a tell located on the west bank of the Euphrates just on the border between Turkey and Syria, was excavated by a British Museum Expedition in the late 19<sup>th</sup> and early 20<sup>th</sup> century, especially in 1911-1914 and 1920 by the missions guided by Sir Leonard Woolley (Benati 2014; Woolley 1939-1940). The British excavations exposed remarkable and monumental buildings, in particular Gateways (The Water Gate, The King's Gate), a *bit hilani* palace and the Lower Palace, and a large cemetery (Woolley 1939-1940). The most important discoveries are the complex decorative reliefs which embellished the orthostats of many walls: the Long Wall of Sculpture, the Herald's Wall, the Processional Way, the Royal Buttresses (Benati 2014: 60-61; Gilibert 2011: 20-54; Osborne 2021: 98-101).

A new Turco-Italian mission has recently continued the research at Karkemish (Marchetti 2014b). Excavations and soundings were carried out in the area of the Lower Palace (Areas A, B, and C), the Outer Town (Areas E, F. Bonomo, Zaina 2016) and in the Yunus cemetery. The stratigraphy in Area C comprised a sequence from Early Islamic to the Late Iron Age I

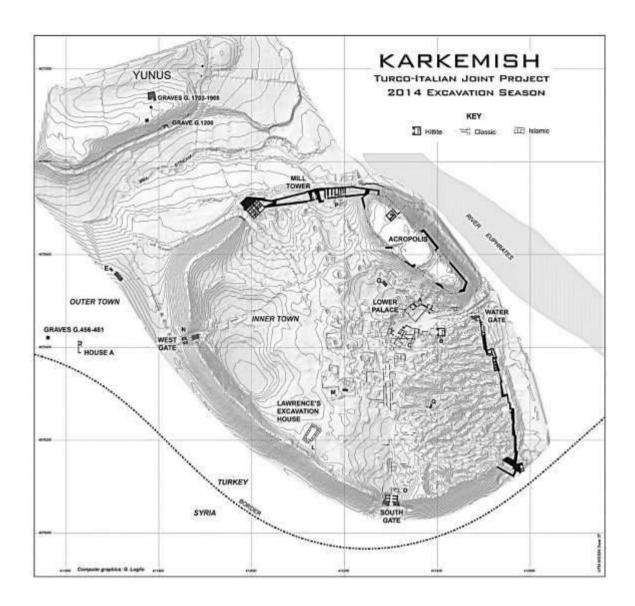


Fig. 43: Karkemish (Pizzimenti, Zaina 2016, fig. 1).

Phase 11 dates to the Late Iron Age I (10<sup>th</sup> century BC) and is characterized by a poorly preserved proto-palatial compound. It was a building composed of at least seven rooms, one of which was a bathroom with a bench and drains (Pizzimenti. Zaina 2016: 364). In Phase 10a-b (Iron Age II, 9<sup>th</sup> – 8<sup>th</sup> century BC) a first palatial compound was erected. At the end of the 10<sup>th</sup> century BC, during the reign of Katuwa, whose name was found on inscriptions belonging to this phase, the building underwent a massive reorganization, with limestone and basalt orthostats found in the rooms in the south-west (Pizzimenti, Zaina 2016: 364). Further modifications were attributed to Yariris (late 9<sup>th</sup> century BC), like the addition of the Royal Buttress (Pizzimenti, Zaina 2016: 365). The end of this phase may have been caused by the Neo-Assyrian conquest of the city, dated to 717 BC: no evidence of this

destruction was found, but this may be due to the massive reconstruction work in the subsequent phase which would have removed the debris (Pizzimenti, Zaina 2016: note 7). Phase 9a-c corresponds to the Iron Age III (7<sup>th</sup> century BC) and is represented by a second palatial compound, from which a fired brick with an inscription of Sargon II was retrieved. The rebuilding therefore took place probably between 717 BC and the death of Sargon II (705 BC. Pizzimenti, Zaina 2016: 365). The new palace was composed of four blocks arranged around a large courtyard surfaced with black and white pebbles arranged in a checkered pattern, with some of the previous structures partially reutilized (Pizzimenti, Zaina 2016: 365-366).

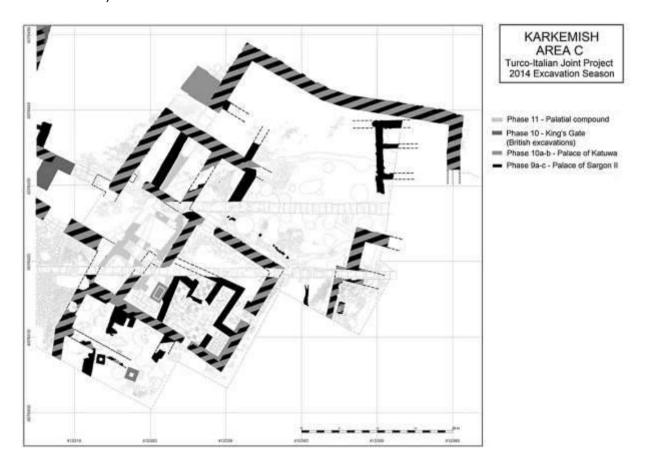


Fig. 44: Karkemish, Area C (Pizzimenti, Zaina 2018, fig. 2).

The pottery assemblage from Karkemish is divided into Common Ware (the majority), Kitchen Ware and Preservation Ware. Parallels are possible with sites from the Euphrates Valley (Tille Hüyük, Tell Ahmar) and the Northern Levant (Tell Tayinat, Tell Afis, Tell Abou Danne, and Tell Mastuma. Bonomo, Zaina 2014: 137; Pizzimenti, Zaina 2016: 366).

The Iron Age I repertoire includes open vessels such as bowls with outer inflated rim and pointed slightly inturned rim, jugs and juglets with inturned rim, which will increase during the Iron Age II and III, kraters with expanded rectangular rims and holemouth cooking

vessels. White slip is used as surface treatment, while burnishing is rare (Pizzimenti, Zaina 2016: 268). The Iron Age II and III assemblages share many morphological forms, of which the evolution from one period to another may be seen, and in a few cases even from the Iron Age I period: miniature platters with flat bases, hammerhead rim bowls, carinated bowls with out-turned rims, jugs with out-turned rounded rims (Pizzimenti, Zaina 2016: 368-372, fig. 6). White and Red Slip can be found especially on open shapes and increase during the Iron Age II. However Red Slip occurs only seldomly, as observed at Zincirli and in other sites on the Middle Euphrates (Pizzimenti, Zaina 2016: 370). Iron Age III fabrics appear coarser, with larger and more numerous mineral inclusions (Pizzimenti, Zaina 2016: 372).

## 2.2.4.2 TELL SHIUKH FAWQANI

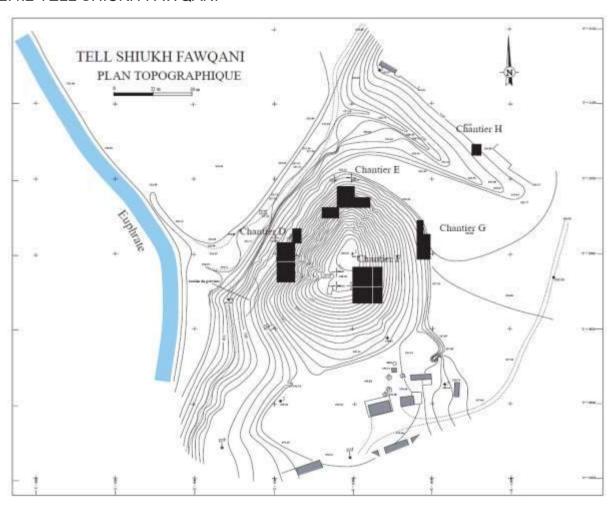


Fig. 45: Tell Shiukh Fawqani (Bachelot, Fales 2005a: 410).

Tell Shiukh Fawqani, ancient Burmarina, is located on the east bank of the Syrian Euphrates, not far from the Turkish border, and was excavated by an Italian-French expedition in the 1990s. The stratigraphy brought to light in the five excavation areas goes from the Late Uruk

period (Period I) to the Late Medieval epoch (Period XV. Bachelot, Fales 2005b: I-V, XLII). Iron Age levels (Period VIII and IX) have been found in Areas F (Makinson 2005), G (Luciani 2005) and H (al-Bahloul, Barro, d'Alfonso 2005; Tenu 2009).

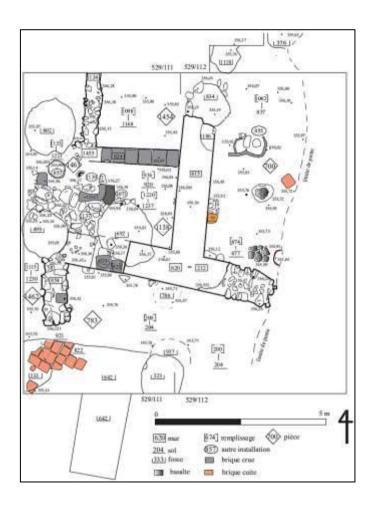


Fig. 46: Tell Shiukh Fawqani, Area F (Makinson 2005, fig. 1).

In Chantier F (Makinson 2005) a residential building dated to the Iron Age III (7<sup>th</sup> century BC, Period IX, fig. 46) was discovered, with four rooms and a small courtyard, each space devoted to different uses. The house was interpreted as a residence of wealthy inhabitants under the Neo-Assyrian domination, as indicated also by the discovery of a small archive of Cuneiform and Aramaic tablets. While the masonry does not appear prestigious, the finds are remarkable: the quantity of storage vessels and the presence of weighing instruments indicates that economic transactions were carried out in the building (Makinson 2005: 411-418, 428-430).

In Area G (Luciani 2005) three levels pertaining to Period IX were identified. Level C was the earliest and was attributed to the Iron Age II (8<sup>th</sup> century BC), level B represented the transition between the Iron Age II and III (Late 8<sup>th</sup> – early 7<sup>th</sup> centuries BC) and level A was

dated to the Iron Age III (7<sup>th</sup> century BC). While from level C comes only pottery and no architecture was found (Luciani 2005: 722), the other two levels are characterized by a large multi-roomed architectural complex (fig. 47), in which both domestic and artisanal (metallurgical) activities were carried out and every room had a different function. The building was built so as to fit the slope of the tell and was probably connected to iron smelting activities, although a furnace has not been found (Luciani 2005: 723-779).

Over this complex a cemetery consisting of 14 inhumation burials, dated to the late Iron Age III and Persian Age ( $6^{th} - 5^{th}$  centuries BC) was found (Luciani 2005: 779-788).

The evidence from Area H consists of four levels of a cremation cemetery, composed of 150 tombs, with similarities to those of Karkemish, Yunus Tepe and Deve Hüyük (al-Bahloul, Barro, d'Alfonso 2005: 997-1002; Tenu 2009).

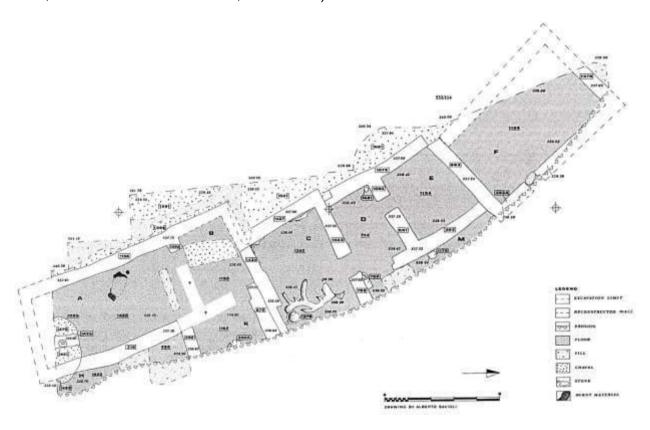


Fig. 47: Tell Shiukh Fawqani, Area G, level B (Luciani 2005, fig.4).

The Iron Age III ceramic assemblage from Chantier F was published by Martin Makinson (Makinson 2005: 455-468): parallels were found with Northern Syria and the absence of Late Assyrian hallmark types was noted, although Palace Ware is documented (Makinson 2005: 457, 465, 467-468). About 30% of the pottery is decorated, especially with incised lines and appliques, while painted ware is extremely rare (c. 2%). Red Slip occurs on a very small percentage of the pottery as well (Makinson 2005: 463-466).

Regarding the repertoire from Area G, discussed by Marta Luciani (Luciani 2005: 790-797), level C yielded a small amount of pottery, with parallels from Tell Afis and Khirbet Khattuniyeh. In level B thin-walled vessels are frequent, however the lack of Palace Ware, unlike Chantier F, indicates the functional difference between the two areas (Luciani 2005: note 163). Parallels are attested especially with sites in North Syria, on the Euphrates and with Late Assyrian centres. A decoration consisting of criss-cross burnishing on the inner surface of small plates appears to be distinctive of Tell Shiukh Fawqani (Luciani 2005: 792-793). A strong continuity with the preceding level characterizes the pottery from level A, with most differences regarding the percentages of certain forms or types (Luciani 2005: 794). Red Slip is rare also in Area G, especially in level A, while in this period an increase in painted pottery may be observed (Luciani 2005: 794).

The pottery from Area H, discussed by Lorenzo d'Alfonso (Al-Bahloul, Barro, d'Alfonso 2005: 1002-1008), is generally homogeneous and consists exclusively of Common Wares without slip, except for one vessel with a pinkish white slip, while in some specimens the top of the rim is burnished. Decorations are rare and mostly represented by clay *appliques* (Al-Bahloul, Barro, d'Alfonso 2005: 1002).

### **2.2.4.3 TELL AHMAR**

The site, ancient Til Barsip or Masuwari (Bunnens 1990b: 3-4; Bunnens 1999: 613; Roobaert, Bunnens 1999: 168; Thureau-Dangin 1929: 187), is located on the east bank of the Syrian Euphrates. It was inhabited from the Chalcolithic until Late Antiquity (Bunnens 1990b: 3). During the Iron Age it was first an important Middle Assyrian centre, then the capital of the Syro-Anatolian State of Bit Adini and in 856 BC it was re-conquered by the Assyrians (Bunnens 2016: 240-241). The site is divided into an upper city, that is the main tell, the middle city to the west of the main tell and the lower city distributed in a semi-circular pattern to the north (Bunnens 1990b: 2).

Tell Ahmar was visited in the early 20<sup>th</sup> century by various scholars and explorers such as David George Hogarth and Gertrude Bell (Thureau-Dangin 1929: 186). It was then excavated from 1928 to 1931 by a French mission led by François Thureau-Dangin (Thureau-Dangin 1929; Thureau-Dangin, Dunand 1936), which exposed on the main tell a large Assyrian palace dated to the 8<sup>th</sup>-7<sup>th</sup> centuries BC (Thureau-Dangin, Dunand 1936, Pls. XII-XIII). The palace had extensive wall paintings (Bunnens 2016: 242).

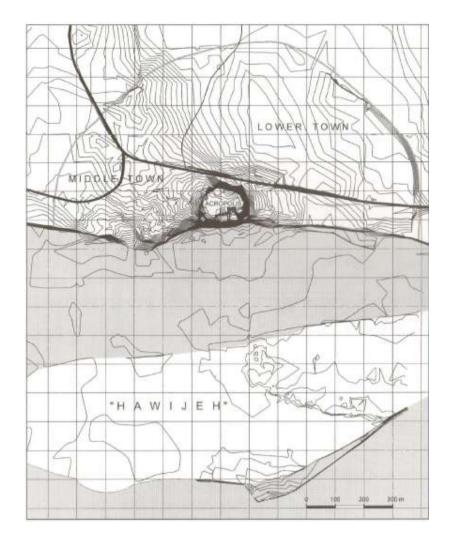


Fig. 48: Tell Ahmar (Jamieson 2012, fig. 1.3).

Research on the site was resumed in the late 1980s by an expedition from the Melbourne University led by Guy Bunnens (Bunnens 1990b: 1; Roobaert, Bunnens 1999: 163).

On the upper city, Stratum 4 represents the Neo-Assyrian occupation (8<sup>th</sup> century BC) and more precisely the Assyrian palace, to which also belonged a pebble-mosaic pavement (Bunnens 2013: 177-178). To Stratum 5 belonged some walls, part of the "installation araméenne" of Thureau-Dangin and Dunand and probably of late Iron Age II date (Bunnens 2013: 179). Stratum 6 was composed of small mud-brick walls on stone foundations which were part of a building which underwent various rebuilding phases. This level was probably violently destroyed, as evidence of a fire was found: the date of the destruction was estimated between the mid-12<sup>th</sup> century and the mid-11<sup>th</sup> century on the basis of a carbon sample (Bunnens 2013: 179-180).

Redeposited Iron Age pottery was found in Area B in the middle city (Wightman 1990), while Area C in the lower town revealed traces of the pre-Assyrian occupation, like a large basalt slab with a Luwian inscription (Roobaert, Bunnens 1999: 168). Again in Area C, various Neo-

Assyrian buildings, at least three, were uncovered (fig. 49): these were residential houses of wealthy people, one of which (C1a) was later transformed into various working areas (Roobaert, Bunnens 1999: 167, 171-172). The architectural complex formed by buildings C1a-C2 was also characterised by a pebble mosaic with a checkered pattern (Roobaert, Bunnens 1999: 172). Other buildings and residential quarters of the Neo-Assyrian period were uncovered in Areas D and E, again in the lower town (Roobaert, Bunnens 1999: 172). This indicates that Tell Ahmar reached is maximum extension and flourished in the Neo-Assyrian period, as often the houses were built on virgin soil (Area C. Roobaert, Bunnens 1999: 167-168).

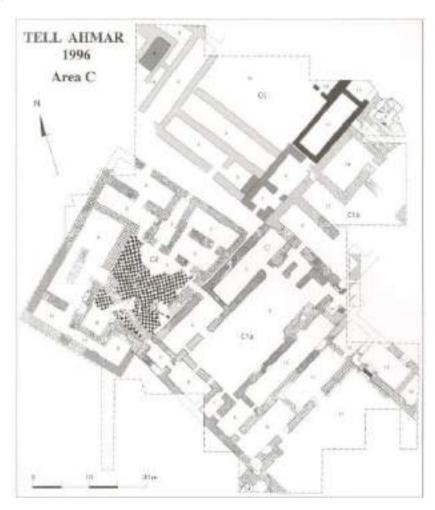


Fig. 49: Tell Ahmar, the residences of Area C (Jamieson 2012, fig. 2.2).

In the Iron Age II-III the city was surrounded by a fortification wall with a gate, called the "Lion Gate", decorated with two basalt lions. An inscription on the lions cites Shamshi-ilu and dates them to the 8<sup>th</sup> century BC (Bunnens 2016: 242; Roobaert 1990). A further fortification encircled the upper town (Roobaert, Bunnens 1999: 170).

Two Neo-Assyrian buildings dated to the 7<sup>th</sup> century BC have been brought to light in the lower town (Bunnens, Russell 2011).

The pottery from the upper town is characterized in the Iron Age I by a local character, continuing and developing from the Late Bronze Age tradition, Middle-Assyrian material present especially in the early period and then disappearing (Bunnens 2013: 180). The late Iron Age II pottery is strongly influenced by Assyrian culture (Bunnens 2013: 181).

The Neo-Assyrian pottery from Area C has been studied by Andrew Jamieson (Jamieson 1999, 2000, 2012). The ceramic assemblage has been subdivided into 17 ware groups: Common, Coarse, Cooking Pot, Red Slip, Palace, Fine, Grey, Tall Jar, Glazed, Painted, Incised, Stamped, Cypriot, Bi-Chrome, Phoenician, Sheikh Hamad and Plain Crisp Wares (Jamieson 2012: 18, Table 2.1).

The most common group is the pinkish-buff Common Ware and most frequent open forms are bowls (Jamieson 1999: 288; Jamieson 2012: 19-20). Jars, kraters, pot stands, lamps, bottles, goblets, juglets and spouted vessels are also attested, as well as handmade cooking pots (Jamieson 1999: 288). Red Slip, Palace and Gray Wares are present in small quantities and according to Jamieson may be imported luxury vessels (Jamieson 1999: 289). The Red Slip in divided into hand-burnished and wheel-burnished and can be found almost exclusively on open forms and only rarely on small jars and bottles (Jamieson 1999: 289; Jamieson 2012: 25-27). Few fragments part of the Red Slip Ware group are decorated with a red band (Red Banded Ware. Jamieson 2012: 27). Sherds decorated with glaze occur rarely, sometimes displaying polychrome patterns (Jamieson 1999: 289-290; Jamieson 2012: 36-38). Painted brown or black decorations on fragments are found occasionally in the assemblage (Jamieson 2012: 39-40). Imported Cypriot and Phoenician vessels are also attested (Jamieson 1999: 290; Jamieson 2012: 42-47).

Parallels for the pottery from Tell Ahmar are possible with other sites on the Euphrates (Karkemish, Tell Jurn Kabir, Tell Sheikh Hassan) and Anatolian centres (Deve Höyük, Sultantepe, Lidar, Tille Höyük). Parallels have been found also in other Neo-Assyrian sites to the east, such as Tell Sheikh Hamad, Nimrud, Assur, Tell Fekheriyeh, Qasrij Cliff, Khirbet Qasrij, Khirbet Khattuniyeh (Jamieson 1999: 291). The assemblages from Central-Western and Coastal Syria are part of a different ceramic tradition, with only a few types in common with Tell Ahmar (Jamieson 1999: 291).

#### 2.2.4.4 TELL JURN KABIR

Tell Jurn Kabir, located on the west bank of the Syrian Euphrates, has been object of excavations by a Danish mission since 1993 (Eidem, Ackermann 1999; Eidem, Putt 1999). The Iron Age is represented by Levels IV-I. Whereas the earliest one, Level IV, has not returned much evidence, Level III (fig. 50) is characterized by an oval enclosure on the

summit of the site. The enclosure had a casemate system attached on the external side, while the inner space was divided into small rooms around a central open space. A few structures were found outside the enclosure (Eidem, Ackermann 1999: 310; Eidem, Putt 1999: 194). These first two levels have been dated to the 11<sup>th</sup> and 10<sup>th</sup> centuries BC (Eidem, Putt 1999: 196).

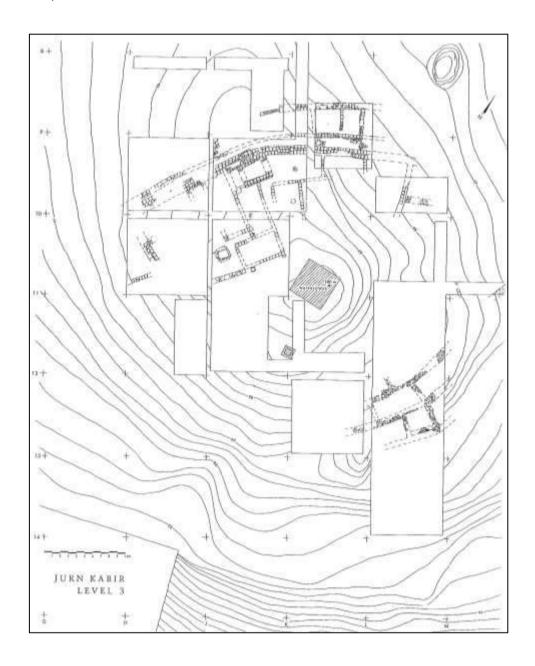


Fig. 50: Tell Jurn Kabir, Plan of Level III (Eidem, Putt 1999, fig. 2).

The site was then abandoned until the occupation of Level II, when the previous enclosure wall was used as a base to erect another enclosure. Inside, two structures (Buildings I and II), whose construction seemed to have been interrupted, were excavated. They may perhaps have been a *bit hilani* residence (Building I) and a gate house (Building II). The

construction of the buildings was ascribed to Level II.B, followed by Level II.A in which the structures were re-utilized and Building II was covered by a layer full of rubbish, as in animal bones and pottery fragments (Eidem, Ackermann 1999: 310-311). In this phase, especially in Level II.B, the site appears to be a local north Syrian settlement dated to the 10<sup>th</sup> and 9<sup>th</sup> centuries BC (Eidem, Ackermann 1999: 315; Eidem, Putt 1999: 196).

Level I is represented once again by another enclosure with 3 m thick mudbrick walls on the location of Building II. Two sub-phases, Levels I.B and I.A, were recognized. A series of pits filled with Neo-Assyrian material belonged to the most recent occupational phase, which coincided with the Neo-Assyrian control and probably has to be dated to c. 850-600 BC (Eidem, Ackermann 1999: 311, 315).

The pottery of Tell Jurn Kabir was divided into three groups (Eidem, Ackermann 1999: 311-312, 314-315; Eidem, Putt 1999: 194). Group A is the oldest one, to which belonged material from Level III and the rubbish deposit from Building II. It probably covers the 11<sup>th</sup> and 10<sup>th</sup> centuries; it displays some similarities with late Middle Assyrian pottery and includes many fragments with a coarser temper than the other groups (Eidem, Ackermann 1999: 311-313). Group B is represented by the materials from Levels II.A and B, dated to the 9<sup>th</sup> and 8<sup>th</sup> centuries BC. Group C is the latest one and includes the pottery from the pits of Level I and similar materials from layers just under the surface. It can be dated to the 7<sup>th</sup> century BC on the basis of many parallels from other Late Assyrian assemblages and the presence of a few fragments of "Palace Ware" (Eidem, Ackermann 1999: 313).

Common Ware usually has a brown or reddish core and lighter surfaces, with specimens distinguished by a red-orange fabric, sometimes burnished, already appearing in group A (Eidem, Ackermann 1999: 313; Eidem, Putt 1999: 194). A very small percentage of the pottery is painted, especially with red or black bands, but in group B more elaborate patterns are attested. An imported Cypro-Phoenician bichrome jar and an also imported fragment of Red-on-Black *aryballos* are present in the same group, together with two sherds of local imitations of Red-on-Black (Eidem, Ackermann 1999: 312).

Grey Ware and Red Slip Ware occur rarely. The former is typical of group C, while a single sherd of the latter is also attested in group B (Eidem, Ackermann 1999: 312-313).

#### 2.2.4.5 TELL SHEIKH HASSAN

The site, once located on the eastern bank of the Euphrates and now submerged by Lake Assad, was investigated as part of the Tabqa Dam Project in the early 1970s (Schneider 1999a: 325). The early excavations revealed the Neolithic and Late Uruk occupation, while a French-German expedition led by L. Boese worked on the site from 1984 to 1994 (Boese

1995: 7; Schneider 1999a: 325). The French-German project exposed the Iron Age settlement, represented by a fortification wall and a large building (Bau A, fig. 52) which was initially interpreted as a temple (Boese 1995: 25), but was later revealed to be a *bit hilani* palace, perhaps the palace of the governor (Boese 1987-1988: 71; Schneider 1999a: 325-326). The building was composed of at least nine rooms (I-IX). The floor of Room IV, which was perhaps a central courtyard, was paved with pebbles (Boese 1987-1988: 71, figs. 11-12). Room IV was divided into a western and an eastern sector by a line of stone slabs (Boese 1995: 205). The lack of finds did not allow a precise dating, although the pottery found in the foundations seemed to indicate that it had been built not before the 8<sup>th</sup> century BC (Boese 1987-1988: 71)

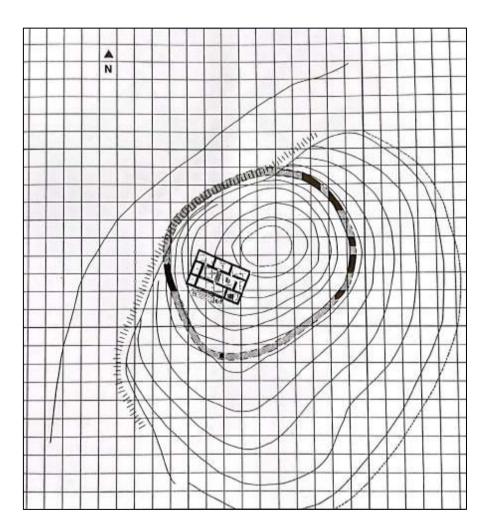


Fig. 51: Tell Sheikh Hassan (Boese 1995: 247, Abb. 4).

The pottery from Tell Sheikh Hassan has been studied by Ellen Schneider (Schneider 1999a, 1999b). The assemblage was divided into local and Assyrianizing forms. Local forms are mostly characterized by simple Common Ware, with an orange or brown colour (Schneider 1999a: 326-327). Bowls with hammer rims and T-shaped rims and pots with thickened rim

are particularly predominant in the assemblage and parallels with Tell Jurn Kabir and Tille Höyük date the repertoire to between the 8<sup>th</sup> and 5<sup>th</sup> centuries BC (Schneider 1999a: 329-330). The Assyrianizing types are dated to a similar chronological interval and have parallels from a large number of sites from both in the Northern and Southern Levant and Assyrian centres (Schneider 1999b: 351-361).

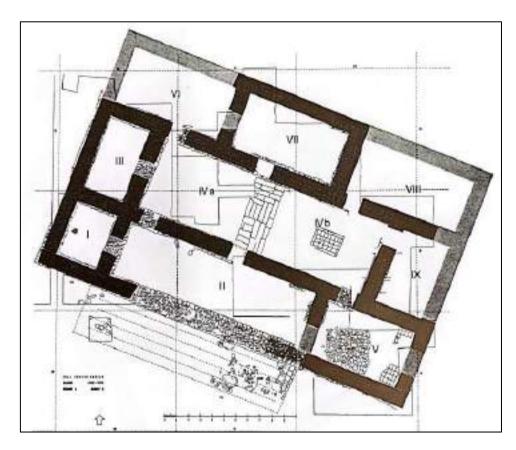


Fig. 52: Tell Sheikh Hassan, BAU A, the bit hilani (Boese 1995: 218, Abb. 4).

### 2.2.5 AREA 5 - SYRO-LEBANESE COAST



Fig. 53: Satellite view of the Syro-Lebanese coast with the sites considered (from Google Earth).

## 2.2.5.1 RAS AL BASSIT

The site is located on a promontory on the Syrian coast, close to Mount Aqra. It was known as Posidium or Posideium in the Classical period and was settled from the beginning of the Late Bronze Age until the Arab conquest (Courbin 1990: 503).

Excavations were carried out by Paul Courbin (1986) in the 1970s and 1980s. The Late Bronze Age settlement was probably an Ugaritic outpost, which was partly abandoned at the end of the period (Courbin 1986: 184-185; Courbin 1990: 503)

The first Iron Age I occupation was represented by domestic dwellings probably destroyed by a fire (fig. 55. Courbin 1990: 503-505), followed by other levels dated to the Iron Age I and II with walls and various installations such as silos (Courbin 1976: 63; Courbin 1986: 188-189; Courbin 1990: 505-506). In the Iron Age II, and especially in the 8<sup>th</sup> century, Bassit was perhaps a port of the Kingdom of Hamath (Courbin 1990: 509). A cremation cemetery dated to the 8<sup>th</sup> and 7<sup>th</sup> centuries BC, consisting of *intra muros* tombs and tombs in rock cavities, was also excavated. The grave goods were local vessels, North Syrian amphorae

and cups and Cypriot pottery (Courbin 1986: 190-193; Courbin 1990: 506-507; Courbin 1993).

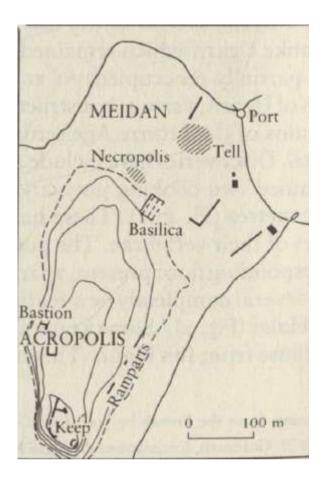


Fig. 54: Ras al Bassit (Courbin 1990, fig. 1).

The site became part of the Assyrian Empire in 720 BC and not many changes are observed (Courbin 1990: 506). In general, only a few finds (perhaps a couple of seals) are attributable to the Assyrian domination (Courbin 1986: 194). In the 7<sup>th</sup> century BC and thereafter the relations between Bassit and Greece became more intense as testified by the pottery finds (Courbin 1973: 27; Courbin 1986: 198-203; Courbin 1990: 509).

In the Iron Age the settlement was therefore a small Northern Syrian port, with residential areas. No major public buildings or cultic areas were found, and the site also appears to lack a craft quarter (Courbin 1986: 203).

Regarding the pottery, the Iron Age I pottery is characterised by painted vessels that are comparable with contemporary examples from Ras Ibn Hani (Courbin 1986: 188). Aegean importations are already attested from the early Iron Age (Courbin 1986: 187; Courbin 1990: 505) and Greek pottery becomes progressively more common from the mid-end 8<sup>th</sup> century BC (Courbin 1976: 63-64; Courbin 1986: 193-194; Courbin 1990: 506, 508). Cypriot pottery is also particularly well attested (Courbin 1976: 64; Courbin 1986: 190).

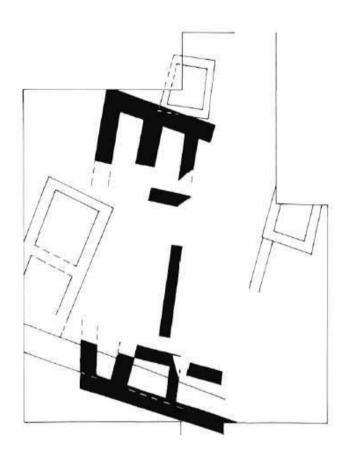


Fig. 55: Ras al Bassit, domestic quarter of the Iron Age I (Courbin 1986, fig. 22).

The Iron Age II-III levels are characterized by red slipped ceramics (Braemer 1986). The Red Slip pottery has been divided into eight assemblages ("ensembles") from A to H depending on the occupation level where it was found (Braemer 1986: 222-223). This treatment occurs on open forms like plates and bowls and a few jugs (Braemer 1986: 224-241). Parallels for the earliest assemblage (A) are possible especially with sites on the coast, Cyprus and Palestine. Only a couple of sherds indicate relations with Inner and Northern Syria (Braemer 1986: 241). The other assemblages have parallels especially with the Levantine coast, with sites such as Tyre and Sarepta (Braemer 1986: 243). According to Braemer, the Red Slip Ware at Bassit was imported and not of local origin and was considered a Phoenician production (Braemer 1986: 245).

### 2.2.5.2 RAS IBN HANI

The site is localized near Ras Shamra (Ugarit) and was excavated from 1975 by a Syro-French expedition led by Adnan Bounni, Élisabeth and Jacques Lagarce and Nassib Saliby (Badre 1983: 203; Bounni et al. 1976). The stratigraphy brought to light stretches from the Late Bronze Age to the Byzantine Age (Badre 1983: 203).

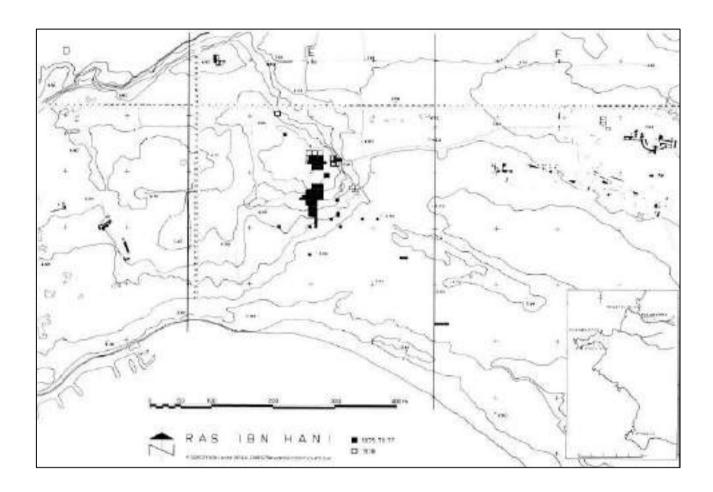


Fig. 56: Ras Ibn Hani (Bounni et al. 1981, fig. 1).

The site is flanked to the north and the south by two large bays which have made it a good stopover or dock on the Syro-Lebanese coast (Bounni et al. 1976: 233-234). Ibn Hani consists of a main tell and two smaller ones (Bounni et al. 1976: 234).

The early Iron Age I occupation on the main tell is represented by various small dwellings, one composed of two parallel rooms (Bounni et al. 1979: 245-248), another characterized by a central court surrounded by smaller spaces (fig. 57. Badre 1983: 204; Bounni et al. 1981: 256-263). The latter building opened to the south onto a paved street (Badre 1983: 204). The pottery fragments are dated to the 12<sup>th</sup> century BC, which point to a re-occupation of the site immediately after the destruction of the Late Bronze Age public buildings, identified as palaces (Bounni et al. 1978: 246). Three phases have been recognized: a first one dated to c. 1200-1150 BC, a second one to c. 1150-1050 BC and the last one to c. 1050-950 (Bounni et al. 1981: 260-270).

In the area between two important Late Bronze Age buildings (the "Palais Sud" and "Palais Nord"), a sounding opened in 1977 uncovered a surface with potsherds dated to the late Iron Age I and early Iron Age II (Bounni et al. 1981: 281-283). An Iron Age II occupation may be represented by pottery fragments dated to between the end of the 9<sup>th</sup> and the end of the

7<sup>th</sup> centuries BC found in squatting contexts over a Late Bronze Age building (Bounni et al. 1976: 237, 241, 243).

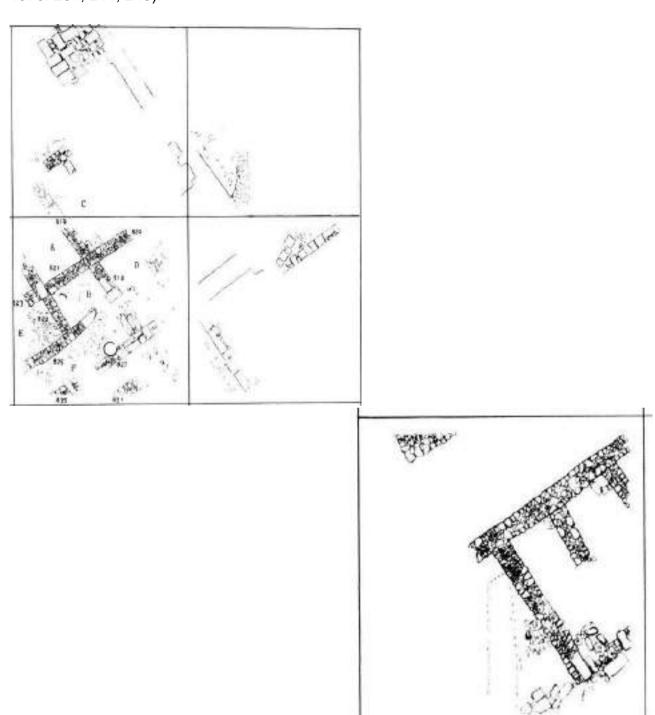


Fig. 57: Ras Ibn Hani, Iron Age I buildings (Bounni et al. 1981, fig. 21).

Iron Age levels on the south-eastern side of the tell were removed with a bulldozer to expose the Late Bronze Age occupation (Bounni et al. 1978: 236).

Regarding the pottery, Cypriot imports are well attested (Bounni et al. 1976: 242-243; Bounni et al. 1978: 280-282). Fragments of the so-called Samaria Fine Ware are also present, as

well as local painted pottery (Bounni et al. 1976: 243-244). The painted pottery is particularly common in the Iron Age I and is characterized by geometric decorations that are almost exclusively red in colour (Bounni et al. 1978: 280; Bounni et al. 1981: 262-266). Plates with round rim are characterised by a painted decoration with red and black concentric bands on the inner surface (Bounni et al. 1981: 266). To the same period belongs a local production influenced by Aegean ones (Badre 1983: 204; Bounni et al. 1978: 280; Bounni et al. 1981: 260). In the 12<sup>th</sup> century level, "steatite pottery" was found; it had already been found in Late Bronze Age Ugarit, and at Ibn Hani was found in levels of both Late Bronze Age and Iron Age I (Bounni et al. 1979: 254-255). At Ibn Hani it was utilized especially for round-shaped cooking pots with simple rim and characterized the whole Iron Age I, while in the Iron Age II cooking pots were produced in simple clay without steatite (Bounni et al. 1979: 255).

Red Slip is attested on both open and closed forms (Bounni et al. 1976, fig. 27) and appears during the first half of the 10<sup>th</sup> century BC (Bounni et al. 1981: 270). The same chronology can be presumed for the appearance of bichrome decorations on plates (Bounni et al. 1981: 270).

# **2.2.5.3 TELL TWEINI**

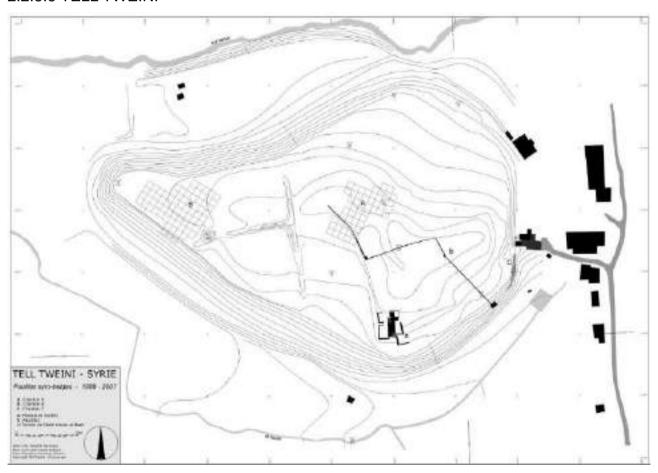


Fig. 58: Tell Tweini (Al-Maqdissi et al. 2010a, fig. III.6).

Tell Tweini, identified as the ancient Gibala cited in textual sources, is localized at the juncture of two rivers in the Jebleh plain on the Syrian coast, not far from Tell Sukas and Tell Sianu (Bretschneider, Van Lerberghe 2008b: 11). The site was excavated between 1999 and 2008 by a Syro-Belgian expedition led by Michel Al-Maqdissi, Karel Van Lerberghe, Massaoud Badawi and Joachim Bretschneider (Al-Maqdissi, Van Lerberghe 2010; Bretschneider, Cunningham, Van Lerberghe 2000). The stratigraphy brought to light was associated with occupation from the Early Bronze Age to the Islamic Period (Bretschneider, Van Lerberghe 2008b, Table 1).

The settlement was partially destroyed at the end of the Late Bronze Age and after a short hiatus it was re-occupied in the early Iron Age I (12<sup>th</sup> century BC. Bretschneider, Van Lerberghe 2008b: 43; Bretschneider, Van Lerberghe 2010: 43). Another phase dated to the 11<sup>th</sup> – 10<sup>th</sup> centuries BC was also discovered: two structures contained abundant pottery, especially storage ware, and two probable storage pits were uncovered as well (Bretschneider, Van Lerberghe 2010: 43-44).

In the beginning of the Iron Age II (9<sup>th</sup> century BC), the site underwent a massive urban reorganization. The settlement was surrounded by a large fortification wall and was divided into two sectors by a main street: houses, streets, workshops, monumental public buildings characterized the urban planning of this period (fig. 59. Bretschneider, Van Lerberghe 2008b: 43; Bretschneider, Van Lerberghe 2010: 44-45). One of the public buildings was the so called "A Building", originally built during the Iron Age I and composed of a single long room, an entrance hall and an open courtyard. Subsequently, the long room was flanked by rows of rooms (Bretschneider, Van Lerberghe 2008b: 44). A similar construction ("B"), only partially excavated, was found parallel to the "A Building". The two buildings have been interpreted as twin temples or "pre-temples" (Bretschneider, Van Lerberghe 2008b: 44). The end of this occupation phase (Tell Tweini VI A) during the 9<sup>th</sup> century may be attributed to the Assyrian expansion in Syria (Bretschneider, Van Lerberghe 2008b: 44).

In the second half of the 9<sup>th</sup> century BC a new urban reorganization is observed, with the enlargement of public buildings and the erection of residential houses. The abundant presence of Cypriot imports indicates the renewal of commercial exchanges between Cyprus, the Phoenician Coast and Syria (Bretschneider, Van Lerberghe 2008b: 44).

With the Assyrian conquest of Syria during the second half of the 8<sup>th</sup> century BC, Tell Tweini and the Syrian Coast became part of the Assyrian Empire. This period corresponds to new urban and architectural changes: installations related to olive oil and probably wine production are attested in every house (Bretschneider, Van Lerberghe 2008b: 44). Buildings A and B were subdivided in smaller spaces devoted to various economic activities

(Bretschneider, Van Lerberghe 2008b: 44-45). During the Iron Age III, the western side of the tell was occupied by a cultic quarter with temples (Bretschneider, Van Lerberghe 2010: 47).

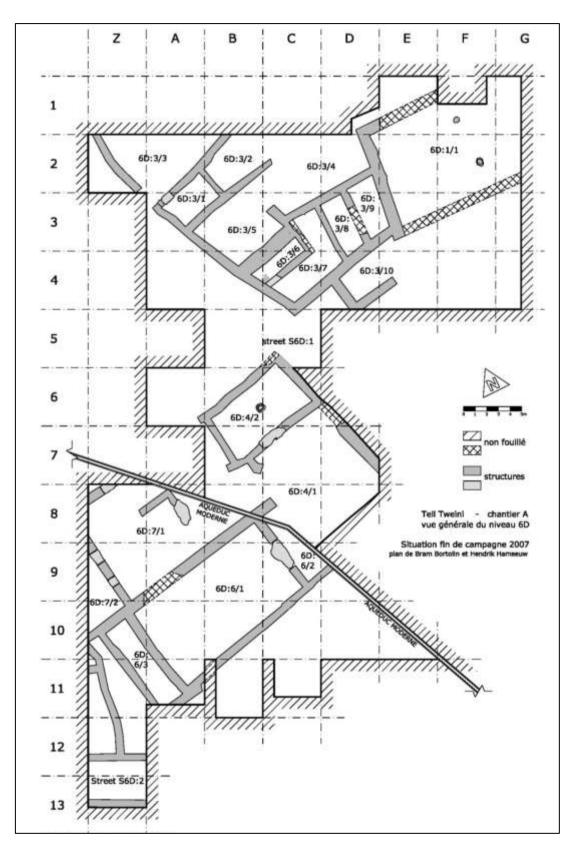


Fig. 59: Tell Tweini, Iron Age II quarter (Bretschneider, Van Lerberghe 2010, fig. III.45)

The pottery of Operation A (the upper town) was studied by Klaas Vansteenhuyse (Vansteenhuyse 2010). The Iron Age I ceramics display continuity with the Late Bronze traditions, for example in the shapes of the steatite pottery; however, the surface treatment and handmade technique used for the steatite cooking pots are novelties compared to the Late Bronze Age (Vansteenhuyse 2010: 98). Painted pottery is typical of the period and a sign of continuity with the Late Bronze Age, especially kraters with hatched triangles (Vansteenhuyse 2010: 99). White slipped vessels with red painted decorations (Syrian White Slip) are also attested (Vansteenhuyse 2010: 99).

In the Iron Age II, Cypriot imports steadily increase and are quite abundant (Vansteenhuyse 2010: 96). Typical forms are red-painted plates with rounded rim, piriform storage jars and drinking vessels. Painted decorations are present also on kraters (Vansteenhuyse 2010: 97). In the Iron Age I and early Iron Age II bichrome decorations are particularly well attested, especially on kraters and plates (Vansteenhuyse, Al-Maqdissi, Van Lerberghe 2002: 41). They are replaced by red slipped and red painted specimens in the later part of the Iron Age II (Vansteenhuyse 2010: 97-98)

In the Iron Age III the Cypriot Black-on-Red ware is particularly well attested, while in the later part of the period, Greek imports, such as black painted pottery, appear (Vansteenhuyse 2010: 95). Large basins, often decorated with rope or fingerprint impressions and occasionally also painted, are part of the assemblage of the period.

## **2.2.5.4 TELL SUKAS**

Sukas is a large tell situated on the Syrian coast, not far from Tell Tweini and about 20 km south of Latakia. It is located in the hinterland of a promontory flanked by two bays to the north and the south, therefore representing an excellent stopover point along the coast (Riis 1970: 7). Tell Sukas was investigated in 1934 by E. O. Forrer (Riis 1970: 7) and was later the subject of systematic excavations by a Danish expedition led by Poul J. Riis (Riis 1970:10). The site has been occupied for a long time, from the Neolithic period to modern times (Periods A-N), with the Iron Age corresponding to Periods H and G (Buhl 1983: 110; Riis 1970:12).

Regarding the residential quarter exposed in the centre of the tell (Lund 1986), the early Iron Age (H2 Period 1170-844 BC, Complex V, fig. 61) shows continuity with the Late Bronze Age structures (Lund 1986: 24, 42), while the later architecture (Complex VI, fig. 62) displays a break from the preceding buildings (Lund 1986: 32). The continuity between the Late Bronze and early Iron Age evidence seems to indicate there was no gap between the two periods at Tell Sukas.

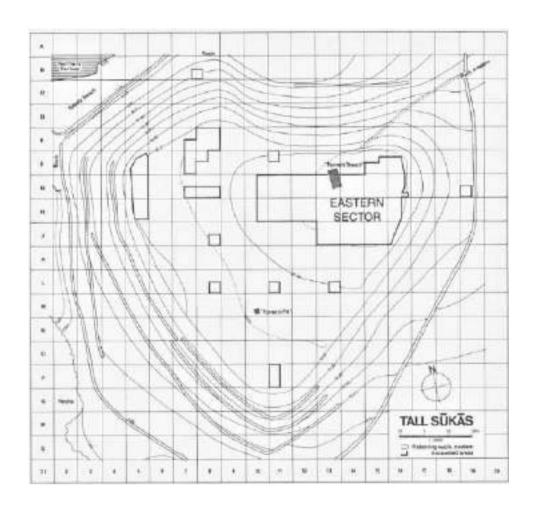


Fig. 60: Tell Sukas (Lund 1986, fig. 3).



Fig. 61: Tell Sukas, Complex V (Lund 1986, Pl. 9).



Fig. 62: Tell Sukas, Complex VI (Lund 1986, Pl. 11).

The second occupational phase of Complex V, indicated by a partial destruction of preceding levels of the building, has been dated to the Iron Age II (Period H1, 844-675 BC, 9<sup>th</sup> – 8<sup>th</sup> centuries BC) on the basis of the presence of red slipped pottery (Lund 1986: 40, 188). The destruction of the first Complex V might have been caused by the arrival of the Assyrians on the Syrian coast around 850 BC (Lund 1986: 188). It was not possible to propose a precise dating for Complex VI, although it probably belonged to the H1 Period and was built in the late 8<sup>th</sup> century (Lund 1986: 40-42, 188). Other architectural complexes were I and VII, of Periods H1 and H2 (Lund 1986: 42, 46). In the final part of the Iron Age a storage area with pits, previously found in the northern area of the excavation, expanded southward and eastward (Lund 1986: 35-38, 188-189).

Late Bronze and early Iron Age remains attributed to an open-air sanctuary have been discovered at the Southern Harbour (Riis et al. 1996).

Marie-Louise Buhl studied the finds from the upper layers of the excavation on the mound (Buhl 1983). Pottery types present in Period H are amphorae, jars, painted kraters with parallels from Hama and Ras Ibn Hani (Buhl 1983: 110-115). The pottery shows many correlations with Hama and Buhl suggests this may be because on the fact that in the late 8<sup>th</sup> century this part of the Syrian coast was under the control of the Kingdom of Hamath

(Buhl 1983: 117-118).

The material from the Southern Harbour includes smaller vessels such as bowls, "fruit-stands", *amphoriskos* and juglets, and larger vessels such as amphorae (Riis et al. 1996: 13-19).

## 2.2.5.5 TELL KAZEL

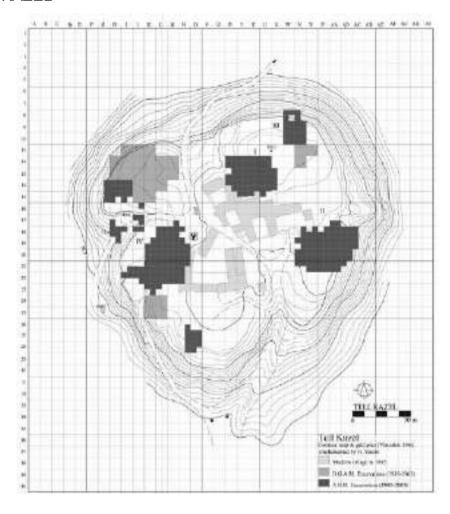


Fig. 63: Tell Kazel (Chiti, Pedrazzi 2014, fig. 1).

Tell Kazel, ancient Sumura/Simyra (Sader 1990), is a mound in the Akkar plain, north of the Nahr el Kabrisi and almost on the border with modern Lebanon. Systematic excavations on the site were started in the 1960s by a Syro-French expedition (Capet, Gubel 2000: 427). The research was resumed in 1985 by the AUB Museum, with a mission led by Leila Badre (Badre et al. 1990; Capet, Gubel 2000: 428).

Two excavation areas were opened on the mound, Area I on the upper town and Area III on the north-eastern slope. Areas II and IV/V were dug instead in the eastern and the western plains (Capet, Badre 2000: 428).

Area I was characterized by the presence of the so-called "jar building", in use from the early

1<sup>st</sup> millennium BC until the Assyrian conquest in 738 BC. The building was composed of various rooms, a paved courtyard and an area used for pottery production in the 9<sup>th</sup> and 8<sup>th</sup> centuries BC (Badre, Gubel 1999-2000: 127).

Area IV	Area II North-Eastern sector	Period	Area II Southern sector			
Level	Level		Level	Architectural features	Pottery	
8-6 7		Late Bronze II	6	Dense occupation with dwellings	Mycenaean and Cypriot imports; LB I storage jars	
5 lower	6	Late Bronze II (final)	5b	Dense and well- organized occupation; well-built structures	Mycenaean and Cypriot imports; LB storage jars; single-	
5 upper	6 final				handled storage jars;	
		Iron I (initial)			96196	
4-3	5		5a	Reusing some parts of previous buildings	Pithos-krater	
		Iron I (developed)	1	Absent	Absent	
/	.4	Iron II	4-3	Rural occupation with		
2	3	Iron III		scattered constructions		
v	2	Hellenistic-Roman	2	cemetery		
1	1	Modern	1	topsoil		

Fig. 64: Tell Kazel, correspondence of the phases of Area IV and the North-Eastern and Southern sectors of Area II (Chiti, Pedrazzi 2014: 73).

Area II was divided into two sectors, a North-Eastern one and a Southern one. In the North-Eastern sector, to level 6 belonged fragmentary walls with associated floors, one of which was plastered, and various pits and *tannurs* (Badre 1990b: 78-81). The final phase of level 6 was dated to the transition between the Late Bronze Age II and Iron Age I (Capet 2003: 63; Chiti, Pedrazzi 2014: 73) In the Southern sector, the corresponding level 5b was characterised by various buildings with multi-purpose courtyards characterized by silos, *tannurs*: it was interpreted as a dense residential quarter dated to the Late Bronze Age II and initial Iron Age I (Chiti, Pedrazzi 2014: 69, 73). Level 5b was destroyed by a fire and followed by a brief abandonment of the area and then a subsequent poorly preserved Iron Age I re-occupation (level 5a. Chiti, Pedrazzi 2014: 69). In the Northern-Eastern sector, level

5, corresponding to level 5a of the southern area, was characterised by the re-utilisation of the structures of the preceding level 6. At least six units were uncovered, however it is unclear if they belonged to a single building or were independent spaces. This phase was destroyed by a fire as well (Badre 1990b: 70-74; Capet 2003: 99-101).

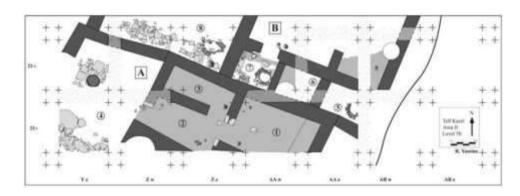


Fig. 65: Tell Kazel, Area II Southern sector, level 5b (Chiti, Pedrazzi 2014, fig. 3)

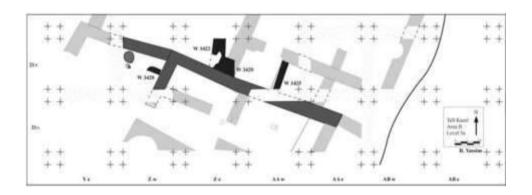


Fig. 66: Tell Kazel, Area II Southern sector, level 5a (Chiti, Pedrazzi 2014, fig. 4).

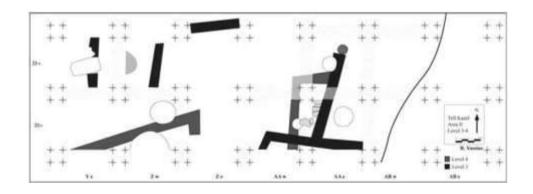


Fig. 67: Tell Kazel, Area II Southern sector, levels 4-3 (Chiti, Pedrazzi 2014, fig. 5).

After the fire of level 5, the area was not settled at length again: in both sectors, rural occupation has been discovered, with various installations, some overlapping each others. In Level 4, dated to the Iron Age II, only scant remains were exposed, two large structures,

tannurs, and a pebble layer (Badre 1990b: 68-70; Capet 2003: 63; Chiti, Pedrazzi 2014: 70). Level 3 was attributed to the Iron Age III and consisted of pits and a building composed of three spaces (Capet 2003: 63; Chiti, Pedrazzi 2014: 70).

In Area IV a cult building in use from the Late Bronze Age until the Iron Age I was unearthed. The area was then abandoned at the end of the Iron I period (Badre, Gubel 1999-2000: 136), only to be reoccupied in the Iron Age III by three silos (Badre, Gubel 1999-2000:194, 198). Regarding the pottery, the initial Iron Age I is characterized by continuity with the Late Bronze Age traditions, as indicated by the presence of a large storage jar with a wide opening (Chiti, Pedrazzi 2014: 72). Locally made Mycenaean pottery appears in this period (Chiti, Pedrazzi 2014: 72). Other Iron Age I and transitional Iron Age I/II ceramic material includes juglets with trefoil rim, an amphoriskos with parallels with Megiddo and fragments which may represent an initial stage of Bichrome Ware jugs (Badre, Gubel 1999-2000: 133-134). Burnished Red Slip Ware is already attested in this early period (Badre, Gubel 1999-2000: 134).

In the Iron Age II, Bichrome ware is common, such as amphoras with bichrome decoration and jugs (Badre, Gubel 1999-2000: 129). Cypriot pottery dated to the 8<sup>th</sup> and 7<sup>th</sup> centuries BC is well attested in Area II level 4, together with abundant red slipped pottery (Badre 1990b: 68, 70), while fragments belonging to categories from earlier periods are present in smaller quantities (Yon, Caubet 1990: 103-104). The local Red Slip or wash characterizes especially plates and bowls, while imported red slipped vessels include jugs and juglets from southern Phoenicia (Badre, Gubel 1999-2000: 133).

### 2.2.5.6 TELL 'ARQA

Excavations started at Tell 'Arqa (ancient Irqatu), an imposing mound near the Mediterranean Coast free from modern constructions, in 1972 (Thalmann 1978: 1, 3-4). The excavations exposed a long almost continuous stratigraphy from the Early Bronze Age II to the Mameluk period (Charaf 2020-2021, fig. 2). The Iron Age occupation is represented by Phases (Niveaux) 10 and 9, while Phase 11 belongs to the transitional Late Bronze Age II/Iron Age I  $(13^{th} - 12^{th} \text{ century BC})$ .

In Level 11 the occupation is clearly domestic, however it differs from the preceding Late Bronze Age phase for the modest and temporary character of the architecture. The area is occupied by open spaces with pits, silos and *tannurs* and the only building remains identified were those of a room (fig. 68. Charaf 2020-2021: 48). In the latest sub-phase (11A), a change of occupation is documented in the northern area, where a small industrial zone was uncovered with a cistern, mudbrick basins, a silo and two walls (Charaf 2020-2021: 53-54).

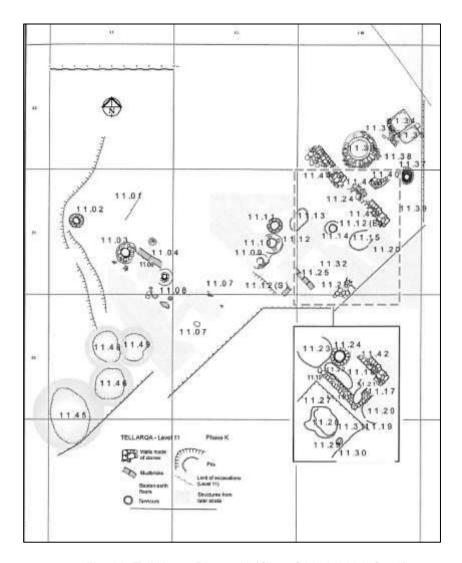


Fig. 68: Tell 'Arqa, Phase 11 (Charaf 2020-2021, fig. 3).

Level 10, with its three main architectural sub-phases, was dated to the Iron Age II (9<sup>th</sup> – late 8<sup>th</sup> century BC) and was characterised by a sanctuary, a cremation cemetery and a fortification wall (Chaaya 2000: 214-215; Thalmann 1978: 78-79). The level was covered by a destruction layer caused by a fire, attributed by the excavators to the conquest by Tiglath-pileser III in 738 BC (Chaaya 2000: 215).

Level 9 (Iron Age III, 7<sup>th</sup> – 5<sup>th</sup> century BC) comprised especially by pits, tombs and modest domestic structures (fig. 69. Chaaya 2000: 215; Thalmann 1978: 71-78).

In the transitional period between the Late Bronze and Iron Age, a regression of the urbanism can be observed at Tell 'Arqa and the flimsy character of the architecture raised questions as to whether it was a permanent occupation or a semi-nomadic one (Charaf 2020-2021: 48, 63).

During the Iron Age II, instead, the site flourished again and had a certain degree of independence and control over the surrounding land, while after the destruction by Tiglath-Pileser III the site has contracted to the size and importance of a village (Chaaya 2000: 217).

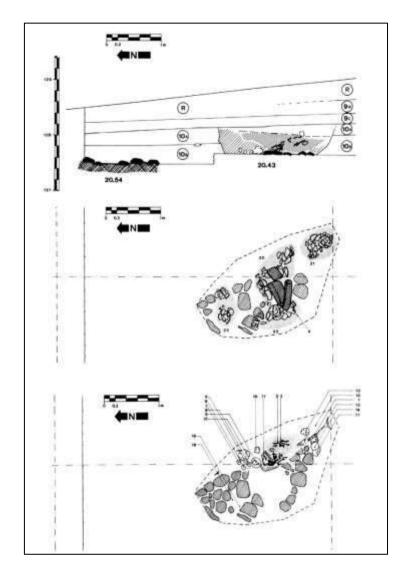


Fig. 69: Tell 'Arqa, Niveau 9, Tomb 1 (Thalmann 1978, fig. 17).

The ceramic assemblage from Level 11 shares many common traits with the Late Bronze Age production, although it is also characterized by Aegean influences, as is common in the Levant in this period (Charaf 2020-2021: 54-63).

The pottery of Level 10 is homogeneous and composed essentially of local forms, that is amphorae, some also with painted inscriptions (*ImIk*), and cooking vessels of two types, one with an ovoidal body and the other with an elliptical body. Bowls are attested both in Common and Red Slip Ware. Both monochrome and bichrome painted decorations are also present (Chaaya 2000: 215; Thalmann 1978: 80-84). A clean break in the material culture can be observed between Levels 10 and 9: the ceramic assemblage of the latter period is less standardized and characterised by large basins, also with Greek imports such as Attic black figure pottery (Chaaya 2000: 215-216, 217; Thalmann 1978: 79-80).

#### 2.2.5.7 SAREPTA

The site is a small tell near the village of Sarafand, on the coast of the Southern Lebanon. Its name, "Sarepta", is testified by an inscription with a dedication to the "Holy God of Sarepta" and by a stamp seal with the inscribed letters s r p t (Anderson 1988: 36; Pritchard 1975: 7). The site was excavated starting in 1969 by James Pritchard, who dug two soundings (X and Y) in the upper town (Anderson 1988: 7; Pritchard 1975: 1-3). The phases are represented by Periods in Sounding X and Strata in Sounding Y.

The Iron Age occupation is represented by Period V = Stratum F (c. 1200/1190 - 1150/1125 BC), Period VI = Stratum E (c. 1150/1125 - 1050/1025 BC), Period VII = Stratum D (c. 1025/1000 - 850/825 BC) and Period VIII = Strata C-B (c. 850/825 - 5<sup>th</sup> century BC). Strata D and C were further subdivided into D2 (c. 1025/1000 - 950 BC), D1 (c. 950-850/825 BC) and C2 (9<sup>th</sup> - 8<sup>th</sup> centuries BC), C1 (8<sup>th</sup> - 7<sup>th</sup> centuries BC. After Anderson 1975: 386-419; Khalifeh 1988: 160).

In Sounding X a pottery and a textile-dyeing workshop were unearthed, although the stratigraphy was disturbed by later occurrences (Pritchard 1975: 5, 13). Separated by a street from the industrial area devoted to pottery making, there was a cultic area characterized by two shrines, the earlier Shrine 1 and the later Shrine 2, built on the ruins of the first (fig. 70. Pritchard 1975: 13-18, 20-22).

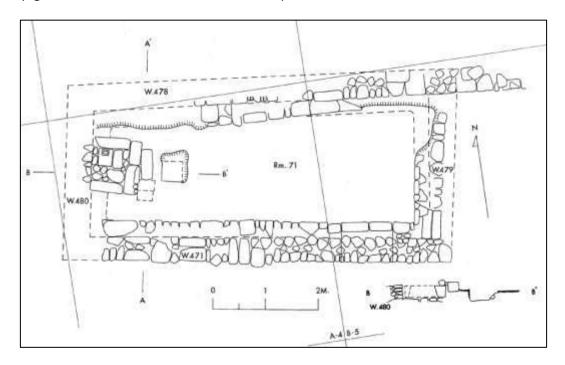


Fig. 70: Sarepta, Sounding X, Shrine 1 (Pritchard 1975, fig. 2).

Regarding Sounding Y, in Stratum F an artisanal pottery workshop was discovered, with kilns and ash pits (Anderson 1975: 44-46). The occupation of Stratum E proceeded partly in

continuity with the earlier Stratum F, as indicated by the reuse of some structures such as kilns and walls (Anderson 1975: 46-47; Anderson 1988: 89-97).

Stratum D was defined "Phoenician" and associated with ashlar masonry and typical "Phoenician" pottery (trefoil and mushroom-lip jugs, Bichrome and Red Slip pottery) and was characterized by a completely different function and plan compared to the previous phases. In fact, the area in this stratum appeared to be occupied by residential units with a street, although it is not clear if they were part of one or two larger building complexes or if they were single structures (fig. 71. Anderson 1975: 47-49; Anderson 1998: 97-108).

In Stratum C there were several rooms and at least one courtyard: according to Anderson, the area probably had a public function (Anderson 1975: 50-51; Anderson 1988: 108-117).

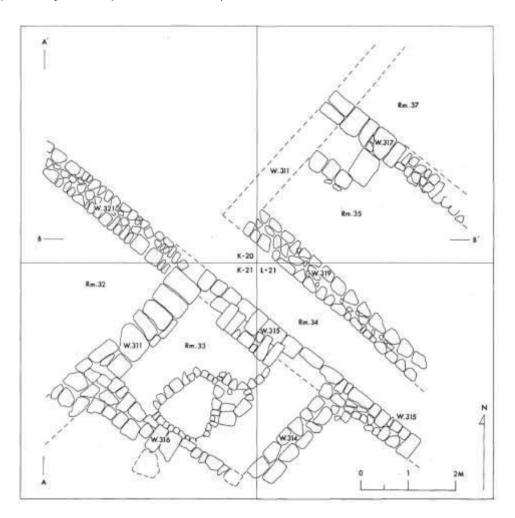


Fig. 71: Sarepta, Sounding Y, Stratum D (Pritchard 1975, fig. 7).

Parallels for the pottery have been sought especially in Coastal and Southern Levantine sites, such as Tyro, Megiddo, Hazor, Tell el-Farah, Tell Keisan, and Cypriot centres, like Kition and Salamis (Anderson 1988: 139ff, "Ceramic Typology"). The ceramic repertoire is markedly distinguished between lower strata (F-E) and upper ones (D-C), with a clear

difference in storage jars and some types of bowls (Pritchard 1975: 64). Decorations and surface treatments are well attested, especially burnishing (Anderson 1988: 337-343) and paint. In Sounding Y paint is especially present on jars, some bowl types, jugs (Pritchard 1975: 55-56) and in Stratum D paint is often associated with burnishing (Anderson 1988: 324). Painted decorations in Iron Age levels mostly occur in Stratum D, especially bichrome decorations, albeit they can also be found slightly earlier and in Stratum C: in the latter phase, painted sherds decline (Anderson 1988: 328-329, 332-333). Red Slip burnished vessels are typical of the Iron Age in Sarepta, especially Substratum D1 and Stratum C: the relevant forms are especially large bowls, kraters, jugs and flasks (Anderson 1988: 344-355).

# 2.2.5.8 TYRE

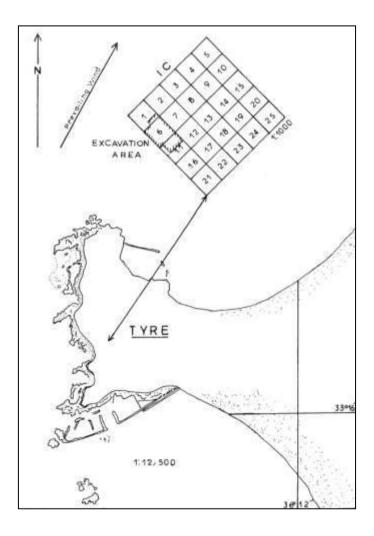


Fig. 72: Tyre, Bikai excavations (Bikai 1978, Pl. LIX).

The site has both a long history and a complex excavation history (Aubet, Núñez, Trellisó 2016: 10; Bikai 1978: 8; Bikai P. 1992). The most recent and important archaeological works on the Iron Age are the excavations by Patricia Bikai in the area of the ancient island of Tyre

(fig. 72. Bikai 1978) and those by Maria Eugenia Aubet together with Francisco Núñez in the al-Bass district and in the area of the Crusader Cathedral (Aubet, Núñez, Trellisó 2014, 2016).

Bikai excavated a small trench in 1973. The Iron Age levels are the Strata from XIII to I, with Stratum XIV dated to c. 1200-1070/1050 BC and characterised by the abandonment of the area (Bikai 1978: 8).

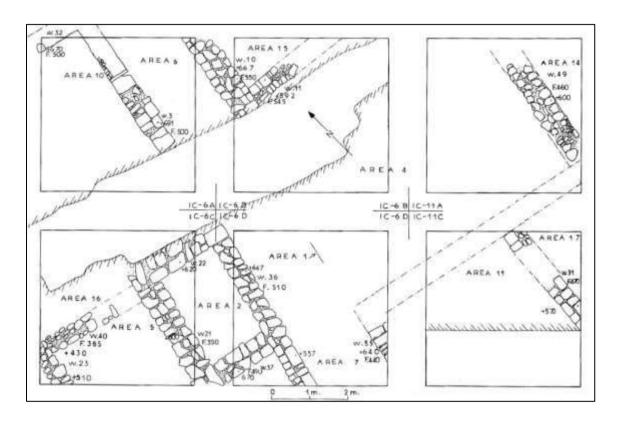


Fig. 73: Tyre, Strata X-VIII (Bikai 1978, Pl. LXIII).

In Strata XIII to XI (c. 1070/1050 – 850 BC) the walls from the older phases were partly reused with new buildings erected in the area, while in Stratum IX (c. 850-800 BC) new structures were built in the western sector (Bikai 1978: 8-11). A new wall system made with large stones was erected in Stratum VII and covered successively by deposits attributed to Stratum VI (Strata VII-VI = c. 800 – 760? BC). The discovery of numerous spindle whorls and pierced objects in Strata XIII-VI may indicate that the area was devoted to textiles weaving during these periods, although this interpretation is not certain (Bikai 1978: 11-12). A new building was erected in Stratum V with masonry blocks prepared *in situ* and a stone-paved courtyard. The presence of a red clay floor and a sand deposit in Strata V-IV (c. 760? – 740 BC) in the western sector has been interpreted as evidence of a pottery workshop (Bikai 1978: 12-13). In Stratum III (c. 740-700 BC) deposits of pottery were found, that is stacks of plates, jugs and juglets, most probably kiln wastes considering their poor

manufacture. No kilns were discovered, however the discovery of twenty balls of unfired clay mixed among the ceramics is proof of pottery-making activities. These activities also continued in Strata II and I (c. late 8<sup>th</sup> century – 700 BC. Bikai 1978: 13-14).

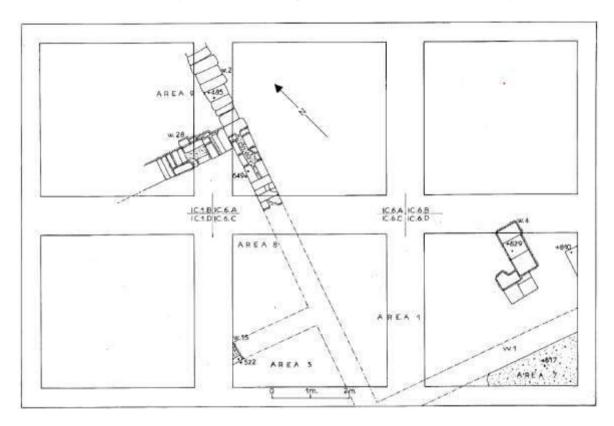


Fig. 74: Tyre, Strata V-I (Bikai 1978, Pl. LXI).

The chronology of the Strata was based especially on the presence of Cypriot imports and on parallels with Coastal and Southern Levantine sites (Bikai 1978: 19-56). Red slipped burnished vessels are very common in Tyre, especially plates and jugs: in general jugs are often decorated with paint or red slip or both (Bikai 1978: 29, 36-37, 41). Deep bowls are uncommon in the assemblage (Bikai 1978: 30).

A Spanish expedition has worked in Tyre since 1997: the areas investigated are the necropolis of al-Bass and, since 2014, the Acropolis of the ancient city (fig. 75. Aubet, Núñez, Trellisó 2016: 3).

The necropolis of al-Bass is situated in the area that was once the shore in front of the ancient island of Tyre: the island is now a peninsula due to the accumulation of sediments over time. It is a cremation cemetery, dated to the Iron Age ( $10^{th} - 6^{th}$  centuries BC), with the ashes contained in one or two urns, or deposited in simple pits.

Five phases have been recognized: Period I dated to the Early Iron Age (consisting exclusively of sporadic finds, 11<sup>th</sup> – 10<sup>th</sup> centuries BC), Period II dated to the Middle Iron Age (9<sup>th</sup> century BC) and Periods III-V of Late Iron Age date (8<sup>th</sup> century – post 600 BC. Aubet,

Núñez, Trellisó 2016: 7-9). The area of the Acropolis has revealed a stratigraphic sequence from the Ottoman period to the Persian Age (Aubet, Núñez, Trellisó 2016: 12).



Fig. 75: Tyre, locations of the areas excavated by the Spanish expedition (Aubet, Núñez, Trellisó 2016, fig.1).

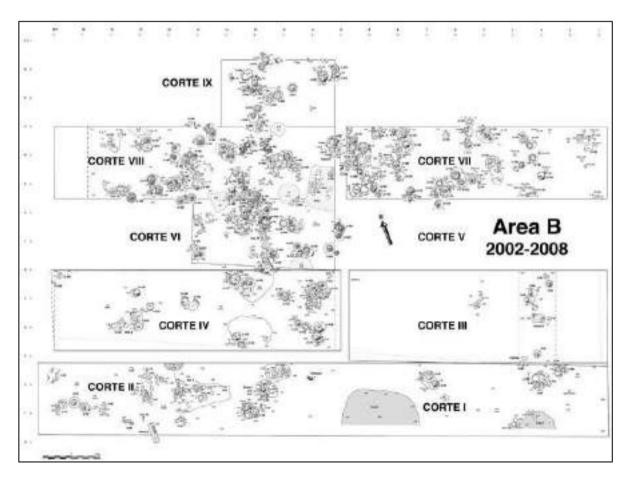


Fig. 76: Tyre, Cemetery of al-Bass, Area B (Aubet, Núñez, Trellisó 2016, fig.3).

In the cemetery a funerary pottery group is found. It usually consists of the cinerary urn, a decanter, a neck-ridge jug and a cup, which may can be accompanied by a plate and a bowl (Aubet, Núñez, Trellisó 2016: 8; Núñez 2012). The vessels are often red slipped (jugs, drinking bowls) or painted (plates, urns) and represent a typical "Phoenician" assemblage, with a marked local character – although Cypriot imports are attested and perfectly integrated into the funerary context (Núñez 2012: 239-243; Núñez 2014: 262-264).

# 2.2.6 AREA 6 - NORTHERN ISRAEL



Fig. 77: Satellite view of Northern Israel with the sites considered (from Google Earth).

### 2.2.6.1 TEL DAN

The site was excavated from 1966 to 1999 by a mission led by Avraham Biran, which published the Iron Age stratigraphy exclusively in a series of preliminary reports (Biran 1998, 2002). The Iron Age corresponds to Strata VI-I. Biran dated Strata VI-V to the Iron Age I (12<sup>th</sup> – 11<sup>th</sup> century BC), Stratum IVB to the end of Iron Age I and the beginning of Iron Age II (destroyed in 950 BC), Strata IVA-II to the Iron Age II and Stratum I to the Iron Age III (Assyrian period). More precisely, he dated Stratum IVA to the reign of Jeroboam I (second half 10<sup>th</sup> – beginning 9<sup>th</sup> century BC), Stratum III to Ahab (9<sup>th</sup> – beginning 8<sup>th</sup> century BC), Stratum II to Joash and Jeroboam II until the destruction caused by Tiglath-pileser III in 732 BC (8<sup>th</sup> century BC. Arie 2008: 6; Biran 1998: 480-481; Biran 2002 Table 1.1).

Biran's considerations and the Iron Age II stratigraphy and materials have been recently reanalysed by Eran Arie (2008): the revised chronology by Arie, on the basis of the new study of the pottery and other dating material, lowers the dates proposed by Biran (fig. 78).

		Biran		Present proposal			
Stratum	Relative Chronology	Absolute Chronology	Historical Notes	Relative Chronology	Absolute Chronology	Historical Notes	
IVB	Iron I and II	1050-950	Last days of Judges to Solomon	Iron Ib	Ends ca. 980 (high) or ca. 950 (low)	Contemporary to Megiddo VIA	
		Unidentified		Occupational gap or insignificant settlement			
IVA	Iron II	Second half 10th – beginning 9th century	Jeroboam I to Ben Hadad I	Iron IIb	-830/800 - first quarter 8th century	Hazael to Adad-nirari III/Joash	
Ш	Iron II	9th – beginning 8th century	House of Omri	Iron IIb (insufficient	Second quarter 8th century-	Adad-nirari III/ Joash to Tiglath-	
II	Iron II	Second and third quarters 8th century	Joash to Tiglath- pilaser III	data to separate the two strata)	732	pileser III	

Fig. 78: Tel Dan, Comparisons between Biran's interpretation and Arie's re-analysis (Arie 2008, Table 2).

The Iron Age occupation of Tel Dan has been exposed mainly in Areas A and T.

The Iron Age I is represented by several pits and remains of metal workshops with crucibles, furnaces and hearths: these workshops have been found in Strata VI, V and IV (Biran 1998: 480-481).

In Area A the fortifications and a massive gateway were discovered. Outside of the fortification system, a complex of domestic structures called *Ḥuṣṣot* was uncovered (figs. 79-80. Biran 2002: 5-6). In all the *Ḥuṣṣot*s, various installations were discovered and some of these were cultic in nature. Four levels of these structures have been recognized: the upper one has not been named, while the lower structures have been named A, B and C (Arie 2008: 12-13; Biran 2002:15-21). Above the unlabelled structure and over the destruction debris associated with the Assyrian conquest were excavated the remains of a cultic installation of the Assyrian city, composed of a rectangular structure with two *maṣṣebot* (sacred pillars) and a basalt bowl (Arie 2013: 13; Biran 2002: 9-11).

Arie dates Structure C to the end of Iron Age IIa or the beginning of Iron Age IIb (late 9th -

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<sup>&</sup>lt;sup>25</sup> From this structure comes a redeposited fragmentary Aramaic stele with the words "*byt dwd*" (translated as "House of David". Biran 1998: 479; Biran 2002: 6).

early 8<sup>th</sup> century BC),<sup>26</sup> Structure B to the Iron Age IIb (830/800 – first quarter 8<sup>th</sup> century BC) and Structure A to the later Iron Age IIb before the Assyrian destruction (second quarter 8<sup>th</sup> century – 732 BC. Arie 2008: 31).

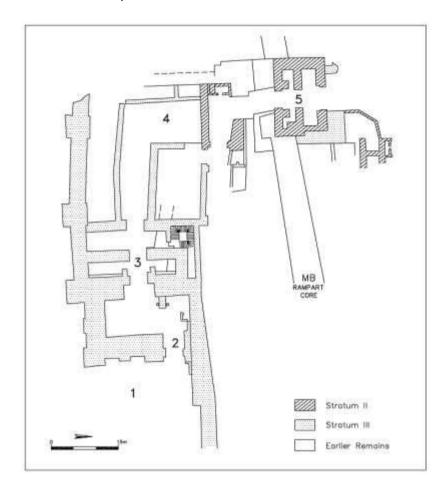


Fig. 79: Tel Dan, Fortifications with 1. paved piazza, 2. outer gate, 3. main gate, 4. paved way, 5. upper gate (Arie 2008, fig.8).

In Area T Stratum IVA (fig. 81) was unearthed, characterised by casemate walls surrounding a large area with a monumental platform in ashlar masonry called "Bamah A", a series of storerooms full of pottery, a rectangular structure (interpreted as an altar) at the centre of a cobbled courtyard and an olive press with basins and plastered floors. This phase has been violently destroyed as proven by traces of burning and the dispersal of cultic objects on the floors: this destruction has been attributed by Biran to the campaign of Ben Hadad I (Arie 2008: 7-10).

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<sup>&</sup>lt;sup>26</sup> It is not possible to give a precise date since only a few sherds (about 15) associated to Structure C were found and they might date to either to the Iron Age IIa or IIb (Arie 2008: 31).

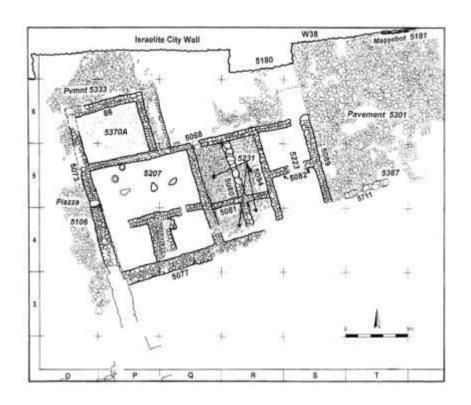


Fig. 80: Tel Dan, Ḥuṣṣot Structure A (Arie 2008, fig.6).

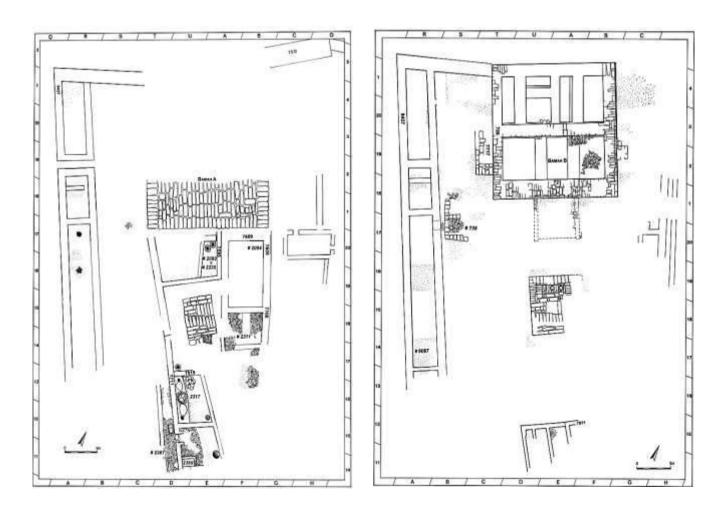


Fig. 81: Tel Dan, Area T. Left: Stratum IVA. Right: Stratum III (Arie 2008, figs.1-2).

Immediately above the destruction layers, Stratum III (fig. 81) was found, with a new large building in ashlar masonry, *Bamah B*, which was built over *Bamah A* and has been interpreted as a temple (Arie 2008: 10-11). *Bamah B* was still in use in Stratum II (fig. 82), but in this phase it also had a monumental staircase. In the centre of the court was found a monumental sacrificial altar and the casemate wall was better preserved than in earlier phases: Biran interpreted it as containing rooms used by the priests, since they were filled with many objects. The destruction of Stratum II has been attributed to Tiglath-pileser III (Arie 2008: 11).

The ceramic assemblage from the Iron Age II is composed of a series of flat and deep bowls, kraters, various jugs and cooking pot types and a good number of large storage jars: lamps, stands, miscellaneous vessels and Cypriot pottery are present as well. Parallels have been found with other Southern Levantine centres such as Megiddo, Hazor, Yokne'am, Beth Shean and so on. Bowls are often wheel-burnished and Red Slip is attested as well, especially in open forms (Arie 2008: 17-27).

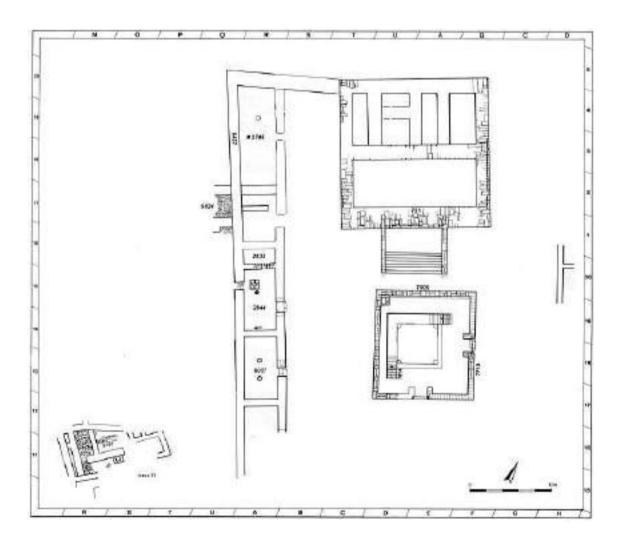


Fig. 82: Tel Dan, Area T Stratum II (Arie 2008, fig.23)

The pottery from Stratum IVA can be divided into long-lasting types (Iron Age IIa – III), types occurring in Iron Age IIb and continuing until Iron Age III, and a cooking pot (CP1) dated to Iron Age I and IIa. Most of the types are therefore attributed to the Iron Age IIb (830/300 – first quarter 8<sup>th</sup> century BC), which according to Arie was the date of Stratum IVA – instead of the beginning of Iron Age II (late 10<sup>th</sup> – early 9<sup>th</sup> century BC) proposed by Biran. While Biran saw continued occupation from the Iron Age I to the end of Iron Age II, according to Arie after the destruction of Stratum IVA there is gap in occupation corresponding to the Iron Age IIa, due to the lack of Iron Age IIa pottery (980/950 – 830/800 BC. Arie 2008: 29-30, 33-34).

The ceramic repertoire of Stratum II dates back to the late Iron Age IIb, while no pottery from Stratum III was published. Thus, the sacred area of Area T was active exclusively during the Iron Age IIb and attribution of the Stratum II destruction to Tiglath-pileser III is plausible (Arie 2008: 30-32).

# 2.2.6.2 HAZOR

Systematic excavations at Hazor, a site of biblical importance,<sup>27</sup> started in 1955 under the direction of Yigael Yadin (Yadin et al. 1958). The site is located in the Huleh plain and is composed of an upper mound (the "tell proper") and a large plateau to the north of the tell (Yadin et al. 1958: 1-2).

Yadin's Terminology	Terminology of the Renewed Excavations	Period	Date	Comments
Vb-Va	Vc-Va	Iron Age IIC	Eighth century BCE	Kingdom of Israel:
VI	VIc-VIa			Gradual decline to final destruction (Jeroboam II– Pekah)
VII VIII	VIIb-VIIa VIIIb-VIIIa	Iron Age IIA-B	Ninth century BCE	Kingdom of Israel: Expansion and prosperity (Omride dynasty)
IXb-IXa Xb-Xa	IXb-IXa Xb-Xa	Iron Age IIA	Mid-tenth-early ninth century BCE	United Monarchy: Embryonic city (Solomon?)
XI XII	"XII / XI"	Iron Age I	Eleventh century BCE	Sporadic (temporary) settlement: Early Israelite?

Fig. 83: Correlations between Yadin's excavations and modern ones (Ben-Tor, Ben-Ami, Sandhaus 2012b: 3).

<sup>-</sup>

<sup>&</sup>lt;sup>27</sup> For a summary of the textual references to Hazor see Yadin et al. 1958: 3-5.

The tell, which was named Tell el-Qedah/Tell Waqqas, was identified as Hazor by J. L. Porter in 1875 and successively by J. Gierstad (Yadin et al. 1958: 3).

No Iron Age occupation was found on the lower plateau (Yadin et al. 1958: 8), while on the upper mound two areas were excavated, with Strata XII-III attributed to the Iron Age, from the 11<sup>th</sup> to the 7<sup>th</sup> century BC. The recent research by Ben-Tor has in part confirmed the chronological framework of Yadin's excavations (fig. 83), while Yadin's various "destruction contexts" (see below) have been drastically reduced to the single destruction of Stratum Va (Ben-Ami, Sandhaus, Ben-Tor 2012: 473).

In Area A, a few remains attesting a temporary occupation and attributed to Stratum XII (Iron Age I, 11<sup>th</sup> century) were uncovered, such as ovens, paved areas, storage pits and walls (Yadin et al. 1989: 25; Ben-Ami, Ben-Tor 2012a).

From Stratum X (fig. 84) comes a casemate fortification wall, with a six-chambered gateway and three guardrooms, which continued to be used also in Stratum IX:<sup>28</sup> a paved street ran along the casemate wall in Stratum X, while in the later phase the course of the street was interrupted by a small room abutting the wall. In Stratum X a few houses were also found under the later Pillared Building and close to the fortification wall (Yadin et al. 1958: 9; Yadin et al. 1960: 1-5; Yadin et al. 1989: 30-37; Ben-Ami 2012).

According to Yadin, Stratum IX was covered by a thick deposit of ash and burnt residues, which suggested that the early Iron Age II (mid-10<sup>th</sup> – early 9<sup>th</sup> centuries BC) city was destroyed by a violent fire (Yadin et al. 1958: 9; Yadin et al. 1960: 1-5; Yadin et al. 1989: 30-37). However, Ben-Ami makes no mention of this destruction layer, noting only that some buildings of Stratum IXa were damaged by later constructions (Ben-Ami 2012a: 97). In the early Iron Age II, Hazor appears to have been built following a clear project: it was protected by a casemate fortification wall with a gate and had a coherent, well organized residential quarter (Ben-Ami 2012a: 108-109).

To Strata VIII-VII (9<sup>th</sup> century BC, fig. 85) was attributed a large public administrative complex. This complex included the Pillared Building, composed of a large hall divided by two rows of squared pillars and another hall consisting of a long, paved room. The building has been interpreted as a royal storehouse. The casemate rooms of the fortification wall from Stratum X were used as storerooms in this phase. Granaries, open squares and dwelling units were also part of the quarter (Yadin et al. 1958: 9-13; Yadin et al. 1960: 6-9, 16; Ben-Ami 2012b: 52-177).

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<sup>&</sup>lt;sup>28</sup> Both Stratum X and Stratum IX were further divided into Xb-Xa and IXb-IXa in the 1989 publication (Yadin et al. 1989: 30-37).

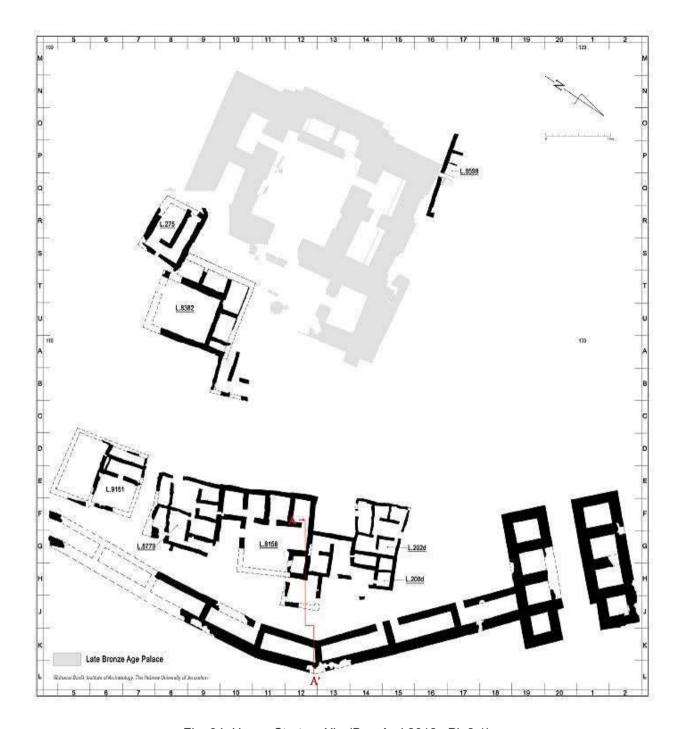


Fig. 84. Hazor, Stratum Xb, (Ben-Ami 2012a Pl. 2.1)

North of this complex a residential quarter was unearthed (Ben-Ami 2012b: 177-184). According to Yadin, the Pillared Building and the area were destroyed by a fire at the end of Stratum VII (Yadin et al. 1958: 9-13; Yadin et al. 1960: 6-9, 16). However, the new excavations indicate that the main buildings continued to be used until the destruction of Stratum VA, although they may have been damaged by the earthquake of c. 760 BC (end of Stratum VI. Ben-Ami 2012b: 235).

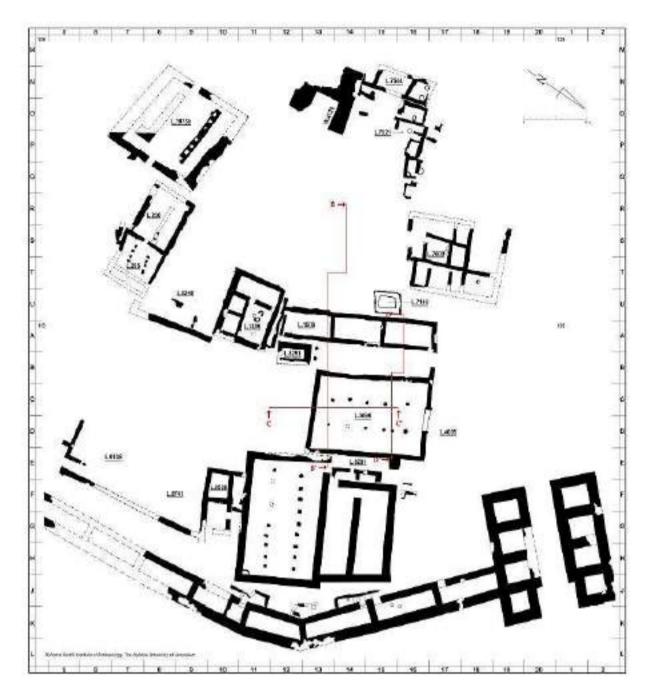


Fig. 85: Hazor, Stratum VIIIb (Ben-Ami 2012b, Pl. 3.1).

A sharp change in the type of occupation in the northern area is registered with Strata VI-V (8<sup>th</sup> century, fig. 86), when a residential quarter was erected. Two rows of small rooms identified as workshops, shops and houses were unearthed along the sides of a narrow street (Yadin et al. 1958: 14-15, 17-19; Yadin et al. 1960: 19-26, 29-30). In the southern and western sectors, most of the buildings uncovered in the earlier levels continued to be in use and in Stratum V the south-western corner represented the administrative quarter. The north-western part, which was once the centre of the "Ceremonial Palace" of the Late Bronze Age, was instead surrounded by the so-called "Enclosure Wall". No structures were found

inside, but outside a street separated the wall from domestic dwellings (Sandhaus 2012: 286, 306-313).

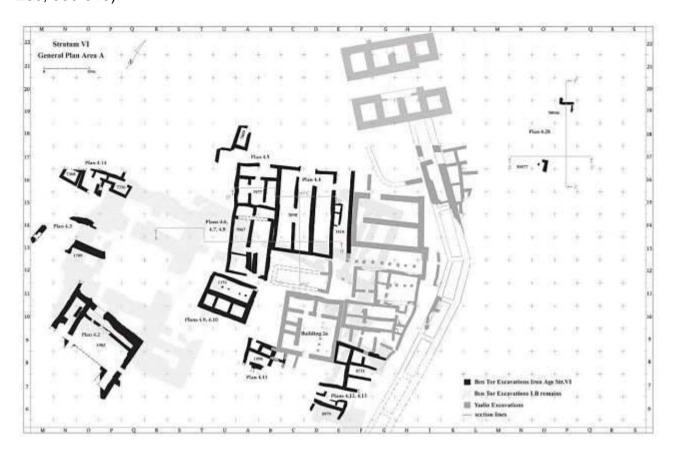


Fig. 86: Hazor, Stratum VI (Sandhaus 2012, Pl. 4.1).

Hazor during the 8<sup>th</sup> century was mostly a domestic settlement (Sandhaus 2012: 306).

Over the remains of Stratum V was found a burnt layer attributed to the destruction caused by Tiglath-pileser III in 732 BC (Yadin et al. 1958: 14-15, 17-19; Yadin et al. 1960: 19-26, 29-30). Only scant remains belong to Stratum IV, walls with a completely different plan compared to the earlier phases, indicating that probably there had been an occupational gap between the destruction of Stratum V and the rebuilding of Stratum IV (Yadin et al. 1958: 21).

In Area B, Stratum XII was characterized by pits, similarly to Area A. Stratum XI was found only in this area and included a sacred area with paved floors and courtyard and rooms containing incense burners, figurines and bronze tools (Yadin et al. 1989: 80-81). In Strata X-IX another casemate wall of the fortification and some buildings were found (Yadin et al. 1989: 82-87).

in Strata VIII-V<sup>29</sup> the Citadel was uncovered. It was surrounded by a massive fortification

<sup>&</sup>lt;sup>29</sup> Stratum V in Area B was divided into VA and VB after the 1956 excavations: this subdivision was considered necessary due to the reorganization of the fortifications that occurred in Stratum VA (Yadin et al. 1960: 43).

wall and inside there were a series of monumental buildings, often with a central courtyard, and an open space which was progressively occupied by other structures over time. The fortifications in Stratum Vb became more massive (Yadin et al. 1958: 30-32; Yadin et al. 1960: 43-53; Yadin et al. 1989: 88-111). Traces of fire, burnt remains and debris indicated that the Citadel was destroyed by a violent fire, the same event already observed in Area A (Yadin et al. 1960: 52-53)

Above this Citadel V and a few intermediate, more ephemeral structures belonging to Stratum IV (Yadin et al. 1958: 30), Citadel III was found (Stratum III, 7<sup>th</sup> century BC). This Citadel was completely isolated from the rest of the tell and consisted of a large central courtyard surrounded by rooms and halls. Other remains were of a tower in the north-west corner and an open square south of the Citadel (Yadin et al. 1958: 45-49).

In Area G, located on the opposite side from the citadel, a bastion of the fortification wall dated to the Iron Age II was excavated (Yadin et al. 1989: 173-196).

Pottery parallels for Yadin's excavations have been proposed at Megiddo, Samaria and Tell el-Far'ah (Yadin et al. 1958: 10). For Ben-Tor's excavations the most important sites for the ceramic parallels are those in northern Israel (including Tel Dan, 'En Gev, Rosh Zayit) and Phoenician sites on the Lebanese coast (Ben-Ami, Ben-Tor 2012b: 411). The pottery from the earliest level, Stratum XII, appears to be completely different from the Late Bronze Age repertoire, apart from large storage jars which still retain Late Bronze Age traditions. Hallmarks are S-profiled bowls and cooking pots with elongated triangular rim (Yadin et al. 1989: 25, 29; Ben-Ami, Ben-Tor 2012b; Ben-Ami, Sandhaus, Ben-Tor 2012: Table 6.1).

Burnished Red Slip already appears in Area A from Strata X-IX (10<sup>th</sup> century BC), as does the Cypro-Phoenician pottery. The assemblage from these phases consists of local vessels and "Phoenician" ones: the latter group includes especially fine serving wares, often red slipped or bichrome or Cypro-Phoenician wares (Yadin et al. 1958: 10-11, 14; Yadin et al. 1960: 5; Ben-Ami, Ben-Tor 2012b). Red slipped vessels, bowls and jugs especially, appear to be particularly common in relation to the storerooms of Stratum VIII, Area A (Yadin et al. 1960: 11-13). The assemblage from Area A Strata VII-V is quite homogeneous in the types present, while for Yadin a marked difference is noted with respect to the pottery from the underlying Stratum VIII (Yadin et al. 1958: 19-20). In Ben-Tor's excavations, however, the assemblages of Phases VIII-IV are considered together, and their homogeneous character is emphasized, albeit for some forms a typological evolution can be observed (Ben-Ami, Sandhaus, Ben-Tor 2012). In Stratum IV Assyrianizing pottery occurs (Yadin et al. 1960: 69).

### 2.2.6.3 MEGIDDO

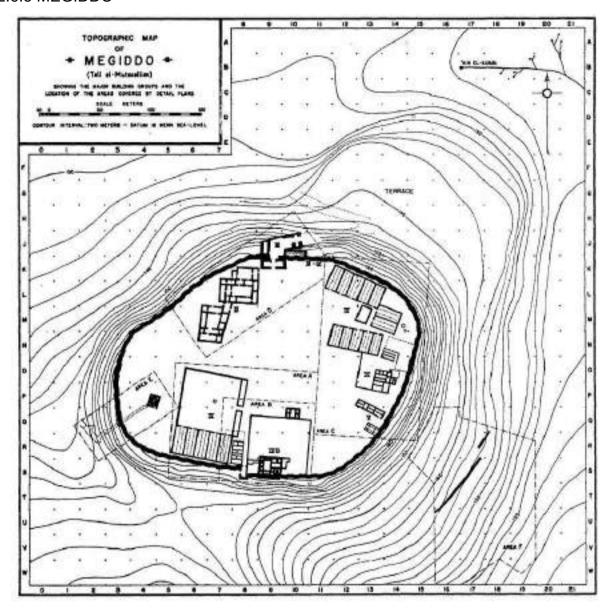


Fig. 87: Megiddo, University of Chicago excavations (Lamon, Shipton 1939, fig. 3).

Megiddo is another site of biblical importance: its identification with the mound of Tell el-Mutesellim, situated on the Carmel Ridge in the west of the Esdraelon Plain, has been widely accepted since the beginning of the archaeological research (Lamon, Shipton 1939: xix-xx). Systematic excavations were carried out by the University of Chicago in the 1920s-1930s (Guy 1931; Guy 1938; Lamon, Shipton 1939). The stratigraphic sequence indicated an almost continuous occupation from the Pre-Pottery Neolithic to the Persian Age, with an important Iron Age sequence. The University of Chicago's excavations recognized in fact six strata dated to the Iron Age (I-VI): the first five were published in 1939 and dated from c.

<sup>&</sup>lt;sup>30</sup> These however were not the first excavations on the site, which had already been investigated by Gottlieb Schumacher in the first years of the 20<sup>th</sup> century (Lamon, Shipton 1939: xx).

1050-1000 BC to 350 BC.

A series of structures of fairly consistent orientation belonged to Stratum V (c. 1050-1000 BC) and a shrine associated with a storehouse was exposed in Area C (Lamon, Shipton 1939: 3-7).



Fig. 88: Megiddo, Stratum IVB (Lamon, Shipton 1939, fig. 12).

In Stratum IV (c. 1000-800 BC), the top of the mound in the earlier sub-phase (IVB, fig. 88) was characterized by an almost square enclosure with a gateway which gave access to a large courtyard and a public building interpreted as a palace.

Outside the enclosure stood Building 1482, which according to the excavators probably had a residential or administrative function (Lamon, Shipton 1939: 8-27). Stratum IVA (fig. 89) was the main occupational phase, in which the area was reworked: the previous structures were reused and the city wall was partly superimposed on the palace. Two extensive structures, in Area A and C, were interpreted as stables, the so-called "Stables of Solomon" (Lamon, Shipton 1939: 27-47).

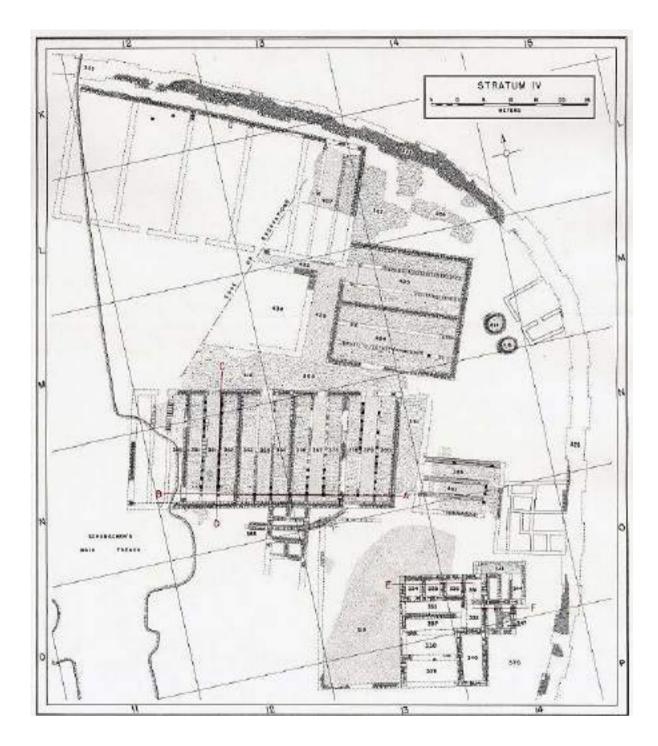


Fig. 89: Megiddo, Stratum IVA (Lamon, Shipton 1939, fig. 49).

In Stratum III (c. 780-650 BC, fig. 90) another city gate was uncovered, together with a large storage pit and a residential quarter which continued to be used also in Stratum II (c. 650-600 BC). The domestic buildings were arranged in orderly blocks separated by parallel streets (Lamon, Shipton 1939: 62-83). Characteristic of Stratum II is the fortress unearthed on the east edge of the mound, rectangular in plan, with the rooms arranged around a central open courtyard (Lamon, Shipton 1939: 83).

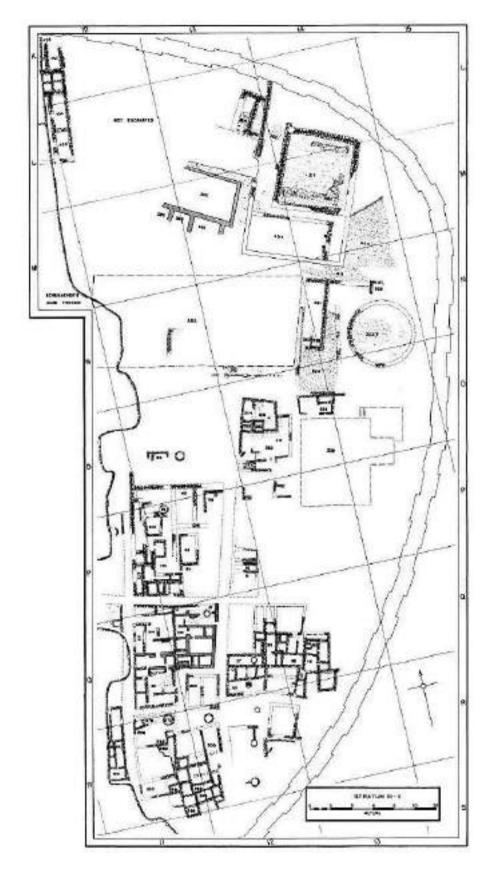


Fig. 90: Megiddo, Strata III-II (Lamon, Shipton 1939, fig. 71).

Yigael Yadin returned to the site in the 1960s to study and excavate the "Solomonic city" (Zarzecki-Peleg 2016), but the more recent excavations were conducted by Finkelstein and

Ussishkin since 1992 (fig. 91. Finkelstein, Ussishkin, Cline 2013; Finkelstein, Ussishkin, Halpern 2000 and 2006a).

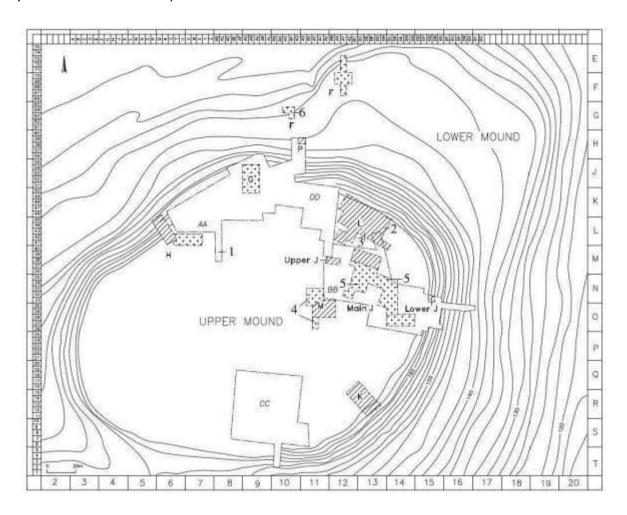


Fig. 91: Megiddo, Finklestein and Ussishkin's excavations (Finkelstein, Ussishkin, Cline 2013b, fig. 1.1).

The areas with Iron Age occupation are F, H, K, L, M and Q.

Regarding Area H, a complex building with a central courtyard that was violently destroyed by a fire was uncovered in level H-9 (Iron Age I. Arie 2013a: 253-257). Scant remains of domestic units were found from H-8 to H-6 (Iron Age IIa; Arie 2013a: 257-270), whereas in level H-5 (Iron Age IIa) the area was transformed into an open space, perhaps with a public function (Arie 2013a: 270-272). The city wall was exposed in H-4 (Iron Age IIb. Arie 2013a: 272), while in level H-3 (Iron Age IIb) domestic units were unearthed and in the western sector presented traces of burning and collapsed roofs (Joffe, Cline, Lipschitz 2000: 143-150).

In H-1 (Iron Age IIc = Iron Age III) two Assyrian palaces, 1369 and 1052, and another building, 1853, were excavated. Palace 1369 had a central courtyard, while some floors of Palace 1052 were cobbled (Joffe, Cline, Lipschitz 2000: 153-160).

trea '	Area H	Area J*	Area E	Ama L	Area M**	Area N	University of Chicago Strata	Persod
		3-1					XX	EBI
		3-2					Phase in XIX; not identified as a separate level	EBIb
		J-3					XIX	EBIb
		14					xvm	EBIb
		J-41					Not detected	EBIb
		J-5, J-6b					XVII	EBIII
		J-6a					XVI	EBIII
		3-7					xv	ЕВШЛВА***
		J-8					XIV	MBI
		3-9					XIV	MBI
		J-10					XIII	MBI
-12		3-11			M-11		XII	MBII
		J-12			M-10, 9		XI	MBII
-11		J-13			M-8	N-2, 3, 4	X (X-DO)	MBIII/LBI
-10		J-14, 15, 16			34-7	N-1	IX	LBI
-9		J-17?	K-9?				VIII	LBII
-8			K-8, 7				VIIB	LBB
F-7			K-6		M-6		VIIA?	LBIII
-6	H-10		K-5		M-5		VIB	Early IAI
-5	H-9		K-4	L-5	M-4		VIA	Late IAI
	H-8, 7, 6		K-3	L-4	M-3,		VB	Early IAIIA
	H-5		K-2	L-3	2, 1		VA-IVB	Late IAIIA
<b>4</b> b	H-4.3		K-1	L-2			IVA	IAUB
	H-2						Not detected	JAIIB
41	H-1			L-I			ш	IAIIB
F-3							п	IAIIC
F-2								Late Roman
F-1								20th cent. CE

Fig. 92: Megiddo, stratigraphic concordances between the University of Chicago Strata and the levels of Finklestein and Ussishkin's excavations: Iron Age phases highlighted (Modified from Finkelstein, Ussishkin, Cline 2013b, Table 1.1)

An irregularly squared building with a central courtyard was brought to light in K-4 (fig. 93, Iron Age I), in Area K. Nine rooms were arranged around the courtyard and several installations and pottery vessels were found on their floors, in a clearly domestic context. This type of building, the "courtyard house", is typical of 2<sup>nd</sup> millennium BC contexts (Middle and Late Bronze Age) at Megiddo and in Israel in general, and it continued to be built until the early Iron Age (Gadot et al. 2006: 94-101).

The building of phase K-4 was violently destroyed by a fire and an occupational gap is attested between this level and K-3 (Gadot et al. 2006: 94; Lehmann, Killebrew, Gadot 2000: 126). K-3 and K-2 (Iron Age IIa) are characterised by domestic buildings (Lehmann, Killebrew, Gadot 2000: 126-135), while in K-1 (Iron Age IIb) the remains of the city wall of

the University of Chicago's Stratum IV A were uncovered (Lehmann, Killebrew, Gadot 2000: 131-136).

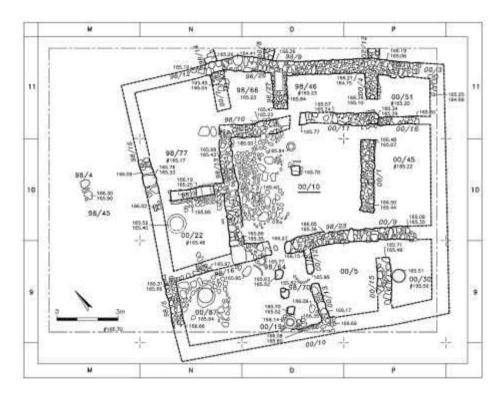


Fig. 93: Megiddo, Level K-4 (Gadot et al. 2006, fig. 7.7)

Area L was opened to re-investigate the excavations by the University of Chicago and by Yadin, more precisely the Northern Stables and Palace 6000 (Cline 2006: 104). Palace 6000 had been excavated by Yadin, who attributed it to the 10<sup>th</sup> century BC and precisely to the "Solomonic" city: according to Yadin, it was a *bit hilani* palace used for ceremonial activities (fig. 94. Yadin 1970: 95).

In level L-5 (Iron Age I) a destruction layer was uncovered, while the walls (probably related to domestic contexts) uncovered in L-4 (Iron Age IIa) had already been discovered by Yadin and attributed to Stratum VB (Cline 2006: 107). L-3 (Iron Age IIa) is characterized by the monumental Palace 6000, with walls in ashlar blocks. Several changes were made compared to Yadin's plan, for example the northern wall of the palace did not join with another wall eastward. Therefore the palace was slightly smaller than Yadin's reconstruction and was differently subdivided; it may also not have been a proper *bit hilani* building, but rather a four-part central hall building designed for multiple functions (fig. 95. Cline 2006: 108-115; Lehmann, Killebrew 2010). In L-2 (Iron Age IIb) the Northern Stables, partially investigated by the University of Chicago, were found: the stable units were rectangular in shape and each of them was tripartite and composed of a central plastered area and two cobbled ones on the sides (Cline 2006: 115-120).

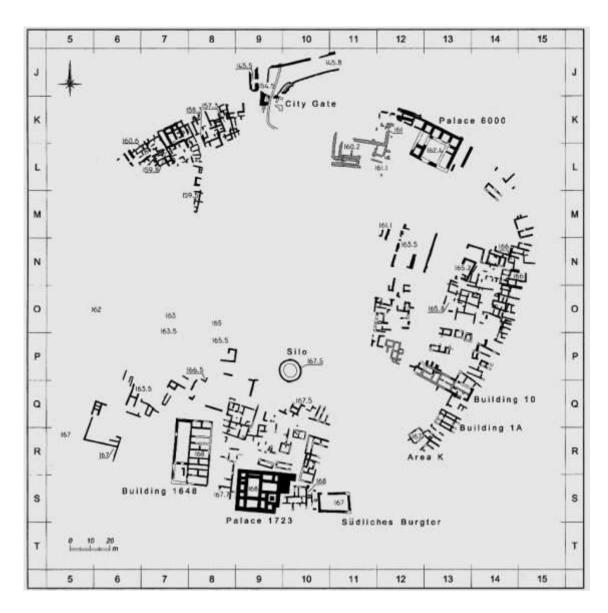


Fig. 94: Megiddo, Stratum V after Yadin's Excavations (note Palace 6000 in the north-eastern corner; Franklin 2006, fig. 6)

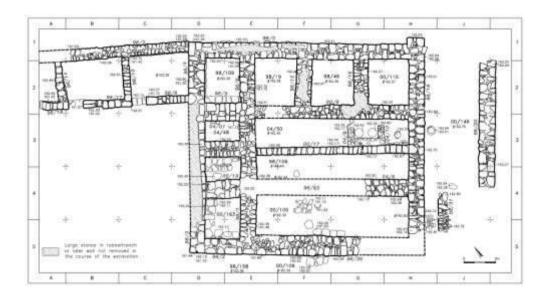


Fig. 95: Megiddo, Level L-3 (Cline 2006, fig. 8.6).

The most important evidence of Area Q was a pillared building found in Level Q-5 dating to the Iron IIA. Considering its dimensions (10x12m) and massive construction, it probably had a public function (Homsher, Kleiman 2022: 127-129). The area was successively occupied by a dense residential quarter (Level Q-2, Iron IIB. Homsher, Kleiman 2022: 142-147).

The pottery from the University of Chicago excavations was dated by means of parallels with other sites excavated at the time, such as Tell Beit Mirsim, Tell Abu Hawwam, Gezer and Beth Semesh (Lamon, Shipton 1939: 160). Cypriot imports were also considered and were found from Stratum V to III (Lamon, Shipton 1939: 163).

The Red Slip is not clearly indicated in the first publications, but probably it was the "dark red wash" often associated with hand-burnishing found especially in Stratum V. More precisely, in Stratum V numerous wares were found – bowls, jugs, jars, chalices, flasks – characterized by a "dark red irregular hand-burnishing": this burnishing can be found on a dark red wash, associated with painted decorations and especially on bowls with a mixed hand and wheel-burnishing technique. Vessels completely covered by the dark red wash are also present (Lamon, Shipton 1939: 163-164). In Stratum V hand burnishing is more used, while in Stratum IV wheel-burnishing associated with a lighter red wash increase distinctly and continues to be used until Stratum I (Lamon, Shipton 1939: 164-165).

Regarding the more recent excavations, the Iron Age I pottery displays some degree of continuity with the Late Bronze Age repertoire, with a number of new types (Arie 2006: 227). It is mostly composed of undecorated vessels, although painted specimens, monochrome or bichrome, are present, as it is also the Phoenician Bichrome Ware. Philistine Ware and Cypriot imports instead occur only rarely (Arie 2006: 222-223; Arie 2013b: 721). Red Slip is already attested in small quantities from the early Iron Age I (=Stratum VIB): it is present mostly as closed vessels and rarely in open forms and the hand-burnishing treatment is even rarer (Arie 2006: 224-225).

The study of the Iron Age IIa pottery is related to the debate about Stratum V<sup>31</sup> and the material has been extensively analysed by Eran Arie (Arie 2013b). Trends of both continuity and change between Iron Age I and Iron Age IIa ceramic assemblages are attested: continuity is seen in some bowl, krater and cooking pot types, whereas general storage vessels decrease and the production of juglets increases notably (Arie 2013b: 737-739, 753). The major discriminating factor appears to be the decoration (Arie 2013b: 730). As already observed by the University of Chicago, in Stratum V there is not only a higher percentage of

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<sup>&</sup>lt;sup>31</sup> The debate over Stratum V is also related to the debate on High or Low Chronology in the Southern Levant. A selected bibliography on the matter: Finkelstein 1996, 1999, 2004, 2005; Finkelstein, Piasetzky, 2006; Franklin 2005, 2006; Mazar 1997, 2005; Stern 1990; Yadin 1970.

decorated vessels, but also most of them are red slipped with hand-burnishing and the rest are either red slipped or burnished. As Arie says: "It therefore seems that the transition from the Iron I to the Iron IIA brought with it a revolutionary change in the techniques of pottery decoration" (Arie 2013b: 730). The strong increase of Cypriot wares in Iron Age IIa (Stratum V) indicates the re-establishment of the commercial relations between Cyprus and the Southern Levant, after the intense contacts of the Late Bronze Age and their disappearance in the Iron Age I. At Megiddo in particular are documented Cypriot White Painted, Cypriot Bichrome and Cypriot Black-on-Red wares (Arie 2013b: 721).

### 2.2.6.4 TEL DOR

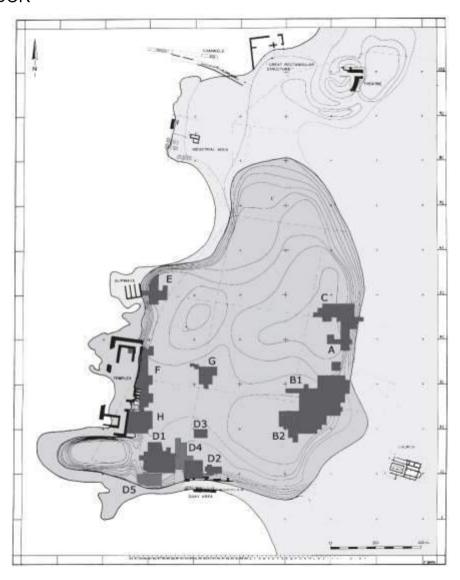


Fig. 96: Tel Dor (Zorn, Sharon, Gilboa 2018, fig.1.1).

A tell called Khirbet el-Burj, situated on the Mediterranean coast of Israel between Haifa and Tel Aviv, has been identified with the site of Tel Dor (Stern 1995c: 1). Due to its two natural

docking places in the north and in the south, a bay and a lagoon, and its vicinity with Wadi Milkh which allowed access to the Jezreel Valley, it represented the ideal stop-over for ships sailing along the Levantine coast (Gilboa, Sharon 2016: 241).

Excavations were carried out by John Garstang with the British School of Archaeology of Jerusalem at the beginning of the 20<sup>th</sup> century; after that, there were sporadic researches until the excavations led by Ephraim Stern started in 1980 (Stern 1995c: 4-7, 11).

In Area G part of the Iron Age I occupation was excavated, with a domestic occupation which continued until Iron Age IIa (fig. 97): a first domestic unit with evidence of productive activities was found in Phase 10 (Iron Age I. Gilboa, Sharon, Zorn 2018: 35-44). Courtyard-house type buildings occupied Phases 9-6, with a destruction level which sealed Phase 9 (Iron Age I and IIa. Gilboa, Sharon, Zorn 2018: 44-75).

Regarding the so-called Israelite Dor, in Area B a four-chambered gate (fig. 98) was uncovered and in the city were found large, monumental public buildings. The gate, according to Stern, was built after the 10<sup>th</sup> century BC and was part of a larger project which included the construction of a city wall, plus a complex of buildings inside the city, which was in use until the end of the 8<sup>th</sup> century BC (Stern 1990: 17-22).

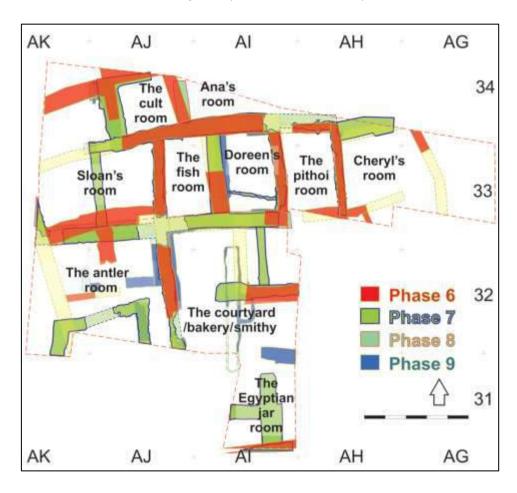


Fig. 97: Tel Dor, Area G, occupation from Phase 9 to Phase 6 (Sharon 2018, fig. 3.3).

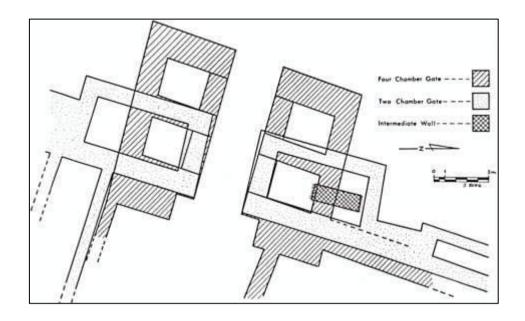


Fig. 98: Tel Dor, Area B, the four-chamber gate under the 7th century two-chamber gate (Stern 1990, fig. 1).

In contrast to Stern's proposal (Stern 1990: 20), according to Gilboa and Sharon no proof of the violent destruction of this level was found: according to them, the few traces of burning close to the gate in Area B do not imply the occurrence of widespread, total devastation of the site. Rather, it seems that the town was abandoned (Gilboa, Sharon 2016: 243).

The dating of the final phase of the Israelite settlement has also been reconsidered. The pottery found in the later phase of the gate indicates a mid-8<sup>th</sup> century date, rather than a late 8<sup>th</sup> century one, and the pits cutting into the architecture of the Israelite phase are also filled with mid-8<sup>th</sup> century BC ceramics. This indicates that there was a gap in occupation between the decline of the Israelite city and the following Assyrian occupation (Gilboa, Sharon 2016: 243).

Dor was re-inhabited between the late 8<sup>th</sup> and the early 7<sup>th</sup> century BC. In Area B, the earlier city wall was renewed and a two-chambered gate, which presents Neo-Assyrian features such as a horseshoe-shaped door socket, was erected (figs. 98-99. Gilboa, Sharon 2016: 243-244; Stern 1990: 22-25). According to Stern, the fact that the Assyrian fortified the city, a practice not common in Israel during that period, means that Tel Dor was a provincial capital (Stern 1990: 25). *Contra* this interpretation, Gilboa and Sharon argue that the presence of a fortification does not necessarily imply that the Neo-Assyrian site was a provincial capital, rather that it was considered an important site that needed to be defended (Gilboa, Sharon 2016: 244).

Around the mid-7<sup>th</sup> century, the settlement was either abandoned or its occupation became so sporadic that no trace of it has been found. It was later rebuilt in the Persian epoch around the mid-6<sup>th</sup> century BC (Gilboa, Sharon 2016: 248).

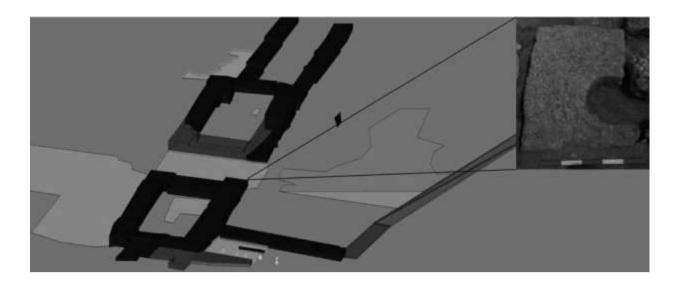


Fig. 99: Tel Dor, model reconstruction of the gate of the Assyrian period (Gilboa, Sharon 2016, fig. 22.2).

The Iron Age pottery was initially dated on the basis of ceramic parallels with Hazor, Samaria, Tyre and Tell Keisan. For the Assyrianizing specimens parallels were sought with Nimrud and Sultantepe (Gilboa 1995: 1-2).

The Iron Age I assemblage derived from Late Bronze Age antecedents, since many types are found in both periods and this continuity is more marked that in the neighbouring areas: the pottery has a local character and is mostly undecorated, albeit bichrome painted sherds are attested. Cypriot fragments were found as well (Gilboa 1995: 16-17; Gilboa 2018: 154-155).

In the Iron Age II, many types evolve from Iron Age I forms (Gilboa 2018: 160-161) and Red Slip is present as well (Gilboa 1995: 17).

The pottery of the Iron Age III at Tel Dor is characterised by the abundance of Assyrianizing vessels, albeit of few typological forms: carinated bowls, bowls with ridged and grooved and infolded rims identical with specimens from Assyria and other Levantine centres. Other forms such as bottles and basins are however rarer. No Palace Ware is attested (Gilboa 1995: 15; Gilboa, Sharon 2016: 245-246). Very common are also Phoenician commercial jars, found in large quantities in rubbish pits on the tell dated the 7<sup>th</sup> century BC. Only a few were locally produced, thus indicating the existence of intense commercial relations between Dor and Phoenicia, as opposed to the situation in the Israelite period. The same can be attested for relations with Cyprus, while Greek pottery is very uncommon (Gilboa, Sharon 2016: 247).

#### CHAPTER 3: MISHRIFEH IN THE IRON AGE



Fig. 100: Localization of Mishrifeh (larger image from Google Earth, smaller one from gatna.org).

Mishrifeh, which is better known as the ancient city of Qatna of the Middle and Late Bronze Age, is located in the fertile valley of the middle River Orontes, in Central-Western Syria, not far from the modern city of Homs and about mid-way between Damascus and Aleppo. Its location on the route between Anatolia and Palestine and Egypt, and on the route from Mesopotamia to the Mediterranean Coast, proved to be fundamental for the historical development and commercial importance of the city (al-Maqdissi et al. 2002b: 8; lamoni 2012: 25-26).

The impressively monumental ramparts, 15-20m high, still stand protecting and surrounding a city of 110ha. Mishrifeh is composed of an upper town in the central-western site region and another mound in the south-eastern corner, the so-called "La Coupole de Loth": all around, there was the lower city (Al-Magdissi et al. 2002b: 9-10).

The River Orontes basin supplies fresh and drinkable water to the region: geoarchaeological research at Mishrifeh revealed that in the Early Bronze Age the site was crossed by two

palaeo-wadis which made the land swampy, as attested by the alluvial deposits found (Cremaschi, Trombino, Sala 2002: 18, 23).



Fig. 101: Mishrifeh, aerial view (from qatna.org).

Furthermore, in this period the site was characterized by a lake, artificially created simultaneously with the urbanization of Mishrifeh and fed by the palaeo-wadis and the karstic springs found at the base of the upper town<sup>32</sup> (fig. 107. Cremaschi 2007a).

In the Middle Bronze Age there is proof of the progressive swamping of the site, correlated to the construction of the ramparts which stopped the flow of the palaeo-wadis. The lake was henceforth fed exclusively by the karstic springs, which were included within the fortified area of the city and served also as sources of fresh water for Qatna and the royal palace (fig. 112. Cremaschi 2007a: 104; Cremaschi Trombino, Sala 2002: 23). After the construction of the ramparts in the early Middle Bronze Age, the lake was subdivided into two basins: one inside the rampart became the "*Marais*", that is a swampy area already observed by the first excavator of Qatna, Count Du Mesnil du Buisson, in the north-western sector of the site, that is the lower town (Cremaschi, Trombino, Sala 2002: 21). Part of the lake became an artificial moat on the western side of the town, outside the rampart (Cremaschi 2007a: 104). The availability of water, due to the presence of marshes and swamps created by the karstic springs, remained high until the Iron Age (fig. 116. Cremaschi, Trombino, Sala 2002: 23).

<sup>&</sup>lt;sup>32</sup> One spring was located in the southwestern corner of the rampart, the second in Area G (eastern part of the royal palace) and the third at the base of the area called *Butte de l'Église*, close to the second one (Cremaschi 2007a: 102).

#### 3.1 HISTORY OF ARCHAEOLOGICAL RESEARCH

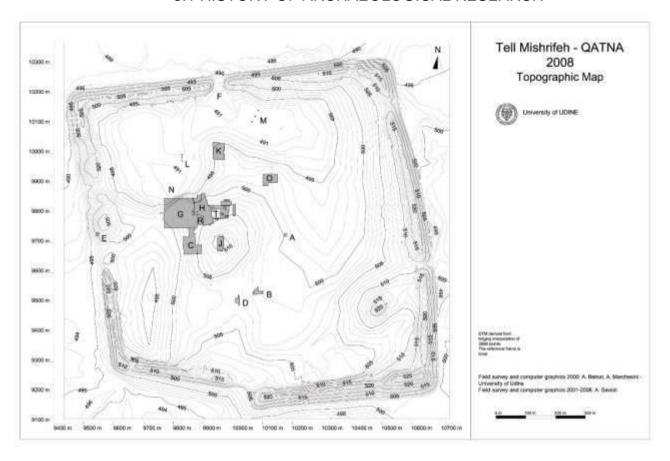


Fig. 102: Mishrifeh, topographic map.

The archaeological site of Mishrifeh has attracted the attention of scholars since the very early years of the 20<sup>th</sup> century BC. While it had already been described by Charles Tyrwhitt Drake in "Unexplored Syria" (Burton, Tyrwhitt Drake 1872: 163; Ronzevalle 1914a: 109), it was the Jesuit Sébastien Ronzevalle, who visited the site in 1904 and 1912, who realised that it must had been settled before the Roman period (Ronzevalle 1914a: 113-119). In fact, the shape of the ramparts had always prompted the scholars to consider Mishrifeh a Roman *castrum* (Burton, Tyrwhitt Drake 1872: 163; Ronzevalle 1914a: 113).

Archaeological research began at Mishrifeh at the beginning of the 20<sup>th</sup> century with the excavations led by Count Robert du Mesnil du Buisson. Du Mesnil du Buisson worked from 1924 to 1929 in various excavation areas, scattered around the site (du Mesnil du Buisson 1926, 1927a, 1927b, 1930, 1935). In the upper town, du Mesnil du Buisson excavated the area called "La Butte de l'Église" (fig. 103. Du Mesnil du Buisson 1935: 71). He found various structures probably dated to the Iron Age, that is small buildings and units and productive installations of unclear function, erected directly over the floors of the Royal Palace (du Mesnil du Buisson 1935: 123-132). Under this, he unearthed the "Palais" with the "Cour du"

Trone", the "Temple du Nin-Egal" and the "Haut Lieu" which according to the Count represented a single cultic and political complex dated to the Mitanni period (du Mesnil du Buisson 1935: 71-122). In truth, he had discovered the Royal Palace and part of the productive quarter dating to the Iron Age (Iamoni 2004: 171; Morandi Bonacossi 2006: 89-97; Chapter 3.5).

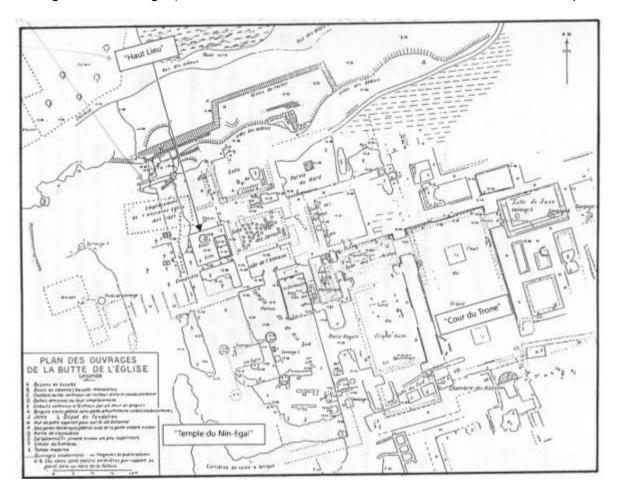


Fig. 103: Mishrifeh, Excavations of "La Butte de l'Église" (Modified from du Mesnil du Buisson 1935, Pl. VIII).

The Count also excavated various trenches and areas in the lower town. Regarding the zone of the South Gate (fig. 104. du Mesnil du Buisson 1935: 48-53), in the areas called "Maison 1" and "Maison 2" he uncovered two large complexes, one of which (Maison 2) only partially excavated. Maison 1 was instead fully explored and consisted of two rows of rooms flanking on two sides a central court. Several rooms had plastered floors and du Mesnil du Buisson interpreted the structure as a public bath or a building devoted for ablutions (du Mesnil du Buisson 1935: 52). This interpretation has been disproven by the recent research: most probably in fact this was a productive complex devoted to textile weaving and dyeing (Morandi Bonacossi 2006: 83-84). Again near the South Gate, there was the "Ouvrage des Tirailleurs" with scant and unclear wall structures, with an earlier phase probably dated to

the Late Bronze Age II and a later Iron Age phase (du Mesnil du Buisson 1927b: 284-286; lamoni 2004: 171; Morandi Bonacossi 2006: 84).

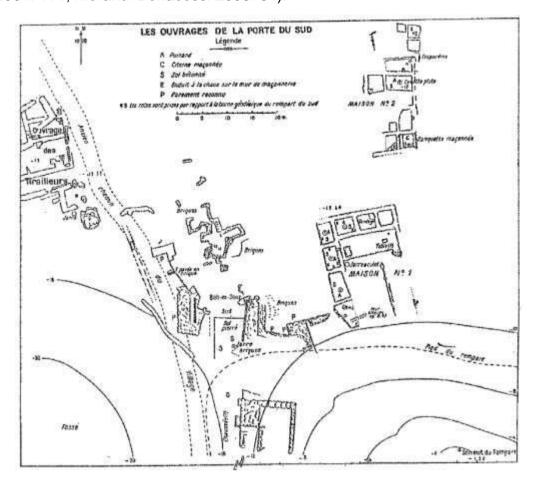


Fig. 104: Mishrifeh, Excavations of the South Gate (du Mesnil du Buisson 1935, Pl. VIII).

Other excavation areas opened in the lower town by du Mesnil du Buisson were: "L'Ouvrage en Creux", where fragmentary remains of an Iron Age building with plastered floors were uncovered, with finds dated also to the Middle and Bronze Age (du Mesnil du Buisson 1935: 56-61); "L'Ouvrage Ronzevalle", with two silos and a probable domestic unit dated to the Iron Age II built over one of the two silos (du Mesnil du Buisson 1927b: 289-291; Iamoni 2004: 171; Morandi Bonacossi 2006: 85); "L'Ouvrage Viry", where massive wall foundations of a probable Iron Age public building were brought to light (du Mesnil du Buisson 1935: 8-9; Iamoni 2004: 170; Morandi Bonacossi 2006: 85-86).

On the small mound called "La Coupole de Loth" a silo, five tombs and some mudbrick structures and pottery finds dated to the Middle Bronze, Late Bronze I and Iron II Ages were found (du Mesnil du Buisson 1935: 62-70; Iamoni 2004: 172; Morandi Bonacossi 2006: 85). In modern times, the site was first excavated by a Syrian expedition led by Michel Al-Maqdissi and the modern village which had been built over the archaeological remains was transferred outside the ramparts. From 1994 to 1998, the expedition had opened several

excavations areas: Operations A, B and C on the central mound; Operation D in the central-southern area of the site; Operations E and F on the inner side of the Western and Northern Gates respectively (Al-Maqdissi et al. 2002b: 11; Morandi Bonacossi 2006: 86-88).

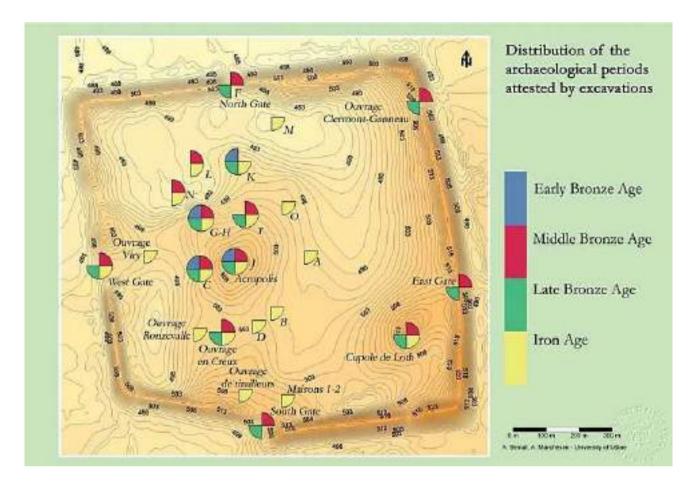


Fig. 105: Mishrifeh, distribution of the excavation areas and the chronological periods attested in each Operation (modified from qatna.org).

In 1999, a joint project between the Direction Générale des Antiquités et des Musées de Syrie, the University of Udine (Italy) and the University of Tübingen (Germany) started to investigate the site (fig. 105). The Syrian team focused on Operation C and other sondages in various areas of the site (including Operation O at the base of the upper town). The Italian team excavated Operations H and J on the central mound and Operation K in the lower city. The German team excavated in Operation G on the upper city. Operations H of the Italian team and G of the German team were opened on the remains of the Bronze Age Royal Palace of Qatna already unearthed by Du Mesnil du Buisson (Al-Maqdissi et al. 2002b: 11-12). From 2006, the Italian team opened another Operation, close to H on the central mound, that is T: subsequently, Operation T was enlarged with the smaller excavation areas T2, T3, T4 and T5.

#### 3.2 HISTORICAL INTRODUCTION

The radiocarbon dating programme gave a Late Chalcolithic 4 date (c. 3300-3000 BC), however no ceramic material or real architectural evidence dating to this period were found (Morandi Bonacossi 2008a: 63-64).

Mishrifeh was certainly inhabited in the Early Bronze Age, starting from Early Bronze Age III (c. 2800-2500 BC), and reached true urban status in the Early Bronze Age IV (c. 2500-2000 BC), with a further 17 sites appearing in proximity to the settlement (Morandi Bonacossi 2014a: 238). The Early Bronze Age III occupation consisted mainly of domestic units which were substituted by food storage pits in the last part of the period (Area J. Morandi Bonacossi 2008a: 64-67). Silos were found also in Area R, on the central mound (Al-Maqdissi 2009: 1204). During the Early Bronze IV the process intensified and a communal stockpiling area, with related food processing installations, was created on the central mound of the upper town (Fig. 106. Morandi Bonacossi 2008a: 68-99; Morandi Bonacossi 2014a: 240-243).



Fig. 106: Mishrifeh, Early Bronze Age IV, food storage installations from the south (Morandi Bonacossi 2008a, fig. 7).



Fig. 107: Reconstruction of the environment of Mishrifeh in the Early Bronze Age (courtesy of Prof. D. Morandi Bonacossi).

The site can start to be identified with Qatna from the Middle Bronze Age (c. 2000 – 1500 BC). Qatna was one of the three kingdoms which controlled Syria during this period, the others being Mari and Yamhad (Al-Maqdissi et al. 8; Iamoni 2012: 25). The importance of the settlement is highlighted by the construction of the massive ramparts, the presence of a large cemetery area with burials of adults and children of both low and high status in jars (Areas G-H. du Mesnil du Buisson 1927a: 11-22; Morandi Bonacossi 2011) and the construction of a palace structure on the upper town (Areas T2-T3).

The so-called Eastern Palace (fig. 108) was built between the Middle Bronze Age IIA and IIB (c. 1700-1600 BC) including two precedent monumental structures (the "Northern Building" and the "Southern Building") dated to the Middle Bronze Age IIA (c. 1770-1700 BC. Iamoni, Morandi 2010-2011: 185-186; Morandi Bonacossi et al. 2009). Close to the Eastern Palace, residential units (AI-Maqdissi 2009: 1210) and a temple (fig. 109) were erected in the final part of the Middle Bronze Age (AI-Maqdissi 2009: 1212-1213). On the summit of the upper town (Area J) a pottery production area was installed (fig. 111), probably connected to or controlled by a monumental building, possibly a temple, of which only a small part was preserved and excavated (fig. 110. Morandi Bonacossi 2008a: 85-92; Morandi Bonacossi 2014b: 277). In the lower town there were instead the residential quarters (Areas S, U, V. AI-Maqdissi 2007: 22; al-Maqdissi 2015: 391).

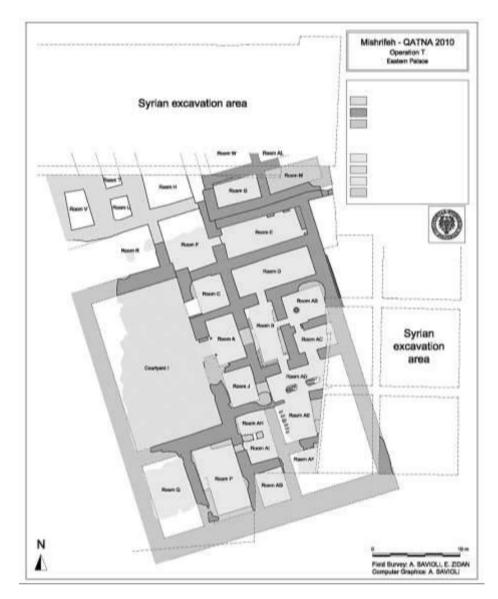


Fig. 108: Mishrifeh, Middle Bronze Age IIB, the Eastern Palace of Operations T2-T3 (Iamoni, Morandi 2010-2011, fig. 3).

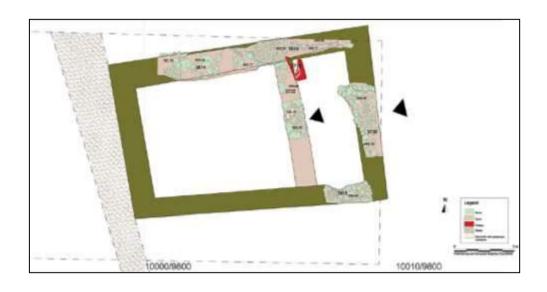


Fig. 109: Mishrifeh, Middle Bronze Age IIB, the Temple of Area T (Al-Maqdissi 2009, fig. 13).



Fig. 110: Mishrifeh, Middle Bronze Age I, the monumental building in Area J from the west (Morandi Bonacossi 2008a, fig. 18).



Fig. 111: Mishrifeh, Middle Bronze Age I, the pottery manufacturing area, detail of the kilns seen from northwest (Morandi Bonacossi 2008a, fig. 28).

Between the end of the Middle Bronze Age and the beginning of the Late Bronze Age the monumental Royal Palace was erected in the upper town, over the abandoned Middle Bronze Age funerary area (fig. 113. Morandi Bonacossi 2007b: 77; Pfälzner 2007).



Fig. 112: Reconstruction of the environment of Mishrifeh in the Middle Bronze Age (courtesy of Prof. D. Morandi Bonacossi).

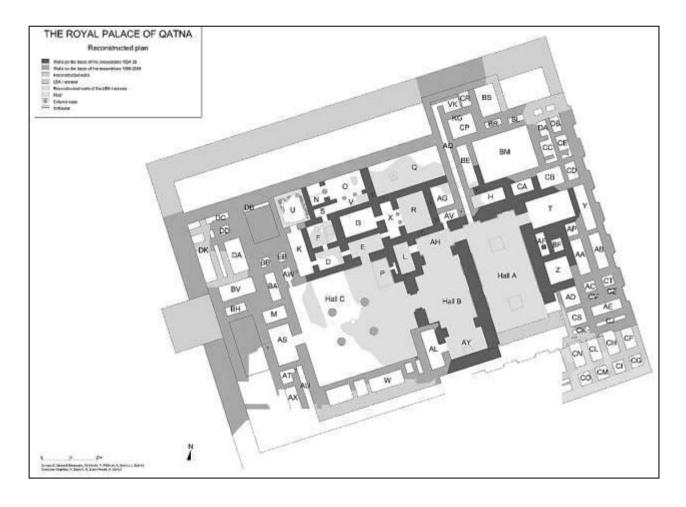


Fig. 113: Mishrifeh, Late Bronze Age I, Royal Palace of Operations G-H (Morandi Bonacossi 2007b, fig. 11).

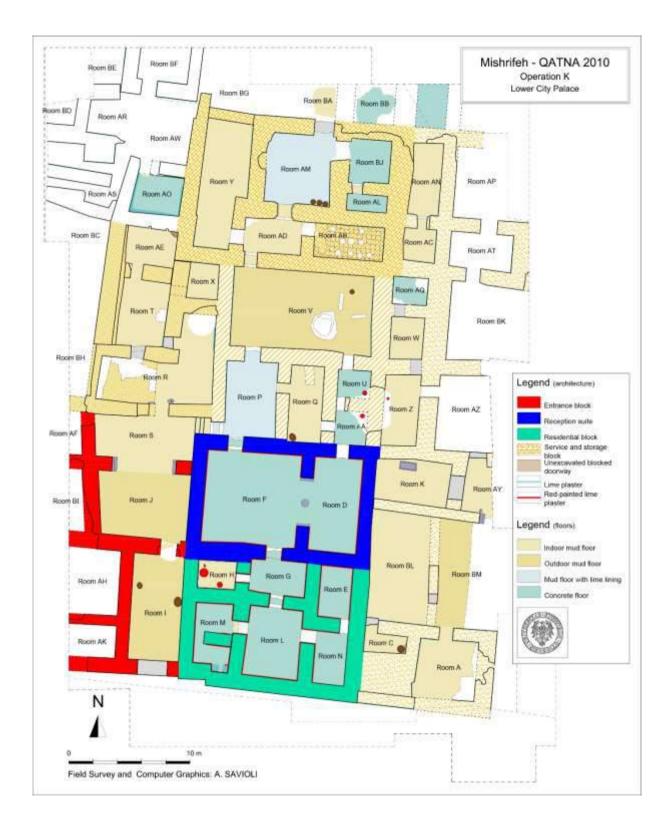


Fig. 114: Mishrifeh, Late Bronze Age I-IIA, plan of the Lower City Palace of Operation K (courtesy of Prof. D. Morandi Bonacossi).

In the Late Bronze Age (c. 1500-1200 BC)<sup>33</sup> Qatna continued to be the royal capital of a kingdom, although it was not as important and large as it had been in the Middle Bronze

<sup>&</sup>lt;sup>33</sup> The Late Bronze IIB (c. 1355/1320-1200 BC) however is not attested at Mishrifeh.

Age (Morandi Bonacossi 2007b: 76). From what it is known from the texts, the kingdom of Qatna in this period included a site in the north called Arashtan (perhaps modern Rastan; Turri 2015b: 227) and perhaps even Hama, while in the south-west its borders reached the Lebanon mountains (Turri 2015b: 270). Qatna balanced an unstable political situation between Hatti and Egypt, often appearing to be more on the Egyptian side than on the Hittite's (lamoni 2012: 27-32; Turri 2015b: 318-327).

The pottery manufacturing area on the summit of the upper town continued to be used also in the Late Bronze Age. At the end of the Middle Bronze Age II it expanded westward and partly included the area of the large public building, which was demolished (Morandi Bonacossi 2007b: 76-77; Morandi Bonacossi 2008a: 112-114).

Two more palace buildings were erected during the Late Bronze Age I (c. 1500-1400 BC), the "Small Palace" of Area C (Al-Maqdissi 2003b: 1500-1505; Al-Maqdissi 2007: 22) and the "Lower City Palace" of Area K (fig. 114. Luciani 2003, 2006a, 2006b),<sup>34</sup> indicating that during the mid-second millennium BC the political and economic power was distributed and shared between different buildings (Morandi Bonacossi 2007b: 78).

The end of Qatna as a regional capital has been attributed to Suppiluliuma I's campaign in Syria around the mid-14<sup>th</sup> century BC (Iamoni 2012: 29-32; Turri 2015b: 326-327). The Royal Palace was destroyed by a violent fire (du Mesnil du Buisson 1935: 74-104), the Lower City Palace and the pottery workshop on the summit of the central mound were abandoned and no traces of occupation dating to the late part of the Late Bronze Age II have been found (Morandi Bonacossi 2007b: 82).

In the Iron Age the situation appears completely different. First of all, the name of the site in this period is unknown, since the toponym "Qatna" disappears from the textual evidence after the Late Bronze Age II (Morandi Bonacossi 2007b: 84) and no tablets dated to this period were found, which is why for the Iron Age the site is called with the modern name of "Mishrifeh".

In the late part of the Late Bronze Age II and in the Iron Age I the site was not settled (Morandi Bonacossi 2019: 22). The earliest Iron Age evidence can be dated to the very end of the Iron Age I (Iron Age Ic, 10<sup>th</sup> century BC) and has been recorded exclusively in one area, that is Operation K in the lower town. As will be discussed in Chapter 3.4, the occupation of the Iron Age Ic and transitional Iron Age I/II consists of residential buildings connected to structures with productive activities.

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<sup>&</sup>lt;sup>34</sup> In this palace an ivory workshop and a small administrative archive were discovered. See Eidem 2003 and 2007, Luciani 2006a and 2006b, Morandi Bonacossi 2014b: 280-281.

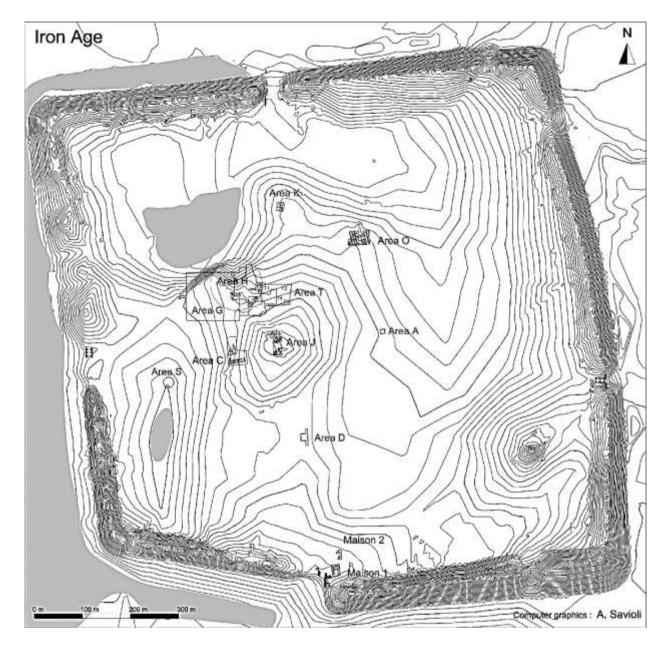


Fig. 115: Mishrifeh, the Iron Age archaeological evidence.

The Iron Age II instead represents the last flourishing of the site. It is ubiquitous in the site and was found in both the upper and lower town. The settlement of Mishrifeh during this period occupied most of the area surrounded by the ramparts, that is about 100 ha (Morandi Bonacossi 2019: 7).

Various contexts have been uncovered: in the upper town, an administrative building (Area C. Al-Maqdissi 2003a: 225-235; Al-Maqdissi 2003b: 1495-1500; Al-Maqdissi, Badawi 2002: 31-34), a pottery workshop (Area C. Al-Maqdissi 2003a: 223-225), a communal food storage and processing area (Area J), a crafts quarter with different productive activities (Areas G and H-T1), productive installations (Area T2) and various domestic units (Areas T3-T4).



Fig. 116: Reconstruction of the environment of Mishrifeh in the Iron Age (courtesy of Prof. D. Morandi Bonacossi).

In the lower town, food storage installations (Area K), productive installations related to textile weaving and dyeing (*Maison 1*), a multi-purpose administrative and productive complex (Area O. Badawi 2015; Ziedan 2013) and residential houses (Area S. Al-Maqdissi 2015: 386) were brought to light. The four second millennium city gates probably continued to be in use during the Iron Age, as indicated by the excavations of the Syrian Team in Area E (al-Maqdissi 2015: 391-392). The monumental building excavated in Area C was characterized by a central courtyard with on the south side five smaller rooms arranged in a row and filled with large storage jars, and other spaces to the north (fig. 117. Al-Maqdissi 2003a: 225-227; Al-Maqdissi 2003b: 1495). Room 7 in the northern sector probably had a domestic function, while Room 8 was a storage room like the smaller ones in the south (Al-Maqdissi 2003a: 226-227). Considering the presence of seals in the material assemblage, the building probably had an administrative function (Al-Maqdissi 2003b: 1497-1500).

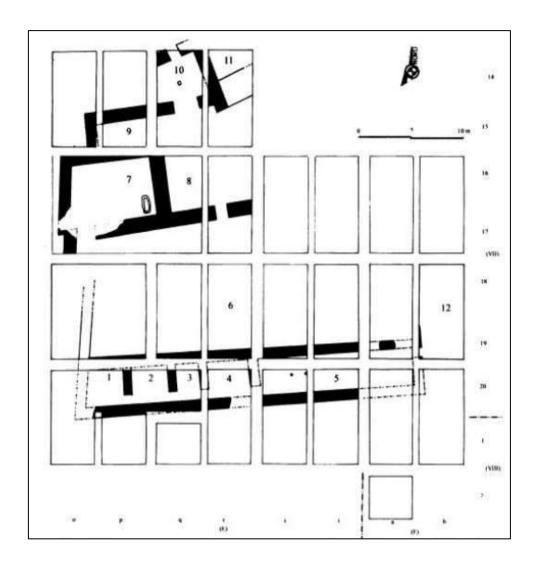


Fig. 117: Mishrifeh, Operation C, the administrative building (Al-Maqdissi 2003a, Abb. 7).

The complex unearthed in Operation O (fig. 118) was composed of three buildings (I, II and III). The rooms of Building I, the earliest Iron Age structure in the area, were covered by a thick collapse layer with mudbricks and ash (Ziedan 2013: 74-75). The structure had a monumental entrance hall with a basalt staircase and limestone orthostats (J-A) which gave access to a central court (B. Ziedan 2013: 75-84). Arranged around the central court were a staircase with basalt orthostats (D) which led to an upper floor and five elongated parallel storage rooms full of fragmentary storage jars (E, F, G, H, I. Ziedan 2013: 84-91). Rooms E, F and I were characterized by sloping plastered floors: in each room a jar was embedded in the plastered floor. These jars were used to collect liquids overflowing from the other storage jars, probably oil or wine (Ziedan 2013: 94).

Building II was built later than Building I and functioned simultaneously with it during its last phase of use (Ziedan 2013: 96). Building II was only partially excavated; the most interesting feature is the large storage room O, which contained 45 storage jars, various tools related

to textile weaving and dyeing, several other ceramic vessels (included a fruit-stand), an incense-burner and some jewellery (Ziedan 2013: 97-101). The smaller Building III, which was constructed after Building I, but earlier than Building II, was devoted to textile weaving and perhaps dyeing activities (Ziedan 2013: 113-120, 160-161).

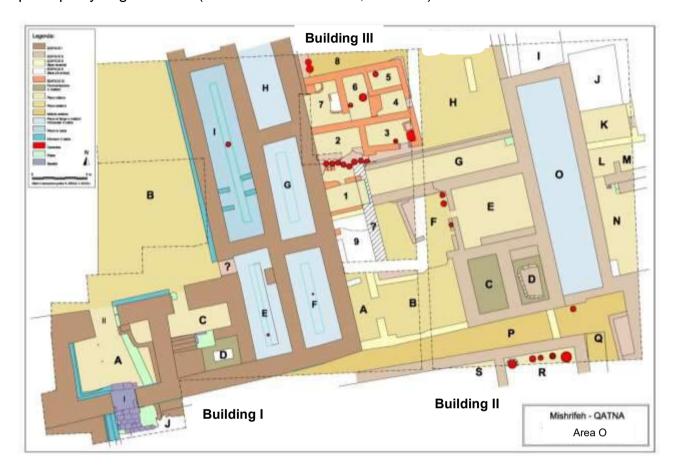


Fig. 118: Mishrifeh, Operation O, schematic plan of the multifunctional complex (Modified from Ziedan 2013, fig. 31).

The archaeological evidence of the Italian expedition (Areas H-T1, J, K, T2-T5)<sup>35</sup> will be extensively discussed in the relative chapters.

The Iron Age II corresponds also with the maximum settlement density in the surrounding region, as 19 sites around Mishrifeh, that is about 80% of the settlements identified during the survey, were inhabited (fig. 119. Morandi Bonacossi 2007b: 85).

This vitality seems to disappear in the Iron Age III, when a regression of the urbanism can be observed at Mishrifeh. This period in fact is not attested in all the Operations and the large productive and administrative areas (C, H-T1 and J) appear to have been transformed

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<sup>&</sup>lt;sup>35</sup> In Operation T<sub>5</sub> no structures were found, therefore it is impossible to define the use of the area, which was excavated to investigate the relation between Operations H-T<sub>1</sub> and T<sub>4</sub>.

into domestic zones with food processing and storage activities on a household scale (Areas C and J. Al-Magdissi 2007: 24; Morandi Bonacossi 2008a: 118-121).

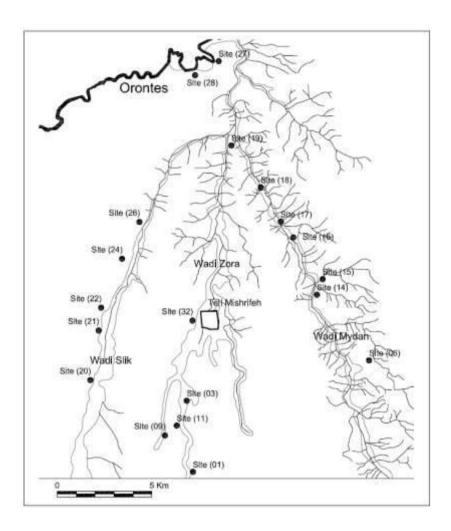


Fig. 119: Mishrifeh, distribution of the sites surrounding the sites in the Iron Age II (Morandi Bonacossi 2009, fig. 7).

This change may have been the result of the political and social upheaval caused by the Assyrian military campaigns in the region and the subsequent destruction of the Hamath kingdom (Morandi Bonacossi 2009: 128-129; Morandi Bonacossi 2019: 5). The settlement of Mishrifeh was abandoned sometime during the 7<sup>th</sup>-6<sup>th</sup> centuries BC: this may have been due to the deportations conducted by the Assyrians, which caused a progressive depopulation of the site, as well as the declining environmental situation (Morandi Bonacossi 2007b: 86). In fact, the palaeoclimatic proxies collected at the site indicate a great deterioration of the local environment during the Iron Age, accompanied by a decline in water availability, shown by the diminishing level of the Mishrifeh lake and increasing aridification of the region in the Late Iron Age III (Cremaschi 2007a: 104; Morandi Bonacossi 2007b: 86).

### 3.3 OPERATION J

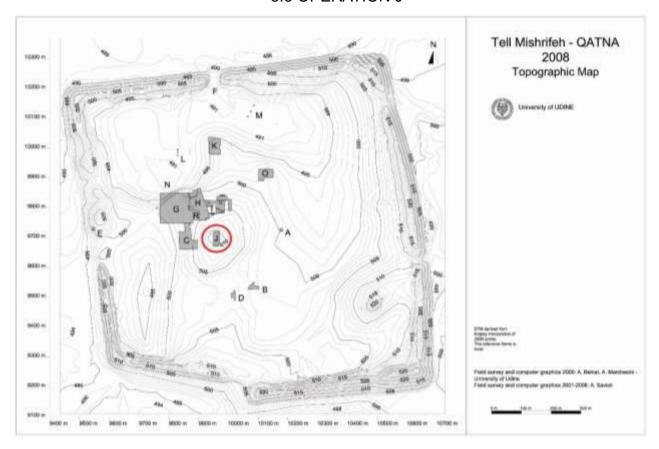


Fig. 120: Mishrifeh, topographic map with the location of Operation J highlighted.

Operation J was excavated in 1999 on the summit of the central mound, with the aim of establishing a complete stratigraphic sequence of this area of the site (Morandi Bonacossi 2002: 123; Morandi Bonacossi 2003: 97). The stratigraphy documents a settlement sequence from the Early Bronze Age III to the Iron Age III (c. 2800-535 BC),<sup>36</sup> with a hiatus during the Early Bronze I and II, the Late Bronze Age II and the Iron Age I (Morandi Bonacossi 2008a: 57).

In the Operation, 49 settlement phases are attested: of these, Phases 1 to 6 belong to the Iron Age III and II (Morandi Bonacossi 2008a: 57). Operation J not only provided a nearly continuous archaeological occupation sequence starting from the Early Bronze Age III, but was also absolutely dated by means of 18 radiocarbon determinations acquired from archaeobotanical samples:<sup>37</sup> three of these samples come from Iron Age contexts and date the Iron Age II and III occupation between approximately 900 and 500 BC (Morandi

<sup>37</sup> The samples were taken from short-lived evidence (olive stones, cereals, bones) in an attempt to obtain the most reliable determinations (Morandi Bonacossi 2008a: 60). The complete results of the radiocarbon dating programme can be read in Morandi Bonacossi 2008a: 60-63, Tables 2 and 3.

<sup>&</sup>lt;sup>36</sup> Traces of an occupation of the site during the Late Chalcolithic 4 (c. 3300-3000 BC) are also attested. Morandi Bonacossi 2008a: 57 and 64.

Bonacossi 2008a: 60-63). The radiocarbon dating programme is not without issues: the calibrated dates in fact give a long chronological interval (Table 2), which is not useful for a more precise chronology of the different Iron Age phases. Since the concentration of 14C in the atmosphere has varied over time, mostly because of the terrestrial magnetic field, the results of radiocarbon analyses need to be calibrated on the basis of items of a known age, such as tree-rings (Akkermans, Schwartz 2003: 12; Bowman 1994; van der Plicht, Bruins, Nijboer 2009: 215-218). In this way it is possible to obtain calibrated curves (Bowman 1994; Bronk Ramsey 1995; Kromer et al. 2010; Reimer et al. 2004). The problem is caused by the flatness of the calibrated curve in the Iron Age, known as the Hallstat Plateau (van der Plicht 2004: 46, 48), which does not allow precise dates, as seen also at Tell Nebi Mend (Whincop 2007: 186). The issue can be partly solved by obtaining more dates for a certain context and calculating an average chronology.

The archaeological evidence of Operation J consists partly of architecture in a poor state of conservation. In fact, the occupation phases followed one another in a very close succession, thus indicating a very intense occupation, and in each phase the structures were razed to their foundations before the mound was resettled. Moreover, numerous intrusions (for the Iron Age phases this means modern and later Iron Age pits), some of large dimensions, severely affected the area, further damaging the archaeological remains. This is because the Iron Age remains were found close to the surface (as seen in the sections, figs. 121-122) and the area has been settled in recent times by a modern village (Morandi Bonacossi 2008a: 63-64).

Due to this, in some phases the stratigraphic evidence may be poor.

J	Relative Chronology	Absolute Chronology	C14 dating	Cal dat at 95.4%	Cal dat at 68.2%
1	IA III	7 <sup>th</sup> cent. BC	2358+/-40	753-355 BC	705-380 BC
2	IA III?	7 <sup>th</sup> cent. BC?			
3	IA III?	7 <sup>th</sup> cent. BC?			
4	IA III?	7 <sup>th</sup> cent. BC?			
5	Late IA II	8 <sup>th</sup> cent. BC	2544+/-45 2612+/-45	806-536 BC 896-592 BC	796-591 BC 827-769 BC
6	IA II	9 <sup>th</sup> -8 <sup>th</sup> cent. BC			

Table 2: Operation J, summary of the phases and their chronology

<sup>&</sup>lt;sup>38</sup> See also the debate on the chronology of the Southern Levant: Bruins, van der Plicht, Mazar 2003a, 2003b; Finkelstein 2005; Finkelstein, Piasetky 2003a, 2003b, 2006; Levy, Higham 2005; van der Plicht, Bruins, Nijboer 2009.

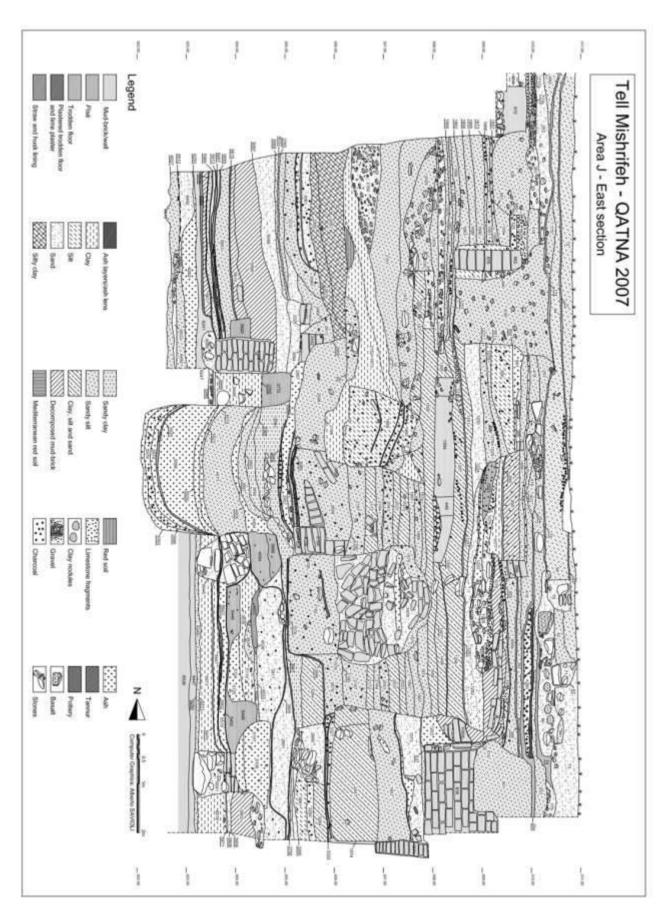


Fig. 121: Operation J, East Section (Morandi Bonacossi 2008a, fig. 2).

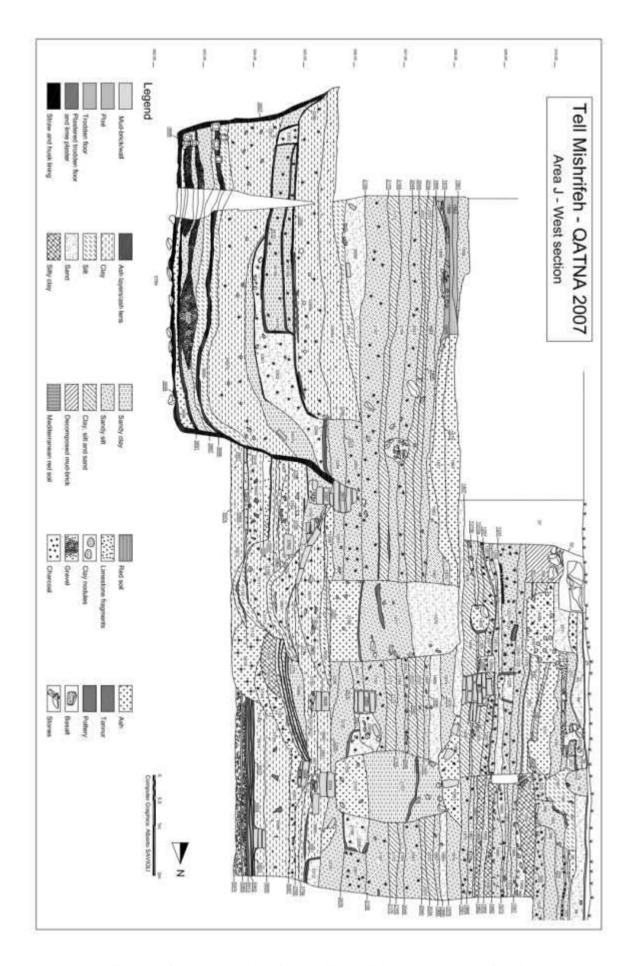


Fig. 122: Operation J, West Section (Morandi Bonacossi 2008a, fig. 3).

#### 3.3.1 ARCHAEOLOGICAL CONTEXT AND STRATIGRAPHY

# **PHASE 1** (Figs. 123-127)

This is the last occupation phase in this area of the upper town. It consisted of a building (Building J1, fig. 125), with at least two rooms, associated to an open-air surface (SU 31 and 78), perhaps a courtyard. In the western room there was an interred storage jar (SU 76), which contained a fragmentary basalt fruit-stand, a juglet and an incomplete basalt bowl. In the courtyard, working and storage installations were discovered: a stone and mudbrick bench (SU 83), a stone installation (SU 35), a basalt mortar (SU 38) and a jar (SU 86. Morandi Bonacossi 2002: 124; Morandi Bonacossi 2003: 109). Building J1 was presumably a small house related to domestic production activities, like food conservation and processing and textile weaving (Morandi Bonacossi 2002: 124).

In the central-northern area of the excavation another series of installations was found (fig. 126), such as poorly preserved stone benches and a large basalt basin (SU 2654) which contained grape seeds and safflower. Safflower could be farmed as an oil crop or could be used as a dye for textiles: this basalt basin could thus have been a wine and oil press or could have been used as a dyeing installation (Morandi Bonacossi 2003: 109; Morandi Bonacossi 2008a: 118-119; Peña-Chocarro, Rottoli 2007: 129, Table 18).

Two other buildings were uncovered in this phase: one was in an extremely poor state of preservation and was also associated with work and storage installations, such as benches, a basalt mortar (SU 2671) and an interred storage jar (SU 2551. Morandi Bonacossi 2008a: 120).

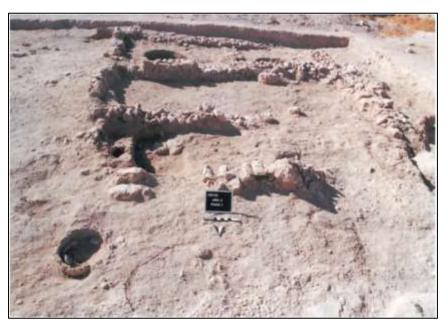


Fig. 123: Operation J, Phase 1. Building J12 from the north (Morandi Bonacossi 2006, fig. 16).

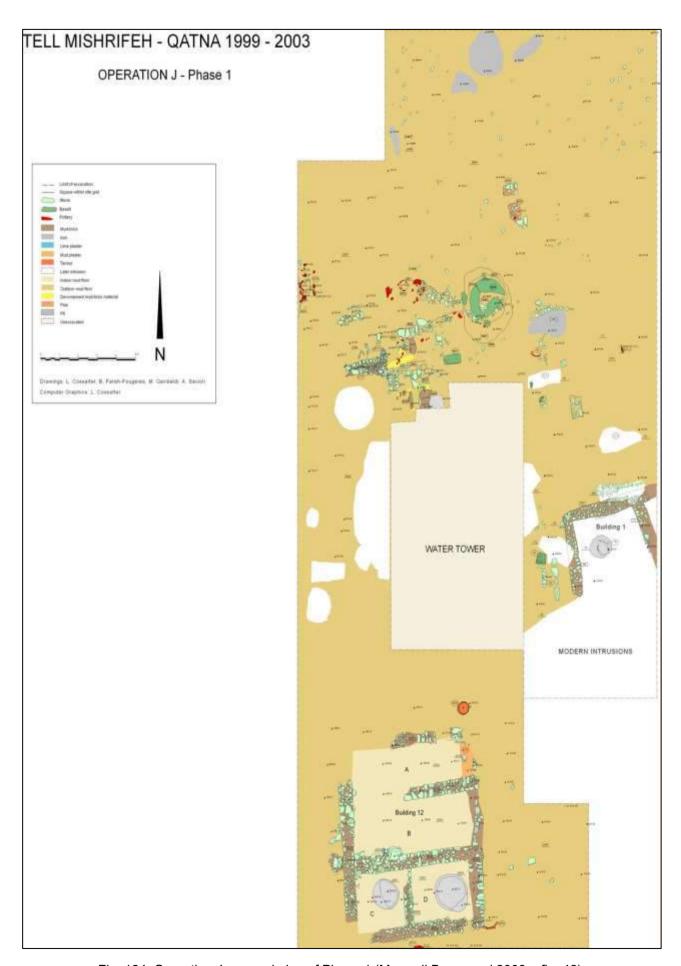


Fig. 124: Operation J, general plan of Phase 1 (Morandi Bonacossi 2008a, fig. 42).

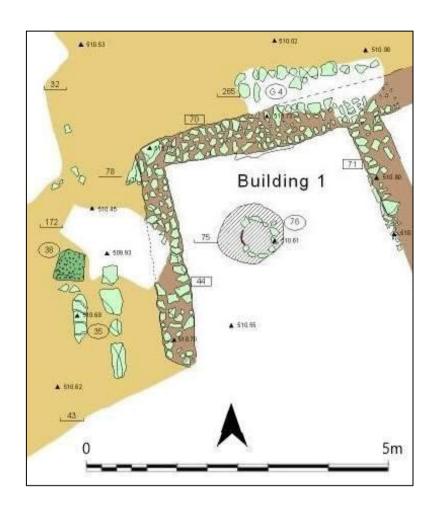


Fig. 125: Operation J, Phase 1, detail of Building J1.

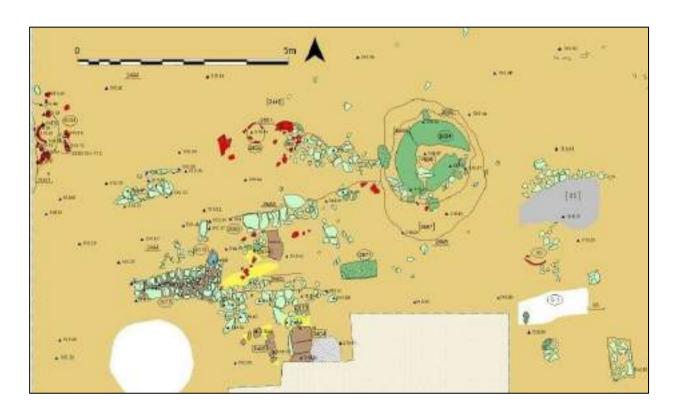


Fig. 126: Operation J, Phase 1, detail of the installations in the northern sector.

The second, Building J12 (figs. 123, 127), was discovered in the southern area of the excavation: it had four rooms, the first two (Rooms A and B) rectangular-shaped, while the two in the back were square storerooms. In each of the back rooms there was a storage pit, SU 4067 in Room C and SU 3994 in Room D. Room C also contained some basalt tools, such as pestles and a grindstone.

Building J12 was probably a farmhouse too and was surrounded by a trodden mud surface (SU 2444) with storage installations (jar SU 5111) and *tannurs* (SU 4059 and 4049): basalt tools – two basalt grindstones, a pestle and a haematite weight – were also recovered from this floor (Morandi Bonacossi 2008a: 120).

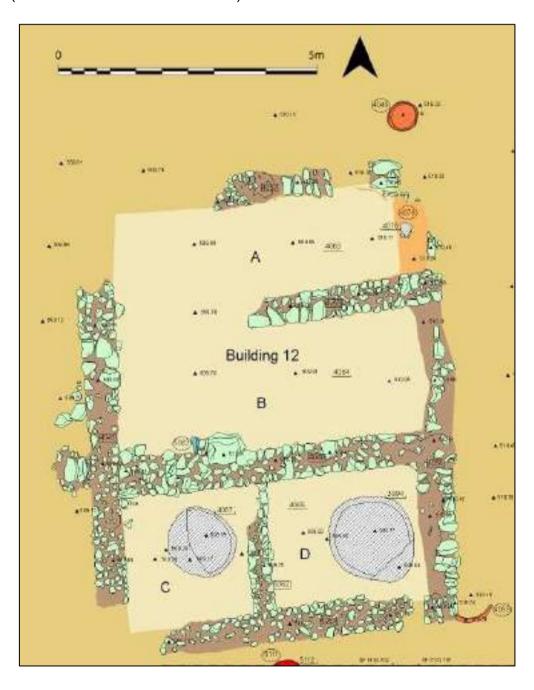


Fig. 127: Operation J, Phase 1, detail of Building J12.

The aforementioned evidence indicates for this phase an open rural occupation, with small dwellings surrounded by open areas dotted with installations devoted to food processing, transformation and production in a clearly domestic context. Other finds – loom weights, bone spatulas, clay bobbins and spindle-whorls – suggest the presence of a domestic textile industry (Morandi Bonacossi 2008a: 121; Morandi Bonacossi 2009: 128-129).

#### PHASE 2

The underlying level was poorly preserved: under Building J1 were discovered the foundation walls of another Building (Building J2), with a doorway in the northern wall. Unfortunately, levelling work connected with the construction of Phase 1 caused the removal of the walls and the floor of Building J2 and almost all other archaeological evidence. The walls of Building J1 overlay those of Building J2, indicating a strong architectural and functional continuity between the two phases (Morandi Bonacossi 2002: 124).

#### PHASE 3

This is a squatting level related to the earlier Phase 4 and it is represented merely by a pit cut in the underlying floor SU 74: no finds were recovered (Morandi Bonacossi 2002: 124).

### PHASE 4

Characterised only by floor 74, which was not associated with any preserved architecture. As in Phase 3, no finds were recovered (Morandi Bonacossi 2002: 124).

## **PHASE 5** (Figs. 128-131)

This is the second major Iron Age phase of Operation J. It consisted of two buildings (Buildings J3 and J13) and dozens of storage pits and installations cut into the floor of an outdoor area. The installations were concentrated in the north-western part of the open-air surface (SU 174), in a clear continuity with Phase 1. The continuity is emphasized by the superimposition of stone bench SU 83, of the more recent phase, on Phase 5 bench SU 202 (Morandi Bonacossi 2002: 124-125). The northern and southern parts of the excavation were characterised by a large cluster of more than 100 densely packed storage pits: they had various depths and widths and some of the smaller ones had mud-plastered walls (Morandi Bonacossi 2008a: 115).

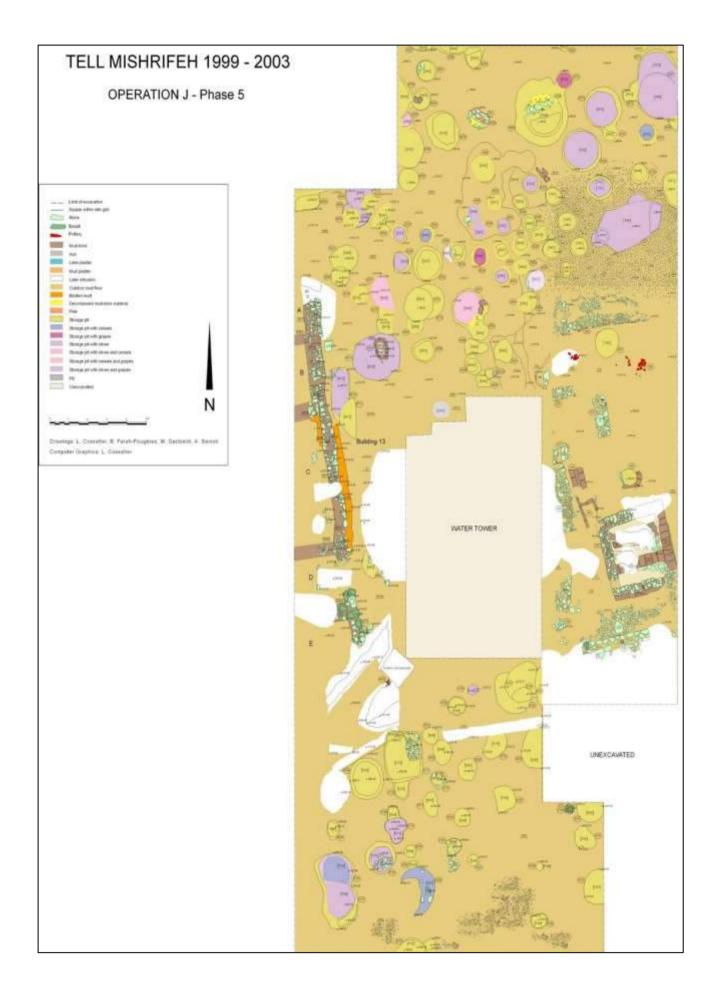


Fig. 128: Operation J, general plan of Phase 5 (Morandi Bonacossi 2008a, fig. 40).

The fills of the pits contained abundant archaeobotanical remains, such as charred cereals, grape seeds, olive stones, figs and legumes. The larger pits and some of the smaller ones were used for olive storage, while cereals and grapes were conserved almost exclusively in the smaller pits. Mixed situations, with olives and cereal, grapes and cereal or olives and grapes conserved in the same installations, are also documented (Morandi Bonacossi 2003: 108; Morandi Bonacossi 2008a: 115; Peña-Chocarro, Rottoli 2007: Table 18).

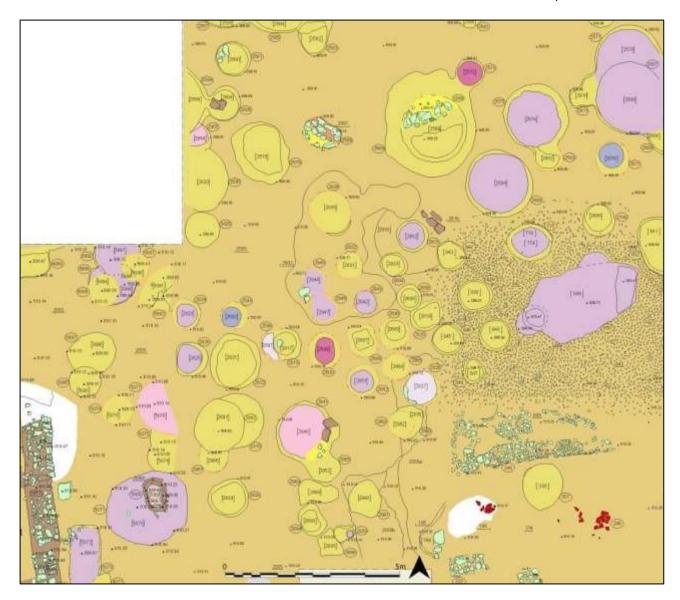


Fig. 129: Operation J, Phase 5, detail of the pits and installations in the northern sector.

In the north, trodden mud floors (fig. 129. SU 174 and 2555 – the latter one composed by SU 417, 717a, 717b and 842) were exposed: they were mostly occupied by storage pits and SU 174 was partially surfaced with pebbles. Perhaps related to the pebble floor was a stone bench or wall (SU 248), possibly a working platform, south of it. Associated with it were three storage jars (SU 195, 246-247) and two more stone benches (SU 203 and 202). Continuing

south-eastward, a silo for cereals (SU 182), another stone bench (SU 201), a possible mudbrick work platform (SU 199) and a shallow mudbrick basin (SU 183) were discovered, together with a slightly raised platform made with cobbles (SU 200. Morandi Bonacossi 2002: 125).

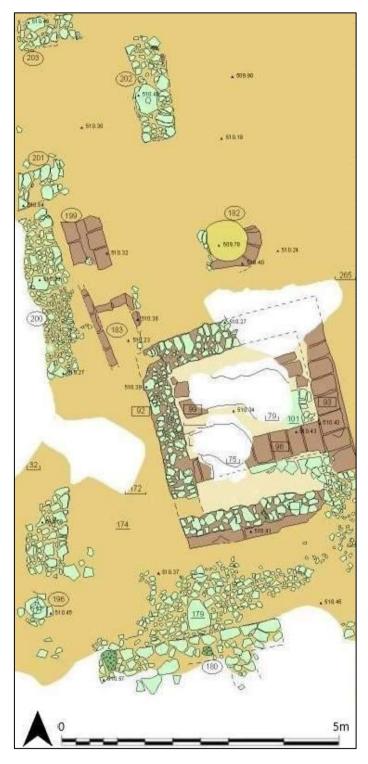


Fig. 130: Operation J, Phase 5, detail of Building J3 and related installations.

Close to these installations, Building J3 (fig. 130) was exposed: while heavily damaged by

later intrusions, it clearly had a grid plan with three elongated rooms, and was probably a granary. South of Building J3 there was a pebble-paved street (SU 179), which separated the former structure from another fragmentary building of which only two stone wall foundations remain. Near street 179, a limestone mortar (SU 196) was interred in the floor (Morandi Bonacossi 2002: 125; Morandi Bonacossi 2003: 108).

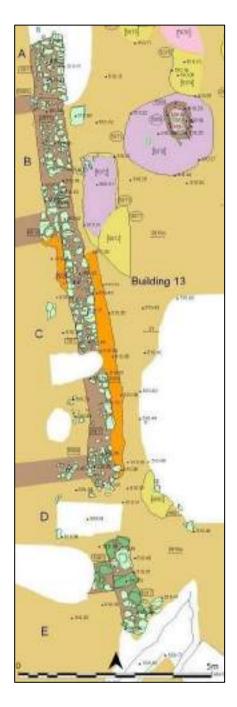


Fig. 131: Operation J, Phase 5, detail of Building J13.

In the central-western area of the Operation there was a large rectangular building (Building J13, fig. 131): it was composed of at least five apparently elongated rooms and it was interpreted as a large storehouse for agricultural produce, possibly another granary (Morandi

# Bonacossi 2008a: 117).

In conclusion, in this phase this area of the upper town was devoted to the storage of agricultural produce: the northern and southern sectors were used for short and medium-term storage, with pits and jars interred in the floor. Activities related to the processing and transformation of food took place, instead, in the central area, where installations like benches, working platforms, basins and so on were located. Lastly, long-term storage of processed agricultural produce occurred in the two granaries to the west and east (Morandi Bonacossi 2002: 125; Morandi Bonacossi 2003: 109; Morandi Bonacossi 2008a: 118). It is not unlikely that this intensive stockpiling and warehousing area was related to the artisans' quarter found in Operation H-T1 (Morandi Bonacossi 2009: 124), which will be discussed in Chapter 3.5.

# **PHASE 6** (Figs. 132-134)

This is the earliest Iron Age phase of the area. It consists of a small inhumation cemetery with graves cut into the abandoned, open-air floor (SU 254) of the earlier Phase 7 (Late Bronze Age I). Six adult burials were found and two grave types are documented: the first consists of simple burials cut into the soil (fig. 132. Graves 7, 8 and 11), the second by burials in pits with a mud-brick covering (fig. 133. Graves 2, 5 and 6). The skeletons were discovered in a good state of preservation and were lying on their right sides with extended or slightly bent legs (Morandi Bonacossi 2002: 125-126).



Fig. 132: Operation J, Phase 6. Grave 7 (Morandi Bonacossi 2009, fig. 9).

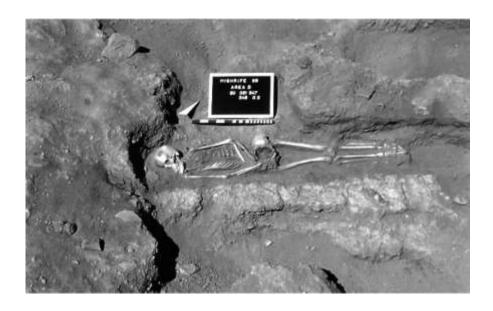


Fig. 133: Operation J, Phase 6. Grave 2 (Morandi Bonacossi 2009, fig. 9).

No grave goods were recovered and in general very few finds come from this phase, making it impossible to determine ranking differences. The existence of two different grave types could be interpreted as a possible indication of some kind of ranking differentiation: furthermore, in Graves 2 and 5 there is a probable evidence of funerary ritual, as an ash lens and a crashed jar were found on top of the fill of Grave 2 and a similar ash lens was discovered on Grave 5. A re-used pierced trapezoidal basalt object was horizontally embedded on top of the grave (Morandi Bonacossi 2002: 126), maybe as a grave marker. The anthropological and palaeopathological study (Canci 2002, 2003; Canci, Bartoli 2007) revealed that in Grave 2 a woman about 20 years old at the time of death was buried, in Grave 5 another woman about 45 years old and in Grave 6 a woman about 35 years old. Grave 7 contained the skeleton of a man aged about 40 years, Grave 8 a man of about 45 years and in Grave 11 a man about 25 years old was buried (Canci 2002: 170). Tomb types seem therefore to be associated with gender: the graves with mud-brick

covering contained female individuals, while males were buried in simple earth inhumations. Recurring anatomical variations on the skeletons, observed on the vertebrae (Graves 8 and 11) and on the ribs (Grave 7), may indicate a possible consanguinity affiliation (Canci 2002: 171; Morandi Bonacossi 2002: 126; Morandi Bonacossi 2003: 108). The oral health of the skeletons was very poor, with caries, abscesses, heavy dental wear and *ante mortem* tooth loss. Poor oral hygiene and an abrasive diet caused by fragments of grindstone in cereal foods may have been the causes (Canci 2002: 171; Canci, Bartoli 2007: 171). This and the presence of biomechanical alterations as a consequence of activities caused by agricultural practices indicate that the group probably was of low social status (Canci 2002: 171-172; Canci, Bartoli 2007: 171-172).

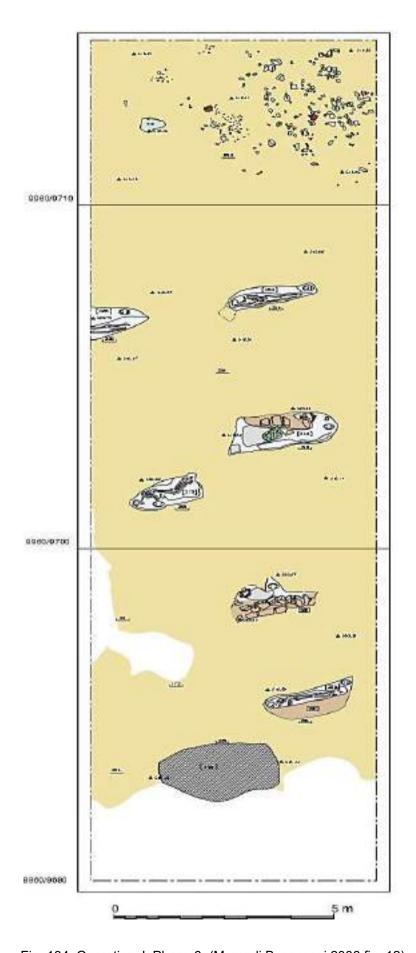


Fig. 134: Operation J, Phase 6. (Morandi Bonacossi 2006 fig. 12)

Highly unusual is the practice of inhumation burial: in this period, in fact, cremation was prevalent ritual in Western Syrian cemeteries (Morandi Bonacossi 2002: 126-127; Morandi Bonacossi 2003: 108; Morandi Bonacossi 2009: 129; Chapter 6.2).

In conclusion, this level marks a strong break in the use of the area in both the earlier Middle and Late Bronze Age phases and the subsequent Iron Age occupation, during which the summit of the upper town was characterised by productive (and domestic for the Iron Age III) activities. The Phase 6 cemetery may possibly have been a small family graveyard, rather than a larger public one (Morandi Bonacossi 2002: 126-127; Morandi Bonacossi 2009: 129).

#### 3.3.2 POTTERY

The analysis of the pottery from Operation J was based partly on the direct study of the material stored at the Department of Humanities and Cultural Heritage (DIUM) of the University of Udine from the 1999 and 2000 campaigns, and partly on the study of the records (that is drawings and pottery descriptions) of the remaining pottery left in Syria. Unfortunately, some of the records pertinent to the pottery of Phases 1 and 5 are still in the Mishrifeh excavation archive in Syria, and were thus unavailable for the analysis.

As mentioned above, not all the Iron Age phases of Operation J contained consistent archaeological remains and finds: however, the most important levels, that is Phases 1 and 5, were dated by means of radiocarbon dating, which gave absolute chronological anchorage for the ceramic assemblage.

The occurrence of pottery types will be first presented with graphics in absolute numbers. Successively, at the end of the chapter, their percentages in the various phases will be compared.

The pottery from **Phase 1**, about 60 fragments in total, is dominated by cooking and storage ware, confirming the domestic and productive character of the area in this level. Plates are represented by one red slipped sherd of the tapering rim type (PL3), and shallow bowls by the triangular rim type, variant with hammerhead (SB6b).

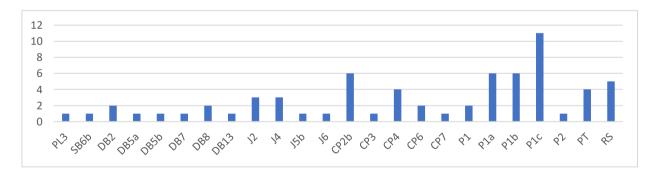


Table 3: Operation J, Phase 1. Pottery.

Concerning deep bowls, the most common types are those with tapering rim (DB2) and with inward rim and basin profile (DB5), the latter also with external ridge (DB5b); also present, but in lesser quantities, are hemispherical bowls with thickened rim and rounded lip (DB7), with externally thickened rim and internal angular thickening (DB8) and bowls with outward squared rim (DB13). Red slipped specimens represent 37.5% of the deep bowls assemblage, while paint is present on only 12.5% of them.

Jars are mostly of the collared rim (J2) and modelled rim (J4) types. However jars with straight incised neck and triangular thickening (J5b) and with concave neck and thickened rim (J6) are also attested. Red Slip is not documented on jars, while paint is present on a sherd of J4 (12.5%).

Cooking pots are quite numerous in the assemblage of the phase. There are two different groups of cooking pots in Mishrifeh's ceramic assemblage, that is holemouth pots and short-necked pots.<sup>39</sup> The most common group in this level are holemouth pots, especially with thickened rim (CP2b) and with small out-turned thickened rim (CP4): vessels with globular body and slight depression under the rim (CP3) are also present. Short-necked pots are represented by forms with straight rim (CP6) and upright sinuous rim (CP7).

Large storage jars with swollen rim (P1) and variants with round, squared and oval rims (P1a, P1b, P1c) are the most common form in the assemblage of this phase, with large storage jars with outward rim (P2) are also documented.

In addition, from this phase come also several fragments of Cypriot pottery (Morandi Bonacossi 2002: 141; Morandi Bonacossi 2008a: 121): in particular, various sherds of a cylindrical bichrome *thymiaterion*, decorated with alternated red and black bands over a white slip, and a Bichrome IV-V jug or amphoroid krater with black concentric circles and black and red horizontal lines (fig. 135). A few White Painted IV-V juglet fragments are also present, such as one with a flat base and globular body with brown-painted triple concentric circles (Morandi Bonacossi 2002, fig. 115).

Painted pottery (PT) represents more than 6% of the assemblage and red slipped sherds (RS) are instead almost 8% of the assemblage.<sup>40</sup>

## Phases 2, 3 and 4 contained no diagnostic finds.

The pottery assemblage from **Phase 5** is the most substantial of the Operation, with more than 230 diagnostic sherds.

Plates with simple (PL1), squared (PL2) and tapering rims (PL3) are all documented, especially the PL1 type which represents the majority of the plates: the attestations of the plate/shallow bowl with slightly rounded sides and everted rim are rare (PL9). Concerning decorations and surface treatments, almost 17% of the plates are red slipped and the same percentage are painted.

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<sup>&</sup>lt;sup>39</sup> This topic will be discussed more extensively in Chapter 4.2.7.

<sup>&</sup>lt;sup>40</sup> Red Slip and painted pottery include also bases and body sherds, which are not considered in the analysis of the types .

Regarding shallow bowls, the type with flat thickened rim (SB8) is the most frequent, followed by carinated bowls with flaring rim (SB13) and vessels with squared rim of the oblique convex variant (SB9a): much rarer are bowls with triangular hammerhead rim (SB6b), thickened rim and a depression under it (SB7), outward swollen rim (SB11) and everted rim (SB12). The Red Slip treatment characterises 46% of the shallow bowls, while only 7.7% are painted.

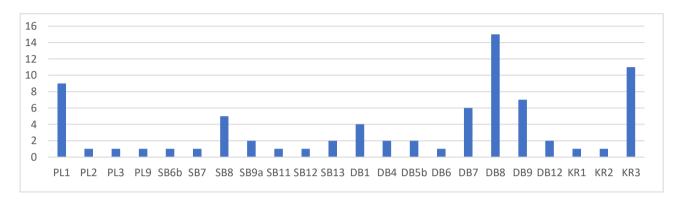


Table 4: Operation J, Phase 5. Open forms and kraters.

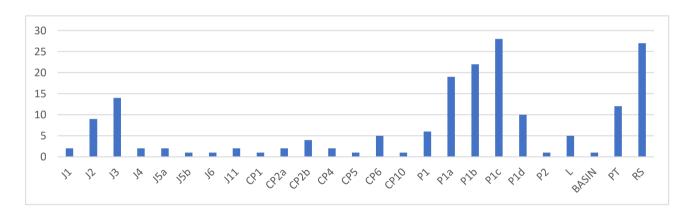


Table 5: Operation J, Phase 5. Closed forms, painted and red slipped pottery.

Deep bowls show a wider range of forms: the most common is the hemispherical bowl with externally thickened rim and internal angular thickening (DB8). Well attested are also bowls with simple rim (DB1), with thickened rim and round lip (DB7) and with inward rim and internal angular thickening (DB9). Quantitatively less present are instead bowls with inward rim and basin profile with an external ridge (DB5b) and with outward tapering rim (DB12). Rare are bowls with rounded walls out-turned rim and tapering lip (DB6). Red Slip is present on 30% of the deep bowls assemblage, while painted specimens are not attested.

Kraters are uncommon, from a quantitative point of view, although all types – out-turned (KR1), rounded (KR2) and straight vertical (KR3) rims – are documented: 33% are painted and the same percentage are red slipped, with only one sherd devoid of any treatment.

Jars are much more frequent than in the later phase: double rim jars (J3) are the most common type, followed by collared rim ones (J2). Neckless jars with thickened rim (J1), straight-necked jars with modelled rim (J4) and triangular rim (J5a) and jars with thickened internally angular rim (J11) are also quite common. Types with triangular rim and incised neck (J5b) and with concave neck and thickened rim (J6) are very rare. Jars are mostly devoid of any treatment or decoration: only 6% are red slipped and the same percentage are painted.

Concerning cooking pots, while holemouth types are more attested than in the later phase, the most common form is the short-necked pot with straight rim (CP6). The other short-necked type present, in very scarce quantities, is that with external groove on the lip (CP10). Within the holemouth group, the pot with thickened rim (CP2b) is the most common, followed by the types with simple rim with almost vertical walls (CP2a) and with small out-turned thickened rim (CP4). Only one sherd of holemouth pot with round rim (CP1) and one with outward inflated rim (CP5) were found in this level.

Large storage jars are the majority in Phase 5, as well: they are mostly types with swollen rim (P1 and variants), but specimens with outward rim (P2) are also documented.

Five fragmentary lamps (L) are present as well.

An unusual form is a probable basin, probable due to its fragmentary state of conservation, with outward roughly squared rim and external red slip. The red slip treatment on storage ware is very rare at Mishrifeh: it is seldom found on storage jars, and only in this case was it found on a basin.

A body sherd of Cypriot Black-on-Red II juglet, with black-painted triple concentric circles and five horizontal lines, also comes from this level.

Red Slip (RS) is not very common, characterising almost 12% of the ceramic assemblage, and the same can be observed about painted decorations (PT), present on only 5% of the pottery of the phase.

**Phase 6** did not yield a large pottery assemblage, only about thirty sherds, mostly found in the floor in which the tombs were cut. Few sporadic fragments were retrieved in the fills of the tombs, particularly tombs G2 and G8.

Plates have mostly simple (PL1) and tapering rims (PL3): a sherd of carinated plate with squared rim (PL4) is present too. Most of the fragments are either red slipped, 66%, or painted, 16%.

The most common form of shallow bowl is the carinated one with flared rim (SB13), however bowls with triangular rim (SB6a) and with semi-circular rim or handle (SB10) occur as well:

most of the specimens (75%) are characterised by Red Slip.

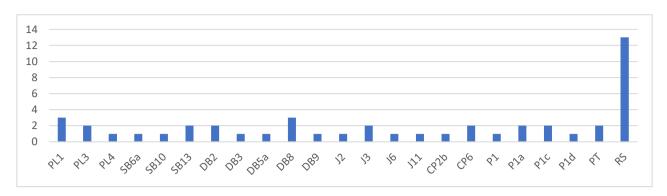


Table 6: Operation J, Phase 6. Pottery.

Deep bowls are slightly more numerous, quantitatively and typologically speaking, than the previous forms discussed: bowls with externally thickened rim and internal angular thickening (DB8) are the most common type. Bowls with tapering rim (DB2) are also quite frequent, while those with straight flaring walls (DB3), inward rim and basin profile (DB5a) and inward rim and internal angular thickening (DB9) are rare. Many specimens are red slipped, 75%, whereas paint occurs only on 12.5% of the deep bowls.

Concerning jars, they show a slightly wider range of forms: double rim jars (J3) are the most common, while jars with collared rim (J2), concave neck and thickened rim (J6) and thickened internally angular rim (J11) occur in very small quantities.

Cooking ware is rare: only one sherd of holemouth pot with thickened rim (CP2b) and two of short-necked pots with straight rim (CP6) are present.

Lastly, large storage jars with swollen rim (P1) – especially the rounded, oval and pointed variants (P1a, P1c, P1d) – are attested.

Red Slip (RS), while present on less fragments compared to the later Phase 5,<sup>41</sup> is present in a higher percentage than in later phases, characterising 40% of the assemblage of this level. Whereas this is understandable with respect to Phase 1, when open forms are less common,<sup>42</sup> it is less clear why in Phase 5 the Red Slip is not as common as in Phase 6 or as in the contemporary phases of Operation H-T1 (Phases 6a and 6b, Chapter 3.5). This may perhaps be because of the type of productive context of Phase 5, that is food storage and processing. In this case, in fact, red slipped vessels would probably be less useful than in other contexts (e.g. textile production. Chapters 3.5, 4.6)

Painted pottery (PT) is again rare (6%).

<sup>&</sup>lt;sup>41</sup> 13 fragments in Phase 6 and 27 fragments in Phase 5.

<sup>&</sup>lt;sup>42</sup> At Mishrifeh the Red Slip appears almost exclusively on open shapes, see Chapter 4.3.

<b>ш</b> к				2	_	D.	
DB 13	1.7			P2	1.7	0.5	
DB 12		-		Z 2		c)	3.1
BD 6		3.3	မ. <u>7</u> .	<u>F</u> 0	6	5 5	6.3
DB 8	3.5	7.5	6.9	Z 0	. 6	5.	
DB 7	1.7	က		Z a	3 .0	o	6.3
DB 6		0.5		2	3.5	ဧ	3.1
DB 5b	1.7	~		CP 10		0.5	
DB 5a	1,7		3.1	CP 7	1.7		
DB 4		-		CP 6	3.5	2.5	6.3
DB 3			3.1	CP 5		0.5	
DB 2	3.5		6.3	CP 4	6.9	~	
DB +		2		cP 3	1.7		
SB 13		1	6.3	CP 2b	10. 3	2	3.1
SB 12		0.5		CP 2a		~	
SB 11		0.5		CP 1		0.5	
SB 10			3.1	J #		~	£.
SB 9a		-		96	1.7	0.5	£.
SB 8		2.5		J5 b	1.7	0.5	
SB 7		0.5		J5 a		<del>-</del>	
SB 6b	1.7	0.5		40	5.2	-	
SB 6a			3.1	13		7	6.3
P. 9		0.5		72	5.2	4.5	3.1
PL 4			3.1	٦,		-	
3 3	1.7	0.5	6.3	χ «		0.5	
PL 2		0.5		2 KR		0.5	
٦ -		4.5	6.9	줐 -		0.5	
TYPE/ PHASE		-P-	9-F			S-L	9-7

Table 7: Operation J, percentage occurrence of types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

Type/	PT	RS	
Phase			
J-1	6.2	7.8	
J-5	5	12	
J-6	6	40	

Table 8: Operation J, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

#### 3.3.3. CONCLUDING REMARKS AND CHRONOLOGY

As already mentioned, the radiocarbon dates from Operation J provide an absolute chronological anchorage for the archaeological sequence. This means that, albeit the chronological interval provided by the radiocarbon results is quite wide, Phase 1 can be probably dated to the Iron Age III and Phase 5 to the Iron Age II. The chronology of Phase 5 has a more solid basis than that of the other phase as there are two calibrated dates from this level (Table 2). Phase 6 also probably belongs to the Iron Age II, perhaps between mid-9<sup>th</sup> and mid-8<sup>th</sup> centuries BC.

Ceramic typologies and complete interregional comparisons will be discussed extensively in later chapters (Chapter 4.2): in this section a reduced overview will be presented, so as to chronologically contextualize the stratigraphic sequence of the Operation.

In summary, Phase 1 represents the last moment of pre-modern occupation of Mishrifeh: it is an occupation of rural nature, with small dwellings and domestic activities related to food processing and textile weaving (Morandi Bonacossi 2008a: 121; Morandi Bonacossi 2009: 128-129). An Iron III chronology is supported by the ceramic evidence: while many of the pottery types of Phase 1 are also present in other levels, 43 shallow bowls with triangular rim, hammerhead variant (SB6b), found in this level are typical especially of the 7th century BC, as seen at Tell Afis (Cecchini 1998: 286). Precise parallels for Phase 1 specimens (J 2666.5, PI. 13:5) come from Late Iron II and especially Iron III contexts at Tell Afis, 44 Tell Mastuma, 45 Chatal Hüyük, 46 Tell Shiukh Fawqani and Karkemish. The variant of deep bowls with inward rim and basin profile with an external ridge (DB5b, PI. 20:8-9) has the most precise parallels in examples from Tell Afis and Tell Matsuma dated to the second half of the 8th century and especially the 7th century BC, that is the Late Iron Age II and the Iron Age III. Furthermore, straight-necked jars with triangular rim with incised collar (J5b) are typical of Levels 8a, 7-6 from Area G Central Zone in Tell Afis (Cecchini 1998: 285-286), that is the Late Iron Age II and Iron Age III. The J5b specimens from Phases 1 (J 2444.5, PI. 41:5) and

<sup>&</sup>lt;sup>43</sup> This means that most of the Operation J pottery is of *"long durée"* and characterises both the periods considered. The continuity of many pottery types from the Iron Age II to the Iron Age III is a trend observed in all the other Operations of the Italian excavations (Chapter 4.7).

<sup>&</sup>lt;sup>44</sup> Cecchini 1998, figs. 21:3, 29:13, 31:16; Mazzoni 1987, figs. 8:6, 10:1-2.

<sup>&</sup>lt;sup>45</sup> Wada 2009b, fig. 4.141:6; Wada 2009c, fig. 5.8:10.

<sup>&</sup>lt;sup>46</sup> Pucci 2019, Pl. 131:f.

<sup>&</sup>lt;sup>47</sup> Luciani 2005, Pl. 43:502.

<sup>&</sup>lt;sup>48</sup> Pizzimenti, Zaina 2016, figs. 4:9, 5:5.

<sup>&</sup>lt;sup>49</sup> Cecchini 1998, figs. 21:12, 31:15; Soldi 2013, figs. 5:4,6; Venturi 2020, Pl. 137:14.

<sup>&</sup>lt;sup>50</sup> Wada 2009c, fig. 5.9:9.

5 (J 175.49, **PI. 41:6**) closely resemble sherds from Tell Afis<sup>51</sup> and Tell Shiukh Fawqani,<sup>52</sup> confirming the dating of both phases.

The Cypro-Archaic I-II (c. 750-480 BC) imports (fig. 135) – that is the bichrome *thymiaterion* that parallels from Cyprus place no later than the mid-6<sup>th</sup> century BC (Morandi Bonacossi 2008a: 121),<sup>53</sup> the Bichrome IV-V jug or amphoroid krater (Morandi Bonacossi 2008a: 121 and note 114)<sup>54</sup> and a White Painted IV-V juglet (Morandi Bonacossi 2008a: 121)<sup>55</sup> – corroborate the Iron Age III chronology.

For Phase 2, and perhaps also Phases 3 and 4, a similar occupation and chronology can be hypothesized, also considering the strong continuity between Phases 2 and 1 as shown by the superimposed walls of Buildings J1 and J2.





Fig. 135: Operation J, Phase 1. Left: fragments of Bichrome IV-V ware (Morandi Bonacossi 2008a, fig. 45). Right: fragments of a Cypriot *thymiaterion* (Morandi Bonacossi 2008a, fig. 44).

In Phase 5 the area was characterised by a strongly productive nature, with activities related to the processing and storage of food produce, perhaps connected to the contemporary crafts quarter found in Operation H-T1 and the administrative sectors of Areas C and O

<sup>&</sup>lt;sup>51</sup> Cecchini 1998, figs. 19:16, 39:20.

<sup>&</sup>lt;sup>52</sup> Makinson 2005, Pl. 18:116.

<sup>&</sup>lt;sup>53</sup> Gjerstad 1948, fig. XXXII:3; Karageorghis 1977: 44, Pl. XVII:2 and 1996, Pl. XLV:3.

<sup>&</sup>lt;sup>54</sup> Gjerstad 1948, figs. XXXVI:2-3 and L:8-9.

<sup>&</sup>lt;sup>55</sup> Cecchini 1998: 287, fig. 26:2; Gjerstad 1948, figs. XXVIII:19, XLVI:1.

(Morandi Bonacossi 2003: 109; Morandi Bonacossi 2008a: 118; Morandi Bonacossi 2009: 124). The whole assemblage, dominated by plates with round rim (PL1), bowls with thickened rim and rounded lip (DB7), externally thickened rim and internal angular thickening (DB8) and inward rim and internal angular thickening (DB9) and double rim jars (J3), is typical of the Iron Age II.<sup>56</sup>

A more precise dating to the Late Iron Age II is indicated by the presence of the aforementioned J5b and DB5a sherds, the only sherd of bowl with everted rim (SB12) found at Mishrifeh and the bowls with out-turned rim and tapering lip (DB6). The SB12 (**PI. 17:1**) fragment is decorated with a red painted band on the upper side of the rim: the closest parallels are vessels from Tell Afis<sup>57</sup> and Tyre<sup>58</sup> dated to the Late Iron Age II/Early Iron Age III. DB6 (**PI. 21**) is also a type well known from Late Iron Age II contexts in Syria, such as Hama,<sup>59</sup> Tell Mastuma<sup>60</sup> and Tell Afis.<sup>61</sup>

The presence of fragments of Cypriot Black-on-Red II pottery, dated to the Cypro-Archaic I period (c. 750-600 BC) and probably imported from Cyprus or the Phoenician Coast, confirms a Late Iron II date (Morandi Bonacossi 2002: 141; Morandi Bonacossi 2008a: 118).<sup>62</sup>

As discussed above, the small cemetery with six adult burials of Phase 6 marks a significant break in the use of the area with respect to both the earlier Middle and Late Bronze Age and the later Iron Age phases (Morandi Bonacossi 2002: 126). The motives for this change of use are not clear, however it is interesting to note that this is the only funerary context found, at the moment, in Iron Age Mishrifeh. The limited ceramic assemblage is typical of the Iron Age II, with many forms already considered in Phase 5. Furthermore, the sherd of carinated plate with squared rim (PL4, J 279.2, **PI. 7:5**), which closely resembles in a vessel from Chatal Hüyük<sup>63</sup> dated to the O\_beg period (850-750 BC), may reasonably indicate a similar date for Phase 6.

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<sup>&</sup>lt;sup>56</sup> As mentioned above, some of these types (PL1, DB8 and J3 especially) are also documented in the Iron Age III, showing a continuity between the pottery of the two periods. The absence of PL1 and J3 in Phase 1 may not be a chronological issue, but due instead to the archaeological context and the limited pottery assemblage of the level. In fact, fragments of both typologies have been recovered in Operation T3 from Iron Age III levels, as will be observed in Chapter 3.7.

<sup>&</sup>lt;sup>57</sup> Cecchini 1998, fig. 19:6.

<sup>&</sup>lt;sup>58</sup> Bikai 1978, Pl. VIIIa:10, 24.

<sup>&</sup>lt;sup>59</sup> Fugmann 1958, figs. 188:5B676, 5B686, 5A875, 5A879; 325:8A220, 8A63, 8A64, 8A70, 8A155, 8A156. See also Lehmann 1998 shape 17, fig. 4:5.

<sup>60</sup> Wada 2009b, fig. 4.24:3.

<sup>61</sup> Cecchini 1998, fig. 19:7; Degli Esposti 1998, fig. 10:21; Venturi 2020, Pl. 138:9.

<sup>&</sup>lt;sup>62</sup> A few fragments of Black-on-Red II pottery have been found in Phase 1 as well: however, considering their very small size, it is highly probable that they were redeposited sherds. Morandi Bonacossi 2008a: 118.
<sup>63</sup> Pucci 2019, Pl. 129:a.

#### 3.4 OPERATION K

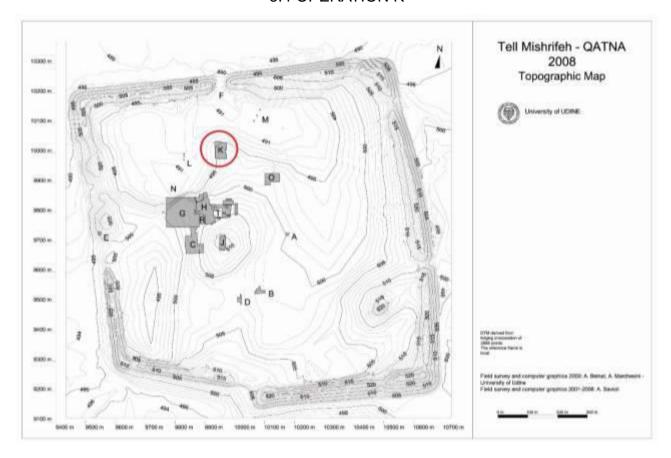


Fig. 136: Mishrifeh, topographic map with the location of Operation K highlighted.

Operation K was opened in 1999, together with Operations H and J, on the northern projection of the central mound, in the lower city (Luciani 2002: 145; Luciani 2003: 144-145). It is the only Operation excavated by the Italian Mission in the lower town. The stratigraphy excavated documents occupation from the Early Bronze Age to the Iron Age II, with nine phases ascribed to the Iron Age (Luciani 2002: 145-146; Luciani 2003: 158).

Operation K is the only excavation area in Mishrifeh which has yielded an occupation dated to the Iron Age I, a very late phase of the Iron Age I (IA Ic) just on the verge of the Iron Age II. The most significant archaeological evidence is a multifunctional complex where activities such as food preparation and storage, weaving, metalworking and cultic activities were all carried out in a domestic context. It is noteworthy that they were all conducted in joined buildings rather than in separated and specialised areas of the centre (Luciani 2002: 167; Luciani 2003: 161). This differs from what can be observed for the Late Iron Age II in the upper town (Morandi Bonacossi 2005: 81-82, Chapters 3.3, 3.5).

K	Relative Chronology	Absolute Chronology		
2	Late IA II	Mid – Late 8 <sup>th</sup> cent. BC		
3	IA II	Mid-9 <sup>th</sup> – Mid-8 <sup>th</sup> cent. BC		
4	IA I – IA II	End 10 <sup>th</sup> – beginning 9 <sup>th</sup> cent. BC		
5	IA I – IA II	End 10 <sup>th</sup> – beginning 9 <sup>th</sup> cent. BC		
6	IA I – IA II	End 10 <sup>th</sup> – beginning 9 <sup>th</sup> cent. BC		
7	IA I – IA II	End 10 <sup>th</sup> – beginning 9 <sup>th</sup> cent. BC		
8	IA I – IA II	End 10 <sup>th</sup> – beginning 9 <sup>th</sup> cent. BC		
9	IA Ic	Late 10 <sup>th</sup> cent. BC		
10	IA Ic	Late 10 <sup>th</sup> cent BC		

Table 9: Operation K, summary of the phases and their chronology.

#### 3.4.1 ARCHAEOLOGICAL CONTEXT AND STRATIGRAPHY

#### PHASE 2

Just below the modern occupation related to the village of Mishrifeh, the last Iron Age phase was exposed. It consisted of a well-preserved trodden floor (SU 130) that was probably originally associated with structures that are not now preserved due to the modern building activity; only scant remains of a wall have survived. The objects found on the floor – unfired clay spindle-whorls, a clay bobbin, a pestle, stone tools, a lamp, a painted bowl and many sherds of storage jars – point to domestic activities. Noteworthy finds are two terracotta figurines, an ostrich-shaped figurine or lid top and the head of an animal.

# **PHASE 3** (Figs. 137-139)

It was characterised by a trodden floor (SU 20, 25, 108, 229) that extended over the whole area and connected to a few walls: this floor partly reutilised the pre-existing, underlying installations such as jar SU 28 (fig. 143. Luciani 2002: 167). The most important features of this level are three large silos (SU 423, 464, 647) for the storage of agricultural produce. The pits cut the underlying architecture, but only in a limited way, as if it was still visible.

A few stone structures were exposed, however their very fragmentary state of preservation makes any precise interpretation impossible. In the 2002 campaign another pit (SU 3239) was excavated, which cut the underlying Rooms U and AA of the Late Bronze Age Building 6 (the Lower City Palace). From this pit came an extraordinary find, that is a small haematite lion head (SF 3240.703, figs. 137-138. Morandi Bonacossi 2009: 131). The fragment measures 2.9 x 2.8 x 3.3 cm and the mane, eyes and nose are emphasized, while the muzzle is open, showing the fangs (Morandi Bonacossi 2009: 131). It was probably part of a "lion bowl", a production well attested in Northern Syria in the Iron Age II and III (Morandi Bonacossi 2009: 132; Muscarella 1974; O'Hea 2013: 67-72).

Numerous tools – such as stone pestles, basalt grinding stones, a tripod, a stone weight, cooking pots and storage jars, stone tools, spindle-whorls, a bone spatula, needles and a convex disc (a loom weight or a spindle-whorl) – were discovered, indicating the presence of domestic activities related to weaving and textiles production. A remarkable find is a *kernos* in simple ware (SF K 2720.701-704) with applied human figurines (fig. 139): two figurines have arms outstretched in a way that suggests that they were joined to one another. Unfortunately not all the fragments join, so the vessel is quite fragmentary.

A fragmentary terracotta figurine was also recovered, representing the upper part of a male human body, with an applied necklace around the neck, similar to other specimens from Syrian sites in the Iron Age II (Luciani 2002: 168).

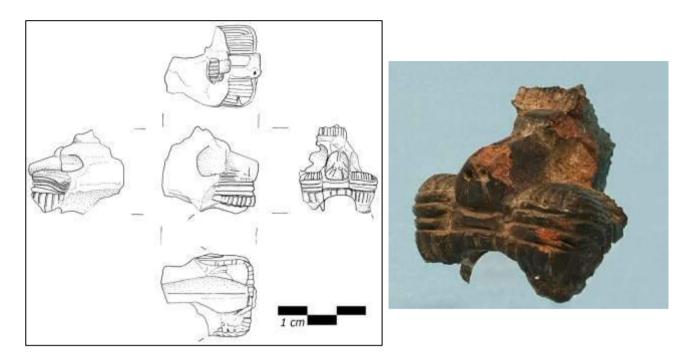


Fig. 137: Operation K, haematite "lion bowl" SF 3240.703 (left, Morandi Bonacossi 2009, fig. 15; right, Al-Maqdissi, Morandi Bonacossi 2005: 55).

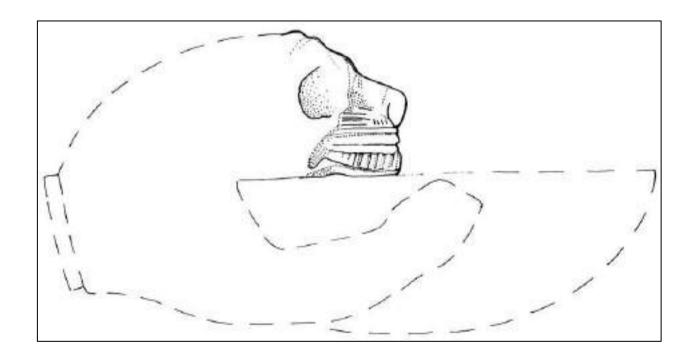


Fig. 138: Operation K, reconstruction of the "lion bowl" (Morandi Bonacossi 2009, fig. 16).





Fig. 139: Operation K, figurines SF K 2720.702-703 of the kernos.

## **PHASE 4** (Figs. 140-145)

This is the first level with significant archaeological evidence, the last phase of the major Iron Age architecture of the Operation, Complex K1.

Contrary to presentations in earlier publications (Luciani 2002, 2003), the re-analysis of the archaeological evidence has revealed that the complex was actually formed of two different buildings rather than just one. First of all, no passageway between the northern block and the southern one was found (Luciani 2002: note 345): the hypothesis of the existence of a raised threshold is difficult to maintain in front of the photographic documentation, which shows the presence of preserved walls that are quite high (at least 50 cm high). Unless we consider the round bench SU 126 found in Room D as a possible step to a raised threshold: this seems improbable, taking into account the small width and relatively large height of this architectural feature (fig. 141) and the different style compared to the thresholds of Rooms A and B (see later). Furthermore, considering the discovery of a probable cultic vessel at the foot of SU 126 (Phase 6), the interpretation of this bench as an altar (Luciani 2002: 162) appears to be well founded.

Moreover, the eastern wall of Room B (SU 124) clearly abutted the northern wall of Room D/H (SU 127). Furthermore, the walls of the two blocks were built with different techniques. The walls of the northern building were built with well-defined mudbricks, whereas the southern building was characterized by thicker *pisé* walls, with small stones and small mudbricks (Luciani 2002: 161, 164-165).

The two buildings appear to have been part of a single complex since the beginning (Phase 8); they developed simultaneously and also most probably were both used at the same time.

The clear separation of the two buildings may have been necessary due to the productive activities carried out in the southern one, which will be discussed more in detail later.

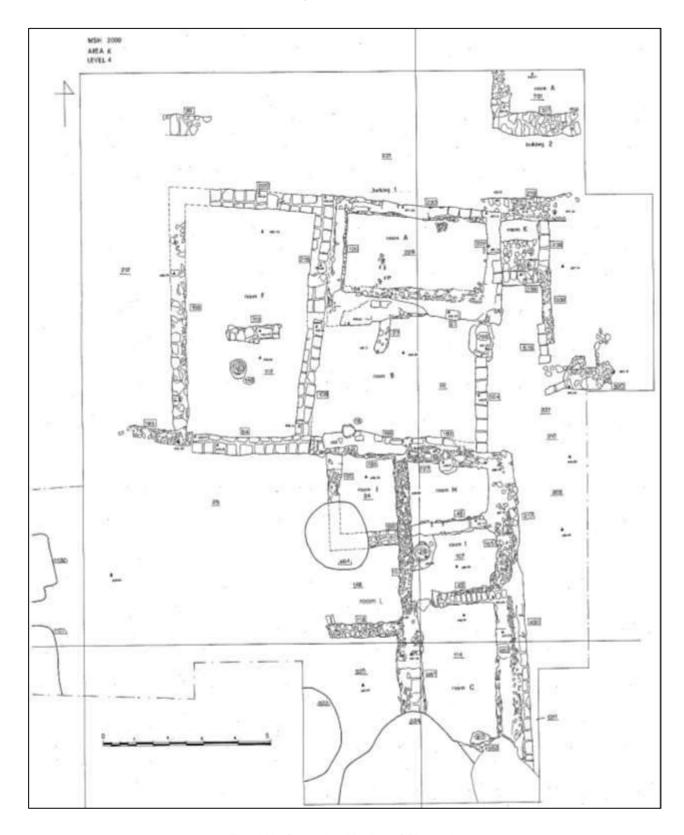


Fig. 140: Operation K, plan of Phase 4



Fig. 141: Operation K, Phases 4-5. The walls between Rooms B and H/D and bench SU 126 on the left.

The complex occupied about 110 square meters and was composed of nine rooms in total. The northern building (fig. 142) was composed of four rooms, three large ones (A, B, M-N) and a small adjacent one (Room K). The southern building (fig. 144) consisted instead of six small areas in two parallel rows, that is five rooms (C, I, H, J, L) and one open space. As discussed before, the southern building, and especially Room C, was delimited by thick, roughly built *pisé* walls (Luciani 2002: 161, 164-165).

The entrance to the northern building was on the eastern side, from the outer Area O and Room B, through a raised stone threshold (SU 766) composed of a squared monolith and large stones: in the same room one jar (SU 16) was interred in a bench (SU 166) and many domestic tools such as basalt bowls, a tripod, grinding stones and basalt instruments were also found. Flint and obsidian blades, unfired clay and stone weights, a clay bobbin and a spindle-whorl were retrieved as well (Luciani 2002: 165).

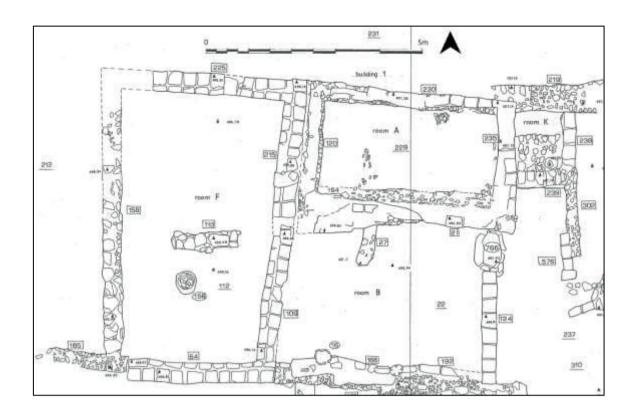


Fig. 142: Operation K, Phase 4. Northern building.

The small Room K was almost completely paved with large stones and on the southern wall there was an opening, possibly a window or a doorway: the continuation (SU 302) of its eastern wall (SU 238) created the outer Area O. This last space can be interpreted as a sort of small vestibule before entering the building. Rooms M and N were created from an originally large single room (F) by means of a partition wall (SU 113). In Room N an interred jar (SU 156) was present.



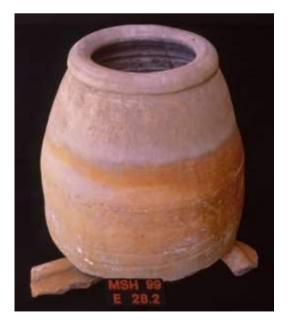


Fig. 143: Operation K, Phase 4. Jar 28 at the moment of the discovery (left) and after restoration (right).

Another interred jar (SU 28, fig. 143), which was partly re-used in the later Phase 3, was found in Room I, in the southern building (fig. 144. Luciani 2002: 165). No entrance was visible for this building, but it was possible that it was on the southern side, which was damaged by the later pit 624 (Luciani 2002: 161 and note 345).

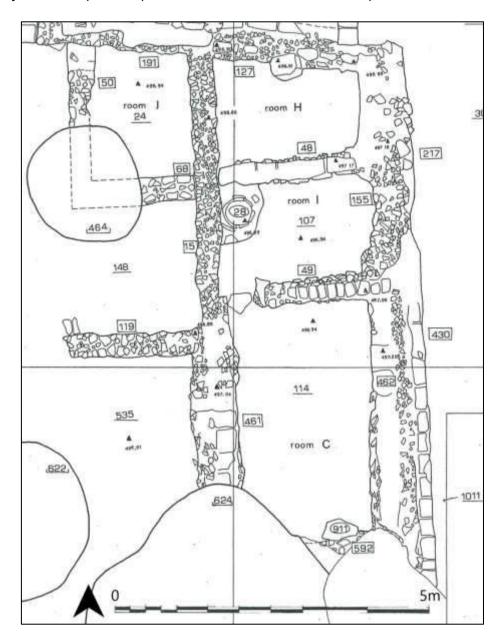


Fig.144: Operation K, Phase 4. Southern building.

Specific craft activities are suggested by the presence of an iron fragment, a roughly finished rectangular stone bead, black stone spheres (perhaps weights), a half-finished haematite artefact with one polished surface and a small, trapezoidal mud-brick with three hemispherical indentations on the upper face (SF K 161.8, fig. 145). The function of the last object is unclear: it looks like a game-piece, but more probably was used as a mould for standard-sized bronze hemispheres or as a support for spherical weights (Luciani 2002:

165).

Considering the finds described above, food preparation and storage and weaving activities were carried out in the northern building, while metalworking activities were performed in the southern one. Metallurgical activities would probably have produced smoke or foul air, which could explain why the two buildings of Complex K1 were built and kept separated.

Part of a room (A) of a second structure (Building K2) was discovered in the north-east corner of the excavation area, separated from K1 by a narrow street, paved with pebbles and pottery sherds (SU 231. Luciani 2002: 164-165).



Fig. 145: Operation K, mudbrick with indentations SF K 161.8

## **PHASE 5** (Fig. 146)

The plan of Complex K1 changed only slightly in this phase. The wall from Room K which created the outer Area O was not present, so access to the building was directly from Room B. In the middle of this room were an interred jar (SU 23) and a small wall (SU 27. Luciani 2002: 164). Rooms M and N in this phase were a single room, F, with jar 156 already present (Luciani 2002: 164).

In the southern building, in Room I jar 28 was already present, while in Room H there was partially interred a round bench (SU 126). An oven (SU 463) was found outside Rooms C and L, while east of Room C there was a large pit (SU 423) containing extensive ash deposits and traces of burnt material. Its clay superstructure had collapsed *in situ* and it appeared to be a "slag pit iron-smelting furnace" (Luciani 2002: 164 and note 357).

The architecture was rather poor, with walls with a base of small-sized stones and layers of mudbricks above and floors made of mud, sometimes hardened; only Room C was already surrounded by thick *pisé* walls.

Most objects found in this level were associated with food preparation and storage and textile weaving: a basalt grinding stone and an unfired clay weight came from Room I, a stone pestle and storage jars from Room A. In the latter also a small bronze rod and a piece

of metal slag were also found, probably indicating that metalworking activities were carried out as well. In the outer eastern area were present jars, pestles, stone artefacts, a basalt working stone, weights in unfired clay and stone and a carnelian bead (Luciani 2002: 165). The paved street (SU 421 in this phase) and Building K2 were already present (Luciani 2002: 164).

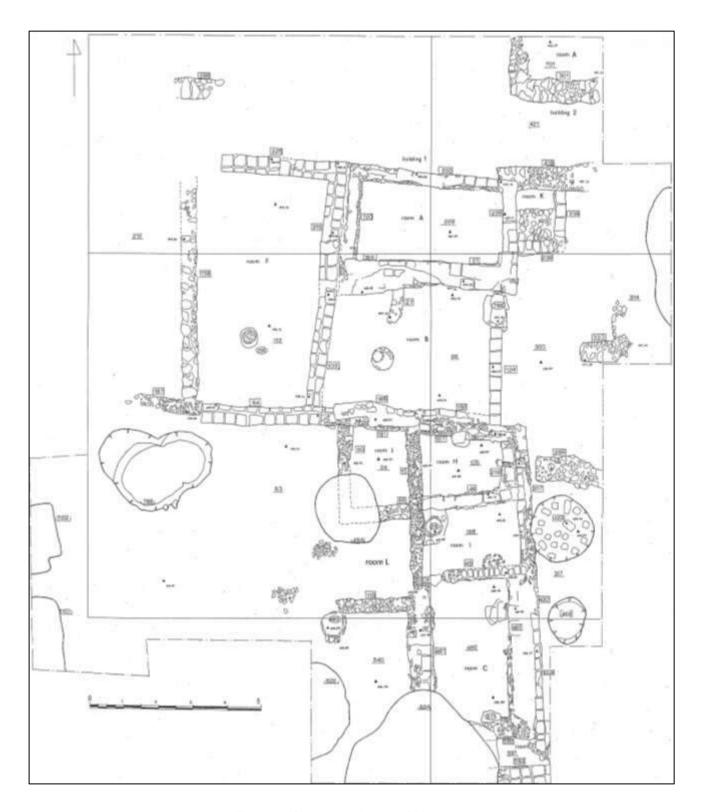


Fig. 146: Operation K, plan of Phase 5

# **PHASE 6** (Figs. 147-152)

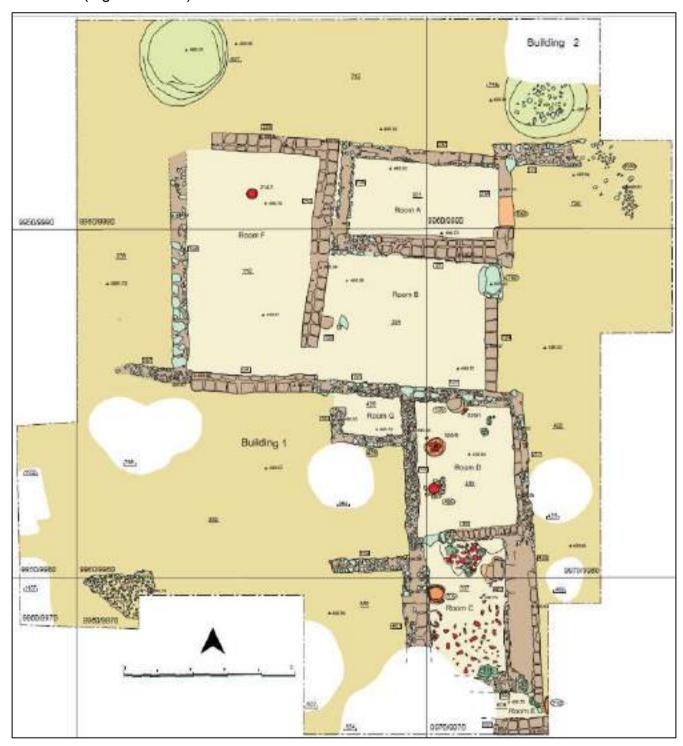


Fig. 147: Operation K, plan of Phase 6 (Al-Maqdissi et al. 2002a, Pl. 5e)

Some changes in the complex's layout can be observed in this level. The northern building still consisted of three rooms (A, B, F), while four units composed the southern building (Rooms C, D, E and G, fig. 148. Luciani 2002: 161).

Other than the entrance from Room B, access to the northern building was possible through a second doorway (SU 584) in Room A, which was blocked in Phase 5. Room K did not exist in this level. In Room F there was another interred jar (SF 214.1), located further north than jar 156, and an opening in the eastern wall – which was blocked in the later phase – permitted passage to Room B (Luciani 2002: 161).

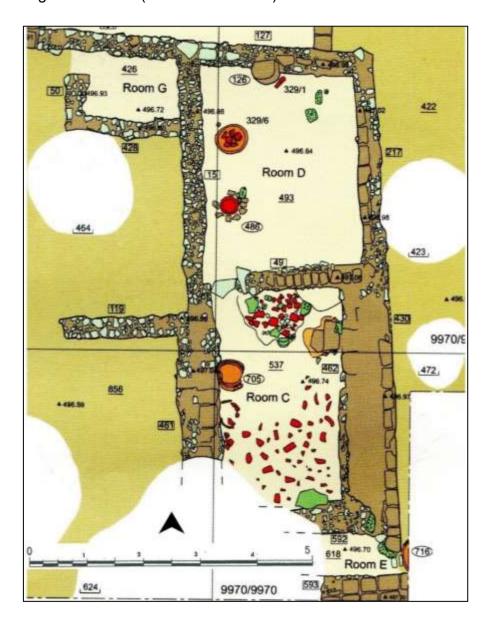


Fig. 148: Operation K, Phase 6. Southern building.

In the southern building, pyrotechnic installations were discovered in Rooms C and E (SU 705 and 716). Room C in this phase was already characterised by thick *pisé* walls and a triple-ring, clay-walled oven (SU 705) abutted the western wall, and a double-step mud-brick installation (SU 462) abutted the eastern one.

Oven 705 was associated with a clay bronze crucible (SF 539.10, fig. 149) and bronze residues, glass-paste and stone beads, basalt tools and a bone spatula: this clearly indicates

that the room was used for metallurgical production (Luciani 2002: 161; Luciani 2003: 160). The presence of beads and glass-paste may point to jewellery manufacture (Luciani 2002: 161).



Fig. 149: Operation K, Phase 6, crucible SF 539.10 (Luciani 2002 fig. 129)

From Room C, Room D was accessible by means of a narrow doorway with a stone threshold. It contained a clay-walled hearth (SU 329/6) and the round bench (SU 126) already visible in Phase 5. Close to these, a bottomless jar (SU 486) was interred up to the rim in the floor (SU 493).<sup>64</sup> The finds from this context are of great interest: a bi-conical carnelian bead, basalt tools consisting of a mortar base with a fitting pestle and a working stone, and a therio-anthropomorphic painted bottle (SF 329.1, figs. 150, 152) found *in situ* at the foot of round bench 126. Bench 126 could therefore be convincingly interpreted as an altar (Luciani 2002: 161-162; Luciani 2003: 159-160).

The vessel has an upright human posture, although the figure is characterised by strong theriomorphic – turtle-like<sup>65</sup> – attributes: no specific divine symbol is present, but it is likely a cultic object, related perhaps to the metallurgic activities carried out in the communicating room or simply related to a domestic cult. No precise parallels are known<sup>66</sup> and it clearly belongs to the local pottery production. The bottomless jar SU 486, since it could have not possibly been used as a storage vessel, was perhaps related to the probable cultic activities performed in Room D (Luciani 2002: note 349).

On the western side of the southern building, a partition wall (SU 119) created two outdoor

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<sup>&</sup>lt;sup>64</sup> Jar 486 was found almost exactly under jar 28 of the later phases.

<sup>&</sup>lt;sup>65</sup> In Mishrifeh many discoveries (wall paintings, archaeozoological remains) are connected to turtles, which may well probably inhabited the area around the site. See Luciani 2002: 162 and note 351; Novák, Pfälzner 2002: 95, fig. 86.

<sup>&</sup>lt;sup>66</sup> For references see Luciani 2002: 162 and note 354.

spaces on the site of future Rooms J, L and the open space. There was a very small room (G) between Rooms B and D, with no passageway to the others and accessible only from the outside.



Fig. 150: Operation K, Phase 6, the therio-anthropomorphic vessel SF 329.1 at the moment of the discovery.





Fig. 151: Operation K, Phase 6. Left: theriomorphic figure 653.3. Right: camel's head 710.1.

Outdoors, north of Building K1, two waste-disposal pits (SU 746 and 647) were discovered, one of them (US 746) in place of Building K2: from these pits came a terracotta camel's head (SF 710.1, fig. 151), a second theriomorphic figure (SF 653.3, fig. 151) and an iron arrowhead (SF. 747.1).

In the external eastern area were discovered a shell with a passing hole, a round black and

white faïence stone imitation and a basalt working stone (Luciani 2002: 164 and note 355).

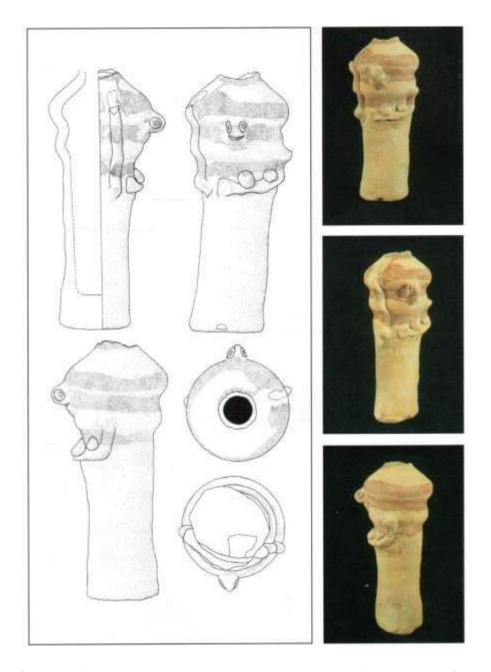


Fig. 152: Operation K, painted therio-anthropomorphic vessel 329.1 (Luciani 2002, fig. 131).

# **PHASE 7** (Figs. 153-155)

The plan of Complex K1 changed drastically in this level: overall, it consisted of only four rooms (A-D) in an irregular row oriented north-south. The north building (fig. 154) was already constituted of the two large Rooms A and B, which represented more than half of the surface of the complex, with the two doorways SU 584 and 766 (Luciani 2002: 160). In the southern building (fig. 155), the small round bench/altar SU 126 was already present in Room D, while two depressions in the floor – maybe earthen basins – appeared in this phase. Room C instead was not delimitated by the thick walls which will be typical of the

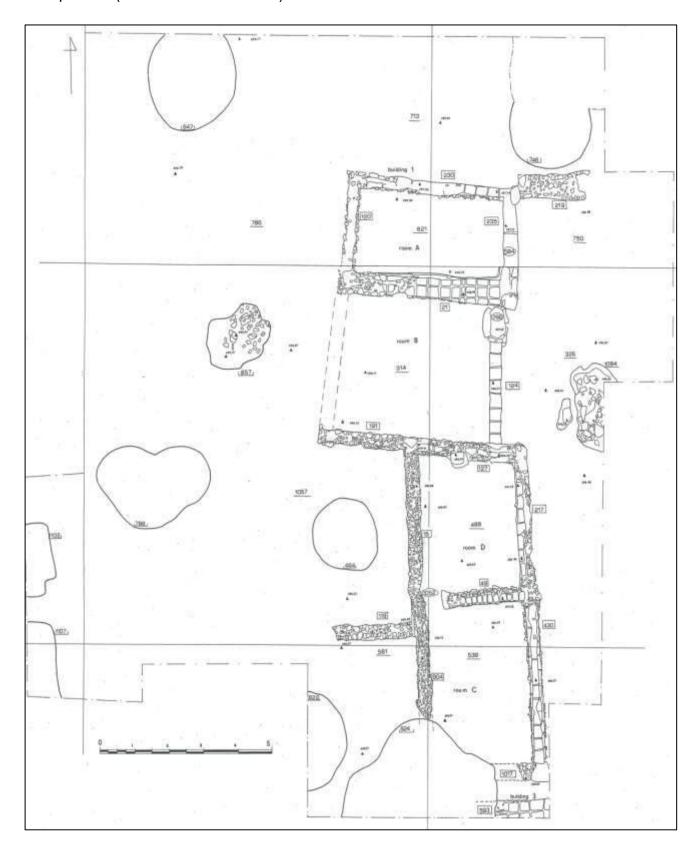


Fig. 153: Operation K, plan of Phase 7

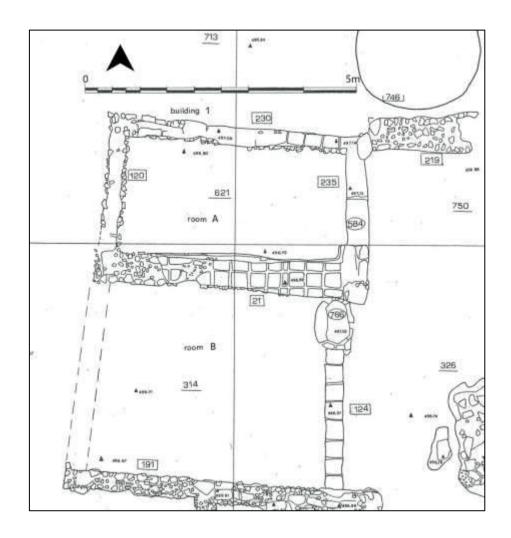


Fig. 154: Operation K, Phase 7. Northern building.

There was no Room G yet and the western side of the southern building was instead characterised by two large open spaces, already divided by the partition wall 119.

Basalt tools such as a pestle and fragments of bronze were also discovered, however not as numerous or as significant as in Phase 6. An unfired clay bobbin and a clay weight discovered in Room C may indicate the existence of textile production activities in this part of the complex during this phase.

South of the building, a wall (SU 593) belonging to another structure, Building K3, was exposed. The closing of the space between the two buildings created Room E in Phase 6 (Luciani 2002: 161).

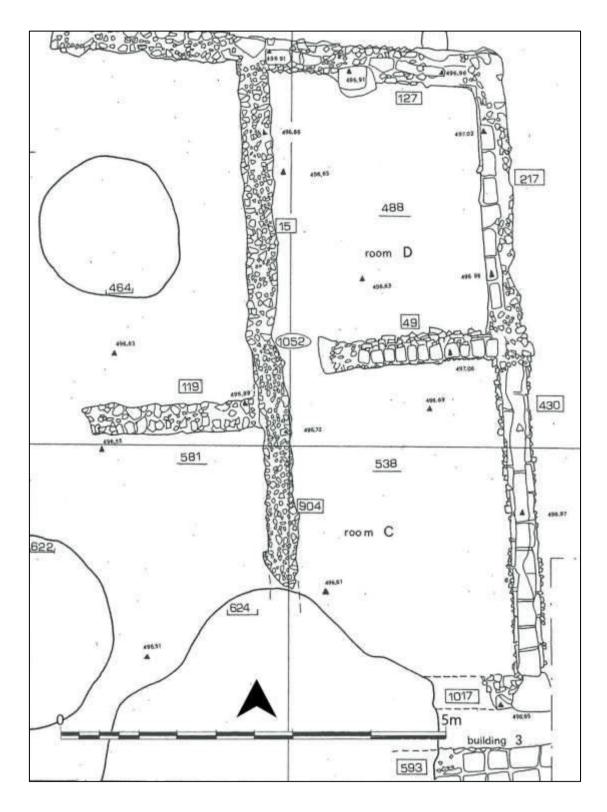


Fig. 155: Operation K, Phase 7. Southern building.

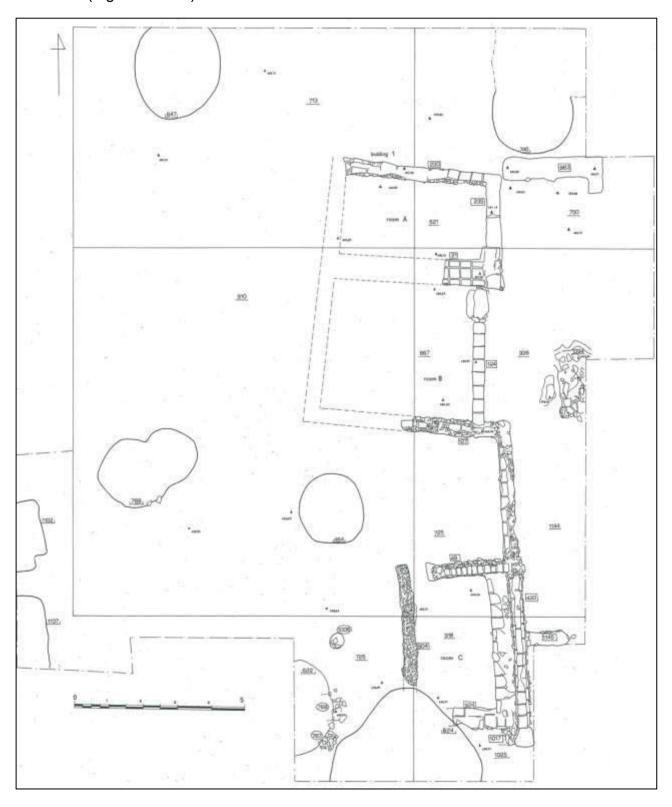


Fig. 156: Operation K, plan of Phase 8

This is the first phase of Complex K1. As in the later level, the original core was the eastern part of the complex, consisting of Rooms A, B, C, and the open space which later became Room D. In the northern building, Rooms A and B already featured the two entrances.

The southern building in this phase consisted exclusively of one space (Room C), which had a mud-brick bench (SU 924) along two walls. Numerous fragments of oven clay walls and ash layers were discovered on the outside and in the south-eastern corner of the room. Room D was probably an open-air space delimited by walls on three sides (Luciani 2002: 160).

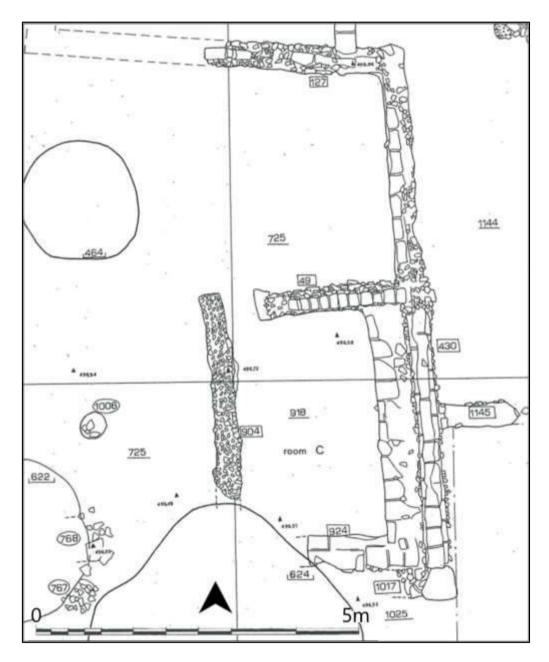


Fig. 157: Operation K, Phase 8. Southern building.

The finds consisted of many basalt tools, a Middle Bronze Age I terracotta female figurine, an over-fired glass-paste bead (SF 725.1) and a piece of bronze slag (SF 786.3). The evidence is not as conclusive as in later phases, although considering the productive character of the southern building in more recent levels, it may be proposed that productive

activities related to bronze and glass paste – that is, jewellery production – were already carried out since the beginning of Complex K1 (Luciani 2002: 160; Luciani 2003: 159). The pyrotechnical processes in this phase were probably performed inside Room C and outside, in the corner between its eastern wall (SU 430) and wall 1145. The small fire pit SU 1006, located to the west of Room C, was probably used for disposal of waste metal remains (Luciani 2002: 160). The northern building was instead probably devoted to dwelling and domestic activities (Luciani 2002: 160; Luciani 2003: 159). This would constitute further evidence that the separation of two buildings since the beginning of the complex's life was motivated by the will to keep out of the domestic area the smoke and smells of the productive processes connected to the metallurgical activity.

# **PHASE 9** (Figs. 158-159)

An extensive trodden hardened-silt floor (SU 765) covered the Late Bronze Age sequence (Luciani 2002: 158). The area later occupied by Building K-1 was largely devoid of any archaeological features, except for some refuse pits (SU 1083, 1105, 1645).<sup>67</sup> The largest one (SU 1105) was originally domed and was probably not only used as a garbage disposal pit, although its function is unclear: perhaps it was originally a silo, which fell into disuse and was re-utilized as a waste-disposal installation.<sup>68</sup> Between this pit and SU 1645, a small hand-made hemispherical cup (SU 1552) was interred: it contained fragmentary incinerated animal – sheep and goat – bones (Luciani 2002:159).

The only architecture of this level are the scant remains of another building, Building K-4 (fig. 159), in the south-western corner of the excavation area: three walls (SU 751, 976 and 1141) were discovered, creating a cross-shaped structure which formed three different rooms (A-C. Luciani 2002: 158).

In the northern wall (SU 976) there was a probable opening to Room A, which had a slightly lowered floor (SU 1100) with a smoothed, pink limestone slab (SU 1099) and other middle-sized slabs in the southern area. Slab 1099 was found directly in front of a stone and mudbrick installation (SU 1103): this created a small basin on a raised platform made of stone and sherds (Luciani 2002: 158). Close to the slab were found *in situ* six animal knuckle bones, also known as *astragali*, an overturned bowl and a basalt whetstone; three further knuckle bones were discovered inside the basin 1103 (Luciani 2002: 158-159). The gravel fill of a small nearby pit contained a goblet.

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<sup>&</sup>lt;sup>67</sup> Another waste-disposal pit (SU 917) was present on the eastern side of the excavation, close to the major architecture of the phase, Luciani 2002: 159.

<sup>&</sup>lt;sup>68</sup> Suggestion by Professor Morandi Bonacossi.

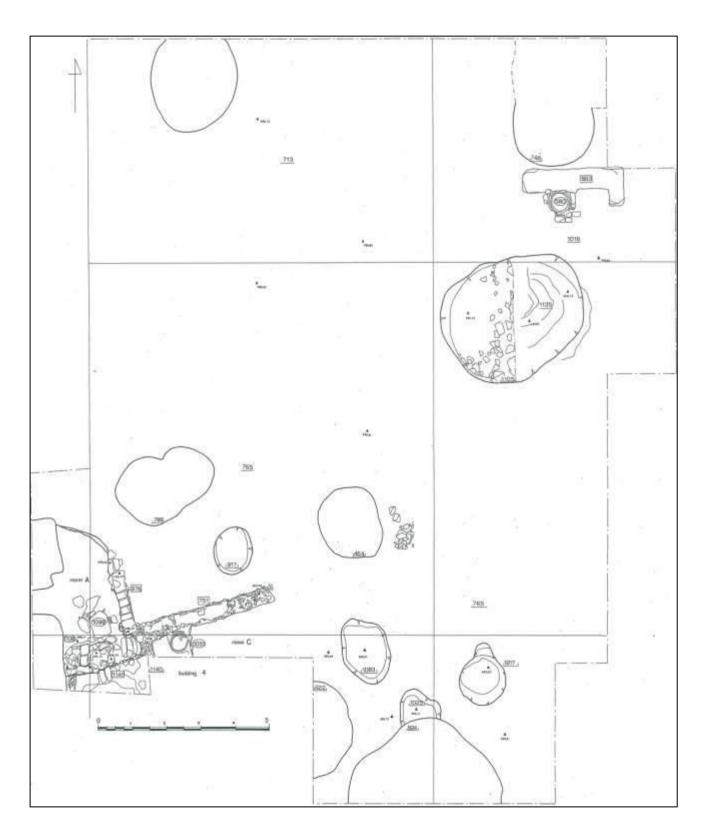


Fig. 141: Operation K, plan of Phase 9

Considering that *astragali* are known to have been used for playing, divination or cultic purposes, <sup>69</sup> one of these activities may have been practiced in this room (Luciani 2002: 159; Luciani 2003: 159). The faunal remains were examined by archaeozoologist E. Vila-Meyer

<sup>&</sup>lt;sup>69</sup> For references see Luciani 2002: 159 and notes 342 and 343; Luciani 2003: note 49.

(Luciani 2003: note 48): the knuckle bones were goats', belonging to at least five different individuals. Taking into account that they did not show any signs of use, and were not found in connection with other parts, they probably had some symbolic meaning. The western area of Room A was exposed in the 2002 campaign; the room had a wall in west (SU 2537) and a floor with a slightly higher level (SU 2782), in which was found interred a large basalt bowl (SF K 2751.701).

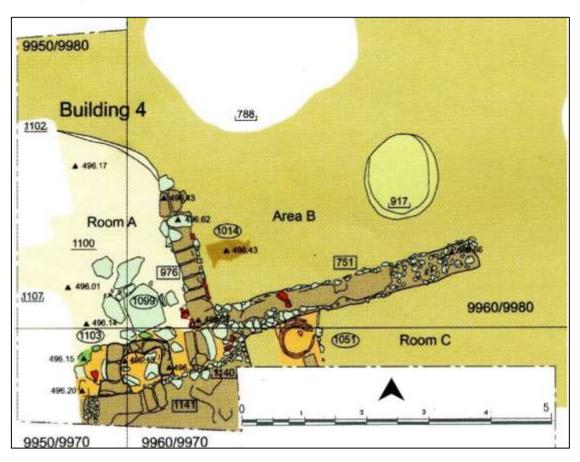


Fig. 142: Operation K, Phase 9, Building 4 (al-Maqdissi et al. 2002a, Pl. 5d).

The adjoining Area B may have been an outdoor space. On the other side of the wall SU 751 was Room C, perhaps another outdoor area. In Room C there was a pyrotechnic installation (SU 1051), with a double-ring, clay wall and a stone and *pisé* platform. A similar oven (SU 580) was interred into floor SU 1016 in the north-east corner of the excavation area (Luciani 2002: 159).

Metal objects were found, some of them clearly from earlier Bronze Age phases,<sup>70</sup> such as a bronze needle (SF 1219.2). An iron spearhead (SF 796.2) attests the use of iron for weapons. Other finds included many basalt tools, Cyprea shells and a fragment of terracotta

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<sup>&</sup>lt;sup>70</sup> For example, a bronze pin (SF 751.2) is identical to others found in Phases 11 and 12 dated to the Late Bronze Age. Luciani 2002: 159.

wagon (Luciani 2002: 159).

Phase 9 documents that almost from the beginning of the Iron Age occupation, productive and perhaps cultic activities were already performed in the area of Operation K. The presence of an interred cup filled with incinerated animal bones, and the *astragali* near Building K4, may suggest foundation or "cultic" activities related to the initial preparation for the founding of Complex K1. They may have been part of a ritual to purify the area before erecting the new structure (Luciani 2002: 159; Luciani 2003: 159).

# **PHASE 10** (Fig. 160)

This is the earliest Iron Age level of the Operation and was identified in the 2001-2002 campaigns. It was characterised mainly by pits (SU 3162, 2936, 2773), which cut the underlying Late Bronze Age architecture.



Fig. 160: Operation K, basalt head SF 2946.701 (Morandi Bonacossi 2009, fig. 13).

The fill of pit 2773 contained an exceptional find, that is a basalt human head (K 2946.701, fig. 160) measuring 16 x 12 x 12 cm: it was sculpted in relief, probably out of a single cobble, in a very schematic way. Albeit roughly sculpted, it is quite expressive and has curly hair on

the top of the head (Morandi Bonacossi 2013: 124). This basalt head is not the only one found at Mishrifeh: two other human heads, of different sizes but both in basalt and sharing similar traits with the one discovered in Operation K, were discovered in 1894 and 1929 on the site, but little is known about their contexts of provenance (Morandi Bonacossi 2009: 130-131; Morandi Bonacossi 2013: 123-124). Their stylistic traits are similar to sculptures found at Tell Tayinat and dated to the early Iron Age II, thus indicating a connection between Mishrifeh and the Kingdom of Palastin, of which Tell Tayinat was the capital (Morandi Bonacossi 2013: 122-124; Morandi Bonacossi 2019: 24-25. Chapter 6.2).

#### 3.4.2 POTTERY

The analysis of the pottery from Operation K is based entirely on the direct study of the material from the 1999 and 2000 campaigns and stored at the Department of Humanities and Cultural Heritage of the University of Udine. The remaining finds in Syria were unavailable for the autoptic study.

The ceramic assemblage from Operation K, considering its diverse chronology with respect to other Operations, offers interesting new information on the pottery of Mishrifeh. However, the considerable amount of redeposited Bronze Age pottery and limited Iron Age assemblage of some phases makes a complete overview difficult, especially for the earliest periods.

The pottery from **Phase 2** is limited in terms of quantity, less than thirty sherds, and of many different of types.

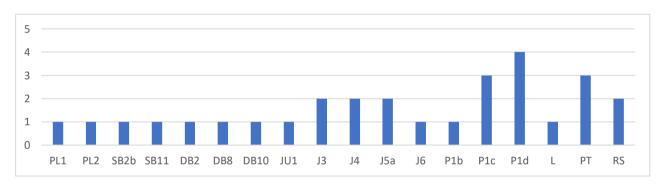


Table 10: Operation K, Phase 2. Pottery.

Plates are represented exclusively by one sherd of the round (PL1) and one of the squared (PL2) rim types. Concerning shallow bowls, only one red slipped sherd of carinated bowl with simple rim (SB2b) and one sherd of the outward swollen rim type (SB11) occur: therefore, the Red Slip is attested on 50% of the shallow bowls.

Deep bowls are just slightly more numerous: equally present are bowls with tapering rim (DB2), with externally thickened rim and internal angular thickening (DB8) and globular bowls with tapered flaring rim (DB10).

A sherd of trefoil jug (JU1) is the only jug specimen found in the level.

Jars are represented especially by the types with double rim (J3), modelled rim (J4) and triangular rim (J5a). Jars with concave neck and thickened rim (J6) also occur, through in scarce quantities (only one fragment). One sherd of J5a, that is 14% of the jars, is painted. Lastly, large storage jars with swollen rim (P1) are documented, especially the oval and

pointed variants (P1c and P1d).

A fragmentary lamp (L) also occurs in this level.

Painted pottery (PT) represents 11% of the assemblage of the phase, while the percentage of red slipped pottery (RS) is slightly lower, 7.5%.

**Phase 3** yielded a more substantial assemblage of about 80 sherds, with a high percentage of painted pottery.

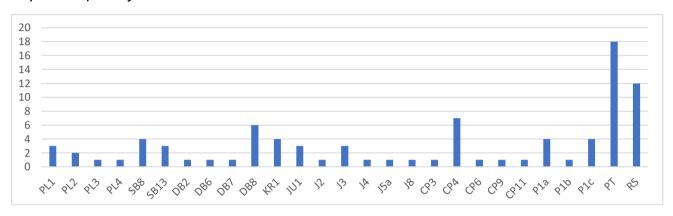


Table 11: Operation K, Phase 3. Pottery.

Plates are of the round (PL1), squared (PL2) and tapering (PL3) rim types, with one sherd of carinated plate and squared rim (PL4) also present: 20% are painted and 40% red slipped. Regarding shallow bowls, bowls with flat thickened rim (SB8) are the most common form, while carinated bowls with simple or tapering rim (SB13) are also attested. Red Slip is documented on 57% of the shallow bowls.

Concerning deep bowls, the most common type is that with externally thickened rim and internal angular thickening (DB8), while bowls with tapering rim (DB2), out-turned rim and tapering lip (DB6) and thickened rim and round lip (DB7) occur only rarely. Painted deep bowls represent 11% of the assemblage and red slipped ones 66%.

Kraters are only of the out-turned rim type (KR1) and most of them -75% - are painted. For jugs also only one form is represented, the trefoil type (JU1).

The assemblage of the jars is a bit more wide-ranging: double rim jars (J3) are the most common form, followed by equal amounts of jars with collared rim (J2), modelled rim (J4), triangular rim (J5a) and upturned swollen rim (J8).

Cooking pots can be, as already seen in an earlier section, divided into two macro-groups: holemouth and short-necked shapes. In this level, holemouth forms are much more numerous, especially vessels with small out-turned thickened rim (CP4), and pots with a slight depression under the rim (CP3) are attested as well. Short-necked forms are

represented by pots with straight rim (CP6), upright thickened rim and external depression (CP9) and inverted stance and grooved rim (CP11).

Large storage jars with swollen rim occur in the variants with rounded, squared and oval rim (P1a, b, c).

Painted pottery (PT) is relatively frequent in this level, representing more than 23% of the assemblage, while red slipped vessels (RS) are just slightly less attested, 15.5%.

The ceramic assemblage of **Phase 4** is composed of more than 100 sherds and the percentage of painted pottery is unusually high.

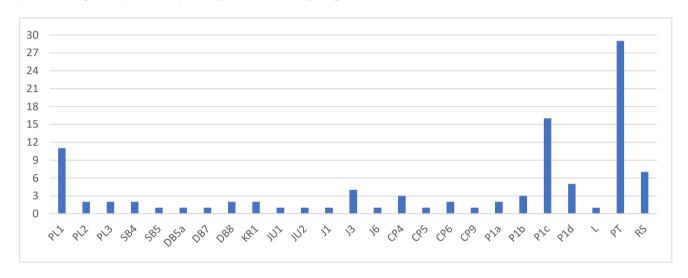


Table 12: Operation K, Phase 4. Pottery.

Plates have mainly round rims (PL1); however squared (PL2) and tapering (PL3) rims are attested as well. Many of the sherds are either painted (26%) or red slipped (20%).

Shallow bowls are uncommon and represented by types with inturned thickened rim (SB4) and with inward rim and external triangular thickening (SB5).

A similar situation can be observed for deep bowls: bowls with externally thickened rim and internal angular thickening (DB8) are the most common form, through in absolute numbers they are very few (2 sherds), and bowls with inward rim (DB5a) and thickened rim and rounded lip (DB7) occur as well. Red Slip characterises 50% of the assemblage.

Kraters have out-turned rims (KR1) and all of them are painted; jugs instead are represented by the trefoil (JU1) and the inward simple rim (JU2) forms, with 50% of them painted.

Jars show a decrease in the range of forms: jars with double rim (J3) are still the most common type, while neckless jars with thickened rim (J1) and jars with concave neck and thickened rim (J6) are rarer.

Also cooking pots decrease in quantity and types as compared to the later phase: holemouth

vessels with small out-turned thickened rim (CP4) are still the most attested form, followed by holemouth pots with outward inflated rim (CP5) and short-necked pots with straight rim (CP6) and with a slight depression (CP9).

Large storage jars of the swollen rim type (P1 and variants) are the most common shape in this level.

A lamp (L) with complete profile is also present.

While Red Slip Ware (RS) decreases sharply to less than 7%, painted decorations (PT) are found on 28% of the assemblage.

**Phase 5** yielded a pottery assemblage little different from Phase 4 in terms of quantity (more than 100 sherds), but more wide-ranging in terms of types present.

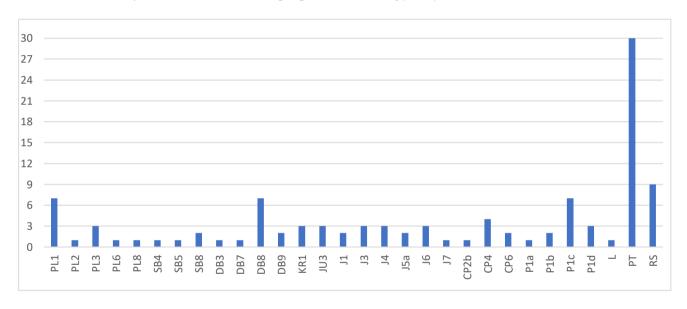


Table 13: Operation K, Phase 5. Pottery.

Plates with round rim (PL1) are still the majority and plates with squared (PL2) and tapering rim (PL3) are still documented. New forms appearing in this level are plates with outward flaring rim (PL6) and with high carination and slightly triangular thickening (PL8). Plates are mostly painted (30%) or red slipped (30%), with only a few sherds devoid of any treatment. Shallow bowls are represented by types with inturned thickened rim (SB4), inward rim and external triangular thickening (SB5) and flat thickened rim (SB8): only one sherd, 25%, is red slipped.

Regarding deep bowls, the most common form is the bowl with externally thickened rim and internal angular thickening (DB8), followed by the inward rim and internal angular thickening (DB9) type. A sherd of bowl with straight flaring walls (DB3) and one of bowl with thickened rim and rounded lip (DB7) are present as well. The Red Slip characterises 27% and paint

9% of the deep bowls. Most remarkable is the fragment of DB3 which is both painted and red slipped.

Kraters and jugs are not common forms in this level (merely 3 sherds for each). Concerning the former, only the type with out-turned rim (KR1) is documented, with all the fragments painted. Jugs are represented exclusively by the type with everted simple rim (JU3).

Jars display an increase both in quantity (14 fragments against the six in the later level) and in the range of forms compared to Phase 4: double rim (J3) specimens are once again the most common type and jars with modelled rim (J4) and with concave neck and thickened rim (J6) are quite frequent. On the contrary, neckless vessels with thickened rim (J1), triangular rim (J5a) and outward rim (J7) are rare.

Regarding cooking pots, holemouth pots with small out-turned thickened rim (CP4) still occur frequently: holemouth vessels with thickened rim (CP2b) are attested as well, though they are rare. Short-necked pots are represented exclusively by the straight rim (CP6) type.

Once again, large storage jars are one of the most common forms in the assemblage: only the swollen rim type with its variants (P1a, b, c, d) is documented.

One lamp sherd (L) is attested as well.

Painted pottery (PT) is still notably present in this phase, representing almost 30% of the ceramic assemblage. Red Slip Ware (RS) slightly increases to 9% compared to the later phase.

The pottery assemblage of **Phase 6** is quite sizeable, with almost 90 diagnostic sherds.

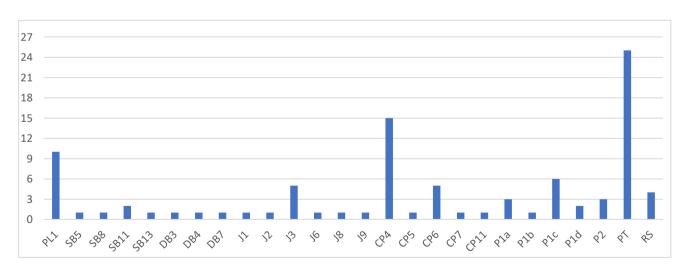


Table 14: Operation K, Phase 6. Pottery.

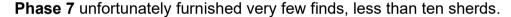
Plates are exclusively of the round rim type (PL1) and the majority – 80% – are painted. Shallow bowls are quantitatively little attested (five sherds); however, they do show a slight

increase in the range of forms, as bowls with inward rim and external triangular thickening (SB5), flat thickened rim (SB8), outward swollen rim (SB11) and carinated bowls with flared rim (SB13) occur in this level. Red Slip characterises 50% of the shallow bowls.

Concerning deep bowls, these are also infrequent (three sherds): the forms documented have flaring straight walls (DB3), squared rims (DB4) and thickened rounded rims (DB7). A single red slipped sherd is attested, representing 33% of the assemblage of the deep bowls. Jars display a quite wide range of forms: double rim jars (J3) are as usual the most common type, while neckless jars with thickened rim (J1), collared rim vessels (J2), jars with concave neck and thickened rim (J6), upturned swollen rim (J8) and straight vertical rim (J9) appear in scarce numbers. Only 20% of the jars, that is one sherd of J1 and one of J9, are painted. Cooking pots are the most abundant form in this phase and this probably reflects both the domestic and productive nature of the context (Chapter 4.6). Holemouth vessels are represented almost exclusively by specimens with small out-turned thickened rim (CP4), which are also the most common form of cooking pot. A sherd of pot with outward inflated rim (CP5) is present as well. Short-necked pots are of the straight rim (CP6), upright sinuous rim (CP7) and inverted stance and grooved rim (CP11) types.

Large storage jars are still quite common, especially the swollen rim type (P1 and variants), however large storage jars with outward rim (P2) are documented as well.

As in later Phases 5-4, the percentage of painted pottery (PT) is quite high, 29%, while red slipped materials are rare, representing 4.6% of the assemblage.



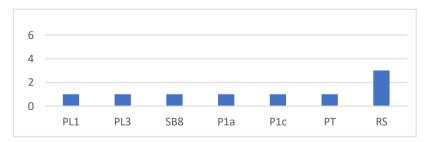


Table 15: Operation K, Phase 7. Pottery.

Open forms are the majority in the assemblage, through their absolute number is very low (three fragments). Plates are represented by one painted sherd of the simple rim (PL1) and one red slipped fragment of the tapering rim (PL3). Regarding bowls, only a red slipped sherd of shallow bowl with flat thickened rim (SB8) is present.

In addition to the aforementioned fragments, the ceramic assemblage comprises a couple of sherds of large storage jars with swollen round and oval rims (P1a, c).

Contrary from what occurs in the other phases, the percentage of Red Slip pottery (RS) is much higher -27% – than that of painted specimens (PT) – 9%. However, this is presumably due to the scarce quantity of pottery examined, and these percentages are probably not representative of the real quantity of red slipped and painted pottery.

The assemblage of **Phase 8** is as poor as that of Phase 7, composed of only eight fragments in total.

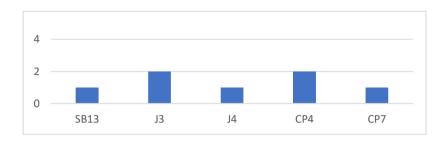


Table 16: Operation K, Phase 8. Pottery.

Open forms are represented exclusively by a sherd of carinated bowl with flared rim (SB13), while closed forms show a wider range of types. Jars with double rim (J3) and with modelled rim (J4) are present, as well as cooking pots with small out-turned thickened rim (CP4) and upright sinuous rim (CP7).

No painted or red slipped pottery is documented.

The assemblage of **Phase 9** is composed of a slightly larger number of fragments, about twenty diagnostic sherds.

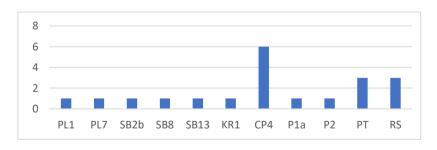


Table 17: Operation K, Phase 9. Pottery.

Plates have round (PL1) and internally thickened rims (PL7). Shallow bowls are carinated with simple (SB2b) and flared (SB13) rims and rounded with flat thickened rim (SB8): 66% of them are red slipped. Deep bowls are represented only by a red slipped sherd of bowl with externally thickened rim and internal angular thickening (DB8). A fragment of krater with

out-turned rim (KR1) is present as well.

Cooking pots are the most common form in this level and they are exclusively of the type with small out-turned thickened rim (CP4). Regarding large storage jars, one sherd of the swollen rounded rim type (P1a) and one with outward rim (P2) are attested.

The percentages of painted (PT) and red slipped (RS) pottery are the same, that is almost 16% of the assemblage: however, these percentages are obviously influenced by the small assemblage analysed.

Unfortunately no pottery from Phase 10 was available for the analysis.

Type/ Phase	PT	RS
K-2	11	7.5
K-3	23.3	15.6
K-4	28	6.8
K-5	29.7	9
K-6	28.7	4.6
K-7	14.2	43
K-8	1	1
K-9	15.7	15.7

Table 18: Operation K, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

Ā -		_	£.	4.				7.1
DB 10	6.4							
6 6				ю				
8 8	6.4	5.	3.1	. ε				
DB 7		1.7	9.1	1.5	9.			
0B 6		1.7						
DB 5a			9.1					
DB 4					1.6			
DB 3				1.5	9.1			
DB 2	4.3	1.7						
SB 13		5.3			1.6		14. 3	7.1
SB 11	4.3				3.1			
S &		7		ю	1.6	20		7.1
SB 5			1.6	1.5	1.6			
S 4			3.1	5.				
SB 2b	6.4							7.1
P								7.1
9 e				5.				
Д <sub>4</sub>		1.7						
3 3		1.7	3.1	4.		20		
PL 2	6.4	3.5	بى 1.	<del>7.</del>				
<b>Ⅰ</b> ←	6.4	5.3	17	- 6 κ	2 2	50		7.1
TYPE/ PHASE	K-2	Ķ-3	<del>Х</del>	K-5	K-6	K-7	<del>К</del> -8	K-9

Table 19: Operation K, percentage occurrence of open and mixed form types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

P2					4.5			5.1
Z p	17.		7.7	4.4	3.1			
Z 0	13	7	24.	10.	9.1	20		
<b>7</b> 0	4.3	1.7	9.4	ю	9.1			
<b>7</b> a		7	2.7	7.5	4.5	70		7.1
G 7		7.1			6.			
G 6		7.1	9.					
C C					6.	<u>4.</u> ε	<del>4</del> ε	
G 6		1.7	3.1	м	7.6			
G &					9.1			
Q 4		2. 8	9.4	ဖ	22.	28.	28.	45. 8
G &		7.1						
CP 2b				7.5				
ಕ					1.6			
ब्र		1.7			1.6			
۲,				7.5				
97	£.		9.	4 4:	9.1			
a a	8.7	1.7		ю				
4	8.7	1.7		4.4		4. 8	14. 3	
ಕ್ಷ	8.7	5.3	6.1	4.4	7.6	28.	28.	
5		1.7			1.6			
7			1.6	е	1.6			
J &				4.4				
J 6			1.6					
3 -	4.3	5.3	1.6					
TYPE/ PHASE	K-2	K-3	<b>X</b>	K-5	K-6	K-7	K-8	6- <b>У</b>

Table 20: Operation K, percentage occurrence of closed form types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

#### 3.4.3. CONCLUDING REMARKS AND CHRONOLOGY

As already mentioned, the archaeological evidence from Operation K differs from that of the other excavated areas due to its chronology and the type of occupation exposed: that means that at the moment it is the only Operation where it is possible to observe the very first occupation of Mishrifeh in the Iron Age. This occupation consisted of densely packed large buildings, with the same orientation, characterised by both domestic and productive in function (Luciani 2002: 167; Morandi Bonacossi 2005: 81).

In this section, as for the previous Operation, a limited overview of the pottery will be presented to provide a chronological context for the archaeological evidence, while the ceramic typologies will be extensively discussed in later chapters.

The more recent phases, Phases 2 and 3, consist of trodden floors with pits, silos and partially reused underlying installations (Luciani 2002: 167-168). The pottery assemblages – especially that of Phase 3, which is more sizeable (almost 80 fragments compared to about 30 of Phase 2) – can be correlated with the assemblages of Phases 5 and 6 of Operation J and Phases 6 and 9 of Operation H-T1 and can thus be dated to the Iron Age II (Chapters 3.3.3, 3.5.5, 3.10). Some fragments which point to a more specific chronological articulation are for example the sherds of the J5 type. One of the specimens from Phase K2 (K 17.2, **PI. 41:4**) is characterised by a peculiar sharp ridge on the neck. No precise parallel is known to me; nonetheless it is quite similar to unpainted vessels from Tell Mastuma<sup>71</sup> and from Hazor,<sup>72</sup> the first dated to the Late Iron Age II and the latter to the 8<sup>th</sup> century. Phase 2 may thus presumably be dated to the Late Iron Age II, that is the second half of the 8<sup>th</sup> century BC.

Regarding Phase 3 instead, the red slipped sherd of carinated plate with squared rim (PL4 - K 595.19, **PI. 7:6**) is similar to the specimen from Phase J-6 (J 279.2, **PI. 7:5**) and closely resembles a specimen from Chatal Hüyük<sup>73</sup> dated to the Iron Age II (850-750 BC).

The painted pottery is particularly interesting in this phase. A thick-walled body-sherd – presumably of a krater – with an interestingly unique decoration, that is cross-hatched triangles and horizontal wavy lines in red paint associated with burnishing of the whole surface (K 480.22, fig. 161, **PI. 75:2**). The combination of paint and burnishing is an unusual treatment in Mishrifeh and appears on only a few sherds, most of them from Operation K. Painted decorations associated with burnishing are peculiar to the pottery of Central-

<sup>&</sup>lt;sup>71</sup> Wada 2009b, fig. 4.50:8

<sup>&</sup>lt;sup>72</sup> Sandhaus 2012, fig. 4.9:9.

<sup>&</sup>lt;sup>73</sup> Pucci 2019, Pl. 129:a

Western Syria and South-Eastern Anatolia in the Iron Age I (Venturi 2007: 404). Furthermore, motifs like cross-hatched triangles and horizontal wavy lines can be found in the Iron Age I period in the same area: specimens similar to the sherd from Operation K occur in Tell Afis,<sup>74</sup> Chatal Hüyük<sup>75</sup> and Tell Tayinat.<sup>76</sup>



Fig. 161: Operation K, painted and burnished fragment of krater K 480.22.

At Tell Afis the cross-hatched triangles motif is found especially on kraters, which would fit with the specimen from Mishrifeh, and is documented in the Northern Levant from the Middle Bronze Age (Venturi 2020: 103-104; Pucci 2019: 181). Cross-hatched triangles are the most popular decoration on kraters at Tell Tayinat as well and they are found especially in the earliest levels of the Iron Age I (Janeway 2017: 101). They are also common in Chatal Hüyük, notably in Phase N (Pucci 2019: 181-182). Horizontal wavy lines seem to have connections to the Aegean (Janeway 2017: 101; Montesanto 2020a: 68; Pucci 2019: 182; Venturi 2020: 100) and they are particularly present in the Iron Age I on the Levantine coast (Venturi 2020: 100): in Tell Afis and Tell Tayinat this decoration is found primarily on kraters and jars (Janeway 2017: 101; Venturi 2020: note 175). Hatched triangles and wavy lines are attested also in the Iron I pottery assemblage of Tell Atchana, but they do not seem associated with kraters (Montesanto 2020a: 68). The same decorations can also be found at Hama (Riis

<sup>&</sup>lt;sup>74</sup> Venturi 2020: 100-101, 103-104. Pls. 72:1-2; 73:8 this one especially for the association of cross-hatched triangles and small incisions which are present also in the specimen from Operation K.

<sup>&</sup>lt;sup>75</sup> Pucci 2019, Pls, 68:j, 70:e, 76:g, 84:e, 152:h,

<sup>&</sup>lt;sup>76</sup> Janeway 2017, Pls. 7:4, 11:4, 20:15.

1948: 86-110, fig. 130A), 'Ain Dara,<sup>77</sup> Ras Ibn Hani,<sup>78</sup> Tell Tweini<sup>79</sup> and Tell Kazel.<sup>80</sup>

Thus the sherd almost certainly belonged to a krater dating to the Iron Age I and in all probability it is redeposited. In fact, I believe that the high percentage of painted pottery in this level may be partially explained by the reuse of the previous installations and structures. Many painted fragments, among which K 480.22, have been found in the fills of the silos which cut the underlying structures and could therefore be redeposited, given that similarly decorated pottery is particularly characteristic of Phases 4-6.

Considering the correlations with levels from other Operations (Chapter 3.10) and the presence of ceramic vessels attributable to the Iron Age II, like the already mentioned PL4 sherd and the DB5 typology with comparisons from Hama<sup>81</sup> and Tell Mastuma,<sup>82</sup> Phase 3 should be dated to the Iron Age II, perhaps between the mid-9<sup>th</sup> and mid-8<sup>th</sup> century.

Phases 4-8 are characterised by the presence of Complex K1. In particular, Phases 4-6 represent the second occupation phase of the buildings (phase B), when the complex was more elaborate and occupied a larger area (Luciani 2002: 161-167). The pottery assemblage contains forms already attested in Iron II levels, with a considerable amount of storage ware.

Some sherds, instead, seem to belong to the Iron I tradition. In Phase 4, for example, a ring base painted with a cross motif and wavy lines (K 22.12, **PI. 66:3**) very similar to a base from Tell Afis<sup>83</sup> dated to the late 11<sup>th</sup> – first half of the 10<sup>th</sup> century, and a sherd with a cross-hatched triangle painted on the inner surface (K 228.11, **PI. 76:1**) were found. A remarkable find is a krater with out-turned rim and painted bichrome decoration (K 161.59, fig. 162, **PI. 31:4**) with parallels from Tell Afis and Tell Tayinat. To be more precise, its shape resembles the kraters with everted triangular, inwardly slanting, rim of Venturi (shape KR 1BA. Venturi 2020, fig. 17)<sup>84</sup> and a specimen from Tell Tayinat<sup>85</sup> from the earliest Iron I phase (around the end of the 12<sup>th</sup> century). The decoration is geometric, with linear bands and a sort of frieze or "garland" created by a wavy line quite different from that which decorates the fragment from Phase 3. I have not found parallels with the same exact pattern, however the krater from Tell Tayinat mentioned previously shows a very close resemblance. Another

<sup>&</sup>lt;sup>77</sup> Stone, Zlmansky 1999, fig. 81.

<sup>&</sup>lt;sup>78</sup> Bounni et al. 1979, fig. 27:3 (? No number in the publication); Bounni et al. 1981, fig. 29.

<sup>&</sup>lt;sup>79</sup> Vansteenhuyse 2010, figs. III.3:10-11. At Tweini cross-hatched triangles are present on kraters from the Late Bronze Age (Vansteenhuyse 2010, figs. III.3:7, 9).

<sup>80</sup> Capet 2003, figs. 21:n, 37:c, 43:k.

<sup>81</sup> Riis, Buhl 1990, fig: 80:601-603, 607, 609.

<sup>82</sup> Wada 2009b, fig. 4.24:3.

<sup>83</sup> Venturi 2020, Pl. 109:6.

<sup>&</sup>lt;sup>84</sup> Venturi 2020, Pls. 102:3, 118:5. These parallels belong to a period from the mid-11<sup>th</sup> to the mid-9<sup>th</sup> century.

<sup>&</sup>lt;sup>85</sup> Welton 2019-2020, fig. 6:1.

similar vessel comes again from Tell Tayinat,<sup>86</sup> but from the latest Iron I level, dated to the 11<sup>th</sup> to 10<sup>th</sup> century BC. Analogous decorations occur also in Chatal Hüyük from the N\_mid period (c. 1100-950 BC) until the O\_late period (c. 600-500 BC).<sup>87</sup> A krater from O\_mid levels<sup>88</sup> strongly resembles the sherd from Operation K.

Concerning Phase 5, the plate/shallow bowl with high carination and triangular rim (PL8, K 791.18, **PI. 9:1**) sherd has a close parallel in a specimen from Tell Afis<sup>89</sup> dated to 950-850 BC. The neckless jar rim (J1, K 63.18, **PI. 36:8**) has an unusual triangular shape and displays very strong affinities with specimens from Tell Qarqur<sup>90</sup> and Tell Nebi Mend:<sup>91</sup> the vessel from Tell Qarqur is dated to the transition between Iron I and II, and that from Tell Nebi Mend to the generic Iron II. Since this type of neckless jar with thickened triangular rim has been found at Mishrifeh exclusively in Operation K and in this phase, it may point more to an Iron I/II transition chronology than a fully Iron II dating, as at Tell Qarqur. A convex pedestal base, which presents on the inner surface a decoration with bands and wavy lines similar to the one in a later level (K 19.66, **PI. 67:6**), presumably belongs to the Iron I ceramic horizon as well.





Fig. 162: Operation K, Iron Age I painted sherds from levels 4-5. Left: K 161.59; right K 791.9.

From Phase 6 comes a sherd of bowl with outward swollen rim (SB11 – K 331.20, **Pl. 16:4**)

<sup>86</sup> Janeway 2017, Pl. 12:3.

<sup>&</sup>lt;sup>87</sup> Pucci 2019, Pls. 5:f, 16:j, 28:b; 39:a, 70:g, 160:c.

<sup>88</sup> Pucci 2019, Pl. 29:a.

<sup>89</sup> Venturi 2020, Pl. 121:13.

<sup>90</sup> Dornemann 2003a, fig. 88:23.

<sup>&</sup>lt;sup>91</sup> Whincop 2007, fig. 9:a.

which has an exact parallel in a specimen from Tell Afis<sup>92</sup> from transitional Iron I/II contexts. In the same phase was found a fragment of pot with stepped rim (CP11 – K 331.3, **PI. 59:2**) that closely resembles a cooking pot from the earliest Iron I phase of Tell Tayinat.<sup>93</sup>

A thick-walled body fragment (K 331.2, **PI. 76:4**), presumably of a krater, resembles the large krater sherd from Phase 3, due to the traces of burnishing combined with the painted decoration. The motif is a zig-zag line between two irregular bands, a pattern known in the Northern Levant since the Middle Bronze Age and documented also in the Iron Age I (Venturi 2020: 105). Similar motifs to the sherd of Operation K can be found at Hama, <sup>94</sup> Tell Afis <sup>95</sup> and Tell Tayinat. <sup>96</sup>

The ratio between painted and red slipped pottery is most noteworthy in these phases: in all three levels of the second occupation phase of Complex K1 the percentage of painted ceramics is higher than red slipped ones and in general the former are much more attested than in all the other Operations. This abundant presence of painted decorations, clearly related to the Iron I tradition, indicates an earlier chronology compared to the earliest levels of the other Operations: the decrease in painted pottery from Iron I to Iron II is clearly observed in Tell Afis (Mazzoni 1998: 169; Venturi 2020: 97-99, 111) and in general in Northern Syria (Lehmann 2008: 209), confirmed by the assemblage of Operation H-T1, in which the number of painted vessels increases in earlier Iron Age II phases (Chapter 3.5.5). The emergence of Red Slip has usually been associated with the beginning of the Iron Age II in Syria (Mazzoni 2000: 42), however it first appears on the Levantine coast as early as the 11<sup>th</sup> century (Anderson 1988: 351-355, 396-398, Pls. 32:12-13) and in the Southern Levant in the mid-12th century BC (Gitin 1990: 38, Pl. 3: 15, 21-23). At Hazor it appears around the 10th century BC (Yadin et al. 1958: 10-11), at Tell Kazel in the Iron Age I and transition to the Iron I to II (Badre, Gubel 1999-2000: 134). In the Northern Levant, it is documented at Tell Qarqur at the end of the 10th century (Dornemann 2003a: 41, 43-44, 47, fig. 88) and at Tell Tayinat from the transition between the 10<sup>th</sup> and 9<sup>th</sup> centuries as well (Harrison 2010b: 89-90). In Tell Mastuma red slipped vessels are already attested in the earliest Iron Age II level (level d. Wada 2009b, fig. 4.9:9), which dates to the beginning of the 9<sup>th</sup> century (Tsumoto 2016: 164; Wada 2009a, fig. 3.2). Therefore, if it is possible to observe a northward movement of the Red Slip technique from the South-Levantine coast (Venturi 2020: 114), it could be present in Mishrifeh at the end of the 10<sup>th</sup> century, a situation

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<sup>&</sup>lt;sup>92</sup> Cecchini 1998, fig. 14:16.

<sup>&</sup>lt;sup>93</sup> Harrison 2010b, fig. 7:3.

<sup>&</sup>lt;sup>94</sup> Riis 1948, fig. 130A:8.

<sup>95</sup> Venturi 2020, Pls. 120:12, 14.

<sup>&</sup>lt;sup>96</sup> Janeway 2017, Pl. 12:4.

not much different from Tell Qargur and Tell Tayinat.

Thus the pottery assemblage of Phases 4-6 confirms the preliminary chronology of Late Iron I/Early Iron II (Luciani 2002: 167) for these levels.

Regarding Phases 7 and 8, which represent the earliest occupation of Complex K1 (Phase A), the pottery assemblage is too poor to make a precise chronological assessment, however a date similar to that of Phases 4-6 may be presumed.

Phase 9 represents the second Iron Age occupation level of Operation K, with only part of a building excavated: the assemblage is slightly more substantial than Phases 7 and 8, however the large quantity of residual Bronze Age material which characterises this level reduced the amount that dates to the Iron Age. A good chronological reference point for this phase is a krater with outward rim (KR1, K 1135.1, **PI. 28:2**), with a slightly more rounded lip as compared to later specimens: it is similar to a krater with a smaller diameter from Tell Afis<sup>97</sup> dated to the second half of the 10<sup>th</sup> century. A Late Iron I chronology, that is the end of the 10<sup>th</sup> century, already preliminarily hypothesized (Luciani 2002: 159; Luciani 2003: 158-159), can therefore be suggested for this phase. It is however clear that more diagnostic material would be needed to confirm this date.

Since it was not possible to analyse the Phase 10 assemblage, the preliminary chronology of Late Iron Age I for this phase too must be accepted.

<sup>&</sup>lt;sup>97</sup> Venturi Pl. 122:13.

# 3.5 OPERATION H-T1 AND OPERATION H NORTH

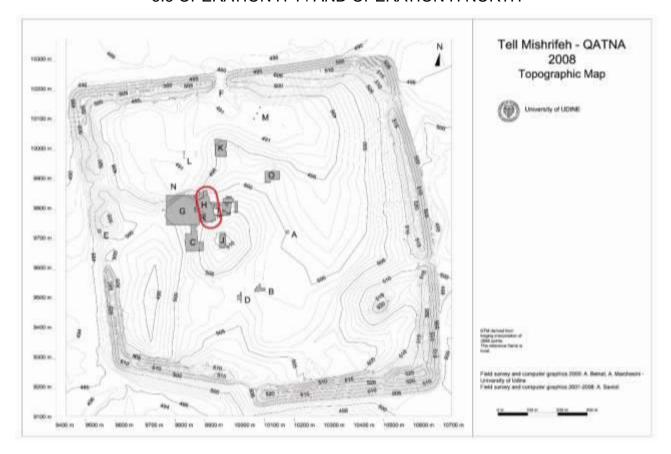


Fig. 163: Mishrifeh, topographic map with the location of Operation H-T1 highlighted.

Operations H and T1 are considered together since they were stratigraphically linked and were excavated as a single open area excavation. Operation H was dug in 1999 on the northern side of the upper town, to investigate the second millennium BC Royal Palace, while T1 was excavated immediately to the east of H in 2006 with the aim of completing the investigation of the Middle and Late Bronze Age occupation of this region of the site (Barro 2002: 111; Barro 2003: 78; Morandi Bonacossi et al. 2009: 61).

The stratigraphy brought to light stretches from the Late Iron II/Early Iron Age III to the Early Bronze Age, with a hiatus corresponding with the Iron Age I: six phases (5-10) belong to the Iron Age.

North of H-T1, but not in stratigraphic continuity with Operation H, another small area called H North was excavated in 2007; twelve phases (from 6 to 17) dated to the Iron Age were documented.

This Operation has provided important information on the role of Mishrifeh in the Iron Age, as it shows that this part of the upper town in this period was characterised by an agglomeration of buildings, structures and installations related to different kinds of

# productive activities.

H-T1	H NORTH	Relative Chronology	Absolute Chronology
5		Late IA II – IA III	Late 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. BC.
6	6-8?	Late IA II	Late 8 <sup>th</sup> cent. BC.
7	6-8?	Late IA II	Mid-Late 8 <sup>th</sup> cent. BC.
8		IA II	Mid-8 <sup>th</sup> cent. BC.
9	(9-14?) 15	IA II	Late 9 <sup>th</sup> – Mid-8 <sup>th</sup> BC.
10	16-17?	IA II	9 <sup>th</sup> cent. BC.

Table 21: Operation H-T1, summary of the phases and their chronology

# 3.5.1 H-T1 – ARCHAEOLOGICAL CONTEXT AND STRATIGRAPHY

# **PHASE 5** (Figs. 164-165)

Found immediately under modern layers, this is the most recent Iron Age phase of the Operation and was damaged by intrusions of the modern Mishrifeh village such as house walls and floors and garbage pits.

During this phase the occupation of the area was sparse and consisted of a poorly preserved small building (Building T1-1), a trodden floor (SU 7112) with pottery sherds directly on it, and a few installations such as bench SU 7115 and basalt mortar SU 7116 built in the external floor SU 7002 (Garna 2011: 57-58). Other evidence consisted especially of pits: in the east sector there were SU 3972, 3974, 3964 and 3962. Some grape seeds were discovered in the fill of the last of these (Garna 2011: 59). In this sector of the excavation, an external surface (SU 1371 and 1128) was exposed: SU 1371 sealed a huge round pit (SU 1060) which cut the underlying palace walls and contained Iron Age pottery. From its fill came also a fragmentary anthropomorphic vessel (SF 1060.1, fig. 165), possibly a bottle, representing a female head with red painted lines (Barro 2002: 119 and note 257). This vessel shows analogies especially in its painted decoration with the therio-anthropomorphic vessel SF 329.1 found in Operation K, which was discussed earlier in Chapter 3.4.



Fig. 164: Operation T1, Phase 5. Building T1-1.

<sup>&</sup>lt;sup>98</sup> Surface 1371-1128 and pit 1060 represented respectively Phases 5 and 6 in Barro 2002.

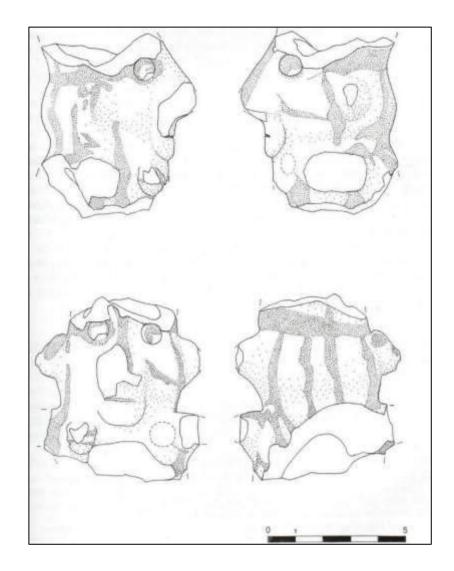


Fig. 165: Operation H, Phase 5. SF 1060.1 (Barro 2002, fig. 108)

Another group of small pits (SU 3782, 3780, 3953, 3955, 3960) probably had a waste-disposal function and caused damage to the underlying Building H8 of Phase 6a (Garna 2011: 59).

Other pits were SU 3711, 3713, 3715 and 3951, mostly of irregular or circular form, aside from the large rectangular pit 3711. Just to the south of these features, there was the large pit SU 3704, which considerably damaged the floor (SU 3795) of the previous Building H4 (Phase 6a). The fill of this pit contained a loom weight with a pierced hole (SF 3703.701) and a fired clay spool (SF 3703.702). These tools are commonly used in spinning and weaving activities, which were intensively carried out in Phase 6, so it is highly possible that the finds may be considered residual and were initially related to floor 3795 and Building H4 of the earlier Phase 6 (Garna 2011: 59-60).

Other features which damaged the underlying Phase 6, and the previous Building H6, were pits SU 3197, 3517, 5235, 5237, 5297, 5299, 5371, 5373, 5375 and 5377, related to a quite

thin floor SU 2860 (Garna 2011: 60). In the south of the excavation area there was another pit, SU 3958, in the fill of which a small jar and few sherds of painted pottery were found (Garna 2011: 60).

In conclusion, this level can be interpreted as a domestic reoccupation of the area after the abandonment of the crafts quarter of Phase 6. The modest Building T1-1, the small basalt workbench 7115 and the few installations connected to it were probably related to household-scale activities which produced a large quantity of pits. The pits may in part have been silos for the storage of agricultural produce (e.g. SU 3962 which contained grape seeds) and in part they may have had a waste-disposal function. The area was subsequently covered by collapse debris and layers, heavily damaged by the modern intrusions, which signalled the final abandonment of this region of the site. The archaeological evidence suggests that this phase corresponded to a moment of transition between the collapse of Mishrifeh as an administrative centre in the kingdom of Hamath – with the resulting abandonment of the Phase 6 artisans' quarter – and the subsequent rural reoccupation of the Iron Age III found in Operations J and C (Garna 2011: 58-59, 61).

# **PHASE 6** (Figs. 166-182)

This is the most important phase of the Iron Age occupation in Operation H-T1. It is characterised by a large, elliptical, specialized crafts quarter devoted to textile weaving and dyeing and the storage and transformation of agriculture produce (Morandi Bonacossi 2006: 89; Morandi Bonacossi 2009: 121; Morandi Bonacossi 2019). The stratigraphy of this level has been divided into two sub-phases, 6a and 6b, with 6a being the most recent one, in which the craft quarter reached its maximum development with eleven buildings.

The poor preservation state of the architecture, damaged by intrusions from Phase 5 and from the modern village of Mishrifeh, made the reconstruction and interpretation of the archaeological context difficult. Moreover, the walls were preserved only at foundation level, with the standing walls absent almost everywhere.

The quarter had an elliptical form and was oriented north-east/south-west: it consisted of at least eleven buildings, with stone foundations and mudbrick walls, arranged around a large central outdoor space consisting of a trodden floor with sparse horizontal pottery sherds lying on the surface. There was an additional outer courtyard or street (SU 3791) to the east and access to the inner area was by means of at least four radial alleys (fig. 167): one between Buildings H3 and H6 (SU 3394), the second between Buildings H4 and H8 (SU 3706), the third between Buildings T1-2 and T1-3 (SU 7541) and the last between Buildings T1-2 and T1-4 (Garna 2011: 64; Morandi Bonacossi 2019: 8, 10-11).

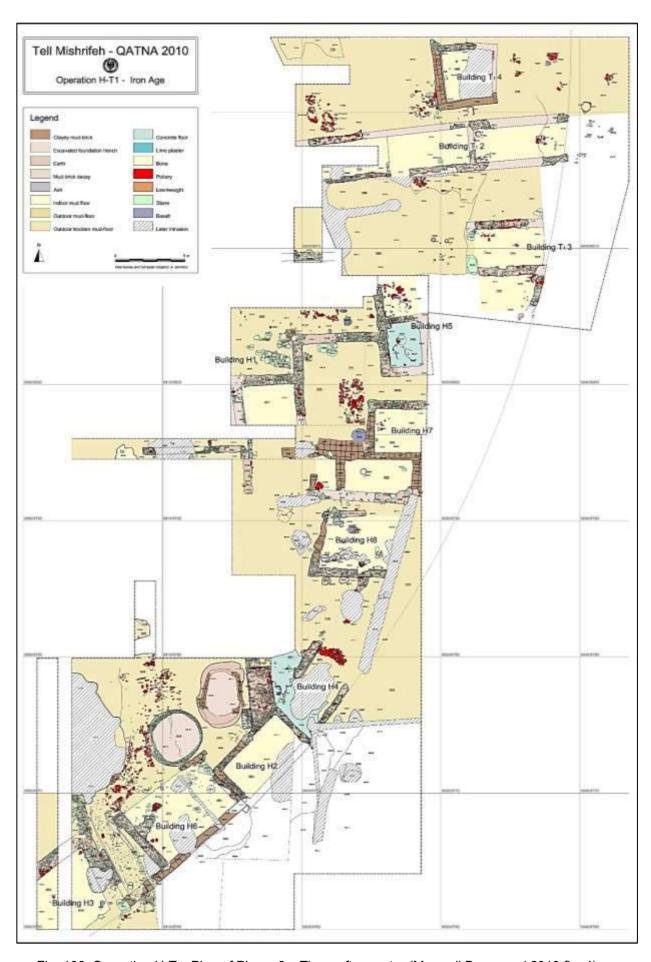


Fig. 166: Operation H-T1, Plan of Phase 6a. The crafts quarter (Morandi Bonacossi 2019 fig. 4).

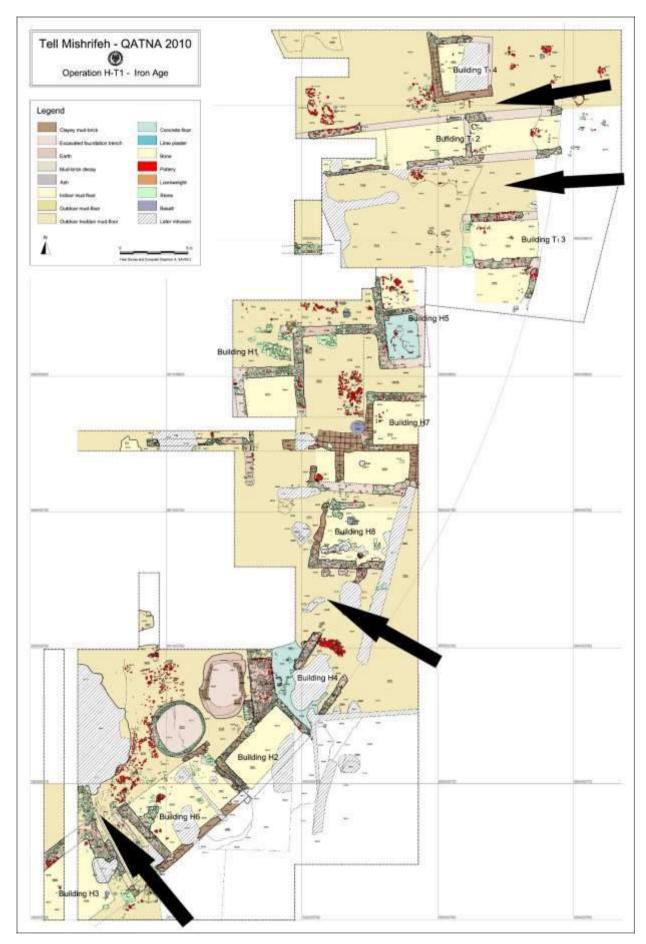


Fig. 167: Operation H-T1, Phase 6a. The four alleys entering the crafts quarter.

Since the spatial arrangement of the buildings was curved and similar structures to the west of Operation H-T1 were discovered by the German expedition (Russo 2018), it seems possible that the artisans' quarter was originally a large compound that extended for about 130 m with an oval layout (Garna 2011: 64; Morandi Bonacossi 2019: 10). The activities carried out in the productive quarter were possibly supervised by the large, administrative building excavated in Operation C by the Syrian mission and located close to Operation H-T1 (fig. 117. Al-Maqdissi 2003b: 1495-5000; Morandi Bonacossi 2019: 19).

The buildings were rectangular in plan and most had one room, although multi-roomed ones are also documented. The majority were of "long durée", that is they remained in use for the entire life-span of the artisans' quarter: the exception is Building H8, which was in use only during the later sub-phase 6a. Many installations — mortars, jars, grindstones — were associated with the buildings and in the central courtyard two large silos (SU 2865 and 3215) connected to a working platform (SU 2630. Barro 2003: 92-93) were discovered.

A re-organization observed in the central area of the productive quarter differentiates the earlier sub-phase 6b from the more recent 6a: the latter is characterised by the presence of Building H8 and the two aforementioned silos (SU 2865 and 3215) with platform 2630 and the renovation of Building H4.

In sub-phase 6b there were no installations in the central courtyard and instead of Building H8 there was a silo (SU 5480) related to another working platform (SU 5481). Therefore in this phase the compound seems to have been organized into two different groups of buildings – a northern one (Buildings H1, H5, H7 and T1-2 and 3) and a southern one (Buildings H3, H4, H2 and H6) – physically separated by the silo 5480 and the platform 5481. In the later phase 6a, the construction of Building H8 connected the two groups and the installation of the two large silos 2865 and 3215 suggests that the activities related to the storage of food and agricultural produce increased and intensified (Garna 2011: 66).

### **SUB-PHASE 6a** (Figs. 166-179)

This more recent sub-phase represents the moment of maximum development of the crafts quarter. There was a progressive increase in the number of buildings, which are eleven in this phase, and of the productive and storage installations with the construction of the two silos 2865 and 3215 in the central courtyard.

The northern part of the excavation, that is Operation T1, was distinguished by trodden floor US 7008 with horizontal pottery sherds and three buildings (Garna 2011: 68).

Building T1-4 was in a fragmentary state: it was composed of at least one room, however its western wall (SU 7597) seemed to continue northward to form another space.

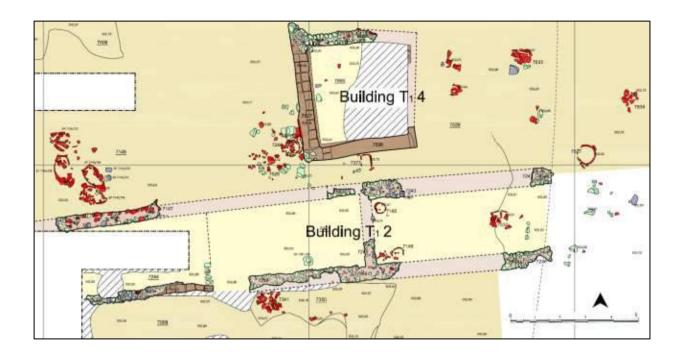


Fig. 168: Operation H-T1, Phase 6a. Detail of Buildings T1-2 and T1-4.

Associated with this structure were four large storage jars, a pestle, a bowl, a *tannur* and a grinding stone, which suggest that the area was devoted to the processing and transformation of agricultural produce (Morandi Bonacossi 2019: 19).

Building T1-2 (fig. 169) had an elongated rectangular plan and was divided into three rooms (Morandi Bonacossi 2019: 19). In Room 2 four loom weights in unbaked clay were found, while there were two jars in the corners of the eastern Room 3. North of Room 1, on floor SU 7149, four jars (SF 7149.704-705-706) were found in association with a fragmentary bowl (SF 7149.701), a pestle and a triangular grindstone. All these elements seem to indicate that around Building T1-2 cereals were processed, while textile weaving activities were carried out in Room 2 (Garna 2011: 69-70).

Building T1-3 (fig. 171) was a two-roomed construction, devoid of installations but surrounded by about four hundred small bone and antler fragments of small dimensions, probably production waste (Turri 2015a: 297; Garna 2011: 71). A few tools, such as a spatula, a rod perhaps used as spindle and a depressor, were clearly related to textile weaving, while the function of other objects such as thin strips of bone, spatulas, a cylindrical element and astragali with non-passing holes is not clear (fig. 170. Turri 2015a: 298-299). Some very small, thin fragments with a square shape were probably waste materials re-used as decorative pieces (Turri 2015a: 299-300). The finds suggest that it was a workshop for bone objects related to textile production (Garna 2011: 71; Turri 2015a: 297, 300). Close to Building T1-3 there was also a small pyrotechnical installation (SU 7548), whose precise function is not clear: it was probably a small furnace associated with a dumping pit, full of

ash and pottery sherds (Garna 2011: 71).



Fig. 169: Operation T1, Phase 6a. Building T1-2 from the east (Garna 2011, fig. 47).







Fig. 170: Operation T1, Phase 6a, a) an astragalus and b-c) two unfinished or discarded bone objects.



Fig. 171: Operation H-T1, Phase 6a. Detail of the complex of Buildings H1, H5, H7 and T1-3.

In the centre of the excavation area were Buildings H1, H5 and H7, which formed a single production complex probably devoted to fulling and textile dyeing.<sup>99</sup> Continuing southward there were Buildings H8 and H4, the latter closely connected to H2, which in turn was connected to H6. Located in the south-western corner of the excavation, after the small alley SU 3394, was Building H3.

The productive complex formed by Buildings H1, H5 and H7 is interesting and unique: it was devoted to textile manufacturing and dyeing and consisted of a rectangular structure arranged around a small inner courtyard (SU 1741, 2260). The complex had six rooms and was accessible through at least two alleys. One access was from the east and consisted of a small passage between Buildings H5 and H7 (SU 5283), while the second was from the west, between Buildings H1 and H7 (Garna 2011: 72). Building H1 was formed of a room with an inner floor (SU 2277), north of which there was an external courtyard SU 2249: on

<sup>&</sup>lt;sup>99</sup> This complex is architecturally very similar to structures found by Count du Mesnil du Buisson, such as *Maison 1* in the Lower Town. Du Mesnil du Buisson erroneously considered *Maison 1* a bath house, whereas it was probably a textile dyeing workshop. Morandi Bonacossi 2005: 83-84, 89-90.

the trodden floor of the courtyard various installations were found, such as a working bench (SU 2281) and a U-shaped structure (SU 2143) delimited by three basalt stones (fig. 172).



Fig. 172: Operation H, Phase 6a. Structure 2143 with the clay spool weights (Morandi Bonacossi 2019, fig. 6).

Inside structure SU 2143, 140 partially baked, horizontally-pierced conical loom weights and spool weights were found, together with bovine bones (a femur and an astragalus) which would perhaps have been transformed into tools (Barro 2003: 93; Morandi Bonacossi 2006: 90, 92; Morandi Bonacossi 2019: 12-14; Turri 2015a: 298). The large quantity of weights indicates the importance of textile activities in the complex: some of them had small, impressed dots on one or both sides (fig. 173), whose function is not clear. They could have indicated a certain weight, or the position in which a spool weight should be used on a loom or perhaps they were maker's marks or decorative motifs (Morandi Bonacossi 2019: 12-14). Other small installations, such as a small basalt mortar, were found on this floor, while there was a trapezoidal structure made of large stones (SU 2289) in the central court of the complex.

Building H5 was connected to H1 by wall SU 5238 and had a rectangular shape and two rooms: the rooms were covered by collapse layers, caused by the abandonment of the building, in which many potsherds and stone tools were found together with lumps of red ochre.



Fig. 173: Operation H, Phase 6a. Building H1. Spool weights and conical weight with horizontal piercing.

(Morandi Bonacossi 2019 fig. 7a-c)





Fig. 174: Operation H, Phase 6a. Building H5. Left: a restored large storage jar (Morandi Bonacossi 2019 fig. 9c). Right: Red Slip fruit-stands (Morandi Bonacossi 2019, fig. 3).

Many objects were discovered both in the fillings of the rooms and directly on their inner floors: especially noteworthy is the presence of many large broken storage jars.

It appears that the collapse occurred gradually, in a south-west/north-east direction, with the smaller objects – pottery sherds and tools – and degraded mudbricks ending up under the storage jars. The storage jars had collapsed into the centre of the rooms from the sides and corners in which they were presumably located originally: they were probably arranged vertically along the walls and in the corners, at least six or seven per room, and stabilized with large, roughly squared stones which were found on the floors (Garna 2011: 75-76).

In the southern room numerous fragments of large storage jars were found (Morandi Bonacossi 2019: 17): they belonged to at least nine or ten different vessels, some of which were reconstructed (fig. 174). The average dimensions of the large storage jars were 1.05 m high and about 35 cm in diameter. Other pottery vessels found in this room, both in the collapse deposit and lying on the floor, were three fruit-stands in Red Slip Ware (SF 5225.711, 5281.714, 5399.701, fig. 174, PI. 3:1-3), one zoomorphic vessel (SF 5281.712, fig. 176, PI. 73:5), some cooking pot sherds and a small jar. Other finds were stone reels, and a few lumps of red ochre and a fragment of white chalk from inside some of the large storage jars: these last materials were probably used as dyes for textiles (Morandi Bonacossi 2019: 17).



Fig. 175: Operation H, Phase 6a. Building H5 before the excavation, with the large storage jars in fragments.



Fig. 176: Operation H, Phase 6a. Building H5, zoomorphic vessel (SF 5281.712).

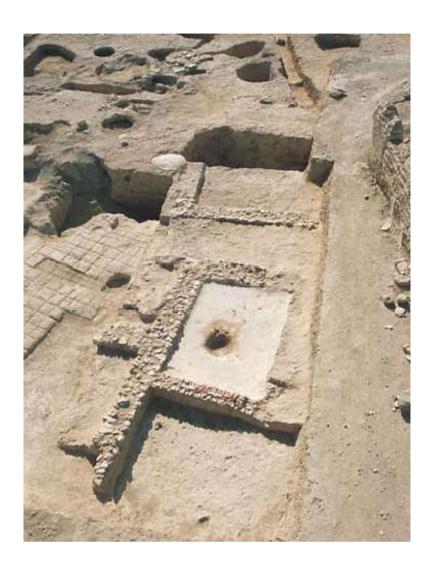


Fig. 177: Operation H, Phase 6a. Building H5 with the southern room with the plastered floor (Morandi Bonacossi 2019, fig. 9a).

The floor SU 5399 in the southern room was lime-plastered (fig. 177), and therefore waterproof. The floor sloped towards a nearly central circular basin (65 cm in diameter and 20 cm deep) in which a fruit-stand (SF 5399.701) and a reel (SF 5399.703) were found. The depression was presumably used as a catchment basin for liquids used for textile dyeing (Morandi Bonacossi 2005: 92; Morandi Bonacossi 2009: 124; Morandi Bonacossi 2019: 15).<sup>100</sup>

The northern room presented two different trodden floors, a more recent one (SU 5225) and one belonging to phase 6b (SU 5754): inside, at least seven large storage jars were found, together with various objects related to textile weaving, spinning and possibly dyeing, such as bone tools (presumably spatulas and combs to card textiles or wool) and two stone pestles and other objects. From here came also an unfired clay loom weight (SF 5225.729)

<sup>&</sup>lt;sup>100</sup> For details, see Morandi Bonacossi 2019: 15-17.

and a few lumps of ochre like those found in the southern room. Pottery finds also include a small painted juglet (SF 5225.714, **PI 72:1**).

Building H7 consisted of two rooms (floors SU 5282, 5895) and a space open to the inner courtyard of the complex. A jar containing cereal seeds (perhaps barley) was interred in floor 5895. Other installations were a working bench in mudbricks (SU 6271) and a structure (SU 5883) in the inner court leaning against the wall of Building H7. The structure was formed of a large fragment of a basalt column originally from the Bronze Age Royal Palace that had been re-utilised as a work surface. Connected to this was a small room open on the west side with inside an interred jar (SU 3787) and a work bench made of small stones and *pisé* (Garna 2011: 82-83).

Thus, the complex formed by Buildings H1, H5, H7 was used for at least three phases of textile production, spinning, weaving and dyeing. The complex was probably also related to nearby Building T1-3, where the bone tools used for textile production were manufactured (Turri 2015a: 297-300).

Immediately south of this complex was Building H8, which consisted of only one room with an inner trodden floor (SU 3717), slightly sloping towards the east and at a slightly lower level than the outer floor. Inside the building, a few installations were uncovered: a basalt grindstone (SF 3783.701), a working platform in stone (SU 3785) and a small structure of unclear function made with stones and pottery fragments (SU 3184). Outside H8, near its southern wall, two pits were found (SU 3977, 3979): these were presumably service pits related to the building and contained two jars. Close to them was installation SU 3778, formed by what had perhaps once been a work bench made of stones and potsherds (Garna 2011: 84-85).

Continuing southward, there was a group of interconnected buildings, H4, H2 and H6, all one-roomed and rectangular-shaped. Inside Building H4 was trodden floor SU 3975, on which three weights were found, so the structure was probably used for weaving activities. Related to it was floor SU 3705, with horizontal large storage jar sherds, and two outer surfaces, one in gravel (SU 3706) and the other plastered (SU 3651. Garna 2011: 85-86) Similar to H4 were Buildings H2, which was associated with the large working platform SU 2630, and H6.

The two large silos 2865 and 3215, probably used together with the platform 2630, were embedded in the inner courtyard (SU 2638, 3512 and 3229) which was characterised by a trodden floor with pottery sherds, mostly of storage jars.

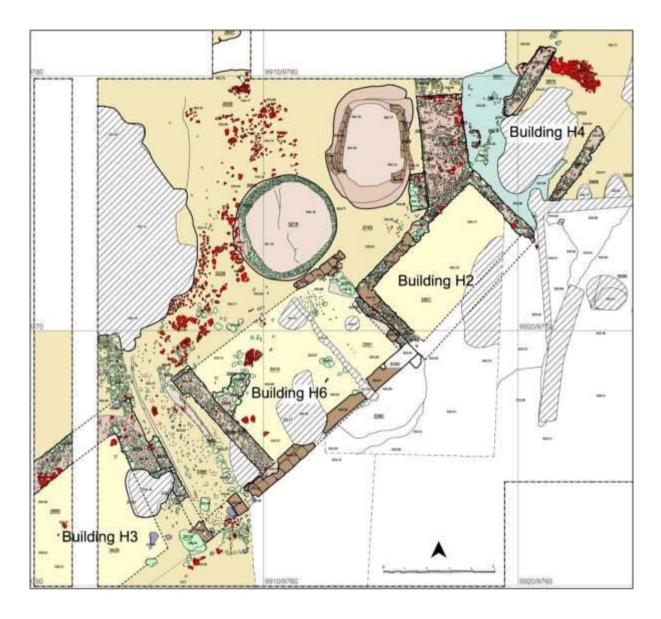


Fig. 178: Operation H, Phase 6a. Detail of the southern area of the crafts quarter.

Silo 2865 was elliptic in shape, with a diameter of 2.5 m and volume of 11 m<sup>3</sup>, while silo 3215 (fig. 179) was lined with pebbles, measured 3.6 m in diameter and had 31 m<sup>3</sup> in volume (Barro 2003: 93; Garna 2011: 87). The latter silo revealed a complex internal sequence, with five sub-phases identified by five floors<sup>101</sup> made of straw mixed with gravel and silt. Between the floors were deposits full of ash, bones and pottery.<sup>102</sup>

Cereals, olives, grape seeds and lentils were found in the silo. The palaeobotanical analysis (Peña-Chocarro, Rottoli 2007) showed that barley was the prevalent cereal, although hulled wheats and free-threshing wheats are also documented in the straw of the inner trodden floors. Legumes consisted of lentil, grass pea, bitter vetch and broad bean. Grape pips and

<sup>&</sup>lt;sup>101</sup> SU 3649, 3655, 3657, 3718 and 3985.

<sup>30 3049, 3033, 3037, 37</sup> To and 3903.

<sup>&</sup>lt;sup>102</sup> Like SU 3701, in which many potsherds, mainly of fine serving ware, were discovered.

olive stones are attested as well, whereas figs were sporadic (Garna 2011: 87-88; Peña-Chocarro, Rottoli 2007: 127-129).



Fig. 179: Operation H, Phase 6a. Silo 3215 (Garna 2011, fig. 71).

Concluding, Building H3 was separated from H6 by the access alley SU 3394 in trodden earth and gravel, with a small drain covered by stones (Garna 2011: 86).

### **SUB-PHASE 6b** (Figs. 180-182)

This was the construction phase of the quarter, when the pre-existing structures were destroyed and the upper town's surface was extensively reorganized (Garna 2011: 93). As mentioned before, there were two groups of buildings – H3 and H6, H2, H4 in the south and H1, H5, H7, T1-2, T1-3 and T1-4 in the north – and in place of Building H8 there were a silo and a platform.

Starting from the north, in Operation T1 only a few changes can be observed. In Building T1-2 there was a threshold (SU 7546) open towards south and closed in sub-phase 6a. Building T1-3 was still formed by two rooms with trodden floors SU 7853 and 7854 (Garna 2011: 93).

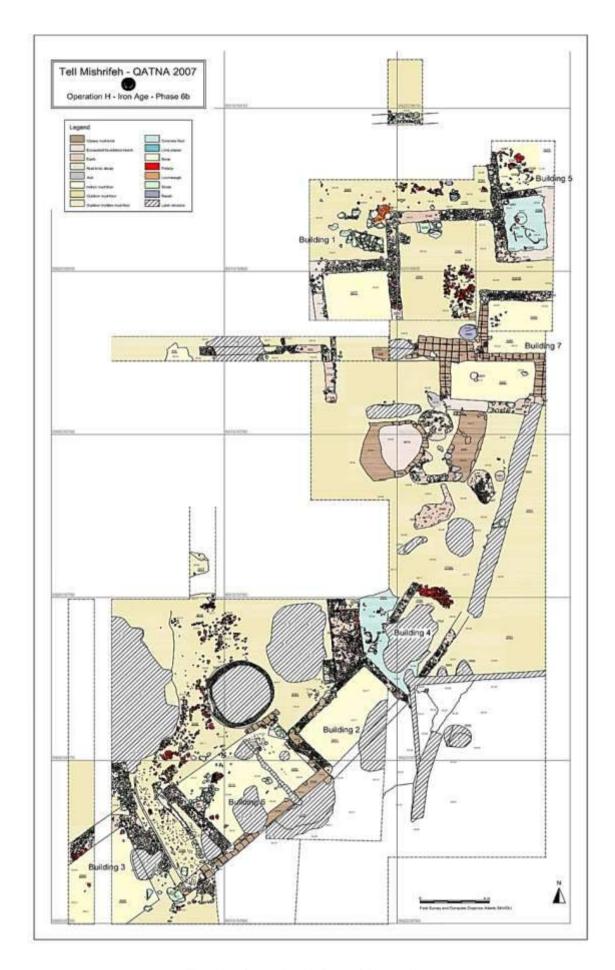


Fig. 180: Operation H, Plan of Phase 6b

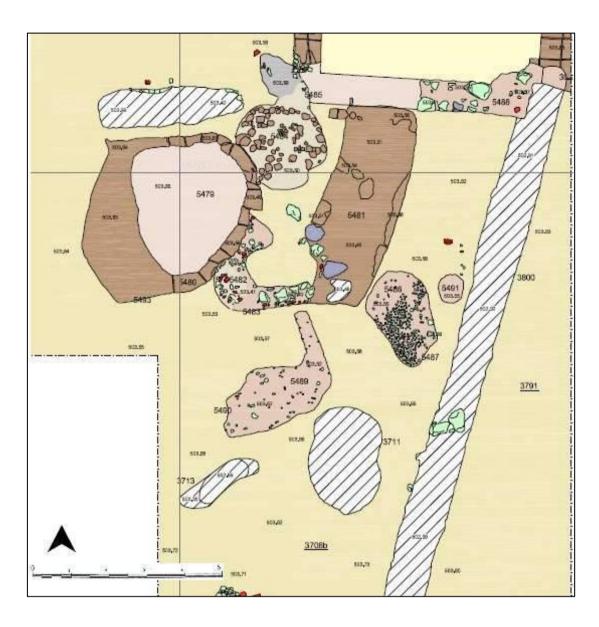


Fig. 181: Operation H, Phase 6b, the installations (silos and pits 5483, 5487, 5490, 5491, 5493 and working platform 5481) in place of Building H8.

Buildings H1, H5 and H7 did not undergo substantial changes, apart from the inner trodden floor (SU 5754) in the southern room of H5. Just south of the complex, cut into surface 3706b, there was a circular silo SU 5493 with top built in mudbricks (fig. 181). This silo was associated with rectangular working platform SU 5481 (in mudbricks and stone foundations), pits 5483 and 5491 and service pits SU 5487 and 5490. These features were all probably related to the storage system for agricultural produce (Garna 2011: 94-95). Pit 5483 was partly obliterated by collapsed mudbricks and in its fill was found a large storage jar rim with a stamped Aramaic inscription (SF 5482.701, **PI. 60:1**). <sup>103</sup> A similar one (SF 2630.701, **PI.** 

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<sup>&</sup>lt;sup>103</sup> More about Aramaic and Luwian inscriptions in Iron Age Mishrifeh can be read in Morandi Bonacossi 2019: 23-24. See also Chapter 6.2.

**63:2**) was discovered while removing platform 2630, in which it was re-used as a building element (fig. 182, Garna 2011: 94).

Building H4b was formed by different walls (SU 5474, 5475) than its later phase (SU 3650, 3658): walls SU 5474 and 5475 were discovered directly under the more recent ones and were slightly narrower than them. The inner floors were SU 3795, 3705, the latter characterised by horizontal potsherds.



Fig. 182: Operation H, Phase 6b. Rims of large storage jars with Aramaic inscriptions, SF 2630.701 and 5482.701 (Garna 2011, fig. 80).

In summary, Phase 6 represents the time of greatest development and utilisation of the upper town during the Iron Age as an area devoted to different economic productions. In the productive quarter many activities took place, especially textile weaving and dyeing (Buildings H4, H1, H5, H7), production of bone tools (Building T1-3), and food production (Buildings H8, T1-2, T1-3) and storage (Buildings H2, H6. Morandi Bonacossi 2006: 90; Morandi Bonacossi 2019: 11).

The productive quarter was built from the beginning with a precise separation into distinct working areas, with processing and storage of agricultural produce in the southern zone and textile production activities in the northern one. The storage system was further increased in the subsequent phase 6a with the construction of the two silos 2865 and 3215.

## **PHASE 7** (Fig. 183)

Found only in Operation T1, this was represented by a series of waste-disposal pits (SU 7564, 7581, 7583 and 7550) dug into the floors of the underlying level. It was perhaps a moment of abandonment after Phase 8, as no other evidence was found (Garna 2011: 102).



Fig. 183: Operation T1, Phase 7. View of the area with the pits (unexcavated).

#### **PHASE 8** (Figs. 184-185)

Only scant remains can be attributed to this level. The northern area was heavily damaged by the later pits of Phases 7 and 5 and the structures of the artisans' quarter. Perhaps the first installation of Building T1-4 was already built in this phase, with two related plastered basins (fig. 185, SU 7565 and 7675). The function of these large, rectangular basins is not clear. On the floor of SU 7565 a fragmentary tortoise shell (SF 7535.701) was found. Close to the installations there were a small basin with a basalt bowl (SU 7756), pestles and stone tools perhaps related to the grinding of cereals (Garna 2011: 99-101).

The southern area was characterised only by Building H12 (fig. 184), whose walls (SU 3777-5388 and 5391) were re-utilised in the later productive quarter: it had a roughly rectangular shape, with an inner floor SU 5389 and a small entrance on the southern side (Garna 2011: 98-99).

Considering the scarce evidence surviving, the most probable hypothesis is that this phase was related to the installation of the later crafts quarter devoted to productive activities: however, the meagre archaeological remains do not allow for a more precise interpretation (Garna 2011: 102).



Fig. 184: Operation H, Plan of Phase 8 and Building H12.



Fig. 185: Operation T1, Phase 8. Basin 7565 (Garna 2011, fig. 90)

## **PHASE 9** (Figs. 186-187)

This level was found especially in Operation H and consisted mainly of an open area with some installations related to agricultural activities.

This phase was probably composed of a series of sub-phases that are quite difficult to disentangle precisely as pits and silos overlapped each other and later features have seriously disturbed the archaeological deposit.

The surface was characterised by a few outdoor floors, SU 5889, 6407, 6393, 6391, 7068, 7090 and 7163, with at least two sub-phases represented by floors SU 6669 and 7469. In these floors were dug pits such as silo SU 6367, sealed on the top by a layer made up with stones and pottery sherds of Iron Age II large storage jars and other jars (Garna 2011: 103). Some pits and installations were found in the southern area of the excavation; the botanical residues found in their fills suggest that they were presumably related to agricultural practices, that is the storage of food produce.

On floor 5889 the pits brought to light were: SU 6372, in the fill of which a cylindrical loom weight (SF 6371.701) was found; SU 6374, from which came a few smoothed fragments of ostrich eggshell and charred cereal and olive seeds; SU 6377, a possible silo whose fill contained bones and olive seeds and the bottom of which was structured with mudbricks; SU 6380, a rectangular pit.

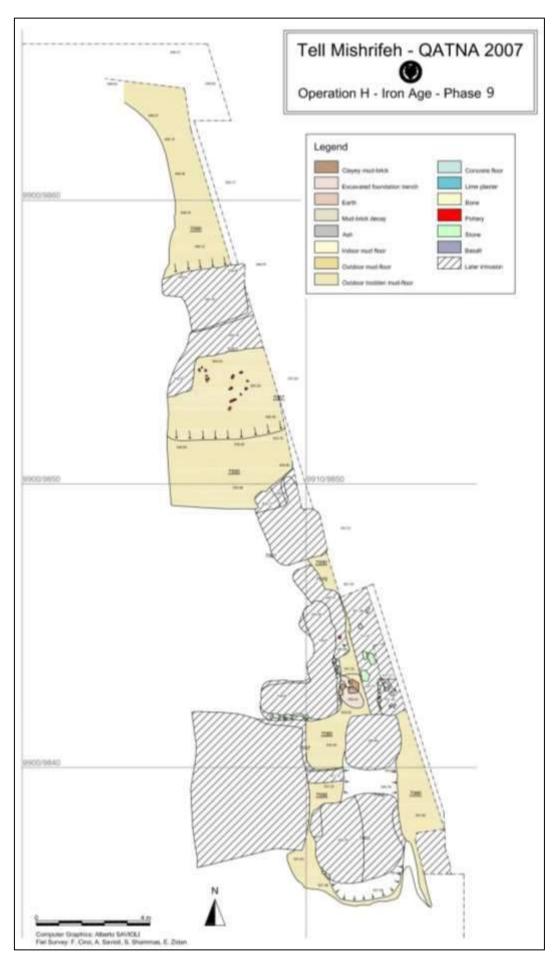


Fig. 186: Operation H, plan of Phase 9 in the northern sector of the excavation area.

Dug into the floor there were also two basalt mortars SU 5888 and 6396, a small, squared basalt installation (SU 6306), perhaps a working surface, an interred jar (SU 6361) and another installation built with pebbles (SU 6375. Garna 2011: 103).

Directly on floor 5889 there were sherds of Iron Age II pottery (Red Slip Ware), ostrich eggshell fragments and a necklace pendant in semi-precious stone (SF 5889.702. Garna 2011: 103-104).<sup>104</sup>

In the north of Operation H there was a trodden floor (SU 6409), with a working bench in pieces of limestone (SU 6416) and a fragmentary jar (SU 6415), which perhaps originally stood upright (Garna 2011: 104).

This phase in Operation T1 was represented by waste-disposal pits SU 8165, 8302, 8367, 8564, 8622 and perhaps large pits 5221, 5227, 5473: however, the attribution of the latter group of features to phase 9 is uncertain due to the superficial erosion. In pit 8302 an unfired clay cylinder with incised signs, probably a seal (SF 8302.702, fig. 187), was found (Garna 2011: 104-105).

Thus, it may be seen that already in this early period the upper town was used as a location for the processing and, at least partial, storage of agricultural produce (Garna 2011: 105). The finding of a seal may indicate that centralized control of the storage of the agricultural produce was already present in this period.



Fig. 187: Operation T<sub>1</sub>, Phase 9, seal SF 8302.702 (Garna 2011, fig. 91).

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<sup>&</sup>lt;sup>104</sup> The numerous pits heavily damaged also the underlying Late Bronze Age levels, thus it cannot be excluded that the ostrich's eggs and the necklace pendant could perhaps originate from the underlying Late Bronze phases (Garna 2011: note 104).

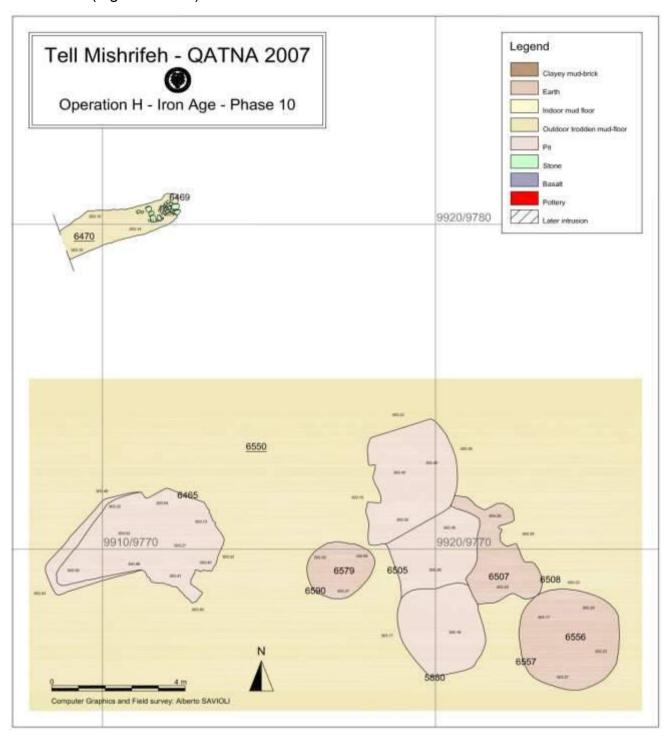


Fig. 188: Operation H, plan of Phase 10 in the southern area of the excavation.

This represents the first occupation of the area in the Iron Age, immediately above the razed Late Bronze Age levels, and is characterised by installations devoted to food transformation and storage.

In the southern area (Operation H) there were floors SU 6314, 6470, 6550, 6676 and 7414, in which pits and installations such as earthen basins were found. The basins were

presumably related to the production and processing of agricultural produce, such as SU 6412, a large rectangular installation with sloping and smoothed walls. SU 6412 was filled with ash and pottery, and it contained charred grape and olive seeds. SU 6552 was another basin, of circular shape, filled with ash, pebbles, bones and Iron Age pottery and in which some charred grape and olive seeds were found.





Fig. 189: Operation H, Phase 10. Left: General view of the excavated area. Right: Mud-brick structure created by walls 8316 and 8388 (Garna 2011, fig. 92).

The two basins were perhaps used for storage or more probably for beating or sieving operations involving cereals. The same could presumably also be said for the other basins SU 6625, 6634, 7181 and 7641: they were all filled with ash, broken mudbricks and botanical remains (Garna 2011: 106-107).

A series of pits were excavated: SU 6557, a large pit full of gravel, 6505, 6508 and 6580, whose precise function is unclear. They were perhaps waste-disposal pits. Also ascribable to this level was a water well (SU 6369), about 8.20 m deep and associated with Iron Age II potsherds (Garna 2011: 107).

The northern area of the excavation (Operation T1) was characterised by floors SU 8136

and 8405 and some pits of large dimensions, like SU 8391: this was probably a silo, since cereal remains were discovered in its fill.

Two other peculiar structures, cut into the surface, were brought to light: one was delimited by two parallel mudbrick walls (SU 8316 and 8388, fig. 189), oriented north/south and about 2 m long, which created a narrow inner space. The second was T-shaped and composed by two perpendicular walls (SU 9015 and 9016). The function of these structures is unclear, but the presence of silos for the storage of agricultural produce and installations related to the transformation of cereals suggests that they were part of the food produce storage system (Garna 2011: 106).

In conclusion, the scanty and poorly preserved archaeological evidence suggests that this level represented the first reorganization of the upper town, previously occupied by the second millennium BC Royal Palace, as an area related to the production, processing and temporary storage of agricultural produce. It was not yet an activity as intensive as it became in later periods, but set the trend that characterised the entire Iron Age occupation in this area (Garna 2011: 107-108).

#### 3.5.2 H-T1 - POTTERY

Most of the pottery analysed in this work came from Operation H-T1. It consists of 3092 fragments and ceramic small finds, which represents more than 70% of the Iron Age ceramic assemblage of Mishrifeh. The analysis was based exclusively on the records (drawings and pottery descriptions) of the material stored in Syria.

The pottery of **Phase 5** is characterised by a wide range of forms, mostly in Common Ware but with a good percentage of Red Slip Ware.

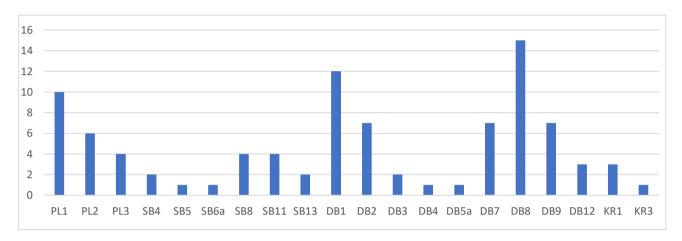


Table 22: Operation H-T1, phase 5. Open forms and kraters.

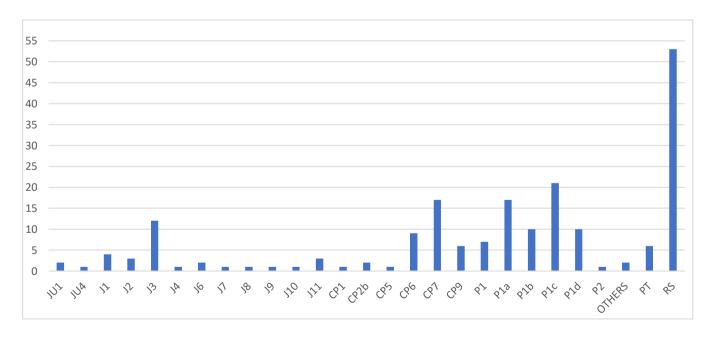


Table 23: Operation H-T1, phase 5. Closed forms, painted and red slipped pottery.

Open forms are represented by plates and bowls. Plates have simple round (PL1), squared (PL2) and tapering (PL3) rims, with many fragments characterised by Red Slip, 40%, while

paint is a very rare decoration found on merely 5% of the plates.

Shallow and deep bowls show a wider morphological range. For the former, the most common types are bowls with flat thickened rim (SB8) and outward swollen rim (SB11). Following, bowls with inturned rim (SB4), inward rim and slightly triangular thickening (SB5), with triangular rim (SB6a) and carinated vessels with simple or tapering rim (SB13) are also present. Half of the shallow bowl assemblage is red slipped.

Deep bowls are more numerous and show a higher variability of types: the most common form is the hemispherical bowl with externally thickened rim and internal angular thickening (DB8). Bowls with simple (DB1) and tapering rim (DB2) are also present in large numbers. Other common types have inward rim and internal angular thickening (DB9) and thickened rim and rounded lip (DB7). Less frequent are bowls with flaring straight walls (DB3) and with slightly protruding tapering rim (DB12). Lastly, much rarer are vessels with simple squared rim (DB4) and inward rim and basin profile (DB5a). Here too, Red Slip occurs on half of the deep bowl assemblage.

Regarding the kraters, typical of this level are types with out-turned rim (KR1) and straight vertical rim (KR3). All the specimens are red slipped.

Concerning closed forms, jugs in this level can be trefoiled (JU1) or with rounded rim (JU4). Jars show a wide range of types: the most frequent jar type is the double rim jar (J3), while other common forms are neckless jars with thickened rim (J1), with collared rim (J2) and thickened internally angular rim (J11). Much rarer are types with modelled rim (J4), concave neck and thickened rim (J6), outward rim (J7), upturned swollen rim (J8), straight vertical rim (J9) and storage jars with out-turned squared rim (J10). Only one sherd of J11, representing 3.4% of the jar assemblage, is red slipped.

Cooking pots are also present. As already mentioned in previous chapters, in Mishrifeh during the Iron Age are documented two different groups of cooking pots, holemouth pots and short-necked ones. In this level the most common group are short-necked vessels, such as cooking pots with upright sinuous rim (CP7), straight rim (CP6) and upright thickened rim with an external depression below the rim (CP9). Holemouth pots are less attested and represented by cooking pots with thickened (CP2b) and outward inflated (CP5) rims. Pots with round rim (CP1) are also present in small quantities.

Lastly, large storage jars are mostly of the swollen rim type (P1), with different rim variants (rounded, squared, oval and pointed; P1a, P1b, P1c, P1d). One fragment of large storage jar with outward rim (P2) is also present.

From this level comes also a red-painted spout<sup>105</sup> and a sherd of Cypriot Black-on-Red, with dark-painted concentric circles (indicated as OTHERS in the graphic).

Overall, the Red Slip treatment (RS) is present on about 20% of the pottery of this level, while painted pottery (PT) is quite rare – only about 2% of the assemblage.

**Phase 6**, as mentioned above, is divided into two sub-phases. The pottery from this phase represents the majority of the ceramic assemblage analysed for Operation H-T1.

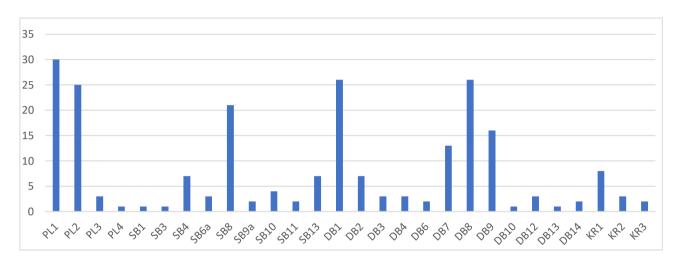


Table 24: Operation H-T1, phase 6a. Open forms and kraters.

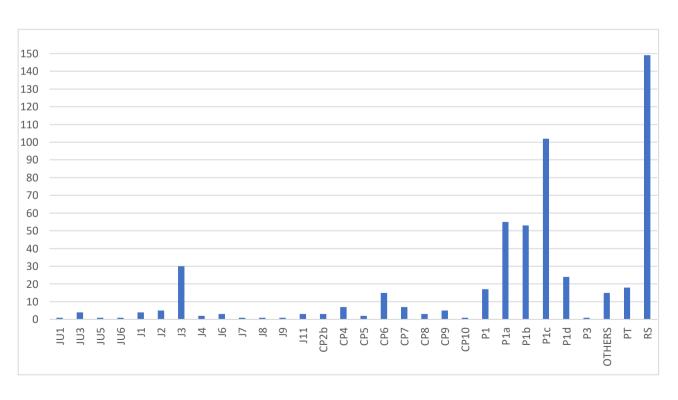


Table 25: Operation H-T1, phase 6a. Closed forms, painted and red slipped pottery.

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<sup>&</sup>lt;sup>105</sup> This spout, found in a pit fill, probably belonged to a juglet of the "teapot" type, see discussion later in this section, then in paragraph 3.5.5 and Chapter 4.2.10.4

**Sub-phase 6a**, the most recent, is represented by a wide range of open forms and a large quantity of storage ware. Regarding plates, forms with simple rim (PL1) are the most common type in the assemblage of this level, with plates with squared rim (PL2) just behind: these types are represented also by archaeologically complete forms. Much rarer are plates with tapering rim (PL3) and carinated plates/shallow bowls with square rim (PL4). Noteworthy is the presence of three red slipped "Hama fruit-stands", of the type with simple round rim. Red Slip is attested on more than 40% of the plates, while paint only on 5%.

Shallow bowls are also frequent: in this level the most common type is that with flat thickened rim (SB8). Also well documented are bowls with inturned thickened rim (SB4) and carinated bowls with simple or tapering flared rim (SB13), while vessels with triangular rim (SB6a) are present as well, even if in minor quantity. Uncommon, though, are the types with outward rim and curving profile (SB1), oblique out-turned rim and tapering basin (SB3a), squared rim and flattened lip (SB9a), semi-circular rim or handle (SB10) and outward swollen rim (SB11). The majority (68%) of the shallow bowls are red slipped.

Deep bowls display once more a wide range of forms: the most common types are again bowls with simple round rim (DB1) and with externally thickened rim and internal angular thickening (DB8). Also quite frequent are those with thickened rim and rounded lip (DB7) and with inward rim and internal angular thickening (DB9). Bowls with tapering rim (DB2) are less in percentage than in Phase 5, but are still widely documented; also quite common are also bowls with flaring straight walls (DB3), simple squared rim (DB4) and slightly protruding tapering rim (DB12). New forms appearing in this phase are bowls with out-turned rim and tapering lip (DB6), tapering flared rim (DB10), outward squared rim (DB13) and round profile and modelled rim (DB14). Red Slip is widespread on deep bowls as well, on 59% of the assemblage to be precise, while painted vessels are rare (3%).

Regarding kraters, the most common type is that with out-turned rim (KR1), while forms with rounded (KR2) and vertical (KR3) rims are also documented. Only a few sherds are devoid of any treatment or decoration: in fact, most of the kraters are either red slipped (71%) or painted (14%).

Closed forms have a wide range of types, however quantitatively they are represented mainly by storage vessels. Starting from jugs, the forms occurring in this level have everted simple (JU3), double (JU5) and flaring thickened (JU6) rims. Red Slip is present on 28.5% of the vessels.

Jars are not that frequent, although they show a great morphological variability. The most common type is once again the double rim jar (J3), while much rarer are neckless jars with thickened rim (J1), jars with collared rim (J2), modelled rim (J4), concave neck and thickened

rim (J6), outward rim (J7), upturned swollen rim (J8), straight vertical rim (J9) and storage jars with thickened internally angular rim (J11). Red Slip on jars is extremely rare: it occurs only in two cases (5%), on a collared rim jar (J2) and on a storage jar with thickened internally angular rim (J11).

Short-necked cooking vessels are the predominant type in this level as well, with pots with straight rim (CP6) being the most frequent type, displaying a marked increase compared to the later Phase 5. Cooking pots with upright sinuous rim (CP7) decrease, while the quantity of short-necked pots with upright thickened rim and an external depression (CP9) is unchanged. A new type compared to Phase 5 is the cooking pot with rim with lip impression (CP8).

Regarding holemouth pots, vessels with thickened rim (CP2b) and with outward inflated rim (CP5) are present in small quantities; more common is the holemouth pot with small outturned thickened rim (CP4), which was absent in Phase 5.

Large storage jars are the most common typology in this level, representing 36% of the whole assemblage: this reflects perfectly the productive nature of the quarter. The large storage jars are mostly of the swollen rim type (P1), with different variants (P1a, b, c, d), while there is only one specimen with grooved rim (P3). Of interest is the presence of a couple of large storage jars rims (of the swollen rim type) with stamped Aramaic inscriptions: one (SF H 5745.704, **PI. 60:4**) comes from the filling of Building H3. Another (SF H 2630.701, **PI. 63:2**) was found while dismantling the working platform 2630, where it was reused as building material.

Lamps with up-turned everted rim (L1) are also present, although in very scarce quantities. This level has also returned an interesting group of unusual small finds, indicated as OTHERS in the chart. One is a red-painted bowl with everted rim (SF H 3195.706, **PI. 74:2**): the interior of the bowl is characterised by a painted cross inscribed inside a circle, while on the upper side of the rim are painted three-pronged-like symbols. No parallels have been found for this specimen: the form is similar, but not equal, to the bowl with rounded walls, out-turned rim and tapering lip (DB6).

Of note is a small, spouted, red-painted globular juglet (SF H 5225.714, **PI. 72:1**), which has strong parallels with the so-called "teapots" from Tell Mastuma. Another similar juglet has been found in the ceramic assemblage of Operation H-T1, in an earlier phase: however, the "teapots" from Tell Mastuma are bichrome (red and black-painted), while those from Mishrifeh are monochrome. A red slipped spout (H 2099.4, **PI. 73:2**), presumably belonging

<sup>&</sup>lt;sup>106</sup> Wada 2009c: 369-370, fig. 6.23. See discussion later in 3.5.5 and Chapter 4.2.10.4

to another one of these juglets, was also discovered.

Another peculiar, however unclear, form is a rim with a triangular thickened lip and straight vertical wall of a vessel with a diameter of 26 cm, internally red slipped (T1 7548.57, **PI. 74:1**): it is hypothesized to be a krater, but the sherd is too small for a precise identification. Other noteworthy finds are two fragmentary incense burners: they are both characterized by ribbed walls and a slightly flaring neck with an out-turned rim (SF H 1913.3, **PI. 71:3**) or a triangular rim (SF T1 7246.701, **PI. 71:4**). The latter specimen is externally red slipped and has a small triangular opening in the lower body.

A last find is a bird-shaped vessel (SF H 5281.712, **PI. 73:5**) decorated with red paint. Remarkable also is the presence of handles with incisions, which perhaps could be identified as potter's marks: H 1798.1 (**PI. 77:1**) has a cross-like sign, while T1 7535.12 and 13 (**PI. 52:5-6**) are instead two sherds of cooking pots of the upright sinuous type (CP6) with handles that each bear a small, incised circle.

A sherd of Cypriot Black-on-Red, with five painted lines and part of two concentric circles, was also found.

Once again, painted pottery (PT) is rare – only 1.5% of the ceramic assemblage of this level, while Red Slip Ware (RS) is well documented, with 149 fragments corresponding to 21.4% of the assemblage.

The pottery of **sub-phase 6b** once again presents a wide range of forms, even though storage vessels decrease sharply compared to the later sub-phase.

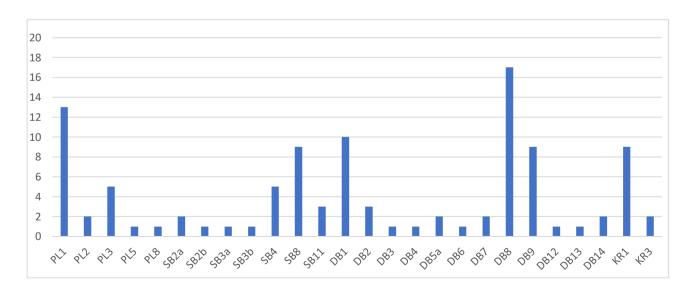


Table 26: Operation H-T1, phase 6b. Open forms and kraters.

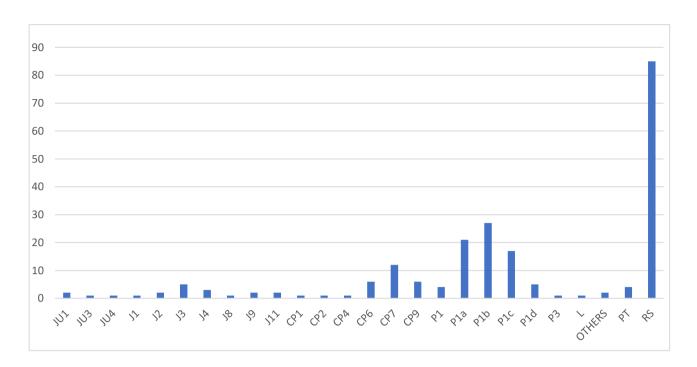


Table 27: Operation H-T1, phase 6b. Closed forms, painted and red slipped pottery.

Starting from the open forms, plates with round rim (PL1) are still the predominant type, while specimens with squared rim (PL2) show a remarkable decrease; plates with tapering rim (PL3) are quantitatively more or less equivalent to phase 6a. New types are present, even if in very scarce quantities, that is the carinated plate with simple rim (PL5) and the plate/shallow bowl with high carination and slightly triangular thickening (PL8). Red Slip is documented on 59% of the plates, while painted vessels are still rare (4.5%).

Shallow bowls display a limited range of forms: the most frequent is again the bowl with flat thickened rim (SB8), but quite common are also carinated bowls with simple rim (SB2), bowls with inturned thickened rim (SB4) and outward swollen rim (SB11). Bowls with oblique out-turned rim with both rounded walls (SB3a) and carination (SB3b) are rare. Red Slip characterises more than 68% of the shallow bowl assemblage.

Deep bowls are more varied with regard to type: bowls with externally thickened rim and internal angular thickening (DB8) are once again the most common form, followed by vessels with round rim (DB1) and inward rim and internal angular thickening (DB9). Bowls with tapering rim (DB2), thickened rim and rounded lip (DB7), slightly protruding tapering rim (DB12) and modelled rim (DB14) are still present, even if in small quantities. Scarce are bowls with straight flaring walls (DB3), simple squared rim (DB4), inward rim and basin profile (DB5a), out-turned rim and tapering lip (DB6) and outward squared rim (DB13). More than 68% of the deep bowls are red slipped.

Regarding kraters, only two types are attested in this sub-phase: kraters with out-turned rim

(KR1) and straight vertical rim (KR3), most of them – 90% – in Red Slip Ware.

Jugs are documented in very small quantities, with only three types: trefoil jugs (JU1), jugs with everted simple rim (JU3) and rounded rim (JU4).

Once again, jars do not occur much in this level and the range of types slightly decreases compared to the more recent subphase: double rim jars (J3) are still the most common type, with jars with modelled rim (J4) following behind. Other types are neckless jars with thickened rim (J1), collared rim jars (J2), jars with upturned swollen rim (J8), with straight vertical rim (J9) and with thickened internally angular rim (J11). Red Slip, again, appears rarely on this form: in this level it is found on only three sherds (18.7%), one J9 and two J11, confirming the trend in which the latter type is often characterised by this treatment.

For cooking pots, more or less the same types present in sub-phase 6a are also attested in this level: cooking pots with round rim (CP1), holemouth pots with thickened (CP2b), small out-turned thickened (CP4) rims and short-necked pots with straight (CP6), upright sinuous (CP7) and thickened with an external depression (CP9) rims. The two differences from the later sub-phase are first, the lack of cooking pots with rim with lip impression (CP8) and second, the inverted proportions of CP6 and CP7. In fact, in this level the latter type is more common than the other, the opposite of sub-phase 6a. Nonetheless, they are both the most frequent cooking pot forms in 6b.

Regarding large storage jars, as mentioned above, quantitatively they are much less present than in sub-phase 6a (75 fragments against 251 in the later sub-phase). Storage jars with swollen rim (P1 and variants) are once again the most common form, but one sherd of large storage jar with grooved rim (P3) is documented as well. Also noteworthy in this level, are two rims of large storage jars with stamped Aramaic inscriptions. One was found inside pit 5483 (SF H 5482.701, **PI. 60:1**), while the other (SF H 6325.702, **PI. 60:2**) was found in the filling of Building H6.

Two fragments of lamps (L) are attested as well.

In addition, a basin (OTHERS) with outward roughly squared rim comes from this level.

Painted pottery (PT) is still rare, only 1.4% of the assemblage of the sub-phase, while Red Slip Ware (RS) is still widely present, characterising 29.9% of the assemblage.

The pottery of **Phase 7** comes exclusively from the fills of pits, which are the only archaeological feature of this level.

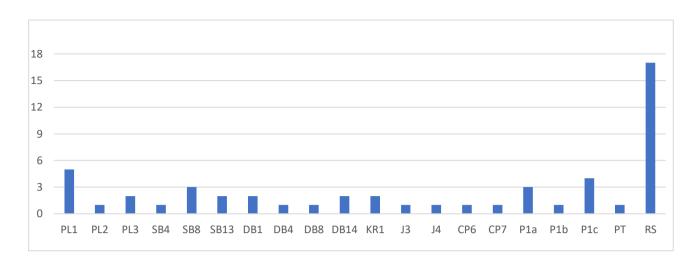


Table 28: Operation H-T1, phase 7. Pottery.

The ceramic assemblage displays a more limited range of forms compared to the later phase. Regarding open form, plates with round (PL1), squared (PL2) and tapering rim (PL3) are documented, most of them (85%) characterised by Red Slip. A red slipped fruit-stand (SF T1 7563.701, **PI. 3:4**) of the type with simple round rim is present too.

Shallow bowls have a reduced range of forms as well: bowls with inturned thickened rim (SB4), flat thickened rim (SB8) and carinated bowls with flaring rim (SB13) are present and most (83%) are red slipped.

Concerning deep bowls, types with simple rim (DB1) and modelled rim (DB14) are more common, while those with squared rim (DB4) and externally thickened rim and internal angular thickening (DB8) are rare. In this level, the Red Slip on deep bowls is present on 40% of the assemblage, which is a lower percentage compared to the shallow bowls.

Concerning kraters and jugs, only one sherd of krater with out-turned rim (KR1) and one sherd of jug with rounded rim (JU4) are attested.

Jars are particularly scarce in this level, with only one sherd of double rim (J3) and one of modelled rim (J4) types attested. Regarding cooking pots, only short-necked types are represented in the pottery assemblage of this level, a few sherds of the straight rim (CP6) and the upright sinuous rim (CP7) types.

Large storage jars are the most common form, with the swollen rim type (P1) and its variants with round, squared and oval rim (P1a, b, c).

As usual, painted sherds (PT) are very rare (2%), while Red Slip (RS) is quite common, occurring on 39% of the ceramic assemblage.

Notwithstanding the scarce archaeological evidence, **Phase 8** yielded a substantial (more than 270 fragments) and typologically varied pottery assemblage.

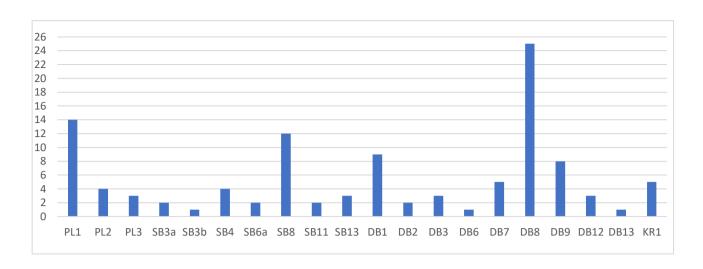


Table 29: Operation H-T1, phase 8. Open forms and kraters.

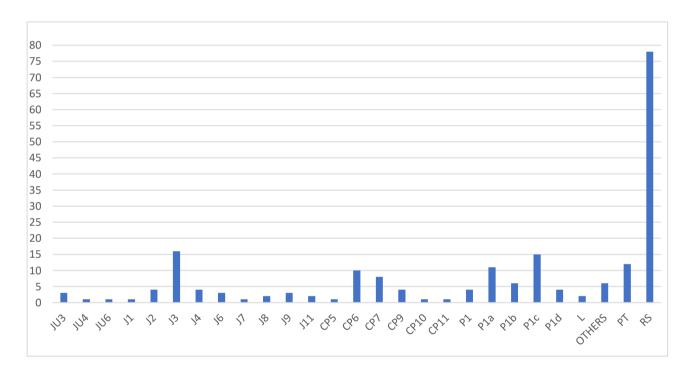


Table 30: Operation H-T1, phase 8. Closed forms, painted and red slipped pottery.

Plates have, as usual, round (PL1), squared (PL2) and tapering rims (PL3), the great majority of them of the first type. Red Slip is present on 19% of the plates; paint also occurs on 19% of them, a clear increase with respect to later phases.

Regarding shallow bowls, rounded bowls with flat thickened rim (SB8) are, as always, the most common type: present, but in lesser quantities, are bowls with oblique out-turned rim with both rounded walls (SB3a) and carination (SB3b), inturned thickened rim (SB4), triangular rim (SB6a), outward swollen rim (SB11) and carinated bowls with flared rim (SB13). Painted shallow bowls are rare, only 4%, while Red Slip is as always very common and occurs on 80% of the assemblage.

Deep bowls come in a wide range of shapes: hemispherical bowls with externally thickened rim and internal angular thickening (DB8) are the most common type, followed by bowls with simple rim (DB1). Quite attested are also bowls with flaring straight walls (DB3), with inward rim and internal angular thickening (DB9) and with slightly protruding tapering rim (DB12). Bowls with tapering rim (DB2), squared rim (DB4), inward rim and basin profile (DB5a), outturned rim and tapering lip (DB6), thickened rim and rounded lip (DB7) and outward squared rim (DB13) are rare. The Red Slip treatment is common as usual, occurring on 46% of the assemblage of the deep bowls, while painted sherds are still rare (1.8%).

Only kraters with out-turned rim (KR1) are present in this phase: 60% of them are red slipped, while only one sherd (20% of the assemblage) is painted. The latter (SF T1 7297.701, **PI. 30:3**) is actually a bichrome painted krater, characterised by red and black paint on the body and the handle: the use of two colours is unusual for decorations in Mishrifeh (Chapter 4.4). Jugs are represented by types with everted (JU3), rounded (JU4) and flaring thickened (JU6) rims: 16% of them are red slipped.

Jars display a wide range of forms, but in scarce quantities: the most common type is as usual the double rim jar (J3), while collared rim jars (J2), jars with modelled rim (J4) and concave neck and thickened rim (J6) occur quite frequently. Neckless jars with thickened rim (J1), jars with outward rim (J7), upturned swollen rim (J8), straight vertical rim (J9) and thickened internally angular rim (J11) are very rare. Red Slip is present on 8.5% of the vessels, characterising the J6, J7 and J9 types.

Concerning cooking pots, only short-necked vessels are found in this level: pots with straight rim (CP6) are the most common type, followed by the types with upright sinuous rim (CP7) and upright thickened rim with an external depression below the rim (CP9). Very rare are cooking pots with a double rim (CP10) and with inverted stance and grooved rim (CP11). Lastly, storage ware is represented by large storage jars with swollen rim (P1 and variants). Ceramic small finds (OTHERS) include: a bowl, with a form similar to DB6, with applied bulls' heads and decorated with red paint (SF H 6353.701, **PI. 74:3**);<sup>107</sup> two sherds of Cypriot Black-on-Red pottery, with painted lines and concentric circles.

Painted pottery (PT) shows a slight increase in the ceramic assemblage of this phase – about 4% - while Red Slip (RS) appears on 28% of the pottery.

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<sup>&</sup>lt;sup>107</sup> A similar specimen, with an applied bull's head decoration, was found in Operation J from the section and dated to the Iron Age II: however, the fragment from Operation J was red slipped, instead of painted (Morandi Bonacossi 2002 fig. 114).

The ceramic assemblage of **phase 9** is characterised by a large quantity of open forms and a significant amount of storage ware, which reflects the productive nature of the area in this level.

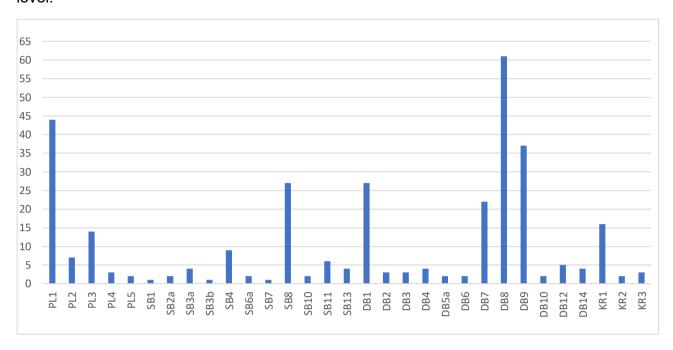


Table 31: Operation H-T1, phase 9. Open forms and kraters.

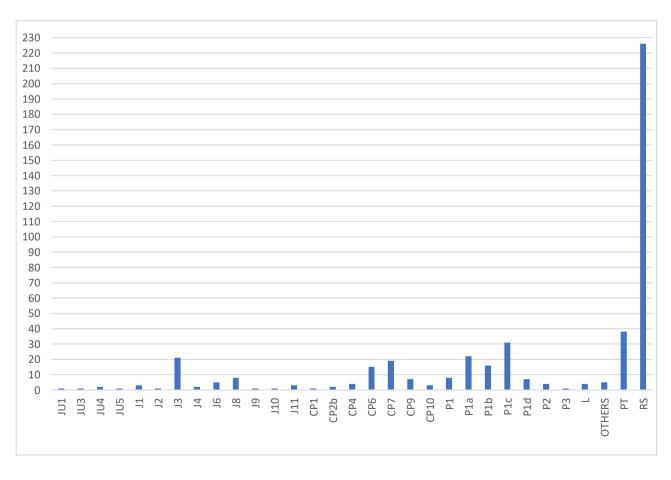


Table 32: Operation H-T1, phase 9. Closed forms, painted and red slipped pottery.

The most common type of plates are those with simple round rim (PL1), followed by plates with tapering rim (PL3), while plates with squared rim (PL2) are much rarer. Carinated plates with squared (PL4) and simple (PL5) rims are rare. It is noteworthy that the Red Slip treatment characterises more than 52% of the plates, especially the PL3<sup>108</sup> type, while 24% of them are painted: only a few sherds are devoid of any treatment or decoration.

Shallow bowls display a wide range of forms: the most common is once again the type with flat thickened rim (SB8). Also quite common are bowls with inturned thickened rim (SB4), oblique out-turned rim and tapering basin with rounded walls (SB3a), outward swollen rim (SB11) and the carinated bowl with flared rim (SB13). Less common are those with outward rim and curving profile (SB1), carinated bowls with simple rim (SB2a), oblique out-turned rim and tapering basin with carination (SB3b), with triangular rims (SB6a) and semi-circular rim or handle (SB10). One sherd of bowl with thickened rim (SB7) appears in this level. Once again, Red Slip is widely present and can be found on 69% of the shallow bowls, while painted sherds represent only 1.7% of the shallow bowls.

Deep bowls are more numerous than shallow ones (171 sherds against 58) and the most common type is again the bowl with externally thickened rim and internal angular thickening (DB8). Frequent are also bowls with simple round rim (DB1), thickened rim and rounded lip (DB7) and inward rim and internal angular thickening (DB9). Bowls with slightly protruding tapering rim (DB12) are less present, whereas the remaining types are rare: bowls with tapering rim (DB2), flaring straight walls (DB3), with squared (DB4) and inward (DB5a) rims, with out-turned rim and tapering lip (DB6), globular bowls with tapering flared rim (DB10) and bowls with modelled rim (DB14). Red Slip treatment is very common on deep bowls as well and is found on almost 64% of the fragments; paint, instead, is found only rarely, on 2.3%.

Kraters are especially attested with out-turned rim (KR1), while the other two types, with rounded (KR2) and straight vertical (KR3) rims are much rare. They are mostly characterised by Red Slip (63%) or red paint (21%), and only a handful of sherds lack any treatment or decoration.

Jugs are extremely scarce: only one sherd is present for each type – trefoil jug (JU1), jugs with everted simple rim (JU3), rounded rim (JU4) and double profile (JU5) –and only in Common Ware.

Jars are not particularly common either, apart from the usual double rim jar (J3): jars with concave neck and thickened rim (J6) and storage jars with upturned swollen rim (J8) are

<sup>&</sup>lt;sup>108</sup> All plates with tapering rim in this phase are red slipped, except for one which is painted.

documented in small numbers. Neckless jars with thickened rim (J1), jars with modelled rim (J4), straight rim (J9), out-turned squared rim (J10) and thickened internally angular rim (J11) are extremely rare. As expected, red slipped jars are scarce: only one sherd of J9, one of J6 and one of J11 are characterised by the Red Slip, that is the 4% of the jars.

Short-necked pots are the most frequent group of cooking vessels in this level too: in a trend similar to Phase 6b, pots with upright sinuous rim (CP7) are the most common type, followed by those with straight rim (CP6). Cooking pots with upright thickened rim with an external depression (CP9) also occur frequently, while on the contrary vessels with an external groove on the rim (CP10) are rare. Holemouth cooking pots are not common and only two types – pots with thickened rim (CP2b) and small out-turned thickened rim (CP4) – are documented.

Storage ware, represented especially by large storage jars, is widely present, confirming the productive nature of the occupation also in this phase: storage jars with swollen rim (P1) and variants are very common as always, but also storage jars with outward rim (P2) and grooved rim (P3) also occur in small numbers.

Four fragments of lamps (L) are also documented.

Concerning what could be defined as "unusual" forms (OTHERS), two spouts presumably once part of two juglets of the "teapot" type were found (H 7084.3, H 8563.18, PI. 73:3-4). Furthermore, in a pit two rim-fragments of basins (T1 8366.12-13, PI. 70:2-3) were found: given the similarities in form and decoration, they probably belonged to the same vessel. Their state is quite fragmentary, but they appear to have an outward squared rim and are characterised by fingerprints impressions (and a few small oval impressions on one sherd). From this level comes also a fragmentary zoomorphic painted vessel (SF T1 8302.708, PI. 73:6): it looks similar to the one found in sub-phase 6a and probably represented a bird as well, perhaps a duck. In this specimen the red paint is much more visible: the lower body of the vessel is decorated with a large painted band, while the upper body is characterised by criss-cross lines.

Another sherd of Cypriot Black-on-Red pottery, with four painted lines, was found in this phase.

The percentage of painted pottery (PT), which occurs in a larger percentage compared to later phases, is noteworthy: it is in fact present on more than 6% of the ceramic assemblage (38 fragments). Red Slip (RS) is once again documented on a large number of sherds, occurring on more than 37% of the assemblage.

# The pottery of **Phase 10** is also represented by a wide range of types.

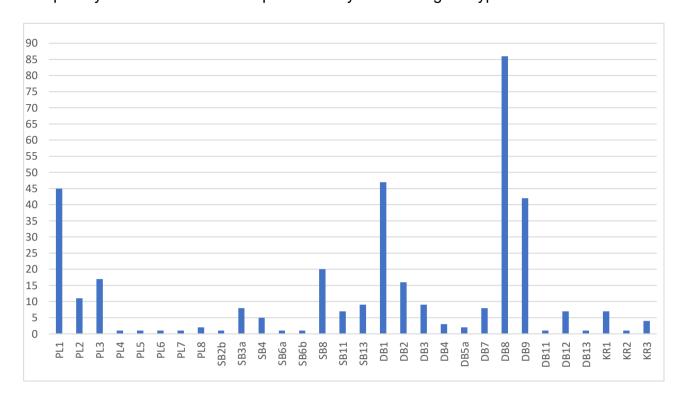


Table 33: Operation H-T1, phase 10. Open forms and kraters.

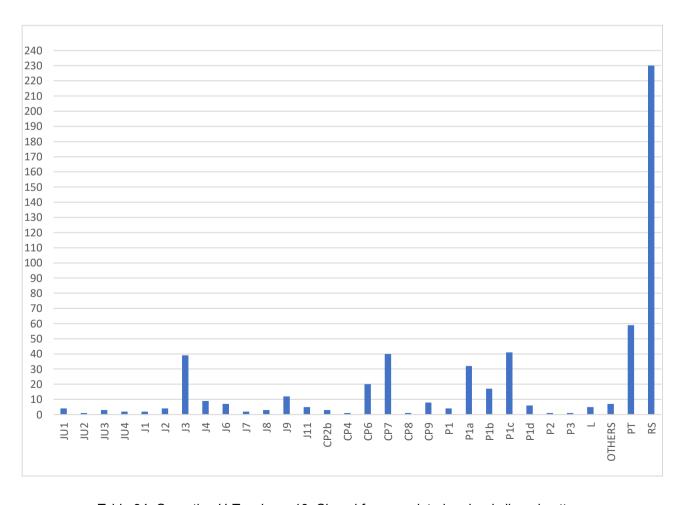


Table 34: Operation H-T<sub>1</sub>, phase 10. Closed forms, painted and red slipped pottery.

Plates are still very common, especially ones with simple round rim (PL1), and it is interesting to note the wide range of forms documented in this level: in fact, while the usual plates with squared (PL2) and tapering rims (PL3) occur frequently, also other types appear in smaller quantities. These types are carinated plates with squared rim (PL4), plates with outward flaring rim (PL6), plates/shallow bowls with internally thickened rim (PL7) and plates/shallow bowls with high carination and slightly triangular thickening (PL8). PL6 and PL7 are found only in this level in the Operation H-T1 ceramic assemblage. Plates in this level are mostly red slipped (48%) or painted (almost 23%) and only a few sherds are devoid of any treatment or decoration.

Shallow bowls are dominated as usual by bowls with flat thickened rim (SB8). Bowls with oblique out-turned rim and tapering basin (SB3a), inturned rim (SB4), outward swollen rim (SB11) and carinated bowls with flared rim (SB13) occur more rarely. Bowls with carination and simple rim (variant SB2b), simple triangular rim (SB6a) and triangular hammerhead rim (SB6b) are rare. The majority of the shallow bowls are characterised by Red Slip (61.5%) and, while only a small percentage (almost 8% of the assemblage) are painted, it is noteworthy how the percentage of painted sherds for this form increases in this level.

Deep bowls represent the most numerous form in this level (222 fragments): the most common type is as always the bowl with externally thickened rim and internal angular thickening (DB8), followed by bowls with simple round rim (DB1) and inward rim and internal angular thickening (DB9). Bowls with tapering rim (DB2) are also quite frequent, while other types are less common: these are bowls with straight flaring walls (DB3), squared rim (DB4), thickened rim and round lip (DB7) and slightly protruding tapering rim (DB12). Vessels with inward rim and basin profile (DB5a), outward flaring rim (DB11) and outward squared rim (DB13) are rare. Red Slip treatment is found on 57% of the deep bowls, while only a few sherds (almost 4%) are painted.

All types of kraters presented up until now occur in this phase: with out-turned (KR1), rounded (KR2) and straight vertical rim (KR3). The first type is the most common one and as usual, kraters are mostly red slipped (75%) or painted (16%) and only one sherd is devoid of any treatment or decoration.

Jugs are scarce as always, but present in various types: trefoil jugs (JU1), jugs with inward simple rim (JU2), everted rim (JU3) and rounded rim (JU4). In this level, jugs are all in Common Ware, except for one painted sherd (10% of the form).

Concerning jars, they are quite uncommon, except for the double rim jar (J3). Jars with modelled rim (J4), with concave neck and thickened rim (J6) and straight vertical rim (J9) also occur quite frequently, while neckless jars with thickened rim (J1), collared rim jars (J2),

jars with outward rim (J7), upturned swollen rim (J8) and thickened internally angular rim (J11) are rare. In this level, too, is confirmed the trend that jars are usually devoid of treatment or decoration: only two sherds are painted (2.8%) and merely four are red slipped (almost 4%), three fragments of J9 and one of J4. This is interesting, as storage jars with straight vertical rim (J9) seem to be characterised by Red Slip especially in earlier levels, while in later phases the treatment is found more on jars with thickened internally angular rim (J11), as seen above. This is also the only phase of the Operation in which paint was found on jars.

Cooking pots have a limited range of types: short-necked vessels are the most numerous as always, with pots with upright sinuous rim (CP7) and straight rim (CP6) the most common types, while pots with upright thickened rim and external depression (CP9) are less common. Holemouth cooking pots, they are quite scarce and only two types are represented: pots with thickened rim (CP2b) and small out-turned thickened rim (CP4).

Large storage jars are well represented, especially the type with swollen rim and its variants (P1). A few sherds of large storage jars with outward rim (P2) and grooved rim (P3) also occur.

Ceramic small finds (OTHERS) include: a rim-fragment of a basin (T1 8313.21, **PI. 70:4**), analogous to those found in phase 9, but much better preserved, with an outward squared rim and fingerprint impressions. Another juglet of the "teapot" type (SF H 7083.701, **PI. 72:2**) is similar to the one found in phase 6a, a globular juglet with a spout and decorated with red paint, except for the presence of the handle: a thin, circular, vertically positioned handle.

Lamps (L) are present, in very small numbers (5 fragments), also in this level.

The percentage of painted ware is very interesting: in this level painted pottery (PT)<sup>109</sup> reaches its highest percentage in Operation H-T1, 7.6% of the ceramic assemblage. Red Slip Ware (RS) occurs on 30% of the assemblage of this level.

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<sup>&</sup>lt;sup>109</sup> To be noted the presence of a small body-sherd of Local Bichrome pottery.

SB	13	2.6	5.		5.9	4.	8.0	<del>4</del> .
SB	#	1.8	0.3	1.3		6.0	1.2	7.
SB	10		7.0				0.4	
SB	9a		0.3					
SB	<b>ω</b>	1.8	3.7	4	8.8	5.6	5.3	3.1
SB	q9							0.2
SB	<b>6</b> a	0.4	0.5			6.0	0.4	0.2
SB	£0	4.0						
SB	4	6.0	1.2	2.2	2.9	1.8	1.7	0.8
SB	3b			0.4		0.5	0.2	
SB	3a		0.2	9.0		6.0	9.0	1.2
SB	2b			0.4				0.2
SB	2a			6:0			0.4	
SB	-		0.2				0.2	
P	80			9.0				0.3
PL	7							0.2
P	9							0.2
PL	5			0.4			0.4	0.2
PL	4		0.2				9.0	0.2
PL	ဇ	1.8	0.5	2.2	5.9	4.1	2.7	2.7
P	7	2.6	4. 4.	6:0	2.9	8.	4.	1.7
Ъ	-	4	5.2	5.7	. t	6.5	8.6	7.1
TYPE/	PHASE	H-T1 5	H-T1 6a	H-T1 6b	H-T1 7	H-T18	H-T19	H-T1

Table 35: Operation H-T1, percentage occurrence of open form types (plates, shallow bowls). Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

J 0		0.2			0.5		
J. 8		0.2				0.2	
J 4	0.4		0.4		0.5	0.4	0.3
J &		0.7	0.4		1.4	0.2	0.5
J 2							0.2
<b>∃</b> ←	6.0	0.2	6:0			0.2	9.0
<del>х</del> "	4.0	0.3	6:0			9.0	9.0
<del>х</del> 2		0.5				0.4	0.2
조 -	£.	4.	4	5.9	2.3	£.	<del></del>
DB 14		0.3	6.0	5.9		8.0	
13 13		0.2	4.0		0.5		0.2
DB 12	6.	0.5	4.0		<u>+</u>	-	<del>-</del> -
DB 11							0.2
DB 10		0.2				4.0	
9 6 9	3.1	2.8	4		3.7	7.2	9.9
8 8	9.9	3.4	7.4	2.9	<u>£</u> 0	<u>t</u> o	6 3.
DB 7	3.1	2.2	6.0		2.3	£.	1.2
9		0.3	4.0		0.5	4.0	
DB 5a	4.0		6.0			4.0	0.3
DB 4	4.0	0.5	4.0	2.9		0.8	0.5
3 8	6.0	0.5	0.4		4.	9.0	4.
DB 2	3.7	1.2	1.3		6.0	9.0	2.5
DB -	5.2	4.5	4.	5.9	2.	5.3	7.4
TYPE/ PHASE	H-T1 5	H-T1 6a	H-T1 6b	H-T1 7	H-T18	H-T19	H-T1 10

Table 36: Operation H-T1, percentage occurrence of open, mixed and closed form types (deep bowls, kraters, jugs). Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

9 <del>E</del>					0.5		
10 CP		0.2			0.5	9.0	
G 6	2.6	8.0	2.6		<u>6</u>	4.	1.2
۵ »		0.5					0.2
CP 7	7.5	1.2	5.3	2.9	3.7	3.7	6.3
G 6	4	2.6	2.6	2.9	4.6	2.9	3.1
C S	4,0	0.3			0.5		
Q 4		1.2	4.0			0.8	0.2
CP 2b	6:0	0.5	4.0			9.0	0.5
Q -	0.4		4.0			0.2	
¬ ₽	1.3	0.5	6.0		6:0	9.0	0.5
J 01	0.4					0.2	
ව	0.4	0.2	6.0		<b>4</b> .	0.2	1.9
8	0.4	0.2	0.4		6.0	7.5	0.5
7	0.4	0.2			0.5		0.3
97	6:0	0.5			4.	-	1.1
47	0.4	0.3	5.7	2.9	<del>6</del> .	0.4	4.1
<del>د</del> ر	5.2	5.2	2.2	2.9	7.4	1.4	6.2
ट्	1.3	0.8	6.0		1.8	0.2	9.0
7	1.8	0.7	0.4		0.5	9.0	0.3
TYPE/ PHASE	H-T1 5	H-T1 6a	H-T1 6b	H-T1 7	H-T18	H-T19	H-T1 10

Table 37: Operation H-T1, percentage occurrence of closed forms types (jars and cooking pots). Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

Type/	P1	P1a	P1b	P1c	P1d	P2	P3
Phase							
H-T1 5	3.1	7.5	4	9.2	4	0.4	
H-T1 6a	3	9.6	9.2	17.8	4.2		0.2
H-T1 6b	1.7	9.2	11.9	7.4	2.2		0.4
H-T1 7		8.8	2.9	11.8			
H-T1 8	1.8	5.1	2.8	7	1.8		
H-T1 9	1.5	4.3	3.1	6	1.4	0.8	0.2
H-T1 10	0.6	5	2.7	6.5	0.9	0.2	0.1

Table 38: Operation H-T1, percentage occurrence of closed form types (large storage jars). Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

Type/	PT	RS
Phase		
H-T1 5	2.17	19.2
H-T1 6a	1.5	21.4
H-T1 6b	1.4	29.9
H-T1 7	2	39
H-T1 8	4	28
H-T1 9	6	37
H-T1 10	7.6	30

Table 39: Operation H-T1, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

#### 3.5.3. H NORTH - ARCHAEOLOGICAL CONTEXTS AND STRATIGRAPHY

A different discussion is needed for the excavation area called 'H North': it measured 6 x 6 m and was begun in 2007 to investigate the Middle Bronze Age Hypogeum 5, whose structures had been partially excavated in 2006. The sounding was then enlarged in 2008. The sequence discovered in H North evidences a progressive reorganization on the slope in the Iron Age, with various overlapping terracing structures cutting into the bedrock: this was probably done to create space needed for living or working purposes (Garna 2011: 109).

### **PHASE 6** (Fig. 190)

This is the most recent Iron Age level, found immediately under modern layers. It was formed of a silty trodden floor (SU 7906-9099), which sloped slightly towards the north, a related pit (SU 7936) and two deposits (SU 7905 and 7907) in a circular shaped depression. The depression, located in the south-eastern corner of the sounding, was probably caused by the collapse of the underlying Hypogeum 5. Both the deposits 7905 and 7907 contained small and medium-sized stones and pottery.





Fig. 190: Operation H North, Phase 6. Left: Floor 7906. Right: Floor 9099.

#### **PHASE 7** (Figs. 191-192)

This level consisted of a trodden floor (SU 7919-9103) and a square pit (SU 7917) filled with stones and pottery. Over the floor lay deposit SU 7919, in which a fragment of painted plaster was found, and US 9100, consisting of collapsed mudbricks and jar fragments. It may represent an episode of abandonment of the area.



Fig. 191: Operation H North, Phase 7. Pit 7917.



Fig. 192: Operation H North, Phase 7. Floor 9103.

# **PHASE 8** (Fig. 193)

Under the previous phase, deposits SU 8103 and 9104 and trodden floor US 8106 were exposed. Floor 8106 abutted a stone wall foundation (SU 8104) associated with jar fragments and a grinding stone (SF 8104.701. Garna 2011: 112): in the middle of the wall a large basalt stone, perhaps a threshold was discovered. Deposit SU 8107 and trodden floors SU 8110 and 9106 were also related to 8104. The function of the structures was unclear due

to the very limited exposure of the building.

The southern part of the sounding was instead occupied by a depression caused by the collapse of the underlying Hypogeum 5.



Fig. 193: Operation H North, Phase 8. General view of floor 8106.

### **PHASE 9** (Fig. 194)

This consisted of a floor (SU 9114) covered by deposit SU 9112 and collapsed mudbrick layer SU 9113, in which two spherical weights (SF 9112.701-702) and a sherd of painted pottery (SF 9112.703) were found. Also present were a large pit (SU 8116), filled with ash, potsherds and small stones, and a smaller pit (SU 8118), also filled with ash and pottery. This phase probably represented an episode of abandonment, with artisanal tools discovered in secondary context.

#### **PHASE 10 AND PHASE 11** (Figs. 195-197)

These two phases are presented together since they could simply represent the features of two different terraces and therefore be contemporary.

Under some deposits, a building attributed to Phase 10 was exposed. Of the structure remained a mudbrick wall with stone foundations (SU 7923), connected to a small square

bench (SU 7926),<sup>110</sup> and an inner trodden floor (SU 7927). On this floor, the head of a Middle Bronze Age I figurine (SF 7918.701) in secondary context was found.



Fig. 194: Operation H North, Phase 9. General view.

In the underlying Phase 11, the slope of the tell was reorganized with the construction of a wall (SU 7397) oriented north-east/south-west, covered by deposit SU 9115. In the fill of the foundation trench (SU 8123) a basalt mortar (SF 8123.701) was found, whereas in wall 7397 a small basalt pestle (SF 7397.701) and a crucible with remnants of bronze (SF 7397.702) were re-used as building materials. Wall 7397, together with walls SU 8186 and 9118, was probably part of a domestic or productive structure (fig. 196). Its floor was US 9117, on which a basalt conical weight (SF 9117.701) was found. The scanty evidence does not allow a precise interpretation, however the presence of the weight may indicate that the building was a domestic unit (Garna 2011: 109, 114), where textile activities were performed on a household level, or perhaps a structure devoted to craft activities.

Since the structures of Phase 10 building do not overlie or cover those of Phase 11 building, the two buildings may be contemporary and simply be located on two different terraces (fig. 197. Garna 2011: 116).

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<sup>&</sup>lt;sup>110</sup> On the bench there were two fragmentary cooking pots (SF 7926.701).



Fig. 195: Operation H North, Phase 10. General view.



Fig. 196: Operation H North, Phase 11. General view of the building.

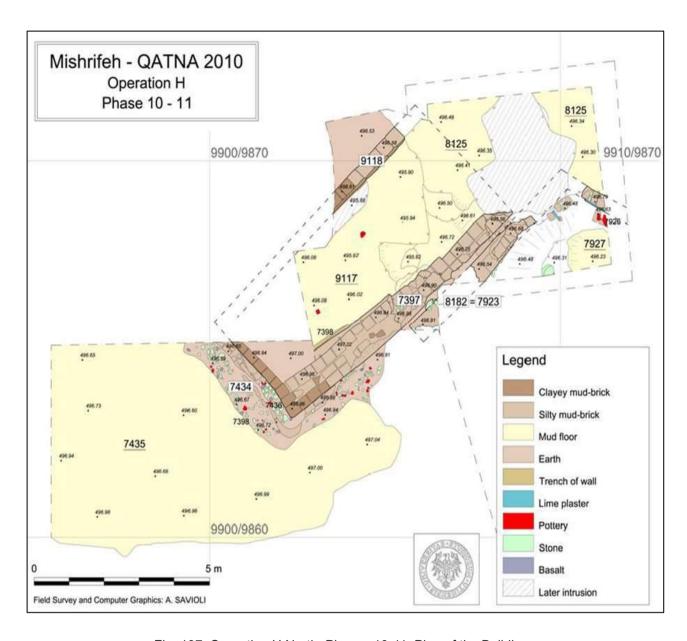


Fig. 197: Operation H North, Phases 10-11. Plan of the Buildings.

## **PHASE 12** (Fig. 198)

This is a badly preserved phase, characterised by a trodden floor (SU 8185) formed of broken mudbricks: it was found under two deposits (SU 8184 and 9565) composed of mudbrick debris, stones, gravel and pottery.



Fig. 198: Operation H North, Phase 12. Floor 8185.

# **PHASE 13** (Figs. 199-200)

Found only in the southern area of the sounding, this featured a mudbrick wall (SU 8181) with stone foundations which cut the bedrock (SU 7441) underneath. Associated with the wall was also its collapse (SU 8197). Under the foundations of SU 7393 a floor (SU 9569) which abutted a much-reworked wall (SU 9568) was uncovered. An installation (SU 9566-9571) created by a mud-plastered mortar, two millstones (9569.701 and 703), a basalt pestle and some fragments of basalt grindstone were also associated to the floor (Garna 2011: 109, 116-117).

The presence of all these elements suggests that this was an open area, belonging perhaps to a nearby domestic or productive unit, where activities devoted to the transformation of agricultural produce were carried out. The building of Phase 11 obliterated the open area, marking also a change of use from activities related to the production of food to textile weaving activities (Garna 2011: 118).



Fig. 199: Operation H North, Phase 13. General view.



Fig. 200: Operation H North, Phase 13. Wall 8181.

### **PHASE 14** (Fig. 201)

Wall 8181 cut also an underlying mudbrick wall (SU 8182) with stone foundations (Garna 2011: 109), badly preserved and connected to a trodden floor (SU 8402). Another floor (SU 9575) was uncovered under deposit SU 9572, in which a millstone (SF 9572.701) was found. Floor 9575 was cut by a pit (SU 9573-9574) – full of stones, pottery, limestone fragments and a basalt grindstone (SF 9573.791) – which damaged the underlying Hypogeum 5.



Fig. 201: Operation H North, Phase 14. General view.

### **PHASE 15** (Fig. 202)

Located mainly in the northern area of the sounding, this phase was characterised by trodden floors SU 8196, on which a basalt pestle was found (SF 8196.701), SU 8409, created out of mudbrick debris and some Iron Age painted pottery (SF 8409.701 and 702), and SU 9582. Deposit SU 8412, from which comes a Black-on-Red rim fragment (SF 8412.701, **PI. 76:7**), also pertains to this phase. It was interpreted as a levelling layer; in any case the evidence is too poor for a more precise interpretation.



Fig. 202: Operation H North, Phase 15. General view.

### **PHASE 16** (Fig. 203)

Underneath deposit 8412 a trodden floor (SU 8414) was discovered, on which a small, pierced basalt object (SF 8414.701), perhaps a pestle, was found. In floor 8414 an irregular pit (SU 8411) was discovered, which was identified as the access pit of Hypogeum 5. These features abutted the southern side on the bedrock 7441, which showed erosion caused by water. Perhaps the water's concentration or stagnation could have also caused the collapse of the underlying vault of Hypogeum 5.

### **PHASE 17** (Figs. 204-205)

This is the earliest Iron Age phase of the sounding, immediately over Hypogeum 5. It was characterised by trodden floor 8523 and deposits SU 8521, from which came a basalt pestle (SF 8521.701), and SU 8522, in which a small lump of iron (SF 8522.701) and a bronze nail (SF 8522.702) were found. In floor 8523 was interred a massive stone structure SU 8419-8420, whose precise function is unclear and partially damaged the underlying Hypogeum 5 (Garna 2011: 111-112).



Fig. 203: Operation H North, Phase 16. General view.



Fig. 204: Operation H North, Phase 17. General view.



Fig. 205: Operation H North, Phase 17. The massive stone structure 8419-8420.

#### 3.5.4. H NORTH - POTTERY

The assemblage from H North was also analysed by means of the records of the finds stored in Syria. This small excavation area unfortunately did not yield a lot of pottery, and furthermore residual Bronze Age materials is quite common. Therefore for some phases it was not possible to analyse any diagnostic Iron Age pottery.

The ceramic assemblage of **Phase 6** is limited in quantity (16 sherds in total) and in the range of types present.

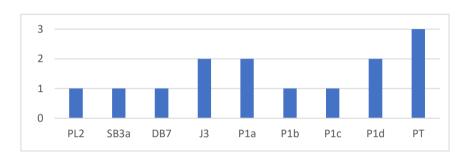


Table 40: Operation H North, phase 6. Pottery.

Open forms are scarce and represented by a painted sherd of plate with squared rim (PL2), a painted fragment of bowl with oblique out-turned rim and tapering basin with rounded walls (SB3a) and a sherd of bowl with thickened rim and rounded lip (DB7).

Apart for a few fragments of double rim jar (J3), closed forms are represented especially by large storage jars with swollen rim (P1 and variants); storage ware constitutes the majority of the assemblage of this level.

No Red Slip is documented, while painted decorations (PT) occur on 18% of the assemblage. This high value for painted pottery is unusual, however it corresponds to three sherds in total and such a small repertoire is not a representative sample. Moreover, paint occurs often on both the PL2 and SB3 types (Chapters 4.2.1.2 and 4.2.2.3), more than Red Slip. Therefore, the high percentage of painted pottery is thus explained by the small assemblage and the presence of two often painted forms. The lack of red slipped sherds is probably due to the scarce presence of open forms.

A similar situation can be observed for the pottery of Phase 7.

Open forms are limited and represented by one red slipped sherd of plate with tapering rim (PL3), one of carinated bowl with simple rim (SB2b), one red slipped fragment of flaring bowl with straight walls (DB3) and two sherds of bowls with thickened rim and rounded lip (DB7).

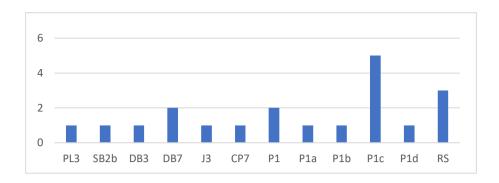


Table 41: Operation H North, phase 7. Pottery.

So, it appears that 33%, which is actually one sherd, of the deep bowls are red slipped.

Concerning closed forms, only one sherd of double rim jar (J3) and one of cooking pot with upright sinuous rim (CP7) occur, while large storage jars with swollen rim (P1 and variants) make up the majority of the assemblage.

No painted vessels are present, while Red Slip (RS) is documented on 16% of the ceramic assemblage.

**Phase 8** furnished a limited range of forms as well, comprising a small assemblage of about ten sherds.

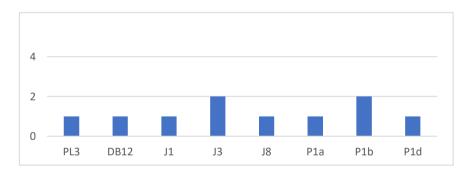


Table 42: Operation H North, phase 8. Pottery.

Open forms are represented only by a sherd of plate with tapering rim (PL3) and one of bowl with slightly protruding rim (DB12), while jars display a wider range of types with neckless jars with thickened rim (J1), double rim jars (J3) and storage jars with upturned swollen rim (J8). Large storage jars with swollen rim – with the variants with round, squared and pointed rims (P1a, P1b, P1d) – occur, through rarely.

No painted or red slipped pottery is documented.

Only a handful of sherds (17) compose the ceramic assemblage of **Phase 9**. Open forms are represented by plates with squared rim (PL2), shallow bowls with flat thickened rim (SB8)

and rectangular rim and flattened lip (SB9b), deep bowls with thickened rim and rounded lip (DB7) and internal angular thickening (DB8-9). Only the SB8 sherd is red slipped, representing 50% of the shallow bowls and 14% of the open forms. A sherd of cooking pot with sinuous rim (CP7) is present. A few fragments of large storage jars with swollen rim, of the variants with rounded and pointed rim (P1a, P1d), occur as well. No painted pottery was found, while the Red Slip (RS) is present on 6% of the assemblage.

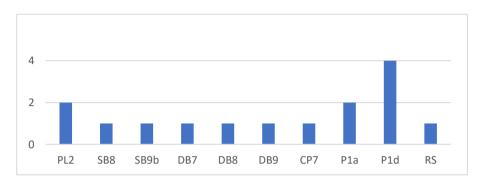


Table 43: Operation H North, phase 9. Pottery.

Unfortunately, **Phase 10** returned no diagnostic Iron Age pottery.

Less than ten potsherds come from Phase 11.

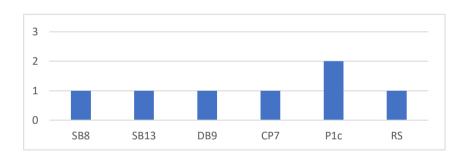


Table 44: Operation H North, phase 11. Pottery.

Open forms are represented by a fragment of bowl with flat thickened rim (SB8), one of carinated bowl with flaring rim (SB13) and one of bowl with inward rim and internal angular rim (DB9); both the fragments of shallow bowls are red slipped. Closed forms are represented by cooking pots with upright sinuous rim (CP7) and large storage jars with swollen oval rim (P1c). In the assemblage of this phase there is no painted pottery, while Red Slip (RS) characterises 22% of the assemblage.

**Phase 12** was poorly preserved and returned a limited ceramic assemblage as well (about ten fragments). No open forms are attested in this level, while closed forms display a slightly

wider range of types.

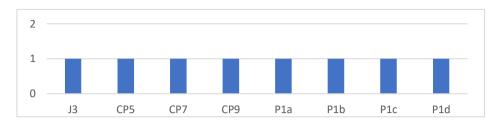


Table 45: Operation H North, phase 12. Pottery.

Double rim jars (J3), cooking pots with outward inflated rim (CP5), with upright sinuous rim (CP7) and with upright thickened rim and an external depression (CP9) are documented in scant quantities. Large storage jars with swollen rim (P1 and variants) are once again the most common type. No painted or red slipped pottery is present.

From **Phase 13** comes only one sherd of a large storage jar with swollen oval rim (P1c), and from **Phase 14** merely a fragment of plate with squared rim (PL2).

**Phase 15** has the most significant pottery assemblage of the sounding, composed of about 50 sherds.

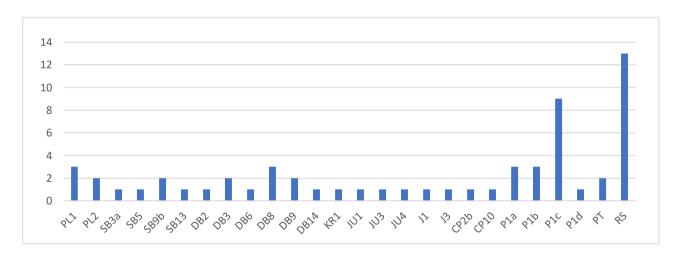


Table 46: Operation H North, phase 15. Pottery.

Plates have round (PL1) and squared rims (PL2): 40% of them are painted and 40% characterised by Red Slip. One of the plates with squared rim has a complete profile and is decorated with a red-painted criss-cross motif on the inner surface (SF H 8409.702, **PI. 5:2**). Shallow bowls are represented mostly by bowls with squared rim and flattened lip (SB9b), but bowls with oblique out-turned rim and tapering basin with rounded walls (SB3a), with inward rim and external slightly triangular thickening (SB5) and carinated bowls with flaring

rim (SB13) occur too. Most of the shallow bowls, 80%, are red slipped.

Concerning deep bowls, the most common type is the hemispherical bowl with externally thickened rim and internal angular thickening (DB8), followed by types with flaring straight walls (DB3) and inward rim and internal angular thickening (DB9). Bowls with tapering rim (DB2) and out-turned rim and tapering lip (DB6) are also documented. Red Slip characterises 50% of the deep bowls.

Only one type of krater occurs in this phase, the one with out-turned rim (KR1), while jugs are of the trefoil (JU1), everted simple rim (JU3) and rounded rim (JU4) types.

Jars are present only in small quantities and very few types: one sherd of neckless jar with thickened rim (J1) and one of double rim jar (J3). The same situation can be registered for cooking pots: only one fragment of holemouth pot with thickened rim (CP2b) and one sherd of short-necked pot with external groove on the lip (CP10) are present.

Large storage jars are the most common form in this level, exclusively of the type with swollen rim (P1 and variants).

From this level comes also a Cypriot Black-on-Red jug rim (SF H 8412.701, Pl. 76:7).

Painted vessels (PT) are scarce but attested, almost 4% of the assemblage, while Red Slip (RS) occurs on 24.5% of the pottery assemblage of this phase.

The ceramic assemblage of **Phase 16** is represented only by a few sherds (5 rim-fragments): one fragment of red slipped bowl with inward rim and internal angular thickening (DB9) and two of cooking pot with outward inflated rim (CP5) are present. Large storage jars are of the swollen rounded and oval rim types (P1a, P1c). The Red Slip (RS) is attested on 28.5% of the assemblage.

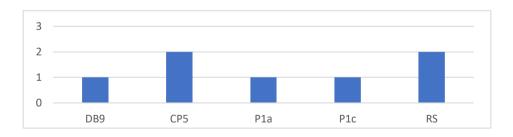


Table 47: Operation H North, phase 16. Pottery.

No pottery from **Phase 17** was available for the analysis.

TYPE/	PHASE	H North 6	H North	H North	H North	H North	H North	H North	H North	H North	H North 16
PL	-									6.8	
Ъ	7	9.1			<del>4</del> 6				100	4.5	
Ч	ო		5.9	10							
SB	2a		5.9								
SB	3a	1.0								2.3	
SB	r.									2.3	
SB	œ				7.1	6					
SB	q <sub>6</sub>				7.1					4.5	
SB	5					6 6				2.3	
DB	7									2.3	
DB	ო		5.9							4.5	
DB	ဖ									2.3	
DB	۲	1.0	7. 7		7.1						
BB	ω				7.1					8.8	
DB	6				7.1	9 .				4.5	20
DB	25			10							
DB										2.3	
퐀	-									2.3	
3	~									2.3	
3	ო									2.3	
UC	4									2.3	

Table 48: Operation J, percentage occurrence of open, mixed and closed (jugs) form types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

д р	8	5.9	10	28. 5		12.			2.3	
Z 0	0.1	53			33.	5.5	100		3 3	20
Z 0	1.0	5.9	20			5.5	-		8.9	
2 e	8	5.9	10	<u>4</u> ε		5.5			8.8	20
7		17.								
- CP									2.3	
<b>a</b> 6						5.5				
CP 7		5.9		7.1	6.	12.				
5 S						12.				40
CP 2b									2.3	
8			10							
£0	€ -	5.9	20			12.			2.3	
5			10						2.3	
TYPE/ PHASE	H North 6	H North	H North 8	H North	H North	H North	H North	H North	H North	H North 16

Table 49: Operation J, percentage occurrence of closed form types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

Type/	PT	RS
Phase		
H North 6	18	1
H North 7	/	16
H North 8	1	1
H North 9	1	6
H North 11	1	22
H North 12	1	1
H North 13	1	1
H North 14	/	1
H North 15	4	24.5
H North 16	/	28.5

Table 50: Operation J, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

#### 3.5.5. CONCLUDING REMARKS AND CHRONOLOGY

The Iron Age pottery assemblage from Operation H-T1 is, as mentioned above, the largest and most complete analysed in this work: this allows a series of important considerations to be made.

First, it can be observed that most of the types presented occur in all the phases of the Operation. Thus, it can be hypothesized that the stratigraphic sequence spans a limited chronological time frame and/or that most of the pottery forms are long-lasting. Moreover, the Iron Age occupation of Operation H-T1 consists of a series of levels characterised by external floors, pits and installations related to agricultural activities, mostly devoid of significant structures aside from Phase 6, and this is reflected by the numerous sherds of large storage jars, lack of many complete vessels and large majority of fragments of small dimensions, in some phases found especially in pit fills.

Furthermore, the majority of the most common types – such as plates with simple, squared and tapering rim (PL1, 2, 3), shallow bowls with inturned thickened rim or with flat thickened rim (SB4 and 8), carinated bowls with flared rim (SB13), deep bowls with simple or tapering rim (DB1 and 2), hemispherical bowls with thickened rim and round lip or with internal angular thickening (DB7, 8 and 9), jars with collared and double rim (J2 and 3) and large storage jars with swollen rim (P1) – are well known throughout Syria and the Northern Levant in both the Iron Age II and III.<sup>111</sup>

Taking all these observations into consideration, it is possible to recognize a precise chronological subdivision thanks to the presence of a number of more "short-term" pottery diagnostic.

The Phase 5 occupation was probably more rural in character, with many pits, in part devoted to the storage of agricultural produce and in part used as waste-disposal installations. The ceramic assemblage is typical of the Iron Age II, as shown by the large amount of plates with simple rim (PL1), deep bowls with simple and tapering rims (DB1, 2), externally thickened rim and internal angular thickening (DB8) and double rim jars (J3). Parallels for PL1 come from many Syrian sites like Hama, <sup>112</sup> Tell 'Acharneh. <sup>113</sup> Tell Mardikh. <sup>114</sup> Tell Mastuma <sup>115</sup> and Tell Afis. <sup>116</sup> Deep bowls with simple and tapering rim (DB1

<sup>&</sup>lt;sup>111</sup> For more precise parallels see Chapter 4.2

<sup>&</sup>lt;sup>112</sup> Fugmann 1958, figs. 325: 8A222, 8A68; 344: H899, H908.

<sup>&</sup>lt;sup>113</sup> Cooper 2006, figs. 1:7, 2:3-5, 5:6 and 9-11, 15:6.

<sup>&</sup>lt;sup>114</sup> Pizzimenti 2014/2015, fig. 2:9.

<sup>&</sup>lt;sup>115</sup> Wada 2009d, fig. 6.4.

<sup>&</sup>lt;sup>116</sup> Venturi 2020, Pl. 138:1.

and 2) are also extremely widespread in Central Western Syria: DB1 has parallels from Tell 'Acharneh<sup>117</sup> and Tell Qarqur<sup>118</sup> dated to the Iron Age II. In fact, hardly any specimens of this type were found in Iron Age III levels in Mishrifeh.<sup>119</sup> DB2 seems to be a more long-lasting form, with parallels from Tell 'Acharneh,<sup>120</sup> Tell Afis,<sup>121</sup> Tell Tuqan<sup>122</sup> and Chatal Hüyük<sup>123</sup> dated to both the Iron Age II and III. The J11 specimen T1 7006.12 (**PI. 46:2**) closely resembles a storage jar<sup>124</sup> from the German excavations of Operation G, from Late Iron Age II contexts.

The painted anthropomorphic vessel SF H 1060.1 has similarities with the zoo-anthropomorphic vessel from Operation K from an Iron Age I levels, but also shows similarities with a figurine dated to the Iron Age III found at Tell Tweini 125 and with an unpainted anthropomorphic vessel from a Late Iron Age II context in Operation O.126

The archaeological evidence seems to indicate that this might have been a moment of transition between the collapse of the administrative centre in Mishrifeh and the rural reoccupation of the Iron Age III (Garna 2011: 58-59, 61). Considering also the absence of pottery types exclusively attributable to the Iron Age III, a chronology around the Late Iron Age II or beginning of the Iron Age III, that is the end of the 8<sup>th</sup> century and the first quarter of the 7<sup>th</sup> century BC, can be convincingly hypothesized for Phase 5.

Phase 6 represents the major occupation level of the Operation and, probably, the most important Iron Age evidence from the Italian excavations at Mishrifeh: a large craft quarter devoted to various activities such as textile weaving and dyeing, and storage and transformation of agriculture produce (Morandi Bonacossi 2019: 8-19).

The ceramic repertoire of the whole phase, which has been divided in two sub-phases as already discussed, is comparable with that from Operation G, dated to the Late Iron Age II and studied by Giulia Russo (Russo 2018). The parallels concern the presence of red slipped plates with round rim (=PL1), <sup>127</sup> carinated bowls with flaring rim (=SB13), <sup>128</sup> hemispherical bowls with tapered rim (=DB2), <sup>129</sup> bowls with rounded walls and out-turned

<sup>&</sup>lt;sup>117</sup> Cooper 2006, figs. 1:2, 8:1-3.

<sup>&</sup>lt;sup>118</sup> Dornemann 2003a, figs. 81:22-23.

<sup>&</sup>lt;sup>119</sup> Just one sherd was found in Iron Age III levels in Operation T3: but since it is the only one in the entire Iron Age III assemblage, it could be a residual sherd.

<sup>&</sup>lt;sup>120</sup> Cooper 2006, fig. 1:3.

<sup>&</sup>lt;sup>121</sup> Venturi 2020, Pls. 135:4; 137:2, 6, 12-13.

<sup>&</sup>lt;sup>122</sup> Baffi 2008c, figs. 25:6, 27:10; Baffi 2011d, fig. 38:5.

<sup>&</sup>lt;sup>123</sup> Pucci 2019, Pls. 197:f-j.

<sup>&</sup>lt;sup>124</sup> Russo 2018, Pl. 1:11.

<sup>&</sup>lt;sup>125</sup> Bretschneider, Van Lerberghe 2010, fig. III.62.

<sup>126</sup> Ziedan 2013, Tav. 26:9.

<sup>&</sup>lt;sup>127</sup> Russo 2018, Pl. 1:1.

<sup>&</sup>lt;sup>128</sup> Russo 2018, Pl. 1:5.

<sup>&</sup>lt;sup>129</sup> Russo 2018, Pl. 1:6.

rim (=DB6),<sup>130</sup> bowls with internal thickening (=DB8)<sup>131</sup> and cooking pots with thickened rim (=CP2b). <sup>132</sup> Furthermore, the presence of short-necked cooking pots with sinuous rim (=CP7)<sup>133</sup> and thickened rim with an external depression (=CP9)<sup>134</sup> is particularly noteworthy, as they appear to be typologies typical of Mishrifeh (Russo 2018: 605. Chapters 4.2.7.7 and 4.2.7.9). An externally red slipped storage jar<sup>135</sup> from the German excavations is almost identical to H 5225.114 (**PI. 46:3**).

The pottery assemblage of Phase 6a is dominated by storage ware, which presumably reflects the intensification of storage activities indicated by the construction of the two silos in the central open area.

The large quantity of red slipped plates is comparable particularly with the assemblages of Tell 'Acharneh<sup>136</sup> and Tell Nebi Mend<sup>137</sup> dated to the Iron Age II (Cooper 2006; Whincop 2007). Furthermore, as observed by Lehmann and other scholars, <sup>138</sup> fruit-stands (**PI. 3**) were ubiquitous in inland Syria in Iron Age II, especially in the 8<sup>th</sup> century. A complete plate with squared rim (PL2 – SF H 5281.718, **PI 4:1**) is identical to a specimen from Tell Afis <sup>139</sup> dated to the 8<sup>th</sup> century. The SB3a type has parallels dated especially to the Iron Age II from Tell Mastuma, <sup>140</sup> Tell Qarqur, <sup>141</sup> Zincirli, <sup>142</sup> Karkemish. <sup>143</sup> More precisely, specimen T1 7661.3 (**PI. 11:1**) closely resembles a vessel from Tell Mardikh dated to the late 8<sup>th</sup> century BC. <sup>144</sup>

Regarding SB4, which is a more long-lasting typology, specimen H 3701.13 (**PI. 12:3**) is very similar to a sherd from Tell Mastuma dated to the Iron Age II.<sup>145</sup> A SB9a specimen (H 2875.9, **PI. 15:2**) has parallels from Tell Afis<sup>146</sup> and Tell Mastuma<sup>147</sup> dated to the Late Iron II/early Iron Age III.

DB14 is also a form found especially in Iron Age II contexts, as seen for example at Hama, 148

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<sup>130</sup> Russo 2018, Pl. 1:4.
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<sup>&</sup>lt;sup>131</sup> Russo 2018, Pl. 1:7.

<sup>&</sup>lt;sup>132</sup> Russo 2018, Pl. 2:4.

<sup>&</sup>lt;sup>133</sup> Russo 2018, Pl. 2:1.

<sup>&</sup>lt;sup>134</sup> Russo 2018, Pl. 2:2.

<sup>&</sup>lt;sup>135</sup> Russo 2018, Pl. 1:11.

<sup>&</sup>lt;sup>136</sup> Cooper 2006, figs. 1, 5 and 7.

<sup>&</sup>lt;sup>137</sup> Whincop 2007, fig. 7.

<sup>&</sup>lt;sup>138</sup> Lehmann 1998: 13, fig. 4:2; Whincop 2007: 186, 205

<sup>&</sup>lt;sup>139</sup> Degli Esposti 1998, fig. 10:1.

<sup>&</sup>lt;sup>140</sup> Wada 2009b, fig. 4.140:2.

<sup>&</sup>lt;sup>141</sup> Dornemann 2003a, fig. 82:7.

<sup>&</sup>lt;sup>142</sup> Soldi 2019, fig. 12:f.

<sup>&</sup>lt;sup>143</sup> Pizzimenti, Zaina 2016, fig. 4:7.

<sup>&</sup>lt;sup>144</sup> Mazzoni 1992b, fig. 17:3.

<sup>&</sup>lt;sup>145</sup> Wada 2009b, fig. 4.39:9.

<sup>&</sup>lt;sup>146</sup> Cecchini 1998, fig. 19:10.

<sup>&</sup>lt;sup>147</sup> Wada 2009c, fig. 5.9:10.

<sup>&</sup>lt;sup>148</sup> Riis, Buhl 1990, fig. 78:595.

Tell Mastuma<sup>149</sup> and Tell Abou Danne.<sup>150</sup> Moreover, specimen H 3701.8 (**PI. 27:1**) displays strong similarities with a vessel from Tell 'Acharneh<sup>151</sup>, while specimen T1 7232.28b (**PI. 27:2**) resembles bowls from Tell Mastuma,<sup>152</sup> Chatal Hüyük,<sup>153</sup> Tell Tayinat<sup>154</sup> and Hazor.<sup>155</sup> The only JU6 specimen found in this level (T1 7336.86, **PI. 35:6**) indicates a later period of the Iron Age II, as it closely resembles jugs from Tell Mastuma<sup>156</sup> from Stratum I-1.

Regarding closed forms, jar type J6 is found especially in Iron Age II contexts: parallels are in fact possible with Tell Nebi Mend, <sup>157</sup> Tell Afis, <sup>158</sup> Tell Mastuma, <sup>159</sup> Tell Qarqur, <sup>160</sup> Tell Abou Danne, <sup>161</sup> Chatal Hüyük <sup>162</sup> and Karkemish. <sup>163</sup> The cooking pot type CP10 is typical particularly of Iron Age II levels at Tell Nebi Mend <sup>164</sup> and Tell Mastuma. <sup>165</sup>

The red-painted juglet SF H 5225.714 (**PI. 72:1**), similar to the so-called "teapots" from Tell Mastuma, closely resembles a specimen belonging to Stratum I-2a<sup>166</sup> in Mastuma, dated to the Late Iron Age II. As already mentioned, the "teapots" from Mastuma are bichrome, unlike the monochrome specimens from Mishrifeh, and have a long neck. The fragmentary state of the juglets from Mishrifeh prevents the reconstruction of their entire form: as it will be assessed later (Chapter 4.2.10.4), they probably had a neck as well.

The unclear form T<sub>1</sub> 7548.57 (**PI. 74:1**), perhaps a red slipped krater, can be cautiously compared to a krater from Tell Mastuma<sup>167</sup> also dated to the Late Iron Age II as well.

Regarding handles with incisions, presumably potter's marks, there are cross-like signs (H 1798.1, **PI. 77:1**), which have parallels from Tell Mastuma, <sup>168</sup> Hazor <sup>169</sup> and Megiddo <sup>170</sup> dating to a period between the 9<sup>th</sup> and the 7<sup>th</sup> century. Then, there are cooking pots (T1 7535.12 and 13, **PI. 52:5-6**) with handles characterised by a small, incised circle, with

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<sup>149</sup> Wada 2009b, figs. 4.59:5, 4.66:9.
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<sup>&</sup>lt;sup>150</sup> Lebeau 1983 Pl. XIV:4.

<sup>&</sup>lt;sup>151</sup> Cooper, Fortin 2004, fig. 11:14.

<sup>&</sup>lt;sup>152</sup> Wada 2009b, fig. 4.34.14.

<sup>&</sup>lt;sup>153</sup> Pucci 2019 Pl. 13:f.

<sup>&</sup>lt;sup>154</sup> Osborne et al. 2019, fig. 17:10.

<sup>&</sup>lt;sup>155</sup> Yadin et al. 1958. Pl. XLIX:15.

<sup>&</sup>lt;sup>156</sup> Wada 2009c fig. 5.7:99; Wada 2009d fig. 6.31:51.

<sup>&</sup>lt;sup>157</sup> Whincop 2007, fig. 9:o.

<sup>&</sup>lt;sup>158</sup> Cecchini 1998, figs. 15:2-3; Venturi 2020, Pl. 118:11.

<sup>&</sup>lt;sup>159</sup> Wada 2009b, figs. 4.11:41, 4.46:21.

<sup>&</sup>lt;sup>160</sup> Dornemann 2003a, figs. 83:4-7.

<sup>&</sup>lt;sup>161</sup> Lebeau 1983, Pls. XL:2, LVIII :2, LXIV:2 and 4.

<sup>&</sup>lt;sup>162</sup> Pucci 2019, Pl. 16:i.

<sup>&</sup>lt;sup>163</sup> Pizzimenti, Zaina 2016, fig. 4:12.

<sup>&</sup>lt;sup>164</sup> Whincop 2007, fig. 8:f.

<sup>&</sup>lt;sup>165</sup> Wada 2009b, figs. 4.10:16, 4.32:2.

<sup>&</sup>lt;sup>166</sup> Wada 2009d: 376, fig. 6.23.

<sup>&</sup>lt;sup>167</sup> Wada 2009b, fig. 4.94:7.

<sup>&</sup>lt;sup>168</sup> Wada 2009d, fig. 6.25:1.

<sup>&</sup>lt;sup>169</sup> Yadin et al. 1958, Pl. LX:5-6; Pl. LXXXIV:12-24. Yadin et al. 1960, Pl. LXXVI: 1-2; Pl. CII:3-4, 10.

<sup>&</sup>lt;sup>170</sup> Arie 2013, fig. 13.51:5.

parallels from Hazor<sup>171</sup> from contexts dated to the mid-8<sup>th</sup> and 7<sup>th</sup> century.

Concerning the fragmentary incense burner SF T1 7246.701 (**PI. 71:4**), no precise parallels in the Levant have been found, except for a red-painted potstand from Tell Afis,<sup>172</sup> which is however dated to the final Iron Age I.<sup>173</sup> An interesting parallel was found, though: with a potstand from the Sanctuary of Myrtou-Pigadhes<sup>174</sup> in Cyprus, in a context dated to the 8<sup>th</sup> century BC (Chapter 4.2.10.3).

On the basis of the parallels presented, the later phase of the craft quarter can be convincingly dated to the Late Iron Age II.

Regarding sub-phase 6b, a sharp decrease of storage ware can be observed, due presumably to the less intensive food storage activity. The types are more or less the same as in sub-phase 6a, with a slight contraction in the range of forms, for example the lack of any SB9 specimens. PL8, which appears in this level, is a type with parallels from Tell Afis<sup>175</sup> and Tell Mardikh<sup>176</sup> dated to the Iron II. DB14 specimen T1 7880.8 (**PI. 27:3**) has close similarities with vessels from Late Iron Age II/Early Iron Age III and Iron Age II levels from Tell Afis<sup>177</sup> and Tell Abou Danne.<sup>178</sup> A Late Iron Age II chronology may be presumed also for this level.

Phase 7 consists most probably of squatting evidence and this is reflected by the limited pottery assemblage. The presence of a red slipped fruit-stand (T1 7563.701, **PI. 3:4**) points still to a Late Iron Age II chronology, obviously a bit earlier than the other phases due to its place in the stratigraphic sequence, that is around the Mid-Late 8<sup>th</sup> century BC. This dating is corroborated by the presence of a DB14 specimen (T1 7563.9, **PI. 27:4**) with parallels from Tell Afis<sup>179</sup> dated to the Late Iron Age II/Early Iron Age III.

The later activity of Phases 5-7 heavily damaged Phase 8 deposits, especially on the northern side, leaving a difficult situation that is to decipher: notwithstanding the scant archaeological evidence, this may be a first installation of the craft quarter, or merely of single installations devoted to the transformation of agricultural produce (Garna 2011: 102). The pottery assemblage is largely homogeneous and similar to those from the later phases.

<sup>&</sup>lt;sup>171</sup> Yadin et al. 1958, Pl. LXXXIV:8-11.

<sup>&</sup>lt;sup>172</sup> Venturi 2020: 92, Pl. 109:16.

<sup>&</sup>lt;sup>173</sup> The fact that the vessel from Tell Afis is painted and that from Mishrifeh is red slipped may be cautiously interpreted as a confirmation of a later chronology for the second specimen, since painted vessels are more common in earlier Iron Age levels (see note 196).

<sup>&</sup>lt;sup>174</sup> Plat Taylor, Taylor 1957, fig. 19:480.

<sup>&</sup>lt;sup>175</sup> Venturi 2020 Pl. 137:5.

<sup>&</sup>lt;sup>176</sup> Pizzimenti 2014/2015 fig. 2:7.

<sup>&</sup>lt;sup>177</sup> Cecchini 1998, fig. 38:5

<sup>&</sup>lt;sup>178</sup> Lebeau 1983, Pl. XIV:4.

<sup>&</sup>lt;sup>179</sup> Cecchini 1998, fig. 38:5.

The SB3b specimen H 6326.23 (**PI. 11:7**)<sup>180</sup> closely resembles vessels dated to the 8<sup>th</sup> century BC from Tell Mastuma<sup>181</sup> and Tell Shiukh Fawgani.<sup>182</sup>

Of note is the presence of another JU6 sherd (T1 7711.12, **PI. 35:7**), very similar to a jug from Tell Mastuma<sup>183</sup> dated to the Late Iron II. A J6 fragment (H 6326.3, **PI. 42:2**) has instead a close resemblance with an Iron Age II specimen from Tell Nebi Mend.<sup>184</sup>

Useful from a chronological point of view is also a sherd of CP10, that is the short-necked pot with external groove on the lip: as already discussed, it is a type with parallels from Tell Nebi Mend<sup>185</sup> and Tel Dor<sup>186</sup> dated to the 8<sup>th</sup> century, through no specific parallel has been found for the specimen from Phase 8.

Considering also the stratigraphy, this level may convincingly be dated to the 8<sup>th</sup> century. In Phase 9 this area of the upper town was already used for agricultural produce storage and processing, as it was characterised mainly by installations related to agricultural activities (Garna 2011: 103-105). Typologically speaking, the pottery assemblage is not much different from what has been observed in later phases. The presence of red slipped and painted plates with round, squared and tapering rims (PL1-2-3), shallow bowls with outward rim (SB11), hemispherical bowls with round and tapering rim (DB1-2), bowls with internal angular thickening (DB8-9), collared rim (J2) and double rim jars (J3), jars with concave neck and thickened rim (J6) and with upturned swollen rim (J8), short-necked pots with sinuous rim (CP7) and thickened rim with external depression (CP9) indicates again an Iron Age II date for this level.<sup>187</sup> Painted plates like those of in Phase 9 (**PIs. 1:5-7, 2:1-2, 6:3, 7:1**) occurred especially at Hama<sup>188</sup> and Tell 'Acharneh<sup>189</sup> during the Iron Age II.

A sherd of CP10 (H 7039.43, **PI. 58:6**) probably points to an earlier moment of the Iron Age II compared to the phases discussed above, because it closely resembles a specimen from Tell Mastuma<sup>190</sup> from Stratum I-2c.

Regarding the two rim-fragments of basins (T1 8366.12-13, **PI. 70:2-3**), these strongly resemble storage vessels from Tell Mastuma<sup>191</sup> Stratum I-2b and basins from Hama<sup>192</sup> from

<sup>&</sup>lt;sup>180</sup> This specimen is also very similar to a painted bowl from Chatal Hüyük (Pucci 2019, Pl. 152:b), dated to the Iron Age I, see discussion in Chapter 4.2.2.3.

<sup>&</sup>lt;sup>181</sup> Wada 2009b, fig. 4.66:3.

<sup>&</sup>lt;sup>182</sup> Luciani 2005, Pl. 10:131.

<sup>&</sup>lt;sup>183</sup> Wada 2009b, fig. 4.132:1.

<sup>&</sup>lt;sup>184</sup> Whincop 2007, fig. 9:o.

<sup>&</sup>lt;sup>185</sup> Whincop 2007, fig. 8:f.

<sup>&</sup>lt;sup>186</sup> Gilboa 2015a, fig. 3.1.9:8.

<sup>&</sup>lt;sup>187</sup> See earlier and Chapter 4.2.

<sup>&</sup>lt;sup>188</sup> Riis, Buhl 1990, figs. 75-77.

<sup>&</sup>lt;sup>189</sup> Cooper, Fortin 2004: 34-35, fig. 47

<sup>&</sup>lt;sup>190</sup> Wada 2009b, fig. 4.10:16.

<sup>&</sup>lt;sup>191</sup> Wada 2009d, figs. 6.33.68-69.

<sup>&</sup>lt;sup>192</sup> Fugmann 1958, fig. 325.8A196.

Période E. The fragmentary painted zoomorphic vessel (SF T1 8302.708, **PI. 73:6**) has its closest parallel in a bichrome zoomorphic vessel from Tell Mastuma<sup>193</sup> from the earlier levels of Iron Age II.

The presence of a few DB6 sherds, which is a typology well known in Late Iron II contexts, <sup>194</sup> seems in contradiction with the parallels presented above. However, they come from the fill of a basin from one of the upper sub-phases of the level. Therefore, it may be hypothesized that this actually was a more long-lasting phase as compared to the others, and its most recent evidence dated to the middle of the 8<sup>th</sup> century, like Phase 8. Taking into consideration also the relatively high percentage of painted pottery<sup>195</sup> which indicates an early stage of the Iron Age, <sup>196</sup> Phase 9 could presumably span between the mid or end of the 9<sup>th</sup> and the beginning of the 8<sup>th</sup> century.

Phase 10 is the earliest Iron Age occupation of the Operation and corresponds to the moment when the upper town was first organized as an area related to the production, processing and temporary storage of agricultural produce (Garna 2011: 106-108). The pottery assemblage is quite similar to that of Phase 9, apart from the lack of DB6, which can supposedly indicate an earlier Iron Age II date for this level.<sup>197</sup>

The presence of painted plates is documented also in this level (**PIs. 2:4-5, 7:2**). Starting from Phase 9, there is a clear increase of the number of plates: while in Phase 6a, out of 695 fragments, 59 belong to plates, in Phase 9 plate fragments number 70 out of the total of 603, and in Phase 10 there are 79 plate sherds out of 768 fragments. Furthermore, there is a clear increase in painted plates, from 5% in Phase 6a to 24% in Phase 9 and 23% of Phase 10, which could be interpreted as the confirmation of an earlier Iron Age II date for these phases. 198

The SB2b sherd (SF H 7083.703, **PI. 10:6**) resembles a vessel from Tell 'Acharneh<sup>199</sup> dated to the general Iron Age II, however it is also similar to a specimen from Hazor<sup>200</sup> from early

<sup>194</sup> See Chapters 3.3.3 (p. 189, notes 59-61) and 4.2.3.6.

<sup>&</sup>lt;sup>193</sup> Wada 2009b, fig. 4.11:56.

<sup>&</sup>lt;sup>195</sup> Painted pottery represents 6.3% of the assemblage of Phase 9 (603 fragments), as compared to 1.5% of the slightly larger assemblage of Phase 6a (695 fragments).

<sup>&</sup>lt;sup>196</sup> This can be noted from the analysis of the pottery of Operation K, in which painted pottery is quite abundant, but especially it was observed at Tell Afis (Venturi 2020: 94, 97-98, 111, 116-117). In general, in Central-Western Syria painted pottery is typical of the Iron Age I, while it gradually disappears with the beginning of the Iron Age II (see Chapters 2.1 and 4.4)

<sup>&</sup>lt;sup>197</sup> The lack of DB6 is not by chance, as the Phase 10 assemblage is larger than that of Phase 9 and consists of 768 sherds.

<sup>&</sup>lt;sup>198</sup> The increase of painted plates is documented starting from Phase 8 (19%), which has however a smaller assemblage (273 fragments) compared to the earlier Phases 9-10. Comparing with assemblages of similar size, in Phase 5 (276 fragments) painted plates were 5% and in Phase 6b (230 fragments) only 4.5%.

<sup>&</sup>lt;sup>199</sup> Cooper 2006, fig. 6:1.

<sup>&</sup>lt;sup>200</sup> Ben-Ami 2012a, fig. 2.9:3

Iron Age II levels (Iron Age IIa). A sherd of bowl with outward swollen rim (SB11, H 7156.75, **PI. 16:8**) has a close resemblance in both the shape of the rim and the red paint on the rim to a vessel from Hazor<sup>201</sup> dated to the 9<sup>th</sup> century BC. Another sherd which points to a 9<sup>th</sup> century date for this level is a J8 fragment (H 6644.6, **PI. 44:3**) with a parallel from Phase 6a of Area G at Tel Dor.<sup>202</sup> The J11 specimen H 7083.41 (**PI. 45:5**) displays similarities with vessels from Sarepta<sup>203</sup> from sub-strata D1 and C2, which have a chronology that ranges between the late 10<sup>th</sup> century and the 8<sup>th</sup> century BC.

Another rim-fragment of basin (T1 8313.21, **PI. 70:4**), analogous to those found in phase 9, looks very similar to the basins from Tell Mastuma<sup>204</sup> and Hama.<sup>205</sup>

Regarding the other juglet of the "teapot" type, SF H 7083.701 (**PI. 72:2**), it closely resembles a "teapot" from Tell Mastuma from Stratum I-1.<sup>206</sup>

In conclusion, considering also the stratigraphy and the relatively high percentage of painted pottery, a 9<sup>th</sup> century BC chronology seems plausible for this phase.

As for Operation H North, the excavations brought to light a series of terracing structures employed to progressively reorganize the slope of the upper town during the Iron Age, in association with buildings devoted to productive activities or perhaps domestic in character (Garna 2011: 109). The ceramic assemblage date these activities to the Iron Age II, as indicated by the presence of plates with squared (PL2) and tapered rim (PL3), carinated bowls with simple rim (SB2b), bowls with oblique rim (SB3a), carinated bowls with flaring rim (SB13), bowls with flat thickened rim (SB8), thickened rim and rounded lip (DB7), internal angular thickening (DB8-9), slightly protruding rim (DB12), collared rim jars (J3), and shortnecked pots with sinuous rim (CP7) and thickened rim with a depression (CP9).

However, more precise chronological subdivisions are difficult to recognize. Considering the scarcity of finds, from both quantitative and qualitative points of view, it is not easy to date each level exactly: a subdivision more specific than a generic Iron II date would not be supported by the ceramic evidence, except for Phase 15 and perhaps Phase 9.

<sup>&</sup>lt;sup>201</sup> Garfinkel, Greenberg 1997, fig. III.33:5.

<sup>&</sup>lt;sup>202</sup> Gilboa 2018, Pl. 20.65:12.

<sup>&</sup>lt;sup>203</sup> Anderson 1988, Pls. 33:1, 36:5.

<sup>&</sup>lt;sup>204</sup> Wada 2009c, figs. 6.33.68-69.

<sup>&</sup>lt;sup>205</sup> Fugmann 1958, fig. 325.8A196

Wada 2009d: 376, fig. 6.31:50. Stratum I-1 is dated "Iron II-III" in the comparative stratigraphic sequence (Wada 2009a fig. 3.2) and in the Concluding Remarks (Wakita 2009b: 508) it is stated that the Stratum I settlement can be dated to the western expansion of the Neo-Assyrian Empire and its abandonment should have taken place around the 7<sup>th</sup> century. Thus, the "teapot" from Mastuma comes from a late Iron II/Iron Age III context: however, this chronology cannot be same for the vessel from Mishrifeh as the stratigraphy clearly does not allow it and the other comparisons point to an earlier date. Notwithstanding the very close resemblance between these two specimens, this type of juglets has been found in other Syrian sites also in earlier contexts, see Chapter 4.2.10.4.

<sup>&</sup>lt;sup>207</sup> See earlier and Chapter 4.2.

Phase 9 can be dated to the Iron Age II for the presence especially of the SB8, DB7, DB8. DB9 and CP7 types. Albeit known also in Iron Age III contexts, bowls with flat thickened rim (SB8) are especially well attested in the Northern Levant in the Iron Age II (Hama, 208 Tell Mardikh, <sup>209</sup> Tell Qargur, <sup>210</sup> Tell Jurn Kabir). <sup>211</sup> The same can be observed for bowls with thickened rim and rounded lip (DB7, Tell 'Acharneh, 212 Tell Mastuma, 213 Tell Tugan, 214 Tell Qargur) <sup>215</sup> and bowls with internal angular thickening (DB8, Tell Nebi Mend, <sup>216</sup> Tell 'Acharneh, 217 Tell Mastuma, 218 Tel Abou Danne, 219 Tell Jurn Kabir; 220 DB9, Tell Qarqur). 221 The short-necked pot with sinuous rim (CP7) is a form typical of Mishrifeh, attested in all the chronological periods but especially common in the Iron Age II (Chapter 4.2.7.7). From this phase comes also a sherd of bowl with squared rim and flattened rim (SB9b, H 9112.9)<sup>222</sup> with strong affinities with a sherd from Hazor dated to the 9th century BC.<sup>223</sup> I would not date this phase precisely though, because a single sherd is insufficient as a chronological reference point.

Phase 15, instead, is the only level of the sounding with enough finds to make it possible to propose a more precise dating. The pottery assemblage is typical of the Iron Age II, with many forms discussed previously, such as plates with round and squared rims (PL1-2), bowls with oblique out-turned rim (SB3a), bowls with tapering rim (DB2), internal angular thickening (DB7-8), modelled rim (DB14) and collared rim jars (J3). The most diagnostic sherds are those of the SB5, SB9b and DB6 typologies. As already mentioned, DB6 is a type usually found in Late Iron Age II contexts. However, the single sherd found in this level is a very small fragment and its placement in the DB6 group is not certain. Moreover, it comes from a thick deposit and it may be intrusive. More suitable are the parallels concerning the SB5 and SB9 sherds. The first one (H 8193.21, Pl. 12:9) has a very close resemblance to a specimen from Tell Abou Danne<sup>224</sup> from levels dated to the second half of

<sup>&</sup>lt;sup>208</sup> Riis, Buhl 1990, fig. 78:593.

<sup>&</sup>lt;sup>209</sup> Mazzoni 1992b. fig. 22:4.

<sup>&</sup>lt;sup>210</sup> Dornemann 2003a, fig. 82:6.

<sup>&</sup>lt;sup>211</sup> Eidem, Ackermann 1999, fig. 6:10.

<sup>&</sup>lt;sup>212</sup> Cooper 2006, figs. 6:13, 18-19; 2:8; 8:9.

<sup>&</sup>lt;sup>213</sup> Wada 2009b, figs. 4.18:8, 4.34:7, 4.34:7 and 11.

<sup>&</sup>lt;sup>214</sup> Baffi 2008c, fig. 27:4.

<sup>&</sup>lt;sup>215</sup> Dornemann 2003a, fig. 82:9.

<sup>&</sup>lt;sup>216</sup> Whincop 2007, fig. 10:c.

<sup>&</sup>lt;sup>217</sup> Cooper 2006, figs. 6:9 and 14, 13:10.

<sup>&</sup>lt;sup>218</sup> Wada 2009b, figs. 4.59:4, 4.78:17, 4.94:3.

<sup>&</sup>lt;sup>219</sup> Lebeau 1983, Pl. XIX:2-4.

<sup>&</sup>lt;sup>220</sup> Eidem, Ackermann 1999, fig. 6:10.

<sup>&</sup>lt;sup>221</sup> Dornemann 2003a, fig. 82:3.

<sup>&</sup>lt;sup>222</sup> This fragment is identical to specimen H 8412.12, **PI. 15:4**, of the earlier Phase 15.

<sup>&</sup>lt;sup>223</sup> Yadin et al. 1960, Pl. LIV:14

<sup>&</sup>lt;sup>224</sup> Lebeau 1983 BL23 Pl. XXIII: 4.

the 9<sup>th</sup> to the end of the 8<sup>th</sup> century, while the two SB9b sherds (H 8412.12-13, **PI. 15:4-5**), like the one from Phase 9, strongly resemble the vessel from Hazor<sup>225</sup> dated to the 9<sup>th</sup> century.

The almost complete red-painted plate with squared rim (SF 8409.702, **PI. 5:2**) has a close resemblance to painted plates from Hama<sup>226</sup> from Période E. And regarding the Black-on-Red jug (SF 8412.701, **PI. 76:7**), the closest parallel is with a specimen from Tel Dan<sup>227</sup> dated to the Iron IIb (830/800-first quarter 8<sup>th</sup> century).

In the light of these parallels, a 9<sup>th</sup> – beginning of the 8<sup>th</sup> century BC date for Phase 15 can be proposed.

<sup>&</sup>lt;sup>225</sup> Yadin et al. 1960 Pl. LIV:14.

<sup>&</sup>lt;sup>226</sup> Fugmann 1958 fig. 269 nr 6B479; De Maigret 1979: 37-38, fig. 11.

<sup>&</sup>lt;sup>227</sup> Arie 2008 fig. 11:6.

### 3.6 OPERATION T2

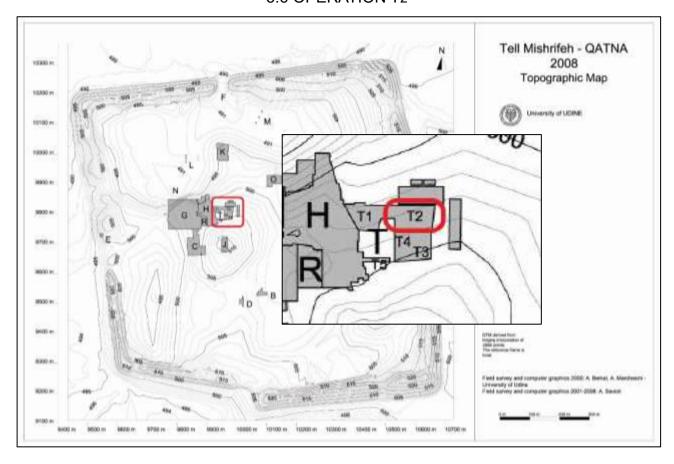


Fig. 206: Mishrifeh, topographic map with the location of Operation T highlighted and in the enlargement the location of Operation T2.

Operation T2 in an extension towards east of Operation T1. It was opened in 2007 to better investigate the remains of a Bronze Age monumental building partially discovered in 2006 (the Eastern Palace). The stratigraphy documented goes from the Iron Age to the Middle Bronze Age (Morandi Bonacossi et al. 2009: 61), with four phases dated to the Iron Age, from 5 to 8. It is one of the areas where the Iron Age occupation is less attested, although the Phase 6 discoveries are remarkable.

T2	H-T1	Relative Chronology	Absolute Chronology
5	5	Late IA II – IA III	Late 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. BC
6	6	Late IA II	8 <sup>th</sup> cent. BC
7	6-9	Late IA II – IA II	Mid-8 <sup>th</sup> cent. BC – Late 9 <sup>th</sup> cent. BC
8	10	IA II	9 <sup>th</sup> cent. BC

Table 51: Operation T2, summary of the phases and their chronology and correlations with H-T1.

#### 3.6.1 ARCHAEOLOGICAL CONTEXT AND STRATIGRAPHY

# **PHASE 5** (Fig. 207)

Immediately under modern layers a pebble floor surface (SU 7848) was exposed: related to it, there were some installations with Iron Age II pottery sherds, mostly belonging to large vessels. The area, whose function is impossible to establish, was probably an open area.



Fig. 207: Operation T2, Phase 5. General view

### **PHASE 6** (Figs. 208-209)

This is the major Iron Age phase of the Operation. Two sub-phases were recognized.

#### **SUB-PHASE 6a**

The most recent level was composed of a room with a floor (SU 7867) made of mortar, pottery fragments and small-sized lithic material, a wall foundation (SU 8006) and an external trodden floor surface (SU 8004). In the deposit over this surface (SU 8005) a fragment of a painted handle was found. Three aligned pits (SU 7877, 8001, 8003) cut SU 7867: since the central one (SU 8001) was filled with ash, maybe caused by the combustion of a wooden post, they were interpreted as postholes.

### **SUB-PHASE 6b** (Figs. 208-209)

In this phase, floor 7867 was connected to a circular installation (SU 8010) similar to that which the Count du Mesnil du Buisson called a *"chapelle taurobolique"* ("taurobolic chapel"). Du Mesnil du Buisson, who found these installations in the area of the Royal Palace, had interpreted these large tanks as cultic pits for the collection of blood of sacrificial bulls – hence the term *"chapelle taurobolique"* (Du Mesnil Du Buisson 1935: 124-128).

It had a diameter of 1.8 m and a depth of 1.4 m and on the bottom, in the northern side, there was a nearly circular, small basin (39 cm deep) with an additional pit 11 cm deep (Morandi Bonacossi 2019: 18). The installation had a lime-plastered lining (SU 8009) about 5 cm thick, red-stained, and was cut into a pebble preparation (SU 8011), characterized also by large re-used fragments of the lime-plaster. The installation contained fill SU 8012, consisting of a sandy-clayey matrix with many lithic elements, and SU 8015, composed of mud-bricks fragments.

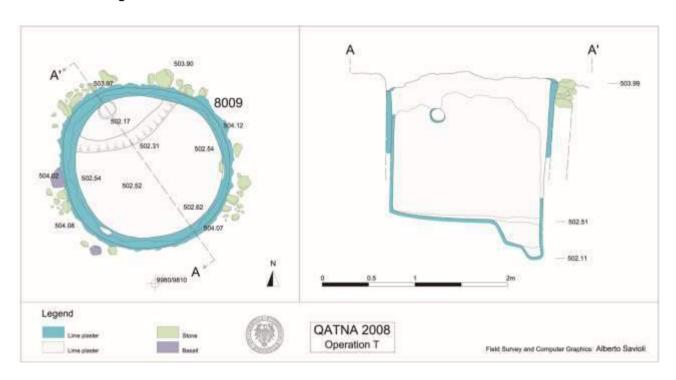


Fig. 208: Operation T2, Phase 6b. Plan and profile of the textile dyeing installation (Morandi Bonacossi 2019, fig. 10c)

The original fill of the installation was composed of two different deposits. One of these was SU 8052, a layer with a fine sandy matrix of grain and with a white-greyish colour, perhaps due to the pulverized limestone or some other material used for dyeing, from which came a

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<sup>&</sup>lt;sup>228</sup> The presence of these re-used fragments may indicate that the installation had been repaired at least once during its use.

pestle in basalt (SF 8052.701).

The analysis of the red stains on the plastered surface of the installation revealed the presence of an iron oxide, perhaps from ochre (Morandi Bonacossi 2019: 18). Therefore, the red material was probably a dye for textiles and the tank must be interpreted as an installation for textile dyeing or perhaps for the manufacturing of leather (Morandi Bonacossi 2019: 17-18). Similar installations have been found by du Mesnil du Buisson also in the lower town, like the structure called *Maison 1* and interpreted by the Count as a bath house (du Mesnil du Buisson 1935: 52). *Maison 1* is similar to Building H5 of the crafts quarter (Chapter 3.5.1), thus also that structure may have been a productive complex devoted to textile weaving and dyeing.

Considering the productive activities performed in the artisans' quarter of Operation H-T1, and particularly the textile production carried out in the complex of Buildings H1, H5 and H7, it is probable that the installation of Operation T2 was also connected to the crafts quarter.



Fig. 209: Operation T2, Phase 6b. View of the textile dyeing installation (Morandi Bonacossi 2019, fig. 10a).

### PHASE 7

This level consists of pits (SU 8017, 8019, 8053, 8055) of various dimensions which indicate the defunctionalisation of the underlying phase.

# **PHASE 8** (Fig. 210)

Two sub-phases were recognized in this level.

# **SUB-PHASE 8a** (Fig. 210)

The only archaeological feature is a small channel (SU 8013-8014) oriented east-west and about 20 cm wide. The lack of any other material makes it impossible to hypothesize the function of the area.



Fig. 210: Operation T2, Phase 8a. The small channel 8013-8014

### **SUB-PHASE 8b**

It is the first Iron Age occupation and consists of a series of levelling layers in the western part of the excavation.

It marks the abandonment of the courtyard of a monumental building dated to the Bronze Age.

#### **3.6.2. POTTERY**

The analysis of the pottery from Operation T2 was based entirely on the records (drawings and pottery descriptions) of the materials stored in Syria. This Operation yielded few ceramic materials and even less dating to the Iron Age: Late and Middle Bronze Age redeposited pottery is very common and represents the majority of the assemblage even in Iron Age levels.

In **Phase 5** only two Iron Age sherds were found: one of a plate with tapering rim (PL3) and a rounded low knobbed base (BA5), a type of base associated with storage ware.

The assemblage of **Phase 6** is quantitatively very poor (11 fragments overall).

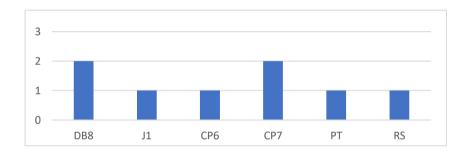


Table 52: Operation T2, Phase 6a. Pottery.

In the more recent **sub-phase 6a**, open forms are represented by bowls with externally thickened rim and internal angular rim (DB8), one sherd of which (50%) characterised by Red Slip. Closed forms are storage jars with thickened internally angular rim (J11) and short-necked cooking pots with straight rim (CP6) and upright sinuous rim (CP7). Both the Red Slip (RS) and painted decorations (PT) are present on merely one sherd each, corresponding to 14% of the assemblage.

The pottery assemblage of **sub-phase 6b** consists of a painted sherd of deep bowl with simple rim (DB1) and a sherd of double rim jar (J3).

**Phase 7** returned the most substantial assemblage of the Operation, amounting to 24 pottery fragments

Open forms are represented only by plates with round (PL1) and squared rim (PL2); 33% of them (that is, one sherd) is red slipped.

Closed forms display a wider range of types, with collared rim (J2) and double rim (J3) jars

and holemouth pots with small out-turned thickened rim (CP4) and short-necked pots with straight rim (CP6) and double rim (CP10).

Storage ware is common, with large storage jars with swollen rim (P1 and variants). Only one sherd is red slipped, corresponding to 4.1% of the phase assemblage.

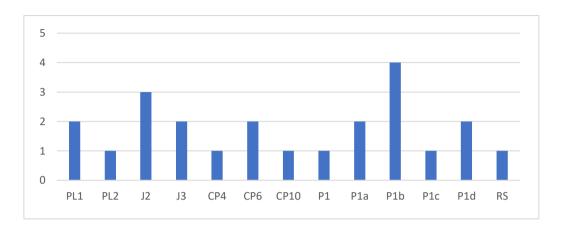


Table 53: Operation T2, Phase 7. Pottery.

In Phase 8 no diagnostic materials were found.

Type/ Phase	PT	RS
T2-5	/	1
T2-6a	14	14
T2-6b	50	1
T2-7	/	4.1

Table 54: Operation T2, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

PL2 PL3 DB1	100		90	4.5
10 88 L		33.3 16.6		
77		9		13.6
ಬ			50	9.1
CP4				4.5
9d2		16.6		9.1
CP7		33.3		
CP10				4.5
٤				4.5
Д в				9.1
P16				18.1
P1c				4.5
P1d				9.1

Table 55: Operation T2, percentage occurrence of types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

#### 3.6.3. CONCLUDING REMARKS AND CHRONOLOGY

As stated above, the Iron Age evidence from Operation T2 is quite scarce and represented mostly by floors with pits or levelling layers, except for Phase 6 where an installation for textile dyeing may have been connected to the activities of the artisans' quarter of Operation H-T1 (Morandi Bonacossi 2019: 17-18).

While a general Iron Age II chronology for the whole assemblage is certain, it is impossible to propose a more precise dating based entirely on the pottery. The lack of sufficient Iron Age pottery also makes it difficult to propose a reliable synchronisation with the other Operations, especially in earlier periods, exclusively on the basis of the pottery.

Sub-phase 6b could reasonably be dated to the Late Iron Age II, due to the fact, as said above, that it is most probably related to the large crafts quarter.

The assemblage of Phase 7 does not indicate a chronology more precise than a general Iron Age II, demonstrated by the presence of plates with squared rim (PL2), collared rim (J2) and double rim (J3) jars and cooking pots with straight (CP6) and double rim (CP10).

The chronology of the phases has been therefore proposed on the basis of the stratigraphic correlations with the other Operations, which were established in part during the excavation and are in part based on intra-Operation pottery parallels. The stratigraphic concordances will be discussed in Chapter 3.10.

#### 3.7 OPERATION T3

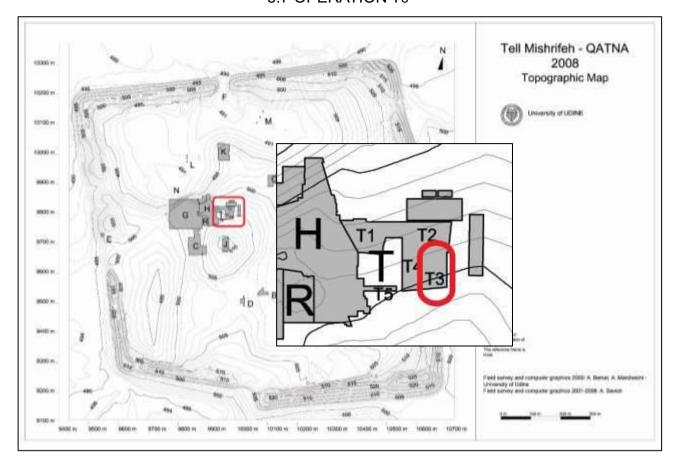


Fig. 211: Mishrifeh, topographic map with the location of Operation T highlighted and in the enlargement the location of Operation T<sub>3</sub>.

Operation T3 was dug in 2007 east of Operation H-T1. The stratigraphic sequence brought to light stretches from the Iron Age III to the Middle Bronze Age, with at least eight phases belonging to the Iron Age.<sup>229</sup> The Operation was further enlarged eastward in 2010 with the aim of finishing the exploration and excavation of the Bronze Age "Eastern Palace", whose archaeological remains were found between Operations T2 and T3 (Morandi Bonacossi et al. 2009).

The most important Iron Age evidence is a large multi-roomed building, partly excavated also in Operation T4, with a domestic function (Morandi Bonacossi 2009: 125-126).

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<sup>&</sup>lt;sup>229</sup> At least eight because Phase 13, as it will be seen below, is a particular case and cannot be considered completely an Iron Age phase.

Т3	T3 (2010)	T4	Relative Chronology	Absolute Chronology
5			IA III	7 <sup>th</sup> cent. BC
6			IA III	7 <sup>th</sup> cent. BC
7			Late IA II – IA III	End 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. BC
8		1	Late IA II – IA III	End 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. BC
9		2-3	Late IA II – IA III	Late 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. BC
10	1	4	Late IA II	Late 8 <sup>th</sup> cent. BC
11	2?	5	Late IA II	Mid-Late 8 <sup>th</sup> cent. BC
12		6	IA II	9 <sup>th</sup> - 8 <sup>th</sup> cent. BC
13		7	LBA II/IA II	9 <sup>th</sup> cent. BC

Table 56: Operation T<sub>3</sub>, summary of the phases and their chronology and correlations with T<sub>4</sub>.

### 3.7.1 ARCHAEOLOGICAL CONTEXTS AND STRATIGRAPHY

# **PHASE 5** (fig. 212)

The layers above this phase have been destroyed by a long, deep modern pit that has removed any possible archaeological evidence. This is therefore the first phase with significant archaeological features, consisting of a trodden surface (SU 7986, fig. 212) with ceramic fragments still *in situ*.



Fig. 193: Operation T3, Phase 5, SU 7986

### PHASE 6

Under SU 7986 there was another surface (SU 7988), devoid of any traces of activity, with just a few sherds.

### **PHASE 7** (fig. 213)

In this level the first Iron Age architecture of Operation T3 was present. It consisted of stone foundations (SU 7991 and 8133) with two related floors (SU 8168 and 8135), the so-called Building T3-1. A circular silo (SU 8207) was excavated to the south of the previously mentioned evidence: on top of it there was a round lining of mudbricks, perhaps what remained of a larger cover. No traces of organic materials were found inside. The rest of the excavation area was occupied by an open-air trodden surface (SU 8231) devoid of any traces of activities.

The poor state of preservation prevents interpretation of the function of the area.



Fig. 213: Operation T3, Phase 7, general view.

### **PHASE 8** (fig. 214)

Under phase 7, Building T3-2 consisted of a series of trodden floors (SU 8174-8175 and 8134) related to stone foundations (SU 7989-7990). The stone foundations formed a corner of a possible room with traces of a mud floor (SU 7993), which perhaps continued northward. However modern intrusions have heavily damaged the archaeological deposit. SU 8134 was probably also related to stone foundations SU 7997, 7999 and 8126, which perhaps constituted a single foundation damaged by later pits.



Fig. 214: Operation T3, Phase 8, general view and SU 8173-8175

Due to the poor state of preservation, the precise archaeological sequence of Phases 7 and 8 is difficult to reconstruct: however, it is likely that SU 7991-8133 together with SU 8135 represented the last evidence of a very narrow sequence of Iron Age buildings.

### PHASE 9

This consisted of a trodden surface (SU 8206) without any trace of occupation, except for a deep pit (SU 8222) which damaged the underlying structures. It might represent an abandonment phase of the area.

# **PHASE 10** (= T4 Phase 4, fig. 215)

This is the beginning of the most important sequence of the Iron Age occupation in the area, represented by a large multi-roomed building, Building T3-3, which extended northeast-southwest and was located partly in Operation T4.

Building T3-3 had two main phases of occupation, the final one corresponding to phase 10. In this level, the building had seven main rooms, of which only rooms A and B were located in Operation T3. They were created by inserting a new wall (SU 8224) above a pre-existing one (SU 8502), visible in the south-west corner of room B where a cut (SU 8503) removed

Tell Mishrifeh - QATNA 2007
Operation T3/T4
Phase 4 - Building 3

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the pre-existing mudbricks to allow the addition of the new wall.

Fig. 215: Operation T3 (and T4), Phase 10, Plan of Building T3-3.

In the last phase of Building T3-3, the mudbricks were brown and coarse, quite different from the silty white mudbricks, solid and regularly placed, of the earlier phase.

The building will be discussed more extensively in Chapter 4.8.

# **PHASE 11** (= T4 Phase 5, figs. 216-217)

The wall dividing the two rooms in phase 10 (SU 8224) was built partly above a small partition wall (SU 8435), which originally created two smaller areas north-east of the building. Rooms A and B in this phase probably served for domestic or more likely farming activities, including cattle-farming. In fact, two installations (SU 8431 and 8432) made of mud *pisè* might have perhaps been drinking troughs or mangers (Morandi Bonacossi 2009: 124, 126). Two other walls (SU 8507 and 8512) delimited the northern side of the area, associated with trodden surfaces SU 8430 and 8428.

It is likely that a certain amount of time had passed between the two phases, as in Phase 11 at least one pit (SU 8516) cut the floor of room B (SU 8430) and its northern wall (SU 8512). This suggests a possible short abandonment of the structure between Phases 11 and 10.

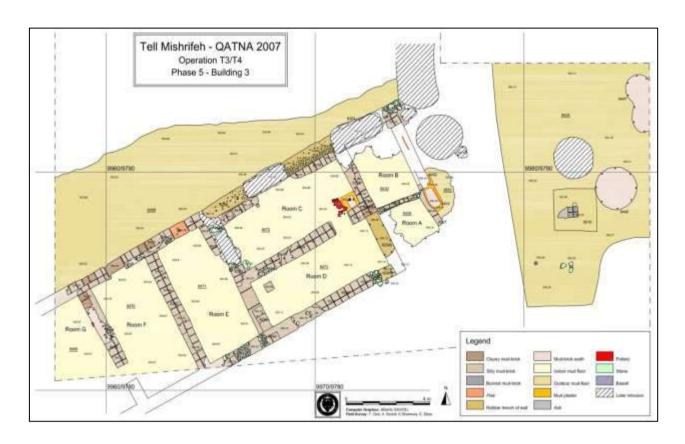


Fig. 216: Operation T3 (and T4), Phase 11, Plan of Building T3-3 (Morandi Bonacossi 2009, fig. 6).

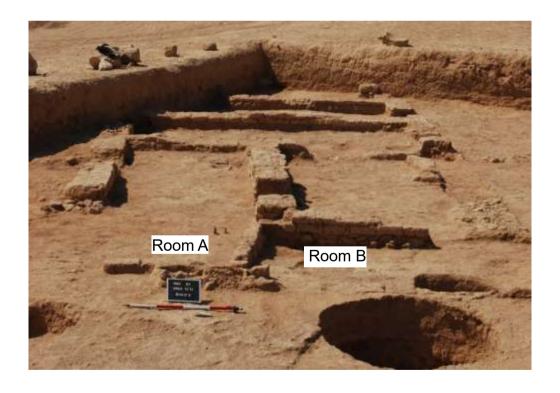


Fig. 217: Operation T<sub>3</sub> (and T<sub>4</sub>), Phase 11, View of Building T<sub>3</sub>-3 from the north-east.

A single external surface located to the east of the building occurred in both phases, SU 8424, which might indicate a continuous occupation otherwise better attested within the

rooms of the building. SU 8424 was devoid of any installation except for a square fireplace (SU 8515), which might indicate some kind of firing activities, and a large pit (SU 8446) starting directly from the surface, containing fragments of a large ceramic basin (SF 8439.704).

#### PHASE 12

Rooms A1 and B1 were built directly above a regular surface (SU 8509 and 8510), which corresponded to another one (SU 8212) preserved below SU 8424 in the northern area of Building T3-3. This is the earliest Iron Age level of Operation T3.

#### PHASE 13

Below SU 8509 and 8510 another regular surface (SU 8701) was discovered: the only traces of activity were some pits (SU 8705, 8706 and 8751), one of them particularly large and full of potsherds and fragmentary mudbricks.

Surface 8701 probably dates to the Late Bronze Age, considering that the pottery assemblage belongs completely to the second millennium BC and the emergence of walls from Late Bronze Age buildings. However, the pits also contained Iron Age sherds, suggesting a long exposure of the surface and a final occupation of this phase that must date to the Iron Age.

#### THE 2010 EXCAVATIONS

As mentioned above, in 2010 Operations T2 and T3 were enlarged to better investigate the architecture of the Eastern Palace. While Operation T2 yielded merely the scant remains of a wall (SU 10277) without any finds,<sup>230</sup> in Operation T3 the Iron Age occupation was more substantial.

### **PHASE 1 (2010)** (Fig. 218)

Two large, round, plastered basins (SU 10078 and 10081, fig. 218) were discovered. They were most probably installations for textile dyeing, called "chapelles tauroboliques" by Count Du Mesnil Du Buisson (Du Mesnil Du Buisson 1935: 124-128), like the one found in Operation T2. The two pits were coated with a layer of pebbles and white lime plaster, the bottoms were flat and had a further depression whose function was presumably to facilitate

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<sup>&</sup>lt;sup>230</sup> Considering the lack of finds and substantial architectural remains, which also makes it impossible to hypothesize any function for the area, the 2010 excavations of Operation T2 have not been discussed in Chapter 3.6.

the cleaning of the installation after each dyeing operation. The basins might have been associated with other structures, however the modern intrusions have destroyed any other possible archaeological feature.



Fig. 218: Operation T<sub>3</sub>, Phase 1 (2010), basin SU 10081.

# **PHASE 2 (2010)**

At the same elevation (504.7 m) as the installations, but belonging to a previous phase as the surface of use associated with of the basins was originally higher, a trodden surface (SU 10075) was exposed. Related to SU 10075 was a *pisé* wall (SU 10095), discovered in the corner of the excavation area.

#### 3.7.2 POTTERY

The analysis of the ceramic assemblage from Operation T3 was based exclusively on the records of the pottery stored in Syria. The assemblage is not one of the largest discussed in the present work and is characterised by a good percentage of residual Bronze Age pottery. Nonetheless, it offers an interesting overview on domestic contexts from Mishrifeh.

The pottery of **Phase 5** displays quite wide typological variability, though not large numbers (about 30 sherds).

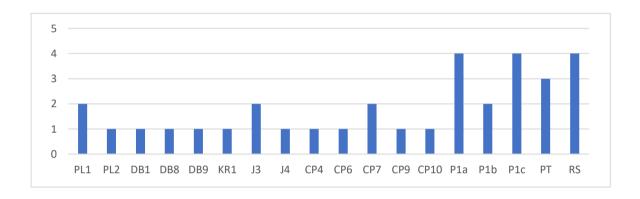


Table 57: Operation T<sub>3</sub>, phase 5. Pottery.

Plates are represented by the types with round (PL1) and squared rim (PL2), 33% of them red slipped.

Shallow bowls are not present, while deep ones have round rims (DB1) and internal angular thickening (DB8-9), with 66% of them characterised by Red Slip.

Only one sherd of krater with out-turned rim (KR1) occur, decorated with red paint.

Jars are not a common form and only double rim jars (J3) and jars with modelled rim (J4) are present: one sherd, 33% of the assemblage, of J3 is red slipped.

Cooking pots are well attested, the most common type being the short-necked pot with upright sinuous rim (CP7). Other short-necked pots are the ones with straight rim (CP6), upright thickened rim and an external depression below the rim (CP9) and an external groove on the lip (CP10). A sherd of holemouth cooking pot with small out-turned rim (CP4) is also present.

Storage ware is quite common in this level: large storage jars with swollen rim (P1a, b, c) are the most common form in the pottery assemblage of the phase.

Painted vessels (PT) are rare but present, representing 9% of the assemblage, while the Red Slip (RS) is just slightly more common, on 12% of the pottery. The relatively high

percentage of painted pottery can be explained by the small assemblage present.

**Phase 6** returned only a few finds (less than ten sherds). Plates with simple round rim (PL1) occur, together with shallow bowls with flat thickened rim (SB8). Deep bowls are of the types with out-turned rim and tapering lip (DB6) and with thickened rim and rounded lip (DB7). Closed forms are documented exclusively by a sherd of cooking pot with small out-turned thickened rim (CP4). No Red Slip or painted decoration is present.

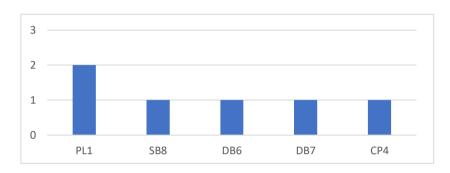


Table 58: Operation T<sub>3</sub>, phase 6. Pottery.

The assemblage of **Phase 7** has also a limited range of types.

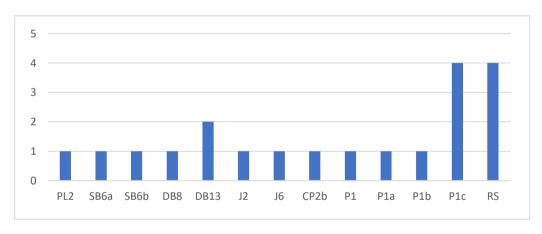


Table 59: Operation T3, phase 7. Pottery.

Plates are characterised exclusively by the squared rim type (PL2) and shallow bowls only by the type with triangular rim, both the simple triangular rim variant and the hammerhead rim variant (SB6a-b). Half of the shallow bowls, corresponding to one sherd, are red slipped. Regarding deep bowls, the most common form is the one with outward squared rim (DB13), followed by that with externally thickened rim and internal angular thickening (DB8); all the specimens are characterised by Red Slip.

Jars occur with collared rim (J2) and concave neck and thickened rim (J6). The only cooking pot form present is the holemouth one with thickened rim (CP2b).

Storage ware is represented as usual by large storage jars with swollen rim (P1 and variants), which are the most common form in the level.

Red Slip (RS) is present on 17% of the assemblage of this phase, while no painted sherds are attested.

From **Phase 8** comes a more numerous assemblage (more than 20 sherds), with a slightly wider range of types.

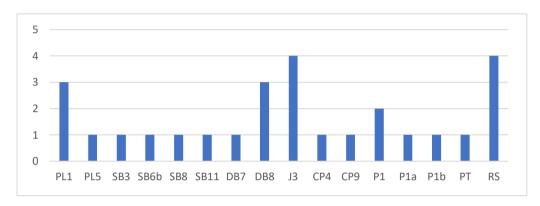


Table 60: Operation T3, phase 8. Pottery.

Plates have simple round rims (PL1) and carinated walls with simple rims (PL5). Shallow bowls are present in scarce quantities but show quite a variability of shapes: bowls with oblique out-turned rim and tapering basin (SB3a), with triangular rim hammerhead variant (SB6b), with flat thickened rim (SB8) and with outward swollen rim (SB11) are attested, 50% of them red slipped and 25% painted.

Deep bowls are quite common, although practically only one type, the hemispherical bowl with externally thickened rim and internal angular thickening (DB8), is present. One sherd of bowl with thickened rim and rounded lip (DB7) is also attested. Red Slip characterises half of the deep bowls.

Concerning jars, double rim types (J3) are the most common form, followed by jars with modelled rim (J4). As for cooking pots, the type with small out-turned thickened rim (CP4) is still present, however short-necked pots with upright thickened rim with an external depression below the rim (CP9) are also present.

Large storage jars (P1) are attested, however in smaller quantities than the more recent phases (only 4 sherds).

Red Slip (RS) characterises 18.5% of the pottery assemblage of the phase, while painted vessels (PT) amount to only 3.7%.

The pottery of **Phase 9** displays an interesting increase in Red Slip.

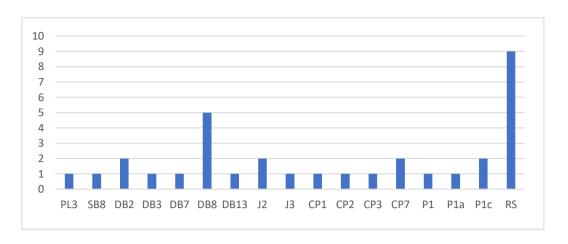


Table 61: Operation T3, phase 9. Pottery.

Only one red slipped sherd of plate with tapering rim (PL3) is present, while shallow bowls are represented by a sherd with flat thickened rim (SB8), also characterised by Red Slip. Concerning deep bowls, the ones with tapering rim (DB2) and especially the externally thickened rim and internal angular thickening (DB8) are the most common forms. Scarce are instead bowls with flaring straight walls (DB3), thickened rim and rounded lip (DB7) and outward squared rim (DB13). A large percentage of the vessels, 60%, are red slipped. Jars occur in the collared rim (J2) and double rim (J3) types.

Cooking pots display an interestingly wide range of types. Holemouth vessels are the most common, with the round rim (CP1), thickened rim (CP2b) and slight depression under the rim (CP3) forms. Vessels with upright sinuous rim (CP7) are the only form present for the short-necked pots group.

Storage ware is represented by large storage jars with swollen rim (P1), also with the round and oval rim variants (P1a, c).

No painted pottery is present in this level, while red slipped vessels (RS) reach a high percentage, 25.8%, probably due to the preponderance of open forms over closed ones.

**Phase 10** yielded only a couple of Iron Age sherds, as most of the finds are redeposited Bronze Age pottery fragments. Only a sherd of bowl with triangular rim (SB6a) and an unusual sherd of cooking pot which has been tentatively included in the group of pots with external groove on the rim (CP10) are present.

The assemblage of **phase 11** is composed of less than 20 sherds.

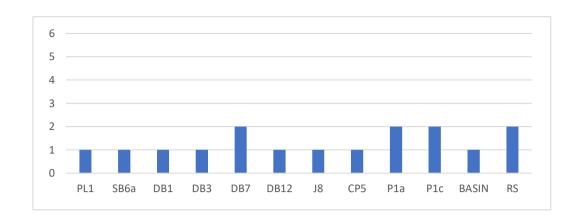


Table 62: Operation T<sub>3</sub>, phase 11. Pottery.

Plates are exclusively of the round rim (PL1) type, while shallow bowls are represented only by a red slipped sherd of the triangular rim (SB6a) type. The assemblage of the deep bowls is more numerous, with bowls with externally thickened rim and internal angular thickening (DB8) being the most common form, followed by bowls with round rim (DB1),<sup>231</sup> straight flaring walls (DB3) and slightly protruding tapering rim (DB12). Only 20% are red slipped. Jars are exemplified by a sherd of jar with upturned swollen rim (J8) and cooking pots by one fragment of the outward inflated rim (CP5) type. Regarding large storage jars, the swollen rim round and oval variants (P1a, c) are attested.

From this phase comes also a basin with outward squared rim.

Red Slip (RS) characterises 11.7% of the assemblage of this level.

A similar situation is registered for **Phase 12**.

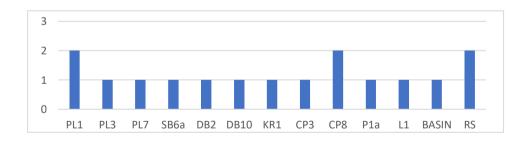


Table 63: Operation T<sub>3</sub>, phase 12. Pottery.

Plates show a wider range of types compared to the later phase. Vessels with round rim (PL1) are the most common form, followed by types with tapering rim (PL3) and internally thickened rim (PL7). Painted and red slipped sherds each represent 25% of the assemblage

<sup>&</sup>lt;sup>231</sup> Although the specimen from this level is characterised by a small thickening just under the rim, like the central thickening of type DB5a, it had been included in the DB1 group as it has no inward rim.

of plates.

Shallow bowls have triangular rims (SB6a), while concerning deep bowls the tapering rim type (DB2) and the globular bowl with flaring rim (DB10) are attested; 50% of the deep bowls are characterised by Red Slip.

A red slipped sherd of krater with out-turned rim (KR1) occurs as well.

Closed forms are represented by cooking pots and large storage jars. Regarding the former shape, short-necked vessels are mostly present, that is pots with rim with lip impression (CP8). A sherd of holemouth pot with a slight depression under the rim (CP3), a rare type, is also attested. Regarding the latter category, only one sherd of large storage jar with swollen round rim (P1a) is documented. One sherd of lamp (L) and a fragment of large basin with out-turned rim with ridges on the body are present as well.

Painted (PT) sherds are 5% of the assemblage, while red slipped (RS) vessels 15%,

The Iron Age finds of **Phase 13** come almost exclusively from the pits featured in this level. The quantity is quite scarce in this case as well (about 15 sherds).

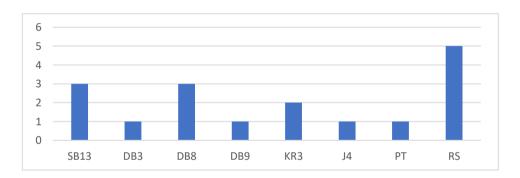


Table 64: Operation T<sub>3</sub>, phase 13. Pottery.

Open forms represent the majority of the assemblage: shallow bowls are entirely of the carinated bowl with flared rim (SB13) type and 66% of them are red slipped. Concerning deep bowls, the most common form is the one with externally thickened rim and internal angular thickening (DB8), followed by types with flaring straight walls (DB3) and with inward rim and internal angular thickening (DB8): 20% of the deep bowls are painted.

Sherds of kraters with straight vertical rim (KR3), all characterised by Red Slip, are also attested. The only closed form present is a fragment of jar with modelled rim (J4).

Paint (PT) occurs on 7% of the assemblage of the phase, and Red Slip (RS) on 35.7%.

The assemblage of Phase 1 (2010) is the most significant of the whole Operation and

consists of more than 40 sherds.

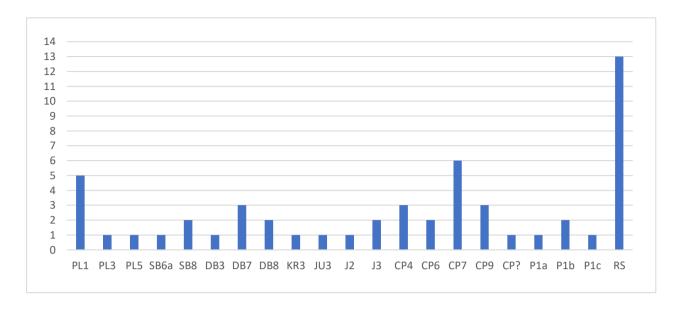


Table 65: Operation T<sub>3</sub>, phase 1 (2010). Pottery.

Plates have round rims especially (PL1). Tapering rims (PL3) and a Red Slip fruit-stand of the carinated type with simple rim (PL5) are also present. Red slipped sherds represent 28.5% of the plates.

Regarding shallow bowls, the most common type is that with flat thickened rim (SB8), followed by the triangular rim (SB6a) type: all the shallow bowls of the phase are red slipped. Deep bowls display a wider range of forms. The most common are bowls with thickened rim and rounded lip (DB7) and externally thickened rim and internal angular thickening (DB8). Bowls with deep flaring walls (DB3) occur in more limited quantities. Red Slip is present on 50% of the deep bowls.

Kraters are represented by a red slipped sherd of krater with straight vertical rim (KR3). Concerning jars, the most common type are double rim jars (J3), followed by collared rim jars (J2).

Short-necked cooking pots are the most common group of the cooking vessels. Pots with upright sinuous rim (CP7) are particularly frequent, followed by those with upright thickened rim and an external depression (CP9) and straight rim (CP6). Holemouth vessels have exclusively small out-turned rims (CP4). An unusual sherd of cooking pot sherd has not been inserted in any typology, since it does not fit any of them perfectly: in fact, it has a sinuous rim similar to the CP7 type, but with an almost holemouth opening instead of a short neck. A couple of CP4 specimens are also unusual, as they have a short-necked shape more than a holemouth one.

Storage pottery is represented by large storage jars with swollen rims and variants (P1a-b-c).

Red Slip is present on almost 20% of the assemblage of the level.

From **Phase 2 (2010**) comes a scarce quantity of finds (7 sherds).

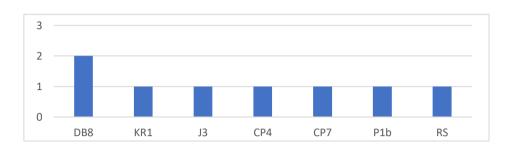


Table 66: Operation T3, phase 2 (2010). Pottery.

Open forms are represented exclusively by deep bowls with externally thickened rim and internal angular thickening (DB8), half of them (corresponding to one sherd) in Red Slip Ware. One sherd of krater with out-turned rim (KR1) occurs as well.

Closed forms are slightly more numerous and consist of one sherd of double rim jar (J3), one of cooking pot with small out-turned thickened rim (CP4), one of pot with upright sinuous rim (CP7) and one of large storage jar with swollen squared rim (P1b).

Red Slip is present on 14% of the assemblage, corresponding to a single sherd.

Type/	PT	RS
Phase		
T3-5	9	12
T3-6	/	1
T3-7	1	17
T3-8	3.7	18.5
T3-9	1	25.8
T3-10	1	/
T3-11	1	11.7
T3-12	5	15
T3-13	7	35.7
T3-1 (2010)	1	20
T3-2 (2010)	1	14

Table 67: Operation T3, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

퐀	ო									<del>6</del> . –	2.5	
줐	~	3.8							8.3			14.
DB	5			12.		4.1						
98	12							7.7				
DB	10								8.3			
DB	6	3.8								9.1		
DB	œ	3.8		6.2	13. 6	20. 8				27. 3	5	28.
DB	^		16. 6		4.5	4.1		15. 3			7.5	
OB	ဖ		6									
DB	ო					4.1		7.7		9.1	2.5	
BB	7					8.3			8.3			
8	~	3.8						7.7				
SB	5									27.		
SB	<b>±</b>				4.5							
SB	ω		16.		4.5	4.					2	
SB	99			6.2	4.5							
SB	6a			6.2			90	7.7	8.3		2.5	
SB	e B				4.5							
Ъ									8.3			
Ъ	က				4.5						2.5	
Ъ	ო					4.1			8 8.3		2.5	
Ъ	7	3.8		6.2								
Ъ		7.7	33.		13.			7.7	16. 6		12.	
TYPE/	PHASE	T3-5	T3-6	T3-7	T3-8	T3-9	T3-10	T3-11	T3-12	T3-13	T3-1 (2010)	T3-2 (2010)

Table 68: Operation T3, percentage occurrence of open and mixed form types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

P1c	15.4		25		8.3		15.3			2.5	
P1b	7.7		6.2	4.5						2	14.3
P1a	15.4		6.2	4.5	4.1		15.3	8.3		2.5	
7			6.2	9.1	4.1						
۵ <sup>۷</sup>										2.5	
CP 10	3.8					90					
ပ္ ေ	3.8			4.5						7.5	
ე ∞								16.6			
CP ~	7.7				8.3					15	14.3
G e	3.8									5	
S S							7.7				
Q 4	3.8	16.6		4.5						7.5	14.3
۵ <sub>6</sub>					4 L.			8.3			
C G			6.2		4.1						
g -					4. L.						
85							7.7				
90			6.2								
40	3.8								9.1		
<u>ي</u>	7.7			18.2	4.1					2	14.3
27			6.2		8.3					2.5	
2U3										2.5	
TYPE/ PHASE	T3-5	T3-6	Т3-7	T3-8	T3-9	T3-10	T3-11	T3-12	T3-13	T3-1 (2010)	T3-2 (2010)

Table 69: Operation T3, percentage occurrence of closed form types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

#### 3.7.3. CONCLUDING REMARKS AND CHRONOLOGY

The archaeological sequence of Operation T3 must be considered together with that of Operation T4, as they are stratigraphically connected and the latter area yielded more substantial architectural evidence. However, the sequence from T3 also includes later periods that are not present T4. Thus, the analyses of the two Operations have been kept separated, in contrast to Operation H-T1.

As in other Operations, the first observation that can be made about the ceramic assemblage is that many of the pottery types are attested in most, if not all, phases of the Operation: therefore, once again it is confirmed that the majority of the forms are long-lasting ones.

The upper layers have been quite disturbed by modern intrusions related to the modern village of Mishrifeh, so their interpretation is problematic. Phases 5 and 6 consist in fact of trodden surfaces devoid of any structure: the pottery assemblages are not large, especially for Phase 6, but some parallels are possible.

Both the ceramic repertoires of the two phases present typologies which are frequent at Mishrifeh and that are attested in the Northern Levant during both the Iron Age II and III. These forms are especially the plates with round and squared rim (PL1-2), bowls with flat thickened rim (SB8), with simple rim (DB1) and internal angular thickening (DB8-9) and collared rim jars (J3. Chapters 3.3.3, 3.5.5 and 4.2). Cooking pots with small out turned rim (CP4) and with straight rim (CP6), sinuous rim (CP7) and thickened rim with a depression (CP9) are also poorly diagnostic, as they are widespread in the site in almost all chronological periods (Chapter 4.2.7).

However, the jar with modelled rim (J4, T3 7986.2, **PI. 40:2**) from Phase 5 closely resembles a specimen from Tell Afis<sup>232</sup> dated to the 7<sup>th</sup> century, while the bowl with out-turned rim and tapering lip (DB6) from Phase 6 is a type found in Late Iron II/Iron Age III contexts (Chapter 3.3.3). Closest parallels for the DB6 sherd (T3 7988.1, **PI. 21:1**) come from Tell Mastuma<sup>233</sup> (Iron III) and Tell Shiukh Fawqani<sup>234</sup> (Late Iron II/Iron III).

For both phases a date around the beginning of the Iron Age III (early 7<sup>th</sup> century) can be proposed.<sup>235</sup>

<sup>233</sup> Wada 2009c, fig. 5.5:51.

<sup>&</sup>lt;sup>232</sup> Cecchini 1998, fig. 25:4.

<sup>&</sup>lt;sup>234</sup> Luciani 2005, Pl. 10:131. The sherd from Mishrifeh is much smaller than the specimen from Tell Shiukh Fawqani: while the rim shape is in fact the same, the latter vessel has a squared carination, which cannot be confirmed for the sherd from Operation T3.

<sup>&</sup>lt;sup>235</sup> An Iron Age III chronology for these phases is corroborated also by the discovery of a fragment of Greek

In Phases 7 and 8 the first structural remains appear: the archaeological evidence is not clear due to the poor state of preservation, but these two levels probably represent a very narrow sequence of buildings.

The sherds of bowl with outward squared rim (DB13, T3 8209.20 and 8211.17, **PI. 26:9-10**) from Phase 7 have strong similarities with specimens from Tell Afis, <sup>236</sup> dated to the 8<sup>th</sup> but especially the 7<sup>th</sup> century. For the collared rim jar fragment (J2, T3 8231.1, **PI. 37:3**) from Phase 7 and characterized by an unusual ridge on the neck, the closest parallels are from Tell Mastuma<sup>237</sup> (Late Iron II/Iron III), Tell Afis<sup>238</sup> (7<sup>th</sup> century) and Tell Tayinat<sup>239</sup> (Late 9<sup>th</sup> – Early 7<sup>th</sup> century). The appearance in this phase and in the earlier one of SB6b specimens, that is bowls with triangular hammerhead rim, is an important chronological marker. In fact, SB6b has parallels dated to the Late Iron Age II and Iron Age III at Tell Afis, <sup>240</sup> Tell Mastuma, <sup>241</sup> Chatal Hüyük<sup>242</sup> and Tell Shiukh Fawqani. <sup>243</sup>

Regarding Phase 8, the painted sherd of bowl with oblique out-turned rim (SB3a, T3 7993.1, **PI. 11:3**) has no exact parallels, but it strongly resembles an unpainted vessel from Hazor<sup>244</sup> dated to the 8<sup>th</sup> century. The fragment of bowl with triangular hammerhead rim (SB6b, T3 8174.8, **PI. 13:8**) closely resembles the specimen from phase J1 (J 2666.5, **PI. 13:5**).

Thus for both Phases 7 and 8 a very Late Iron II/Early Iron Age III (Late 8<sup>th</sup> – Early 7<sup>th</sup> centuries BC) dating can be proposed.

Phase 9 is probably an abandonment level devoid of traces of occupation. A chronology not much different from the previous two phases must be presumed, since the ceramic assemblage displays some similarities, with the presence of types DB8, DB13, J3 and CP2b types.

A few parallels also point to a very Late Iron II/Iron III date. The sherd of bowl with outward squared rim (DB13, T3 8425.4, **PI. 26:8**) has the closest parallel with a vessel from Tell

black painted pottery, of which part of the documentation is unfortunately unavailable as it is in Syria. This small sherd may push the dating to a very late moment of the Iron Age III. However, the excavators have considered the fragment intrusive and this dating seems to be too low to safely date the Iron Age III occupation. Not only are the layers highly disturbed by modern activities, but also the ceramic assemblage does not indicate a date later than the 7<sup>th</sup> century. In fact, specimens of Late Iron Age III/Persian Age observed in other Central-Western Syrian sites like Tell Mardikh (Mazzoni 1992b: 106, fig. 18), Tell Afis (Cecchini 1998: 275, 284) and Tell Tuqan (Baffi 2011d figs. 37, 38:8-19, 42; Baffi, Peyronel 2014: 25-27) are not attested at Mishrifeh.

<sup>&</sup>lt;sup>236</sup> Cecchini 1998, figs. 23:9, 27:8; Oggiano 1997, Pl. VI:10. Note that most of those vessels have rounded walls, while those from Mishrifeh have straighter walls.

<sup>&</sup>lt;sup>237</sup> Wada 2009b, figs. 4.16:5, 4.17:2, 4.28:15, 4.69:9; Wada 2009c, fig. 5.10:58.

<sup>&</sup>lt;sup>238</sup> Cecchini 1998, fig. 32:17; Mazzoni 1987, fig. 11:19.

<sup>&</sup>lt;sup>239</sup> Osborne et al. 2019, fig. 17:16.

<sup>&</sup>lt;sup>240</sup> Cecchini 1998, figs. 19:11; 21:1, 3-4, 18; 26:17-18; 29:13.

<sup>&</sup>lt;sup>241</sup> Wada 2009b, fig. 4.141:6; Wada 2009c, fig. 5.8:10.

<sup>&</sup>lt;sup>242</sup> Pucci 2019, Pl. 131:f.

<sup>&</sup>lt;sup>243</sup> Luciani 2005, Pls. 8:111, 9:122, 10:130, 38:463-464, 43:502.

<sup>&</sup>lt;sup>244</sup> Yadin et al. 1958, Pl. LI:4.

Afis<sup>245</sup> dated to the 7<sup>th</sup> century. Furthermore, the cooking pot with thickened rim (CP2b, T3 8425.5, **PI. 48:5**) fragment strongly resembles one from Tell Afis<sup>246</sup> (7<sup>th</sup> century), while the sherd of pot with slight depression under the rim (CP3, 8425.9, **PI. 49:2**) shows analogies with specimens from Tell Mastuma<sup>247</sup> dated to the Late Iron II.

Phases 10 and 11 represent the two occupation levels of Building T3-3. In both phases the pottery assemblage is quite poor, especially in the more recent one. Two unusual forms come from these levels: in Phase 10, a short-necked cooking pot with an uncommon rim shape (T3 8225.12, **PI. 58:2**), similar to a double rim type (CP10) but with more grooves, is attested. From Phase 11 comes a bowl with simple round rim and a small thickening under the rim (T3 8424.6, **PI. 18:3**). As mentioned in a note above, T3 8424.6 looks similar to type DB5a (inward rim with central ridge or thickening), however the high location of the thickening – immediately under the rim – is quite unusual and the wall curve and rim shape are more similar to a DB1 than a DB5 type. No exact parallels have been found for either specimen, through for the latter some very cautious analogies can be found in vessels from Tell Afis<sup>248</sup> (7<sup>th</sup> century), Tell Mastuma<sup>249</sup> (Late Iron II/III) and in the bowls with prominent ridge below flat rim type from Hazor<sup>250</sup> (9<sup>th</sup> and especially 8<sup>th</sup> century).

More precise parallels are possible for the cooking pot with outward inflated rim (CP5, T3 8429.2, **PI. 51:3**): analogous vessels are in fact documented at Tell Mardikh<sup>251</sup> (8<sup>th</sup> century), Tell Afis<sup>252</sup> (7<sup>th</sup> century), Tell Mastuma<sup>253</sup> (Late Iron II). The squared rim basin (T3 8439.15, **PI. 70:1**) has a suitable parallel in a specimen from Tell Mastuma<sup>254</sup> from Stratum I-2b (Iron Age II).

Considering the parallels presented, a late 8<sup>th</sup> century date for Phase 10 and a mid-8<sup>th</sup> century one for Phase 11 are probable and confirmed by the analysis of T4 Phase 4 (Chapter 3.8). A short interval of time between the two phases is presumable as the building was perhaps abandoned after Phase 11, given to the presence of the aforementioned pit cut into the floor of Room B.

Phase 12 is the earliest Iron Age level of the Operation and consisted of a regular surface found just under Building T3-3. The ceramic assemblage is scarce: however a few parallels

<sup>&</sup>lt;sup>245</sup> Cecchini 1998, fig. 23:9.

<sup>&</sup>lt;sup>246</sup> Cecchini 1998, fig. 30:18.

<sup>&</sup>lt;sup>247</sup> Wada 2009b, figs. 4.20:5, 4.34:23, 4.42:7, 4.50:7.

<sup>&</sup>lt;sup>248</sup> Cecchini, fig. 21:12.

<sup>&</sup>lt;sup>249</sup> Wada 2009b, fig. 4.60:2; Wada 2009c, fig. 5.9:9, with the central ridge about half-way on the wall.

<sup>&</sup>lt;sup>250</sup> Ben-Ami, Sandhaus, Ben-Tor 2012: 438, figs. 6.2:7-8. Nr. 8 however has an inward rim and it closely resembles a DB5a type.

<sup>&</sup>lt;sup>251</sup> Mazzoni 1992b, fig. 22:10.

<sup>&</sup>lt;sup>252</sup> Cecchini 1998, fig. 34:4.

<sup>&</sup>lt;sup>253</sup> Wada 2009b, fig. 4.108:6.

<sup>&</sup>lt;sup>254</sup> Wada 2009d, fig. 6.33:68.

have been found. The sherd of plate/shallow bowl with internally thickened rim (PL7, T3 8212.24, **PI. 8:5**) resembles specimens from Tell Nebi Mend<sup>255</sup> and Tell Abou Danne<sup>256</sup> dated to the Iron Age II. The globular bowl with flaring rim (DB10, T3 8212.60, **PI. 25:3**) has very close parallels with vessels from Tell Mardikh<sup>257</sup> and Tell Tuqan<sup>258</sup> from Iron Age II contexts. Regarding the cooking pots with rim with lip impression (CP8, T3 8212.7 and 45, **PI. 56:4-5**), parallels are particularly attested for the whole Iron Age II (Chapter 4.2.7.8). However, the closest parallels to the specimens from Phase 12 can be found in the Southern Levant, at Tel Gezer<sup>259</sup> and Hazor,<sup>260</sup> dated to the early 8<sup>th</sup> century BC.

From the parallels presented a more precise dating than a generic Iron II attribution for this level cannot be proposed. The corresponding T4 Phase 6 seems to indicate a late 9<sup>th</sup> century chronology (Chapter 3.8.3), although only a single sherd was really diagnostic, so a dating to the 9<sup>th</sup> / 8<sup>th</sup> centuries for this level can be cautiously suggested.

Phase 13 was originally a Late Bronze Age horizon, with pits excavated in it during the Iron Age that contained Iron Age finds. The pottery assemblage is once again poor. Noteworthy is the presence of a painted fragment of bowl with externally thickened rim and internal angular thickening (DB8, SF T3 8667.706, **PI. 24:2**). This type is usually in common or Red Slip Ware and painted specimens are quite rare – only three in the whole assemblage from Mishrifeh. The other painted sherds were found in Operation H-T1 Phase 10 and dated to the 9<sup>th</sup> century (H 6644.91, **PI. 24:1**), which could indicate an early Iron Age II date for the vessel from Operation T3 as well. From this level come also two fragments of a krater with straight vertical rim (KR3, T3 8720.2 and 11, **PI. 33:5-6**), one of which (T3 8720.11) strongly resembles a vessel from Tell Mastuma<sup>261</sup> from one of the earliest Iron II levels. Considering also the stratigraphic sequence, the Iron Age evidence of this phase should thus probably be dated to the 9<sup>th</sup> century BC.

Regarding the 2010 phases, as there is no stratigraphic connection their correlations with the 2007 phases are proposed on the basis of the pottery assemblages. Phase 1 (2010) has one of the most significant assemblages of the Operation. It is clearly an Iron Age II assemblage, with the presence of red slipped plates with round rim (PL1), bowls with triangular rim (SB6a), thickened flat rim (SB8), thickened rim and round lip (DB7), internal angular thickening (DB8-9), collared and double rim jars (J2-3) and cooking pots with

<sup>255</sup> Whincop 2007, fig. 7:d.

<sup>&</sup>lt;sup>256</sup> Lebeau 1983, Pl. IX:5.

<sup>&</sup>lt;sup>257</sup> Pizzimenti 2018, fig. 6:6.

<sup>&</sup>lt;sup>258</sup> Baffi 2008c, fig. 27:7.

<sup>&</sup>lt;sup>259</sup> Spagnoli 2010, Pl. 23:268.

<sup>&</sup>lt;sup>260</sup> Yadin et al. 1960, Pl. LXIX:11 and 14.

<sup>&</sup>lt;sup>261</sup> Wada 2009b fig. 4.44:10.

straight rim (CP6), sinuous rim (CP7) and thickened rim with a depression (CP9). <sup>262</sup>
The presence of a red slipped fruit-stand (SF T3 10082.701, **PI. 8:1**) points to an 8<sup>th</sup> century date for the level (Lehmann 1998: 13). The sherd of a krater with straight vertical rim (KR3, T3 10082.24, **PI. 33:3**) has instead contrasting parallels: on one hand it has strong resemblances with a specimen from Tell Afis <sup>263</sup> dated to the 9<sup>th</sup> century, on the other analogous vessels were also present at Tell Mastuma <sup>264</sup> in the Late Iron II. The fact that, notwithstanding the sizable assemblage of this Operation, no painted pottery is attested in this level while Red Slip Ware occurs in a notable percentage (20%), probably indicates a Late Iron Age II or more generally an 8<sup>th</sup> century date, as seen in other Operations. <sup>265</sup> The assemblage of Phase T3-1 (2010) is comparable with both the assemblages of sub-phases H-T1 6a and 6b due to the presence of the PL1, PL3, PL5, SB6a, SB8, DB3, DB7, DB8, DB9, KR3, JU3, J1, J2, J3, CP4, CP6, CP7 and CP9 typologies and especially due to the presence of a fruit-stand, which is a form found exclusively in Late Iron Age II contexts. The existence of a "taurobolic chapel", an archaeological feature found in Mishrifeh

The existence of a "taurobolic chapel", an archaeological feature found in Mishrifeh especially in Late Iron II contexts and related to textile dyeing, might corroborate a Late Iron Age II date for Phase T3-1 (2010). A similar chronology may be supposed for Phase 2 (2010), as the pottery assemblage is too poor for a more specific dating.

<sup>&</sup>lt;sup>262</sup> Chapters 3.5.5, 4.2.

Degli Esposti 1998 fig. 7:16. Another comparable specimen, however painted and clearly out of the possible chronological range for the level, is dated to the Iron Age I (1050-1000/950 B.C.), Venturi 2020 Pl. 109:17.
 Wada 2009b 4.30:4.

<sup>&</sup>lt;sup>265</sup> Higher percentages of painted pottery usually indicate an earlier Iron Age II, or even Iron Age I, chronology. See Chapters 3.4.3, 3.5.5, 4.4.

### 3.8 OPERATION T4

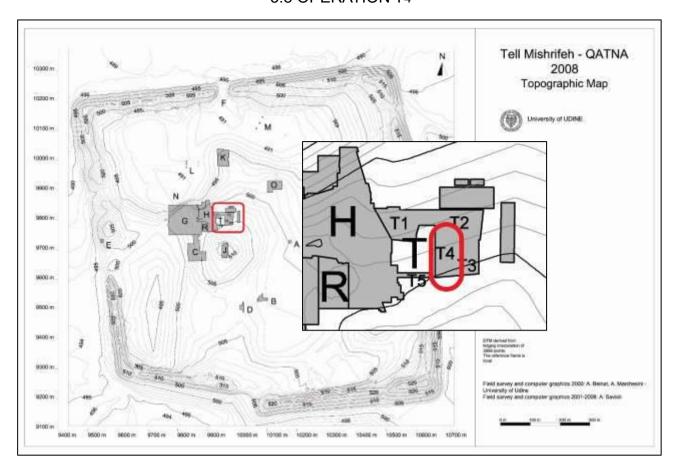


Fig. 219: Mishrifeh, topographic map with the location of Operation T highlighted and in the enlargement the location of Operation T4.

Operation T4 was opened in 2007, south-east of Operation H-T1 and is stratigraphically connected to Operation T3.

The excavations exposed a sequence from the Late Iron Age II/Early Iron Age III to the Middle Bronze Age, with seven phases dated to the Iron Age. The archaeological evidence documents a low-density occupation in this area of the upper town, with residential houses and installations related to domestic production and widely spaced activities: these were independent units, with their own private storage spaces (Morandi Bonacossi 2009: 128).

T4	Т3	Relative Chronology	Absolute Chronology
1	8	Late IA II – IA III	End 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. B.C.
2	9	Late IA II – IA III	Late 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. B.C.
3			
4	10	Late IA II	Late 8 <sup>th</sup> cent. B.C.
5	11	Mid – Late IA II	8 <sup>th</sup> cent. B.C.
6	12	IA II	9 <sup>th</sup> - 8 <sup>th</sup> cent. B.C.
7	13	LBA II/IA II	9 <sup>th</sup> cent. B.C.

Table 70: Operation T4, summary of the phases and their chronology and correlations with T3.

#### 3.8.1 ARCHAEOLOGICAL CONTEXT AND STRATIGRAPHY

### **PHASE 1** (Figs. 220-221)

This was found below a modern phase created by the partial removal and levelling of the archaeological deposit.<sup>266</sup> It consisted of a trodden lime floor (SU 7976) and a building which continued partly outside the excavation area.

Building T4-1 was composed of at least 3 rooms (B and C in T4, A perhaps in T3).<sup>267</sup> Room C was covered by a collapse (SU 8245) underneath which there was a floor (SU 8252). Interred in the floor was a large three-handled large storage jar (SU 8254.701, fig. 220, PI. 62:1. Morandi Bonacossi 2009: 128), which was used to contain liquids or grain. On floor 8252 there was also a mudbrick structure (SU 8264) belonging to an earlier phase. Room B too was covered by a collapse deposit (SU 8244) that obliterated another mudbrick installation (SU 8257). Under a third collapse, two Iron Age large storage jars (SF 8256.701 and 702) were discovered. Considering the presence of the two jars, this room was identified as a storage room.



Fig. 220: Operation T4, Phase 1. Three handled large storage jar in Building T4-1, Room C.

<sup>&</sup>lt;sup>266</sup> The surface deposit (SU 7957) contained Iron Age materials. However, it had been heavily damaged and disturbed by modern intrusions such as pits.

<sup>&</sup>lt;sup>267</sup> The equivalent T3 phase (Phase 8) is heavily damaged by modern intrusions, therefore its interpretation is not clear.

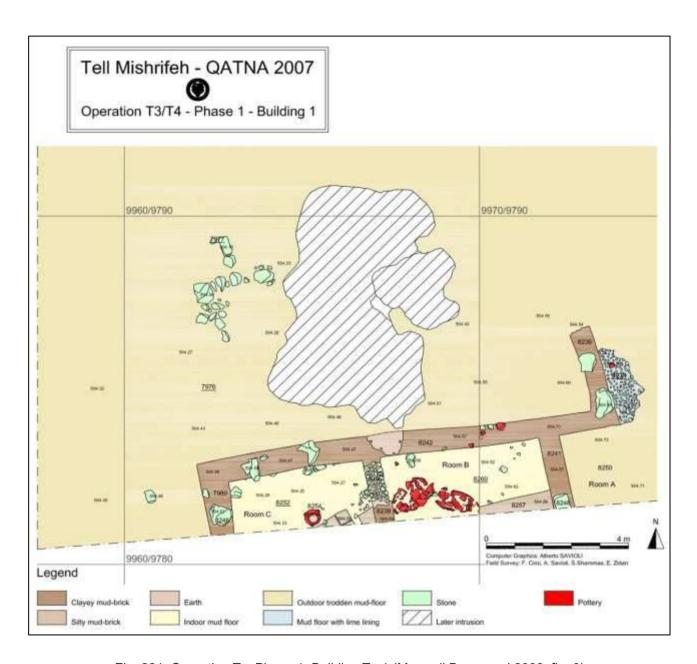


Fig. 221: Operation T4, Phase 1. Building T4-1 (Morandi Bonacossi 2009: fig. 8)

# PHASE 2 (Fig. 222)

This consisted of two pits (SU 8268 and 8269) and a stone L-shaped structure (SU 7977), which was also visible in the more recent phase. The pits were devoid of any pottery, while the structure seemed to have been abandoned in this phase, as many stones had been removed.

In the northern area there was a floor (SU 8259) with two depressions in it (SU 8266 and 8267) filled with ash. One of them contained only Early Bronze Age pottery sherds.

This phase was interpreted as an abandonment level of the earlier one.



Fig. 222: Operation T4, Phase 2. General view.



Fig. 223: Operation T4, Phase 3. Building T4-2.

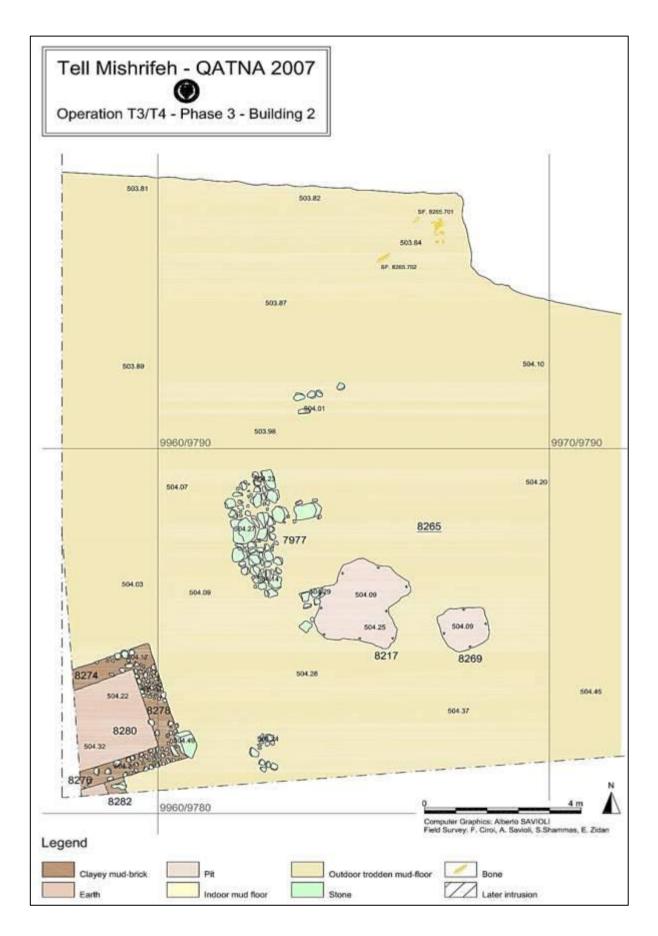


Fig. 224: Operation T4, Plan of Phase 3.

# **PHASE 3** (Figs. 223-224)

This was found only in the southern sector of the Operation. The floor of Phase 2 (SU 8265) was already in use and in the south-west corner of the excavation part of a rectangular room (Building T4-2) was discovered. The room, which was bounded by walls with stone foundations, was covered by a collapse deposit (SU 8280), underneath which was a floor (SU 8287) devoid of any artefacts; it was thus not possible to identify the function of the room.

At this time structure 7977 was already in use. It was located close to Building T4-2, so it may be supposed that they were connected.

# **PHASE 4** (= T3 Phase 10, figs. 225-226)

The removal of the floor and deposit of Phase 3 (SU 8290) revealed a basalt grinding slab (SF 8290.701) which could have been used in Phase 4. Underneath the deposit a large structure (Building T4-3) was exposed (Morandi Bonacossi 2009: 124, 126). It had a rectangular shape and was composed of seven rooms, partly in Operation T3: rooms C, D, E, F and G were in Operation T4. The walls of the building were made of mudbricks over stone foundations, with one to three courses of mudbricks preserved.

Starting from the western side, Room G with its floor (SU 8465) was poorly documented as it was almost completely beyond the limit of the excavation area. In the eastern wall, a well-preserved passage with a probable threshold made of limestone stones led to Room F. This room was rectangular in shape and its function is unclear, although fragments of storage vessels were discovered in the upper deposits. Room E was located eastward from Room F and no passageway was found between the two: it was therefore supposed that Rooms G and F had a separate entrance located in the unexcavated area to the west.

Room E was very similar to Room F in dimensions and orientation: it was accessed from an entrance in the north-western wall (SU 8291) and its floor was poorly preserved. Another opening in the south-eastern wall allowed access to the following Room D. Originally, there was probably a further passage, which could have connecting Rooms E and C in the north-eastern side of the room, but this part of the wall was robbed after the abandonment of the building. Room C was perpendicular to Room E and was the worst preserved, lacking most of the walls; it was either open to the outside or, as said before, accessible from Room E. To the south, parallel to Room C, lay Room D, of smaller size than the other rooms. Room D was quite well preserved, as it maintained its floor (SU 8455) and the surrounding walls, the eastern of which (SU 8295) was the only one in the building made of *pisé* rather than with stone foundations and mudbricks.

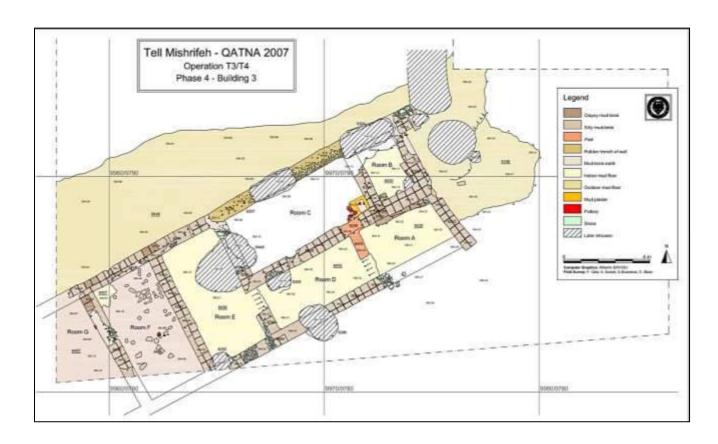


Fig. 225: Operation T4 (and T3), Phase 4, Plan of Building T4-3.

The eastern side of the building was characterised by two smaller, almost square rooms, A and B (already described in Operation T3), the first one of which was connected to Room D though a passageway in the *pisé* wall 8295. Room B was either accessible from Room C, although a threshold was not preserved, or from the outside.

Therefore Building T4-3 can be divided in three units: the first was the western part, with Rooms F and G; the second unit was the public area, composed of Rooms E, D and maybe C; the last one was the private space, Room A. Room E was probably an entrance hall, with an external entrance and two passageways to Rooms C and D, which could have been 'connecting rooms' between the public area and the private one.

Room A was the innermost space, devoted to private use. Interpretation of Room C is actually quite problematic; it is unlikely that it had an opening to the outside, as this would have made the building excessively fragmented, so it is more probable that it was connected to Room E. As mentioned above, no access was recognizable for Room B: perhaps the entrance was from the outside, suggesting that it may have been a shed or barn.

Due to the scarcity of artefacts recovered from the building it is very difficult to recognize the functions of the various rooms. The floors are fragmentary or not preserved, the pottery – which will be discussed below – is mostly common or storage ware, so the building was probably a residential house or a warehouse.

No installation or any other evidence was found outside the building in this phase.

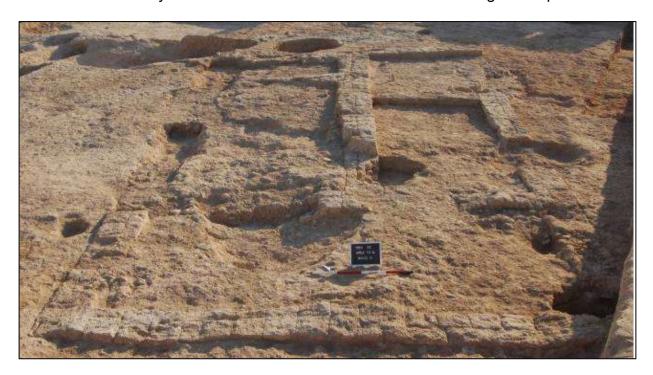


Fig. 226: Operation T4, Phase 4. Building T4-3 from the west

### **PHASE 5** (= T3 Phase 11, figs. 227-228)

This represents the first phase of occupation of Building T4-3. It was always rectangularshaped but was smaller in size, as Room A was now open to the outside on the southern side (Chapter 3.7.1).

Beginning from the western side, there was Room G with another floor (SU 8469), similar to the later one. The walls were the same as in the previously discussed phase, however the access to Room F was further southward, partly under the excavation limit. This opening was without threshold and was filled with a block of *pisé* (SU 8474) in Phase 4. Room F also had almost the same plan as in Phase 4, however the floor (SU 8470) was in a very good state of preservation. The access to the room was then in the northern wall and was closed with mudbricks in the later phase.

The eastern side of the building differs the most from Phase 4. The number of rooms was four instead of three; Room D was now a single rectangular unit together with part of Room A. Room E had the same plan, also with the same access from the outside, however without any threshold; the opening in the south-eastern wall was not present in this level. The floor of the room (SU 8471) was quite well-preserved and on it was discovered a silver earring (SF 8471.701). Near the entrance there was a mudbrick installation, which presented a white plaster decoration and traces of burning on the western face. Close to it, in the eastern side

of the room there must have been an access to the following Room C.

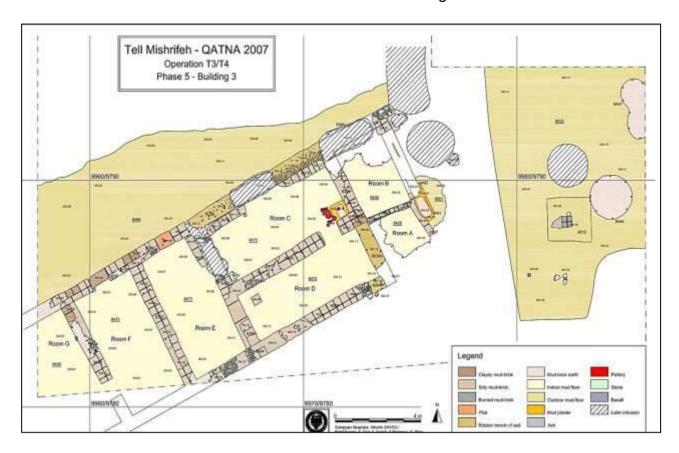


Fig. 227: Operation T4 (and T3), Phase 5, Plan of Building T4-3 (Morandi Bonacossi 2009, fig. 6).

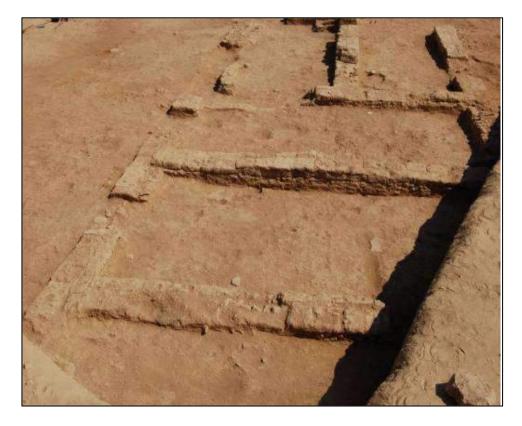


Fig. 228: Operation T4, Phase 5. Building T4-3 from the west.

As in Phase 4, the evidence is missing due to the robbing trench, although a passageway may be hypothesized due to analogies between the material found in the two rooms.<sup>268</sup> Room C is better preserved than in the later phase. The floor (SU 8472) is slightly plastered and some installations were found on it, such as two benches (SU 8478 and 8479), a small oven – which at the time of the discovery was filled with storage jar sherds and ash – and a complete quern (SF 8472.701). Therefore, it is highly probable that this room was devoted to domestic activities.

Through an opening, it was possible to access the innermost room of the building, Room D. In Phase 4 this entrance was obliterated by a large block of *pisé*, but originally there was a basalt threshold (SU 8487). Room D was well preserved and in the western corner there was a small hoard of mudbricks (SU 8480).

Two different units are thus recognizable in this phase: the western part consisted of Rooms F and G, which were presumably storage rooms given the large quantity of storage pottery and the absence of other finds. The eastern block was formed by Rooms E, C and D: E was probably an entrance hall in this phase too. Considering the presence of only one access to the other areas, there was maybe a more distinct room hierarchy than in the later phase. In fact, from Room E it was necessary first to enter Room C. This room was clearly a working space for domestic activities, starting from the processing of cereals to their storage and concluding with cooking in the oven. Room D was the most domestic and private one and could be reached only after having passed through both the others.

The building can be interpreted as a habitation with a storage area (Rooms F-G) devoted to the conservation, also long-term, of food and an area accessible from the outside and probably used as a barn or shed (Rooms A-B).

Outside of the building, in the north area, there was a surface (SU 8468) devoid of any installations, while on the eastern open-air surface 8424 there was a fireplace.

#### PHASE 6

This is the construction phase of Building T4-3, with the foundation trenches and an external surface. It should be noted that not all the walls of the building had foundation trenches; in fact only one had been made this way (SU 8292,<sup>269</sup> trench SU 8685), together with three partitions between the rooms. Therefore the building did not need heavy structures to ensure its stability: so, given also the width of the walls, it evidently did not have a second floor and the roof must have been made of light material (perhaps straw).

<sup>&</sup>lt;sup>268</sup> That is, storage pottery and artefacts used for the processing of cereals.

<sup>&</sup>lt;sup>269</sup> The wall between Rooms F and E.

# **PHASE 7** (Figs. 229-230)

This is the first occupation phase of the Iron Age and it is divided in two sub-phases.

# **PHASE 7a** (Fig. 229)

This was characterised by a trodden floor (SU 8688), with some pits cut into it. The largest pit (SU 8720) was half under the section. It was presumably used as a grain deposit and had been filled with ash and mudbricks when no longer in use. Another pit (SU 8689) was discovered westward, filled with ash and fragmentary storage pottery; it had probably a waste-disposal function. A third pit (SU 8698) was excavated. While no buildings were discovered, it may be supposed that they would have been located near the pits.

Part of the excavation was instead occupied by floor surface SU 9072-9096, characterised by levelling activities (SU 9071-9094) and evidence of water flowing and stagnant water (SU 9072-9096)

## **PHASE 7b** (Fig. 230)

This was composed of a floor surface (SU 9101-9151), covered by a collapse layer (SU 9097), with a small stone installation (SU 9102), much reworked.



Fig. 229: Operation T4, Phase 7a, general view from the north.



Fig. 230: Operation T4, Phase 7b, general view from the south.

Phase 7, especially sub-phase 7b, represents the interface between the Late Bronze Age and the Iron Age occupation in this part of the upper town. It corresponds probably first to an abandonment of the area after the Late Bronze Age, in a situation similar to phase 13 of Operation T3, followed by a first, tentative occupation.

#### 3.8.2 POTTERY

As in most Operations, the analysis of the materials from Operation T4 was based entirely on the records of the pottery stored in Syria. The pottery assemblage from this Operation is less substantial than that from Operation T3 and Bronze Age residual pottery is quite present.

The assemblage of **Phase 1** is scarce (less than ten sherds).

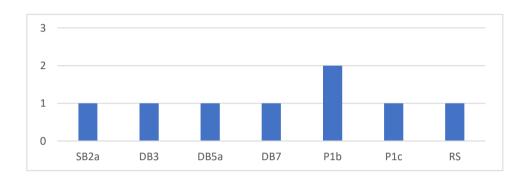


Table 71: Operation T4, phase 1. Pottery.

Open forms are represented by a red slipped sherd of carinated bowl with simple rim (SB2a) and almost exclusively by deep bowls, which have straight flaring walls (DB3), inward rims (DB5a) and thickened rims with rounded lip (DB7). 33% of the deep bowls are painted. Concerning closed forms, only large storage jars with squared and oval rim (P1b, c) are attested. Of these, one was the complete three-handled large storage jar interred in the floor of Room C of Building T4-1. Red slipped (RS) material represents 12.5% of the assemblage of the level, corresponding to a single sherd.

In Phase 2 no Iron Age pottery was found.

**Phase 3** contained just a few sherds of large storage jars with swollen rim (P1 and P1c) and with outward rim (P2).

The assemblage of **Phase 4** is more substantial (more than 40 sherds).

Only one painted sherd of plate with round rim (PL1) is documented. Deep bowls show a wider variety with types with simple round rim (DB1), thickened rim and rounded lip (DB7), internal angular thickening (DB8, 9) and outward squared rim (DB13). 20% of the deep bowls are characterised by Red Slip treatment.

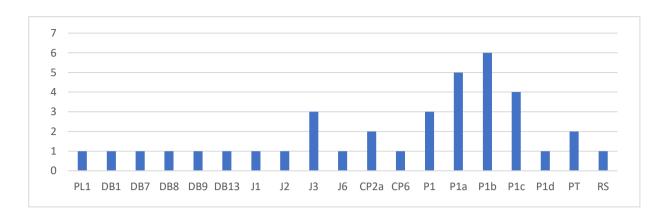


Table 72: Operation T4, phase 4. Pottery.

Jars occur for the first time in this Operation. The most common type is the double rim jar (J3), followed by neckless jars with thickened rim (J1), collared rim jars (J2) and jars with concave neck and thickened rim (J6).

Cooking vessels are also attested, especially holemouth ones: the most common form is in fact the pot with simple rim (CP2a), followed by the type with straight rim (CP6).

Lastly, large storage jars are the predominant shape in the phase: they are represented exclusively by the swollen rim type with its variants (P1, P1a, b, c, d).

Painted (PT) and red slipped (RS) vessels are quite scarce, representing respectively 4% and 2% of the pottery assemblage.

**Phase 5** yielded once again a limited quantity of material (about ten sherds), but a relatively high percentage of red slipped sherds.

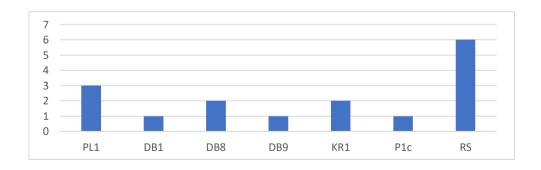


Table 73: Operation T4, phase 5. Pottery.

Plates are entirely of the simple round rim type (PL1), with 33% of them characterized by the Red Slip. Bowls have simple round rims (DB1) and internal angular thickenings (DB8, 9) and the large majority (75%) is red slipped.

Kraters with out-turned rim (KR1) are also documented, half of them (corresponding to one

sherd) characterized by Red Slip.

Closed forms are represented exclusively by a sherd of large storage jar with swollen oval rim (P1c).

No painted vessels are attested, while red slipped (RS) ones reach the highest percentage in the Operation, that is 37.5%.

The assemblage of **Phase 6** also consists of few sherds (less than ten).

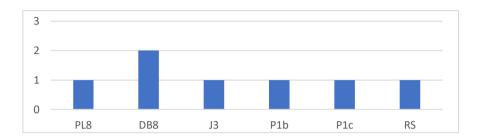


Table 74: Operation T4, phase 6. Pottery.

Open forms are exemplified by a red slipped sherd of plate/shallow bowl with high carination and triangular thickening (PL8) and a couple sherds of bowl with externally thickened rim and internal angular thickening (DB8), half of them presenting the Red Slip treatment.

Concerning closed forms, double rim jars (J3) and large storage jars with swollen rim (P1b, c) are documented.

Red slipped (RS) vessels represent 28.5% of the assemblage, corresponding however to a single sherd.

**Phase 7a** returned a slightly more substantial pottery assemblage (more than a dozen of sherds).

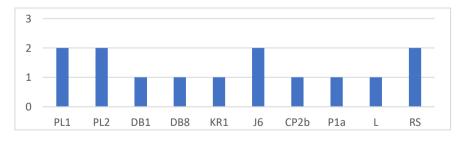


Table 75: Operation T4, phase 7a. Pottery.

Plates occur in a larger quantity compared to other phases and the round (PL1) and squared (PL2) rim types are attested. Deep bowls have round rims (DB1) and externally thickened rims with internal angular thickening (DB8).

Kraters are also documented, with one red slipped sherd of vessel with out-turned rim (KR1). Closed forms are represented by jars with concave neck and thickened rim (J6) and holemouth cooking pots with thickened rim (CP2b). Storage vessels are rare, only one fragment of large storage jar with swollen rounded rim (P1a).

A fragmentary lamp (L) is also documented.

As in other phases of the Operation, no painted sherds were recovered in this level, while Red Slip Ware is quite rare, representing 12.5% of the assemblage, that is two sherds.

In **Phase 7b** no Iron Age pottery was found.

Type/ Phase	PT	RS
T4-1	1	12.5
T4-3	/	1
T4-4	4	2
T4-5	1	37.5
T4-6	1	28.5
T4-7a	/	12.5

Table 76: Operation T4, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

2		16.				
ط 4			2.9			
<b>پ</b> 5	<del>4</del> ε	50	11.	10	16.	
<b>ч</b> 6	28.		17.		16.	
т <u>е</u>			7 -			9.1
2		33.	8.8			
g 0			2.9			
CP 29						6.1
CP 2a			5.9			
97			2.9			0.
ဥ			8.8		16.	
27			2.9			
7			2.9			
<del>х</del> -				20		9.1
13 13			2.9			
80 6			2.9	10		
8 8			2.9	20	33.	9.1
7	<u>4</u> κ		2.9			
<b>БВ</b> 5а	<del>4</del> ε					
8 °	<u>4</u> κ					
DB -			2.9	01		6.
SB 2a	<u>4</u> κ					
김 &					16. 7	
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<b>리 ←</b>			2.9	30		18.
TYPE/ PHASE	T4-1	T4-3	T4-4	T4-5	T4-6	Т4-7а

Table 77: Operation T4, percentage occurrence of types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

#### 3.8.3. CONCLUDING REMARKS AND CHRONOLOGY

As already remarked for Operation T<sub>3</sub> and in the section regarding the archaeological context, the evidence found in T<sub>4</sub> must be considered together with T<sub>3</sub>, as the two areas are stratigraphically connected.

The archaeological remains of Operation T4 are easier to interpret because they are better preserved, especially Buildings T4-1 and T4-3. While the pottery assemblage is not large, examined together with that of Operation T3 it offers an interesting overview.

Phase 1 is characterised by Building T4-1, probably a domestic unit with its own storage area (Morandi Bonacossi 2009: 128). Despite the poor pottery assemblage, some chronological aspects can be deduced from a few fragments. The red slipped sherd of carinated bowl with simple rim (SB2b, T4 8258.701, **PI. 10:3**) closely resembles some specimens from Tell 'Acharneh<sup>270</sup> and Tyre,<sup>271</sup> dated to the 8<sup>th</sup> and especially late 8<sup>th</sup> century BC. The bowl with inward rim (DB5a, T4 8245.8, **PI. 20:4**) recovered in this level presents an unusual thickening on the rim, which does not closely resemble other material in the Mishrifeh assemblage nor have any precise parallels been found elsewhere. However, some affinities are possible with bowls from Tell Afis<sup>272</sup> (7<sup>th</sup> century) and Tell Shiukh Fawqani<sup>273</sup> (8<sup>th</sup> - 7<sup>th</sup> century). All considered, these similarities seem to confirm the chronology proposed for the corresponding T3 Phase 8, that is the late 8<sup>th</sup> – beginning 7<sup>th</sup> century BC.

Phase 2 is presumably an abandonment layer, while in Phase 3 the partially preserved Building T4-2 was discovered. Since in the former phase no Iron Age pottery was recovered and in the latter the assemblage consists exclusively of fragments of large storage jars which are not diagnostic, it is not possible to surmise a specific chronology. Therefore, it must be assumed that the dating of the corresponding T3 Phase 9, that is the late 8<sup>th</sup> – early 7<sup>th</sup> century BC, may be taken as valid also for T4 Phases 2 and 3.

Phase 4, which coincides with T3 Phase 10, represents the later level of the major architecture of the Operation, Building T4-3. Unlike the corresponding T3 phase, the ceramic assemblage is quite substantial and characterised by types attested in the Iron Age II (DB1, DB7, DB8, DB9, J2, J3, J6. Chapters 3.3.3, 3.5.5, 4.2). More precisely, it is comparable with Late Iron Age II assemblages from other Operations (such as J Phase 5 and H-T1 Phase 6b). For example, the sherd of cooking pot with simple rim (CP2a, T4 8288.56, **PI. 47:6**) is

<sup>&</sup>lt;sup>270</sup> Cooper 2006: 144 and figs. 1:17-18, 6:1, 13:5.

<sup>&</sup>lt;sup>271</sup> Bikai 1978, Pls. XIa:8, XV:4, 7.

<sup>&</sup>lt;sup>272</sup> Cecchini 1998, fig. 31:18.

<sup>&</sup>lt;sup>273</sup> Luciani 2005, Pl. 9:119.

very similar to one from Operation J Phase 5 (J 417.6, **PI. 47:5**). Analogous specimens have been found in Iron Age II contexts at Tell 'Acharneh,<sup>274</sup> Chatal Hüyük<sup>275</sup> (850-750 BC) and 'Ain Dara<sup>276</sup> (9<sup>th</sup> – early 8<sup>th</sup> century). A Late Iron II chronology seems therefore plausible, especially taking into consideration the comparison with Phase 5 of Operation J. Quite noteworthy is the low percentage of Red Slip Ware, which is uncommon compared to other Operations. However, red slipped sherds are in general very scarce in Operation T4, and this can be explained by the scarcity of open forms in the assemblage of this area, since these are more frequently characterised by the Red Slip (Chapter 4.4).

Phase 5 is the first occupation level of Building T4-3. The ceramic assemblage is once again quite poor and while the presence of plates with round rim (PL1) and bowls with simple rim (DB1) and internal angular thickening (DB8, 9) indicates an Iron Age II chronology (Chapters 3.3.3, 3.5.5, 4.2), a more precise dating to the 8<sup>th</sup> century can be proposed only thanks to the analysis of the equivalent T3 Phase 11.

The construction phase of Building T4-3 is Phase 6, which yielded a very sparse pottery assemblage. The sherd of plate/shallow bowl with high carination and slightly triangular rim (PL8, T4 8679.18, **PI. 9:2**) is the only fragment which gives a more specific chronological indication. Notwithstanding the fact that no decisive parallel has been found, it is similar to a vessel from Tell Afis<sup>277</sup> dated to the second half of the 9<sup>th</sup> century BC. Taking into account the stratigraphic sequence and that the corresponding T3 Phase 12 is dated to the general Iron Age II, a late 9<sup>th</sup> century and beginning of the 8<sup>th</sup> century chronology can be cautiously suggested for this phase.

In conclusion, Phase 7 is the first Iron Age occupation level and is divided into two subphases. The more recent one (7a) was characterised by a floor with some pits and evidence of flowing water. The earlier one (7b) was an abandonment level with a floor which probably belonged to the Late Bronze Age, covered by a collapse layer. Iron Age ceramics were retrieved only in the later sub-phase 7a. The types attested are all typical of the Iron Age II, as also confirmed by the sherd of jar with concave neck and thickened rim (J6, T4 9071.52, PI. 42:7) with parallels from Tell Tayinat<sup>278</sup> (Late 9<sup>th</sup> – Early 7<sup>th</sup> century). It is not possible to propose a more precise chronological division, so taking also into account the materials from the equivalent T3 Phase 13, a 9<sup>th</sup> century date seems reasonable.

<sup>&</sup>lt;sup>274</sup> Cooper 2006, figs. 4:1, 9:2.

<sup>&</sup>lt;sup>275</sup> Pucci 2019, Pl. 127:e.

<sup>&</sup>lt;sup>276</sup> Stone, Zimansky 1999, fig. 70:226.

<sup>&</sup>lt;sup>277</sup> Venturi 2020, Pl. 128:2.

<sup>&</sup>lt;sup>278</sup> Osborne et al. 2019 fig. 17:17.

## 3.9 OPERATION T5

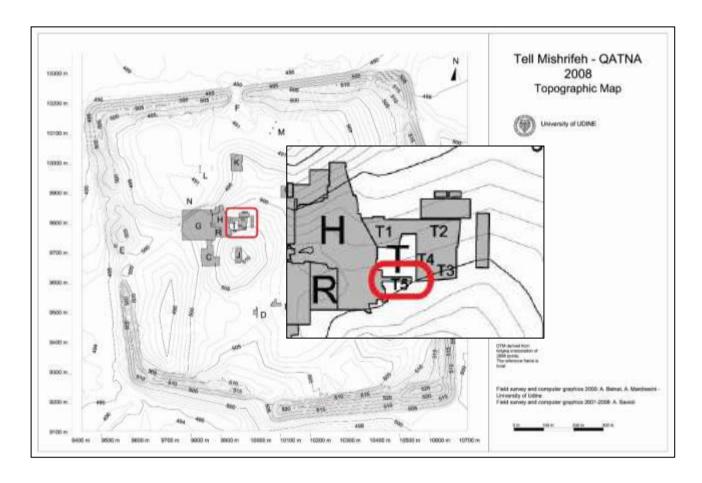


Fig. 231: Mishrifeh, topographic map with the location of Operation T highlighted and in the enlargement the location of Operation T<sub>5</sub>.

Operation T5 was a trench excavated in 2008 between Operations H-T1 and T4, to establish the stratigraphic connection between the two areas.

Unfortunately, the excavation unearthed no architectural and very scant archaeological evidence: only two phases of the Iron Age occupation were recognized, over a series of trodden surfaces belonging to the Late Bronze Age.

Т5	H-T1	T4	Relative Chronology	Absolute Chronology
1	5	2-3	Late IA II – IA III	Late 8 <sup>th</sup> – Early 7 <sup>th</sup> cent. B.C.
2	6	4-5	Late IA II	8 <sup>th</sup> cent. B.C.

Table 78: Operation T5, summary of the phases, their chronology and correlations with H-T1 and T4.

# 3.9.1 ARCHAEOLOGICAL CONTEXT AND STRATIGRAPHY

#### PHASE 1

This level consists only of the trodden floor SU 9233.

#### PHASE 2

Two floors, SU 9402 and 9405, belong to this phase, the latter with pottery sherds *in situ*. No other evidence was present.

#### 3.9.2 POTTERY

The pottery from Operation T5 was also analysed exclusively by means of the records and drawings of the materials stored in Syria. As may be imagined from the scant archaeological deposit, the ceramic assemblage from Operation T5 consists of a meagre number of sherds.

**Phase 5** returned only storage ware, that is about six fragments of large storage jars with swollen rim (P1, P1a, P1b, P1c).

The pottery assemblage of **Phase 6** is slightly more numerous, consisting of more than 20 sherds.

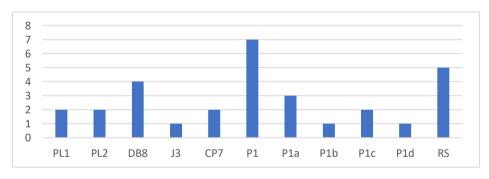


Table 79: Operation T5, phase 6. Pottery.

Plates have simple (PL1) and squared (PL2) rims, with 25% of them characterised by Red Slip. Deep bowls are exclusively of the externally thickened rim and internal angular thickening type (DB8) and half of these bowls are red slipped.

Jars are represented merely by one sherd of double rim jar (J3), while cooking pots by vessels with upright sinuous rim (CP7).

Large storage jars are the most common form in the assemblage: storage jars with swollen

rim (P1) are especially attested, followed by their variants with rounded, squared, oval and pointed rims (P1a, b, c, d).

Red Slip (RS) is present on 14.7% of the assemblage.

Type/ Phase	PT	RS
T5-5	1	12.5
T5-6	1	/

Table 80: Operation T5, percentage occurrence of painted and red slipped fragments. Percentages are calculated on the whole assemblage of each phase.

Type/	PL1	PL2	DB8	J3	CP7	P1	P1a	P1b	P1c	P1d
Phase										
T5-5						16.7	16.7	33.3	33.3	
T5-6	8	8	16	4	8	28	12	4	8	4

Table 81: Operation T5, percentage occurrence of types. Percentages are calculated on the total number of diagnostic rim-sherds of each phase.

#### 3.9.3. CONCLUDING REMARKS AND CHRONOLOGY

As already mentioned, the archaeological deposit of the Iron Age phases of Operation T<sub>5</sub> is extremely poor, from the point of view both of the architectural evidence and the pottery finds.

The two phases consist exclusively of trodden floors with no associated architecture and were related by the excavators to Operation H-T1 Phases 5 and 6 respectively, and more hypothetically to Operation T4 Phases 2-3 and 4-5 respectively.

The assemblage of Phase 5 is too sparse to define a precise chronology, however the equivalence with H-T1 Phase 5 dates this level to the Late Iron II/Early Iron III.

The Phase 6 finds point to a general Iron Age chronology, due to the presence of some of the most common types in the assemblage of Mishrifeh in both Iron Age II and III levels – such as plates with round and squared rims (PL1, 2), bowls with internal angular thickening (DB8), double rim jars (J3) and pots with upright sinuous rim (CP7). The repertoire appears comparable to Operation H-T1 Phase 6 due to the presence of red slipped plates with round and squared rim (PL1, PL2) and in the large percentage of storage ware, confirming the equivalence between the two phases documented during the excavation. Thus a Late Iron Age II date for Phase 6 can be confirmed.

#### 3.10 STRATIGRAPHIC CONCORDANCES

	Phases						Relative	Absolute Chronology
							Chronology	
J	K	H-T1	T2	T3	T4	T5		
				5			IA III	7th cent. BC
1				6			IA III	7th cent. BC
				7			Late IA II – IA III	8th – 7th cent. BC
				8	1		Late IA II – IA III	8th – 7th cent. BC
		5	5	9	2	5	Late IA II – IA III	8th – 7th cent. BC
					3			
				10	4		Late IA II	Second half 8th cent. BC
5	2	6	6	11	5	6	Late IA II	Second half 8th cent. BC
		7					Late IA II	Mid-Second half 8th cent BC
		8	7				Late IA II	Mid-8th cent. BC
6	3	9		12	6		IA II	8th – 9th cent. BC
		10	8				IA II	9th cent. BC
				13	7		IA II	9th cent. BC
	4-8						IA I/II	10th – 9th cent. BC
	9-10						IA Ic	Late 10th cent. BC

Table 82: Stratigraphic concordances.

The concordances between phases for the H/T area (Operations H, T1, T2, T3, T4, T5) are mostly based on the stratigraphical connection of the excavation areas and the nature of the contexts.<sup>279</sup> Furthermore, Operation T5 was opened to investigate the correlation between Operation H and T4. It was otherwise more challenging to establish the correlations with Operation J and especially Operation K since these excavation areas are not physically connected. The main difficulty regards Operation K and depends on the fact that especially the assemblage of Phase K-2 is limited to about thirty sherds, narrowing the possibilities of finding parallels among pottery.

Iron Age III levels were excavated in Operations J (Phase J-1) and T3 (Phases T3-5/6): in Operation J this chronology was ascertained on the basis of both the radiocarbon analysis and the pottery study.<sup>280</sup> For Operation T3 the dating was proposed on the basis of the

 $^{279}$  The concordances between H-T1, T3-T4 and H/T1-T5 are particularly well-grounded as they were verified during the excavation. See the dedicated chapters.

<sup>&</sup>lt;sup>280</sup> However the radiocarbon analysis must be considered cautiously because, as already discussed in the dedicated chapter, the calibration curve of the Iron Age is part of the Halstatt Plateau and returns a wide chronological interval.

stratigraphic comparison with T4 and pottery parallels with other Syrian centres. It is difficult to compare the archaeological contexts of the two Operations, because the deposit of T3 had been disturbed by modern activities and only two trodden floors (SU 7986 and 7988) survived. The pottery assemblages of Phases J-1 and T3-5 are comparable due to the presence of numerous storage jars and cooking pots and the limited numbers of open forms (ten sherds of open shapes for J-1, six sherds and one fragment of a krater for T3-5). Furthermore, in both assemblages there are a few recurrent forms, that is DB8, J4, CP4, CP6, CP7<sup>281</sup> and BA8. Unfortunately, most of these are long-lasting types and no precise comparisons are possible between the specimens found in these phases.

The concordance between J-5 and H-T1 6 (both sub-phases 6a and 6b) is based on the nature of the archaeological contexts and their chronology. They both belong to the Late Iron Age II chronological horizon and the agricultural produce storage and processing installations of Operation J, together with the buildings recognized as granaries, were most probably related to the large crafts quarter of Operation H-T1, which had a sector devoted to agricultural produce processing and storage (Morandi Bonacossi 2019: 22-23). In both pottery assemblages can be observed a large quantity of storage vessels<sup>282</sup> and at the same time a significant percentage of open forms.<sup>283</sup> Some of these forms are important for the stratigraphic correlations and confirm the concordance between J-5 and H-T1 6. A KR1 specimen in J-5 (J 880.15, **PI. 29:3**) is similar to vessels in sub-phase H-T1 6b (H 6275.7, **PI. 29:2**). J2 vessels from Phase J-5 have close parallels in examples from Phase H-T1-6 (J 175.82, **PI. 37:8** and H 6662.1, **PI. 37:5**; J 175.1, **PI. 37:13**, and T1 7232.180, PI. **37:6**). Similar specimens of CP2b are attested in Phases J-5 (J 175.90, **PI. 48:6**) and H-T1 6a (T1 7232.46, **PI. 48:8**).

The correlation between Phase J-5 and the Late Iron Age II levels of Area T (Phase T2-6) is further confirmed by the presence of two alike specimens of jar type J1 in Operations J and T2: jar J 717A.1 (**PI. 36:3**) is in fact very similar to jar T2 8002.9 (**PI. 36:4**).

Regarding the earlier Iron Age II contexts, the concordance between Phases J-6 and H-T1 9 is supported by the close resemblance of the SB10 specimens J 770B.21 (**PI. 15:7**) and H 7088.19 (**PI. 15:8**), H 6371.17 (**PI. 15:9**) and also of the J6 specimens J 281.21 (**PI. 42:5**) and H 7155.5 (**PI. 42:6**). Two alike red slipped specimens of PL4 from Phases J-6 (J 279.2,

<sup>282</sup> Large storage jars represent 37% of the assemblage of sub-phase H-T1 6a and 26% of sub-phase 6b. Phase J-5 registers the same percentage of storage vessels as sub-phase 6a (37%).

<sup>&</sup>lt;sup>281</sup> CP7 appears in Operation J exclusively in Phase J-1.

<sup>&</sup>lt;sup>283</sup> Open forms in sub-phase H-T1 6a represent 32% of the assemblage, and a similar percentage is attested for sub-phase 6b (32%). In phase J-5 open forms are almost 26% of the repertoire.

PI. 7:5) and K-3 (K 595.19, PI. 7:6) validate the correlation between these two phases.<sup>284</sup> Phase T2-7 yielded little Iron Age pottery (about 20 fragments), so the concordances with other Operations must be considered cautiously. The pits found in this level seem to be designated for waste-disposal, rather than installations devoted to the storage of agricultural produce as in Operations H-T1 and J.<sup>285</sup> However, the presence of a rim of storage jar with a potter's mark (T2 8057.703, Pl. 61:1), found while dismantling the floor of the phase, may indicate that storage activities were also carried out in this area. The assemblage full of storage ware and jars may corroborate this. It is very difficult to date this phase to a precise moment of the Iron Age II, as the repertoire mostly composed of large storage jars is not truly diagnostic and the other forms (J2, J3, PL1) are long-lasting ones. The parallels with specimens from other Operations are also quite problematic: a fragment of cooking pot (CP6, T<sub>2</sub> 8057.33. **PI. 53:2**) most closely resembles a specimen from Phase J-6 (J 717A1.2. **PI. 52:4**). The same concordance is confirmed by a J3-type jar (T2 8057.69, **PI. 38:8**) that resembles a fragment from Phase H-T1 9 (H 7039.34, Pl. 39:3). However, another J3 specimen (T<sub>2</sub> 8057.103, **PI. 39:1**) is similar to a sherd from Phase J-5 (J 175.41, **PI. 38:5**), and another J2 fragment (T2 8057.105b, Pl. 37:10) closely resembles another specimen found in sub-phase H-T1 6b (H 6474.78, Pl. 37:12).

Taking into consideration also the other concordances already confirmed during the excavations, <sup>286</sup> the only reasonable explanation is that Phase T2-7 corresponds to the final part of Phase H-T1 6 and Phases H-T1 7-9. These phases are all characterised by the presence of both waste-disposal pits (Phases H-T1 7 and 9) and installations devoted to food processing and storage (Phases H-T1 8-9).

In conclusion, the homogeneous assemblage with the presence of many long-lasting types makes it difficult to recognize many intra-Operations parallels. Nonetheless, those identified and presented here are important for the identification and validation of the stratigraphic correlations between the Operations.

<sup>&</sup>lt;sup>284</sup> Although the vessel from Operation J has a very small diameter.

<sup>&</sup>lt;sup>285</sup> The pits were full of fragments of Middle and Late Bronze Age pottery and no trace of agricultural produce was found.

<sup>&</sup>lt;sup>286</sup> Phases H-T<sub>1</sub> 6 = T<sub>2</sub>-6 and H-T<sub>1</sub> 10 = T<sub>2</sub>-8 = T<sub>3</sub>-12 = T<sub>4</sub>-6.

## 4. THE IRON AGE POTTERY FROM MISHRIFEH

The study of the Iron Age pottery from Mishrifeh was based on the analysis of the materials from the seven Operations excavated by the Italian Mission, that is Operations J, K, H-T1, T2, T3, T4 and T5. It involved analysing about 580 Stratigraphic Units (SU), for a total of 9268 diagnostic fragments taken into examination: of these, 4270 sherds were dated to the Iron Age, 3731 were attributed to the Middle and Late Bronze Age, <sup>287</sup> 280 to the Early Bronze Age and 987 were indeterminate. Most of the indeterminate group consists of bases and fragments of which either the pottery descriptions or the drawings were unavailable.

The 4270 Iron Age fragments were successively processed and inserted into a database (Chapter 1).

The majority of the assemblage is composed of the pottery from Operation H-T1 including that of H North (3092 ceramic diagnostics, 72.4%), followed by the pottery from Operation K (430 ceramic diagnostics, 10%) and Operation J (334 ceramic diagnostics, 7.8%). From the other Operations the materials are much scarcer, 288 and Operation T2 is the area with least pottery diagnostics (37 sherds, 0.86%).

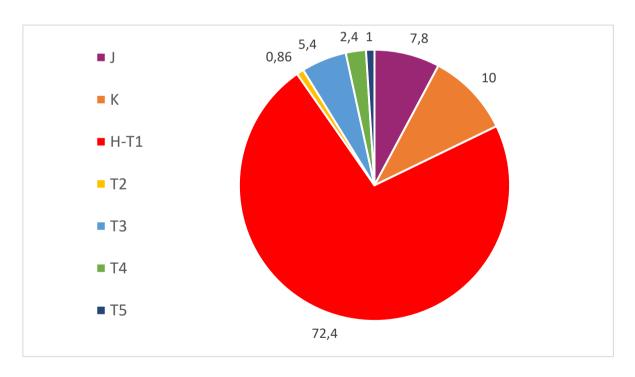


Fig. 232: The pottery assemblage of Mishrifeh divided by Operations.

<sup>288</sup> T3 (232 ceramic diagnostics, 5.4%), T4 (104 ceramic diagnostics, 2.4%), T5 (41 ceramic diagnostics, 1%).

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<sup>&</sup>lt;sup>287</sup> The large number of Middle and Late Bronze Age redeposited potsherds may be due to the important deposits dating to these periods and the numerous Iron Age pits and structures often damaging the underlying layers.

#### 4.1 WARES AND FABRICS

Regarding wares, the Iron Age pottery assemblage from Mishrifeh is composed for the majority of Common Ware (62.3%), then Storage (27.7%) and Kitchen Ware (9.6%), and lastly Fine Ware, which is extremely rare (0.4%). Red Slip and painted pottery are counted together with the Common Ware, since they share the same forms and fabrics. The Iron Age Common, Fine and Storage Ware is usually characterised by light red, rose and orange coloured clay, corresponding to Munsell colours 5 YR 7/6, 5 YR 7/4, 7.5 YR 7/6, 7.5 YR 6/4. Kitchen ware is generally distinguished by dark red, grey and dark grey colours, such as Munsell 10 R 5/6, 2.5 YR 5/4, 5 YR 5/4, 5 YR 6/4.

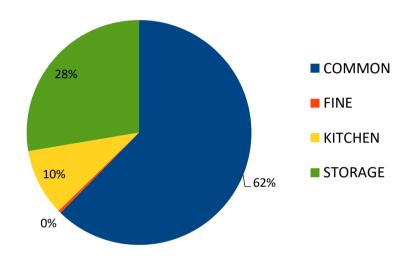


Fig. 233: Wares.

Fundamental to the classification and study of the pottery is the analysis of the fabrics. First, a catalogue of preliminary fabric types had been created on the field (lamoni 2012: 94), distinguishing fabrics with mineral and vegetal tempers (nos. 1-23) and those with mineral only temper (nos. 101-141). The attributes taken into consideration when creating the catalogue were colour, primary and secondary inclusions, the sorting of the inclusions and relative percentage of the inclusions (lamoni 2012: 94).

Afterwards, the fabrics were petrographically and chemically analysed by the Department of Geosciences of the University of Padova (Maritan et al. 2005; Maritan, Mazzoli, Speranza 2007) and divided into nine macrogroups according to mineralogical and petrographic criteria (Table 83). Only very few fabric types were not inserted into these macrogroups, because they were added after the results of the archaeometric analysis were published (lamoni 2012: 94).

As for the first classification between mineral and vegetal tempered fabrics on one hand and

mineral-only tempered fabrics on the other, the latter group represents the majority of the fabrics observed in the Iron Age period: in fact, it characterises 75% of the assemblage, while only 25% of the pottery has mineral and vegetal inclusions (fig. 234).

MACROGROUPS	DESCRIPTION	FABRIC TYPE EQUIVALENCE
MG 1	Basalt rich fabrics	1a: 15, 129, 129.1 1b: 127, 132 1c: 1.1, 7, 16, 110, 115, 116, 121 1d: 4.2
MG 2	Limestone rich (with minor basalt presence) fabrics	2a: 2, 3, 3.1, 11.2, 113, 120.1, 123, 128 2b: 127.1
MG 3	Volcanic glass rich fabrics	1, 22, 106, 109.1, 112, 114.2, 131, 133, 109, 140
MG 4	Mollusc rich fabrics	20, 138
MG 5	Optically inactive groundmass fabrics (quartz-limestone prevalence)	117, 122, 126
MG 6	Spathic calcite rich fabrics	134, 137.2, 141
MG 7	Highly porous fabrics (quartz-limestone prevalence)	104, 104.1, 108, 109
MG 8	Quartz and chert rich fabrics	8a: 3.1bis, 4, 4.1, 8, 9, 12, 13, 17, 18, 107, 118, 120, 120.2, 120.3, 124, 125, 125.1, 130, 135, 136, 137.  8b: 5, 6, 10, 11, 11.1, 14, 19, 21, 102, 103, 103.1, 111, 114, 114.1, 137.1, 139.
MG 9	Fine grained fabrics (quartz-limestone)	101, 105

Table 83: Macrogroup description (after Iamoni 2012 Table IV-3 and Maritan et al. 2005: 726-730)

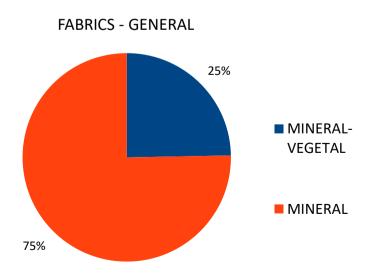


Fig. 234: Mineral and mineral-vegetal tempered fabrics – general overview.

Observing the fabrics in relation to the forms (fig. 235), it can be noted that in every generic pottery form, mineral-only fabrics are used for the majority of the vessels, with an average of 75% versus an average 25% of mineral and vegetal tempered fabrics. More in detail, jars are the form in which fabrics with both mineral and vegetal inclusions reach their lowest percentage (16%), while on the contrary they have the highest percentage (38%) in cooking pots.

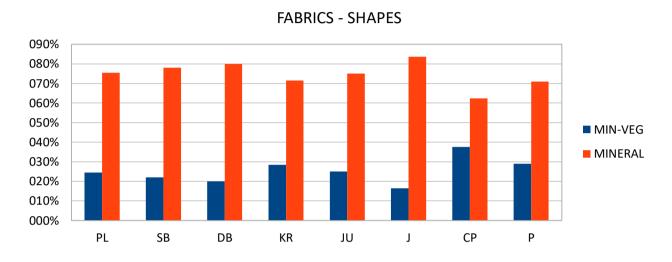


Fig. 235: Mineral and mineral-vegetal tempered fabrics in relation to pottery forms. PL (plates), SB (shallow bowls), DB (deep bowls), KR (kraters), JU (jugs), J (jars), CP (cooking pots), P (large storage jars).

This must be for certain due to their function. Jars were used to contain and transport materials, especially foodstuff such as cereals or liquids like wine, beer and water: vegetal matter leaves extensive pore space in the vessels (Cuomo di Caprio 2007: 101; Rice 1987: 85), as it is burned during the firing, making them more permeable and less durable (Skibo 1992: 37). On the contrary, cooking pots must have a high thermal shock resistance as they have to withstand heat exposure multiple times: mineral temper and pores left by plant matter block the growth of micro cracks formed on the surface of the vessel during heat exposure and the porosity allows the pot to expand and shrink, thus preventing it from breaking (Cuomo di Caprio 2007: 128; Orton, Hughes 2013: 250; Shepard 1956: 126; Skibo 2013: 40; Rice 2015: 424).

Analysing the fabrics instead with regard to the petrographic macrogroups (fig. 236), the predominance of fabrics rich in quartz, chert and limestone (MG 8) is undeniable, especially the first subgroup (8a) which characterises 69% of the pottery assemblage. The difference between subgroups 8a and 8b lies in the firing temperature, with the former fired at temperatures lower than 750-800°C and the latter at higher temperatures (Iamoni 2012: 103; Maritan et al. 2005: 729). Macrogroup 8, considering both subgroups 8a and 8b, represents

almost 74% of the ceramic assemblage of the Iron Age.

The second most common fabric type is that rich in limestone with minor presence of basalt (MG 2), especially subgroup 2a, which is found in about 12% of the assemblage: in all, macrogroup 2 represents almost 13% of the pottery.

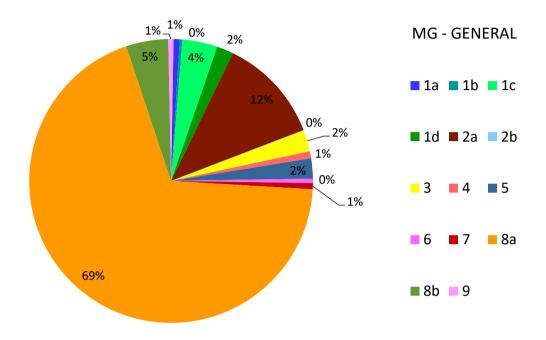


Fig. 236: Macrogroups, general overview.

Observing more in detail (figs. 237-238), subgroup 8a represents the larger part of the macrogroups for every form, often reaching over 60% of the form's assemblage. The lowest percentage can be found in cooking pots (fig. 238), which are characterised also by many other types of fabric, especially basalt and limestone-rich ones (MG 1 and 2). Limestone-rich fabrics, especially subgroup 2a, are the second most common macrogroup in the assemblage, except for jugs: however, this may be due to the limited number of specimens for this shape.

In general, it must be noted that all the macrogroups are present in most forms, although the majority of them occur in percentages of less than 1%, and thus statistically are of little importance.

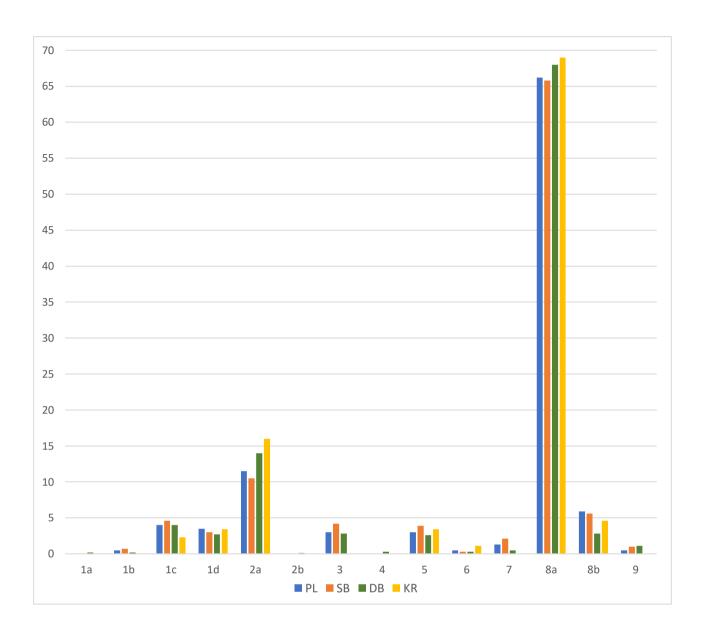


Fig. 237: Macrogroups – percentage occurrence in relation to pottery forms: open forms and kraters (PL = Plates, SB = Shallow Bowls, DB = Deep Bowls, KR = Kraters).

The archaeometric study also revealed the local nature of Mishrifeh's pottery production: both the clay and the inclusions and temper (basalt, limestone, chert, calcite, angular rock fragments, lacustrine mollusc shells) have a local origin in the rock types outcropping surrounding Mishrifeh (Maritan et al. 2005: 734; Maritan, Mazzoli, Speranza 2007: 211, 213). Petrographic similarities between the Iron Age assemblages from Mishrifeh and those from Tell Afis have also been found. This may be because of analogies between the starting clays and rock types and a similar pottery production (Maritan et al. 2005: 735).

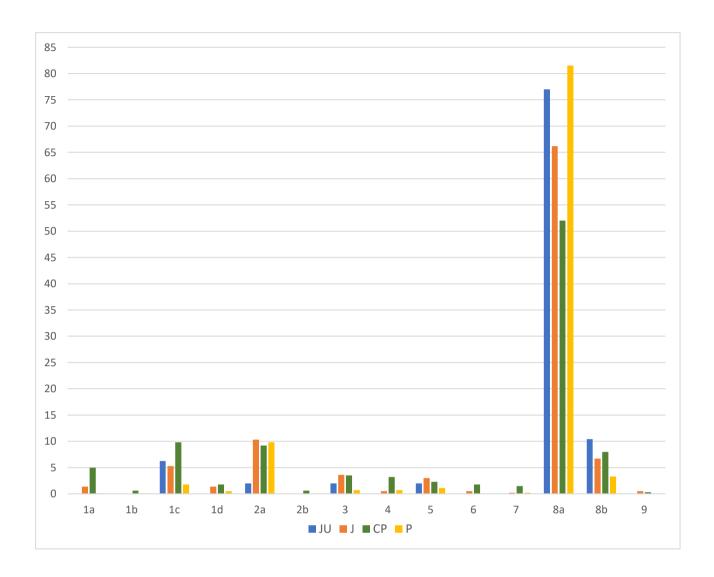


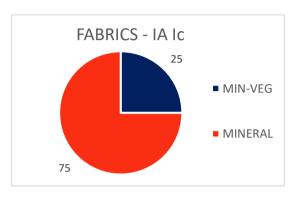
Fig. 238: Macrogroups – percentage occurrence in relation to pottery shapes: closed forms (JU = Jugs, J = Jars, CP = Cooking Pots, P = Large Storage Jars).

Lastly, the petrographic and chemical analysis revealed some aspects of the technology of ceramic production during the Iron Age (Maritan et al. 2005: 738). A large majority of the Iron Age pottery types have fabrics with numerous rounded inclusions and a well-sorted grain-size, corresponding to macrogroups 2, 3, 5 and 8. This may occur when the raw clay was not levigated or tempered and is similar to what is observed for Late Bronze Age pottery (Maritan et al. 2005: 738).

Then, studying the mineral assemblage, it was possible to estimate the pottery firing conditions. For the Iron Age a wide temperature interval from ≤ 750°C to ~ 850°C is registered, with the majority of the potsherds fired at a temperature of 750-800°C (Maritan et al. 2005: 739 and fig. 9; Maritan, Mazzoli, Speranza 2007: 214), corresponding to the temperature estimated for subgroup 8a (Iamoni 2012: 103; Maritan et al. 2005: 729).

In addition, it is important to analyse fabrics and macrogroups in relation to the chronology of the contexts.

The set of data pertaining to the Iron Age Ic (Late 10<sup>th</sup> century BC, fig. 239) is not representative enough, as the sample is extremely limited, but it has been considered for the sake of completeness. The most common macrogroups – that is subgroups 8a, 8b, 1c and 2a – are all attested, with an expected predominance of 8a. The prevalence of basalt-rich fabrics (1c) over limestone rich-ones (2a) may be noted.



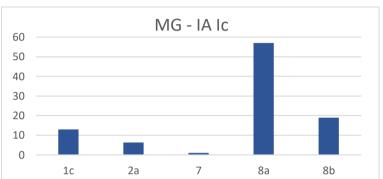


Fig. 239: Fabrics in the Iron Age I (in percentage).

Regarding the transition between the Iron Age I and II ( $10^{th} - 9^{th}$  century BC, fig. 240), macrogroup 2 is prevalent over 1 and it is interesting to note the relatively high percentage of fabrics with optically inactive groundmass (MG 5). Within the quartz and chert-rich fabrics (MG 8), subgroup 8b reaches in this period one of its highest percentages, which means that more potsherds were fired at a higher temperature. Fabrics with mineral and vegetal temper are more common than average (33%) at this time: this may be due, at least partly, to the numerous cooking pot sherds, a form indeed characterised by a higher percentage of fabrics with vegetal inclusions.



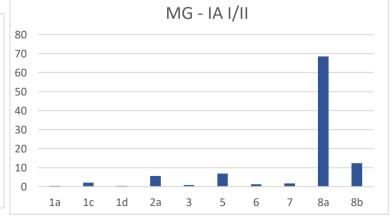


Fig. 240: Fabrics during the Iron Age I to Iron Age II transition (in percentage).

In the early part of the Iron Age II (9<sup>th</sup> century BC – mid-8<sup>th</sup> century BC, fig. 241), all the petrographic macrogroups and their subgroups are documented: limestone-rich fabrics (MG 2) become the most common group after quartz and chert rich ones (MG 8), while macrogroup 5 decreases. Subgroup 8b also contracts sharply from more than 12% of the assemblage to less than 5%. Fine grained fabrics (MG 9) make their appearance in this period.

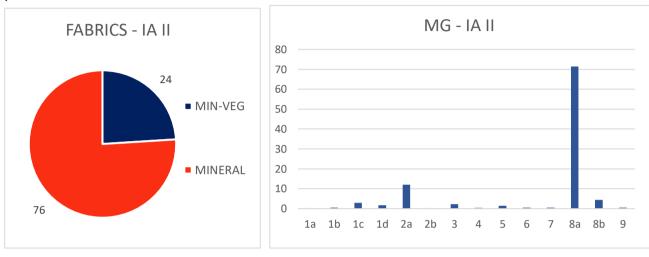


Fig. 241: Fabrics in Iron Age II (in percentage).

The assemblage of the Late Iron Age II (late 8<sup>th</sup> century BC, fig. 242) <sup>289</sup> is one of the largest considered in this study. There are not many differences from the earlier periods, aside for the renewed slight increase of fabrics with optically inactive groundmass (MG 5). Also registered is the largest quantity (although not the highest percentage) of fine grained fabrics (MG 9, 18 sherds) and the lowest percentage of fabrics with mineral and vegetal inclusions (22%).

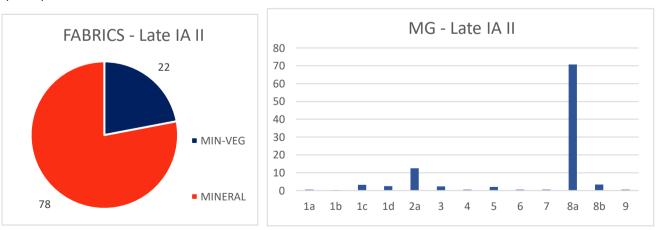


Fig. 242: Fabrics in the Late Iron Age II (in percentage).

<sup>&</sup>lt;sup>289</sup> Phase T2-7 is difficult to catalogue, because it spans from the late 9<sup>th</sup> century/early 8<sup>th</sup> century BC to the late 8<sup>th</sup> century BC. However, since it interests especially the mid and late 8<sup>th</sup> century BC (Table 82), it has been considered a Late Iron Age II phase.

In the transition between the Late Iron II and the beginning of the Iron Age III ( $8^{th} - 7^{th}$  century BC, fig. 243) spathic calcite-rich fabrics (MG 6) disappear while basalt-rich fabrics (MG 1), especially subgroup 1c, increase sharply. Other than this, and a slight increase in mineral and vegetal-tempered fabrics, no other major changes compared to the earlier period can be noted.

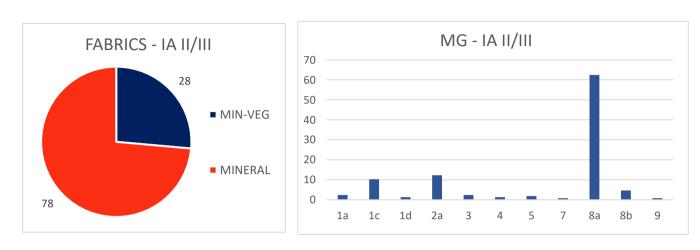


Fig. 243: Fabrics during the Iron Age II to Iron Age III transition (in percentage).

The range of fabrics in the Iron Age III (7<sup>th</sup> century BC, fig. 244) decreases further, because highly porous fabrics (MG 7) are also no longer attested. While basalt and limestone-rich fabrics (MG 1 and 2) decline slightly, subgroup 8b reaches its highest percentage,<sup>290</sup> almost 15% of the assemblage. The proportion between mineral and vegetal-tempered fabrics and mineral-only ones is of particular note: the former group characterises 40% of the assemblage in this period, its highest registered percentage.

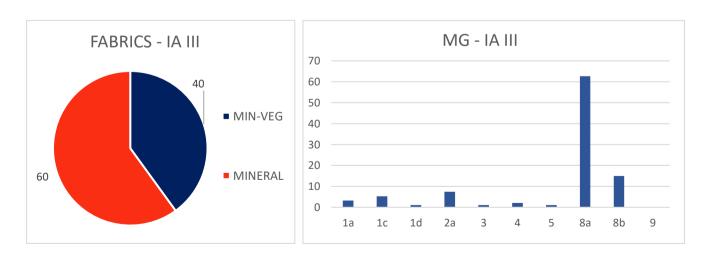


Fig. 244: Fabrics in the Iron Age III (in percentage).

<sup>&</sup>lt;sup>290</sup> Not considering Iron Age Ic, because of the small size of the sample for that period.

This may reflect the nature of the Iron Age III occupation at Mishrifeh, that is a sparse domestic and rural occupation poorer than that in the Iron II (Morandi Bonacossi 2009: 128-129). The relatively high proportion of vegetal temper in fact may indicate an easier availability for pottery production of plant matter, such as straw, than during the earlier periods (Chapter 6.1).

In conclusion, the fabrics of the pottery from Mishrifeh are generally homogeneous from the Iron Age Ic to the Iron Age III. The trend is clearly similar to the general overview (fig. 236), with macrogroup 8, more specifically subgroup 8a, being the dominating petrographic group in every period. Other common macrogroups are 1, especially subgroup 1c, and 2, represented almost exclusively by subgroup 2a. Throughout the Iron Age II a wide range of petrographic groups is attested, as they are all always documented (subgroups included), unlike the situation in the transitional periods and the Iron Age III. This may also depend on the fact that the pottery assemblage of the Iron Age II is the most substantial; given that most of the minor macrogroups are present in percentages under 1%, in a less abundant assemblage they might not appear.

The proportion between fabrics with mineral and vegetal temper and mineral-only ones is also similar to the general overview (fig. 234), with averages of 28% for the former and 72% for the latter group. The only notable changes occur in the transition from the Iron Age I to II and especially in the Iron Age III, when the percentage of mineral and vegetal tempered fabrics increases up to 40%.

## 4.2 MORPHOLOGICAL ANALYSIS AND CHRONO-TYPOLOGY

Simultaneously with the analysis of the fabrics, a typological study was carried out. Some difficulties were encountered in recognizing precise typologies, <sup>291</sup> because the Iron Age pottery from Mishrifeh is in a very fragmentary state and complete vessels are few, especially of open forms. Therefore, pottery types were distinguished principally by their rim shapes and only rarely by the curvature of the walls as well: it is also extremely difficult to associate base types with specific shapes, apart from some cases that will be presented later.

The general pottery shapes recognized are plates (PL), shallow and deep bowls (SB and DB), kraters (KR), jugs (JU), jars (J), cooking pots (CP) and large storage jars (P): the ceramic assemblage also includes bases (BA), body sherds with painted decoration (DECP) and other forms that stand out from the general shapes, such as lamps, basins, painted juglets, spouts, Cypriot pottery, incense burners, zoomorphic vessels and particular objects (OTHERS).

The most common type in the assemblage are storage jars (22.7%), followed by deep bowls (19.7%): however, deep and shallow bowls together represent almost 27% of the pottery (fig. 245). The abundant presence of storage jars reflects the productive nature of many contexts of Iron Age Mishrifeh.

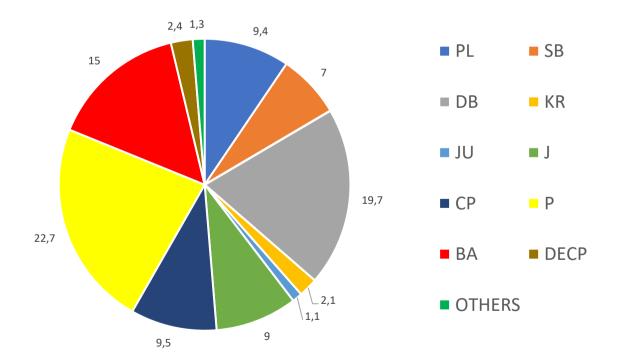


Fig. 245: Percentage occurrence of pottery forms.

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<sup>&</sup>lt;sup>291</sup> An example of the problems faced in distinguishing types concerns the SB13 and DB3 typologies: a small rim-fragment of a bowl with tapering or simple flaring rim could in fact be attributed to either type. Only the presence of the carination would enable the form to be recognized as a SB13.

## POTTERY TYPOLOGY

## **4.2.1 PLATES**

Plates are a rather common form in the ceramic assemblage (almost 10%): they are open-shaped vessels with usually simple rims and modest volumes, especially compared to the bowls. They usually, but not always, have a larger diameter compared to bowls. They were presumably used for serving and eating, and larger vessels especially were probably utilized for communal eating. At Mishrifeh they are principally in Common Ware, but Red Slip occurs on a large percentage of them, 40.8%, while painted vessels represent 18% of the assemblage. Thus, the majority of plate sherds, almost 60%, are decorated with paint or Red Slip.

The most frequent typologies are plates with round (PL1), squared (PL2) and tapering (PL3) rims, especially the first. The other types occur much more rarely (fig. 246).

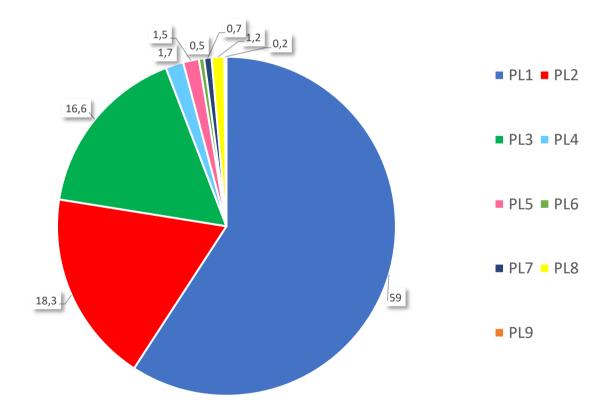


Fig. 246: Plates - percentage occurrence of typologies.

	PL1	PL2	PL3	PL4	PL5	PL6	PL7	PL8	PL9
IA III	Х	Х	Х						
IA II / IA III	Χ	X	X		X				
Late IA II	Х	Х	Х	Х	Х			Х	Х
IA II	X	X	X	X	Х	X	X	X	
IAI/IAII	Х	Х	Х			Х		Х	
IA Ic	Х						Х		

Table 84: Plates – chronological distribution of typologies.

# 4.2.1.1 PLATES WITH SIMPLE ROUND RIM (PL1) Pls. 1-3

As mentioned above, this is the most common plate typology (59%). Vessels of this type may have straight or slightly curved walls and they were probably associated with ring bases, through the only complete vessels documented at Mishrifeh are fruit-stands,<sup>292</sup> thus with pedestal bases. These plates present a wide range of diameters, from 14 to 48 cm, with most specimens measuring 22, 24, 26 and 30 cm in diameter.

This is the only plate type found in every chronological phase, from the Iron Age Ic to the Iron Age III, with a large majority in the Iron Age II (Table 85): more precisely, a gradual increase can be observed starting from the transition between the Iron Age I and II, then a sharp decline is registered after the Late Iron Age II.

PL1	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	31	103	83	13	4
%	0.4	13.3	43.8	35.3	5.5	1.7

Table 85: PL1 chronological distribution.

At Mishrifeh they can be found in both Common and Red Slip Ware, but also painted: red slipped sherds are widely documented (37.3%), while painted ones are slightly less numerous (21.8%). It is remarkable that almost 60% of plates with round rim are characterized either by red paint or Red Slip.

This type of plates is not truly diagnostic, since analogous specimens are widespread from the Iron Age I, and especially in both the Iron Age II and III in other Syrian sites such as

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<sup>&</sup>lt;sup>292</sup> SF H 5281.714, H 5225.711, H 5399.701, T1 7563.701 (Pl. 3).

Hama (Période E),<sup>293</sup> Tell 'Acharneh,<sup>294</sup> Tell Mardikh (phase 2<sup>295</sup> and Area G level 4),<sup>296</sup> Tell Afis (Areas D levels 2, 4 and 6<sup>297</sup> and E2-E4 phase Ia),<sup>298</sup> Tell Mastuma (Strata I-2a/b),<sup>299</sup> Tell Tuqan (Area Q phases 5a-b),<sup>300</sup> Tell Abou Danne (Niveau IId),<sup>301</sup> 'Ain Dara (phase XVIII)<sup>302</sup> and Bassit.<sup>303</sup> They can also be found on the Euphrates – at Karkemish,<sup>304</sup> Tell Shiukh Fawqani (Areas F Période IX<sup>305</sup> and G Period IX levels A-B)<sup>306</sup> and Tell Sheikh Hassan<sup>307</sup> – and in the 'Amuq Valley and Southern Anatolia – Tell Tayinat,<sup>308</sup> Zincirli.<sup>309</sup> The furthest parallels are from Tyre (Stratum I),<sup>310</sup> Tel Dan (Stratum II)<sup>311</sup> and Megiddo (Stratum IV)<sup>312</sup> and level H-3).<sup>313</sup>

Painted plates are particularly popular at Hama (Période E)<sup>314</sup> and were found also at Tell 'Acharneh.<sup>315</sup> Specimens in Red Slip are common in almost all the sites of the Syrian and Southern Anatolian regions, such as Tell Nebi Mend (phase B),<sup>316</sup> Tell 'Acharneh,<sup>317</sup> Tell Mardikh (Area G level 2),<sup>318</sup> Tell Afis (Area G level 4),<sup>319</sup> Tell Mastuma (Strata I-1 and I-2a),<sup>320</sup> Tell Abou Danne (Niveau IId),<sup>321</sup> Tell Tuqan (Area D phase 4a<sup>322</sup> and Area Q phase 5b),<sup>323</sup> Tell Qarqur,<sup>324</sup> Tell Tayinat<sup>325</sup> and Chatal Hüyük (Area II levels 03-05).<sup>326</sup> A red slipped

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<sup>293</sup> Fugmann 1958, figs. 269:6B516, 325:8A222 and 8A68, 310:7A873 and 7B21; 344:4C995 and H899.
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<sup>&</sup>lt;sup>294</sup> Cooper 2006, fig. 8:6.

<sup>&</sup>lt;sup>295</sup> Pizzimenti 2014/2015, fig. 2:9.

<sup>&</sup>lt;sup>296</sup> Mazzoni 1992b, fig. 22:1.

<sup>&</sup>lt;sup>297</sup> Mazzoni 1987, figs. 9:2-3, 15:5, 21:26.

<sup>&</sup>lt;sup>298</sup> Venturi 2020, Pl. 138:1

<sup>&</sup>lt;sup>299</sup> Wada 2009d, fig. 6.14:a5-8-2, b5-1-2.

<sup>&</sup>lt;sup>300</sup> Fiorentino 2008, figs. 14:10-11; Fiorentino, Marinelli 2011, fig. 12:8.

<sup>&</sup>lt;sup>301</sup> Lebeau 1983, Pls. I:1, II:1-5.

<sup>&</sup>lt;sup>302</sup> Stone, Zimansky 1999, figs. 74:1 and 70 type 100

<sup>&</sup>lt;sup>303</sup> Courbin 1993, fig. 6:6.

<sup>&</sup>lt;sup>304</sup> Bonomo, Zaina 2014, fig. 3:3; Pizzimenti, Zaina 2016, figs. 5:1-3.

<sup>&</sup>lt;sup>305</sup> Makinson 2005, Pl. I:2, 4-6.

<sup>&</sup>lt;sup>306</sup> Luciani 2005, Pls. 2:13 and 17, 3:32, 31:364 and 367.

<sup>&</sup>lt;sup>307</sup> Schneider 1999a, Abb.4 type 1:1.

<sup>&</sup>lt;sup>308</sup> Osborne et al. 2019, fig. 17:2.

<sup>309</sup> Soldi 2019, fig. 4:e.

<sup>&</sup>lt;sup>310</sup> Bikai 1978, Pl. I:13.

<sup>311</sup> Arie 2008, fig. 14:2.

<sup>312</sup> Lamon, Shipton 1939, Pl. 26:76

<sup>&</sup>lt;sup>313</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.52:2.

<sup>&</sup>lt;sup>314</sup> Fugmann 1958, figs. 269, 305, 325.

<sup>&</sup>lt;sup>315</sup> Cooper 2006, fig. 15:6.

<sup>&</sup>lt;sup>316</sup> Whincop 2007, figs. 7:a, c. These are pedestal platters, thus parallels are more precise with the fruit-stands.

<sup>&</sup>lt;sup>317</sup> Cooper 2006, figs. 1:6-7, 2:3-5, 5:6 and 9-11.

<sup>&</sup>lt;sup>318</sup> Mazzoni 1992b, fig. 19:2.

<sup>&</sup>lt;sup>319</sup> Soldi 2013, fig. 1:1.

<sup>&</sup>lt;sup>320</sup> Wada 2009d, figs. 6.14: 13Fb/d-Pit4, a4-1-1.

<sup>&</sup>lt;sup>321</sup> Lebeau 1983, Pls. I:2-3, II:6,7, III:4-8, IV:1-7.

<sup>322</sup> Baffi 2008c, figs. 27:11-12.

<sup>323</sup> Fiorentino, Marinelli 2011, fig. 12:8.

<sup>&</sup>lt;sup>324</sup> Dornemann 2003a, figs. 81:1-9, 11-13, 15.

<sup>&</sup>lt;sup>325</sup> Osborne et al. 2019, figs. 17:1, 29:20 and 22.

<sup>&</sup>lt;sup>326</sup> Pucci 2019, Pls. 90:a, 94:b, 100:a and c.

# 4.2.2 PLATES WITH SQUARED RIM (PL2) Pls. 4-5, 6:1-4

These are the second most common form in the plate assemblage (18.3%). They mostly have straight walls and, considering the complete vessels,<sup>328</sup> ring bases. This type presents a large variety of diameters, from 14 to 38 cm, although the majority of the vessels measure 26 and 28 cm across. Through documented for the whole Iron Age II, they are especially common in the Late Iron II. Specimens in Iron Age I/II transition and Iron Age III are rare (Table 86).

PL2	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	2	23	40	7	2
%	2.7	31.1	54.1	9.4	2.7

Table 86: PL2 chronological distribution

Plates with squared rim are mostly in Common Ware, however they can also be in Red Slip (11.2%) or painted (19.7%). This is the only plate type for which painted potsherds are more numerous than red slipped ones: the relatively low percentage of decorated vessels is noteworthy – especially compared to the other common types – although it is difficult to understand why this happens.

These plates are particularly attested in Iron Age II and III Syrian assemblages and can be found at Tell 'Acharneh, <sup>329</sup> Tell Mardikh (phases 1-2), <sup>330</sup>, Tell Afis (Area D levels 1-2, 4-5<sup>331</sup> and Area E2 level 2a), <sup>332</sup> Tell Mastuma (Strata I-2b/c), <sup>333</sup> Tell Tuqan (Area D phase 1), <sup>334</sup> Tell Shiukh Fawqani (Area G Period IX levels A-B) <sup>335</sup> and Tell Ahmar (Area C Stratum 2). <sup>336</sup> Painted examples are documented at Hama (Période E). <sup>337</sup> Slipped variants are more widespread: they are in fact present at Tell 'Acharneh, <sup>338</sup> Tell Nebi Mend (phase C), <sup>339</sup> Tell

<sup>327</sup> Ben-Ami 2012b, fig. 3.14:11.

<sup>&</sup>lt;sup>328</sup> SF H 5281.718 (**Pl.4:1**), J 156.1 (**Pl. 5:1**), H 8409.702 (**Pl. 5:2**).

<sup>&</sup>lt;sup>329</sup> Cooper 2006, fig. 7:4.

<sup>&</sup>lt;sup>330</sup> Pizzimenti 2014/2015, figs. 2:10, 4:10-11.

<sup>&</sup>lt;sup>331</sup> Mazzoni 1987, figs. 8:2, 9:5, 16:2-3, 20:2; Oggiano 1997, Pl. IV: 1-2, shape PB.

<sup>&</sup>lt;sup>332</sup> Degli Esposti 1998, fig. 10:1.

<sup>&</sup>lt;sup>333</sup> Wada 2009b, figs. 4.10:1-2, 4.20:1; Wada 2009d, fig. 6.14:b4-1-14.

<sup>&</sup>lt;sup>334</sup> Baffi 2008c, fig. 23:6-7.

<sup>&</sup>lt;sup>335</sup> Luciani 2005, Pls. 2:17, 32:375.

<sup>&</sup>lt;sup>336</sup> Jamieson 2012, fig. 3.1:5-6.

<sup>&</sup>lt;sup>337</sup> Fugmann 1958, figs. 325: 8A185, 245: 7B682, 269: 6B472, 7B213.

<sup>&</sup>lt;sup>338</sup> Cooper 2006, figs. 5:19, 7:8.

<sup>&</sup>lt;sup>339</sup> Whincop 200,7 fig. 7:g.

Mardikh (Area G level 2),<sup>340</sup> Tell Afis (Area D levels 4-6),<sup>341</sup> Tell Mastuma (Stratum I-2c),<sup>342</sup> Tell Abou Danne (Niveau IId),<sup>343</sup> Tell Qarqur,<sup>344</sup> 'Ain Dara (phase XIII),<sup>345</sup> Tell Tayinat,<sup>346</sup> Chatal Hüyük (Area I levels 04-06 and Area II level 03 and Area IVa level 03a),<sup>347</sup> Bassit (Niveau 3),<sup>348</sup> Tyre (Stratum IX)<sup>349</sup> and Tel Dan (Area T Stratum Iva).<sup>350</sup> Red slipped specimens coming from earlier contexts (late 11<sup>th</sup> century BC, Iron Age I) are instead attested at Megiddo level K-3 (Arie 2013: 692-683).<sup>351</sup>

# 4.2.1.3 PLATES WITH TAPERING RIM (PL3) Pls. 6:5-8, 7:1-3.

This typology is the third most common of the plate repertoire of (16.6%). As for the PL1 type, these plates have straight or slightly curved walls and may have had ring or pedestal bases. Their diameters vary from 15 to 34 cm: most specimens measure 16, 18, 24 or 28 cm.

They are attested in almost all periods, but are particularly common in the Iron Age II: in later levels, their presence decreases gradually (Table 87).

A large majority of plates with tapering rims are red slipped (81.8%) and only a few sherds are painted (7.5%). It is remarkable that very few specimens are devoid of any decoration or treatment. According to Ida Oggiano (Oggiano 1997: 189), this typology is often distinctive of fruit-stands, as also observed at Hama (see later). Unfortunately, no complete vessels were recovered from Mishrifeh; however the large percentage of red slipped potsherds may confirm this, as fruit-stands are usually in Red Slip Ware.

PL3	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	7	35	17	6	1
%	10.6	53	25.7	9.1	1.5

Table 87: PL3 chronological distribution.

Parallels for PL3 come from a more limited area compared to the previous two typologies.

<sup>&</sup>lt;sup>340</sup> Mazzoni 1992b, fig. 19:3.

<sup>&</sup>lt;sup>341</sup> Mazzoni 1987, figs. 16: 1 and 5-6, 20:9, 21:15.

<sup>&</sup>lt;sup>342</sup> Wada 2009b, fig. 4.10:3.

<sup>&</sup>lt;sup>343</sup> Lebeau 1983, Pl. VI:4-5.

<sup>&</sup>lt;sup>344</sup> Dornemann 2003a, fig. 81:16.

<sup>&</sup>lt;sup>345</sup> Stone, Zimansky 1999, fig. 74:2.

<sup>&</sup>lt;sup>346</sup> Osborne et al. 2019, figs. 13:3-4.

<sup>&</sup>lt;sup>347</sup> Pucci 2019, Pls. 13:b, 20:a and d, 32:c-d, 33:a-b, 37:g, 106:d, 128:h.

<sup>&</sup>lt;sup>348</sup> Braemer 1986, fig. 1:2.

<sup>&</sup>lt;sup>349</sup> Bikai 1978, Pl. XIX:13, 16.

<sup>350</sup> Arie 2008, fig. 9:2.

<sup>&</sup>lt;sup>351</sup> Arie 2013, fig. 13.45:8.

They are in fact attested during the Iron Age II and III in Syria at Hama (Période E),<sup>352</sup> Tell Afis (Area D)<sup>353</sup> and Tell Shiukh Fawqani (Area G Period IX level A).<sup>354</sup> Painted specimens are present at Hama (Période E)<sup>355</sup> and red slipped ones occur at Tell 'Acharneh,<sup>356</sup> Tell Nebi Mend (phase B),<sup>357</sup> Tell Mardikh (Area G level 2),<sup>358</sup> Tell Afis (Area D level 4),<sup>359</sup> Tell Mastuma (Stratum I-2a).<sup>360</sup> Examples in Red Slip are also documented outside Syria, in the 'Amuq Valley at Tell Tayinat<sup>361</sup> and in the northern part of the Southern Levant at Hazor (Area G Stratum IV)<sup>362</sup> and Megiddo (level L-3).<sup>363</sup>

# 4.2.1.4 CARINATED PLATES WITH SQUARED RIM (PL4) Pl. 7:4-6

This typology is quite rare in the plate assemblage (1.7%); only seven sherds are documented. It is represented by vessels with a higher or lower carination and a squared flat rim: no complete specimen has been found, so it is unclear which bases they were associated with. The diameters range from 14 to 28 cm.

This type is attested in the Iron Age II, although it declines sharply in the Late Iron Age II (Table 88).

PL4	IA II	LATE IA II
Nr.	6	1
%	85.7	14.3

Table 88: PL4 chronological distribution.

Red slipped potsherds are widely attested (71.4%), while painted ones are less common (14.2%): in general, a situation similar to that of PL3 may be observed, with the majority of the sherds decorated.

Only a few parallels have been found, particularly a red slipped specimen from Late Iron Age II/III contexts at Tell Mastuma (Stratum I-1).<sup>364</sup> Parallels are possible also with some

<sup>&</sup>lt;sup>352</sup> Fugmann 1958, figs. 269: 6B369; 310: 7B407. As fruit-stands, figs. 188: 5B93; 269: 5A499, 5A500; 310: 7B20, 7A875, 7B418, 8A219.

<sup>&</sup>lt;sup>353</sup> Oggiano 1997, Pl. IV:7-8, shape PD.

<sup>&</sup>lt;sup>354</sup> Luciani 2005, Pl. 31:372.

<sup>355</sup> Fugmann 195,8 figs. 269: 6B492, 344: 4B830.

<sup>&</sup>lt;sup>356</sup> Cooper 2006, figs. 1:10, 5:7-8.

<sup>&</sup>lt;sup>357</sup> Whincop 2007, fig. 7:b.

<sup>358</sup> Mazzoni 1992b, fig. 19:2.

<sup>&</sup>lt;sup>359</sup> Mazzoni 1987, fig. 15:4.

<sup>&</sup>lt;sup>360</sup> Wada 2009b, figs. 4.46:4, 4.132:2 (fruit-stand).

<sup>&</sup>lt;sup>361</sup> Osborne et al. 2019, fig. 29:20.

<sup>362</sup> Yadin et al. 1989, Pls. CCXLIX:5, CCLIV: 27.

<sup>&</sup>lt;sup>363</sup> Finkelstein 2006, fig. 15.3:1. The chronological context of this specimen is the 10<sup>th</sup> century B.C.

<sup>&</sup>lt;sup>364</sup> Wada 2009d, fig. 6.33:75,

Red Slip and Common Ware bowls from Chatal Hüyük (Area I level 05 and Area IVa level 03a)<sup>365</sup> dated to the Iron Age II and III. Furthermore, a painted specimen from Tyre (Stratum XIV)<sup>366</sup> very similar to some of the sherds from Mishrifeh is of note, but it is dated to the Iron Age I (1200-1070/1050 BC).

# 4.2.1.5 CARINATED PLATES WITH SIMPLE RIM (PL5) Pl. 8:1-2

This typology appears rarely (1.5%) in the Mishrifeh plate assemblage. The carination is usually high, but it can be lower, and the only complete vessel recovered is a fruit-stand with a pedestal base (SF T3 10082.701, **PI. 8:1**). An association of this form with simple ring bases cannot be excluded. This type of plate displays a limited range of diameters, from 12 to 20 cm; they usually measure 16, 18 or 20 cm. The typology is attested in the Iron Age II, although it is especially present in the transition between Iron II and Iron III (Table 89).

This type was found in both common and Red Slip (50%) ware.

Parallels are possible with a red slipped and painted plate from Tyre (Stratum IV)<sup>367</sup> and analogous slipped bowls are documented at Tell Afis (Area G Central zone level 7b)<sup>368</sup> and Hazor (Area A Stratum VIII).<sup>369</sup> The chronological interval of these parallels spans the 9<sup>th</sup> and 7<sup>th</sup> centuries BC, which fits with the chronological distribution of this typology at Mishrifeh.

PL5	IA II	LATE IA II	IA II/III
Nr.	2	2	5
%	22.2	22.2	55.6

Table 89: PL5 chronological distribution.

# 6.2.1.6 PLATES WITH OUTWARD FLARING RIM (PL6) Pl. 8:3-4

This form is extremely rare (0.5% of the plates) and the couple of sherds found are of very small dimensions. They are characterised by a flaring rim with a triangular external thickening. The fragmentary state of the specimens found does not allow hypotheses to be made concerning the bases associated or the vessels' general appearance. They were identified as plates due to the parallels, especially those with Tell Afis (see below). The diameters measure 14 and 28 cm. This type occurs in the earlier Iron Age levels (50%) of the site, including the transitional Iron Age I/II contexts (50%).

<sup>&</sup>lt;sup>365</sup> Pucci 2019, Pls. 21:g, 23:e, 129:a.

<sup>&</sup>lt;sup>366</sup> Bikai 1978, Pl. XXXIX:23.

<sup>&</sup>lt;sup>367</sup> Bikai 1978 Pl. XV:12.

<sup>&</sup>lt;sup>368</sup> Cecchini 1998, fig. 20:19.

<sup>&</sup>lt;sup>369</sup> Yadin et al. 1960, Pl. LIII:31.

Half of the assemblage, which actually corresponds to one sherd, is red slipped.

Parallels have been found with Tell Afis (Area D levels 2 and 4). $^{370}$  Similar specimens in Red Slip are also documented in the northern part Southern Levant, at Hazor (Stratum V) $^{371}$  and at Samaria (Strata III, V-VI). $^{372}$  These parallels are dated between the 9<sup>th</sup> and 7<sup>th</sup> century BC (Iron Age II-III), with those from Tell Afis attributed to a later period than the Southern Levantine ones (Late 8<sup>th</sup> – 7<sup>th</sup> century BC). Therefore it seems probable that these plates derived from Southern Levantine models.

# 4.2.1.7 PLATES/SHALLOW BOWLS WITH INTERNALLY THICKENED RIM (PL7) **PI. 8:5-7** With regard to this typology, the fragmentary state of the sherds prevents their precise identification as either plates or shallow bowls. However, considering the inclination of the sherds and the parallels with other sites (see below), they were probably plates. This is a rare type in the plate assemblage (0.7%) and no complete vessel was recovered. The diameters measure 18 and, more commonly, 26 cm. The typology is attested in the Iron Age Ic and in Iron Age II (Table 90).

The specimens of this typology are all in Common Ware. They strongly resemble vessels dated to the Iron Age II and III from Tell Abou Danne (Niveaux IIc-d)<sup>373</sup> and Hazor (Area B Stratum V)<sup>374</sup>. A painted exemplar is attested at Tell Nebi Mend (phase C)<sup>375</sup> and red slipped ones are documented at Tyre (Stratum IX)<sup>376</sup> and Hazor (Area G Stratum IV)<sup>377</sup>. No precise parallels were found in the Iron Age I.

PL7	IA Ic	IA II
Nr.	1	2
%	33.3	66.7

Table 90: PL7, chronological distribution.

# 4.2.1.8 PLATES/SHALLOW BOWLS WITH HIGH CARINATION AND SLIGHTLY TRIANGULAR RIM (PL8) PI. 9:1-4

This is another uncommon type (1.2% of the plates): it features vessels with a more or less

<sup>&</sup>lt;sup>370</sup> Mazzoni 1987, figs. 9:4 (white slip), 15:1.

<sup>&</sup>lt;sup>371</sup> Sandhaus 2012, fig. 4.16:8.

<sup>&</sup>lt;sup>372</sup> Amiran 1970, Pl. 67:9-10.

<sup>&</sup>lt;sup>373</sup> Lebeau 1983, Pls. IX:4-5, Cl:4.

<sup>374</sup> Yadin et al. 1958, Pl. LXVII:13.

<sup>&</sup>lt;sup>375</sup> Whincop 2007, fig. 7:d.

<sup>&</sup>lt;sup>376</sup> Bikai 1978, PL. XIX:26.

<sup>&</sup>lt;sup>377</sup> Yadin et al. 1989, Pl. CCLIV:29.

pronounced carination and a modest volume. The triangular thickening on the rim may have sharp angles or be more rounded. The range of diameters is quite limited, from 22 to 27 cm. The typology occurs in the whole Iron Age II (Table 91).

A large percentage (80%) of the assemblage is red slipped.

Parallels for this typology can be found in Northern Syria starting from Late Iron Age I and especially during the Iron Age II at Tell Mardikh (phase 2),<sup>378</sup> Tell Afis (Areas E2-E4 Phases IIa-b<sup>379</sup> and Area E2 level 3)<sup>380</sup> and Tell Tuqan (Area D phase 4a).<sup>381</sup> From Tell Afis (E2-E4 phase IIa)<sup>382</sup> comes also a painted specimen, while red slipped vessels are attested again at Tell Afis (Areas E2-E4 phase Ia<sup>383</sup> and Area E2 level 1),<sup>384</sup> at Tell Tweini (Chantier A),<sup>385</sup> Tell Ahmar (Area C)<sup>386</sup> and, outside Syria, at Hazor (Stratum Xa).<sup>387</sup>

PL8	IA I/II	IA II	LATE IA II
Nr.	1	4	1
%	16.7	66.6	16.7

Table 91: PL8, chronological distribution.

# 6.2.1.9 PLATES/SHALLOW BOWLS WITH SLIGHTLY ROUNDED SIDES AND EVERTED RIM (PL9) **PI. 9:5**

This is the rarest plate typology (0.2%), with only one Common Ware specimen found. It measured 30 cm in diameter and was found in a Late Iron II context (Operation J, Phase 5): this chronology is confirmed by parallels from other centres in Syria, Tell Afis (Area D level 4)<sup>388</sup> and Tell Tuqan (Area T phase 3a),<sup>389</sup> Southern Anatolia, Karkemish (Phase 10a),<sup>390</sup> and Lebanon, Tyre (Strata III and IV).<sup>391</sup> Versions in Red Slip are attested at Tell Tuqan (Area T phase 3a)<sup>392</sup> and at Chatal Hüyük (Area II level 04 and Area II level 03).<sup>393</sup>

<sup>&</sup>lt;sup>378</sup> Pizzimenti 2014-2015, fig. 2:7.

<sup>&</sup>lt;sup>379</sup> Venturi 2020, Pl. 121:11, 13.

<sup>&</sup>lt;sup>380</sup> Degli Esposti 1998, fig. 7:2.

<sup>&</sup>lt;sup>381</sup> Baffi 2008c, fig. 27:9.

<sup>&</sup>lt;sup>382</sup> Venturi 2020, Pl. 120:4.

<sup>&</sup>lt;sup>383</sup> Venturi 2020, Pl. 137:5.

<sup>&</sup>lt;sup>384</sup> Degli Esposti 1998, fig. 10:5.

<sup>&</sup>lt;sup>385</sup> Vansteenhuyse, Al-Magdissi, Van Lerberghe 2002, fig. 7:3 (? No number on the figure).

<sup>&</sup>lt;sup>386</sup> Jamieson 1999, fig. 6:2.

<sup>&</sup>lt;sup>387</sup> Ben-Ami 2012a, fig. 2.6:15.

<sup>&</sup>lt;sup>388</sup> Mazzoni 1987, fig. 15:16.

<sup>&</sup>lt;sup>389</sup> Baffi 2011d, fig. 46:4.

<sup>&</sup>lt;sup>390</sup> Pizzimenti, Zaina 2016, fig. 4:8.

<sup>&</sup>lt;sup>391</sup> Bikai 1978, Pls. X:7, XVIa:5.

<sup>&</sup>lt;sup>392</sup> Baffi 2011d, fig. 46:7.

<sup>&</sup>lt;sup>393</sup> Pucci 2019, Pls. 95:h, 100:i.

## 4.2.2 SHALLOW BOWLS

Shallow bowls were probably used for serving food or to contain small quantities of raw materials, since they were also found in productive contexts.

This form is largely characterised by Red Slip (63.5%), while painted specimens are particularly rare (3%). The most common type is the bowl with flat thickened rim (SB8), composing almost 40% of the assemblage, followed by carinated bowls with flared rim (SB13, 13.8%) and bowls with inturned rim (SB4, 11.8%).

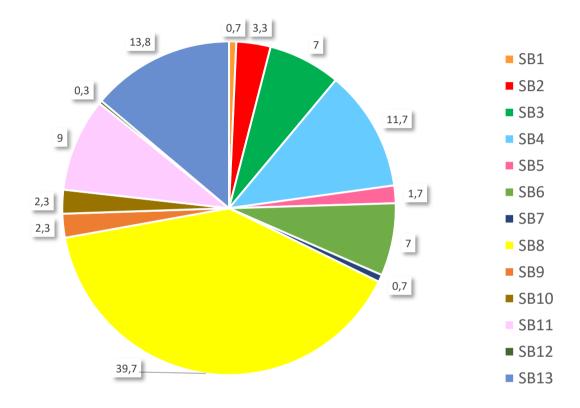


Fig. 247: Shallow bowls – percentage occurrence of typologies.

	SB1	SB2	SB3	SB4	SB5	SB6	SB7	SB8	SB9	SB10	SB11	SB12	SB13
IA III						X		Х					
IA II / III		Х	Х	Х	Х	X		Х			Χ		Х
Late IA II	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х
IA II	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х
IAI/II				Х	Х			Χ			Х		Х
IA Ic		Х						Х					

Table 92: Shallow bowls – chronological distribution of typologies.

# 4.2.2.1 BOWLS WITH OUTWARD RIM AND CURVING PROFILE (SB1) PI. 9:6-7

This is a very uncommon typology (0.7% of the shallow bowls), represented by a couple of vessels characterised by an S-shaped thin-walled profile. No complete forms have been found and one sherd actually presents a deeper basin. These bowls have diameters of 11 and 30 cm. In Mishrifeh they are documented in the Iron Age II and are exclusively in Common Ware.

Parallels for this typology are attested in Common Ware at Tell Tuqan (Area T Trench north-south)<sup>394</sup> and in Red Slip at Tell 'Acharneh,<sup>395</sup> Tell Afis (Area G Central zone level 6),<sup>396</sup> Hazor (Area A Stratum 3)<sup>397</sup> and Megiddo (level K-2).<sup>398</sup> Another similar red slipped vessel may also be documented at Tell Qarqur,<sup>399</sup> but the sherd is too small to evaluate the curvature of the wall. The chronology of these parallels ranges between the Iron Age II and III.

# 4.2.2.2 CARINATED BOWLS WITH SIMPLE RIM (SB2) PI. 10

This typology shows some variety in the position of the carination and the shape of the rim: two main variants are in fact documented, the first one (SB2a) has a high carination and a round rim, the second one (SB2b) presents instead a low carination and a rounded or tapered rim. As no complete vessels have been discovered, the shape of the base is uncertain, although ring bases or more probably slightly rounded or flat bases may be hypothesized on the basis of the parallels: diameters vary between 20 and 32 cm and specimens with 28 cm in diameter are particularly common. It is found especially in the Late Iron Age II, while it is quite rare in other periods and completely absent in the Iron Age III (Table 93): in detail, SB2b is already present in the Iron Age Ic and occurs until the transition to the Iron Age III, while SB2a is attested exclusively in the Iron Age II.

The SB2 type is generally characterised by the Red Slip Ware, which is found on 80% of the assemblage.

The first variant (SB2a) has parallels with vessels from Tell Afis (Area G Central zone level 7b)<sup>400</sup> and from the Southern Levant, Sarepta (Area II-Y Stratum E)<sup>401</sup> and Tel Dor (Area G Phase 6a).<sup>402</sup> Specimens in Red Slip or otherwise decorated are present at Tell Afis (Area

<sup>&</sup>lt;sup>394</sup> Baffi 2011d, fig. 37:20.

<sup>&</sup>lt;sup>395</sup> Cooper 2006, fig. 27:6.

<sup>&</sup>lt;sup>396</sup> Cecchini 1998, fig. 26:10.

<sup>&</sup>lt;sup>397</sup> Bonfil, Greenberg 1997, fig. II.58:17.

<sup>&</sup>lt;sup>398</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.20:2.

<sup>&</sup>lt;sup>399</sup> Dornemann 2003a, fig. 82:5.

<sup>&</sup>lt;sup>400</sup> Cecchini 1998, fig. 20:17.

<sup>&</sup>lt;sup>401</sup> Anderson 1988, Pl. 31:14.

<sup>&</sup>lt;sup>402</sup> Gilboa 2018, Pl. 20.64:8.

SB2a	IA Ic	IA II	LATE IA II	IA II/III
Nr.		2	2	
% on SB2a		50	50	
% on SB2 tot		20	20	
SB2b				
Nr.	1	1	3	1
% on SB2b	16.6	16.6	50	16.6
% on SB2 tot	10	10	30	10

Table 93: SB2 chronological distribution.

From a chronological point of view, the attestations in the northern part of the Southern Levant appear much earlier than those of Tell Afis, as they come from contexts dated to the Iron Age I (Sarepta, 12<sup>th</sup> - 11<sup>th</sup> centuries BC) and the Early Iron Age II (Tel Dor, 9<sup>th</sup> century BC, and Megiddo),<sup>405</sup> whereas specimens from Tell Afis are dated to the Iron Age III (7<sup>th</sup> century BC). Considering that at Mishrifeh these vessels are present in the Iron Age II (9<sup>th</sup> – 8<sup>th</sup> centuries BC), a northward movement of this sub-typology can be hypothesized, from the Southern Levant to Northern Syria, with Mishrifeh on the trajectory connecting the two regions.

Parallels for the second variant (SB2b) are more wide-ranging and widespread: red slipped versions of these bowls are in fact very common at Tell 'Acharneh<sup>406</sup> and documented also at Tell Afis (Area E2 level 1<sup>407</sup> and Area G Central zone level 5),<sup>408</sup> Tell Mastuma (Strata I-2a and I-1)<sup>409</sup> and Bassit (Niveaux 4b, 6).<sup>410</sup> A yellow slipped vessel was found at Tell Ahmar (Area C, Stratum 2).<sup>411</sup> However, they notably occur in the northern region of the Southern Levant. They are in fact a common form at Tyre (Strata II-IV),<sup>412</sup> often in Red Slip and also in association with paint, but red slipped specimens are present also at Sarepta (Area II-Y)

<sup>404</sup> Finkelstein, Zimhoni, Kafri 2000, figs. 11.38:2-3.

<sup>&</sup>lt;sup>403</sup> Soldi 2013, figs. 1:5-7.

<sup>&</sup>lt;sup>405</sup> The specimens from Megiddo come from Early Iron Age IIa contexts, which may be dated to the 10<sup>th</sup> or the 9<sup>th</sup> century depending if we are considering the low or high chronologies.

<sup>&</sup>lt;sup>406</sup> Cooper 2006, figs. 1:17-18, 6:1-2, 13:5.

<sup>&</sup>lt;sup>407</sup> Degli Esposti 1998, fig. 10:3.

<sup>&</sup>lt;sup>408</sup> Soldi 2013, figs. 2:1-2.

<sup>&</sup>lt;sup>409</sup> Wada 2009b, fig. 4.77:1 (in Common Ware); Wada 2009c, fig. 5.9:4.

<sup>&</sup>lt;sup>410</sup> Braemer 1986, figs. 2:4, 4:15.

<sup>&</sup>lt;sup>411</sup> Jamieson 2012, fig. 3.1:8.

<sup>&</sup>lt;sup>412</sup> Bikai 1978, Pls. XIa:4-9, 12-13, 16, XV: 7 and 10, XVIa:4.

Substratum C1),<sup>413</sup> Tel Dor (Area G phase 6b),<sup>414</sup> Hazor (Area B Stratum Va<sup>415</sup> and Stratum Xa).<sup>416</sup> Examples in Common Ware were found also at Megiddo (Strata Vb and Va-IVb).<sup>417</sup> Most of these parallels date to the 8<sup>th</sup>-7<sup>th</sup> centuries BC (Iron Age II-III), but in the northern part of the Southern Levant earlier specimens are documented (Dor phase 6b, Hazor Stratum Xa, Megiddo Strata Vb/Va-IVb, 10<sup>th</sup>-9<sup>th</sup> centuries). Perhaps a South-Levantine origin for this sub-typology could be hypothesized as well.

# 4.2.2.3 BOWLS WITH OBLIQUE OUT-TURNED RIM AND TAPERING BASIN OR CARINATION (SB3) **PI. 11**

This is a typology which appears rarely in the assemblage of shallow bowls (7%), and features vessels with an oblique, elongated outward rim and rounded (SB3a) or carinated (SB3b) walls: the lip may be rounded, tapered or squared. The bowls display a great variety of diameters, from 10 to 30 cm, with a prevalence of 18 cm diameters. SB3a is especially common in the Iron Age II and almost disappears with the transition to the Iron III, while SB3b is attested exclusively in the Iron Age II (Table 94).

SB3a	IA II	LATE IA II	IA II/III	
Nr.	12	5	1	
% on SB3a	66.7	27.8	5.5	
% on SB3 tot	57.1	23.8	4.7	
SB3b				
Nr.	1	2		
% on SB3b	33.3	66.7		
% on SB3 tot	4.7	9.5		

Table 94: SB3 chronological distribution.

With 28.5% of the potsherds painted, this is the shallow bowl type most decorated with paint. Red slipped fragments, instead, represent 14% of the assemblage of the type.

The first variant (SB3a) resembles Iron Age II and especially Iron Age III specimens from Central-Western Syrian sites, such as Tell Afis (Areas G Central zone levels 4 and 7b<sup>418</sup> and

<sup>&</sup>lt;sup>413</sup> Anderson 1988, Pl. 38:3.

<sup>&</sup>lt;sup>414</sup> Gilboa 2018, Pl. 20.56:16.

<sup>&</sup>lt;sup>415</sup> Yadin et al. 1960, Pl. XCII:6.

<sup>416</sup> Ben-Ami 2012a, fig. 2.9:3.

<sup>&</sup>lt;sup>417</sup> Arie 2013: 678-679, fig. 13.1, type BL36a.

<sup>&</sup>lt;sup>418</sup> Cecchini 1998, figs. 22:12, 23:9, 38:18.

E2-E4 phase la)<sup>419</sup> and Tell Qarqur.<sup>420</sup> A vessel in Red Slip comes from Tell Mastuma (Stratum I-2b).<sup>421</sup>

The SB3b variant displays similarities with vessels from Tell Mardikh (Area E level 4b), <sup>422</sup> Tell Afis (Areas D level 2), <sup>423</sup> Tell Tuqan (Area Q phase 5a) <sup>424</sup> and Bassit. <sup>425</sup> Other parallels can be found on the Middle Euphrates at Karkemish (Phase 10a-b) <sup>426</sup> and Tell Shiukh Fawqani (Area G Period IX levels A-B), <sup>427</sup> dating to the Iron Age II (especially Late Iron Age II) and III. Red slipped versions are documented in Iron Age II contexts at Tell Mastuma (Stratum I-2b), <sup>428</sup> Zincirli <sup>429</sup> and Hazor (Stratum VI). <sup>430</sup>

It should be noted that while painted SB3 specimens are quite common at Mishrifeh, they have not been found in any other of the sites considered except Chatal Hüyük; there, a painted vessel from Area V level 03<sup>431</sup> closely resembles a SB3b specimens from Mishrifeh (H 6326.23, **PI. 11:7**). However, the bowl from Chatal Hüyük comes from N\_mid contexts, that is the Iron Age I (1100-950 BC), while the one from Mishrifeh is from an Iron Age II level (8<sup>th</sup> century BC). No other similar vessel has been found at Chatal Hüyük and while the chronological gap is wide, it may indicate a relation between the Iron Age I tradition in that site and the Iron Age II pottery production in Mishrifeh.

# 4.2.2.4 BOWLS WITH INTURNED THICKENED RIM (SB4) PI. 12:1-5

This is one of the most common types of the shallow bowl assemblage (almost 12%). It is characterised by a thickening, usually rounded but various shapes are documented, on the inside of the rim. The basin may be shallow or slightly deeper and no complete specimen has been found: flat or rounded bases may have been associated with these bowls, although a parallel from Megiddo (see below) has a ring base. Diameters range from 12 to 36 cm, with most at 20 and 30 cm.

This typology has been found in all Iron Age II levels, beginning with the transition between Iron Age I and II and reaching its highest percentage in the Late Iron Age II: a sharp decline

<sup>419</sup> Venturi 2020, Pl. 138:7.

<sup>&</sup>lt;sup>420</sup> Dornemann 2003a, fig. 82:7.

<sup>&</sup>lt;sup>421</sup> Wada 2009b, fig. 4.140:2.

<sup>&</sup>lt;sup>422</sup> Mazzoni 1992b, fig. 17:3.

<sup>&</sup>lt;sup>423</sup> Mazzoni 1987, fig. 9:22; Oggiano 1997, Pl. V:9.

<sup>&</sup>lt;sup>424</sup> Fiorentino, Marinelli 2011, fig. 12:2.

<sup>&</sup>lt;sup>425</sup> Courbin 1993, fig. 16:5.

<sup>426</sup> Pizzimenti, Zaina 2016, fig. 4:7

<sup>&</sup>lt;sup>427</sup> Luciani 2005, Pls. 10:131 (although this is a deep bowl), 40:472.

<sup>&</sup>lt;sup>428</sup> Wada 2009b, fig. 4.66:3.

<sup>&</sup>lt;sup>429</sup> Soldi 2019, fig. 12:f.

<sup>&</sup>lt;sup>430</sup> Yadin et al. 1958, Pl. LI:4.

<sup>&</sup>lt;sup>431</sup> Pucci 2019, Pl. 152:b.

can be observed with the transition to Iron Age III (Table 95).

SB4	IA I/II	IA II	LATE IA II	IA II/III
Nr.	3	11	16	2
%	9.4	34	50	6.2

Table 95: SB4 chronological distribution.

Red Slip is present on most sherds, that is almost 66% of the assemblage.

This typology is well attested in Syrian assemblages in the Iron Age II and III, such as Hama (Période E2),<sup>432</sup> Tell 'Acharneh,<sup>433</sup> Tell Mardikh (phase 1),<sup>434</sup> Tell Afis (Area D levels 2 and 4<sup>435</sup> and Area G Central zone level 6),<sup>436</sup> Tell Mastuma (Stratum I-2b),<sup>437</sup> Tell Tuqan (Area D phase 1,<sup>438</sup> Area Q phase 5b<sup>439</sup> and Area T phase 3b)<sup>440</sup> and Tell Qarqur.<sup>441</sup> Red slipped versions occur at Tell Afis (Area G Central zone level 7b),<sup>442</sup> at Tell Mastuma (Stratum I-2b)<sup>443</sup> and at Tell Ahmar (Area C Stratum 2).<sup>444</sup> An analogous specimen in Red Slip, dated to the 6<sup>th</sup> century, is documented at Chatal Hüyük (Area I level 03).<sup>445</sup>

Similar bowls appear also on the Lebanese Coast: they are in fact one of the most common bowls typologies at Sarepta Area II-Y<sup>446</sup> from the Late Bronze Age (Stratum K) until the Iron Age III (Substratum C1. Anderson 1988: Table 3b Appendix C, Type X-17). It is a type particularly present in Iron Age I (Anderson 1988: 391, 398) and Early Iron Age II (Anderson 1988: 400) levels, often characterized by Red Slip in Substratum D1 (950-850/825 BC). It decreases in Substratum C2 (9<sup>th</sup> - 8<sup>th</sup> centuries BC), but is still one of the main bowl types with Red Slip treatment (Anderson 1988: 409, 411). It is also attested in Area II-X (Period VIII) and appears to be a common typology in the Late Iron Age, together with Tyre (Khalifeh 1988: 142-143). In fact, similar vessels to those of Mishrifeh, in painted or red slipped versions, are also present at Tyre (Stratum III and IV).<sup>447</sup>

<sup>432</sup> Riis. Buhl 1990, fig. 78:592.

<sup>&</sup>lt;sup>433</sup> Cooper 2006, fig. 8:10.

<sup>&</sup>lt;sup>434</sup> Pizzimenti 2018, fig. 8:4.

<sup>&</sup>lt;sup>435</sup> Mazzoni 1987, figs. 9:17, 15:21.

<sup>&</sup>lt;sup>436</sup> Cecchini 1998, fig. 27:4.

<sup>&</sup>lt;sup>437</sup> Wada 2009b, fig. 4.39:9.

<sup>&</sup>lt;sup>438</sup> Baffi 2008c, fig. 22:4.

<sup>&</sup>lt;sup>439</sup> Fiorentino 2008, fig. 17:7.

<sup>&</sup>lt;sup>440</sup> Baffi 2011d, fig. 48:10,

<sup>&</sup>lt;sup>441</sup> Dornemann 2003a, figs. 82:2-3.

<sup>&</sup>lt;sup>442</sup> Cecchini, fig. 20:12.

<sup>&</sup>lt;sup>443</sup> Wada 2009b, figs. 4.42:1, 4.57:3.

<sup>444</sup> Jamieson 2012, fig. 3.24:12.

<sup>&</sup>lt;sup>445</sup> Pucci 2019, Pl. 39:f.

<sup>&</sup>lt;sup>446</sup> Anderson 1988, Pl. 47, type X-17 (especially X-17A and X-17G).

<sup>&</sup>lt;sup>447</sup> Bikai 1978, Pls. X:26, XV:16.

Other examples (also in Red Slip Ware) from Iron Age II and III contexts occur also at Hazor (Areas A Stratum IXa and G Stratum IV)<sup>448</sup> and Megiddo (Strata IV-III)<sup>449</sup>.

# 4.2.2.5 BOWLS WITH INWARD RIM AND EXTERNAL SLIGHTLY TRIANGULAR THICKENING (SB5) **PI. 12:6-9**

This is a rare type (1.5% of the shallow bowls), which features a rounded inward-turned rim with a triangular thickening on the external surface. As in most cases, no complete vessels were found. The specimens measure between 22 and 30 cm in diameter.

It is particularly common in the transition from Iron Age I to II, while it appears more rarely in Iron Age II and in the transition between Iron Age II and III (Table 96). The single sherd from an Iron Age II/III level was retrieved from a pit, so it may be a residual sherd.

SB5	IA I/II	IA II	IA II/III
Nr.	3	1	1
%	60	20	20

Table 96: SB5 chronological distribution.

Red Slip features on 40% of the assemblage and while the percentage is quite high, in absolute numbers it corresponds to only two sherds.

Parallels are possible with other Syrian centres close to Mishrifeh especially in the Iron Age II and III: similar specimens appear in fact at Tell 'Acharneh<sup>450</sup> and Tell Abou Danne (Niveaux IIc-d).<sup>451</sup> However, as Cooper and Fortin have observed (Cooper, Fortin 2004: 27), these vessels occur also in the Iron Age I in sites like Tell Afis (Areas E1 levels 9-10<sup>452</sup> and E2-E4 phase IIIb)<sup>453</sup> and Tell Qarqur:<sup>454</sup> at least at Tell Afis, they probably originate from Late Bronze Age models (Venturi 1998: 126, fig. 5:8).

The survival of this typology is confirmed by the presence of comparable specimens in the Iron Age III at Tell Shiukh Fawqani (Area F Période IX)<sup>455</sup> and in the 6<sup>th</sup> century B.C. at Chatal Hüyük (Area II level 03),<sup>456</sup> in the latter case also in Red Slip.

<sup>448</sup> Yadin et al. 1989, Pls. CLXXVIII:7 (Red Slip), CCLIV:26.

<sup>&</sup>lt;sup>449</sup> Lamon, Shipton 1939, Pl. 25:67.

<sup>&</sup>lt;sup>450</sup> Cooper, Fortin 2004, fig. 8:1.

<sup>&</sup>lt;sup>451</sup> Lebeau 1983, Pls. X:2, XXI:2, XXIII:3-5.

<sup>&</sup>lt;sup>452</sup> Venturi 1998, fig. 5:8.

<sup>&</sup>lt;sup>453</sup> Venturi 2020, Pl. 111:5.

<sup>&</sup>lt;sup>454</sup> Dornemann 2003a, fig. 88:4.

<sup>&</sup>lt;sup>455</sup> Makinson 2005, Pls. 4:20, 5:21.

<sup>&</sup>lt;sup>456</sup> Pucci 2019, Pl. 108:a-b.

These bowls occur also in the Southern Levant, in Iron Age II contexts at Tel Dan (Area A, Structure B)<sup>457</sup> and Hazor (Area A Stratum VI<sup>458</sup> and Stratum Xb),<sup>459</sup> both in Common and Red Slip Ware.

### 4.2.2.6 BOWLS WITH TRIANGULAR RIM (SB6) PI. 13

This typology can be distinguished from the previous one by the less in-turned rim and the much more pronounced triangular thickening. Two variants have been observed: the first (SB6a) is more numerous and consists of specimens with simple triangular rims, while the second (SB6b) is characterized by an oblique T-shaped thickened or hammerhead rim. In this case also, no complete vessels have been found. These bowls display a great variety of diameters, from 14 to 32 cm, though a prevalence of 18 cm diameters can be observed. Bowls with simple triangular rim (SB6a) are documented especially in the Iron Age II, while bowls with triangular hammerhead rim (SB6b), although present in Iron Age II contexts, are more common in the transition from Iron Age II to III and attested also in the Iron Age III (Table 97).

SB6a	IA II	LATE IA II	IA II/III	IA III
Nr.	6	7	1	
% on SB6a	42.8	50	7.2	
% on SB6 tot	31.5	36.8 5.3		
SB6b				
Nr.	1	1	2	1
% on SB6b	20	20	40	20
% on SB6 tot	5.3	5.3	10.5	5.3

Table 97: SB6, chronological distribution.

Red Slip is attested on 43% of the potsherds of this typology.

Parallels for this typology are quite widespread. Regarding SB6a, parallels are possible with Syrian and Southern Anatolian sites in the Iron Age II and III: Common and Red Slip Ware

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<sup>&</sup>lt;sup>457</sup> Arie 2008, fig. 19:2.

<sup>&</sup>lt;sup>458</sup> Yadin et al. 1958, PL. LI:11 (Red Slip).

<sup>&</sup>lt;sup>459</sup> Ben-Ami 2012a, figs. 2.3:1, 14. Stratum Xb belongs to the Iron Age IIa period, which according to the excavators can be dated from the middle 10<sup>th</sup> to the early 9<sup>th</sup> century BC. Therefore, according to the chronology used at Mishrifeh, it is actually the transition from the Iron Age I to the Iron Age II.

versions are found at Tell 'Acharneh. 460 Tell Mardikh (Area E level 4). 461 Tell Afis (Areas E1 level 2,462 E2 level 2a463 and G Central zone levels 4 and 5-7b),464 Tell Mastuma (Stratum I-1),465 Tell Abou Danne (Niveau IId),466 Tell Tugan (Area T phase 3),467 Chatal Hüyük (Areas I level 04 and II level 03), 468 Zincirli<sup>469</sup> and Karkemish. 470 Other parallels are documented in the Iron Age II, especially in the 8th century BC,471 on the Levantine Coast and in the Southern Levant, at Tell Kazel (Area II level 4), 472 Tyre (Strata I-II), 473 Tel Dor (Area G phase 6a),474 Hazor (Area A Stratum VI,475 Area B Stratum Va476 and Area L Strata VI-VII)477 and Megiddo (level H-5).478

Concerning instead SB6b, parallels are attested in a more limited area in the Northern Levant: identical examples are in fact present in both Common and Red Slip Ware at Tell 'Acharneh, 479 Tell Mastuma (Strata I-2a/b and I-1), 480 Chatal Hüyük (Area IVa levels 02cd),<sup>481</sup> Karkemish (phases 9-10),<sup>482</sup> Tell Shiukh Fawgani (Area F Période IX<sup>483</sup> and Area G Period IX levels A-B). 484 Tell Sheikh Hassan 485 and Bassit (Niveau 6). 486 Most of these examples are dated to the Late Iron Age II - Iron Age III (Late 8th - 7th century BC). This variant, both in Common and Red Slip Ware, is particularly attested at Tell Afis, where it is typical of the 7<sup>th</sup> century BC (Area D levels 1-2,<sup>487</sup> Area G levels Central zone 8a-4).<sup>488</sup> Out

<sup>&</sup>lt;sup>460</sup> Cooper, Fortin 2004, fig. 11:17 (Red Slip).

<sup>&</sup>lt;sup>461</sup> Mazzoni 1992b, fig. 15:9.

<sup>&</sup>lt;sup>462</sup> Mazzoni 1998, fig. 24:5.

<sup>&</sup>lt;sup>463</sup> Degli Esposti 1998, fig. 10:15.

<sup>464</sup> Cecchini 1998, figs. 22:14-15; 26:14 (Red Slip); 31:12-14, 26, 28. Soldi 2013, fig. 3:3 (Red Slip).

<sup>&</sup>lt;sup>465</sup> Wada 2009c, fig. 5.2:4.

<sup>&</sup>lt;sup>466</sup> Lebeau 1983, Pl. XXX:2-3.

<sup>&</sup>lt;sup>467</sup> Baffi 2011d, figs. 47:11-12.

<sup>&</sup>lt;sup>468</sup> Pucci 2019, Pl. 33:g, 107:o (both in Red Slip).

<sup>&</sup>lt;sup>469</sup> Soldi 2019, figs. 5:e.

<sup>&</sup>lt;sup>470</sup> Bonomo, Zaina 2014, fig. 3:8.

<sup>&</sup>lt;sup>471</sup> 9<sup>th</sup> century specimens are however attested at Hazor (note 477) and Megiddo (note 478).

<sup>472</sup> Badre et al. 1994, fig. 28:d.

<sup>&</sup>lt;sup>473</sup> Bikai 1978 Pls. I:12 (painted), X:10.

<sup>&</sup>lt;sup>474</sup> Gilboa 2018 Pl. 20.64:16.

<sup>&</sup>lt;sup>475</sup> Yadin et al. 1960 Pl. LXVI:29-30 (brown decoration).

<sup>&</sup>lt;sup>476</sup> Yadin et al. 1960 Pl. XCII:22 (painted).

<sup>&</sup>lt;sup>477</sup> Garfinkel, Greenberg 1997 figs. III.33:6, 10, 18 (painted), III.36:6 and 9 (nr. 9 painted).

<sup>&</sup>lt;sup>478</sup> Finkelstein 2006 fig. 15.6:10.

<sup>&</sup>lt;sup>479</sup> Cooper 2006 fig. 13:8 (Red Slip).

<sup>&</sup>lt;sup>480</sup> Wada 2009b figs. 4.66:7, 4.141:6; Wada 2009c fig. 5.8:10 (Red Slip).

<sup>&</sup>lt;sup>481</sup> Pucci 2019 Pl. 131:f (Red Slip).

<sup>&</sup>lt;sup>482</sup> Pizzimenti, Zaina 2016 figs. 4:9, 5:4-5.

<sup>&</sup>lt;sup>483</sup> Makinson 2005 Pls. 5:24, 6:27.

<sup>&</sup>lt;sup>484</sup> Luciani 2005 Pls. 8:111, 9:122, 10:130, 38:463-464, 43:502.

<sup>&</sup>lt;sup>485</sup> Schneider 1999b, Abb. 7 type F:8.

<sup>&</sup>lt;sup>486</sup> Braemer 1986, fig. 4:20 (Red Slip).

<sup>&</sup>lt;sup>487</sup> Mazzoni 1987 figs. 8:6 (Red Slip), 10:1-3 (nr. 3 Red Slip).

<sup>&</sup>lt;sup>488</sup> Cecchini 1998 figs. 19:11; 21:1, 3-4, 18 (Red Slip); 26:17-18 (Red Slip); 27:12-13; 29:13 (Red Slip); 31:16 (Red Slip). Soldi 2013 fig. 3:5.

of this region, an analogous bowl was found at Hazor (Area L Strata VI)<sup>489</sup> and Megiddo (Level Q-4).<sup>490</sup> This rim typology is associated with Assyrian influence, as it is particularly common among Late Assyrian pottery (Anastasio 2010: 34; D'Agostino 2009, fig. 7 line 27; Hausleiter 2010, Taf. 53:SF 8 R1, 61:SF 25 R1-R2, 72:ST 13 R1; Kreppner 2006, Taf. 46:13; Mahmoud et al. 1988, Abb. 6:a).

The parallels confirm the chronological distribution of the specimens from Mishrifeh: the low number of SB6b in Iron Age III levels may be related to the small size of the assemblage, which is less substantial than the Iron Age II one, more than being due to a greater scarcity of these bowls.<sup>491</sup>

## 4.2.2.7 BOWLS WITH CONCAVE DEPRESSION UNDER A THICKENED RIM (SB7) PI. 14:1-2

This is an extremely rare type in the assemblage of Mishrifeh (0.7% of the shallow bowls), consisting of only a couple of Common Ware sherds from Iron Age II (50%) and Late Iron Age II (50%) contexts. As the name implies, it features bowls with an outward thickened rim with a depression under it: the rims are triangular or of the hammerhead type. The walls are rounded and no complete specimen has been found, though they probably had ring or rounded bases, according to the parallels. The diameters measure 22 and 25 cm.

This is a type well known in other Syrian centres in the Iron Age II and III, such as Tell 'Acharneh, <sup>492</sup> Tell Afis (Areas G level 2<sup>493</sup> and E2-E4 phase Ib), <sup>494</sup> Tell Mastuma (Strata I-2b and I-1), <sup>495</sup> Tell Abou Danne (Niveau IId) <sup>496</sup> and Tell Tuqan (Area T phase 3). <sup>497</sup> It is however most common in the sites of the Middle Euphrates: examples are documented in fact at Karkemish <sup>498</sup> (Phase 10a-b), <sup>499</sup> Tell Shiukh Fawqani (Area F Period IX<sup>500</sup> and Area G levels A-B) <sup>501</sup> and Tell Jurn Kabir. <sup>502</sup>

These bowls, especially but not exclusively associated with hammerhead rims, have been

<sup>&</sup>lt;sup>489</sup> Garfinkel, Greenberg 1997 fig. III.36:9 (painted).

<sup>&</sup>lt;sup>490</sup> Kleiman 2022, fig. 23.74:3 (Red Slip).

<sup>&</sup>lt;sup>491</sup> To note also that SB6b is one of the two shallow bowls types documented in Iron Age III levels at Mishrifeh (see Table 92).

<sup>&</sup>lt;sup>492</sup> Cooper 2006, fig. 6:11 (Red Slip).

<sup>&</sup>lt;sup>493</sup> Cecchini 1998, figs. 35:19-20.

<sup>&</sup>lt;sup>494</sup> Venturi 2020, Pl. 130:9.

<sup>&</sup>lt;sup>495</sup> Wada 2009b, 4.66:8, even though the sherd is quite small; Wada 2009c, fig. 5.9:11 (Red Slip).

<sup>&</sup>lt;sup>496</sup> Lebeau 1983, Pl. CVI:3.

<sup>&</sup>lt;sup>497</sup> Baffi 2011d, fig. 47:14.

<sup>&</sup>lt;sup>498</sup> Bonomi, Zaina 2014, fig. 3:18.

<sup>&</sup>lt;sup>499</sup> Pizzimenti, Zaina 2016, fig. 4:4.

<sup>&</sup>lt;sup>500</sup> Makinson 2005, Pls. 3:14, 6:30.

<sup>&</sup>lt;sup>501</sup> Luciani 2005, Pls. 7:98, 10:130, 33:392.

<sup>&</sup>lt;sup>502</sup> Eidem, Ackermann 1999, figs. 4:12, 8:7 and 11.

related to typical Assyrian forms (Cecchini 1998: 287; Pizzimenti, Zaina 2016: 374) well known from various repertoires in Assyria itself and the Western Jezirah (Anastasio 2010: 39-40, type BW\_07; D'Agostino 2009, figs. 8 line 29-28 type 256, 10:15? No number in the publication; Hausleiter 2010: Taf. 58, form 18; Kreppner 2006, Taf. 48:3; Oates 1959, Pl. XXXV: 19, 23; Lines 1954, Pl. XXXVII:5). It is understandable that they are particularly attested in the Middle Euphrates region as that area was influenced deeply by the Assyrian ceramic production and culture especially after the 9<sup>th</sup> century BC, when the area fell under the direct control of Assyria (Anastasio 2010: 14-20; Eidem, Ackermann 1999: 315; Mazzoni 2014a: 691; Steiner 2014: 678). Precise parallels for the specimen from Mishrifeh with thickened triangular rim (H 7040.11, **Pl. 14:2**) come also from Khirbet Khattuniyah (Level 4),<sup>503</sup> Khirbet Hatara (Level 8),<sup>504</sup> Assur<sup>505</sup> and Nimrud.<sup>506</sup>

Similar bowls are documented also in the northern part of the Southern Levant, in correspondence to the Assyrian expansion into the region. In the sites considered here, they are found especially at Tel Dor,<sup>507</sup> which became an Assyrian centre during the late 8<sup>th</sup> century and early 7<sup>th</sup> century (Gilboa, Sharon 2016: 243), and also at Hazor (Area A Stratum VI).<sup>508</sup>

### 4.2.2.8 ROUNDED BOWLS WITH FLAT THICKENED RIM (SB8) PI. 14:3-10

This is the most common type, representing almost 40% of the shallow bowls: it is characterised by a flat rim usually thickened both internally and externally, through in some cases the thickening may be more pronounced on one side. Notwithstanding their abundance, no complete vessel has been found and it is unclear which kind of bases were associated with them. A wide range of diameters characterises this type, from 14 to 40 cm, with a prevalence of diameters of 26, 28, 30 and 32 cm. These bowls occur in all the periods, particularly in the Iron Age II, showing an increase starting from earlier contexts and reaching their highest percentage in the Late Iron Age II. They are rare in the Iron Age I and III (Table 98).

The majority of the potsherds, 76.2%, is red slipped.

<sup>&</sup>lt;sup>503</sup> Curtis, Green 1997, fig. 37:147.

<sup>&</sup>lt;sup>504</sup> Negro 1992, fig. 1:7.

<sup>&</sup>lt;sup>505</sup> Hausleiter 2010, Taf. 27:k, 65:ST 4.8.

<sup>&</sup>lt;sup>506</sup> Hausleiter 2010, Taf. 75:SD 7.3

<sup>&</sup>lt;sup>507</sup> Gilboa, Sharon 2016, figs. 22.4:14-15. However, at Tel Dor are also attested bowls from Iron Age I levels (Area G phases "11 and 10"-7) which closely resemble the above-mentioned vessel with thickened triangular rim (H 7040.11, **PI. 14:2**. Gilboa 2018 Type BL23a, Pls. 20.3:10, 20.37:3, 20.21:7, 20.41:7, 20.42:5, 20.49:4). It is considered the local evolution of a predominant typology at Dor, particularly attested in Iron Age I levels (Gilboa 2018: 107).

<sup>&</sup>lt;sup>508</sup> Yadin et al. 1960, Pl. LXVI:21; Yadin et al. 1989, Pl. CLXXXII:4.

SB8	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	4	51	54	6	1
%	0.8	3.4	43.5	46.1	5.1	0.8

Table 98: SB8, chronological distribution.

Identical specimens occur in the Northern Levant during the Iron Age II and III: examples in Common Ware are found at Hama (Période E). 509 Tell Mastuma (Stratum I-2b), 510 Tell Tugan (Area D Phase 3),<sup>511</sup> 'Ain Dara,<sup>512</sup> Chatal Hüyük (Area I level 03)<sup>513</sup> and Tell Jurn Kabir.<sup>514</sup> Red slipped and painted vessels are attested at Tell 'Acharneh, 515 Tell Mardikh (Area G level 4),<sup>516</sup> Tell Abou Danne (Niveau IId),<sup>517</sup> Tell Mastuma (Stratum I-1),<sup>518</sup> Tell Tugan (Area Q phase 5c),<sup>519</sup> Tell Qargur,<sup>520</sup> Chatal Hüyük (Area I level 04 and Area IVa level 01).<sup>521</sup> This type is also known on the Levantine Coast and in the northern area of the Southern Levant, in both Common and Red Slip Ware and with painted decorations, at Bassit (Niveau 7),522 Tell 'Arga (Niveau 9b), 523 Sarepta Area (II,Y Substratum C1), 524 Tel Dor (Area G phase 6b),525 Tel Dan (Area T Stratum II),526 They are quite common at Hazor (Area A Strata VIII and VI,527 Area B Strata Va and III,528 Strata VIIIa529 and Vc),530

### 4.2.2.9 HEMISPHERICAL BOWLS WITH SQUARED RIM AND FLATTENED LIP (SB9) PI. 15:1-5

This is an uncommon typology (2.3% of the shallow bowls), which features two variants: the first (SB9a) is characterized by oblique convex out-turned rims, and the second (SB9b) by

<sup>&</sup>lt;sup>509</sup> Riis, Buhl 1990, fig. 78:593.

<sup>&</sup>lt;sup>510</sup> Wada 2009b, 4.45:5.

<sup>&</sup>lt;sup>511</sup> Baffi 2008c, fig. 26:3.

<sup>&</sup>lt;sup>512</sup> Stone, Zimansky 1999, fig. 70:134.

<sup>&</sup>lt;sup>513</sup> Pucci 2019, Pl. 39:b.

<sup>&</sup>lt;sup>514</sup> Eidem, Ackermann 1999, fig. 6:10.

<sup>&</sup>lt;sup>515</sup> Cooper 2006 fig. 6:17.

<sup>&</sup>lt;sup>516</sup> Mazzoni 1992b fig. 22:4.

<sup>&</sup>lt;sup>517</sup> Lebeau Pl. XII:4.

<sup>&</sup>lt;sup>518</sup> Wada 2009c fig. 5.4:14.

<sup>&</sup>lt;sup>519</sup> Fiorentino 2008 fig. 17:19.

<sup>&</sup>lt;sup>520</sup> Dornemann 2003a fig. 82:6.

<sup>&</sup>lt;sup>521</sup> Pucci 2019 Pls. 34:f, 138:d.

<sup>&</sup>lt;sup>522</sup> Braemer 1986, fig. 6:33.

<sup>&</sup>lt;sup>523</sup> Thalmann 1978 fig. 46:19 (Red Slip).

<sup>&</sup>lt;sup>524</sup> Anderson 1988 Pl. 36:3.

<sup>&</sup>lt;sup>525</sup> Gilboa 2018 Pl. 20.63:2-3 (nr. 3 painted).

<sup>&</sup>lt;sup>526</sup> Arie 2008 fig. 14:10.

<sup>527</sup> Yadin et al. 1958 Pls. LXIII:30 (Red Slip), LXVI:32-33 (Brown Slip).

<sup>&</sup>lt;sup>528</sup> Yadin et al. 1958 Pls. LXXVI:5, XCII:26 (both decorated).

<sup>&</sup>lt;sup>529</sup> Ben-Ami 2012b fig. 3.7:4 (Red Slip).

<sup>&</sup>lt;sup>530</sup> Sandhaus 2012 fig. 4.33:5 (Red Slip).

rectangular-shaped rims. Through no complete specimens are attested, it seems probable that they had flat or rounded bases. The diameters of the bowls vary from 20 to 32 cm, with a prevalence of vessels of 26 cm.

SB9a comes exclusively from Late Iron II contexts, while SB9b can be found in the whole Iron Age II (Table 99).

SB9a	IA II	LATE IA II
Nr.		4
% on SB9a		100
% on SB9 tot		57.1
SB9b		
Nr.	2	1
% on SB9b	66.7	33.3
% on SB9 tot	28.6	14.3

Table 99: SB9, chronological distribution.

Red Slip is present on most of the sherds, that is 71.5% of the assemblage.

Parallel for the first sub-type (SB9a) – in both Common and Red Slip Ware versions – are limited to a few Syrian sites in the Iron Age II (especially Late Iron II) and III, such as Tell 'Acharneh, <sup>531</sup> Tell Mardikh (Area E level 4), <sup>532</sup> Tell Afis (Area G Central zone level 5) <sup>533</sup> and Tell Mastuma (Stratum I-1). <sup>534</sup> Analogous vessels are also documented in the 'Amuq Valley, at Chatal Hüyük (Area IVa level 02c-d), <sup>535</sup> and on the Euphrates, at Tell Shiukh Fawqani (Area G Period IX level A) <sup>536</sup> and Tell Sheikh Hassan. <sup>537</sup> One specimen (H 2875.9, **PI. 15:2**) closely resembles an Assyrianizing bowl from Khirbat Khattuniyah (level 4). <sup>538</sup>

Regarding SB9b, parallels have been found only with Hazor (Area A Stratum VIII)<sup>539</sup> from a 9<sup>th</sup> century level.

### 4.2.2.10 BOWLS WITH SEMICIRCULAR RIM OR HANDLE (SB10) PI. 15:6-9

This is another uncommon typology (2.3% of the shallow bowls) and a peculiar form. It

<sup>&</sup>lt;sup>531</sup> Cooper, Fortino 2004, fig. 11:13 (Red Slip).

<sup>532</sup> Mazzoni 1992b, fig. 15:5 (Red Slip and deep bowl).

<sup>&</sup>lt;sup>533</sup> Cecchini 1998, fig. 19:26.

<sup>&</sup>lt;sup>534</sup> Wada 2009c, fig. 5.9:10 (Red Slip)

<sup>&</sup>lt;sup>535</sup> Pucci 2019, Pl. 135:a.

<sup>&</sup>lt;sup>536</sup> Luciani 2005, Pl. 40: 476.

<sup>&</sup>lt;sup>537</sup> Schneider 1999a, Abb. 5 type 5:2.

<sup>&</sup>lt;sup>538</sup> Curtis, Green 1997, fig. 37:156.

<sup>&</sup>lt;sup>539</sup> Yadin et al. 1960, Pl. LIV:14.

includes a series of bowls with rounded rim and/or a small semicircle-profiled handle on the rim. Often the fragments are so small that it is impossible to distinguish the rim from the handle: in a few cases the rim associated with the handle seems to be squared. Since no complete specimen have been recovered and the potsherds are small, it is not possible to hypothesize the shape of the bases. The vessels range from 14 to 26 cm in diameter and are attested in Iron Age II levels (Table 100).

SB10	IA II	LATE IA II
Nr.	4	5
%	44.4	55.6

Table 100: SB10, chronological distribution.

The majority, almost 86%, of the sherds of this type is red slipped.

For this type of bowls comparisons are limited to Northern Syria and Southern Anatolia: similar vessels in Common Ware are found at Tell Mastuma (Stratum I-2b),<sup>540</sup> Tell Tayinat<sup>541</sup> and Tell Shiukh Fawqani (Area G Period IX level A). <sup>542</sup> Examples in Red Slip are documented instead at Tell Qarqur<sup>543</sup> and Chatal Hüyük (Area II level 03).<sup>544</sup>

The only other parallel found out of this region comes from Hazor (Stratum VI).545

From a chronological point of view, most comparisons date to the Iron Age II, though earlier (Tell Tayinat, Late Iron Age I/Early Iron Age II) and later (Chatal Hüyük, 6<sup>th</sup> century B.C.) examples are attested.

#### 4.2.2.11 BOWLS WITH OUTWARD SWOLLEN RIM (SB11) PI. 16

This is a typology quite attested among the shallow bowls (9%). Specimens feature a more or less pronounced outward rim, often rounded but some variability is observed, and rounded walls. As usual, no complete vessel was found: however, observing the curve of the walls it is probable the bowls had flat or rounded bases. They had diameters from 16 to 34 cm, with a prevalence of 20 and 22 cm.

These bowls start to appear in the transition from the Iron Age I to II, increasing in the Iron Age II: they decrease with the transition to the Iron Age III (Table 101).

<sup>&</sup>lt;sup>540</sup> Wada 2009b, figs. 4.11:21, 4.90:12.

<sup>&</sup>lt;sup>541</sup> Osborne et al. 2019, fig. 13:9.

<sup>&</sup>lt;sup>542</sup> Luciani 2005, Pl. 41:481.

<sup>&</sup>lt;sup>543</sup> Dornemann 2003a, fig. 82:10,

<sup>&</sup>lt;sup>544</sup> Pucci 2019, Pl. 108:g.

<sup>&</sup>lt;sup>545</sup> Sandhaus 2012, fig. 4.8:8.

Red Slip is documented on a large number of sherds (almost 41%) and painted decorations are attested as well, however on only 7.5% of the bowls.

SB11	IA I/II	IA II	LATE IA II	IA II/III
Nr.	2	11	9	5
%	7.4	40.8	33.3	18.5

Table 101: SB11 chronological distribution.

Analogous vessels can be found in the Syrian area and in the 'Amuq Valley in the Iron Age II and III. Common Ware specimens are attested at Tell 'Acharneh,<sup>546</sup> Tell Mardikh (phase 1<sup>547</sup> and Area E level 4),<sup>548</sup> Tell Afis (Areas D levels 3 and 5,<sup>549</sup> E1 level 2<sup>550</sup> and G East zone level 3),<sup>551</sup> Tell Mastuma (Strata I-2a/b and I-1),<sup>552</sup> Tell Tuqan (Areas D phases 1-2<sup>553</sup> and Q phase 5b),<sup>554</sup> Tell Abou Danne (Niveau IId),<sup>555</sup> 'Ain Dara<sup>556</sup> and Tell Shiukh Fawqani (Area G Period IX level A).<sup>557</sup> Red slipped versions can be found at Tell 'Acharneh,<sup>558</sup> Tell Afis (Area G Central zone level 2),<sup>559</sup> Tell Tuqan (Area D phase 1)<sup>560</sup> and Chatal Hüyük (Area II level 03 and Area IVa level 02c-d).<sup>561</sup> Parallels are possible also with the Southern Levant, at Tyre (Stratum IV)<sup>562</sup> and Dor (Area G phase 6a).<sup>563</sup> While painted decorations are present at Mishrifeh, the only comparable painted example is a bowl from Hazor (Area L Stratum VII).<sup>564</sup>

### 4.2.2.12 BOWLS WITH EVERTED RIM (SB12) PI. 17:1

This is the rarest shallow bowl typology at Mishrifeh. It consists of merely one painted

<sup>&</sup>lt;sup>546</sup> Cooper 2006, fig. 8:8.

<sup>&</sup>lt;sup>547</sup> Pizzimenti 2018, fig. 8:6.

<sup>&</sup>lt;sup>548</sup> Mazzoni 1992b, fig 15:8.

<sup>&</sup>lt;sup>549</sup> Mazzoni 1987, figs. 14:8, 20:5.

<sup>&</sup>lt;sup>550</sup> Mazzoni 1998, fig. 24:9.

<sup>&</sup>lt;sup>551</sup> Cecchini 1998, fig. 14:16. This is the earliest parallel found, dated in fact to the late 10<sup>th</sup> and beginning of the 9<sup>th</sup> century BC (that is, the transition between the Iron Age I and II). This bowl closely resembles the specimen from transitional Iron Age I/II levels of Mishrifeh, as already discussed in Chapter 3.4.3.

<sup>&</sup>lt;sup>552</sup> Wada 2009b, figs. 4.28:5, 4.34:7, 4.66:4, 4.72:2, 4.99:8; Wada 2009c fig. 5.5:34.

<sup>&</sup>lt;sup>553</sup> Baffi 2008c, figs. 22:8 and 10, 25:2.

<sup>&</sup>lt;sup>554</sup> Fiorentino 2008, fig. 17:5.

<sup>&</sup>lt;sup>555</sup> Lebeau 1983, Pl. XXVI:5.

<sup>&</sup>lt;sup>556</sup> Stone, Zimansky 1999, fig. 70:130.

<sup>&</sup>lt;sup>557</sup> Luciani 2005, Pls. 33:400, 41:481.

<sup>&</sup>lt;sup>558</sup> Cooper 2006, figs. 6:7-8, 12-13, 15.

<sup>&</sup>lt;sup>559</sup> Cecchini 1998, fig. 35:2.

<sup>&</sup>lt;sup>560</sup> Baffi 2008c, fig. 22:9.

<sup>&</sup>lt;sup>561</sup> Pucci 2019, Pls. 102:e, 108:e, 131:d.

<sup>&</sup>lt;sup>562</sup> Bikai 1978, Pl. XV:27.

<sup>&</sup>lt;sup>563</sup> Gilboa 2018, Pl. 20.64:13,

<sup>&</sup>lt;sup>564</sup> Garfinkel, Greenberg 1997, fig. III.33:5.

specimen (0.3% of the shallow bowls) with elongated everted rim, 24 cm of diameter, found in a Late Iron II context (Operation J, Phase 5).

A similar specimen, with a smaller diameter and thinner walls, was discovered at Tell 'Acharneh. Other, more similar, red slipped parallels dated to the Late Iron Age II and Iron Age III come from Tell Afis (Area G Central zone level 6), See Tell Qarqur and Chatal Hüyük (Area II level 03). Common Ware specimens are documented over a wider area, from Tell Afis (Area G Central zone level 3), See to Tell Shiukh Fawqani (Area G Period IX level B) on the east and Tyre (Stratum III) to the south.

# 4.2.2.13 CARINATED BOWLS WITH SIMPLE OR TAPERING FLARED RIM (SB13) PI. 17:2-9

This type of bowl is one of the most common in the ceramic corpus (almost 14% of the shallow bowls). <sup>572</sup> It features bowls with a sharp carination over rounded walls and a probable rounded base, with a long flaring rim and a tapered or rounded lip. Diameters vary from 10 to 24 cm, with a clear prevalence of 18 cm specimens. The typology is attested starting from transitional Iron Age I/II with an exponential increase in the Iron Age II, while an evident drop in numbers, with the same percentage as the transitional Iron Age I/II period, can be observed in the transition to the Iron Age III (Table 102).

Red Slip occurs on the majority of the potsherds, 78%.

SB13	IA I/II	IA II	LATE IA II	IA II/III
Nr.	2	20	14	2
%	5.3	52.6	36.8	5.3

Table 102: SB13, chronological distribution.

This typology is that for which the most parallels were found. Analogous vessels are in fact widespread in Northern and Southern Levant starting from the Iron Age I to III, both in Common and Red Slip Ware. In Central-Western Syria they can be found at Hama (Période

<sup>&</sup>lt;sup>565</sup> Cooper, Fortin 2004, fig. 10:2.

<sup>&</sup>lt;sup>566</sup> Cecchini 1998, fig. 26:15.

<sup>&</sup>lt;sup>567</sup> Dornemann 2003a, fig. 82:7.

<sup>&</sup>lt;sup>568</sup> Pucci 2019, Pls.100:1, 109:k.

<sup>&</sup>lt;sup>569</sup> Cecchini 199,8 fig. 38:18. Other similar specimens, however with a deep basin, are present in the Central zone levels 8a-7b and East zone level 5 – Cecchini 1998, figs 19:6, 22:12, 38:4.

<sup>&</sup>lt;sup>570</sup> Luciani 2005, Pl. 3:31.

<sup>&</sup>lt;sup>571</sup> Bikai 1978, Pl. VIIIa:10, 24.

<sup>&</sup>lt;sup>572</sup> Some smaller fragments may have been included in the DB3 typology, due to the absence of the carination.

E),<sup>573</sup> Tell 'Acharneh,<sup>574</sup> Tell Nebi Mend (phase C),<sup>575</sup> Tell Mardikh (phase 2),<sup>576</sup> Tell Afis (Area D levels 2-5,<sup>577</sup> Area E1 level 2,<sup>578</sup> Area G North zone level 3,<sup>579</sup> Areas E2-E4 phase la<sup>580</sup> and Area B2),<sup>581</sup> Tell Mastuma (Strata I-2a/b and I-1),<sup>582</sup> Tell Abou Danne (Niveau IIc),<sup>583</sup> Tell Tuqan (Area D Phases 1 and 4a-b<sup>584</sup> and Area Q Phases 5b-c),<sup>585</sup> Tell Qarqur<sup>586</sup> and 'Ain Dara.<sup>587</sup> Similar bowls are attested also in Southern Anatolia and on the Middle Euphrates, in sites such as Tell Tayinat,<sup>588</sup> Chatal Hüyük (Area I levels 07-04, Area II level 05 and Area IVa level 01),<sup>589</sup> Zincirli,<sup>590</sup> Karkemish,<sup>591</sup> Tell Shiukh Fawqani (Area F Période IX<sup>592</sup> and Area G Period IX levels A-B),<sup>593</sup> Tell Ahmar (Area C Stratum 2),<sup>594</sup> Tell Jurn Kabir<sup>595</sup> and Tell Sheikh Hassan.<sup>596</sup> They are attested on the Levantine Coast as well, at Bassit <sup>597</sup>and Tell Sukas.<sup>598</sup>

As mentioned above, parallels are present also in the north region of the Southern Levant, at Tel Dan (Area A), <sup>599</sup> Tel Dor, <sup>600</sup> Hazor (Strata Xa, <sup>601</sup> IXa, <sup>602</sup> VIIa, <sup>603</sup> and VI) <sup>604</sup> and Megiddo (Arie 2013: 682-683, fig. 13.1 BL41 and 41a. Strata XIIIa-XI, <sup>605</sup> XII-XI, <sup>606</sup> X, <sup>607</sup>

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<sup>573</sup> Riis, Buhl 1990, figs. 78:596-599 (Red Slip).
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<sup>&</sup>lt;sup>574</sup> Cooper, Fortin 2004, fig. 8:6.

<sup>&</sup>lt;sup>575</sup> Whincop 2007, fig. 10:b.

<sup>&</sup>lt;sup>576</sup> Pizzimenti 2014-2015, figs. 2:4-5.

<sup>&</sup>lt;sup>577</sup> Mazzoni 1987, figs. 9:6, 14:3 (Red Slip), 15:9-13 (nr. 9 Red Slip), 20:1.

<sup>&</sup>lt;sup>578</sup> Mazzoni 1998, fig. 24:6 (Yellow Slip).

<sup>&</sup>lt;sup>579</sup> Cecchini 1998, fig. 38:17.

<sup>&</sup>lt;sup>580</sup> Venturi 2020, Pls. 131:4, 133:4.

<sup>&</sup>lt;sup>581</sup> Mazzoni et al. 2005, figs. 34:4-7.

<sup>&</sup>lt;sup>582</sup> Wada 2009b, fig. 4.18:3 and 10, 4.20:2, 4.21:2, 4.28:8, 4.34:19, 4.41:11, 4.56:5, 4.97:11 (Red Slip), 4.121:3 (Red Slip); Wada 2009c, figs. 5.2:6, 5.8:5-6 (nr. 6 Red Slip).

<sup>583</sup> Lebeau, Pl. CII:2.

<sup>&</sup>lt;sup>584</sup> Baffi 2008c, figs. 23:1-5, 27:5-6, 29:5 (Red Slip).

<sup>&</sup>lt;sup>585</sup> Fiorentino 2008, fig. 17:18 (Red Slip); Fiorentino, Marinelli 2011 fig. 12:12 (Red Slip).

<sup>&</sup>lt;sup>586</sup> Dornemann 2003a, figs. 82:20-22, 24-25 (nr. 20 Red Slip).

<sup>&</sup>lt;sup>587</sup> Stone, Zimansky 1999, fig. 70:183.

<sup>&</sup>lt;sup>588</sup> Osborne et al. 2019, fig. 29:8.

<sup>&</sup>lt;sup>589</sup> Pucci 2019, Pls. 9:d (painted), 14:b, 22:a-d (Red Slip), 23:b, 34:i (Red Slip), 90:e (Red Slip), 139:k (Red Slip).

<sup>&</sup>lt;sup>590</sup> Soldi 2019, fig. 14:c.

<sup>&</sup>lt;sup>591</sup> Bonomo, Zaina 2014, fig. 3:17.

<sup>&</sup>lt;sup>592</sup> Makinson 2005. Pls. 8:44. 10:56-58.

<sup>&</sup>lt;sup>593</sup> Luciani 2005, Pls. 4:46, 5:69, 34:413, 36:434-435 (nr. 434 Red Slip).

<sup>&</sup>lt;sup>594</sup> Jamieson 2012, figs. 3.24:5 (Red Slip), 3.25:20.

<sup>&</sup>lt;sup>595</sup> Eidem, Ackermann 1999, figs. 6:1-3, 8:4.

<sup>&</sup>lt;sup>596</sup> Schneider 1999a, Abb. 7 type 11:3; Schneider 1999b, Abb. 1 type Ab, Abb. 2 type Ac and Ad.

<sup>&</sup>lt;sup>597</sup> Braemer 1986, fig. 3:8 (Red Slip).

<sup>&</sup>lt;sup>598</sup> Riis et al. 1996, fig. 27:XIIB 2 6047 SH 27

<sup>&</sup>lt;sup>599</sup> Arie 2008, fig. 19:6 (Red Slip).

<sup>&</sup>lt;sup>600</sup> Gilboa 2018, Pl. 20.72:3; Gilboa, Sharon 2016 figs. 22.3:5, 7-10.

<sup>&</sup>lt;sup>601</sup> Ben-Ami 2012a, fig. 2.6:16 (Red Slip).

<sup>602</sup> Yadin et al. 1989, Pl. CLXXVIII:31 (Red Slip).

<sup>&</sup>lt;sup>603</sup> Ben-Ami 2012b, fig. 3.19:23.

<sup>604</sup> Yadin et al. 1960, Pl. LXVII:5 (Red Slip).

<sup>&</sup>lt;sup>605</sup> Loud 1948, Pl. 19:5.

<sup>606</sup> Loud 1948. Pl. 37:4.

<sup>607</sup> Loud 1948, Pl. 44:19.

VIII.608 Vb.609 Va/IVb-IV610, level Q-4).611

These bowls have been related to Assyrian or Assyrianizing ceramic production (Adachi 1997; Baffi 2008c: 126; Cecchini 1998: 293-294; Oggiano 1997: 189; Pizzimenti 2016: 480; Soldi 2019: 177-178; Wada 2009d: 360). 612 At Mishrifeh, however, this is probably not a direct connection.

The Assyrian conquest of Central-Western Syria took place especially in the 8<sup>th</sup> century BC (Akkermans, Schwartz 2003: 378-379; Steiner 2014: 678) and forms that can be attributed to Late Assyrian tradition or influence are quite scarce in the ceramic repertoire of Mishrifeh. In fact, the Assyrianizing typologies (SB6b, SB7) represent 0.51% of the Iron Age pottery corpus, corresponding to 7 sherds (Chapter 6.1). As discussed above, sherds of the SB13 typology, although small fragments, were already found in transitional Iron Age I/II contexts and are particularly common in earlier Iron Age II levels: in the Iron Age III, the time when a stronger Late Assyrian influence might be expected, they are completely absent. This is also in clear contradiction with most of the parallels from other Syrian sites, where these bowls are especially common in the Late Iron Age II and Iron Age III (Late 8<sup>th</sup> – 7<sup>th</sup> century BC). Moreover, Late Assyrian specimens in terms of shape are not always identical to those of Mishrifeh: for example, the carination often appears sharper and more pronounced or complex (e.g. at Nimrud. Lines 1954, Pl. XXXVII:7-9; Oates 1959, Pls. XXXV:20, XXXVII:59). Also the rim shape of some vessels from Tell Sheikh Hamad is different (Kreppner 2006, Taf. 96:3).

Iron Age I or earlier Iron Age II specimens are documented especially at Chatal Hüyük and at Hazor and Megiddo (see above). Marina Pucci, for example, does not see these bowls as being derived from Assyrian forms, but rather as a local form since the vessels from Chatal Hüyük have different sizes, bases and fabrics compared to Late Assyrian types and appear already in the Iron Age I (Communication 12<sup>th</sup> ICAANE; Pucci 2019: 189-190, 210-211). Also at Tell Qarqur carinated bowls occur during the whole Iron Age II and are not limited to the Late Iron Age II (Dornemann 2003a: 44). The parallels from Hazor and Megiddo belong to a period between the 10<sup>th</sup> and 8<sup>th</sup> centuries and red slipped examples are documented from the 10<sup>th</sup> century BC. Moreover, older types were discovered at Nippur in the Kassite period and at Tarsus starting from the 11<sup>th</sup> century BC (Adachi 1997: 52, Table

<sup>&</sup>lt;sup>608</sup> Loud 1948, Pl. 61:7.

<sup>&</sup>lt;sup>609</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.23:21; Lamon, Shipton 1939 Pl. 31:144 (painted).

<sup>&</sup>lt;sup>610</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.36:3; Lamon, Shipton 1939 Pl. 28:93a.

<sup>&</sup>lt;sup>611</sup> Kleiman 2022, fig. 23.53:5 (Red Slip).

<sup>&</sup>lt;sup>612</sup> For the carinated bowls in Late Assyrian contexts: Anastasio 2010, Plate 15 (type BW 30); D'Agostino 2009, fig. 10; Hausleiter 2010, Taf. 75 (SD 4 and 5); Kreppner 2006, Taf. 96:3-4; Lines 1954, Pl. XXXVII:7-9.

1 and fig. 8). Adachi concludes that fine carinated bowls appeared before the 10<sup>th</sup> century and that what he calls "Syrian group", with shapes similar to the vessels from Mishrifeh, disappeared under Assyrian rule (Adachi 1997: 52).

In conclusion, the carinated bowls at Mishrifeh do not seem to be related to Late Assyrian influence. The fabrics are local, and there is a clear lineage from Iron Age I forms, they do not appear suddenly in the pottery assemblage, but on the contrary they disappear with the transition to Iron Age III. They seem more to be part of the local Levantine ceramic assemblage, as indicated by the presence of identical bowls in Iron Age I contexts at Chatal Hüyük, Hazor and Megiddo.<sup>613</sup>

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<sup>&</sup>lt;sup>613</sup> On the true impact of Assyrian presence in the Levant, see also the overview presented by Margreet Steiner (Steiner 2014).

#### 4.2.3 DEEP BOWLS

Deep bowls have greater volume than the previous form: they could probably contain both liquids and solid materials and particularly the smaller ones with hemispherical bodies could have been utilized as drinking vessels.

Red Slip appears on almost 24% of the assemblage, a much lower percentage than shallow bowls, and painted potsherds are scarce, at 2.7%. The most common types are the bowls with internal angular thickening, both with externally thickened rim (DB8, 36.3%) and inward rim (DB9, 16.3%), followed by bowls with round rim (DB1, 17.2%).

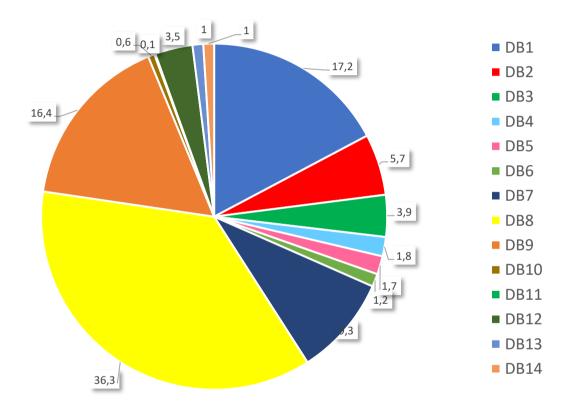


Fig. 248: Deep bowls – percentage occurrence of typologies.

	DB1	DB2	DB3	DB4	DB5	DB6	DB7	DB8	DB9	DB10	DB11	DB12	DB13	DB14
IA III	Х	Х			Х	Х	Х	Х	Х				Х	
IA II / III	Х	Х	Χ	Х	Х		Х	Х	Х			Х	Χ	
Late IA II	Х	X	X	Х	X	Х	X	X	Х	Х		X	X	Χ
IA II	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
IAI/II			Х		Х		Х	Х	Х			Х		
IA Ic			Х					Х						

Table 103: Deep bowls – chronological distribution of the typologies.

#### 4.2.3.1 BOWLS WITH SIMPLE ROUND RIM (DB1) PI. 18

As mentioned above, this is one of the most common deep bowl typologies (about 17%). It includes a series of vessels with round rim and mostly rounded walls,<sup>614</sup> with a hemispherical shape, and round bases (SF H 6676.702, **PI. 18:4**). Specimens display a great variety of diameters, from 10 to 36 cm, with a marked prevalence of 16 and 18 cm diameters.

These bowls are quite common in the whole Iron Age II, only to diminish notably in the transition to the Iron Age III (Table 104).

The majority of the sherds are either red slipped, 66%, or painted, 7.6%.

DB1	IA II	LATE IA II	IA II/III	IA III
Nr.	77	55	12	1
%	53.1	37.9	8.3	0.7

Table 104: DB1, chronological distribution.

Parallels are widespread all over the Levant in the Iron Age II and III. Common Ware examples are attested at Hama (Période E1), <sup>615</sup> Tell 'Acharneh, <sup>616</sup> Tell Mardikh (Area E level 4), <sup>617</sup> Tell Afis (Area D levels 3-4 and 6<sup>618</sup> and Area G Central zone level 8b), <sup>619</sup> Tell Mastuma (Strata I-2b and I-1), <sup>620</sup> Tell Tuqan (Area D phase 5, <sup>621</sup> Area Q phase 5c <sup>622</sup> and Area T phase 3b), <sup>623</sup> 'Ain Dara (Phase XII), <sup>624</sup> Karkemish <sup>625</sup> and Tell Shiukh Fawqani (Area G Period IX levels A-B) <sup>626</sup>. Red slipped or otherwise decorated specimens occur more frequently in Northern Levantine sites such as Tell 'Acharneh, <sup>627</sup> Tell Mardikh (Area E level 4), <sup>628</sup> Tell Afis (Area D level 6, <sup>629</sup> Area E2 level 1 <sup>630</sup> and Area G Central zone levels 7b-6), <sup>631</sup> Tell Mastuma

<sup>&</sup>lt;sup>614</sup> Specimens with straight walls are also documented.

<sup>&</sup>lt;sup>615</sup> Riis, Buhl 1990, fig. 73:518.

<sup>616</sup> Cooper 2006, figs. 8:1-3.

<sup>617</sup> Mazzoni 1992b, fig. 15:3.

<sup>618</sup> Mazzoni 1987, figs. 14:4, 15:6 and 8, 21:2-4 and 6.

<sup>&</sup>lt;sup>619</sup> Cecchini 1998, fig. 18:6.

<sup>&</sup>lt;sup>620</sup> Wada 2009b, figs. 4.39:4, 4.99:4; Wada 2009c figs. 5.2:5, 5.9:5.

<sup>&</sup>lt;sup>621</sup> Baffi 2008c, fig. 30:2.

<sup>&</sup>lt;sup>622</sup> Fiorentino 2008, fig. 17:16.

<sup>623</sup> Baffi 2011d, fig. 47:20, 49:5.

<sup>624</sup> Stone, Zimansky 1999, fig. 74:5.

<sup>625</sup> Bonomo, Zaina 2014, fig. 3:5.

<sup>&</sup>lt;sup>626</sup> Luciani 2005, Pls. 4:52 and 56, 5:59, 32:387-388, 35:419.

<sup>&</sup>lt;sup>627</sup> Cooper 2006, figs. 1:2, 5:3.

<sup>&</sup>lt;sup>628</sup> Mazzoni 1992b, fig. 15:4.

<sup>&</sup>lt;sup>629</sup> Mazzoni 1987, fig. 21:5.

<sup>&</sup>lt;sup>630</sup> Degli Esposti 1998, fig. 10:10.

<sup>631</sup> Cecchini 1998, figs. 20:8-10 and 13, 26:9.

(Strata I-2a/b and I-1), <sup>632</sup> Tell Tuqan (Area D phase 2 <sup>633</sup> and Q phases 5a-c), <sup>634</sup> Tell Qarqur, <sup>635</sup> Tell Tayinat, <sup>636</sup> Chatal Hüyük (Area I level 3 and Area II level 4) <sup>637</sup> and Zincirli. <sup>638</sup> Vessels either painted or in Red Slip are also documented on the Costal and the northern region of the Southern Levant, at Bassit (Niveau 7), <sup>639</sup> Tell Kazel (Area I), <sup>640</sup> Tyre (Strata II-III and IX), <sup>641</sup> Hazor (Strata VIII, <sup>642</sup> VI<sup>643</sup> and V) <sup>644</sup> and Megiddo (Strata V and IV-II<sup>645</sup>, Area Q). <sup>646</sup>

### 4.2.3.2 BOWLS WITH TAPERING RIM (DB2) PI. 19:1-5

These vessels may be considered a variant of the DB1 type, as they share the same forms, hemispherical or more straight-walled, although they are much less present in the assemblage (5.7% of the deep bowls). The only significant change is the shape of the rim, which is in fact tapered. Though no complete specimens were found, it is probable that this type also had a round base, like DB1. Diameters range from 6 to 26 cm, with a prevalence of 14, 16 and 18 cm.

The typology is particularly attested in the Iron Age II, while finds decline in the Late Iron Age II and in the transition to the Iron Age III. Only sporadic specimens are documented for the Iron Age III (Table 105).

DB2	IA II	LATE IA II	IA II/III	IA III
Nr.	42	13	9	2
%	63.7	19.7	13.6	3

Table 105: DB2, chronological distribution.

Just a few of the sherds belonging to this typology are in Common Ware; about 85% of them are characterised by Red Slip and 4.1% are painted. Notably, the large majority of them is

<sup>&</sup>lt;sup>632</sup> Wada 2009b, figs. 4.29:3, 4.56:2, 4.60:2, 4.108:5 (painted); Wada 2009c, fig. 5.5:11.

<sup>633</sup> Baffi 2008c, fig. 25:6.

<sup>634</sup> Fiorentino 2008, fig. 14:13.

<sup>635</sup> Dornemann 2003a, figs. 81:22-23.

<sup>&</sup>lt;sup>636</sup> Osborne et al. 2019, fig. 17:3.

<sup>&</sup>lt;sup>637</sup> Pucci 2019, Pls. 39:e, 93:d (painted), 96:b.

<sup>638</sup> Soldi 2019, figs. 12:c-d.

<sup>&</sup>lt;sup>639</sup> Braemer 1986, fig. 5:24 (Red Slip).

<sup>640</sup> Badre, Gubel 1999-2000, fig. 6:j.

<sup>&</sup>lt;sup>641</sup> Bikai 1978, Pls. X:15-16, 20 (painted), 21-22; XIX:5,8.

<sup>642</sup> Yadin et al. 1958, Pl. XLVIII:3.

<sup>643</sup> Sandhaus 2012, fig. 4.2:9.

<sup>&</sup>lt;sup>644</sup> Garfinkel, Greenberg 1997, Pl. III.42:1; Sandhaus 2012, fig. 4.15:2; Yadin et al. 1958, Pl. LIII:6; Yadin et al. 1960, Pl. LXXV:3 (red slipped and painted).

<sup>645</sup> Lamon, Shipton 1939, Pls. 24:54 (red wash), 31:143 (painted).

<sup>&</sup>lt;sup>646</sup> Kleiman 2022, fig. 23.5 BL31a.

decorated with either Red Slip or paint.

Identical vessels are ubiquitous in Iron Age II and III Syria and South-Eastern Anatolia. Close parallels in Common Ware can be found at Hama (Période E),<sup>647</sup> Tell Mardikh (phase 2<sup>648</sup> and Area E level 4),<sup>649</sup> Tell Afis (Areas E2-4 phase Ia),<sup>650</sup> Tell Tuqan (Area D phase 4a),<sup>651</sup> Tell Shiukh Fawqani (Area G Period IX levels A-B),<sup>652</sup> Tell Ahmar (Area C Stratum 2)<sup>653</sup> and Tell Jurn Kabir.<sup>654</sup>

Red Slip specimens are attested at Hama (Période E),<sup>655</sup> Tell 'Acharneh,<sup>656</sup> Tell Nebi Mend (phase C),<sup>657</sup> Tell Afis (Area G Central zone levels 8b and 7b),<sup>658</sup> Tell Qarqur,<sup>659</sup> Chatal Hüyük (Area II level 03),<sup>660</sup> Zincirli.<sup>661</sup> Red slipped or decorated versions are particularly present on the Coastal Levant and the northern area of the Southern Levant, at Bassit (Niveaux 4b, 6-7),<sup>662</sup> Tell Kazel (Area II level 4),<sup>663</sup> Tell 'Arqa (Niveau 9),<sup>664</sup> Sarepta (Area II,Y Substratum D1),<sup>665</sup> Tel Dan (Areas T Strata IVa and II),<sup>666</sup> Hazor (Strata V-VI<sup>667</sup> and VIII)<sup>668</sup> and Megiddo (Strata IV-II<sup>669</sup>, Level Q-4).<sup>670</sup>

### 4.2.3.10 DEEP BOWLS WITH FLARING STRAIGHT WALLS (DB3) PI. 19:6-11

This typology includes vessels with mostly straight oblique walls: fragments of small dimensions which might have belonged to other typologies have also been inserted. This is particularly the case for SB13: when sherds are too small it was quite difficult to distinguish between the DB3 and SB13 types, thus if there was no sign of carination it was considered

<sup>&</sup>lt;sup>647</sup> Riis, Buhl 1990, fig. 72:501.

<sup>648</sup> Pizzimenti 2014-2015, fig. 2:8.

<sup>649</sup> Mazzoni 1992b, fig. 15:1.

<sup>650</sup> Venturi 2020, Pl. 137:12-13, 16.

<sup>651</sup> Baffi 2008c, fig. 27:10.

<sup>652</sup> Luciani 2005, Pls. 4:40-42 and 54, 35:418 and 420.

<sup>653</sup> Jamieson 2012, fig. 3.25:17.

<sup>654</sup> Eidem, Ackermann 1999, fig. 6:5.

<sup>655</sup> Fugmann 1958, fig. 310: 8A151.

<sup>&</sup>lt;sup>656</sup> Cooper 2006, fig. 1:3.

<sup>&</sup>lt;sup>657</sup> Whincop 2007, fig. 10:a.

<sup>&</sup>lt;sup>658</sup> Cecchini 1998, figs, 18:3, 20:11. Type DB2, together with its variant with round rim, in the Red Slip version is attested at Tell Afis Area G also in levels 7-2 (7<sup>th</sup>-6<sup>th</sup> century BC), Cecchini 1998: 286.

<sup>659</sup> Dornemann 2003a, fig. 81:24.

<sup>&</sup>lt;sup>660</sup> Pucci 2019, Pl. 107:f-j, I.

<sup>&</sup>lt;sup>661</sup> Soldi 2019, fig. 12:e.

<sup>&</sup>lt;sup>662</sup> Braemer 1986, figs. 2:5, 3:11, 5:23 (this last specimen both red slipped and painted).

<sup>&</sup>lt;sup>663</sup> Badre et al. 1994, fig. 28:b.

<sup>664</sup> Thalmann 1978, fig. 45: 8 (Red Slip), 9 (painted).

<sup>665</sup> Anderson 1988, Pl. 33:19.

<sup>666</sup> Arie 2008 figs., 9:16-17, 14:11. At Dan Common Ware examples also occur, Arie 2008, figs. 19:4-5.

<sup>&</sup>lt;sup>667</sup> Sandhaus 2012, figs. 4.26:3, 4.31:7-8 (Red Slip); Yadin et al. 1989 Pls. CLXXXI:17 (Red Slip).

<sup>668</sup> Yadin et al. 1960, Pl. LV:7 (painted), 8-11 (Red Slip).

<sup>669</sup> Lamon, Shipton 1939, Pl. 24:53 (Red wash).

<sup>&</sup>lt;sup>670</sup> Kleiman 2022, fig. 23.60:3 (Red Slip).

more correct to include them in the DB3 category.<sup>671</sup> The specimens have a large variety of diameters, from 12 to 38 cm; a prevalence of 16 and 20 cm can be observed.

These bowls appear already in the Iron Age Ic and then increasingly in the Iron Age II: they decline with the transition to the Iron III (Table 106).

DB3	IA Ic	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	1	16	12	5
%	2.8	2.8	45.7	34.3	14.2

Table 106: DB3, chronological distribution.

Most of the sherds, almost 61%, are red slipped. Painted ones are also attested but in smaller quantities, 6%. It is noteworthy that one sherd is both red slipped and painted (K 19.67, **PI. 19:11**).<sup>672</sup>

Regarding parallels, analogous bowls are present in Common Ware at Tell Afis (Area D levels 2-3 and 5<sup>673</sup> and Area G North zone levels 5-4),<sup>674</sup> Tell Mastuma (Stratum I-1),<sup>675</sup> Tell Abou Danne (Niveau IId),<sup>676</sup> Tell Tayinat<sup>677</sup> and Tell Shiukh Fawqani (Area G Period IX level B)<sup>678</sup>. Slipped versions are attested at Tell 'Acharneh,<sup>679</sup> Tell Afis (Area D level 6),<sup>680</sup> Tell Tuqan (Area Q Phase 5b),<sup>681</sup> Tell Qarqur<sup>682</sup> and Bassit.<sup>683</sup> These examples are dated to the Iron Age II and III.

Other parallels were found in the northern region of the Southern Levant at Hazor (Area A Stratum 4)<sup>684</sup> in the Iron Age II (9<sup>th</sup> century) and, in Red Slip, at Megiddo (Level K-3)<sup>685</sup> from Early Iron Age IIa contexts (10<sup>th</sup> century).

#### 4.2.3.3 BOWLS WITH SQUARED RIM (DB4) PI. 20:1-3

This typology is rare (1.8% of the deep bowls); it includes a series of bowls with squared

<sup>&</sup>lt;sup>671</sup> See for example T1 7529.4, **PI. 19:8**.

<sup>&</sup>lt;sup>672</sup> This particular sherd comes from Operation K, phase 5, and thus it is dated to the Iron I / Iron II transition.

<sup>&</sup>lt;sup>673</sup> Mazzoni 1987 figs. 9:19-20, 14:2 and 4, 23:2.

<sup>&</sup>lt;sup>674</sup> Cecchini 1998 figs. 38:2 and 13.

<sup>&</sup>lt;sup>675</sup> Wada 2009c fig. 5.5:14-16.

<sup>676</sup> Lebeau 1983 Pl. XV:1.

<sup>&</sup>lt;sup>677</sup> Osborne et al. 2019 fig, 29:2.

<sup>&</sup>lt;sup>678</sup> Luciani 2005 Pl. 5:60.

<sup>&</sup>lt;sup>679</sup> Cooper 2006 figs. 5:1-2, 13:1.

<sup>680</sup> Mazzoni 1987, fig. 21:1 (black slip).

<sup>&</sup>lt;sup>681</sup> Fiorentino, Marinelli 2011, fig. 12:5-6.

<sup>&</sup>lt;sup>682</sup> Dornemann 2003a, figs. 81:24, 82:17.

<sup>&</sup>lt;sup>683</sup> Braemer 1986, fig. 5:22.

<sup>&</sup>lt;sup>684</sup> Bonfil, Greenberg 1997, fig. II.40:1.

<sup>&</sup>lt;sup>685</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.18:8.

rims and usually rounded walls, although specimens with a shallower basin are present as well. An almost complete vessel (T1 7563.6, **PI. 20:3**) indicates that these bowls have round bases: they also display a wide range of diameters, from 12 to 32 cm, however 20 cm diameters are the most common.

They appear in the Iron Age II and are most common in the Late Iron Age II, only to decline sharply in the transition to the Iron Age III (Table 107).

DB4	IA II	LATE IA II	IA II/III
Nr.	7	8	1
%	43.7	50	6.3

Table 107: DB4, chronological distribution.

Red Slip occurs on the majority of the sherds, precisely on 73% of them.

Similar vessels, in both Red Slip and Common Ware, are present in a more limited number of sites than the previous deep bowl typologies. Parallels occur in the Iron Age II and III in Central-Western Syria, at Tell 'Acharneh, <sup>686</sup> Tell Mardikh (phase 1), <sup>687</sup> Tell Mastuma (Strata I-2a/b and I-1), <sup>688</sup> Tell Tuqan (Area D phase 1) <sup>689</sup> and 'Ain Dara; <sup>690</sup> in the 'Amuq Valley, at Chatal Hüyük (Area II level 03 and Area IVa level 02c-d); <sup>691</sup> on the Middle Euphrates, at Karkemish, <sup>692</sup> Tell Ahmar (Area C Stratum 2) <sup>693</sup> and Tell Shiukh Fawqani (Area G Period IX level B); <sup>694</sup> on the Levantine Coast, at Tell 'Arqa (Niveau 9b); <sup>695</sup> in the north area of the Southern Levant, at Tel Dor (Area G) <sup>696</sup> and Hazor (Area A Stratum VII). <sup>697</sup>

### 4.2.3.4 BOWLS WITH INWARD RIM AND BASIN PROFILE (DB5) PI. 20:4-9

This typology appears sporadically (it represents 1.7% of the deep bowls), but over a long timespan. It features bowls with an inward rim and a lip usually rounded or squared. A variant with a ridge in the centre of the body is attested (DB5b), although the vessels may also have

<sup>&</sup>lt;sup>686</sup> Cooper, Fortin 2004, fig. 9:6 (Red Slip).

<sup>&</sup>lt;sup>687</sup> Pizzimenti 2014-2015, fig. 4:2.

<sup>&</sup>lt;sup>688</sup> Wada 2009b, figs. 4.11:13 (Red Slip), 4.29:10, 4.139:4; Wada 2009c, fig. 5.4:10.

<sup>&</sup>lt;sup>689</sup> Baffi 2008c, fig. 22:3.

<sup>&</sup>lt;sup>690</sup> Stone, Zimansky 1999, fig. 70:136.

<sup>&</sup>lt;sup>691</sup> Pucci 2019, Pls. 101:d, 134:g (Red Slip).

<sup>692</sup> Bonomo, Zaina 2014, fig. 3:7.

<sup>&</sup>lt;sup>693</sup> Jamieson 2012, figs. 3.25:12, 14.

<sup>&</sup>lt;sup>694</sup> Luciani 2005, Pl. 9:120.

<sup>&</sup>lt;sup>695</sup> Thalmann 1978, fig. 46:1 (Red Slip).

<sup>&</sup>lt;sup>696</sup> Gilboa 2018, Pl.20.i BL 11. This is a rare typology at Dor, however present in all the sequence of Area G. (Gilboa 2018: 107).

<sup>&</sup>lt;sup>697</sup> Yadin et al. 1958, Pl. XLIX:26 (Red Slip).

grooves or small conical handles (e.g. K 237.3, **Pl. 20:7**). Diameters vary from 16 to 36 cm, but a prevalence of diameters of 16, 18 and 20 cm can be observed.

As mentioned before, this is quite a long-term typology (Table 108): it is first attested in the transition from the Iron Age I to II and then increasingly in the Iron Age II. It is still present, although rarely, in the Iron Age III. The variant with central ridge is present exclusively in Late Iron Age II and Iron Age III contexts in Operation J.

DB5a	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	5	3	2	1
% on DB5a	8.3	41.7	25	16.7	8.3
% on DB5 tot	6.7	33.3	20	13.3	6.7
DB5b					
Nr.			2		1
% on DB5b			66.7		33.3
% on DB5 tot			13.3		6.7

Table 108: DB5, chronological distribution.

This typology presents a large percentage of red slipped sherds (64%).

Parallels for this typology are found in other Central-Western and Northern Syrian sites in the Iron Age II, particularly Late Iron Age II, and III, such as Tell Nebi Mend (phase B),<sup>698</sup> Tell Afis (Area D level 2<sup>699</sup> and Area G Central zone level 2),<sup>700</sup> Tell Tuqan (Area D phases 1 and 4b).<sup>701</sup> Red Slip versions are almost exclusively attested in the DB5b variant, with parallels from Tell Afis (Area G Central zone levels 5-4 and 2<sup>702</sup> and Areas E2-4 phase Ia)<sup>703</sup> and Tell Mastuma (Stratum I-1).<sup>704</sup> These examples date the variant with central thickening to the second half of the 8<sup>th</sup> century and especially the 7<sup>th</sup> century BC, confirming the chronology of the specimens from Mishrifeh.

A red slipped specimen was found at Tell Kazel from an Iron Age I context (Area II level 5). 705

<sup>&</sup>lt;sup>698</sup> Whincop 2007, fig. 10:d.

<sup>&</sup>lt;sup>699</sup> Mazzoni 1987, fig. 9:17.

<sup>&</sup>lt;sup>700</sup> Cecchini 1998, fig. 35:7.

<sup>701</sup> Baffi 2008c, figs. 22:5, 29:3.

<sup>&</sup>lt;sup>702</sup> Cecchini 1998, figs. 21:12, 31:15; Soldi 2013, figs. 5:4,6;

<sup>&</sup>lt;sup>703</sup> This is an exception, with a DB5b in Common Ware (Venturi 2020, Pl. 137:14) and DB5a in Red Slip (Venturi 2020, Pl.137:2).

<sup>&</sup>lt;sup>704</sup> Wada 2009c, fig. 5.9:9.

<sup>&</sup>lt;sup>705</sup> Badre et al. 1990, fig. 41:b.

Furthermore, close parallels, in both Common and Red Slip Ware, are documented at Hazor also in earlier Iron Age II contexts such as Strata Xa-IXb,<sup>706</sup> and then Stratum Va.<sup>707</sup> At Hazor is also present the DB5b variant, in Red Slip, in Strata V-IV (8<sup>th</sup>-7<sup>th</sup> century BC).<sup>708</sup>

# 4.2.3.5 BOWLS WITH ROUNDED WALLS, OUT-TURNED RIM AND TAPERING LIP (DB6) **PI. 21**

This is another uncommon typology (1.2% of the deep bowls), characterised by vessels with rounded walls and an elongated outward rim. The bases can be rounded or with a central hole (SF H 5281.719, **PI. 21:2**). The bowls display a range of diameters from 10 to 24 cm, with a prevalence of 16 cm.

This type is widespread in the Iron Age II, especially Late Iron II, while it is rare in the Iron Age III (Table 109).

DB6	IA II	LATE IA II	IA III
Nr.	4	5	1
%	40	50	10

Table 109: DB6, chronological distribution.

DB6 specimens are all in Common Ware except for one vessel (10% of the assemblage) which is painted.

This typology is usually found in Late Iron Age II and Iron Age III contexts in Syria, such as Hama (Période E),<sup>709</sup> Tell Afis (Area G Central zone level 2<sup>710</sup> and Areas E2-E4 level 1<sup>711</sup> and phase Ia)<sup>712</sup> and Tell Mastuma (Stratum I-2a).<sup>713</sup> A similar example, painted, also comes from Tyre (Stratum IV).<sup>714</sup>

# 4.2.3.6 HEMISPHERICAL BOWLS WITH THICKENED RIM AND ROUNDED LIP (DB7) **PI. 22**

These bowls are widespread in the assemblage (they represent almost 10% of the deep

<sup>&</sup>lt;sup>706</sup> Ben-Ami 2012a, fig. 2.5:16, 2.14:8 (Red Slip).

<sup>&</sup>lt;sup>707</sup> Sandhaus 2012, fig. 4.24:5 (Red Slip).

<sup>&</sup>lt;sup>708</sup> Ben-Ami, Sandhaus, Ben-Tor 2012, fig. 6.2:8; Yadin et al. 1958, Pl. LXIX:30-31; Yadin et al., 1960 Pl. XCIII:13

<sup>&</sup>lt;sup>709</sup> Fugmann 1958, figs. 188:5B676, 5B686, 5A875, 5A879; 325:8A220, 8A63, 8A64, 8A70, 8A155, 8A156; Riis, Buhl 1990, fig. 80:601-603, 607, 609. See also Lehmann 1998, shape 17, fig. 4:5.

<sup>&</sup>lt;sup>710</sup> Cecchini 1998, fig. 35:11.

<sup>&</sup>lt;sup>711</sup> Degli Esposti 1998, fig. 10:21.

<sup>&</sup>lt;sup>712</sup> Venturi 2020, Pl. 138:9.

<sup>&</sup>lt;sup>713</sup> Wada 2009b, figs. 4.24:3.

<sup>&</sup>lt;sup>714</sup> Bikai 1978, Pl. XV:3.

bowls); their most prominent feature is a more or less outward and thickened rounded rim and they may have handles. It is difficult to associate a base type with them because no complete vessels were found. Their diameters range from 12 to 44 cm; diameters of 24 and 28 cm are the most common.

They begin to appear in Iron Age I/II transitional contexts and their presence increases until the Late Iron Age II. They become rarer in the transition to the Iron Age III (Table 88).

DB7	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	3	30	32	9	2
%	3.9	39.5	42.1	11.8	2.6

Table 88: DB7, chronological distribution.

A relatively high percentage of fragments (43.5%) are red slipped and a small number (2.5%) are painted.

Many parallels have been found with vessels from various Syrian sites from both Iron Age II and III contexts. Analogous specimens in Common Ware are attested, for example, at Hama (Période E),<sup>715</sup> Tell 'Acharneh,<sup>716</sup> Tell Mardikh (Phase 1),<sup>717</sup> Tell Afis (Areas D levels 1-3,<sup>718</sup> G Central zone level 7b<sup>719</sup> and E2-E4 phase Ia),<sup>720</sup> Tell Mastuma (Strata I-2b/a and I-1),<sup>721</sup> Tell Abou Danne (Niveau IId)<sup>722</sup> and Tell Tuqan (Areas D phase 2<sup>723</sup> and Q phase 5b).<sup>724</sup> Red slipped versions are present at Tell 'Acharneh,<sup>725</sup> Tell Mardikh (Area E level 4),<sup>726</sup> Tell Afis (Areas D levels 1-2<sup>727</sup> and G Central zone level 2),<sup>728</sup> Tell Mastuma (Strata I-2a/b),<sup>729</sup> Tell Tuqan (Area D phase 4a),<sup>730</sup> Tell Qarqur (Area E),<sup>731</sup> Chatal Hüyük (Areas II levels 04-03 and IVa levels 02c-01)<sup>732</sup> and Bassit (Niveau 4b).<sup>733</sup>

<sup>&</sup>lt;sup>715</sup> Fugmann 1958, fig. 325:8A51.

<sup>&</sup>lt;sup>716</sup> Cooper 2006, fig. 8:9.

<sup>&</sup>lt;sup>717</sup> Pizzimenti 2014-2015, fig. 4:6.

<sup>&</sup>lt;sup>718</sup> Mazzoni 1987, figs. 8:7, 10:14, 14:8 and 11.

<sup>&</sup>lt;sup>719</sup> Cecchini 1998, figs. 23:1,3.

<sup>&</sup>lt;sup>720</sup> Venturi 2020, Pl. 138:11.

<sup>&</sup>lt;sup>721</sup> Wada 2009b, figs. 4.18:8, 4.274, 4.34:11, 4.46:12; Wada 2009c, figs. 5.4:16, 5.5:26.

<sup>&</sup>lt;sup>722</sup> Lebeau 1983, Pl. XV:5.

<sup>&</sup>lt;sup>723</sup> Baffi 2008c, fig. 25:1.

<sup>724</sup> Fiorentino, Marinelli 2011, fig. 12:13.

<sup>&</sup>lt;sup>725</sup> Cooper 2006, figs. 6:13, 18-19; 2:8.

<sup>&</sup>lt;sup>726</sup> Mazzoni 1992b, fig. 15:5.

<sup>727</sup> Mazzoni 1987, figs. 8:4, 10:12,

<sup>&</sup>lt;sup>728</sup> Cecchini 1998, fig. 35:2.

<sup>&</sup>lt;sup>729</sup> Wada 2009b, figs. 4.34:7, 4.97:9.

<sup>&</sup>lt;sup>730</sup> Baffi 2008c, fig. 27:4.

<sup>&</sup>lt;sup>731</sup> Dornemann 2003a, fig. 82:9.

<sup>&</sup>lt;sup>732</sup> Pucci 2019, Pls. 96:e, 107:m, 108:e, 136:l, 138:c.

<sup>&</sup>lt;sup>733</sup> Braemer 1986, fig. 2:6.

Furthermore, vessels with similar rim shapes are documented in the northern part of the Southern Levant, also in earlier Iron Age contexts: Iron Age I specimens are in fact found at Tel Dor (Areas C1 Phase 7<sup>734</sup> and G Phase 10)<sup>735</sup> and Megiddo (Stratum V).<sup>736</sup> Other examples, often decorated, dated especially to the 9<sup>th</sup> century are attested at Hazor (Areas A, B, G and L Strata VIII-V).<sup>737</sup> Lastly, another similar vessel was found at Tel Dan (Area A),<sup>738</sup> in a context dated between Iron Age IIa and IIb (9<sup>th</sup> - 8<sup>th</sup> centuries BC).

# 4.2.3.7 HEMISPHERICAL BOWLS WITH EXTERNALLY THICKENED RIM AND INTERNAL ANGULAR THICKENING (DB8) Pls. 23, 24:1-2

This is the most common typology of the deep bowls, representing more than 36% of the general shape, and, in general, one of the most frequent forms in the whole ceramic assemblage. The characteristics of the type are an outward thickened rim (often rounded) and particularly an internal angular thickening, but a high degree of morphological variability can be observed. No complete vessel has been recovered; however it is probable that they had rounded or ring bases. A wide range of diameters is displayed, from 12 to 42 cm, although diameters of 22, 24, 26, 28, 30 and 32 cm are prevalent.

These bowls occur frequently in the Iron Age II, but they are attested in much lower numbers also in the Iron Age Ic, Iron Age III and the transitional phases (Table 110).

DB8	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	9	168	101	25	2
%	0.3	2.9	54.9	33	8.2	0.6

Table 110: DB8, chronological distribution.

Almost 50% of the sherds are characterised by Red Slip, while only a small percentage (2.5%) are painted.

This type is particularly common and widespread in both the Northern and Southern Levant in the Iron Age II and III, with both Common Ware and decorated (painted and slipped) versions attested. In Central-Western and Northern Syria these bowls can be found at Hama

<sup>&</sup>lt;sup>734</sup> Gilboa 1995, fig. 1.13:5.

<sup>&</sup>lt;sup>735</sup> Arie 2018, Pl. 20.2:24, 26.

<sup>&</sup>lt;sup>736</sup> Lamon, Shipton 1939, Pl. 30:114 (red wash).

<sup>&</sup>lt;sup>737</sup> Garfinkel, Greenberg 1997, fig. III.33:5; Yadin et al. 1958, Pl. XLIX:13; Yadin et al. 1960, Pl. LIV:7; Yadin et al. 1989, Pl. CCXIV:26, Pl. CCLI:9.

<sup>&</sup>lt;sup>738</sup> Arie 2008, fig. 18:5.

(Période E),<sup>739</sup> Tell 'Acharneh,<sup>740</sup> Tell Nebi Mend (phase C),<sup>741</sup> Tell Mardikh (phase 1,<sup>742</sup> Area E level 4 and Area G level 3),<sup>743</sup> Tell Afis (Areas D levels 2-6,<sup>744</sup> E1 level 2<sup>745</sup> and G levels 8b-6),<sup>746</sup> Tell Mastuma (Strata I-2a/b and I-1),<sup>747</sup> Tell Abou Danne (Niveau IId),<sup>748</sup> Tell Tuqan (Areas D phases 1 and 3,<sup>749</sup> Q phase 5a)<sup>750</sup> and Tell Qarqur.<sup>751</sup> Analogous specimens are present also on the Syrian Coast at Ibn Hani,<sup>752</sup> in the 'Amuq Valley at Chatal Hüyük (Area II levels 03-04)<sup>753</sup> and Tell Tayinat,<sup>754</sup> and on the Middle Euphrates, at Tell Shiukh Fawqani (Area G Period IX levels A and C)<sup>755</sup> and Tell Jurn Kabir.<sup>756</sup>

Bowls with the same rim type are documented from the 10<sup>th</sup> century BC also in the north area of the Southern Levant, at Sarepta (Area II,Y Substratum D1),<sup>757</sup> Tel Dor (Area C1 phases 5b and 7/8<sup>758</sup> and Area G phases "6 and later" and 7c),<sup>759</sup> Tel Dan (Areas A Structure B and T Stratum II),<sup>760</sup> Hazor (Areas A Strata V-IX/X<sup>761</sup> and B Stratum Va)<sup>762</sup> and Megiddo (Strata III and V,<sup>763</sup> levels H-4<sup>764</sup> and Q-5).<sup>765</sup>

# 4.2.3.8 DEEP BOWLS WITH INWARD RIM AND INTERNAL ANGULAR THICKENING (DB9) **PI. 24:3-9**

This typology occurs often (it represents more than 16% of the deep bowls). It differs from the previous one in the lack of an outward thickened rim, which is on the contrary turned inward. It is probable that the vessels had a rounded base considering the parallels and the

<sup>&</sup>lt;sup>739</sup> Fugmann 1958, fig. 310:7A870.

<sup>&</sup>lt;sup>740</sup> Cooper 2006, figs. 6:9 and 14 (nr. 14 Red Slip), 13:10.

<sup>&</sup>lt;sup>741</sup> Whincop 2007, fig. 10:c.

<sup>&</sup>lt;sup>742</sup> Pizzimenti 2014-2015, fig. 4:8.

<sup>&</sup>lt;sup>743</sup> Mazzoni 1992b, figs. 15:7-8, 21:16.

<sup>&</sup>lt;sup>744</sup> Mazzoni 1987, figs. 10:7, 14:5, 17:2 and 10 (nr. 10 yellow slip), 22:2-3 (nr. 2 Red Slip), 23:4-5.

<sup>&</sup>lt;sup>745</sup> Mazzoni 1998, fig. 25:5 (yellow slip).

<sup>&</sup>lt;sup>746</sup> Cecchini 1998, figs. 16:12, 18:9, 21:19 (Red Slip), 22:24, 23:4-6, 24:2, 27:19-20.

<sup>&</sup>lt;sup>747</sup> Wada 2009b, figs. 4.59:4, 4.78:17 (Red Slip), 4.94:3; Wada 2009c figs. 5.5:37, 41, 43-44, 46 (all but nr. 44 in Red Slip).

<sup>&</sup>lt;sup>748</sup> Lebeau 1983, Pl. XIX:2-4 (Red Slip).

<sup>&</sup>lt;sup>749</sup> Baffi 2008c, figs. 22:8-9, 13 (nr. 9 Red Slip), 26:4 (painted).

<sup>&</sup>lt;sup>750</sup> Fiorentino 2008, figs. 15:1, 5-6 (nrs. 1 and 5 in Red Slip); Fiorentino, Marinelli 2011 fig. 12:3.

<sup>&</sup>lt;sup>751</sup> Dornemann 2003a, figs. 82:4, 11-12 (nrs. 11 and 12 in Red Slip).

<sup>&</sup>lt;sup>752</sup> Bounni et al. 1976, fig. 27:13.

<sup>&</sup>lt;sup>753</sup> Pucci 2019, Pls. 96:h, 108:i (all vessels in Red Slip).

<sup>&</sup>lt;sup>754</sup> Osborne et al. 2019, fig. 17:13 (Red Slip).

<sup>&</sup>lt;sup>755</sup> Luciani 2005, Pls. 1:8, 33:390.

<sup>&</sup>lt;sup>756</sup> Eidem, Ackermann 1999, fig, 6:10.

<sup>&</sup>lt;sup>757</sup> Anderson 1988, Pl. 33:17 (Red Slip).

<sup>&</sup>lt;sup>758</sup> Gilboa 1995, figs. 1.11:5, 1.15:4-5 (Red Slip).

<sup>&</sup>lt;sup>759</sup> Gilboa 2018, Pls. 20.48:2, 20.73:17.

<sup>&</sup>lt;sup>760</sup> Arie 2008, figs. 14:8 (painted), 19:9.

<sup>&</sup>lt;sup>761</sup> Bonfil, Greenberg 1997, fig. II.58:2 (painted); Yadin et al. 1958, Pls. XLV:16-17 (Red Slip), XLVII:9 (decorated, perhaps painted); Yadin et al. 1960, Pls. LIV:11, LXXV:2; Yadin et al. 1989, Pl. CLXXXIX:5.

<sup>&</sup>lt;sup>762</sup> Yadin et al. 1960 Pls. LXXX:33 (decorated, perhaps painted), XCII:18 (decorated, perhaps painted).

<sup>&</sup>lt;sup>763</sup> Lamon, Shipton 1939, Pls. 27:86, 30:116 and 125 (red wash).

<sup>&</sup>lt;sup>764</sup> Finkelstein 2006, figs. 15.7:2-3.

<sup>&</sup>lt;sup>765</sup> Kleiman 2022, fig. 23.45:4 (Red Slip).

curvature of the walls. The range of diameters vary from 12 to 44 cm, with a prevalence of 22, 24, 26, 28 and 30 cm.

The typology at Mishrifeh is present in the whole Iron Age II, while it is quite rare in the Iron Age III and transitional periods (Table 111), like also DB8.

Red slipped sherds represent almost 60% of the assemblage, while painted ones are extremely scarce, 0.7%.

DB9	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	2	83	40	7	1
%	1.5	62.4	30.1	5.3	0.7

Table 111: DB9, chronological distribution.

Parallels for this typology are more limited compared to the previous type. Analogous vessels are attested in the Iron Age II and III at Tell Afis (Area G Central zone level 7b), <sup>766</sup> Tell Qarqur<sup>767</sup> and Tell Shiukh Fawqani (Area G Period IX level A). <sup>768</sup> A red slipped version is present at Chatal Hüyük (Area IVa level 02c-d). <sup>769</sup> Other parallels can be found on the Levantine Coast and in the Southern Levant at Sarepta (Area II,Y Substratum C1), <sup>770</sup> Tel Dor (Area G phase 6b) <sup>771</sup> and Hazor (Area B Stratum Va). <sup>772</sup> The specimen from Tel Dor comes from a level dated to the 10<sup>th</sup> / 9<sup>th</sup> century BC, indicating the presence of this typology already in Late Iron I contexts, as is also seen at Mishrifeh.

### 4.2.3.9 GLOBULAR DEEP BOWLS WITH (TAPERING) FLARING RIM (DB10) PI. 25:1-3

These bowls occur rarely in the assemblage (0.6% of the deep bowls). They feature an almost hemispherical basin and an elongated flaring rim which may be rounded or tapered. Considering the parallels and the curvature of the walls, they probably had rounded bases; the diameters range from 10 to 20 cm, with a distinct prevalence of 10 cm specimens.

The typology is attested in the Iron Age II (Table 112).

All the sherds found in Mishrifeh are in Common Ware.

Identical specimens are documented in Northern Syrian sites such as Tell Mardikh (phase

<sup>&</sup>lt;sup>766</sup> Cecchini 1998, fig. 22:21.

<sup>&</sup>lt;sup>767</sup> Dornemann 2003a, fig. 82:3.

<sup>&</sup>lt;sup>768</sup> Luciani 2005, Pl. 45:516.

<sup>&</sup>lt;sup>769</sup> Pucci 2019, Pl. 136:k.

<sup>&</sup>lt;sup>770</sup> Anderson 1988, Pl. 37:5.

<sup>771</sup> Gilboa 2018, Pl. 20.68:11.

<sup>772</sup> Yadin et al. 1960, Pl. XCII:17.

2),<sup>773</sup> Tell Afis (Area G Central zone level 7b),<sup>774</sup> Tell Tuqan (Area D phase 4a)<sup>775</sup> and 'Ain Dara:<sup>776</sup> an example in Red Slip is present at Tell Afis (Area D level 6).<sup>777</sup> Other parallels, painted, have been found in the 'Amuq Valley, at Chatal Hüyük (Areas I level 05 and II level 05).<sup>778</sup> Moreover, a couple of analogous vessels are attested at Hazor (Area A Strata IXb and VIII).<sup>779</sup>

DB10	IA II	LATE IA II
Nr.	3	2
%	60	40

Table 112: DB10, chronological distribution.

While the parallels from 'Ain Dara and Hazor are also attested in the Iron Age I, the chronology of the parallels from the Syrian region and Chatal Hüyük spans between the Iron Age II and III. The exact correspondence between the vessels from Mishrifeh and the Iron Age II examples from Tell Mardikh and Tell Tuqan especially fits with the chronological distribution of the DB10 typology.

### 4.2.3.11 DEEP BOWLS WITH OUTWARD FLARING RIM (DB11) PI. 25:4

This is the rarest type of deep bowl (0.1%), with only one red slipped specimen found in the assemblage, with a diameter of 20 cm. It was found in an Iron Age II level.

No precise parallels, that I know of, have been found. Very similar specimens, in Common Ware, come from Tell Shiukh Fawqani (Area G Period IX level A)<sup>780</sup> and in Red Slip Ware from Chatal Hüyük (Areas I level 04 and II level 04),<sup>781</sup> Tel Dan (Area T Stratum II)<sup>782</sup> and Tel Dor (Areas A phase 9 and C2 phase 7).<sup>783</sup> In Tyre (Stratum IV)<sup>784</sup> both Common and Red Slip Ware versions are present. The parallels, while not precise, may indicate an 8<sup>th</sup> century BC chronology for this typology.

<sup>&</sup>lt;sup>773</sup> Pizzimenti 2018, fig. 6:6.

<sup>&</sup>lt;sup>774</sup> Cecchini 1998, fig. 22:13.

<sup>&</sup>lt;sup>775</sup> Baffi 2008c, fig. 27:7.

<sup>&</sup>lt;sup>776</sup> Stone, Zimansky 1999, fig. 70:170.

<sup>777</sup> Mazzoni 1987, fig. 21:12.

<sup>&</sup>lt;sup>778</sup> Pucci 2019, Pls. 18:h, j, l; 91:b.

<sup>&</sup>lt;sup>779</sup> Yadin et al. 1958, Pl. XLVII:11; Yadin et al. 1989 Pl. CLXXV:13.

<sup>&</sup>lt;sup>780</sup> Luciani 2005, Pl. 42:493.

<sup>&</sup>lt;sup>781</sup> Pucci 2019, Pls. 33:g, 95:h.

<sup>&</sup>lt;sup>782</sup> Arie 2008, fig. 14:5.

<sup>&</sup>lt;sup>783</sup> Gilboa 1995, figs. 1.4:14, 1.8:10.

<sup>&</sup>lt;sup>784</sup> Bikai 1978, Pls. XV:5 (Red Slip), XVIa:11.

#### 4.2.3.12 BOWLS WITH SLIGHTLY PROTRUDING TAPERING RIM (DB12) PI. 26:1-6

This type occurs seldom (3.5% of the deep bowls). It includes specimens with an outward tapered rim and walls mostly rounded, but some variability can be observed; also, the inner side of the rim may be rounded or with a slight angular thickening. Diameters range between 12 and 32 cm, with a prevalence of vessels with 22 and 24 cm diameters.

While attested in the transition from the Iron Age I to II, this typology is particularly present in the Iron Age II: it diminishes in the transition to the Iron Age III (Table 113).

DB12	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	15	11	3
%	3.3	50	36.7	10

Table 113: DB12, chronological distribution.

Red Slip occurs on a relatively smaller percentage of the sherds, 34%, compared to other bowl typologies.

Parallels for this type are documented in the Syrian region during Iron Age II and III (especially 8<sup>th</sup>-7<sup>th</sup> century BC): examples in Common Ware can be found at Tell Mardikh (Area G level 4),<sup>785</sup> Tell Afis (Area E1 level 2<sup>786</sup> and Area D level 4),<sup>787</sup> Tell Mastuma (Stratum I-2b),<sup>788</sup> Tell Abou Danne (Niveau IIc),<sup>789</sup> Tell Tuqan (Area Q phase 5a)<sup>790</sup> and Tell Shiukh Fawqani (Area G Period IX level A).<sup>791</sup> Slipped versions are slightly more widespread and can be found also in sites close to Mishrifeh, such as Hama (Période E)<sup>792</sup> and Tell 'Acharneh,<sup>793</sup> then in Northern and Coastal Syria at Tell Afis (Area D level 4),<sup>794</sup> Tell Mastuma (Strata I-1 and I-2a-c)<sup>795</sup> and Tell Kazel (Area II level 5),<sup>796</sup> and in the 'Amuq Valley, at Chatal Hüyük (Areas II levels 03-04 and IVa levels 01-03a).<sup>797</sup>

Vessels with the same rim shape may also be found in the northern part of the Southern

<sup>&</sup>lt;sup>785</sup> Mazzoni 1992b, fig. 22:3.

<sup>&</sup>lt;sup>786</sup> Mazzoni 1998, fig. 24:10.

<sup>&</sup>lt;sup>787</sup> Mazzoni 1987, fig. 15:14.

<sup>&</sup>lt;sup>788</sup> Wada 2009b, fig. 4.34:8.

<sup>&</sup>lt;sup>789</sup> Lebeau 1983, Pl. CIV:5.

<sup>&</sup>lt;sup>790</sup> Fiorentino 2008, fig. 15:7.

<sup>&</sup>lt;sup>791</sup> Luciani 2005, Pl. 39:465.

<sup>&</sup>lt;sup>792</sup> Riis, Buhl 1990, fig. 78:584.

<sup>&</sup>lt;sup>793</sup> Cooper 2006, fig. 2:7.

<sup>&</sup>lt;sup>794</sup> Mazzoni 1987, fig. 17:5 (yellow slip).

<sup>&</sup>lt;sup>795</sup> Wada 2009b, figs. 4.5:3, 4.49:4, 4.50:3-4, 4.99:6, 4.107:2; Wada 2009c, fig. 5.5:36.

<sup>&</sup>lt;sup>796</sup> Badre et al. 1990, fig. 41:d.

<sup>&</sup>lt;sup>797</sup> Pucci 2019, Pls. 95:i, 101:e, 102:i, 109:e and g, 128:g, 132:e, 139:e.

Levant. Common Ware specimens are attested at Tyre (Stratum IV),<sup>798</sup> Tel Dan (Area A under Stratum C and Stratum B),<sup>799</sup> Tel Dor (Area A phase 10)<sup>800</sup> and Megiddo (level H-3).<sup>801</sup> Decorated (red slipped and painted) versions are present at Tyre (Strata III-IV),<sup>802</sup> Tel Dor (Area G phase 10)<sup>803</sup> and Hazor (Area A Stratum VIII).<sup>804</sup> Most of these last examples are dated to the 9<sup>th</sup>-8<sup>th</sup> centuries BC, although the vessels from Tel Dor appear also in earlier contexts (11<sup>th</sup> century BC).

### 4.2.3.13 BOWLS WITH OUTWARD SQUARED RIM (DB13) PI. 26:7-11

This is an uncommon typology (1% of the deep bowls), similar to the previous one but with a squared rim and usually straight walls. The bowls display diameters from 10 to 30 cm, however a prevalence of 22 cm can be observed.

The type appears in the Iron Age II; it occurs notably in the Late Iron II only to decrease gradually until the Iron Age III (Table 114).

DB13	IA II	LATE IA II	IA II/III	IA III
Nr.	1	4	3	1
%	11.1	44.4	33.3	11.1

Table 114: DB13, chronological distribution.

Red Slip is not present as much as in other typologies, characterizing 33% of the potsherds. These bowls have close parallels from a limited number of sites in the Iron Age II and III (particularly 8<sup>th</sup> – 7<sup>th</sup> centuries BC) in Central-Western Syria, that is Tell 'Acharneh, <sup>805</sup> Tell Mardikh (Area E levels 4-4b), <sup>806</sup> Tell Afis (Areas D level 4, <sup>807</sup> E1 level 2<sup>808</sup> and G Central zone levels 7b-6), <sup>809</sup> Tell Mastuma (Stratum I-2b), <sup>810</sup> and in the 'Amuq Valley, such as Tell

<sup>&</sup>lt;sup>798</sup> Bikai 1978, Pl. XVIa:10.

<sup>&</sup>lt;sup>799</sup> Arie 2008, figs. 18:10, 19:10.

<sup>800</sup> Gilboa 1995, fig. 1.1:6.

<sup>801</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.52:7

<sup>802</sup> Bikai 1978, Pl. X:31 (Red Slip) and 33 (paint), Pl. XV:2 (Red Slip), Pl. XVIa:12 (paint).

<sup>&</sup>lt;sup>803</sup> Gilboa 2018, Pl. 20.3:7-9.

<sup>804</sup> Yadin et al. 1960, Pl. LIV:10 (Red Slip).

<sup>805</sup> Cooper 2006, fig. 8:11.

<sup>806</sup> Mazzoni 1992b, fig. 15:10.

<sup>&</sup>lt;sup>807</sup> Mazzoni 1987, fig. 15:17.

<sup>&</sup>lt;sup>808</sup> Mazzoni 1998, fig. 24:7.

<sup>809</sup> Cecchini 1998, figs. 23:8-9, 27:8.

<sup>&</sup>lt;sup>810</sup> Wada 2009b, fig. 4.73:3.

Tayinat<sup>811</sup> and Chatal Hüyük (Area II level 03).<sup>812</sup> A red slipped version is present at Tell Mastuma (Stratum I-2b).<sup>813</sup> Out of this area, parallels have been found at Hazor (Area A Stratum VI).<sup>814</sup>

### 4.2.3.14 HEMISPHERICAL BOWLS WITH MODELLED RIM (DB14) PI. 27

These bowls appear rarely in the assemblage (1% of the deep bowls) and feature a mostly squared and flat rim with a pronounced thickening under it, sometimes accompanied by a handle, and curved walls. They are mostly medium-large bowls, with a limited range of diameters from 16 to 24 cm, with a prevalence of 18 and 24 cm diameters.

They are documented for the whole Iron Age II, with an increase in the Late Iron Age II (Table 115).

DB14	IA II	LATE IA II
Nr.	4	6
%	40	60

Table 115: DB14, chronological distribution.

It is remarkable that all the specimens present at Mishrifeh are red slipped.

Parallels for this typology have been found in the Northern Levant, at sites such as Tell 'Acharneh, <sup>815</sup> Tell Afis (Area G Central zone level 6 and North zone level 5), <sup>816</sup> Tell Abou Danne (Niveau IIc) <sup>817</sup> and Tell Shiukh Fawqani (Area G Period IX level A). <sup>818</sup> Red slipped versions are also well attested at Hama (Périod E), <sup>819</sup> Tell Afis (Area G level 5), <sup>820</sup> Tell Mastuma (Stratum I-2b), <sup>821</sup> Tell Abou Danne (Niveaux IIc-d), <sup>822</sup> Tell Tayinat <sup>823</sup> and Chatal Hüyük (Area I levels 06-05). <sup>824</sup> These parallels span the 9<sup>th</sup> to 7<sup>th</sup> centuries BC: in fact 9<sup>th</sup> century specimens come from the 'Amuq Valley (Chatal Hüyük), while later vessels are present at Tell Afis, Tell Abou Danne and Tell Shiukh Fawqani.

<sup>811</sup> Osborne et al. 2019, fig. 29:4.

<sup>&</sup>lt;sup>812</sup> Pucci 2019, Pl. 110:i. This specimen was found in a O\_late context (600-500 BC), which may indicate a survival of this typology at Chatal Hüyük.

<sup>&</sup>lt;sup>813</sup> Wada 2009b, fig. 4.117:2.

<sup>814</sup> Yadin et al. 1958, Pl. LI:20.

<sup>&</sup>lt;sup>815</sup> Cooper, Fortin 2004, fig. 11:14.

<sup>816</sup> Cecchini 1998, figs. 27:14-15, 38:5.

<sup>&</sup>lt;sup>817</sup> Lebeau 1983, Pl. CV:1.

<sup>818</sup> Luciani 2005, Pl. 37:453.

<sup>819</sup> Riis, Buhl 1990, fig. 78:595.

<sup>820</sup> Soldi 2013, fig. 5:9.

<sup>821</sup> Wada 2009b, figs. 4.34:14, 4.59:5, 4.66:9.

<sup>822</sup> Lebeau 1983, Pls. XIV:4, CIV:2.

<sup>&</sup>lt;sup>823</sup> Osborne et al. 2019, fig. 17:10.

<sup>824</sup> Pucci 2019, Pls. 13:f, 22:g-h.

Analogous examples are documented also on the Levantine Coast and in the northern part of the Southern Levant. Common Ware vessels are present at Tell 'Arqa (Niveau 9)<sup>825</sup> and at Tel Dor (Area G phase "6 and later"). <sup>826</sup> This type of bowl is particularly attested at Hazor (Area A Strata VII and V<sup>827</sup> and Area B Strata VII-VI and III), <sup>828</sup> especially in its Red Slip version. From a chronological point of view, these comparisons date between the 9<sup>th</sup> and the 7<sup>th</sup> century.

Some of these parallels are considered Assyrianizing vessels or connected to Assyrian types: that is, the one from Tel Dor (Gilboa 2018: 151) or the examples from Tell Afis (Cecchini 1998: 286, 293-294). While bowls with modelled rims are in fact attested in Late Assyrian pottery production (D'Agostino 2009, fig. 10:9-10? No number in the publication; Hausleiter 2010, Taf. 55-56, 62; Kreppner 2006, Taf. 7:4, 109:1), the vessels from Mishrifeh generally have a deeper, more hemispherical basin and the shape of the rim is also quite different: the thickening in the Assyrian specimens is usually more pronounced and downward-leaning. Furthermore, as mentioned above, it is a rim shape already attested in the northern part of the Southern Levant from the 9<sup>th</sup> century BC (Riis, Buhl 1990: 170).

There is only one specimen from Mishrifeh (H 3701.8, **PI. 27:1**) which may actually be considered Assyrianizing, as it closely resembles vessels from Khirbat Hatarah (level 8)<sup>829</sup> and Tell Sheikh Hamad.<sup>830</sup>

While an Assyrian influence cannot be completely excluded, and may be reflected in some vessels, the fact that no DB14 specimens were found in Iron Age III levels and that precise parallels from the Levant occur already from the 9<sup>th</sup> century seems to point more to a local Levantine origin for this typology.

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<sup>825</sup> Chaaya 2000, fig. 3:c? (no vessel number in the publication).

<sup>826</sup> Gilboa 2018, Pl. 20.73:26.

<sup>827</sup> Yadin et al. 1958, Pls. XLIX:15 (Red Slip), LIV:4, 14 (nr. 4 in Red Slip); Yadin et al. 1960, Pl. LXIII:21, 23 (nr. 23 in Red Slip); Yadin et al. 1989, Pl. CXCV:14 (Red Slip).

<sup>828</sup> Yadin et al. 1958, Pl. LXXVII:7, 22, 24 (nrs. 22 and 24 in Red Slip); Yadin et al. 1989, Pl. CCXX:14 (Red Slip).

<sup>829</sup> Negro 1997, fig. 2:18.

<sup>830</sup> Kreppner 2006, Taf. 109:1.

#### 4.2.4 KRATERS

Kraters are a distinctive form that may be considered an intermediate shape, neither open nor closed: in fact, they have a wide mouth with straight walls and normally a wider basin, so that often their body diameter is wider than the opening. The large orifice seems to indicate the need for easy access to the contents inside: kraters in Greek tradition were used to mix liquids to prepare alcoholic drinks, especially water and wine, and this is also presumed for Near Eastern tradition, though perhaps they were also employed for food processing purposes (Janeway 2017: 61-62; Venturi 2020: 47-48). Considering that in Mishrifeh most of the vessels – 83% – are either red slipped (64%) or painted (19%), with only a few sherds devoid of any decoration, in addition to their utilitarian function these kraters were probably also displayed.

The assemblage is composed for the majority of kraters with outward rim (KR1, 73%), followed by those with straight rim (KR3, 17.5%) and with rounded rim (KR2, almost 8%): in one case, it was uncertain if the vessel was truly a krater.<sup>831</sup>

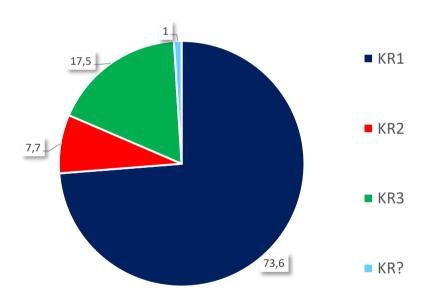


Fig. 249: Kraters – percentage occurrence of typologies.

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<sup>831</sup> See discussion in Chapter 3.5.5.

	KR1	KR2	KR3
IA III	X		
IA II / III	X		X
Late IA II	X	X	X
IA II	X	X	X
IAI/II	X		
IA Ic	X		

Table 116: Kraters – chronological distribution of the typologies.

### 4.2.4.1 KRATERS WITH OUT-TURNED RIM (KR1) Pls. 28-31

As mentioned above, this is the most common krater typology, comprising specimens with an out-turned rim and usually a squared lip. In earlier phases (Iron Age I/II) the rims are usually characterized by a sharper inner angle (i.e., **PI. 31:4**), while later types have more curved rims (**PIs. 29-30**). Diameters range from 13 to 34 cm, however a prevalence of 22 and 24 cm diameters can be observed.

This type was found in every chronological context: it appears already in the Iron Age I and is particularly common in the Iron Age II. Its presence decreases sharply in the transition to the Iron Age III, however it is still attested in this last period (Table 117).

KR1	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	5	31	26	3	1
%	1.5	7.5	46.3	38.8	4.4	1.5

Table 117: KR1, chronological distribution.

Almost half of the sherds (49.3%) are in Red Slip Ware and a significant percentage (21.3%) are painted: thus most of the vessels were decorated.

Parallels are widespread in Syria during the whole Iron Age: they are attested at Hama (Période E),<sup>832</sup> Tell Mardikh (phase 3),<sup>833</sup> Tell Mastuma (Stratum I-2b),<sup>834</sup> Tell Tuqan (Area D phase 4),<sup>835</sup> Tell Abou Danne (Niveau IId),<sup>836</sup> Tell Shiukh Fawqani (Area G Period IX level B),<sup>837</sup> Tell Jurn Kabir,<sup>838</sup> Tell Sukas.<sup>839</sup> Analogous kraters, often painted, are particularly

<sup>832</sup> Fugmann 1958, figs. 310:7B16, 7B17, 7B19; Riis 1948: 59, form C2.

<sup>833</sup> Pizzimenti 2018, figs. 5:2-3.

<sup>834</sup> Wada 2009b, fig. 4.45:8.

<sup>835</sup> Baffi 2011c, fig. 5:4.

<sup>836</sup> Lebeau 1983, Pl. LXXII:5.

<sup>837</sup> Luciani 2005, Pls. 16:174, 27:310-311.

<sup>838</sup> Eidem, Ackermann 1999, figs. 7:16, 9a:18.

<sup>839</sup> Riis et al 1996, fig. 23:IVA 3640/1, IVC

common at Tell Afis (Areas D level 6,<sup>840</sup> E1 level 7<sup>841</sup> and E2-E4)<sup>842</sup> starting from the Iron Age I until the early Iron Age III. Painted specimens are also documented at Tell Qarqur<sup>843</sup> and in the 'Amuq Valley at Chatal Hüyük (Area I levels 06-03, Area II levels 08 and 03 and Area V level 01).<sup>844</sup> A sharp-angled vessel, similar to the kraters from earlier levels of Mishrifeh, was found also at Karkemish.<sup>845</sup>

Further parallels are present on the Levantine Coast and in the northern part of the Southern Levant, at Tyre (Stratum IV)<sup>846</sup> and Tel Dor (Area G phase 9).<sup>847</sup> A painted specimen is present at Sarepta (Area II,Y Substratum D1),<sup>848</sup> while the only red slipped parallel found comes from Hazor (Area A Stratum 4).<sup>849</sup>

### 4.2.4.2 KRATERS WITH ROUNDED RIM (KR2) PI. 32

This is the typology of krater less attested (almost 8%). It includes forms with rounded outward rim and straight or slightly oblique walls. Some degree of variability, especially in the rim shape, is present. The vessels display a limited range of diameters, from 20 to 38 cm.

These kraters are documented in the whole Iron Age II (Table 118).

KR2	IA II	LATE IA II
Nr.	3	3
%	50	50

Table 118: KR2, chronological distribution.

Also in this case, a large percentage (57%) of the vessels is red slipped.

These kraters resemble specimens from Tell 'Acharneh<sup>850</sup> and Chatal Hüyük (Area II level 02).<sup>851</sup> From the same sites come red slipped (Tell 'Acharneh)<sup>852</sup> and painted (Chatal Hüyük

<sup>840</sup> Mazzoni 1987, fig. 22:14.

<sup>841</sup> Mazzoni 1998, figs. 16:5, 8 (painted).

<sup>&</sup>lt;sup>842</sup> Degli Esposti 1998, fig. 11:5; Venturi 2020, Pls. 118:5 (phase IIc), 128:7 (phase Ic), but in general see type KR1AA.

<sup>843</sup> Dornemann 2003a, figs. 83:13-15, 88:17 (all painted).

<sup>844</sup> Pucci 2019, Pls. 12:I, 19:a, 29:a, 39:a, 84:e-f, 104:f, 159:e.

<sup>845</sup> Bonomo, Zaina 2014, fig. 4:18.

<sup>846</sup> Bikai 1978, Pl. XIV:15.

<sup>847</sup> Gilboa 2018, Pl. 20.21:20.

<sup>848</sup> Anderson 1988, Pl. 34:10.

<sup>849</sup> Bonfil, Greenberg 1997, fig. II.40:2.

<sup>850</sup> Cooper 2006, fig. 3:7; Cooper, Fortin 2004, fig. 16:5.

<sup>&</sup>lt;sup>851</sup> Pucci 2019, Pl. 114:g.

<sup>852</sup> Cooper 2006, figs. 7:10-11.

Area I level 05)<sup>853</sup> examples. The parallels from Tell 'Acharneh are dated to the Iron Age II (9<sup>th</sup> – 8<sup>th</sup> centuries BC), while those from Chatal Hüyük to the Iron Age II-III/Persian Age (Late 8<sup>th</sup> – 6<sup>th</sup> centuries BC). An Iron Age II chronology for the specimens from Mishrifeh, considering also the proximity of Tell 'Acharneh compared to the 'Amuq Valley, fits with these comparisons. A specimen much similar to T1 7336.2 (**PI. 32:1**) was found at Tell Sheikh Hassan.<sup>854</sup>

### 4.2.4.3 KRATERS WITH STRAIGHT VERTICAL RIM (KR3) PI. 33

This typology is quite common in the assemblage (17.5% of the kraters). It is exemplified by specimens with an elongated vertical rim, mostly with a squared lip but variants with an internal thickening or a slight external protrusion are also attested. An almost complete vessel (H 3656.8, **PI. 33:1**) displays a hemispherical basin under a straight rim. Diameters vary from 16 to 28 cm, with a prevalence of 18 and 24 cm.

These kraters are well attested in the Iron Age II, while they almost disappear with the transition to Iron Age III (Table 119).

KR3	IA II	LATE IA II	IA II/III
Nr.	6	6	1
%	46.1	46.1	7.7

Table 119: KR3, chronological distribution.

It is noteworthy that all the sherds are either red slipped (94%) or painted (6%), with no Common Ware specimens documented.

Parallels are attested in a couple of sites in Northern Syria, Tell Afis and Tell Mastuma, and in the 'Amuq Valley, at Chatal Hüyük, dated to the Iron Age II and III. At Tell Afis they are present in Areas E2 level 4<sup>855</sup> and E2-E4 phase Ia<sup>856</sup> and from Chatal Hüyük (Area I level 05)<sup>857</sup> comes a red slipped example. At Tell Mastuma this type of krater is particularly common in Stratum I-2 from sub-level c to sub-level a,<sup>858</sup> with one painted specimen from Stratum I-2c.<sup>859</sup>

<sup>853</sup> Pucci 2019, Pls. 16:j, 19:f.

<sup>854</sup> Schneider 1999a, Abb. 8 type 13:2.

<sup>855</sup> Degli Esposti 1998, fig. 7:16.

<sup>856</sup> Venturi 2020, Pl. 136:4.

<sup>857</sup> Pucci 2019, Pl. 22:e.

<sup>858</sup> Wada 2009b, figs. 4.27:8, 4.10:8, 4.30:4, 4.41:12, 4.44:10, 4.88:4, 4.105:2.

<sup>859</sup> Wada 2009b, fig. 4.10:8.

Jugs are one of the rarest shapes in the assemblage (1%) and do not appear in all the Operations. They were used as serving vessels for liquids.

As serving vessels, perhaps in some cases used also for display, one would expect jugs to be decorated or at least slipped in order to impermeabilize the inner surface. However, most of the sherds from Mishrifeh are in Common Ware without any decoration or surface treatment: Red Slip is present on merely 6% of the repertoire and paint on 4%.

Trefoil jugs (JU1) and jugs with everted simple rim (JU3) make up the majority of the assemblage, with 33.3% and 35.4% respectively. Jugs with rounded rim (JU4) are also fairly common (almost 19%).

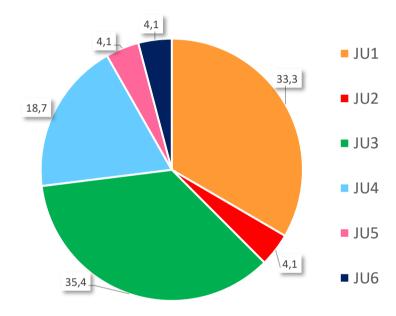


Fig. 250: Jugs – percentage occurrence of typologies.

	JU1	JU2	JU3	JU4	JU5	JU6
IA III						
IA II / III	X			X		
Late IA II	Х		X	X	X	X
IA II	X	X	Х	Х	X	
IAI/II	X	X	X	Х		
IA Ic						

Table. 120: Jugs – chronological distribution of the typologies.

#### 4.2.5.1 TREFOILED JUGS (JU1) PI. 34:1-6

Trefoiled jugs are a distinctive type, well attested (33% of the jugs) and in general well known in the Syrian area. The specimens from Mishrifeh display a fairly wide variability, with everted rims, double rims and rims with a groove and a triangular thickening. The fragments are usually of small dimensions and no complete vessel was recovered: thus, it is often impossible to determine the diameters. Where it was possible to, they measured 4 cm.

This typology is documented starting from the transition between Iron Age I and II, with an exponential increase in the Iron Age II. In the Late Iron II and in the transition to Iron III the numbers decline (Table 121).

JU1	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	9	3	2
%	6.7	60	20	13.3

Table 121: JU1, chronological distribution.

Only one specimen (6.25%) is characterised by Red Slip.

Trefoiled rims are quite common on jugs (Lehmann 1998:9, 12 and figs. 3:18, 6.26): they are present for the whole Iron Age and thus are not chronologically distinctive. Vessels analogous to those of Mishrifeh are attested at Hama (Période F1),<sup>860</sup> Tell Mastuma (Strata I-2a and I-1),<sup>861</sup> Tell Shiukh Fawqani (Area F Période IX),<sup>862</sup> Tell Tweini (Area A, level 6),<sup>863</sup> Tell Kazel (Area II level 4),<sup>864</sup> Tell Sukas,<sup>865</sup> Tel Dan (Area T Stratum II)<sup>866</sup> and Hazor (Area A Strata XII and "XII/XI").<sup>867</sup> Slipped vessels are documented at Hazor (Area A Strata VII-VIII).<sup>868</sup>

#### 4.2.5.2 JUGS WITH INWARD SIMPLE RIM (JU2) PI. 34:7

This is an uncommon typology (4% of the jugs), comprising a couple of vessels in Common Ware, with a rounded rim turned inward and diameters from 4 to 8 cm. They were found in transitional contexts from the Iron Age I to II (50%) and in the earlier levels of the Iron Age II

<sup>860</sup> Riis, Buhl 1990 fig. 67:451.

<sup>&</sup>lt;sup>861</sup> Wada 2009b fig. 4.46:19; Wada 2009c fig. 5.6:90.

<sup>862</sup> Makinson 2005 Pl. 24:159.

<sup>863</sup> Vansteenhuyse 2010, fig. III.1:13.

<sup>864</sup> Badre et al. 1994, fig. 28:a.

<sup>865</sup> Riis et al. 1996, fig. 24:IVA and IVB.

<sup>866</sup> Arie 2008 fig. 16:8.

<sup>&</sup>lt;sup>867</sup> Yadin et al. 1989 Pl. CLXVI:12. Ben-Ami, Ben-Tor 2012a, fig. 1.1:23.

<sup>868</sup> Yadin et al. 1960 Pls. LVIII:25 (Red Slip), LXIV:19 (brown slip).

(50%).

Only a few parallels have been found for this typology, all from the northern part of the Southern Levant: analogous vessels are attested at Tel Dor (Area C1 phase 9<sup>869</sup> and Area G phase 6b)<sup>870</sup> and at Megiddo (Stratum III).<sup>871</sup> The specimens from Tel Dor come from early Iron Age contexts (Iron Age I and Early Iron IIa, 11<sup>th</sup> – Early 9<sup>th</sup> centuries BC), while the one from Megiddo is dated to the Iron Age II and III (780-650 BC), indicating the long-lasting presence of jugs with this type of rim shape.

## 4.2.5.3 JUGS WITH EVERTED SIMPLE RIM (JU3) PI. 34:8-11

This typology is fairly frequent among the jugs (about 35%) and includes specimens with more or less outward rims and usually rounded lips. While no complete vessels are present, one large fragment shows a pyriform body. The diameters measure from 4 to 12 cm, with a prevalence of 6 and 10 cm.

These jugs appear in the transition from the Iron Age I to II and are present in the Iron Age II (Table 122).

JU3	IA I/II	IA II	LATE IA II
Nr.	3	5	5
%	23	38.5	38.5

Table 122: JU3, chronological distribution.

Red Slip can be observed on 6% of the assemblage.

This is a simple form, quite widespread from a geographical and a chronological point of view, although closer parallels with the specimens from Mishrifeh are attested in Central-Western Syria at Tell 'Acharneh,<sup>872</sup> Tell Mardikh (phase 3)<sup>873</sup> and Tell Tuqan (Area Q phase 5b).<sup>874</sup> Red slipped examples can be found at Tell Mastuma (Stratum I-2a/b)<sup>875</sup> and in the 'Amuq Valley at Tell Tayinat.<sup>876</sup> Further specimens are present in the northern part of the Southern Levant both in Common Ware, at Megiddo (level H-3),<sup>877</sup> and slipped, at Hazor

<sup>869</sup> Gilboa 1995, fig. 1.10:32.

<sup>&</sup>lt;sup>870</sup> Gilboa 2018, Pl. 20.60:22-23.

<sup>871</sup> Lamon, Shipton 1939, Pl. 1:29.

<sup>&</sup>lt;sup>872</sup> Cooper 2006, fig. 4:11.

<sup>873</sup> Pizzimenti 2018, fig. 5:7.

<sup>874</sup> Fiorentino 2008, fig. 17:13.

<sup>875</sup> Wada 2009b, figs. 4.36:11, 4.46:17.

<sup>&</sup>lt;sup>876</sup> Osborne et al. 2019, fig. 17:19.

<sup>877</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.53:2.

(Area A Strata IX-X).<sup>878</sup> They are also particularly common on the Lebanese Coast at Tyre (Stratum III and X-2).<sup>879</sup> These parallels are dated to a period between the Iron Age I<sup>880</sup> and the beginning of the Iron Age III, with most of them belonging to the Iron Age II (9<sup>th</sup>-8<sup>th</sup> century BC), which fits quite well with the chronological distribution observed at Mishrifeh.

### 4.2.5.4 JUGS WITH ROUNDED RIM (JU4) PI. 35:1-4

This group includes vessels with a slightly inward curved rim and rounded lip: only fragments of small dimensions are preserved. The specimens display a range of diameters from 6 to 13 cm.

The typology appears in the Iron Age II with an increase in the Late Iron II, and then decreases sharply during the transition to Iron Age III (Table 123).

JU4	IA II	LATE IA II	IA II/III
Nr.	5	7	1
%	38.5	53.8	7.7

Table 123: JU4, chronological distribution.

Just 10% of these jugs are red slipped.

Parallels for this typology are quite limited and dated to the  $8^{th}$  –  $7^{th}$  centuries BC: identical specimens are in fact attested in Northern Syria at Tell Afis (Area D level 2)<sup>881</sup> in both Common and Red Slip Ware and at Tell Tuqan (Area Q phase 5a).<sup>882</sup> On the Lebanese Coast, a painted example comes from Tyre (Stratum IV). <sup>883</sup> Further south, other comparisons have been found at Tel Dor (Area A phase 9)<sup>884</sup> and Hazor (Areas A Stratum V<sup>885</sup> and B Stratum Va).<sup>886</sup>

#### 4.2.5.5 JUGS WITH DOUBLE PROFILE (JU5) PI. 35:5

This is another uncommon typology (4% of the jugs) and consists of a couple of vessels with

<sup>878</sup> Yadin et al. 1960, Pl. LII:16 (brown slip).

<sup>&</sup>lt;sup>879</sup> Bikai 1978, Pls. XII:1-6, 9-14, 18-23 and XXV:1-4.

<sup>&</sup>lt;sup>880</sup> The earliest specimens are those from Tell Mardikh and Hazor: while the jug from Hazor was found in a context dated to 950-890 BC, Pizzimenti does not specify the chronological interval of Phase 3 at Tell Mardikh other than identifying it with a generic Iron Age I (Pizzimenti 2018: 477-480).

<sup>&</sup>lt;sup>881</sup> Mazzoni 1987, figs. 11:3, 5 (nr. 5 in Red Slip).

<sup>&</sup>lt;sup>882</sup> Fiorentino 2008, fig. 15:12.

<sup>&</sup>lt;sup>883</sup> Bikai 1978, Pl. XIV:6.

<sup>884</sup> Gilboa 1995, fig. 1.7:6.

<sup>885</sup> Yadin et al. 1958, Pl. LVI:14.

<sup>886</sup> Yadin et al. 1960, Pl. LXXIX:21.

a rim with double external thickening, exclusively in Common Ware and with diameters of 6 and 10 cm. They are found in the Iron Age II.

There are no precise parallels that I know of, although a very similar specimen is present at Tell Nebi Mend (phase B),<sup>887</sup> red slipped and dated to the Iron Age II, which may confirm the chronology of the specimens from Mishrifeh.

4.2.5.6 JUGS WITH FLARING THICKENED RIM AND DOUBLE PROFILE (JU6) **PI. 35:6-7** Only a couple of vessels belong to this typology: they are characterised by a narrow neck and a flaring rim with thickened slightly triangular rim and they measure 8 cm in diameter. They occur exclusively in the Late Iron Age II and both specimens are red slipped.

The only parallels are documented at Tell Mastuma (Stratum I-2a/b),<sup>888</sup> dated to the Late Iron Age II.

<sup>&</sup>lt;sup>887</sup> Whincop 2007, fig. 9:I.

<sup>888</sup> Wada 2009b, figs. 4.20:6, 4.24:6.

Jars are mostly characterized by a narrow neck and were used for the transport and storage of foodstuff and liquids. They are not particularly frequent in the pottery assemblage of Mishrifeh (9%): they are, for example, less common than storage jars and cooking pots. Their scarce occurrence may be in part determined by the more conspicuous numbers of large storage jars. No complete jar vessel was found, thus it is quite difficult to reconstruct their entire shape: however, the presence of large fragments for some typologies (e.g. J11) makes it possible to hypothesize their form, which was presumably ovaloid with carinated shoulders.

Most of the sherds are undecorated: Red Slip occurs merely on almost 5% of the assemblage and paint on 2%.

Almost 50% of the jars are represented by the double rim typology (J3). Other common types are jars with collared rim (J2, 10.2%), with modelled rim (J4, 8.6%) and with concave neck and thickened rim (J6, 8.5%).

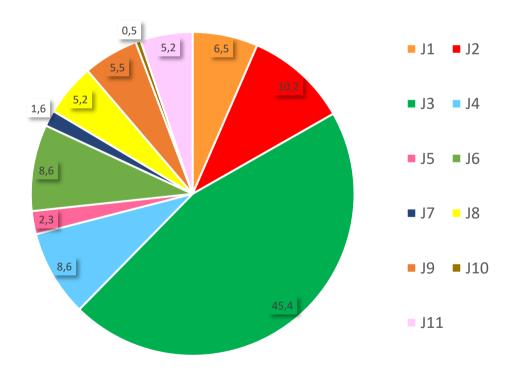


Fig. 251: Jars – percentage occurrence of typologies.

	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11
IA III		X	X	X	X	X					
IA II / III	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х
Late IA II	X	X	X	X	X	X	Х	X	X		X
IA II	X	X	X	X	X	X	Х	X	X	X	X
IAI/II	Х	Х	Х	Х	Х	Х	Х	Х	Х		
IA Ic											

Table 124: Jars – chronological distribution of the typologies.

### 4.2.6.1 NECKLESS JARS WITH THICKENED RIM (J1) PI. 36

This typology is found occasionally in the assemblage (6.5% of the jars). The vessels usually have thickened rounded rims, although oval, flat or triangular rims are also documented, with variable dimensions. No complete vessels were found and, in general, this typology is composed exclusively of rim fragments. The jars display a wide range of diameters, from 8 to 22 cm, with a prevalence 16 cm diameter specimens.

The typology starts to be attested in the transition from the Iron Age I to II. It is not common in the early Iron Age II levels, while it reaches its greatest frequency in the Late Iron II. It decreases sharply, back to the same numbers it had in the transition between Iron Age I and II, with the transitional period to the Iron Age III (Table 125).

J1	IA I/II	IA II	LATE IA II	IA II/III
Nr.	4	6	14	4
%	14.3	21.4	50	14.3

Table 125: J1, chronological distribution.

Only a few sherds are red slipped (4%) or painted (4%).

Parallels are widespread in Syria between the Iron Age I and III, at Tell Nebi Mend (phases B and C), <sup>889</sup> Tell Mardikh (phases 1 and 3), <sup>890</sup> Tell Afis (Area G Central zone level 5), <sup>891</sup> Tell Mastuma (Stratum I-2b), <sup>892</sup> Tell Tuqan (Areas D phase 2<sup>893</sup> and Q phase 5c), <sup>894</sup> Tell

<sup>889</sup> Whincop 2007, figs. 9:a-b.

<sup>&</sup>lt;sup>890</sup> Pizzimenti 2014-2015, fig. 5:2; Pizzimenti 2018, fig. 5:14.

<sup>891</sup> Cecchini 1998, fig. 30:3.

<sup>892</sup> Wada 2009b, fig. 4.39:16. This sherd is considered probably imported from the Levantine Coast.

<sup>893</sup> Baffi 2008c, fig. 25:10.

<sup>894</sup> Fiorentino 2008, fig. 17:22.

Qarqur<sup>895</sup> and Tell Shiukh Fawqani (Area G Period IX level B). 896

Similar rim shapes can be found at Tyre (Strata II-III)<sup>897</sup> and further parallels are attested also in the Southern Levant, at Tel Dor (Area A phase 9<sup>898</sup> and Area G phase 7).<sup>899</sup>

The wide chronological spread of these parallels, with the majority of them belonging to the Iron Age II, confirms the dating of the specimens from Mishrifeh.

### 4.2.6.2 JARS WITH COLLARED RIM (J2) PI. 37

This typology is quite common (more than 10% of the jars), comprising jars with a long neck, usually straight or slightly curved, and a thickened, mostly round or triangular-shaped rim. Diameters range from 6 to 18 cm, however most of the vessels have a narrow neck of 8 or 10 cm across.

While present also in the transition from the Iron Age I to II, this typology is particularly attested in the Late Age Iron II, only to decrease sharply in the transition to the Iron Age III (Table 126).

J2	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	7	22	6	3
%	2.6	17.9	56.4	15.4	7.7

Table 126: J2, chronological distribution.

These jars included more painted sherds (5%) than red slipped ones (2.5%).

Collared rim jars are very common and widespread in the Levant, particularly during the late Iron Age II and early Iron Age III. In Central-Western Syria, parallels are attested at Tell 'Acharneh, <sup>900</sup> Tell Mardikh (Areas E levels 4-4b and G levels 2-4), <sup>901</sup> Tell Afis (Areas D levels 2 and 4, <sup>902</sup> E2 levels 1-2, <sup>903</sup> E2-E4 phase Ia-b, <sup>904</sup> G Central zone levels 2 and 5-7b and

<sup>895</sup> Dornemann 2003a, fig. 88:23.

<sup>&</sup>lt;sup>896</sup> Luciani 2005, Pl. 20.234.

<sup>&</sup>lt;sup>897</sup> Bikai 1978, Pls. II and III. Taking into consideration exclusively the rim shape, as it is impossible to compare the body shape.

<sup>&</sup>lt;sup>898</sup> Gilboa 1995, fig. 1.6:15.

<sup>899</sup> Gilboa 2018, Pl. 20.48:16, 20.54:2.

<sup>&</sup>lt;sup>900</sup> Cooper 2006, figs. 4:5-6, 9:10-13.

<sup>&</sup>lt;sup>901</sup> Mazzoni 1992b, figs. 11:6, 17:2, 20:11-12 and 15-16, 20:6, 22:9.

<sup>902</sup> Mazzoni 1987, figs. 11:8-9; 18:6-7, 9-11, 13.

<sup>&</sup>lt;sup>903</sup> Degli Esposti 1998, figs. 11:7, 12:2-3.

<sup>&</sup>lt;sup>904</sup> Venturi 2020, Pls. 130:10, 133:11.

North zone levels 1 and 3),<sup>905</sup> Tell Mastuma (Strata I-2a/b and I-1),<sup>906</sup> Tell Abou Danne (Niveaux IIc-d)<sup>907</sup> and Tell Tuqan (Areas D phases 1 and 4a,<sup>908</sup> Q phase 5b<sup>909</sup> and T phase 3).<sup>910</sup> Red slipped vessels are documented at Tell Afis (Area D levels 2 and 4)<sup>911</sup> and Tell Tuqan (Area D phase 4a).<sup>912</sup> Further parallels can be found in the 'Amuq Valley, at Tell Tayinat<sup>913</sup> and Chatal Hüyük (Area II levels 03-04),<sup>914</sup> and on the Middle Euphrates, at Karkemish,<sup>915</sup> Tell Shiukh Fawqani (Areas F Période IX<sup>916</sup> and G Period IX levels A-B),<sup>917</sup> Tell Ahmar (Area C Stratum 2)<sup>918</sup> and Tell Jurn Kabir.<sup>919</sup>

Analogous rim shapes are present on the Levantine Coast, at Tell Sukas, <sup>920</sup> Sarepta (Area II,Y Substratum C2), <sup>921</sup> and in the northern part of the Southern Levant, at Tel Dan (Area A Structure C), <sup>922</sup> Tel Dor (Areas A phase 9 and C1 phases 6-7/8) <sup>923</sup> and Hazor (Areas A Strata V-VIII) <sup>924</sup> and B Stratum V): <sup>925</sup> in the last site, many specimens are painted and one is red slipped.

### 4.2.6.3 JARS WITH DOUBLE RIM (J3) Pls. 38-39

As noted above, double rim jars are the most common jar typology at Mishrifeh (representing more than 45% of the general shape): they are characterised by a long straight neck and a profiled rim with double external thickening. Their diameters vary from 5 to 20 cm, with a notable prevalence of diameters of 10 cm, but also 8 and 12 cm.

This type occurs already in the transition from the Iron Age I to II, and then it is particularly common in the Iron Age II: as already observed for other typologies, specimens sharply decrease in number in the transition to the Iron III and in Iron Age III contexts they are rare

<sup>905</sup> Cecchini 1998, figs. 24:6, 28:6-8, 28:12, 30:7, 36:10, 39:2 and 25.

<sup>&</sup>lt;sup>906</sup> Wada 2009b, figs. 4.16:5, 4.17:2-3, 4.24:7, 4.34:28, 4.36:12-13, 4.46:22-23, 4.78:35-36; Wada 2009c figs. 5.2:28 and 30-31, 5.7:103-104. This is just a small selection: it is a common form at Tell Mastuma, especially with a ridge on the neck, similar to the sherd T3 8231 from Mishrifeh.

<sup>907</sup> Lebeau 1983, Pls. LVIII:8, LX:1, LXII:2-5, LXIV:7, CXXI:1-2.

<sup>908</sup> Baffi 2008c, figs. 24:6, 28:11.

<sup>909</sup> Fiorentino 2008, figs. 16:13, 17:9; Fiorentino, Marinelli 2011 fig. 12:19.

<sup>910</sup> Baffi 2011d, fig. 38:1.

<sup>&</sup>lt;sup>911</sup> Mazzoni 1987, figs. 11:7, 11, 19 and 18:12.

<sup>&</sup>lt;sup>912</sup> Baffi 2008c, fig. 29:11.

<sup>&</sup>lt;sup>913</sup> Osborne et al. 2019, figs. 17:16-17.

<sup>&</sup>lt;sup>914</sup> Pucci 2019, Pls. 98:c, 110:h.

<sup>&</sup>lt;sup>915</sup> Bonomo, Zaina 2014, fig. 4:1.

<sup>&</sup>lt;sup>916</sup> Makinson 2005, Pls. 18:109-110 and 115, 21:133, 23:150, 24:156.

<sup>&</sup>lt;sup>917</sup> Luciani 2005, Pls. 17:189-190, 18:213, 45:518, 46:522-523 and 528-529, 49:566, 50:586-589.

<sup>&</sup>lt;sup>918</sup> Jamieson 2012, fig. 3.9:1, 3.

<sup>&</sup>lt;sup>919</sup> Eidem, Ackermann 1999, fig. 7:12.

<sup>&</sup>lt;sup>920</sup> Buhl 1983, fig. III:33 (painted).

<sup>921</sup> Anderson 1988, Pl. 36:3.

<sup>922</sup> Arie 2008, fig. 18:9.

<sup>&</sup>lt;sup>923</sup> Gilboa 1995, figs. 1.6:1, 1.11:36, 1.14:17-20.

<sup>924</sup> Yadin et al. 1958, Pls. L:30-32, LII:26-27, LVII:1-2; Yadin et al. 1960 Pls. LIX:3 and 6, LXXI:5.

<sup>925</sup> Yadin et al. 1958, Pls. LXIX:3 (Red Slip), LXXIII:43.

(Table 127).

J3	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	14	68	71	17	2
%	8.1	39.5	41.3	9.9	1.2

Table 127: J3, chronological distribution.

Red slipped and decorated sherds are unusual, each constituting 1.2% of the J3 assemblage.

Double rim jars are, like J2, very common and generally widespread in the Levant, characterising both the Iron Age II and III, particularly the 8<sup>th</sup> and 7<sup>th</sup> centuries BC. In Central Western Syria they are present at Tell 'Acharneh, <sup>926</sup> Tell Nebi Mend (phase B), <sup>927</sup> Tell Mardikh (phase 2, <sup>928</sup> Areas E levels 3-4 and G levels 2-4), <sup>929</sup> Tell Afis (Areas D levels 2 and 4-6, <sup>930</sup> E2 levels 1-4, <sup>931</sup> E2-E4 phase Ia, <sup>932</sup> G Central zone levels 3 and 6-8b and North zone level 3), <sup>933</sup> Tell Mastuma (Strata I-2a/d and I-1), <sup>934</sup> Tell Abou Danne (Niveau IId) <sup>935</sup> and Tell Tugan (Areas D phases 1 and 4a, <sup>936</sup> Q phases 5a-b, <sup>937</sup> T phase 3). <sup>938</sup>

These jars are also documented in Southern Anatolia, at Zincirli, 939 and on the Middle Euphrates, at Tell Shiukh Fawqani (Areas F Période IX 940 and G Period IX levels A-B) 41 and Tell Jurn Kabir. 942 Further attestations are found on the Levantine Coast and in the northern part of the Southern Levant, at Bassit, 943 Sarepta (Area II,Y Substratum C2), 944 Tyre

<sup>926</sup> Cooper 2006, fig. 9:17; Cooper, Fortin 2004, figs. 17:4-9.

<sup>&</sup>lt;sup>927</sup> Whincop 2007, fig. 9:e.

<sup>928</sup> Pizzimenti 2014-2015, figs. 3:1-2.

<sup>929</sup> Mazzoni 1992b, figs. 12:4; 20:7, 10, 13-14; 22:5-7.

<sup>&</sup>lt;sup>930</sup> Mazzoni 1987, figs. 11:13-14 and 17-18, 18:2-4, 20: 11-12 and 14, 22:6-7 and 9.

<sup>&</sup>lt;sup>931</sup> Degli Esposti 1998, fig. 8:7, 11:8-11, 12:9.

<sup>932</sup> Venturi 2020, Pls. 131:6 and 8, 135:5 and 12, 139:8-11.

<sup>933</sup> Cecchini 1998, figs. 18:10, 19:13-14, 25:1-10, 28:15-19, 30:12-13, 32:15, 33:26, 39:4-6.

<sup>&</sup>lt;sup>934</sup> Wada 2009b, figs. 4.9:6-7, 4.10:23, 4.22:7-8, 4.27:12-13, 4.34:27, 4.44:16, 4.45:11, 4.49:9, 4.78:34; Wada 2009c, figs. 5.4:38, 5.6:98, 5.7:102 and 105.

<sup>935</sup> Lebeau 1983, Pl. LXIX:1-9.

<sup>&</sup>lt;sup>936</sup> Baffi 2008c, figs. 24:3-5, 28:4-7, 29:8-9.

<sup>&</sup>lt;sup>937</sup> Fiorentino 2008, figs. 15:9, 17:10.

<sup>&</sup>lt;sup>938</sup> Baffi 2011d, fig. 38:2.

<sup>939</sup> Soldi 2019, figs. 7:e-f.

<sup>&</sup>lt;sup>940</sup> Makinson 2005, Pl. 23:151.

<sup>&</sup>lt;sup>941</sup> Luciani 2005, Pls. 17:187, 47:537, 50:582 and 584.

<sup>&</sup>lt;sup>942</sup> Eidem, Ackermann 1999, fig. 7:11.

<sup>&</sup>lt;sup>943</sup> Courbin 1993, fig. 6:1.

<sup>&</sup>lt;sup>944</sup> Anderson 1988, Pl. 36:4 and 7.

(Stratum IV),945 Tel Dor (Areas A phase 9,946 C1 phase 5b,947 G phases 6b and 1-4)948 and Hazor (Areas B Stratum V<sup>949</sup> and L Stratum V).<sup>950</sup>

Red slipped and painted examples are rare, although some specimens are attested at Tell Afis (Area D level 2,951 Area E2 levels 4-3),952 Tell Mastuma (Stratum I-1),953 Chatal Hüyük (Area IVa level 02c-d)954 and Ibn Hani.955

#### 4.2.6.4 JARS WITH MODELLED RIM (J4) PI. 40

This is another fairly common typology (almost 9% of the jars) and includes straight-necked vessels with a profiled rim, with a more or less pronounced thickening under the lip. The diameters range between 8 and 14 cm, with 10 and 12 cm diameters prevailing.

The typology appears in low numbers during the transition from Iron Age I to II and is quite attested in Iron Age II; in the transition to Iron Age III it occurs rarely, while its numbers increase slightly in the Iron Age III (Table 128). The sharp decline of these jars during the transitional Iron Age II and III period probably depends on the archaeological contexts and, I believe, on the preservation of the relative pottery assemblages. Transitional Iron Age II and III contexts were found in Operation H-T1 Phase 5 and Operations T3 Phases 7-9 and T4 Phase 1-3. In Operation H-T1, the major archaeological features are mostly wastedisposal pits (Chapter 3.5), while in Operations T3-T4 domestic buildings were exposed but returned scarce quantities of pottery (Chapters 3.7, 3.8). Therefore, since this typology was found in both domestic and productive contexts (Chapter 4.6, Table 184), I think that a more substantial assemblage from Operations T3-T4 would have contained more J4 specimens.

J4	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	3	13	13	1	4
%	8.8	38.2	38.2	2.9	11.8

Table 128: J4, chronological distribution.

<sup>945</sup> Bikai 1978, Pl. XIV:10.

<sup>&</sup>lt;sup>946</sup> Gilboa 1995, fig. 1.6:12.

 $<sup>^{947}</sup>$  Gilboa 1995, fig. 1.15:30.  $^{948}$  Gilboa 2018, Pl. 20.69:3, 20.75:5. The first example cited here is dated to the late  $10^{th}$  – early  $9^{th}$  century BC. It is the earliest parallel found and fits well chronologically with the earliest specimens from Mishrifeh.

<sup>949</sup> Yadin et al. 1958, Pl. LXXIII:44.

<sup>950</sup> Garfinkel, Greenberg 1997, fig. III.44:17.

<sup>951</sup> Mazzoni 1987, fig. 11:16 (Red Slip).

<sup>952</sup> Degli Esposti 1998, fig. 8:8 (painted).

<sup>&</sup>lt;sup>953</sup> Wada 2009c, fig. 5.4:39 (painted).

<sup>954</sup> Pucci 2019, Pl. 136:f (painted).

<sup>955</sup> Bounni et al. 1976, fig. 27:8 (Red Slip).

These jars, analogously to what has already been noted for the other types, are mostly in Common Ware: Red Slip and paint each occur on 3% of the sherds.

Parallels for this typology are found especially in Central-Western Syria. Identical specimens come from Tell Mardikh (phase 1), 956 Tell Afis (Areas E2-E4 phase IIa957 and G Central zone level 4), 958 Tell Abou Danne (Niveaux IIc-d), 959 Tell Tuqan (Area D phase 1) 960 and 'Ain Dara. 961 At Tell Mastuma (Strata I-2b/c) 962 the vessels are painted. Further parallels are present in 'Amuq Valley, at Tell Tayinat, 963 and on the Middle Euphrates at Tell Shiukh Fawqani (Area G Period IX levels A-B). 964 Other painted examples are attested at Chatal Hüyük (Area II level 04) 965 and in the Southern Levant, at Hazor (Area A Stratum 5). 966 Red slipped examples have not been found.

With regard to chronology, most of the parallels are dated to the Late Iron Age II and the Iron Age III: however, earlier specimens from the end of the 10<sup>th</sup> century and the 9<sup>th</sup> century are also documented, such as at Tell Afis Area E2-E4, 'Ain Dara and Hazor, confirming the chronological distribution found at Mishrifeh.

### 4.2.6.5 STRAIGHT-NECKED JARS WITH TRIANGULAR RIM (J5) PI. 41

This is a typology which is rare in the ceramic assemblage (about 2% of the jars). As the definition indicates, it includes vessels with a long straight neck and a rim with external triangular thickening. They may have an incised collar (J5b), especially the later specimens, and diameters lie between 5 and 10 cm.

While also attested in the transition from the Iron Age I to II and the Iron Age II, jars with triangular rim are especially common in the Late Iron Age II. The variant with incised collar is present in the Late Iron Age II and Iron Age III (Table 129).

Most of the sherds are in Common Ware, and only one fragment (12.5% of the repertoire) is painted.

Parallels for this typology are well attested in Central-Western Syrian sites especially in Iron Age II and III. Jars with triangular rim can be found at Tell Mardikh (Area E levels 3+4), 967

<sup>&</sup>lt;sup>956</sup> Pizzimenti 2014-2015, fig. 5:1.

<sup>&</sup>lt;sup>957</sup> Venturi 2020, Pls. 121:5, 123:10.

<sup>&</sup>lt;sup>958</sup> Cecchini 1998, figs. 32:12-13.

<sup>959</sup> Lebeau 1983, Pls. LXXI:2 and 6, CXXIV:8.

<sup>&</sup>lt;sup>960</sup> Baffi 2008c, fig. 23:11.

<sup>&</sup>lt;sup>961</sup> Stone, Zimansky 1999, figs. 413, 416.

<sup>&</sup>lt;sup>962</sup> Wada 2009b, figs. 4.32:6, 4.44:17.

<sup>&</sup>lt;sup>963</sup> Osborne 2019, figs. 17:18, 29:13-14.

<sup>&</sup>lt;sup>964</sup> Luciani 2005, Pls. 17:182, 18:208, 48:555.

<sup>&</sup>lt;sup>965</sup> Pucci 2019, Pl. 93:I.

<sup>&</sup>lt;sup>966</sup> Bonfil, Greenberg 1997, fig. II.37:13.

<sup>&</sup>lt;sup>967</sup> Mazzoni 1992b, figs. 14:3.

Tell Afis (Areas E2 level 3<sup>968</sup> and G East zone level 1b and Central zone level 3), <sup>969</sup> Tell Mastuma (Strata I-2a/b)<sup>970</sup>, Tell Abou Danne (Niveau IIc)<sup>971</sup> and Tell Tuqan (Areas D phases 1-3<sup>972</sup> and Q phase 5b). <sup>973</sup>

J5a	IA I/II	IA II	LATE IA II	IA III
Nr.	2	1	5	
% on J5a	25	12.5	62.5	
% on J5 tot	20	10	50	
J5b				
Nr.			1	1
% on J5b			50	50
% on J5 tot			10	10

Table 129: J5, chronological distribution.

Further parallels are present in the 'Amuq Valley, at Tell Tayinat, <sup>974</sup> on the Middle Euphrates, at Tell Shiukh Fawqani (Area G Period IX level B), <sup>975</sup> and also in the Southern Levant, at Hazor (Area A Stratum VII). <sup>976</sup> Painted specimens are attested at Tell Mastuma (Stratum I-2a) <sup>977</sup> and at Chatal Hüyük (Area II level 04). <sup>978</sup>

Most of these parallels date to the Late Iron Age II and III (second half 8<sup>th</sup> century – 7<sup>th</sup> century BC), although earlier examples such as at Hazor (9<sup>th</sup> century BC) are documented. However, I have not found any comparable specimens dated to the Iron Age I, or the final part of the period or the transition to Iron Age II, such as in Mishrifeh: the fragments found in transitional Iron Age I/II contexts in Operation K have pronounced triangular rims, comparable with later examples from other sites (the specimens from Tell Afis Area E2 and from Chatal Hüyük, see above) and also with sherds from Operation J (J 253.2, **PI. 41:1**). Thus, this type of jar with triangular rim seems to appear at Mishrifeh earlier than in other

<sup>968</sup> Degli Esposti 1998, fig. 8:5.

<sup>&</sup>lt;sup>969</sup> Cecchini 1998, figs. 16:15, 33.24.

<sup>&</sup>lt;sup>970</sup> Wada 2009b, figs. 4.11:42-43, 4.24:8, 4.78:39.

<sup>&</sup>lt;sup>971</sup> Lebeau 1983, Pl. CXXVII:1.

<sup>&</sup>lt;sup>972</sup> Baffi 2008c, figs. 23:9, 25:9, 26:6.

<sup>&</sup>lt;sup>973</sup> Fiorentino 2008, fig. 12:22.

<sup>&</sup>lt;sup>974</sup> Osborne et al. 2019, fig. 17:27.

<sup>&</sup>lt;sup>975</sup> Luciani 2005, Pl. 19:217.

<sup>&</sup>lt;sup>976</sup> Yadin et al. 1958, Pl. L:35.

<sup>&</sup>lt;sup>977</sup> Wada 2009b, fig. 4.78:38.

<sup>&</sup>lt;sup>978</sup> Pucci 2019, Pl. 93:m.

#### sites.

The specimens with incised neck (J5b) have parallels from Syrian sites such as Tell Mardikh Area G level 2),<sup>979</sup> Tell Afis (Area G Central zone levels 8a-7b and North zone level 2),<sup>980</sup> Tell Mastuma (Stratum I-2a)<sup>981</sup> and Tell Shiukh Fawqani (Area F Période IX),<sup>982</sup> dated to the late 8<sup>th</sup> century and especially the 7<sup>th</sup> century BC.

#### 4.2.6.6 JARS WITH CONCAVE NECK AND THICKENED RIM (J6) PI. 42

This typology is quite frequent at Mishrifeh (almost 9% of the jars) and consists of vessels with concave neck and thickened rims that can have different shapes (rounded, triangular, flattened), the most common being triangular. Diameters measure between 5 and 18 cm, although the prevalence of 10 and 14 cm diameters can be noted.

These jars occur starting from the transition between the Iron Age I and II and increase exponentially in the Iron Age II. They decrease in later contexts and in the Iron Age III their numbers are low (Table 130).

J6	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	5	15	9	3	1
%	15.2	45.4	27.3	9.1	3

Table 130: J6, chronological distribution.

Red Slip characterizes 6.3% of the assemblage.

Close parallels for the vessels from Mishrifeh come from Central-Western Syrian sites, such as Tell 'Acharneh, <sup>983</sup> Tell Nebi Mend (phase B), <sup>984</sup> Tell Mardikh (phase 3), <sup>985</sup> Tell Afis (Area G East zone level 3 and Central zone level 3<sup>986</sup> and Areas E2-E4 Phase IIc), <sup>987</sup> Tell Mastuma (Strata I-2a and I-1), <sup>988</sup> Tell Abou Danne (Niveau IId), <sup>989</sup> and Tell Qarqur. <sup>990</sup>

Other attestations are present on the Middle Euphrates, at Karkemish (phase 10a-b)991 and

<sup>&</sup>lt;sup>979</sup> Mazzoni 1992b, fig. 20:8.

<sup>&</sup>lt;sup>980</sup> Cecchini 1998, figs. 19:16, 24:8-9, 39:20.

<sup>&</sup>lt;sup>981</sup> Wada 2009b, fig. 4.29:18.

<sup>&</sup>lt;sup>982</sup> Makinson 2005, Pl. 18:116.

<sup>&</sup>lt;sup>983</sup> Cooper 2006, fig. 4:7.

<sup>&</sup>lt;sup>984</sup> Whincop 2007, fig. 9:o.

<sup>&</sup>lt;sup>985</sup> Pizzimenti 2018, fig. 5:9.

<sup>&</sup>lt;sup>986</sup> Cecchini 1998, figs. 15:2-3, 33:23.

<sup>&</sup>lt;sup>987</sup> Venturi 2020, Pl. 118:11.

<sup>988</sup> Wada 2009b, fig. 4.46:21; Wada 2009c, fig. 5.7:107.

<sup>989</sup> Lebeau 1983, Pls. XL:2, LVIII:2, LXIV:2 and 4.

<sup>&</sup>lt;sup>990</sup> Dornemann 2003a, figs. 83:4-7.

<sup>&</sup>lt;sup>991</sup> Pizzimenti, Zaina 2016 fig. 4:12.

Tell Shiukh Fawqani (Area G Period IX levels A-C). Period slipped versions are documented at Tell Mastuma (Stratum I-2b) and Tell Tayinat, while painted specimens, present also at Tell Shiukh Fawqani (Area F Période IX), are particularly common at Chatal Hüyük (Areas I level 05-04 and V levels 02-01).

Chronologically, these parallels span from the Iron Age I (Tell Mardikh and Tell Afis Areas E2-E4) to the Iron Age III (Tell Mastuma Strata I-1, Chatal Hüyük Area I, Tell Shiukh Fawqani Area G level A), with a large number of Iron Age II examples: this fits well with the chronological distribution of this typology at Mishrifeh.

### 4.2.6.7 JARS WITH OUTWARD RIM (J7) PI. 43

This is an uncommon typology (less than 2% of the jars) characterised by jars with a long neck, straight or slightly curved, and an out-turned rim. Diameters range from 8 to 17 cm. They are found in the Iron Age II, transitional periods included (Table 110).

Red Slip is present on a single sherd, which corresponds to a relatively high percentage (16%).

J7	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	2	2	1
%	16.7	33.3	33.3	16.7

Table 131: J7, chronological distribution.

The few comparisons<sup>997</sup> found for this typology are concentrated in Syria, in contexts dated especially to the Iron Age II, but also to the Iron Age III: they are in fact attested at Tell 'Acharneh, <sup>998</sup> Tell Afis (Area D level 4), <sup>999</sup> Tell Abou Danne (Niveaux IIc-d), <sup>1000</sup> 'Ain Dara, <sup>1001</sup> Tell Shiukh Fawqani (Area G Period IX level A), <sup>1002</sup> Tell Ahmar (Area C Stratum 2) <sup>1003</sup> and Ibn Hani. <sup>1004</sup> Slipped specimens are present at Tell Afis Area D level 4. <sup>1005</sup>

<sup>994</sup> Osborne et al. 2019, fig. 13:13.

<sup>992</sup> Luciani 2005, Pls. 1:5; 17:179-181; 18:204; 19:214, 223, 225; Pl. 47:544.

<sup>&</sup>lt;sup>993</sup> Wada 2009b, fig. 4.11:41.

<sup>&</sup>lt;sup>995</sup> Makinson 2005, Pl. 19:121.

<sup>&</sup>lt;sup>996</sup> Pucci 2019, Pls. 16:1, 30:c and f, 157:d, 161:d-e.

<sup>&</sup>lt;sup>997</sup> Another vessel similar to the specimens from Mishrifeh is present at Tell Mastuma Stratum I-2b (Wada 2009b fig. 4.108:8), although it was considered intrusive.

<sup>&</sup>lt;sup>998</sup> Cooper, Fortin 2004, fig. 17:16.

<sup>&</sup>lt;sup>999</sup> Mazzoni 1987, figs. 19:15 and 17.

<sup>&</sup>lt;sup>1000</sup> Lebeau 1983, Pls. XL:5, XLI:1-5, CXV:7, CXXI:5, CXXII:1.

<sup>&</sup>lt;sup>1001</sup> Stone, Zimansky 1999, fig. 71:404.

<sup>&</sup>lt;sup>1002</sup> Luciani 2005, Pls. 48:558, 50:583.

<sup>&</sup>lt;sup>1003</sup> Jamieson 2012, fig. 3.9:5.

<sup>&</sup>lt;sup>1004</sup> Bounni et al. 1976, fig. 27:9.

<sup>&</sup>lt;sup>1005</sup> Mazzoni 1987, figs. 18:18 (Red Slip), 19:12 (pink slip).

#### 4.2.6.8 JARS WITH UPTURNED SWOLLEN RIM (J8) PI. 44:1-5

These vessels occur rarely (about 5% of the jars). They have a usually straight neck, but it can also be slightly curved, a thickened rim mostly rectangular-shaped, and they are exclusively in Common Ware. Only few of the specimens have handles. They differ from J6 for the less concave neck and the more rectangular shape of the rim. Diameters measure between 8 and 14 cm, with a prevalence of 10 and 12 cm.

Though jars with upturned swollen rim are attested already in the transition from the Iron Age I to II, they are especially documented in the Iron Age II, while they become rare in the transition to the Iron Age III (Table 132).

J8	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	12	7	1
%	4.8	57.1	33.3	4.8

Table 132: J8, chronological distribution.

Parallels are documented in the Syrian area, at Hama (Période E),<sup>1006</sup> Tell Afis (Area L),<sup>1007</sup> Tell Abou Danne (Niveau IId),<sup>1008</sup> Tell Shiukh Fawqani (Area G Period IX level A),<sup>1009</sup> Tell Ahmar (Area C Stratum 2)<sup>1010</sup> and Tell Sheikh Hassan.<sup>1011</sup> Further parallels come from Southern Anatolia, Zincirli,<sup>1012</sup> and the Coastal and Southern Levant, Sarepta (Area II,Y Substratum C2),<sup>1013</sup> Dor (Area G phase 6a)<sup>1014</sup> and Hazor (Area A Stratum XII).<sup>1015</sup> At Tell Tayinat<sup>1016</sup> a red slipped specimen is present.

These examples are dated especially to the Iron Age II, however vessels from Iron Age I (Hazor) and III (Tell Shiukh Fawqani) contexts are also attested.

#### 4.2.6.9 JARS WITH STRAIGHT VERTICAL RIM (J9) PI. 44:6-8

This is a typology characterised by vessels with a generally short straight vertical rim. The specimens display a fairly wide range of diameters, from 8 to 24 cm, through 10 and 12 cm diameters are prevalent. Since no complete vessels have been retrieved, the body shape of

<sup>&</sup>lt;sup>1006</sup> Fugmann 1958, fig. 305:5B59.

<sup>&</sup>lt;sup>1007</sup> D'Amore 1998, fig. 6:8, 21.

<sup>&</sup>lt;sup>1008</sup> Lebeau 1983, Pls. LXII:1, LXIII:2.

<sup>&</sup>lt;sup>1009</sup> Luciani 2005, Pl. 46:527.

<sup>&</sup>lt;sup>1010</sup> Jamieson 2012, fig. 3.9:6.

<sup>&</sup>lt;sup>1011</sup> Schneider 1999a, Abb. 14 type 25:12.

<sup>&</sup>lt;sup>1012</sup> Soldi 2019, figs. 7:a, c-d.

<sup>&</sup>lt;sup>1013</sup> Anderson 1988, Pl. 36:6.

<sup>&</sup>lt;sup>1014</sup> Gilboa 2018, Pl. 20.65:12.

<sup>&</sup>lt;sup>1015</sup> Yadin et al. 1989, Pl. CLXVII:6.

<sup>&</sup>lt;sup>1016</sup> Osborne et al. 2019, fig. 13:12.

these jars can only be hypothesized: a couple of larger fragments display a rounded shoulder, so the jars might have been ovoidal in shape, although the presence of types with sharp-angled shoulder like the "torpedo" or "sausage" jars (Arie 2008: 22; Bikai 1978: 46; Cecchini 1998: 288) cannot be excluded.<sup>1017</sup>

Jars with straight vertical rim start to be attested between the Iron Age I and II. However, it is in the Iron Age II that they reach their greatest diffusion: they become uncommon in the transition to the Iron III (Table 133).

J9	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	13	6	1
%	4.8	61.9	28.5	4.8

Table 133: J9, chronological distribution.

This is the jar type with most decorated vessels: red slipped potsherds represent almost 29% of the assemblage and painted ones almost 5%.

From a few Syrian sites come close parallels<sup>1018</sup> for this typology. Analogous specimens are present at Tell Afis (Area G Central zone level 7b), <sup>1019</sup> Tell Mastuma (Stratum I-2a), <sup>1020</sup> Tell Tuqan (Area D phase 1)<sup>1021</sup> and Tell Shiukh Fawqani (Area F Period IX). <sup>1022</sup> Jars with the same rim shape are instead more common and widespread in the Coastal and north part of the Southern Levant, such as at Tell Tweini (Area A level 6), <sup>1023</sup> Tell Sukas, <sup>1024</sup> Tell Kazel (Area I levels 9-10, <sup>1025</sup> Area II level 5), <sup>1026</sup> Tell 'Arqa (Niveau 10), <sup>1027</sup> Sarepta (Area II,Y Substrata D1-C2), <sup>1028</sup> Tyre (Strata II-IV, IX and XII), <sup>1029</sup> Tel Dor (Areas A phase 9-10, C1 phases 7-8, C2 phase 7<sup>1030</sup> and G phases 8-9), <sup>1031</sup> Tel Dan (Areas T-T1 Stratum II), <sup>1032</sup>

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<sup>&</sup>lt;sup>1017</sup> On the basis of the parallels from the northern part of the Southern Levant, especially with Tel Dan and Tvre (see below).

<sup>&</sup>lt;sup>1018</sup> For the parallels I have considered only the rim shape.

<sup>&</sup>lt;sup>1019</sup> Cecchini 1998, fig. 25:24.

<sup>&</sup>lt;sup>1020</sup> Wada 2009b, fig. 4.78:33.

<sup>&</sup>lt;sup>1021</sup> Baffi 2008c, fig. 23:10.

<sup>&</sup>lt;sup>1022</sup> Makinson 2005, Pl. 19:119.

<sup>&</sup>lt;sup>1023</sup> Vansteenhuyse 2010, fig. III.2:6.

<sup>&</sup>lt;sup>1024</sup> Buhl 1983, figs. III:34-25, IV:38-41.

<sup>&</sup>lt;sup>1025</sup> Badre et al. 1994, figs. 19:b-c.

<sup>&</sup>lt;sup>1026</sup> Badre et al. 1994, figs. 31:a-b, d-e; Capet 2003, fig. 36:b.

<sup>&</sup>lt;sup>1027</sup> Chaaya 2000, fig. 2:8? (no vessel number present in the publication).

<sup>&</sup>lt;sup>1028</sup> Anderson 1988, Pls. 33:2, 37:15, 36:2.

<sup>&</sup>lt;sup>1029</sup> Bikai 1978, Pls. IV:3, VII:7, XIV:16, XXI:11, XXVI:13 and 18 and 21, XXI:19.

<sup>&</sup>lt;sup>1030</sup> Gilboa 1995, figs. 1.1:25-26, 1.6:10, 1.8:25-26 and 28, 1.11:38-39.

<sup>&</sup>lt;sup>1031</sup> Gilboa 2018, Pls. 20.23:3-4, 20.31:13, 20.40:14.

<sup>&</sup>lt;sup>1032</sup> Arie 2008, fig. 17:2.

Hazor (Areas A Stratum 5,<sup>1033</sup> L Strata VIII-VII and V)<sup>1034</sup> and Megiddo (Strata IV-II).<sup>1035</sup> A painted example comes from Tyre (Stratum III).<sup>1036</sup>

On the coast and in the northern part of the Southern Levant attestations of this typology occur starting from the Iron Age I (Kazel, Sarepta, Tyre and Tel Dor): since Central-Western Syrian specimens are mostly dated to the Late Iron Age II and III, it seems reasonable to presume it is a type derived from Coastal and Southern Levantine models, as already noted by Cecchini for Tell Afis (Cecchini 1988: 288). The presence of these jars at Mishrifeh from transitional Iron Age I/II contexts and in the early Iron Age II levels may be indicative of contacts with the Levantine Coast and the Southern Levant since the beginning of the Iron Age occupation of the site.

#### 4.2.6.10 STORAGE JARS WITH OUT-TURNED SQUARED RIM (J10) Pl. 45:1-2

This is the rarest jar typology and consists of only two specimens, representing 0.5% of the jar repertoire. They are thick-walled vessels, with an outward squared rim and diameters measuring from 16 to 30 cm. They probably had a storage function and were found in Iron Age II (50%) and transitional Iron Age II/III contexts (50%).

Only one close parallel has been found, at Tell Afis (Area G Central zone level 3):1037 this example is dated to the Iron Age III, which could fit with the fragment from transitional Iron Age II/III levels at Mishrifeh. No Iron Age II parallel was found, other than an in-site parallel from the Syrian Operation O excavations at Mishrifeh.1038

# 4.2.6.11 STORAGE JARS WITH THICKENED INTERNALLY ANGULAR RIM (J11) Pls. 45:3-5, 46.

This is another uncommon typology, representing 5% of the assemblage. It includes jars with internally angular rims, usually profiled, and often thick walls. A large fragment (H 5225.114 (**PI. 46:3**) displays an ovaloid body shape with a carination and oval vertical handles. Diameters vary from 14 to 40 cm, with 28 cm diameters being the most common. Due to the dimensions of the vessels and the walls, they were probably used for storage purposes.

They are documented in earlier Iron Age II contexts, but are most common in the Late Iron

<sup>&</sup>lt;sup>1033</sup> Bonfil, Greenberg 1997, fig. II.35:18.

<sup>&</sup>lt;sup>1034</sup> Garfinkel, Greenberg 1997, figs. III.28:8, III.32:29, III.44:9.

<sup>&</sup>lt;sup>1035</sup> Lamon, Shipton 1939, Pl. 13:69.

<sup>&</sup>lt;sup>1036</sup> Bikai 1978, Pl. VII:3.

<sup>&</sup>lt;sup>1037</sup> Cecchini 1998, fig. 34:10.

<sup>&</sup>lt;sup>1038</sup> Ziedan 2013, Tav. 15:1.

Age II; they decrease in the transition to the Iron Age III (Table 134).

J11	IA II	LATE IA II	IA II/III
Nr.	7	10	2
%	36.9	52.6	10.5

Table 134: J11, chronological distribution.

Compared to other jar typologies, a relatively large percentage (20%) of the sherds are red slipped.

Precise parallels for this typology can be found in the German<sup>1039</sup> and Syrian<sup>1040</sup> excavations of Mishrifeh. A complete jar with the same incurved, thickened and profiled rim as some of the specimens presented here was found embedded in the floor of an Iron Age II building discovered in Operation G, the excavation area opened by the German expedition over the western area of the second millennium Royal Palace (Russo 2018: 605). This fragmentary building could have been part of the crafts quarter of Operation H-T1 Phase 6, that was located just east of Operation G. This would indicate that the productive quarter originally had an oval arrangement and occupied the area over the second millennium BC Royal Palace (Morandi Bonacossi 2019: 10).<sup>1041</sup> The presence of Red Slip and the vertical ovoid shape with two oval vertical handles makes it very similar to H 5225.114.

The specimen from the Syrian expedition was discovered in Room D of Building I of Operation O (Ziedan 2013: 210). Room D was probably a basement under a staircase leading to an upper floor (Ziedan 2013: 90) and Building I had a public character and was probably devoted to the supervision and central control of production and storage activities (Morandi Bonacossi 2019: 21-22; Ziedan 2013: 164).

Therefore at Mishrifeh this typology of jar is closely connected to productive contexts.

Parallels without a profiled rim, analogous to some fragments from Mishrifeh (e.g. H 7083.41, **PI. 45:5**), are documented at Sarepta (Area II,Y Substrata D1-C2)<sup>1042</sup> in contexts dated to the Late Iron Age I and the Iron II. A storage jar with the same profiled and internally angular rim as described before, of 9<sup>th</sup> century BC, was found at Hazor (Area A Stratum VIII).<sup>1043</sup>

<sup>1040</sup> Ziedan 2013, Tav. 13-3.

<sup>&</sup>lt;sup>1039</sup> Russo 2018, Pl. 1:11.

<sup>1041</sup> Count du Mesnil du Buisson excavated buildings and structures that he had dated to the Iron Age, in the area Butte de l'Église over the Royal Palace, that were characterized by plastered floors and basins (du Mesnil du Buisson 1935: 123-132), which could also have belonged to the crafts quarter (Morandi Bonacossi 2019: 8-10).

<sup>&</sup>lt;sup>1042</sup> Anderson 1988 Pls. 33:1, 36:5.

<sup>&</sup>lt;sup>1043</sup> Yadin et al. 1958 Pl. XLVIII:11.

It is not clear if this typology should be considered a local form typical of Mishrifeh, as already suggested by Giulia Russo (Russo 2018: 605) or whether it is derived from the models mentioned above. I would agree with Russo that the profiled version at least, considering the single specimen from Hazor and the more numerous assemblage (about 20 fragments only from the Italian excavations) from Mishrifeh, is a type local to the site.

#### 4.2.7 COOKING POTS

Cooking pots represent 10% of the Mishrifeh pottery: thus, while they are not a major form in the repertoire, they are quite significant. As their name implies, they are devoted to food processing with heat.

Remarkable is the presence at Mishrifeh of two different cooking pot groups: holemouth (CP2-5) and short-necked pots (CP6-11), which often appear together in the same contexts. Holemouth vessels are well known and widespread throughout Central-Western Syria in the Iron Age II and III (Lehmann 1998: 13; Whincop 2007: 205). Instead, aside from Tell Nebi Mend (Whincop 2007: 205) and few other exceptions such as Tell Afis (Degli Esposti 1998: 241) and Tell Mastuma (Wada 2009d: 369), short-necked cooking pots seem to be a form foreign to the Iron Age II and III Syrian ceramic repertoire. These pots are instead common along the Lebanese Coast, in the Southern Levant and are in fact the only cooking-type vessel present at Tell Nebi Mend (Whincop 2007: 205).

Complete specimens are rare, although all the typologies seem to have a globular or ovoidal body, probably with a flat or rounded bottom; handles linking rim and shoulder occur frequently. Their rounded shape, while useful for reducing thermal shock (Orton, Hughes 2013: 250), suggests that they were used especially for boiling (Rice 2015: 422).

As would be expected, the cooking pots are generally undecorated, except for a few grooves, incisions and potter's marks (small incised circles on the handles).

Short-necked pots represent almost 70% of the cooking vessels: the most common typologies are pots with upright sinuous rim (CP7, 31.4%) and with straight rim (CP6, 24.7%), which together make up more than half of the assemblage. Another well attested short-necked type is the pot with upright thickened rim and an external depression (CP9, 11%). Concerning holemouth vessels, the most common typology are pots with small outward swollen rim (CP4, 15.8%).

Some specimens display mixed features from two different typologies: this happens especially with the CP7 and CP9 forms. A single fragment may present both a sinuous rim and an external depression under the rim. The attribution of these sherds to one typology rather than another was determined by which attribute is more prominent. This blend of features may confirm the local origin of the CP7 and CP9 forms, as will be assessed below.

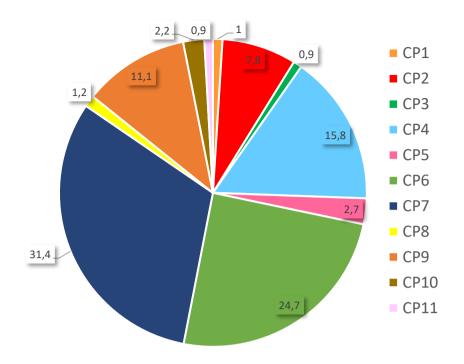


Fig. 252: Cooking pots – percentage occurrence of typologies.

	CP1	CP2	CP3	CP4	CP5	CP6	CP7	CP8	CP9	CP10	CP11
IA III		Х	Х	X		Х	X		Х	Х	
IA II / III	X	Х	Х	X	Х	Х	X		Х		
Late IA II	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х
IA II	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
IAI/II		Х		X	Х	Х	X		X		X
IA Ic				Х							

Table 135: Cooking pots – chronological distribution of the typologies.

#### 4.2.7.1 COOKING POTS WITH ROUNDED RIM (CP1) PI. 47:1-3

This rare group (1% of the cooking vessels) includes vessels with simple rims, usually rounded or squared in shape. It includes a few particular specimens which blend both holemouth and short-necked features.<sup>1044</sup> Diameter range between 10 and 22 cm.

While documented in the earlier Iron Age II contexts, these pots are especially common in the Late Iron II: they decline again in the transition to the Iron III (Table 136).

CP1 has parallels with vessels from Tell Shiukh Fawqani (Area G Period IX Level A)<sup>1045</sup> dated to the Iron Age III.

<sup>&</sup>lt;sup>1044</sup> In fact, these specimens are neither completely holemouth nor do they present a true short neck, rather what seems to be the beginning of a neck.

<sup>&</sup>lt;sup>1045</sup> Luciani 2005, Pl. 52:603-604.

CP1	IA II	LATE IA II	IA II/III
Nr.	1	3	1
%	20	60	20

Table 136: CP1, chronological distribution.

#### 4.2.7.2 HOLEMOUTH COOKING POTS WITH SIMPLE RIM (CP2) PI. 47:4-6, 48

This is a typology that occurs occasionally at Mishrifeh (almost 8% of the cooking pots). It has been divided in two variants depending on the thickness of the rim: CP2a includes vessels with a simple round rim, while CP2b is characterized by a thickened or swollen rim with a certain shape variability. The sherds are usually small, but a globular form for the body can be reasonably supposed (H 3516.5, Pl. 48:3). Diameters display a large variability, from 9 to 30 cm, through most the specimens measure 10, 16, 20 or 24 cm.

The variant CP2a is attested especially in Late Iron Age II and with only one attestation in transitional Iron Age II/III contexts, while CP2b is documented in almost all the chronological contexts (Table 137). It is present in small numbers in the transition from the Iron Age I to II and then in more significant quantities in the Iron Age II. The Late Iron Age II is the period with most attestations, while the slight decrease during the Iron Age II/III transition is more limited than in other typologies. In the Iron Age III it is well attested.

The parallels for CP2a are widespread in Syria. Similar specimens are found at Tell 'Acharneh, 1046 Tell Afis (Areas E1 levels 4-5, 1047 E2 levels 3-4, 1048 E2-E4 Phase IIa-b, 1049 G Central zone level 6), 1050 Tell Mastuma (Stratum I-2d), 1051 Tell Abou Danne (Niveau IId), 1052 'Ain Dara (phase XII)<sup>1053</sup> and Ibn Hani. 1054 Further specimens are documented in the 'Amuq Valley, at Chatal Hüyük (Area IV level 03b), 1055 and on the Middle Euphrates, at Tell Shiukh Fawqani (Area F Période IX), 1056 Tell Ahmar (Area C Stratum 2) 1057 and Karkemish (phase 10a-b). 1058 This variant appears in Syria, notably at Tell Afis and Ibn Hani, already in the Late

<sup>&</sup>lt;sup>1046</sup> Cooper 2006, figs. 4:1, 9:2.

<sup>&</sup>lt;sup>1047</sup> Mazzoni 1998, figs. 20:7-9.

<sup>&</sup>lt;sup>1048</sup> Degli Esposti 1998, fig. 9:2.

<sup>&</sup>lt;sup>1049</sup> Venturi 2020, Pl. 124:1-4.

<sup>&</sup>lt;sup>1050</sup> Cecchini 1998, fig. 28:23.

<sup>&</sup>lt;sup>1051</sup> Wada 2009b, fig. 4.9:4.

<sup>&</sup>lt;sup>1052</sup> Lebeau 1983, Pl. XLVIII:3.

<sup>&</sup>lt;sup>1053</sup> Stone, Zimansky 1999, fig. 74:6 (see also fig. 70:226).

<sup>&</sup>lt;sup>1054</sup> Bounni et al. 1979 fig. 27:1-2? (no numbers in the publication).

<sup>&</sup>lt;sup>1055</sup> Pucci 2019, Pl. 127:e.

<sup>&</sup>lt;sup>1056</sup> Makinson 2005, Pls. 11:66, 13:78.

<sup>&</sup>lt;sup>1057</sup> Jamieson 2012, fig. 3.23:1.

<sup>&</sup>lt;sup>1058</sup> Pizzimenti, Zaina 2016, fig. 4:16.

Iron Age I (Mazzoni 1998: 168) and develops into Iron Age II globular holemouth vessels: the survival of the typology is well attested in the other parallels presented here, with the examples from Tell Shiukh Fawqani, dated to the Iron Age III, being the latest.

CP2a	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.			4	1	
% on CP2a			80	20	
% on CP2 tot			12.9	3.2	
CP2b					
Nr.	1	7	8	4	6
% on CP2b	3.8	26.9	30.8	15.4	23.1
% on CP2 tot	3.2	22.6	25.8	12.9	19.3

Table 137: CP2, chronological distribution.

CP2b represents one of the most common cooking vessels in North Levantine centres in both the Iron Age II and III. It is particularly attested in Syria, at Tell 'Acharneh, <sup>1059</sup> Tell Mardikh (phase 2<sup>1060</sup> and Area E levels 3-4b), <sup>1061</sup> Tell Afis (Areas D levels 1-2, <sup>1062</sup> E1 level 3, <sup>1063</sup> E2 levels 1-2, <sup>1064</sup> E2-E4 phase Ia, <sup>1065</sup> G Central zone levels 2-3 and 5-7b and North zone level 2), <sup>1066</sup> Tell Mastuma (Strata I-2a/c and I-1), <sup>1067</sup> Tell Abou Danne (Niveau IIc-d), <sup>1068</sup> Tell Tuqan (Area D phase 4a), <sup>1069</sup> Tell Qarqur, <sup>1070</sup> 'Ain Dara (phases VI and XI), <sup>1071</sup> Tell Tweini (Area A level 6), <sup>1072</sup> Tell Sukas, <sup>1073</sup> Tell Shiukh Fawqani (Area F Période IX<sup>1074</sup> and

<sup>&</sup>lt;sup>1059</sup> Cooper 2006, fig. 4:3, 9:3-4 and 9.

<sup>&</sup>lt;sup>1060</sup> Pizzimenti 2014-2015, fig. 3:8.

<sup>&</sup>lt;sup>1061</sup> Mazzoni 1992b, figs. 11:5, 14:5-6 and 8, 16:5.

<sup>&</sup>lt;sup>1062</sup> Mazzoni 1987, figs, 8:15-16, 12:3-4 and 6.

<sup>&</sup>lt;sup>1063</sup> Mazzoni 1998, fig. 22:8.

<sup>&</sup>lt;sup>1064</sup> Degli Esposti 1998, fig. 12:19 and 21.

<sup>&</sup>lt;sup>1065</sup> Venturi 2020, Pls. 128:18, 135:13, 140:2-3.

<sup>&</sup>lt;sup>1066</sup> Cecchini 1998, figs. 25:15-17, 28:24 and 26, 30:17, 34:5-6, 36:15-18, 39:22.

<sup>&</sup>lt;sup>1067</sup> Wada 2009b, figs. 4.5:6, 4.10:10-11, 4.11:28-32, 4.28:10, 4.29:12, 4.34:24, 4.36:9-10, 4.39:13 and 15, 4.46:15, 4.66:11-14, 4.78:23-25 and 29-30; Wada 2009c, figs. 5.2:23-24, 5.10:44 and 48-49.

<sup>&</sup>lt;sup>1068</sup> Lebeau 1983, Pls. XLVIII:5, XLIX:1-7, L:2-4, CXIX:1-2.

<sup>&</sup>lt;sup>1069</sup> Baffi 2008c, fig. 28:12.

<sup>&</sup>lt;sup>1070</sup> Dornemann 2003a, figs. 83:18-19.

<sup>&</sup>lt;sup>1071</sup> Stone, Zimansky 1999, figs, 74:7-8 (see also fig. 71:230).

<sup>&</sup>lt;sup>1072</sup> Vansteenhuyse 2010, fig. III.2:7.

<sup>&</sup>lt;sup>1073</sup> Buhl 1983, fig. IX:97.

<sup>&</sup>lt;sup>1074</sup> Makinson 2005, Pls. 12:69-70 and 72-73, 13:74 and 77.

Area G Period IX levels A-B),<sup>1075</sup> Tell Ahmar (Area C Stratum 2)<sup>1076</sup> and at Tell Jurn Kabir.<sup>1077</sup> It is present also in the 'Amuq Valley, at Tell Tayinat<sup>1078</sup> and Chatal Hüyük (Area IVa level 01),<sup>1079</sup> and in Southern Anatolia, at Karkemish (Phase 10a-b)<sup>1080</sup> and Zincirli.<sup>1081</sup>

# 4.2.7.3 HOLEMOUTH COOKING POTS WITH SLIGHT DEPRESSION UNDER THE RIM (CP3) PI. 49

This is a rare typology (less than 1% of the cooking pots), consisting of holemouth vessels with globular body and a thickened, internally angular rim with an external slight depression. The diameters vary from 12 to 30 cm.

These cooking pots are attested in the Iron Age II and then in lower numbers in transitional Iron Age II/III and Iron Age III contexts (Table 138).

CP3	IA II	IA II/III	IA III
Nr.	2	1	1
%	50	25	25

Table 138: CP3, chronological distribution.

It is a typology well known in Central-Western Syria, in the 'Amuq Valley and on the Middle Euphrates in the Iron Age II, particularly the Late Iron Age II, and III: comparisons are in fact attested at Tell 'Acharneh, <sup>1082</sup> Tell Mardikh (Area E levels 3-4), <sup>1083</sup> Tell Afis (Areas E2-E4 phase Ia-b<sup>1084</sup> and G Central zone level 4), <sup>1085</sup> Tell Mastuma (Strata I-2a/b and I-1), <sup>1086</sup> Tell Tuqan (Area D phase 3), <sup>1087</sup> Tell Tayinat, <sup>1088</sup> Karkemish, <sup>1089</sup> Tell Shiukh Fawqani (Area G Period IX levels A-B)<sup>1090</sup> and Tell Ahmar (Area C)<sup>1091</sup>.

<sup>&</sup>lt;sup>1075</sup> Luciani 2005, Pls. 21:244, 51:599-600.

<sup>&</sup>lt;sup>1076</sup> Jamieson 2012, figs. 3.23:4-5.

<sup>&</sup>lt;sup>1077</sup> Eidem, Ackermann 1999, figs. 9a:19-20.

<sup>&</sup>lt;sup>1078</sup> Osborne et al. 2019, figs. 17:21, 29:10-11.

<sup>&</sup>lt;sup>1079</sup> Pucci 2019, Pl. 138:h.

<sup>&</sup>lt;sup>1080</sup> Pizzimenti, Zaina 2016, fig. 4:15.

<sup>&</sup>lt;sup>1081</sup> Soldi 2019, figs. 8:a-f.

<sup>&</sup>lt;sup>1082</sup> Cooper 2006, figs. 4:2, 9:5.

<sup>&</sup>lt;sup>1083</sup> Mazzoni 1992b, fig. 14:1,4.

<sup>&</sup>lt;sup>1084</sup> Venturi 2020, Pls. 130:12 and 25, 140:7.

<sup>&</sup>lt;sup>1085</sup> Cecchini 1998, fig. 32:19.

<sup>&</sup>lt;sup>1086</sup> Wada 2009b, figs. 4.17:1, 4.20:5, 4.29:13 and 16, 4.30:6, 4.34:23, 4.42:7, 4.50:7, 4.57:5, 4.72:3; Wada 2009c, fig. 5.6:84.

<sup>&</sup>lt;sup>1087</sup> Baffi 2008c, fig. 26:10.

<sup>&</sup>lt;sup>1088</sup> Osborne et al. 2019, figs. 13:10, 17:23.

<sup>&</sup>lt;sup>1089</sup> Bonomo, Zaina 2014, fig. 6:4.

<sup>&</sup>lt;sup>1090</sup> Luciani 2005, Pls. 20:239, 51:508.

<sup>&</sup>lt;sup>1091</sup> Jamieson 1999, fig. 5:4.

# 4.2.7.4 HOLEMOUTH COOKING POTS WITH SMALL OUT-TURNED THICKENED RIM (CP4) PI. 50

This is the most common typology of the holemouth category, representing almost 16% of the cooking pots, and also the only cooking pot type that occurs in all the chronological contexts. It includes vessels with a swollen out-turned rim, mostly of small dimensions but a certain variability in the size and shape can be observed. Diameters display a wide range, between 7 and 30 cm, with a prevalence of 9, 10 and 16 cm diameters.

Cooking pots with out-turned thickened rim occur already in the Iron Age Ic and are most common in the transition to the Iron Age II; while still fairly common in the Iron Age II and III, their numbers steadily decrease (Table 139).

CP4	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	6	24	13	11	1	6
%	9.8	39.3	21.3	18	1.6	9.8

Table 139: CP4, chronological distribution.

This cooking pot type appears to be typical of Central-Western Syrian assemblages during the Iron Age II and III: identical parallels are documented at Tell Mardikh (phases 1-2), 1092 Tell Afis (Areas D level 2, 1093 E2-E4 phase Ia, 1094 G Central zone level 7b), 1095 Tell Mastuma (Strata I-2b/d and I-1) 1096 and Tell Tuqan (Areas D phases 1 and 4a 1097 Q phase 5a). 1098 Precise parallels dated to the Iron Age I have not been found, although a similar specimen comes from Tell Afis (Area E1 level 3) 1099 from a transitional Iron Age I/II context. This type of small out-turned thickened rim appears in Syrian sites such as Tell Afis (Venturi 2020: 112, 117; Cecchini 1998: 287) and is clearly present in the Iron Age II, following the progressive increase in holemouth cooking pots. At Tell Tuqan, in Area D, cooking pots with small out-turned rims are the most common cooking vessel in Phases 1 and 4a (respectively Iron Age III and II. Baffi 2008c: 127, 129). At Mishrifeh the trend is the opposite: holemouth cooking pots, while present in all the stratigraphic sequence, are more documented in the earlier contexts and CP4, as shown before, is especially common in the levels dated to the Iron

<sup>&</sup>lt;sup>1092</sup> Pizzimenti 2014-2015, figs. 3:9, 5:6.

<sup>&</sup>lt;sup>1093</sup> Mazzoni 1987, fig. 12:11.

<sup>&</sup>lt;sup>1094</sup> Venturi 2020, Pl. 135:7.

<sup>&</sup>lt;sup>1095</sup> Cecchini 1998, fig. 21:21.

<sup>&</sup>lt;sup>1096</sup> Wada 2009b, figs. 4.44:13, 4.96:7; Wada 2009c, figs. 5.2:25, 5.6:85.

<sup>&</sup>lt;sup>1097</sup> Baffi 2008c, figs. 24:13-15, 28:13.

<sup>&</sup>lt;sup>1098</sup> Fiorentino 2008, fig. 16:5; Fiorentino, Marinelli 2011, fig. 13:6.

<sup>&</sup>lt;sup>1099</sup> Mazzoni 1998, fig. 22:9.

Age I – II transition. While holemouth pots are still quite common in the Iron Age II, short-necked vessels are the most frequent group in that period at Mishrifeh.

### 4.2.7.5 HOLEMOUTH COOKING POTS WITH OUTWARD INFLATED RIM (CP5) PI. 51

This is a rare cooking pots typology (less than 3%) and features specimens with a more or less outward rim, globular body and diameters measuring between 10 and 40 cm. These pots appear in the transition between the Iron Age I and II: they reach their highest percentage in the Late Iron Age II, declining instead in the transition to the Iron Age III (Table 140).

CP5	IA I/II	IA II	LATE IA II	IA II/III
Nr.	2	1	4	1
%	25	12.5	50	12.5

Table 140: CP5, chronological distribution.

Parallels for this holemouth pot are, once again, limited mostly to Central-Western Syria and Tell Ahmar (Area C Stratum 2).<sup>1100</sup> identical vessels are present at Tell 'Acharneh, <sup>1101</sup> Tell Mardikh (Areas E level 4 and G levels 2 and 4), <sup>1102</sup> Tell Afis (Areas D levels 2 and 4-6, <sup>1103</sup> E2-E4 phases Ib-c and IIa, <sup>1104</sup> G Central zone level 3 and North zone levels 3-2), <sup>1105</sup> Tell Mastuma (Strata I-2a/b and I-1), <sup>1106</sup> Tell Abou Danne (Niveau IId) <sup>1107</sup> and Tell Tuqan (Areas D phase 1, <sup>1108</sup> Q phase 5a and 5c). <sup>1109</sup>

An interesting parallel comes also from Tyre (Stratum VIII),<sup>1110</sup> the only one found outside the Syrian region. These parallels are dated to the Iron Age II and III, although the presence of this type also in transitional Iron Age I and II contexts is confirmed by a vessel from Tell Afis (Areas E2-E4 phase IIa).<sup>1111</sup>

#### 4.2.7.6 SHORT-NECKED COOKING POTS WITH STRAIGHT RIM (CP6) Pls. 52-53

This is one of the most common typologies of cooking pot (about 25%) at Mishrifeh and

<sup>&</sup>lt;sup>1100</sup> Jamieson 2012, fig. 3.23:7.

<sup>&</sup>lt;sup>1101</sup> Cooper 2006, figs. 9:6-7.

<sup>&</sup>lt;sup>1102</sup> Mazzoni 1992b, figs. 11:2, 19:7, 22:10-1.

<sup>&</sup>lt;sup>1103</sup> Mazzoni 1987, figs. 12:12-13, 19:7, 20:17, 22:15 and 19.

<sup>&</sup>lt;sup>1104</sup> Venturi 2020, Pls. 124:11, 128:15, 130:13.

<sup>&</sup>lt;sup>1105</sup> Cecchini 1998, figs. 34:4, 38:15, 39:13 and 24.

<sup>&</sup>lt;sup>1106</sup> Wada 2009b, figs. 4.39:14, 4.97:8 and 13; Wada 2009c figs. 5.6:82, 86.

<sup>&</sup>lt;sup>1107</sup> Lebeau 1983, Pls. XLVII:2, XLVIII:1.

<sup>&</sup>lt;sup>1108</sup> Baffi 2008c, fig. 24:16.

<sup>&</sup>lt;sup>1109</sup> Fiorentino 2008, figs. 16:4, 17:23.

<sup>&</sup>lt;sup>1110</sup> Bikai 1978, Pl. XX:13.

<sup>&</sup>lt;sup>1111</sup> Venturi 2020, Pl. 124:11.

comprises simple forms with globular body and straight rim. A certain variety is displayed: the neck can be longer or shorter, the rim more or less thickened or leaning slightly inwards or outwards. The vessels have a large diameter range, from 6 to 32 cm, with a prevalence of 12, 14 and 18 cm.

This typology appears in the transition between the Iron Age I and II and its presence increases steadily until the Late Iron Age II. After that, it decreases sharply (Table 141).

CP4	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	9	39	42	9	3
%	8.8	38.2	41.2	8.8	2.9

Table 141: CP6, chronological distribution.

Parallels occur in other Central-Western sites in the Iron Age II, such as Tell Nebi Mend (phase C), <sup>1112</sup> Tell Afis (Area E1 level 4) <sup>1113</sup> and Tell Mastuma (Stratum I-2b). <sup>1114</sup> While short-necked pots are present in other Coastal and South Levantine centres (see above), no precise parallel with the CP6 specimens has been found <sup>1115</sup> apart from an example from Tell Kazel (Area I level 9). <sup>1116</sup>

# 4.2.7.7 SHORT-NECKED COOKING POTS WITH UPRIGHT SINUOUS RIM (CP7) **PIs. 54-55**

This typology is the most common in the cooking pot assemblage, representing more than 31% of the pots: the vessels are characterised by a globular body and an undulating rim. Also in this case, a fair variability of rim shapes can be observed and diameters have a large range, from 6 to 30 cm, although most specimens measure 14, 16 or 18 cm.

With regard to chronology, these pots occur in very low numbers in the transition from the Iron Age I to II, but are exponentially more present in the Iron Age II; they decrease steadily with the transition to the Iron Age III (Table 142).

These cooking pots have exclusively in-site parallels with the German excavations of Mishrifeh: 1117 they have been found in the context of the Iron Age II building with associated

<sup>&</sup>lt;sup>1112</sup> Whincop 2007, fig. 8:g.

<sup>&</sup>lt;sup>1113</sup> Degli Esposti 1998, fig. 9:3. The cooking pots with straight rims at Tell Afis are considered connected to archaic forms found at Tyre (Degli Esposti 1998: 241).

<sup>&</sup>lt;sup>1114</sup> Wada 2009b, fig. 4.70:5.

<sup>1115</sup> A similar, but not identical, example occurs in the Iron Age I at Tyre (Stratum XIII-1) - Bikai 197,8 Pl. XXXV:3. 1116 Badre et al. 1990, fig. 30:d.

<sup>&</sup>lt;sup>1117</sup> Russo 2018, Pl. 2:3

pits found in Operation G (Russo 2018: 602) and already discussed above for J11.

Since no other precise parallel has been found, as Russo as already noted (Russo 2018: 605), it is likely that this is a local form, typical of Mishrifeh.

CP7	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	2	57	41	19	3
%	1.6	46.7	33.6	15.6	2.5

Table 142: CP7, chronological distribution.

# 4.2.7.8 SHORT-NECKED COOKING POTS WITH RIM WITH LIP IMPRESSION (CP8) PI. 56

This is a quite rare group (1.2% of the cooking vessels), which includes specimens with a straight or slightly inclined neck and a modelled rim with external thickening: the vessels are quite fragmentary, but a globular shape for the body may be reasonably hypothesized. The diameters measure 14 and 22 cm, most commonly 22 cm.

This typology is attested in the Iron Age II (Table 143): to note that the three Late Iron Age II sherds come from the same SU, that is a deposit related to a *tannur* in the artisans' quarter of Operation H-T1.

CP8	IA II	LATE IA II
Nr.	2	3
%	40	60

Table 143: CP8, chronological distribution.

A few parallels for this typology are attested in Central-Western Syria, at Tell Nebi Mend (phase B)<sup>1118</sup> and Tell Afis (Areas E2-E4 phase Ia),<sup>1119</sup> and on the Middle Euphrates, at Tell Shiukh Fawqani (Area G Period IX level A).<sup>1120</sup>

Most parallels though come from the Levantine Coast, from sites such as Tell 'Arqa (Niveau 9b)<sup>1121</sup> and Tyre (Stratum X-1),<sup>1122</sup> and the northern part of the Southern Levant, from Tel

<sup>&</sup>lt;sup>1118</sup> Whincop 2007, fig. 8:d.

<sup>&</sup>lt;sup>1119</sup> Venturi 2020, Pl. 132:4.

<sup>&</sup>lt;sup>1120</sup> Luciani 2005, Pl. 56:637-638.

<sup>&</sup>lt;sup>1121</sup> Thalmann 1978, fig. 44:2.

<sup>&</sup>lt;sup>1122</sup> Bikai 1978, Pl. XXIII:18.

Dor (Areas A phase 9<sup>1123</sup> and G phase 6a),<sup>1124</sup> Tel Dan (Areas T Strata IVa and II and A Structure A),<sup>1125</sup> Hazor (Areas A Strata VI-VIII<sup>1126</sup> and B Stratum V)<sup>1127</sup> and Megiddo (Level H-3).<sup>1128</sup>

The parallels from Syria are dated to the Iron Age II and III, while those from the Coast and the Southern Levant are dated to the Iron Age II (9<sup>th</sup> and 8<sup>th</sup> centuries), with the exception of the pot from Tell 'Arqa which comes from Iron III-Persian Age levels: however, Iron Age I antecedents are present in both areas. Analogous examples occur in fact at Chatal Hüyük in N-mid levels (1150-950 BC, Area IVa level 05),<sup>1129</sup> in the Iron Age I at Tell Kazel (Area II level 5)<sup>1130</sup> and in transitional Iron Age I/II contexts at Tell Afis (Area E1 levels 5 and 3),<sup>1131</sup> Tel Dor (Area G phase 6b)<sup>1132</sup> and Hazor (Area A Strata IX-X).<sup>1133</sup> At Tell Afis finds come also from transitional Late Bronze Age II/Iron Age I contexts (Area E1 level 9c).<sup>1134</sup> In conclusion, this type most probably circulated in the Levant starting from the Iron Age I. In the Iron Age II it occurred more in Southern Levantine centres (Spagnoli 2010: 21, type 2271), due to the more widespread use of straight-necked cooking pots compared to the Northern Levant, although it also survived in the few Syrian centres presented above.

# 4.2.7.9 SHORT-NECKED COOKING POTS WITH UPRIGHT THICKENED RIM AND AN EXTERNAL DEPRESSION BELOW THE RIM (CP9), **PI. 57**

This is a fairly well-attested typology (11% of the cooking pots). The vessels are characterised by a straight thickened rim and a small external groove under the rim: here also can be noted some variability in the morphology of the rim, which may also be internally angular. Diameters range from 8 to 24 cm, with a prevalence of 14 and 16 cm.

It is a form typical of the Iron Age II: it appears already in transitional Iron Age I/II contexts and is very common in the Iron Age II. In later periods its presence decreases (Table 144). As for CP7, the only precise parallels for this typology are in-site comparisons with the Late Iron Age II building and pits excavated in Operation G by the German expedition 1135 and

<sup>&</sup>lt;sup>1123</sup> Gilboa 1995, fig. 1.5:11.

<sup>&</sup>lt;sup>1124</sup> Gilboa 2018, Pl. 20.65:4-5.

<sup>&</sup>lt;sup>1125</sup> Arie 2008, figs. 10:4-6; 14:12, 14 and 16; 20:6-7.

<sup>&</sup>lt;sup>1126</sup> Yadin et al. 1958, Pl. LII:10; Yadin et al. 1960 Pls. LVII:17-20, LXIV:9-11.

<sup>&</sup>lt;sup>1127</sup> Yadin et al. 1958, Pl. LXVII:36.

<sup>&</sup>lt;sup>1128</sup> Finkelstein, Zimhoni, Kafri 2000, fig. 11.53:12.

<sup>&</sup>lt;sup>1129</sup> Pucci 2019, Pl. 121:c-d.

<sup>&</sup>lt;sup>1130</sup> Badre et al. 1990, fig. 41:f,g.

<sup>&</sup>lt;sup>1131</sup> Mazzoni 1998, figs. 20:10, 22:10.

<sup>&</sup>lt;sup>1132</sup> Gilboa 2018, Pls. 20.59:8, 11-14, 16-17; 20.68:23-24.

<sup>&</sup>lt;sup>1133</sup> Yadin et al. 1958, Pl. XLV:18 and 20.

<sup>&</sup>lt;sup>1134</sup> Venturi 1998, fig. 9:12.

<sup>&</sup>lt;sup>1135</sup> Russo 2018, Pl. 2:2.

with the Iron Age II Building III in Operation O dug by the Syrian Mishrifeh expedition. <sup>1136</sup> This identifies CP9 as another form typical of the site.

CP9	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	16	17	8	1
%	2.3	37.2	39.5	18.6	2.3

Table 144: CP9, chronological distribution.

# 4.2.7.10 SHORT-NECKED COOKING POTS WITH EXTERNAL GROOVE ON THE RIM (OR DOUBLE RIM COOKING POTS) (CP10) PI. 58

This is an uncommon typology, representing 2.2% of the cooking pots, which includes vessels with a thickened, profiled rim with an external groove, analogous to a double rim; the rim is usually straight, or slightly inclined, but one exemplar with a larger swollen rim is documented. Diameters vary between 10 and 20 cm.

These pots are found especially in Iron II contexts, while they are rare in the Iron Age III (Table 145).

CP10	IA II	LATE IA II	IA III
Nr.	4	3	1
%	50	37.5	12.5

Table 145: CP10, chronological distribution.

Parallels for these cooking pots are documented especially in Syria at Tell Nebi Mend (phase B)<sup>1137</sup> and Tell Mastuma (Strata I-2b/c)<sup>1138</sup> during the Iron Age II. Earlier specimens from Iron Age I and transitional Iron Age I/II levels are present at Tell Afis (Area G East zone level 4a)<sup>1139</sup> and Tell Kazel (Area II level 5).<sup>1140</sup> Outside the Syrian region, an identical example was found at Tel Dor (Area A phase 9)<sup>1141</sup> in a level dated to the Late 8<sup>th</sup> – 7<sup>th</sup> centuries BC. The fragment with swollen rim (J 175.2, phase J5, **PI. 58:3**) has a suitable parallel in a cooking pot from Tell Afis (Areas E2-E4 Phase Ia)<sup>1142</sup> dated to 750-600 BC.

<sup>&</sup>lt;sup>1136</sup> Ziedan 2013, Tav. 22:6.

<sup>&</sup>lt;sup>1137</sup> Whincop 2007, fig. 8:f.

<sup>&</sup>lt;sup>1138</sup> Wada 2009b, figs. 4.10:16, 4.32:2, 4.55:2.

<sup>&</sup>lt;sup>1139</sup> Cecchini 1998, fig. 14:12.

<sup>&</sup>lt;sup>1140</sup> Capet 2003, fig. 38:b.

<sup>&</sup>lt;sup>1141</sup> Gilboa 1995, fig. 1.5:10.

<sup>&</sup>lt;sup>1142</sup> Venturi 2020, Pl. 140:8.

# 4.2.7.1 COOKING POTS(?) WITH INVERTED STANCE AND GROOVED RIM (CP11) PI. 59:1-2

This is one of the rarest types, representing in fact less than 1% of the cooking pots. It comprises specimens with a rim with a groove on it and an external thickening: the body was probably globular or ovoidal, while diameters range from 11 to 21 cm.

They are already attested in the transition between the Iron Age I and II, then they are present in the Iron Age II (Table 146).

CP11	IA I/II	IA II	LATE IA II
Nr.	1	1	1
%	33.3	33.3	33.3

Table 146: CP11, chronological distribution.

The closest parallel found is with a cooking pot from Tell Tayinat (Field 1, phases 6-3)<sup>1143</sup> dated to the early Iron Age I: it shows a close resemblance, but is not identical, and it belongs to an earlier period than the specimens from Mishrifeh.

No other precise parallel has been found. The shape is similar to kraters from Tell Afis (Areas E2-E4 Phase IVb),<sup>1144</sup> Tel Dan (Area A)<sup>1145</sup> and Hazor (Stratum VIIa<sup>1146</sup> and Area A Strata VII-VIII),<sup>1147</sup> however the specimens from Mishrifeh have clearly a kitchen ware fabric and display traces of burning. The parallels are dated to the Iron Age I (Tell Afis) and the Iron Age II (Tel Dan, Hazor).

The lack of cooking pots parallels is quite surprising: perhaps the shape was derived from kraters and at Mishrifeh was transformed into a cooking pot – or the vessels from Mishrifeh may be considered kraters related to cooking activities more than true cooking pots.

<sup>&</sup>lt;sup>1143</sup> Harrison 2010b, fig. 7:3.

<sup>&</sup>lt;sup>1144</sup> Venturi 2020, Pl. 93:7.

<sup>&</sup>lt;sup>1145</sup> Arie 2008, fig. 19:11.

<sup>&</sup>lt;sup>1146</sup> Ben Ami 2012b, fig. 3.23:18.

<sup>&</sup>lt;sup>1147</sup> Yadin et al. 1958, Pls. XLIX:40-41, XLVII:29

#### 4.2.8 LARGE STORAGE JARS

As mentioned above, large storage jars are the most common forms in the Mishrifeh pottery assemblage (almost 23%). This is certainly linked to the numerous productive and storage contexts found at the site and especially to the most relevant archaeological evidence, that is the Late Iron Age II productive quarter of Operation H-T1. These are exclusively storage vessels; they may have also been used in some cases also for transport, but this is improbable considering their size.

As for the cooking pots, the storage jars too do not have any decorations apart from grooves, incisions and potter's marks (fingerprint impressions, crescent moons, stamped Aramaic inscriptions). Only one sherd (0.1% of the assemblage) is red slipped.

The most common typology are storage jars with swollen rim, which represent 98%<sup>1148</sup> of the assemblage, especially the variants with oval (P1c, 36.6%) and rounded rims (P1a, 24.1%).

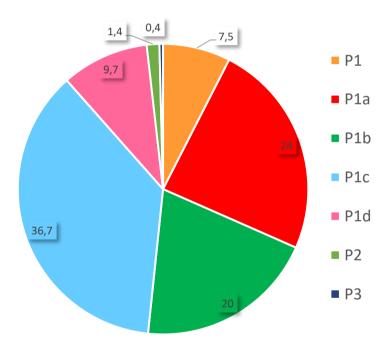


Fig. 253: Storage jars - percentage occurrence of typologies.

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<sup>&</sup>lt;sup>1148</sup> The graphic shows the percentages of the P1 variants due to their large numbers and importance in the pottery repertoire.

	P1	P2	P3
IA III	X	Х	
IA II / III	X	Х	
Late IA II	X	X	X
IA II	X	X	Х
IAI/II	X	X	
IA Ic	X	X	

Table 147: Large storage jars – chronological distribution of the typologies.

# 4.2.8.1 LARGE STORAGE JARS WITH SWOLLEN RIM (P1): ROUNDED (P1a), SQUARED (P1b), OVAL (P1c) AND WITH POINTED ENDING (P1d) PIs. 59:3, 60-64

This is the most common storage jar typology, and in general one of the most attested in the whole pottery assemblage. It is characterised by vessels with large, thickened rims, which come in various shapes, especially rounded, squared, oval and pointed. The oval and rounded rim variants are the most frequent. Complete specimens (T4 8254, **PI. 62:1**) measure about 1m in height, with an ovoidal or cigar-shaped body with a rounded low knobbed base, and two or three handles.

Diameters are wide-ranging, from 12 to 52 cm, with a prevalence of diameters over 20 cm, such as 28, 30, 32, 34, 38 and 40 cm.

The typology and its variants have a similar chronological distribution (Table 148). They mostly appear in the transition from Iron Age I to Iron Age II, aside from P1a which is already attested in the Iron Age Ic, and they increase steadily until the Late Iron Age II. After that period, their numbers sharply decrease.

P1	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.			13	45	11	2
% on P1			18.3	63.4	15.5	2.8
% on P1 tot			1.4	4.9	1.2	0.2
P1a						
P1a Nr.	1	7	66	128	21	10
	1 0.4	7 3	66 28.3	128 54.9	21	10 4.3

P1b	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.		6	39	113	15	8
% on P1b		3.3	21.5	62.4	8.3	4.4
% on P1 tot		0.6	4.2	12.2	1.6	0.9
						•
P1c						
Nr.		30	88	187	31	15
% on P1c		8.5	25.1	53.3	8.8	4.3
% on P1 tot		3.2	9.5	20.2	3.3	1.6
P1d						
Nr.		10	15	57	10	
% on P1d		10.9	16.3	61.9	10.9	
% on P1 tot		1	1.6	6.1	1	

Table 148: P1, chronological distribution.

This typology is one of the most widespread forms in the Northern Levant for the whole Iron Age and thus it is not chronologically distinctive.

Large storage jars with swollen rims are in fact widely present at Hama (Période E),<sup>1149</sup> Tell 'Acharneh,<sup>1150</sup> Tell Nebi Mend (phases B-C),<sup>1151</sup> Tell Mardikh (phases 1-2<sup>1152</sup> and Area E level 4a),<sup>1153</sup> Tell Afis (Areas D levels 2 and 6,<sup>1154</sup> E1 levels 2-4,<sup>1155</sup> E2 levels 1-4/5,<sup>1156</sup> E2-E4 phases Ia and IIa-b,<sup>1157</sup> G Central zone level 8a),<sup>1158</sup> Tell Mastuma (Stratum I),<sup>1159</sup> Tell Abou Danne (Niveaux IIc-d),<sup>1160</sup> Tell Tuqan (Areas D phases 1-2, 4a<sup>1161</sup> and Q phases 5a-b), <sup>1162</sup> 'Ain Dara (Phase IV), <sup>1163</sup> Tell Tayinat, <sup>1164</sup> Chatal Hüyük (Area II level 03), <sup>1165</sup>

<sup>&</sup>lt;sup>1149</sup> Riis, Buhl 1990, figs. 61: 415-419.

<sup>&</sup>lt;sup>1150</sup> Cooper 2006, figs. 4:12-17, 10, 11; Cooper, Fortin 2004 figs. 14:1-2.

<sup>&</sup>lt;sup>1151</sup> Whincop 2007, figs. 6:e-f, 11:a.

<sup>&</sup>lt;sup>1152</sup> Pizzimenti 2014-2015, figs. 3:6-7, 5:3.

<sup>&</sup>lt;sup>1153</sup> Mazzoni 1992b, fig. 16:7.

<sup>&</sup>lt;sup>1154</sup> Mazzoni 1987, figs. 13 and 23.

<sup>&</sup>lt;sup>1155</sup> Mazzoni 1998, figs. 23:2-3, 26:2-3.

<sup>&</sup>lt;sup>1156</sup> Degli Esposti 1998, fig. 13.

<sup>&</sup>lt;sup>1157</sup> Venturi 2020, Pls. 125, 126, 132:5-6, 134:3, 140:12.

<sup>&</sup>lt;sup>1158</sup> Cecchini 1998, fig. 19:22.

<sup>&</sup>lt;sup>1159</sup> Wada 2009d, figs. 6.1, 6.2.

<sup>&</sup>lt;sup>1160</sup> Lebeau 1983, Pls. LXV, LXVI:1-2, LXXXI:1, LXXXII:1.

<sup>&</sup>lt;sup>1161</sup> Baffi 2008c, figs. 24:7, 25:11-12, 28:16-17.

<sup>&</sup>lt;sup>1162</sup> Fiorentino 2008, fig. 16:1-2, 6; Fiorentino, Marinelli 2011, figs. 13:7-10.

<sup>&</sup>lt;sup>1163</sup> Stone, Zimansky 1999, fig. 75.

<sup>&</sup>lt;sup>1164</sup> Osborne et al. 2019, fig. 18:10.

<sup>&</sup>lt;sup>1165</sup> Pucci 2019, Pls. 103:g, 113:f.

Zincirli,<sup>1166</sup> Tell Shiukh Fawqani (Area G Period IX level A),<sup>1167</sup> Tell Ahmar (Area C Stratum 2),<sup>1168</sup> Tel Dan (Area T Stratum IVa),<sup>1169</sup> Hazor (Area A Stratum VIII).<sup>1170</sup> This small selection of parallels shows how widespread, both chronologically and geographically, this typology is.

### 4.2.8.2 LARGE STORAGE JARS WITH OUTWARD RIM (P2) PI. 65:1-4

This form occurs rarely (1.4% of the storage jars). It includes vessels with swollen rim extended outwards and features a high rim shape variability. Rims can be squared, squared and profiled, rounded or pointed. Since no complete vessels were found, their shape is hypothetical: however, they seem analogous to the basins with straight or slightly inclined walls creating a wide mouth and, indeed, a basin-like body. Their diameters vary between 26 and 40 cm.

These storage jars are present in low numbers in all the chronological contexts, starting from the Iron Age Ic: they are most common in the Late Iron Age II (Table 149).

P2	IA Ic	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	1	1	4	5	2	1
%	7.1	7.1	28.6	35.7	14.3	7.1

Table 149: P2, chronological distribution.

Parallels come from other Central-Western Syrian sites, such as Tell 'Acharneh, <sup>1171</sup> Tell Nebi Mend (phases B-C), <sup>1172</sup> Tell Afis (Areas D levels 4-5, <sup>1173</sup> E1 level 2, <sup>1174</sup> E2 levels 3-4, <sup>1175</sup> G East zone levels 2-3) <sup>1176</sup> and Tell Mastuma (Stratum I-2b). <sup>1177</sup> Further parallels are attested on the Middle Euphrates, at Karkemish <sup>1178</sup> and Tell Shiuk Fawqani (Area G Period IX level B). <sup>1179</sup> Most of these examples are dated to the Iron Age II or Late Iron Age II/beginning of Iron Age III, but earlier specimens from Iron Age I or intermediate Iron Age I/II contexts (Tell

<sup>&</sup>lt;sup>1166</sup> Von Luschan, Andrae 1943, Pls. 29:d, 30:a,c; Soldi 2019, fig. 9.

<sup>&</sup>lt;sup>1167</sup> Luciani 2005, Pl. 54:622-623.

<sup>&</sup>lt;sup>1168</sup> Jamieson 2012, fig. 3.20:6.

<sup>&</sup>lt;sup>1169</sup> Arie 2008, fig. 13:1.

<sup>&</sup>lt;sup>1170</sup> Yadin et al. 1960, PL. LIX:1.

<sup>&</sup>lt;sup>1171</sup> Cooper 2006, fig. 10:2.

<sup>&</sup>lt;sup>1172</sup> Whincop 2007, figs. 6:b-c, 11:c.

<sup>&</sup>lt;sup>1173</sup> Mazzoni 1987, figs. 19:11, 20:20.

<sup>&</sup>lt;sup>1174</sup> Mazzoni 1998, fig. 26:5.

<sup>&</sup>lt;sup>1175</sup> Degli Esposti 1998, figs. 13:7, 10.

<sup>&</sup>lt;sup>1176</sup> Cecchini 1998, figs. 14:14, 17:3.

<sup>&</sup>lt;sup>1177</sup> Wada 2009b, fig. 4.66:19.

<sup>&</sup>lt;sup>1178</sup> Bonomi, Zaina 2014, fig. 6.11.

<sup>&</sup>lt;sup>1179</sup> Luciani 2005, Pl. 25:291-293.

Afis Areas E1 levels 4-6<sup>1180</sup> and G East zone level 5<sup>1181</sup>; Tell Kazel Area II level 5a)<sup>1182</sup> are attested. This reflects the chronological distribution of these storage jars at Mishrifeh.

## 4.2.8.3 LARGE STORAGE JARS WITH GROOVED RIM (P3) PI. 65:5

This is a very rare typology (less than 0.4% of the storage jars). The vessels are analogous to storage jars with swollen rims, but with a grooved surface mostly on the inner side of the rim. The diameters measure 30 and 32 cm, especially the former.

This typology is attested in the Iron Age II (Table 150).

P3	IA II	LATE IA II
Nr.	2	2
%	50	50

Table 150: P3, chronological distribution.

There are few parallels for this typology. Analogous vessels are documented at Tell Afis already in the Late Iron Age I (Iron Age Ic) and beginning of Iron Age II (Areas E1 level 7,<sup>1183</sup> E2-E4 phase III,<sup>1184</sup> G East zone level 3)<sup>1185</sup>, and in the Iron Age II (9<sup>th</sup> century BC) at Hazor (Area A Stratum VIII).<sup>1186</sup>

<sup>&</sup>lt;sup>1180</sup> Mazzoni 1998, figs. 21:1 and 3, 23:1.

<sup>&</sup>lt;sup>1181</sup> Cecchini 1998, fig. 17:1.

<sup>&</sup>lt;sup>1182</sup> Chiti, Pedrazzi 2014, fig. 8:1.

<sup>&</sup>lt;sup>1183</sup> Mazzoni 1998, fig. 17:9.

<sup>&</sup>lt;sup>1184</sup> Venturi 2020, Pl. 116:3.

<sup>&</sup>lt;sup>1185</sup> Cecchini 1998, fig. 15:11.

<sup>&</sup>lt;sup>1186</sup> Yadin et al. 1958, Pl. XLVII:28.

### 6.2.9 BASES

Bases represent 15% of the pottery assemblage, thus they are quite a significant part of the ceramic corpus. It is difficult to associate most of the bases with a particular pottery shape or type, except for in a few cases (BA3, BA5, see below).

Regarding treatments and decorations, Red Slip appears on almost 16% of the bases and paint on almost 5% of them.

The most common typology are ring bases, especially single ring bases (BA1, 42.1%), and storage rounded low knobbed bases (BA5, 21.4%).

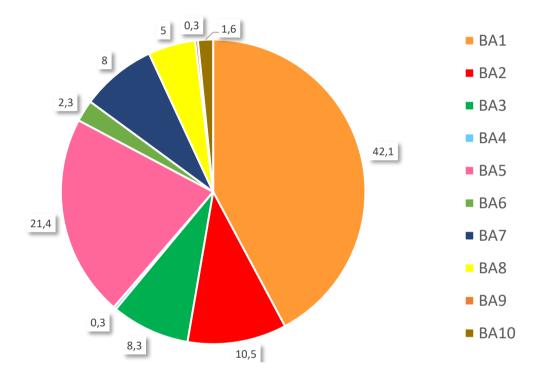


Fig. 254: Bases – percentage occurrence of typologies.

	BA1	BA2	BA3	BA4	BA5	BA6	BA7	BA8	BA9	BA10
IA III	X				X	Х	Х	Х		
IA II / III	X	X	X		X		Х			X
Late IA II	Х	Х	Х		Х	Х	Х	Х		Х
IA II	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
IAI/II	X	X	X	X	X	X		X		X
IA Ic		Х			Х					

Table 151: Bases – chronological distribution of the typologies.

## 4.2.9.1 SIMPLE RING BASES (BA1) Pl. 66:1-4

The most common base typology, this is probably associated with a lot of shapes, especially open forms. It is for example associated with plates with round or squared rim (H 5281.718 **Pl. 4:1**; K 156.1 **Pl. 5:1**). It has a wide range of diameters, from 3 to 26 cm, with a prevalence of 8, 10 and 12 cm.

It appears in the transition from the Iron Age I to Iron II and its presence grows exponentially until the Late Iron Age II: after that, its numbers dwindle (Table 152).

Red slip appears on 20.5% of the sherds and paint on almost 5% of them.

BA1	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	12	109	122	29	2
%	4.4	39.8	44.5	10.6	0.7

Table 152: BA1, chronological distribution.

# 4.2.9.2 FLARED RING BASES (BA2) Pl. 66:5-8

These are similar to ring bases, but with flared walls; analogously to BA1, they can probably be associated with many shapes, especially open ones such as plates and bowls (H 8409.702, **PI. 5:2**). Diameters measure between 5 and 14 cm, with a prevalence of 8 and 10 cm diameters.

They are attested starting from the Iron Age Ic and in the whole Iron Age II; they are very rare in the transition to the Iron Age III (Table 153)

BA2	IA Ic	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	16	24	24	1
%	1.5	24.2	36.4	36.4	1.5

Table 153: BA2, chronological distribution.

Flared ring bases are fairly decorated: Red Slip is present on 11% of the potsherds and paint appears on the same percentage (11%).

# 4.2.9.3 PEDESTAL BASES (BA3) PI. 67:1-5

These bases may have simple flaring walls, or they may have a more complex form with a central ridge. They seem to be connected to fruit-stands and other open forms (e.g. bowl H 3195.706, **PI. 74:2**) and their diameters vary from 5 to 18 cm, with a prevalence of 8 and 12

cm.

These bases appear in small quantities in the transition from Iron Age I to II: they are more common in the Iron Age II, while they decrease with the transition to Iron III (Table 154).

The majority of the sherds are decorated, especially with Red Slip (41.5%), but also with paint (11%).

BA3	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	25	22	5
%	1.9	47.2	41.5	9.4

Table 154: BA3, chronological distribution.

# 4.2.9.4 CONVEX PEDESTAL BASES (BA4) PI. 67:6

This is an uncommon typology (0.3% of the bases) which includes a couple of thick pedestal bases, lower than BA3. It is unclear which shapes they were associated with, but presumably open forms.

Their diameters measure 5 and 8 cm and the specimens occur in the transition from Iron I to Iron II (50%) and in Iron Age II (50%). One of them, that is 50% of the assemblage, is painted on both the outer and inner surfaces: on the inner surface there is a geometric motif.

# 4.2.9.5 ROUNDED LOW KNOBBED BASES (BA5) PI. 68

These bases, usually with a flat or concave bottom, are typical of large storage jars. Their diameters range between 6 and 18 cm, with a prevalence of 14 cm, and they are often characterised by various potter's marks – especially fingerprints impressions and Aramaic letters.

They begin to appear in the transition from the Iron Age I to II and their numbers steadily increase in the Iron II until exponential growth occurs in the Late Iron Age II, a trend which follows that of storage jars (especially P1 and variants): after that, they decrease sharply (Table 155).

BA5	IA I/II	IA II	LATE IA II	IA II/III	IA III
Nr.	9	29	80	20	3
%	6.4	20.6	56.7	14.2	2.1

Table 155: BA5, chronological distribution.

# 4.2.9.6 ROUNDED BASES (BA6) Pl. 69.1

These bases may be associated with closed vessels, such as jugs, jars or even cooking pots, or open forms like bowls. For example, the following complete vessels have round bottoms: the juglet of the "teapot" type H 5225.714 (**PI. 72:1**); the bowl H 5281.719 (**PI. 21:2**), which has a perforated base; presumably the cooking pot H 3656.705 (**PI. 54:4**). Diameters vary between 3 and 16 cm, most commonly 3 cm.

They occur already in the transition from the Iron Age I to II and then are particularly common in the Iron Age II: they are uncommon in the Iron Age III (Table 156).

Red Slip is attested on this typology too, characterizing 26% of the potsherds.

BA6	IA I/II	IA II	LATE IA II	IA III
Nr.	3	9	4	1
%	17.6	52.9	23.5	5.9

Table 156: BA6, chronological distribution.

## 4.2.9.7 FLAT SIMPLE BASES (BA7) Pl. 69:2

Flat bases are fairly well documented, though they are not one of the most common typologies (8% of the bases). It is unclear whether they were related to open or closed forms, perhaps the latter is more probable, but it cannot be excluded that some open forms had flat bases.

Their diameters vary between 3 and 20 cm, with a prevalence of 8 and 10 cm.

This typology occurs in the whole Iron Age II, especially Late Iron Age II, and in minor quantity in the Iron Age III (Table 157).

A very small percentage, 4%, of the potsherds are red slipped.

BA7	IA II	LATE IA II	IA II/III	IA III
Nr.	17	21	9	3
%	34	42	18	6

Table 157: BA7, chronological distribution.

### 4.2.9.8 THICKENED BASES (BA8) PI. 69:3

This is an uncommon typology (5% of the bases). They can presumably be associated with a wide range of forms, both closed and open, and their diameters vary between 3 and 16 cm, although a prevalence of 6 and 10 cm diameters can be observed.

These bases appear in the transition between the Iron Age I and II, increasing until the Late Iron II, only to decrease in the Iron Age III (Table 158).

In this typology as well, Red Slip occurs on a small part of the potsherds, 9%.

BA8	IA I/II	IA II	LATE IA II	IA III
Nr.	1	12	14	4
%	3.2	38.7	45.2	12.9

Table 158: BA8, chronological distribution.

# 4.2.9.9 CONICAL LEGS (BA9) PI. 69:4-5

This is a rare typology (0.3%) with only a couple of specimens: they probably belonged to vessels with two or more legs (tripods perhaps), however it is impossible to say which form they were related to. They were found in early Iron Age II levels.

# 4.2.9.10 DISC BASES (BA10) PI. 69: 6-7

This typology occurs rarely (1.6% of the bases); the diameters vary between 4 and 10 cm, with a prevalence of 4 and 10 cm.

These bases are attested from the transition from the Iron Age I to II, but they are most common in the Late Iron Age II: their numbers decrease in the transition to the Iron III (Table 159).

Red Slip occurs on 40% of the sherds.

BA10	IA I/II	IA II	LATE IA II	IA II/III
Nr.	1	3	4	1
%	11.1	33.3	44.4	11.1

Table 159: BA10, chronological distribution.

### 4.2.10 OTHER FORMS

As stated above, the ceramic assemblage also includes certain particular shapes and small finds in addition to the categories already analysed.

#### 4.2.10.1 LAMPS Pl. 71:1-2

At Mishrifeh twenty-three fragments of lamps were found. They are of the common saucer type with upturned rim and a single nozzle; they are often in a fragmentary state and characterised by traces of burning. It is very difficult to estimate the diameter, as the specimens are, as mentioned, very fragmentary. When it is possible to measure them, diameters are around 13 cm.

They were found in the Iron Age II contexts, starting from the transition between the Iron I and II until the Late Iron II (Table 160).

LAMPS	IA I/II	IA II	LATE IA II
Nr.	1	11	11
%	4.4	47.8	47.8

Table 160: Lamps, chronological distribution.

Similar specimens are widespread in the whole Iron Age in the Northern Levant, for example at Hama (Période E),<sup>1187</sup> Tell Afis (Area D<sup>1188</sup> and Area G Central zone levels 4, 7b)<sup>1189</sup>, Tell Mastuma (Strata I-2a/b)<sup>1190</sup> and Tell Tayinat.<sup>1191</sup>

#### 4.2.10.2 BASINS PI. 70

Rims belonging to large open-shaped vessels with thick and mostly straight walls are recognized as basins, although no complete specimens are attested. The rims are outward, mostly squared and also squared with rounded corners, and present also fingerprint impressions or ridges. They differ from storage jars also for their larger diameters, which measure between 46 and 62 cm.

Basins appear in earlier Iron Age II contexts and are present in the whole Iron Age II (Table 161).

<sup>&</sup>lt;sup>1187</sup> Fugmann 1958, fig. 130:7A872

<sup>&</sup>lt;sup>1188</sup> Oggiano 1997, Pl. III:5-8

<sup>&</sup>lt;sup>1189</sup> Cecchini 1998, figs. 37:8-11.

<sup>&</sup>lt;sup>1190</sup> Wada 2009b, figs. 4.77:5, 4.96:9.

<sup>&</sup>lt;sup>1191</sup> Osborne et al. 2019, figs. 18:1-3

BASINS	IA II	LATE IA II
Nr.	4	3
%	57.1	42.9

Table 161: Basins, chronological distribution.

Parallels for the specimens from Mishrifeh are found at Hama (Périodes F2 and E1),<sup>1192</sup> Tell Mastuma (Stratum I-2b)<sup>1193</sup> and Hazor (Stratum Vc).<sup>1194</sup> A red slipped one is present at Tell Tayinat.<sup>1195</sup> The examples from the first two sites are identical to the basins from Operation T1 discussed in Chapter 3.5.5. The basin fragment found in Operation T3 (T3 8212.81, **PI. 70:5**) instead has a close parallel in a vessel from Tel Dor (Area A phase 9)<sup>1196</sup> which has been defined "Assyrianizing" (Gilboa 1995: 13; Gilboa, Sharon 2016 fig. 22): however, other basins similar to those from Mishrifeh have not been found in Late Assyrian assemblages. From a chronological point of view, these basins occur particularly in the 8<sup>th</sup> century and early 7<sup>th</sup> century BC, although they seem part of a long-lasting tradition, as one of the specimens from Hama is dated to Période F2 (1175/1150-1075/1050 BC).

### 4.2.10.3 INCENSE BURNERS / POTSTANDS PI. 71:3-4

Only two fragmentary incense burners or potstands have been found at Mishrifeh: they both have ribbed walls and a slightly flaring neck with an out-turned (SF H 1913.3, **PI. 71:3**) or triangular rim (SF T1 7246.701, **PI. 71:4**). The latter specimen presents a small triangular opening on the body and the external surface red slipped. They were found in Late Iron Age II contexts. SF T1 7246.701, in particular, was found close to a *tannur* abutting Building T1-4 in the artisans' quarter.

No precise parallels in the Levant have been found: the closest parallel comes from Tell Afis, <sup>1197</sup> where a painted potstand, however dated to the Iron Age I, resembles SF T1 7246.701. The best parallels for the vessel from Tell Afis can be found in the East Aegean area in the Late Helladic IIIC (Venturi 2020: 92): in fact, a large cylindrical potstand from Astypalaia, <sup>1198</sup> although painted and with a more flaring rim, has a shape very similar to the specimen from Mishrifeh.

<sup>&</sup>lt;sup>1192</sup> Riis, Buhl 1990, figs. 81:626 and 628.

<sup>&</sup>lt;sup>1193</sup> Wada 2009d, figs. 6.33:68-69.

<sup>&</sup>lt;sup>1194</sup> Sandhaus 2012, fig. 4.34:3. Another fragment, similar but not identical to T3 8212.81, comes from Area C Stratum IV (Yadin et al. 1960, Pl. C:28).

<sup>&</sup>lt;sup>1195</sup> Osborne et al. 2019, fig. 29:1.

<sup>&</sup>lt;sup>1196</sup> Gilboa 1995, fig. 1.7:9.

<sup>&</sup>lt;sup>1197</sup> Venturi 2020, Pl. 109:16.

<sup>&</sup>lt;sup>1198</sup> Mountjoy 1998, fig. 12:2.

A more fitting parallel comes from Cyprus, from the Sanctuary of Myrtou-Pigadhes (Plat Taylor 1957): a fragment with ribbed wall and flaring rim<sup>1199</sup> was interpreted as a potstand (Plat Taylor, Taylor 1957: 68, nr. 480) and it closely resembles SF T1 7246.701. The deposit in which this fragment was found has been dated to the 8<sup>th</sup> century (Plat Taylor, Taylor 1957: 60), which could fit as a parallel for the sherd from Mishrifeh.

Taking into consideration also the Cypriot pottery fragments found in the site, it seems clear that in the Iron Age Mishrifeh's relationship with Cyprus, in all probability mediated by the Syro-Lebanese coast, was well established. Notwithstanding this relationship, it cannot be excluded that this type of potstand/incense burner, clearly derived from Aegean models, had not already arrived in the Levant already in the Iron Age I, as the vessel from Tell Afis may indicate, and then continued until the end of the Iron Age II (first decorated with paint, then with Red Slip). This may be confirmed by the presence of a similar vessel with ribbed wall and painted decoration from Tell 'Acharneh, 1200 perhaps dated to the Iron Age I (Cooper 2006: 148-149).

# 4.2.10.4 "TEAPOT" TYPE JUGLETS Pls. 72, 73:1-4

At Mishrifeh two almost complete juglets decorated with red painted lines and bands were found. The juglets are quite standardized and have a spheric shape with a rounded base: both have a small spout and a handle. The decoration is also fairly standard: a red horizontal band was painted on the lower body, just above the bottom, and straight and/or zig-zag vertical bands cross the vessel from shoulder to bottom, or to the horizontal band.

Another four spouts (**PI. 73:1-4**), most probably belonging to four similar juglets, also came to light. A painted wall of a closed form recovered from Phase K-5 (transitional Iron Age I/II, K 48.1b, **PI. 76:2**) may perhaps have belonged to one of these juglets: the curvature of the sherd and its decoration with red bands make this seems likely. However, since it is only a body fragment, its attribution to this category is uncertain.

Considering both the more complete vessels and the spouts, they appear throughout the Iron Age II (Table 162). The spout discovered in a transitional Iron Age II/III context may be a residual sherd, since it was found in a pit fill.

These juglets have close parallels with the so called "teapots" from Tell Mastuma<sup>1201</sup> (Wada 2009d: 369-370), which have bichrome black and red decoration and a neck. The "teapots" from Tell Mastuma are dated to the Iron Age II and III.

<sup>&</sup>lt;sup>1199</sup> Plat Taylor, Taylor 1957, fig. 19:480.

<sup>&</sup>lt;sup>1200</sup> Cooper 2006, fig. 15:7.

<sup>&</sup>lt;sup>1201</sup> Wada 2009d, figs. 6.23, 6.31:50.

JUGLETS	IA II	LATE IA II	IA II/III
Nr.	1	1	
% on Juglets	50	50	
% on total	16.6	16.6	
SPOUTS			
Nr.	2	1	1
% on spouts	50	25	25
% on total	33.3	16.6	16.6

Table 162: "Teapot" type juglets, chronological distribution.

An analogous vessel has been found at Hama Période F2:1202 although fragmentary, in shape and decoration, that is bichrome red and black criss-crossed lines, it closely resembles examples from Tell Mastuma Stratum I-2b. 1203 The juglet from Hama has been compared (Riis, Buhl 1990: 152) to a vessel now kept in at the Louvre Museum (Nr. Cat. AO 9522)<sup>1204</sup> that was found at Mishrifeh during the early excavation campaigns of the Count du Mesnil du Buisson. The juglet was discovered at "La Coupole de Loth" together with other painted vessels (Du Mesnil Du Buisson 1927b: 296, nr. 67). The pottery from the French Mission has been reassessed and reanalysed by Marco lamoni (lamoni 2004) and the Iron Age material from "La Coupole de Loth" was dated to the Iron Age II (lamoni 2004: 169, 172): this chronology is compatible with the dating of the "teapot"-type juglets presented here. The juglet found by Du Mesnil Du Buisson is decorated with horizontal bands and vertical curved/zig-zag lines flanked by straight lines, similarly to juglet SF H 5225.714 (PI. 72:1), which came from a Late Iron Age II context. Furthermore, it can be presumed that the "teapots" from Mishrifeh also had a long neck like those of Tell Mastuma, since the juglet from "La Coupole de Loth" is more complete and features the start of a neck. From Hama (Période E)<sup>1205</sup> comes also another fragmentary similar juglet in Red Slip.

It seems clear that painted juglets of the "teapot" type are typical of the Central-Western Syrian tradition starting from the Iron Age I and especially in the Iron Age II, as similar

<sup>&</sup>lt;sup>1202</sup> Riis, Buhl 1990, fig. 69:477.

<sup>&</sup>lt;sup>1203</sup> Wada 2009b, figs. 4.41:21, 4.46:32, 4.138:8; Wada 2009d, fig. 6.23.

<sup>1204</sup> https://collections.louvre.fr/en/ark:/53355/cl010170206. Last visited on 10th January 2022.

<sup>&</sup>lt;sup>1205</sup> Fugmann 1958, fig. 216: 6C162; Riis, Buhl 1990 fig. 69:478.

### 4.2.10.5 ZOOMORPHIC VESSELS PI. 73:5-6

The zoomorphic vessels found at Mishrifeh are a couple of fragmentary vessels suitable for containing liquids: they seem to represent aquatic birds such as ducks and are decorated with red paint. Only the main body is preserved, with a ring base and a loop handle on the back (completely preserved only in one of the specimens); the decoration consists of red bands and/or criss-crossed lines. One of them was found in the filling of Building H5 of the Late Iron Age II artisans' quarter. The other, better preserved, specimen was found in the bottom fill of a pit in an Iron Age II level.

No precise comparisons have been found, although for the Iron Age II specimen a resemblance can be observed in the bird-shaped zoomorphic vessel from Tell Mastuma, <sup>1208</sup> which is however painted in two colours (red and black) and has three legs instead of a single ring base like the specimen from Mishrifeh. Other zoomorphic vessels were found in Operation O, <sup>1209</sup> however they show little resemblance with the specimens from the Italian excavations.

## 4.2.10.6 HAMA FRUIT-STANDS Pls. 3, 8:1

The so-called "Hama fruit-stands" (or "fruit dishes", Lehmann 1998: 13) are pedestal platters, typically characterised by Red Slip and often burnished (Soldi 2008: 207; Whincop 2007: 205). They are typical of Iron Age II pottery assemblages in inland Syria (Lehmann 1996: Form 4, taf. 4/1-3; Lehmann 1998:13 and fig. 14:A).

From the Italian Mishrifeh excavations come five complete fruit-stands in Red Slip Ware. These were found especially in Late Iron Age II contexts (Table 163) and the three from Operation H in particular were discovered in Building H5 in the crafts quarter (Operation H-T1 Phase 6a).

As discussed in Chapter 3.5, Building H5 was part of a larger complex devoted to textile weaving and dyeing (Morandi Bonacossi 2009: 121, 124; Morandi Bonacossi 2019: 15-17). The finding of the fruit-stands in this setting may indicate they had a utilitarian purpose

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<sup>&</sup>lt;sup>1206</sup> Mazzoni 1987, fig. 11:2. Venturi 2020, Pl. 131:10, same specimen as Mazzoni 1998, fig. 24:2: however, this bodysherd is too small to attribute it with certainty to the "teapot" typology.

<sup>1207</sup> Pucci 2019, Pl. 42:c. The specimen in question is part of a ceramic assemblage obtained from a Roman-Byzantine phase: the pottery is actually older than the archaeological evidence of the level as it probably came from fills of pits which damaged underlying levels (Pucci 2019: 60). The sherd belongs to a closed vessel with a spout and black-painted decoration; it is however too small to confirm that it is a juglet of the "teapot" type.

<sup>&</sup>lt;sup>1208</sup> Wada 2009b: 111, fig. 4.11:56.

<sup>&</sup>lt;sup>1209</sup> Ziedan 2013, Tav. 26:10.

connected to textile dyeing.<sup>1210</sup> This may be confirmed by the fact that the fruit-stand from Operation T3 (SF T3 10082.701, **PI. 8:1**) was discovered in the fill of the installation related to textile dyeing (Morandi Bonacossi 2019: 17-18). The discovery of a fruit-stand<sup>1211</sup> in the warehouse connected to a textile workshop in the administrative quarter excavated in Operation O by the Syrian mission (Badawi 2015: 469-472, fig. 12:1) corroborates the hypothesis of a utilitarian function for these vessels.

FRUIT-STANDS	IA II	LATE IA II
Nr.	1	4
%	25	75

Table 163: Fruit-stands, chronological distribution.

Thus, four out of five fruit-stands recovered by the Italian mission were found in productive contexts connected to textile activities, while the last one was discovered in the filling of a pit from Operation H-T1 Phase 9.

## 4.2.10.7 VARIOUS FORMS (PI. 74:2-3)

Other vessels are more difficult to interpret. One (SF H 3195.706, **PI. 74:2**) is a bowl found in the fill of silo 3215, in the central courtyard of the Late Iron Age II craft quarter: it has an everted squared rim, with a fragmentary pedestal base, and is decorated with red paint. On the inner surface there is a painted cross inscribed inside a circle and on the upper side of the rim are painted three-pronged-like symbols: traces of paint are also present on the external surface. No parallels have been found for this specimen: the shape is similar, but not identical, to the bowl with out-turned rim and tapering lip (type DB6).

Another specimen (SF H 6353.701, **PI. 74:3**) was found under Building H7, again in a Late Iron Age II context: it has an analogous bowl shape (DB6), but features five applied bulls' heads on the shoulder. It is decorated with red painted bands on the rim and the external surface. A similar vessel, red slipped and with an applied bull's head decoration, comes from the section of Operation J and has been dated to the Iron Age II (Morandi Bonacossi 2002: fig. 114). No other parallel was found.

<sup>&</sup>lt;sup>1210</sup> For example, H 5399.701 (**PI. 3:3**) was found in the circular basin at the centre of the plastered floor of the southern room of Building H5 (Garna 2011: 78). This room was used for textile dyeing as demonstrated by Morandi Bonacossi (Morandi Bonacossi 2019: 15-17).

<sup>&</sup>lt;sup>1211</sup> Badawi 2015, fig. 12:1. It is not clear if only one fruit-stand was found or if more were present.

### 4.3 RED SLIP WARE

The Red Slip is a surface treatment obtained by coating the vessel with a reddish or brownish clay covering, successively smoothed or more frequently burnished. It is a common surface treatment in the Levant in the Iron Age (Pucci, Soldi 2019: 352; Soldi 2013: 199-200) and its appearance in Syria is connected to the debate on the beginning of the Iron Age II (Mazzoni 2000b: 41-42; Mazzoni 2000c: 125-127).

As already discussed previously (Chapter 3.4.3), the Red Slip first appears in the Southern Levant between the 12<sup>th</sup> and the 11<sup>th</sup> century BC (Mazar 1998; Mazar 2015: 22) and on the Levantine Coast around the 11<sup>th</sup> and 10<sup>th</sup> century BC (Anderson 1988: 351-355, 396-398; Bounni et al. 1981: 270; Stern 2015: 436-437).<sup>1212</sup>

In the Northern Levant, the Red Slip is attested at the end of the 10th century BC at Tell Qargur (Dornemann 2003a: 41, 43-44, 47, fig. 88) and between the 10<sup>th</sup> and 9<sup>th</sup> centuries BC at Tell Tayinat (Harrison 2010b: 89-90). At Chatal Hüyük sporadic red slipped sherds were found already in Iron Age I levels (Pucci, Soldi: 353-354), however the mass production of this class started in the transition between 'Amuq Phases N and O, the mid-9th century BC, and continued until the end of the 7th century BC (Pucci 2019: 191-192; Pucci, Soldi 2019: 354-355). 1213 In other Central-Western Syrian centres the Red Slip occurred especially in the Iron Age II. At Tell 'Acharneh it is well attested in the Iron Age II (Cooper 2006 figs. 1-3, 5-7), but seems to be absent in the Iron Age I, when painted pottery is present (Cooper 2006: 148-149, fig. 15). At Tell Nebi Mend both Iron Age II phases B and C are characterized by the presence of the Red Slip, which can have a brownish colour (Red Slip Ware-buff, RSW-b) or be redder (Red Slip Ware-red, RSW-r; Whincop 2007: 197, 201). At Tell Mastuma it is present in Stratum I-2d, that is the earliest Iron Age II level (Wada 2009b: fig. 4.9:9), which dates to the beginning of the 9<sup>th</sup> century (Tsumoto 2016: 164; Wada 2009a: fig. 3.2). It is attested also at Tell Abou Danne in both Niveaux IId and IIc (respectively Iron Age II and III), but in the later period (IIc) it is less common (Lebeau 1983: 39-41, 49-50). At Tell Afis the Red Slip does not appear before the end of the 9<sup>th</sup>/mid-8<sup>th</sup> century (Soldi 2013: 201, 214; Venturi 2020: 113-114) and the greatest concentration of red slipped sherds was found in Area G, levels 4-6 (Soldi 2013: 204-205, Chart 1), which are dated to the Iron Age

<sup>&</sup>lt;sup>1212</sup> On the debated origin of the Red Slip Ware see: Braemer 1986; Gates 2010: 72-75; Mazar 1998; Mazzoni 2000a: 147; Mazzoni 2000c: 125-127; Venturi 2020: 113-114, 230.

<sup>&</sup>lt;sup>1213</sup> In South-Eastern Anatolia – in Cilicia, at Chatal Hüyük and at Tell Atchana – burnished red slip is already documented in the Late Bronze Age II (Pucci, Soldi 2019: 353-355). In the 'Amuq Valley the Red Slip is attested especially on open forms, that is large plates devoted probably to communal eating. According to Marina Pucci, the production of Red Slip in the 'Amuq Valley in the Iron Age II probably followed this Late Bronze Age tradition (Pucci, Soldi 2019: 354-355).

III, 7<sup>th</sup> century BC (Cecchini 1998: 285). At Tell Tuqan, also, red slipped vessels are documented in Iron Age II and III levels, from the mid-8<sup>th</sup> to the mid-7<sup>th</sup> century BC (Baffi, Peyronel 2014: 24).

A different situation can be observed at Zincirli and on the Middle Euphrates. Only a small amount of Red Slip occurs at Zincirli, in a bad state of preservation and especially characteristic of open forms in the late 8<sup>th</sup> and 7<sup>th</sup> centuries BC (Pucci, Soldi 2019: 356-357; Soldi 2019: 176; Soldi 2020: 173-174). At Tell Shiukh Fawqani red slipped vessels are practically insignificant and consist almost exclusively of open forms: there are three sherds belonging to bowls in Chantier F, dated to the Iron Age III (Makinson 2005: 465, Pl. 8:42) and a few fragments from Area G from Late Iron Age II and III contexts (Luciani 2005: 791, 794, Pls. 4:38, 23:274, 32: 384-396, 36:435, 51:597, 54:628). Similarly, at Tell Jurn Kabir only a small amount of red slipped sherds were found in Groups B and C (9<sup>th</sup> – 7<sup>th</sup> centuries BC; Eidem, Ackermann 1999: 313). From Karkemish come a few examples of Red Slip, mostly open forms dated to the Iron Age II (Pizzimenti, Zaina 2016: 370).

Mishrifeh fully belongs to the Central-Western Syrian ceramic tradition regarding the Red Slip: in fact, at Mishrifeh it represents almost 24% of the Iron Age ceramic corpus, corresponding to more than one thousand fragments. Red slipped fragments are ubiquitous: they are present in all the Operations, even in T2 which has the smallest assemblage (in terms of size) of the ceramic corpus.

As observed in other Syrian sites such as Tell Afis (Soldi 2013: 206 and Chart 3), Red Slip is present especially on open forms (fig. 255): between plates, bowls and kraters, <sup>1214</sup> open forms represent about 87% of the red slipped assemblage. Closed forms, that is jugs, jars and storage jars, represent instead about 2% of the Red Slip at Mishrifeh. This trend is completely different from what can be observed in the Coastal and Southern Levant, where the coating is widely present on closed forms as well (Anderson 1988: 344-355; Arie 2006: 224-225; Bikai 1978: 29, 36-37, 41; Lehmann 1998: 9, 13).

As stated preliminarily in Chapter 4.1, there is no difference in terms of shapes and fabrics<sup>1215</sup> between red slipped vessels and Common Ware ones: they are all part of the Iron Age typological assemblage and the only difference is indeed the presence of a layer

<sup>1215</sup> The selected Iron Age pottery that was part of the archaeometrical study carried out by Lara Maritan and Claudio Mazzoli (Maritan et al. 2005; Maritan, Mazzoli, Speranza 2007) included also red slipped sherds.

<sup>&</sup>lt;sup>1214</sup> As already explained in Chapter 4.2.4, kraters can be considered a "mixed form" due to their morphological shape. In terms of surface treatment, however, at Mishrifeh they are comparable to open shapes.

of slip added before firing. There is only one type, DB14, which is exclusively in Red Slip.

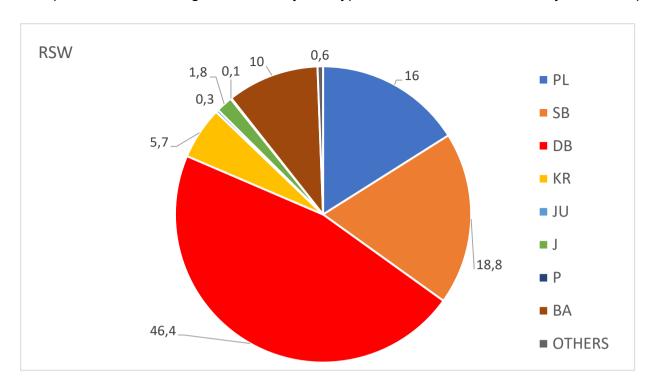


Fig. 255: Percentage occurrence of Red Slip Ware with respect to forms. PL (plates), SB (shallow bowls), DB (deep bowls), KR (kraters), JU (jugs), J (jars), P (large storage jars), BA (bases), OTHERS (small finds, red slipped body sherds).

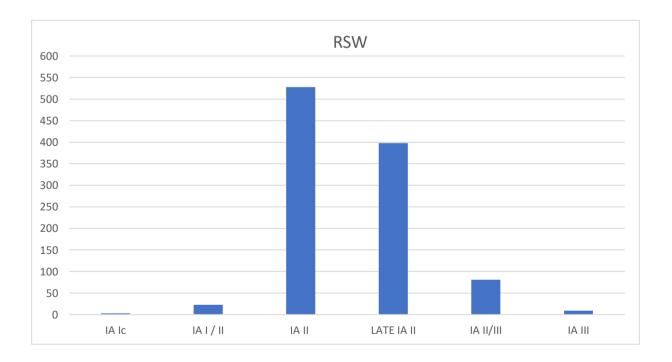


Table 164: Red Slip Ware, chronological distribution.

The slip, which can have either a red or brownish-red colour, may be found on both surfaces of the sherd or only on one: in the latter case, it is usually present on the inner surface. Often

it covers the entire surface of a vessel or at least three-quarters, but sometimes it consists simply of a band over the rim and the upper part of the vase. This variety in the application of the Red Slip, with many vessels completely covered by the engobe, is attested also at Tell Mastuma (e.g. Wada 2009c, fig. 5.9; Wada 2009d, figs. 6.14-6.19). Many vessels completely covered by Red Slip are also found at Tell 'Acharneh (Cooper 2006, figs.1-3, 5-7). At Tell Afis, instead, red slipped vessels usually have a simple band of coating below the rim in the upper part of the vase (Soldi 2013: 206).

With regard to the chronological distribution (Table 164), Red Slip is most common in Iron Age II levels (considering both earlier Iron Age II and Late Iron Age II contexts). While the analysis may be influenced by the difference in size of the assemblages belonging to the different chronological contexts, some observations may be made. As remarked in Chapter 3.4.3, it is noteworthy that Red Slip fragments are already present in contexts dated to the Late Iron Age I and transitional Iron Age I/II, a situation similar to Tell Qarqur (Dornemann 2003a: 41, 43-44, 47) and Tell Tayinat (Harrison 2010b: 89-90).

The sharp decrease in Red Slip in Iron Age III contexts may not just be due to the less numerous assemblage compared to the Iron Age II,<sup>1216</sup> but also to the nature of the contexts themselves. The Iron Age III occupation of Mishrifeh is rural in character, reflected by the clearly domestic assemblage composed especially of cooking pots and storage jars (see Chapters 3.3.2 and 3.7.2). While open forms are present, they do not represent a large portion of the repertoire.

Comparing the data concerning red slipped fragments belonging to open and closed forms and their chronological periods (Table 165), it is interesting to note that in earlier phases (Iron Age Ic, Iron Age I/II) Red Slip is found exclusively on open forms (plates, bowls, kraters). Red Slip on closed forms appears only from the Iron Age II and especially in the Late Iron Age II and it is still attested in the Iron Age III. It is indicative that even within the small Iron Age III assemblage (nine red slipped sherds in total, seven belonging to open forms and one closed form, one is a base), Red Slip does appear on closed shapes as well, in contrast to the transitional Iron Age I/II period when red slipped fragments are more numerous (23 sherds in total, 18 belonging to open forms, whereas the others are bases or body sherds). In conclusion, the Red Slip Ware at Mishrifeh follows the trends already attested in other centres of Central-Western Syria and of the 'Amuq Valley: it is a surface treatment found on the same vessel forms of the Common Ware, especially on open shapes. Its presence

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<sup>&</sup>lt;sup>1216</sup> The Iron Age III assemblage consists of 111 sherds, while the pottery from Iron Age II contexts amounts to 3538 sherds.

during the whole Iron Age occupation of the site, starting from very Late Iron Age I, indicates a trend similar to that observed in other sites north of Mishrifeh, such as Tell Tayinat and Tell Qarqur.

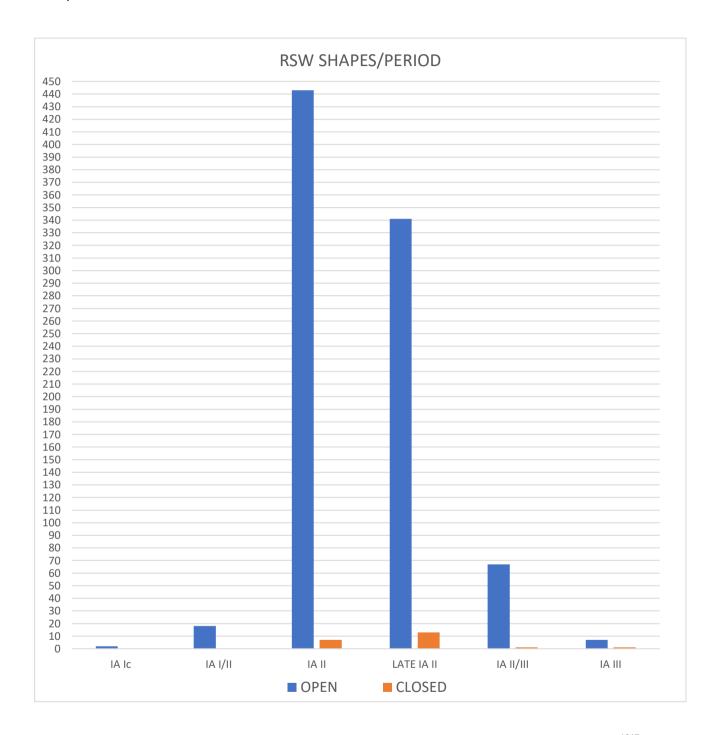


Table 165: Number of red slipped fragments in relation to form type and chronological period. 1217

<sup>&</sup>lt;sup>1217</sup> In this graphic I have not considered bases, body sherds and small finds such as incense burners, as they are not useful in this analysis.

## 4.4 DECORATIONS AND POTTER'S MARKS

The Iron Age ceramic corpus of Mishrifeh is largely undecorated: decorations in fact are attested on merely about 13% of the assemblage.

Type of decoration	Nr. of sherds	% in decorations	% on the total of the ceramic assemblage
Appliques	2	0.36%	0.04%
Comb-incisions	2	0.36%	0.04%
Corrugations	38	6.8%	0.89%
Grooves	192	34.8%	4.49%
Incisions	19	3.45%	0.4%
Paint	278	50.3%	6.5%
Ridges	3	0.54%	0.07%
Combined decorations	18	3.26%	0.42%

Table 166: Occurrence of decorations and their percentage in the ceramic assemblage of the Iron Age.

The most common decoration is paint, followed by grooves and corrugations (Table 166): incisions, ridges and comb-incised decorations are rare, together with those defined as "combined decorations", meaning corrugations associated with grooves or comb-incisions, grooves with potter's marks or ridges, ridges with incisions or potter's marks. There are only two attestations of applied decorations, that is the bowl SF H 6353.701 (**PI. 74:3**) with applied bulls' heads and the *kernos* SF K 2720.701-704 (fig. 139).<sup>1218</sup>

All the decorations except paint and appliques are especially typical of large storage jars,

<sup>&</sup>lt;sup>1218</sup> I have not considered the rim of a red slipped vessel with the same decoration (an applied bull's head) from Operation J, since it was found in the section of the excavation (Morandi Bonacossi 2002, fig. 114).

particularly typology P1, although grooves on other pottery shapes (bowls, cooking pots and jars) are attested. The higher number of attestations in the Late Iron Age II (Table 167), especially of grooves, corrugations and incisions and combined decorations coincides with the more common occurrence of storage jars in the period (see Chapter 4.2.8.1).

Paint, on the contrary, is a decoration typical of open forms and kraters: only twelve painted sherds out of 278 belong to closed forms, jars and jugs in particular. Of these twelve fragments, five come from transitional Iron Age I/II levels, three from earlier Iron Age II ones, three from Late Iron Age II and only one from Iron Age III contexts. It is clear that not only were more vessels painted in earlier periods, but paint was applied to a wider range of forms. In fact, most of the painted closed forms are jars, except for two jug fragments found in earlier Iron Age contexts: taking also the small finds into consideration, the "teapot" type juglets and the two zoomorphic vessels are also painted closed vessels.

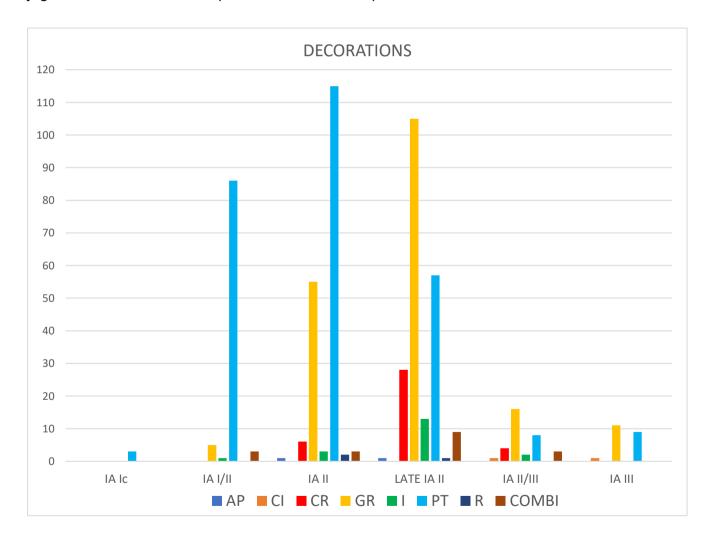


Table 167: Decorations, chronological distribution: AP = appliques, CI = comb-incised, CR = corrugations, GR = grooves, I = incisions, PT = paint, R = ridges, COMBI = combined decorations.

At Mishrifeh, painted fragments were found in all the Operations except for T5 (fig. 256):

Operations H-T1 and K are the areas which yielded more attestations, respectively 51% and 38.3%. However, observing the percentage of painted pottery sherds out of the totals for each Operation, painted sherds represent only 4.7% of the assemblage of Operation H-T1, but 25.6% of the assemblage of Operation K. Therefore, more than a quarter of the Operation K ceramic repertoire consists of painted vessels – mostly belonging, as explained in Chapter 3.4.3, to the Iron Age I pictorial tradition.

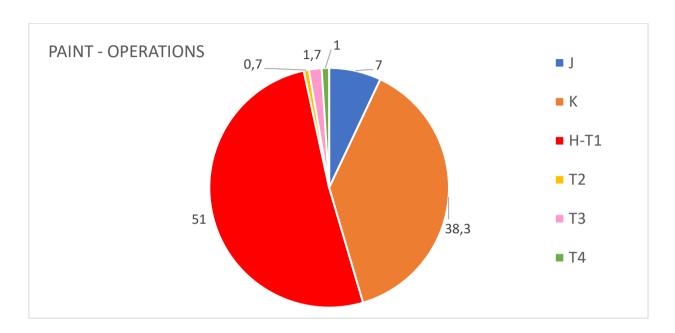


Fig. 256: Percentage occurrence of painted decorations per Operation.

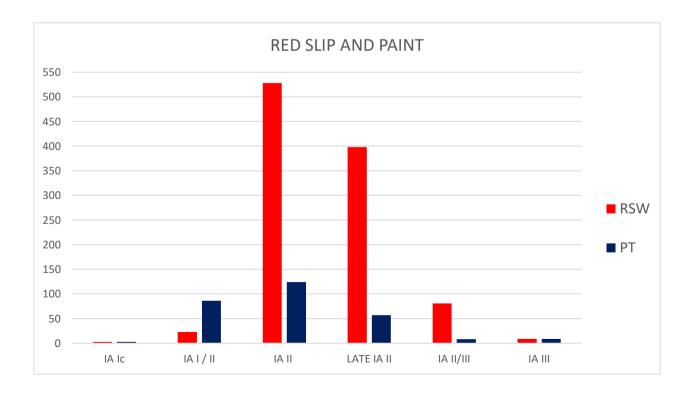


Table 168: Red Slip and paint, comparative chronological distribution.

Comparing the chronological distribution of painted decorations and that of Red Slip (Table 168), it can be observed in the transition from the Iron Age I to II painted pottery is prevalent, whereas with the Iron Age II the Red Slip Ware becomes predominant. The same tendency has been noted at Tell Tayinat (Janeway 2006-2007: 136-137), Chatal Hüyük (Pucci 2019: 186)<sup>1219</sup> and Tell Afis (Venturi 2020:117). A similar situation is documented also at Tell Qarqur (Dornemann 2003a: 47, 58-59, fig. 88) and Tell 'Acharneh (Cooper 2006: 148-149, 155, fig. 15), where painted pottery is attested especially in the Iron Age I or transitional Iron Age I/II contexts and Red Slip in Iron Age II contexts.

The high number of painted decorations in earlier Iron Age II contexts at Mishrifeh depends, at least partly, on the residual Iron Age I painted pottery found in phase K-3. However, it should not be forgotten that in the earlier Iron Age II levels of Operation H-T1 there is a clear increase in painted sherds, both in absolute numbers and in percentage, <sup>1220</sup> compared to the later phases.

Painted decorations at Mishrifeh are usually of a monochrome red colour: only four specimens have a bichrome red and black decoration (fig. 257). 1221



Fig. 257: Operation H-T1, Phase 6a. Local bichrome painted sherd T1 7347.701.

<sup>&</sup>lt;sup>1219</sup> Although here the decline of painted monochrome pottery corresponds also to a slow increase in bichrome painted pottery (Pucci 2019: 186).

<sup>&</sup>lt;sup>1220</sup> In Phase H-T1 9 and 10 are present respectively 38 and 59 painted sherds, corresponding to 6.3% and 7.6% of the assemblages of the phases. In the later phases (Phases 5-8) the sherds number 6, 18, 4, 1 and 12, corresponding to 2.17%, 1.5%, 1.4%, 2% and 4% of the ceramic repertoire for each phase.

<sup>&</sup>lt;sup>1221</sup> Bichrome specimens are found in Iron Age I/II (1. K 161.59, **PI. 31:4**), earlier Iron Age II (1), Late Iron Age II (2. H 7297.701, **PI. 30:3**; T1 7347.701, fig. 257).

The motifs are mostly simple bands or horizontal and vertical lines; more complex patterns are attested especially in Operation K. Paint is mostly used to decorate the rim or the inner surface of open forms (plates, bowls) or the external surface of mixed and closed ones (kraters, jars, jugs, "teapot" type juglets, zoomorphic vessels). Plates often have a red band on the rim and/or one to three painted lines on the inner surface (that is, concentric circles). Bowls usually only have a red band on the rim. Mixed and closed forms have bands on the rim and/or lines on the external body surface or on the handles.

Similar decorations are attested at Hama, where painted plates are common in Période F and especially in Période E, <sup>1222</sup> at Tell 'Acharneh, <sup>1223</sup> Mastuma, where monochrome or bichrome bands are particularly present on jars in the Iron Age II, <sup>1224</sup> and Tell Qarqur. <sup>1225</sup> As already mentioned, other motifs are also attested. The number and variety of these are particularly wide-ranging in Operation K, and a few particular patterns are also attested in other Operations (J, H-T1, Table 169). These motifs are the following: lines creating a cross, crosses with wavy lines, zigzags, cross-hatched triangles, geometric motifs, garlands, multiple concentric circles and a quite unique case of "tridents" or "three-pronged" motif. Wavy lines, "zigzag" lines, cross-hatched triangles and friezes, documented especially on kraters, are part of the painted tradition of the Northern Levant in the Iron Age I. In general, they are well known also in Aegean contexts and have a long tradition in Middle and Late Bronze Age contexts (Janeway 2017 78-82; Venturi 2020: 99-106). Parallels for the patterns attested at Mishrifeh come from Hama, <sup>1226</sup> Tell 'Acharneh, <sup>1227</sup> Tell Afis, <sup>1228</sup> Tell Tayinat <sup>1229</sup> and Chatal Hüyük. <sup>1230</sup> Criss-crossed lines are attested also in the Iron Age II, as demonstrated by vessels from Tell Mastuma. <sup>1231</sup>

Plates of the PL1 and PL3 typologies with the inner surface painted with concentric circles and crosses, as already discussed in Chapter 4.2.1, are particularly common at Hama and Tell 'Acharneh. As Cooper has proposed (Cooper, Fortin 2004: 34-35), since plates with this type of painted decoration seem to be concentrated around the region of Hama – at Hama, Mishrifeh, Tell 'Acharneh<sup>1232</sup> – this may be a common tradition of the kingdom of Hamath.

<sup>1222</sup> Fugmann 1958, fig. 269; Riis, Buhl 1990, figs. 75, 76, 77. Riis, Buhl 1990, fig. 77:572 is very similar to SF H 8409.702 (**PI. 5:2**).

<sup>&</sup>lt;sup>1223</sup> Cooper 2006, fig. 15:1-6.

<sup>&</sup>lt;sup>1224</sup> Wada 2009b, figs. 4.10:23, 4.32:6, 4.52:3 and 7, 4.99:14, 4.100:12, 4.108:10, 4.138:7.

<sup>&</sup>lt;sup>1225</sup> Dornemann 2003a, fig. 88:1,3.

<sup>&</sup>lt;sup>1226</sup> Fugmann 1958, figs. 269, 305:5B108.

<sup>&</sup>lt;sup>1227</sup> Cooper 2006, figs. 15:5, 7.

<sup>&</sup>lt;sup>1228</sup> Venturi 2020, figs. 35: 3-5, 6-10.

<sup>&</sup>lt;sup>1229</sup> Janeway 2017, Pls. 7:4, 8:15, 12:3-4 and 10, 13:7, 22:4, 23:3.

<sup>&</sup>lt;sup>1230</sup> Pucci 2019, fig. 45.

<sup>&</sup>lt;sup>1231</sup> Wada 2009b, figs. 4.11:56, 4.41:21, 4.90:15, 4.138:8.

<sup>&</sup>lt;sup>1232</sup> And perhaps also at Khan Sheikhoun, a site close to Hama (Du Mesnil Du Buisson 1932, Pl. XXXVII:230).

Quoting Cooper: "[...] it is tempting to suggest that these painted bowls represent part of a decorative tradition that emanated from Hama, and which consequently spread to areas that were in contact with or influenced by that city." (Cooper, Fortin 2004: 35).

Motif	Nr. of fragments	Specimens
Cross	6	H 8409.702 ( <b>Pl. 5:2</b> ), H 6366.102 ( <b>Pl.</b>
Closs	0	
		<b>66:1</b> ), K 537.21.5 ( <b>PI. 66:4</b> ), H 6474.136
		( <b>PI. 66:6</b> ), H 6559.24 ( <b>PI. 66:7</b> ), K 151.6
		(PI. 66:8)
Cross with wavy lines	2	K 22.12 ( <b>Pl. 66:3</b> ), K 19.66 ( <b>Pl. 67:6</b> )
"Zigzag" line	1	K 331.2 ( <b>Pl. 76:4</b> )
I be a second consequence	4	11 5005 744 ( <b>DI 70</b> 4)
Lines and wavy lines	1	H 5225.714 ( <b>Pl. 72:1</b> )
Criss-crossed lines	2	H 5281.712 ( <b>Pl. 73.5</b> ), T1 8302.708 ( <b>Pl.</b>
Oliss-clossed iiiles	2	73:6)
Cross-hatched triangles	3	K 480.20 ( <b>PI. 75:1</b> ), K 480.22 ( <b>PI. 75:2</b> ),
o, eee matemen anamg.ee		K 228.11 ( <b>Pl. 76:1</b> )
Geometric motifs	3	J 175.24 ( <b>Pl. 66:5</b> ), T1 7668.26 ( <b>Pl.</b>
		67:5), K 48.1 (Pl. 76:2)
Multiple concentric circles	1	H 6411.50 ( <b>Pl. 66:2</b> )
Frieze/garland	1	K 161.59 ( <b>Pl. 31:4</b> )
"Tridents" + cross	1	H 3195.706 ( <b>PI. 74:2</b> )

Table. 169: Particular painted motifs found on Iron Age pottery.

Particular signs, such as fingerprints and various designs (particularly common is the crescent or half-moon) have been interpreted as potter's marks or potmarks (fig. 258). In this category Aramaic inscriptions have also been cautiously included, although their interpretation is problematic as will be discussed below.

Potter's marks in the Ancient Near East have been studied especially with regard to Late Bronze Age Anatolia (Gates 2001; Glatz 2012). They can be subdivided into pre and post-firing marks (Glatz 2012: 5-6): pre-firing marks are usually connected to the pottery production context, while post-firing marks can be associated with the future life of the vessel such as indication of the content, destination of traded objects or displaying of ownership (Glatz 2012: 6). Potter's marks are also considered an indicator of a pottery "industry" with professional potters (Gates 2001: 140). In the case of Late Bronze Age Anatolian "Drab Ware", potter's marks were probably applied to allow distinction between one potter's products and another's in shared workshops (Gates 2001: 141).

Potter's marks are quite rare in the ceramic repertoire of Mishrifeh, being attested on only 1.9% of the pottery, but are found in all the Operations; they occur almost exclusively on storage jars, the only exceptions being two cooking pots and a bowl.

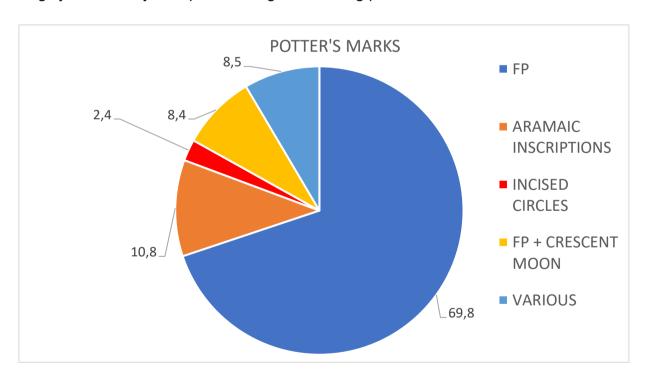


Fig. 258: Percentage occurrence of types of potter's marks (FP = finger impressions).

Most of the potter's marks are finger impressions (FP): there may be just one of them or they may be in a group of two or three, as attested also at Tell 'Acharneh 1233 and Tell

<sup>&</sup>lt;sup>1233</sup> Cooper 2006, figs. 10:9-10, 11:11-12.

Mastuma. 1234 A recurrent pattern is represented by fingerprints in association with a half or crescent moon (**PIs. 60:3** and **5, 61:2-3, 63:1, 64:2, 68:2**), found also at Tell Mastuma. 1235 Also present are Aramaic inscriptions, that is stamped inscriptions on large storage jars (**PI. 77:2-5**) and single letters especially on the rims of large storage jars (**PI. 63:5**) or their bases (BA5, **PI. 68:1**) and in one case on a bowl (**PI. 20:1**). The stamped Aramaic inscriptions, associated with the craft quarter of Phase H-T1 6, are undecipherable and so it is unknown if they referred to names, ownership labels or the storage jars' contents (Morandi Bonacossi 2019: 23). Other Aramaic inscriptions on rims of large storage jars have been found in Building I of Operation O by the Syrian expedition (Ziedan 2013: 142) and at Tell Mastuma. 1236

Incised circles were found exclusively on two cooking pot handles: the only precise parallels come from Hazor Area B Strata III and V (and one surface find)<sup>1237</sup> in 8<sup>th</sup> - 7<sup>th</sup> century BC contexts.

The "various" group includes different signs: a mark with a cross (X) and a fingerprint (**PI. 64:3**), a "greater than"-like symbol (>, **PsI. 61:1, 63:3**), an incised cross on a handle (**PI. 77:1**) and fingerprints associated with one or three incised lines (**PIs. 63:4, 68:3**). Similar incisions, especially crosses and finger impressions, are particularly well attested at Tell Mastuma (Wada 2009d: 353-355).<sup>1238</sup>

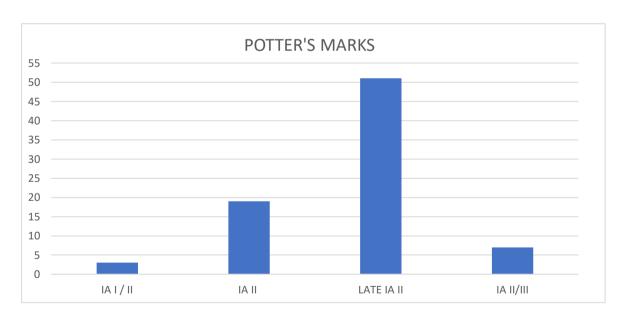


Table 170: Potter's marks, chronological distribution.

<sup>1235</sup> Wada 2009d, fig. 6.7 :38

<sup>&</sup>lt;sup>1234</sup> Wada 2009d, fig. 6:13.

<sup>&</sup>lt;sup>1236</sup> Wada 2009d, fig. 6.11:1.

<sup>&</sup>lt;sup>1237</sup> Yadin et al. 1958, Pl. LXXXIV:8-11; Yadin et al. 1989, Pl. CCXXXI:21.

<sup>&</sup>lt;sup>1238</sup> Wada 2009d, fig. 6.11:9-10.

Potter's marks are attested from the transition between the Iron Age I and II, represented exclusively by finger impressions on large storage jars, and then are particularly present in the Late Iron Age II with the wide variety of signs observed before (especially the stamped Aramaic inscriptions). All Mishrifeh's marks seem to be applied before the firing of the vessel, which may point to the fact that the pottery, or at least large storage jars, was produced under a centralized control and power, which oversaw all productive activities in the Iron Age II (especially Late Iron Age II). This may be confirmed by the fact that large storage jars with potter's marks are especially attested in productive contexts, such as Phases J-5, H-T1 6 and 9-10. The wider range of diverse potter's mark types in the Late Iron Age II perhaps reflects a larger presence of potters at Mishrifeh in the period. However, no Iron Age II pottery workshop was found in the site, except for that of Operation C at the very end of the period, thus it is at the moment impossible to verify this suggestion.

The meaning behind potmarks is unclear as it is for the stamped Aramaic inscriptions: to these signs have been attributed a large variety of meanings such as identification of the content of the vessel or the quantity/volume of the content, to identify the potter or to indicate the location or destination of the vessel if it was to be stored or traded (Glatz 2012: 25-26). Since at Mishrifeh they are especially associated with productive contexts, I would propose that they referred to the content and the recurrent patterns of finger impressions may confirm this. Potter's marks in the craft quarter are for the large part (73.3%) connected with the agricultural produce transformation and storage as they were found especially in association with Buildings H3, H6, H8 and the silos in the central courtyard. Only a small percentage (26.7%) were found in relation to textile production (Building H5 and Room 2 of Building T1-2). Other vessels with potter's marks from Phases J-5, H-T1 9-10 and T2-7 are all from productive contexts related to food transformation and storage, representing over 73% of the potter's marks' assemblage.

It is noteworthy that no potter's marks were found in Iron Age III levels. First, this may indicate that the pottery was then produced on a domestic scale and that potter's marks were no longer necessary. Second, it may mean that storage activities were then associated with single households and not part of a communal effort, as they appeared to be in the Iron Age II.

## 4.5 IMPORTS

Imported pottery present at Mishrifeh is extremely rare: it consists of about a dozen fragments with a painted decoration, that is 0.3% of the Iron Age assemblage.

Through they are present in scarce numbers, imports occur at Mishrifeh in both the Iron Age II and III (Table 171). It is particularly well-attested in the Late Iron Age II, as three fragments were found in relation to the artisans' quarter (Phases H-T1 6a-6b), two in Phase H-T1 8 and one in Phase J-5.

IMPORTS	IA II	LATE IA II	IA II/III	IA III
Nr.	2	6	1	3
%	16.7	50	8.3	25

Table 171: Imports, chronological distribution.

These potsherds mostly have small dimensions and only in a few cases it is possible to recognize the form. Juglets are especially recognizable (T1 7711.707, fig. 259, **PI. 76:6**; H 8412.15, **PI. 76:7**).



Fig. 259: Black-on-Red fragments. Left: T1 7711.707. Right: T1 7008.813.

The imports are all ascribable to Cypriot<sup>1239</sup> pottery: they are in fact White Painted, Black-on-Red and Bichrome Ware sherds. The majority consists of Black-on-Red fragments, followed by Bichrome Ware and White Painted ones (Table 172)

<sup>&</sup>lt;sup>1239</sup> Often defined as "Cypro-Phoenician" in Levantine archaeology. See Schreiber 2003: xx-xxi. *Contra* this definition, especially for Black-on-Red Ware, see Iacovou 2004: 61-62 and Iacovou 2014b: 805.

IMPORTS	BoR	BICHROME	WHITE PAINTED
Nr.	7	2	3
%	58.3	16.7	25

Table 172: Imports, occurrence of wares.

White Painted IV-V fragments were found in Late Iron Age II, transitional Iron Age II/III and Iron Age III contexts. One was found in Phase H-T1 6b (Late Iron Age II, **PI. 76:5**), one in Phase H-T1 5 (transitional Iron Age II/III) and the last one in Phase J-1 (Iron Age III. Morandi Bonacossi 2002: 141, fig. 115). They are characterized by a white-ish or buff slipped surface with dark-painted concentric circles (Gjerstad 1948: 56-57, figs. XXVIII-XXX, XLVI). Similar exemplars have been found at Tell Afis, in 7th century levels (Cecchini 1998: 287). Bichrome IV-V fragments are characterized by a buff slip and reddish and dark-painted decorations (Gjerstad 1948: 62-67). They belong to a *thymiaterion* and a jug or amphoroid krater (fig. 135. Morandi Bonacossi 2008a: 121) found in Phase J-1 (Iron Age III) and have already

The Bichrome IV-V and White Painted IV-V fragments belong all to the Cypro-Archaic I-II horizon (c. 750-480 BC) and were probably imported from Cyprus or the Phoenician Coast (Morandi Bonacossi 2002: 141; Morandi Bonacossi 2008a: 121).

Black-on-Red (BoR) potsherds are more frequent in the assemblage and are present throughout the Iron Age II. More precisely, they were found in Phases H-T1 10 and H North 15 (Iron Age II), and especially in Phases J-5, H-T1 6 and 8 (Late Iron Age II).

This production can be recognized by the red slipped surfaces with dark-painted concentric circles and lines. Most fragments are small-sized, apart from SF T1 7711.707 (fig. 259, **PI. 76:6**). The origin and provenance of BoR Ware has been a debated matter, as it has been considered either a Cypriot (Iacovou 2014b: 804-805; Swift 1958: 159-161) or a Phoenician production (Bieber 1978).<sup>1242</sup> Recent studies have now proven that the BoR pottery found in various Levantine sites was produced in Cyprus (Brodie, Steel 1996; Kleiman et al. 2019). Furthermore, BoR vessels certainly produced in Cyprus appear at Megiddo already around 900 BC, that is the beginning of Cypro-Geometric III and Late Iron Age IIA (Southern Levant) / early Iron Age II (Northern Levant. Kleiman et al. 2019: 547).

been discussed in Chapter 3.3.3.1241

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<sup>&</sup>lt;sup>1240</sup> Cecchini 1998, figs. 20:2-3; 26:2.

<sup>&</sup>lt;sup>1241</sup> Bichrome IV-V fragments were found also in Phase J-5 (Morandi Bonacossi 2008a, note 114), however the documentation was not available and they were not included in this analysis.

<sup>&</sup>lt;sup>1242</sup> On the Black-on-Red see: Bieber 1978; Brodie, Steel 1996; Iacovou 2004; Iacovou 2014b: 804-805; Georgiadou 2016: 5-6; Gilboa 2015b; Gjerstad 1948: 68-72; Kleiman et al. 2019; Schreiber 2003.

The fragments are usually quite small, thus it is difficult to attribute the sherds to either the BoR I-III classes (according to the classification used by Schreiber, based on Gjerstad's. Schreiber 2003: 4-5). It seems to me that they are probably to be included into the BoR II class considering the similarities in decorations and forms (e.g. Gjerstad 1948, fig. XXXVIII:9-10) and the not polished slip.

BoR vessels appear in the Levant already from the middle-late 10<sup>th</sup> century BC (Schreiber 2003: 180-183) and are particularly attested in the 9<sup>th</sup> and 8<sup>th</sup> century (Schreiber 2003: 212-213). They are instead almost completely absent in the Levant in the 7<sup>th</sup> century BC (Schreiber 2003: 212). This reflects the chronological distribution observed at Mishrifeh, where BoR potsherds are present in 9<sup>th</sup> and especially 8<sup>th</sup> century.<sup>1243</sup>

The larger presence of BoR Ware, represented especially by juglets, compared to other Cypriot wares mirrors the popularity of this production in the Levant (Schreiber 2003: 46. 56). According to Schreiber, this popularity in particular of BoR juglets was given by the slip and burnishing which made the vessels more impermeable and thus more suitable to contain perfumed oils or liquids (Schreiber 2003: 57, 65). 1244 Since at Mishrifeh most of the BoR potsherds, although not all of them recognizable as juglets, were found in productive contexts (Operations J and H-T1), they may have contained oils used in craft activities. For example, SF T1 7008.808 and 813 (fig. 259) were found on the floor close to Room 2 of Building T1-2, where textile weaving activities were performed: although small, the sherds are rounded and probably belonged to juglets (perhaps the same one). It may be cautiously suggested that the juglets might have contained perfumed oil or another liquid used for textiles. This hypothesis however does not find confirmation elsewhere in the craft quarter, as in the complex composed of Buildings H1, H7 and H5 (a textile workshop) no Cypriot pottery was found. In Phases J-5 and H-T1 10 and 8 the major productive activities are food processing and storage, thus it seems improbable that BoR juglets contained perfumed oils in these contexts.

The small number of finds does not allow a more precise explanation for their presence.

<sup>&</sup>lt;sup>1243</sup> Very small BoR II sherds were found also in Phase J-1. Their small size indicate that they were most probably residual (Morandi Bonacossi 2008a: 118).

<sup>1244</sup> On the possible functions of BoR juglets see also Schreiber 2003: 62-67.

### 4.6 TYPOLOGICAL-FUNCTIONAL ANALYSIS

Considering the variety of archaeological contexts present at Mishrifeh in the Iron Age, especially the Iron Age II (Tables 173-174), it was extremely interesting to observe first which pottery typologies were found in the various features excavated, and second if in contexts of similar nature the same types occurred.

Excavation Area	Type of Occupation			
	PRODUCTIVE	DOMESTIC	CULTIC	FUNERARY
J	1, 5	1		6
K	3-9	4-9	4-9	
H-T1	5-6, 8-10	5; 10-11(North)		
T2	6			
Т3	1(2010)	7-12		
T4		1-6		

Table 173: Function of the occupation in the different phases of the Operations.

Chronological Period	Excavation Area	Type of Evidence
Iron Age III	J	Farmhouses and productive installations
Iron Age II-III	H-T1	Rural occupation and pits (food storage and
		waste-disposal)
	T3-T4	Houses, perhaps rural occupation
Iron Age II	J	Granaries and agricultural produce storage pits
		Cemetery
	К	Agricultural produce storage pits
	H-T1	Craft quarter
		Waste-disposal pits
		Productive installations, food storage pits
	H North	Domestic occupation
	T2	Productive installations
	T3-T4	Domestic occupation
	T3 2010	Productive installations
Iron Age I-II	К	Multifunctional Complex
Iron Age Ic	К	House(?) with productive and cultic activities

Table 174: Archaeological contexts subdivided by chronological period.

One limit to the analysis is that not all contexts yielded pottery, or a large enough ceramic repertoire that would allow such a study. Furthermore, in a few contexts the complete lack of finds and/or structures means that their function may not be understood. Because of these limits, only contexts which returned a solid architectural evidence and enough ceramic finds to enable a convincing analysis were studied.

#### 4.6.1 IRON AGE III

Iron Age III occupation was recorded in Operations J and T3. The Iron Age III archaeological record of Operation T3 is scarce and consists mostly of floors, whereas in Operation J a domestic rural occupation was uncovered. Two farmhouses were excavated, Buildings J1 and J12, surrounded by installations used for the storage and processing of agricultural produce (Chapter 3.3, Morandi Bonacossi 2008a: 118-121).

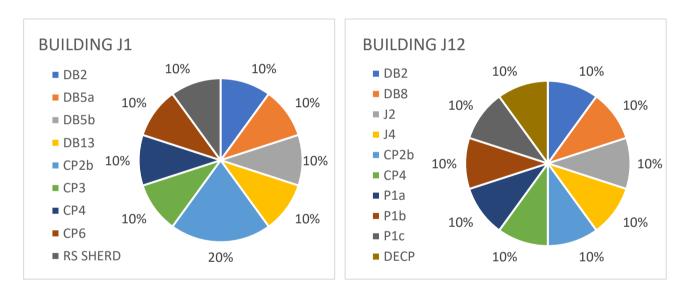


Fig. 260: Iron Age III. Phase J-1. Percentage occurrence of pottery typologies in Buildings J1 and J12.

Observing the pottery from Buildings J1 and J12, it may be noted that in the former (fig. 260) cooking ware (CP) is especially well attested (50% of the assemblage), albeit open shapes are present as well in the form of deep bowls (DB). In Building J12 a more varied assemblage is present (fig. 260, Table 175), characterised largely by closed forms, and storage ware particularly (30%, P1). Storage jars were concentrated in Room C, which was a storage room (Morandi Bonacossi 2008a: 120). From Room B come especially sherds of deep bowls, while in the *tannur* in front of Building J12 a CP2b sherd was found.

Painted and red slipped specimens are documented as well: paint is represented by a painted DB2 vessel in Building J1 and a body sherd (DECP) in the other farmhouse. Red Slip is represented by a body sherd in Building J1 and a DB2 specimen in J12.

Room	Typologies
В	DB2, DB7, J4, CP4
С	J2, P1a, P1b, P1c, DECP

Table 175: Iron Age III. Phase J-1. Pottery typologies subdivided by rooms in Building J12.

Overall, the assemblage confirms the domestic character of the context, with cooking pots and a few deep bowls, used perhaps as drinking vessels (DB2 and DB4 especially).

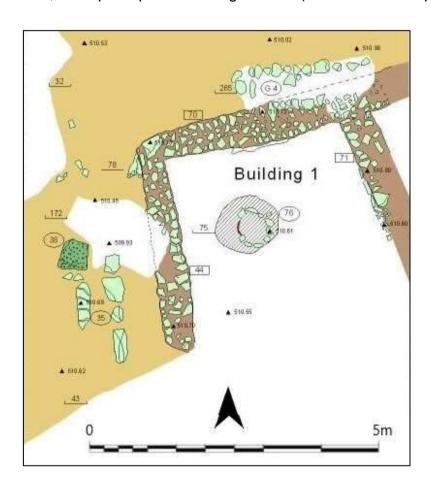


Fig. 261: Iron Age III. Phase J-1. Detail of Building J1.

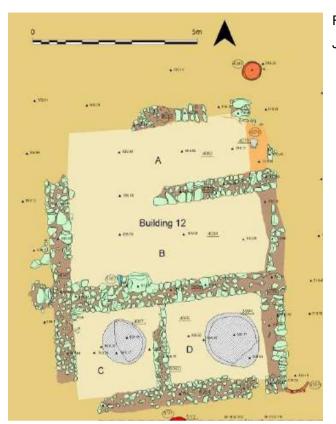


Fig. 262: Iron Age III. Phase J-1. Detail of Building J12.

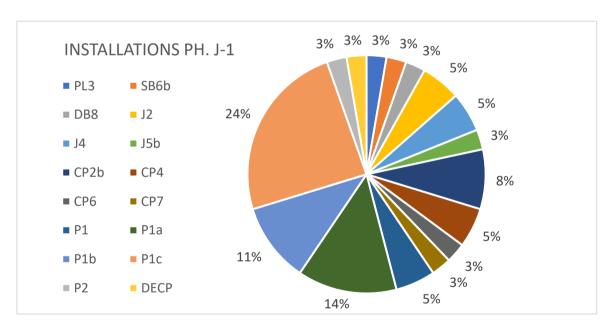


Fig. 263: Iron Age III. Phase J-1. Percentage occurrence of pottery typologies on open-air surfaces and in installations.

Regarding instead the external floors and the installations related to them (fig. 263), more than 50% of the assemblage is composed of storage ware (P), as might be expected considering the function of the installations. The few open shapes documented were found on the floor close to Building J1 (PL3 and DB8) and inside a basin (SB6b): PL3 in particular is the only red slipped vessel in this repertoire and was perhaps related to the dwelling.

#### 4.6.2 TRANSITIONAL IRON AGE II-III

In the transition from the Iron Age II to the Iron Age III there seem to have been a contraction of the occupation, which took on a mostly rural character (Building T4-1 and probably Building T1-1). The many pits which dot the surface of Phase H-T1 5 were probably in part used for the storage of agricultural produce (the fill of SU 3962 contained some grape seeds, see Chapter 3.5.1), but most were probably waste-disposal installations. The pottery of this phase comes almost exclusively from the pits fills and no finds related to the fragmentary Building T1-1 were retrieved.

The evidence from Operations T3-T4 is more understandable, although only a few sherds (in total about 20 fragments or vessels) useful for the analysis were retrieved. Building T4-1 (fig. 264, Table 176) consisted of at least three rooms, of which Room A was in Operation T3 and in a poor state of preservation (Chapters 3.7.1, 3.8.1).

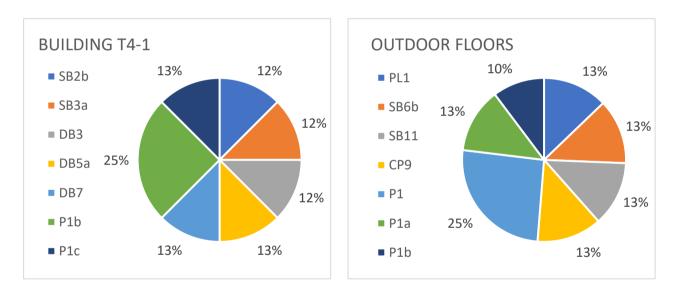


Fig. 264: Iron Age II-III. Phases T<sub>3</sub>-8 and T<sub>4</sub>-1. Percentage occurrence of pottery typologies in Building T<sub>4</sub>-1 and on external surfaces.

Room	Typologies
Α	SB3a
В	DB7, P1b
С	SB2b, DB3, DB5a, P1c

Table 176: Iron Age II-III. Phases T<sub>3</sub>-8 and T<sub>4</sub>-1. Pottery typologies subdivided by rooms in Building T<sub>4</sub>-1.

The pottery from Building T4-1 consists of open forms and storage ware. From Room A comes a painted SB3 specimen, while in Room B two fragmentary storage jars of the P1b type were found. Most of the open shapes (SB, DB) were found in Room C, together with a large three-handled storage jar interred in the floor. The presence of the storage jars suggests that Rooms B and C were used for storage. The large storage jar dug into the floor of Room C was perhaps used to contain liquids, considering the presence especially of deep bowls as well.

The pottery from the outdoor floors (fig. 264) surrounding Building T4-1 consists mostly of storage wares, a few cooking wares and some open forms, almost mirroring the assemblage from inside the building.

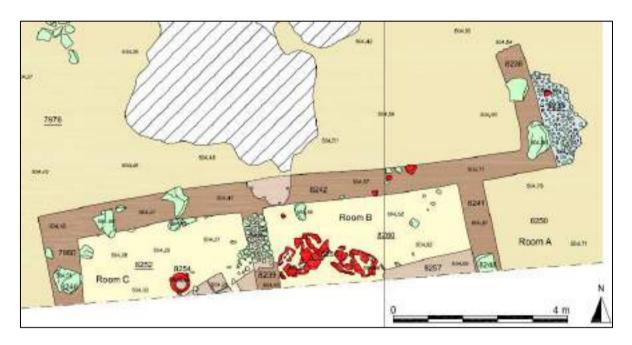


Fig. 265: Iron Age II-III. Phases T<sub>3</sub>-8 and T<sub>4</sub>-1. Detail of Building T<sub>4</sub>-1.

### 4.6.3 IRON AGE II

As already stated, the Iron Age II is fairly ubiquitous at Mishrifeh and comprised a great range of archaeological contexts (Tables 173-174). The most important archaeological evidence is the craft quarter of Operation H-T1: this productive quarter was characterised by textile weaving and dyeing activities in Building H4, the complex of Buildings H1, H5, H7 and Room 2 of Building T1-2; tool production in Building T1-3; food processing in Buildings H8, T1-2 and T1-4; and agricultural produce storage in Buildings H2 and H6 (Chapter 3.5.1. Morandi Bonacossi 2006: 90; Morandi Bonacossi 2019: 11).

Regarding the complex of Buildings H1, H5, H7 (fig. 266), the pottery assemblage found in Building H1 (fig. 267) does not seem explanatory. However, the presence of open shapes (PL2, DB7), kraters (KR1) and jugs (JU) may indicate the use of liquids, perhaps also dyeing-baths for textiles (Morandi Bonacossi 2019: 17), in connection with the activities carried out in nearby Building H5 (Chapter 3.5.1 and later). Considering that the assemblage comes from the same space where a structure containing about 140 weights was found (Morandi Bonacossi 2019: 13-14), it seems clear that the vessels were related to textile activities which were carried out in the complex.

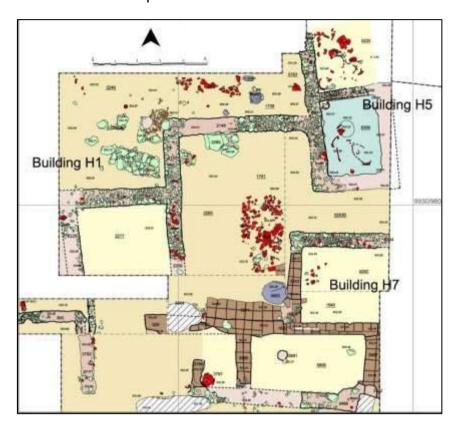
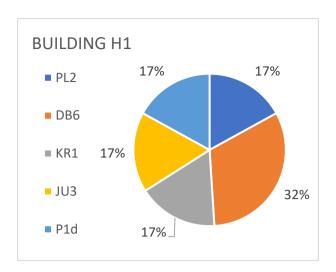


Fig. 266: Iron Age II. Phase H-T<sub>1</sub> 6a. Detail of the complex of Buildings H1-H5-H7.

In Building H7 (fig. 267) cooking and storage wares (CP, P1) were concentrated in the open space in the south-west area of the building, where an interred jar and a work bench were excavated (Chapter 3.5.1. Garna 2011: 82-83). Probably this area was devoted to the preparation of dyeing solutions, in a situation similar to the northern room of Building H5 (Chapter 3.5.1 and later), although the evidence is not as conclusive. In the other rooms of the building the assemblage is composed mostly of open forms (DB) and a few jars (J). The presence also of a jar containing cereal seeds in the southern room may indicate a different function for this space, perhaps related to the storage of agricultural produce.



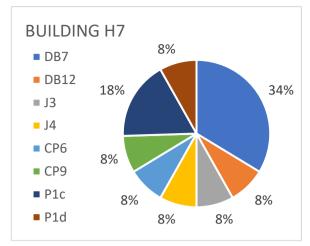


Fig. 267: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Buildings H1 and H7.

Building H5 (fig. 268) is the most interesting structure of the complex (Chapter 3.5.1. Morandi Bonacossi 2019: 15-17): it was formed of two rooms, a northern and a southern one. The ceramic assemblage of the northern room is characterised by about 90% of storage ware (J11 and P), with also a fruit-stand (PL1) and a "teapot" type juglet. In the southern room the repertoire is more varied, with still a large presence of storage ware (39%, P1) but also a majority of open forms (47%, PL, DB).

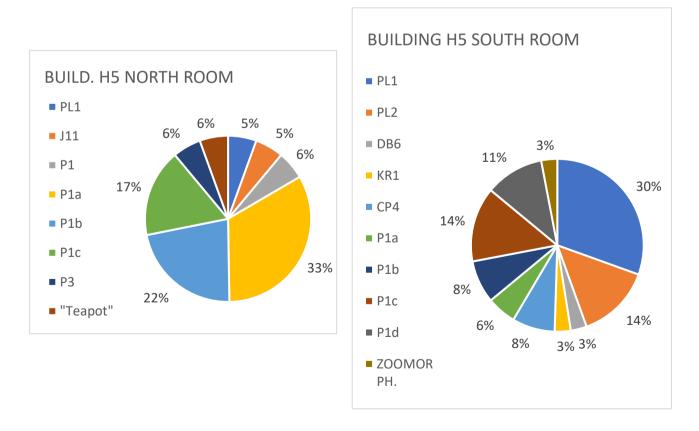


Fig. 268: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Building H5.

Building H5, with a lime-plastered floor in the southern room and lumps of red ochre found both under the collapse of the walls and inside some of the storage jars, was most probably used for textile dyeing (Morandi Bonacossi 2019: 17). This interpretation seems confirmed by the pottery; in fact, as already analysed by Morandi Bonacossi (Morandi Bonacossi 2019: 17), the large storage jars and perhaps the kraters were used to contain the dyes or mordanting solutions, cooking pots served to boil the dyeing agents and the DB6 bowl with a central hole was probably a strainer. The plates (PL) are mostly represented by the so-called fruit-stands and together with the zoomorphic vessels and the "teapot" type juglet they were probably connected to the use of liquids (Chapter 4.2.10.6 and below).

Continuing southward, Buildings H8 and H4 returned only a few sherds; their function (food production and storage) was deduced especially from the installations and the tools found in the rooms and in the vicinity of the buildings (Chapter 3.5.1).

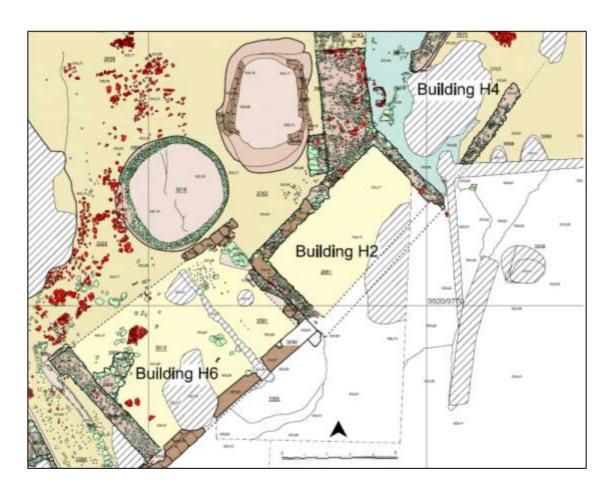


Fig. 269: Iron Age II. Phase H-T1 6a. Detail of Buildings H4, H2 and H6 with the inner court.

The assemblage from Building H2 (fig. 270) is almost exclusively composed of storage ware (P), confirming its use for the storage of agricultural produce.

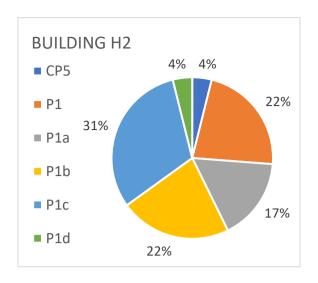


Fig. 270: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Building H2.

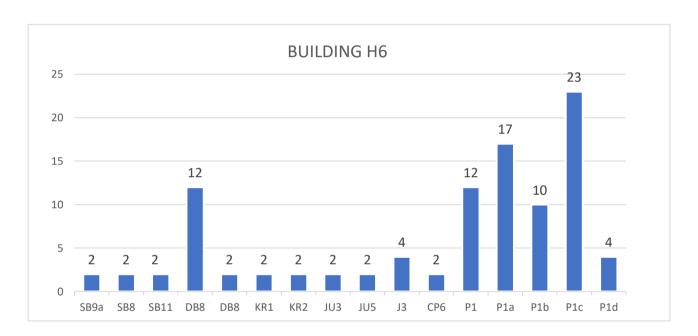


Table 177: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Building H6.

The ceramic repertoire found in Building H6 (Table 177) is wide-ranging in terms of typologies. Once again, it is characterised by a large percentage of storage ware (P), albeit open shapes are also well attested (SB, DB). This building was associated with the nearby silo 3215 and the large quantity (about 65% of the pottery assemblage) of storage ware confirms its use for the storage of agricultural produce and perhaps also liquids, considering the presence of open forms and pouring vessels (JU), probably used to contain liquids and pour them into the larger vessels (both jars – J3 – and storage jars).

In Building H3 the large quantity of storage vessels (P, fig. 271) indicates it was designated to agricultural produce storage, like Buildings H6 and H2.

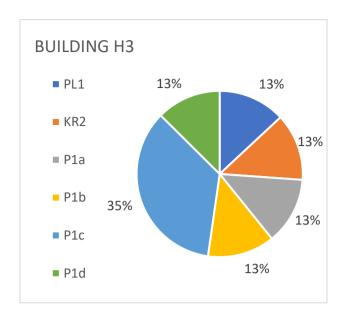


Fig. 271: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Building H3.

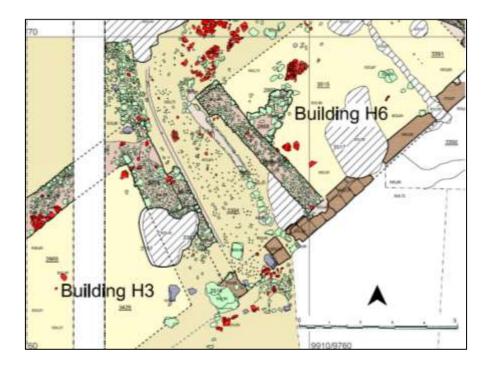


Fig. 272: Iron Age II. Phase H-T1 6a. Detail of Buildings H3 and H6.

Moving to the northern sector, Building T1-3 yielded only a couple of sherds, not useful for this analysis.

Pottery from Building T1-2 came especially from Room 3 (fig. 273). There, two jars were exposed in the corners and the assemblage was composed of storage ware (P) and open shapes (PL, SB, DB), indicating that this room was used to store agricultural produce and perhaps also liquids. The presence of loom weights in Room 2 may be interpreted as clear evidence of textile weaving activity there.

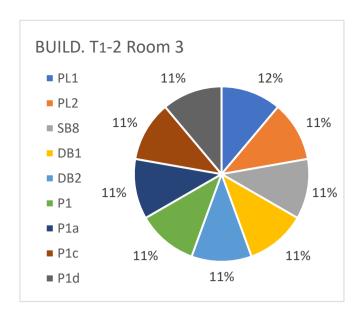


Fig. 273: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Building T1-2.

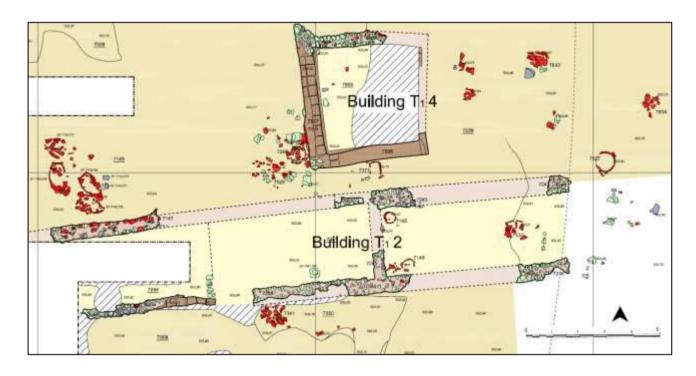


Fig. 274: Iron Age II. Phase H-T1 6a. Detail of Buildings T1-2 and T1-4.

Regarding Building T1-4 (fig. 274), tools such as a pestle and a grinding stone indicate its use for the processing of agricultural produce (Chapter 3.5.1. Morandi Bonacossi 2019: 19). Furthermore, the presence of a *tannur* (US 7246) abutting the western wall suggests that cooking activities were carried out close to and perhaps also inside the building.<sup>1245</sup> The pottery assemblage (fig. 275) made up for a large percentage of open shapes (PL, SB, DB), storage ware (J, P) and some cooking ware (CP) confirms this interpretation; in particular,

<sup>&</sup>lt;sup>1245</sup> The floor of Building T1-4 was not well preserved and more than half of the surface was missing.

deep bowls could have been used to transport cereals inside the building or from it to the *tannur*, or also to contain liquids.

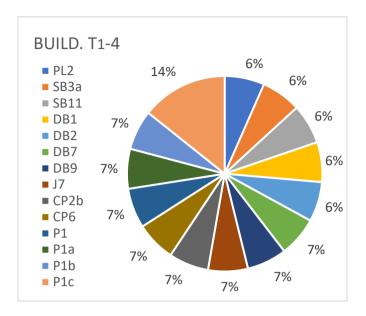


Fig. 275: Iron Age II. Phase H-T1 6a. Percentage occurrence of pottery typologies in Building T1-4.

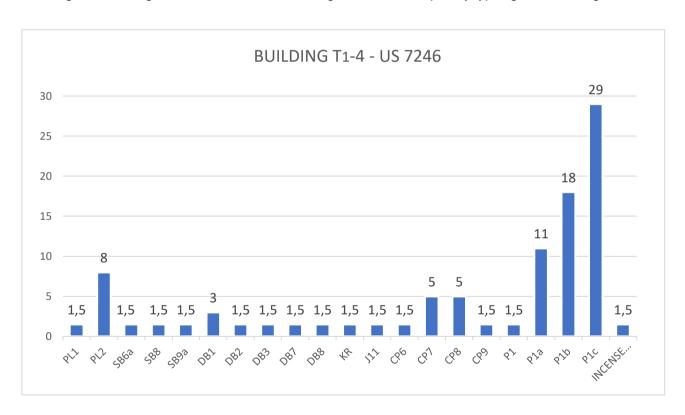


Table 178: Iron Age II. Phase H-T<sub>1</sub> 6a. Percentage occurrence of pottery typologies related to US 7246.

The presence of deep bowls in the ceramic assemblage related to the *tannur* 7246 (Table 178) may be likewise interpreted. Other than deep bowls, the repertoire consists mostly of storage ware (J11, P) and other open forms (PL, SB). The relatively high percentage of

serving ware (PL, 9.5%) and the analogous presence of cooking pots (CP, 13%) supports the interpretation that cooking activities took place in the area.

Regarding the previous sub-phase of the craft quarter, the documentation concerns especially Buildings H6 and H3.

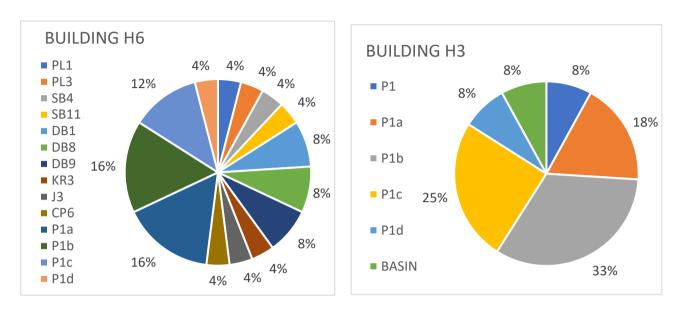


Fig. 276: Iron Age II. Phase H-T1 6b. Percentage occurrence of pottery typologies in Buildings H6 and H3.

The assemblage of Building H6 in sub-phase 6b (fig. 276) is similar to the repertoire of the later sub-phase: it consists of almost 50% of storage jars (P), while a large percentage of open forms (40%, PL, SB and DB) is attested as well. Perhaps the presence of deep bowls and kraters may indicate that liquids were also already stored in the building in this level. From the origin of the craft quarter, Building H3 was clearly devoted to the storage of agricultural produce, considering its ceramic assemblage consisting exclusively of storage vessels and basins (fig. 276).

Albeit decisive data are missing for the other buildings apart from H3 and H6, thus far, the pottery confirms that the artisans' quarter was built from the beginning with a precise separation into working zones.

Another productive context found in Iron Age II Mishrifeh is the warehousing area with two granaries and hundreds of storage pits exposed in Operation J, possibly connected to the craft quarter of Operation H-T1 and the presumably administrative building excavated by the Syrian mission in Area C (Morandi Bonacossi 2009: 124).<sup>1246</sup>

<sup>&</sup>lt;sup>1246</sup> A multifunctional administrative complex was also excavated in Area O by the Syrian Mission (Ziedan 2013).

The two Buildings J3 and J13 unfortunately returned only a few sherds, but the external floors surrounding Building J3 yielded an interesting pottery assemblage (Table 179).

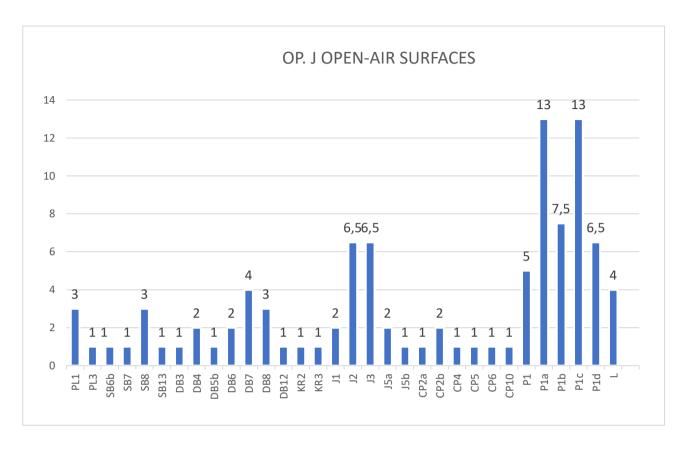


Table 179: Iron Age II. Phase J-5. Percentage occurrence of pottery typologies in the external surfaces around Building J3.

As expected in view of the productive context, storage ware represents the majority of the repertoire (45%, P), but vessels used for medium and long-range transport (J) are also quite common (18%). The presence of open forms (PL, SB, DB) and cooking ware (CP) might have different explanations: kraters (KR) may have been used to contain and mix liquids. Deep bowls may have been used for short-range transport of cereals and/or liquids or together with shallow bowls, plates and cooking pots they may indicate that cooking and serving activities took place near the building. Although pyrotechnical installations have not been found in this phase, it cannot be excluded they were present beyond the excavation area or that they were destroyed by the modern interventions. Anyway, these activities all seem connected to the transformation and storage of agricultural produce in a productive context, rather than a domestic one.

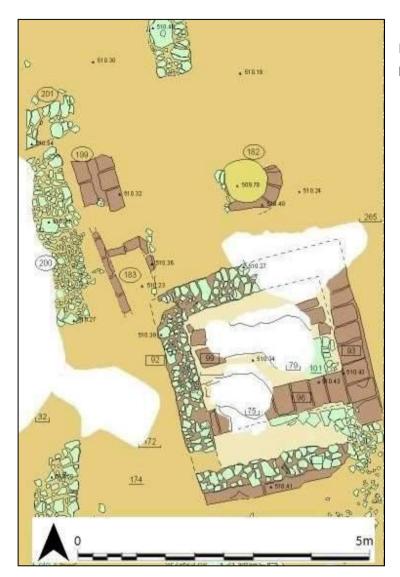


Fig. 277: Iron Age II. Phase J-5. Detail of Building J3 and the installations related to it.

In Operations T2 and T3 productive contexts are represented by installations probably employed for the dyeing of textiles; these consist of a deep tank with a smaller basin on the bottom (Chapters 3.6 and 3.7. Morandi Bonacossi 2019: 17-18).

The pottery found related to the installation of Operation T2 is scarce, just one sherd of jar (J3) and one of a painted deep bowl (DB1) from the fill of the tank.

More substantial are the assemblages from Operation T3 (fig. 279).

In installation 10078 open forms are attested almost exclusively (PL, SB, DB), alongside a small percentage of cooking ware (CP). The most remarkable data regarding 10081 is the high percentage of cooking wares (45%, CP), which are the most common shape of that repertoire. Open forms are also quite attested (c. 30%, PL, SB, DB), together with storage ware (13%, P). From installation 10081 a red slipped fruit-stand (PL5) was also recovered

and perhaps the fragmentary PL3 specimen from installation 10078, which is red slipped as well, was originally also a fruit-stand. 1247

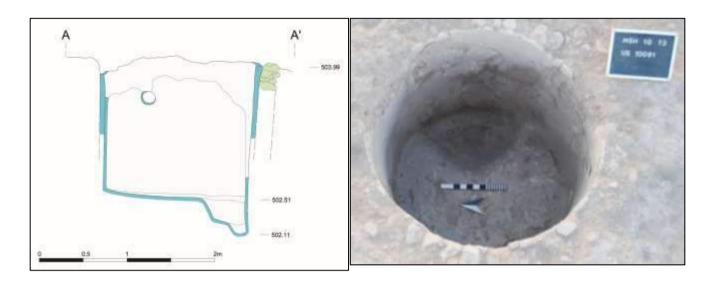


Fig. 278: Left: Iron Age II, Phase T<sub>2</sub>-6b, profile of installation 8010 (Morandi Bonacossi 2019, fig. 10c). Right: Iron Age II, Operation T<sub>3</sub>-1 (2010), installation 10081.

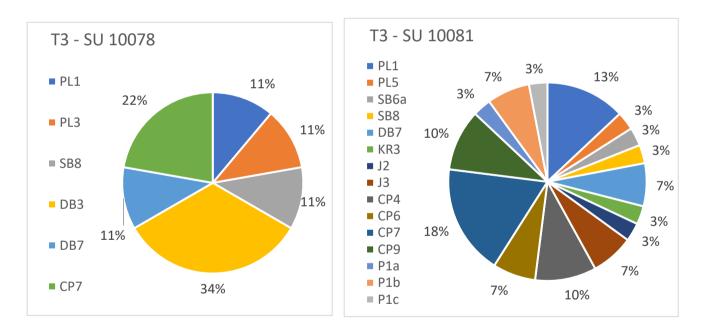


Fig. 279: Iron Age II. Phase T<sub>3</sub>-1 (2010). Percentage occurrence of pottery typologies in installations 10078 and 10081.

In general, the assemblages are comparable to that of the southern room of Building H5 (fig. 268): the only difference is the percentage of storage jars, which are more frequent in Building H5. However, this may be explained by the fact that in Operation T3 isolated installations

<sup>&</sup>lt;sup>1247</sup> As already discussed in Chapter 4.2.1.3, according to Ida Oggiano tapering rims associated to plates (PL3) are typical of fruit-stands (Oggiano 1997: 189).

were unearthed, while Building H5 in H-T1 is a whole structure, part of a larger complex where other activities related to the production of textiles were carried out. The presence of kraters in 10081 may confirm that they were used to contain dyeing-baths or mordanting solutions. The attestation also of cooking pots in both installations, but particularly in 10081, indicates that they were part of the ceramic assemblage related to textile dyeing, used probably to boil plants to extract dyes or to boil mordanting solutions (Martinez 2022: 21; Morandi Bonacossi 2019: 16). For example, safflower was used to produce a yellow dye, which could be extremely easy to produce just by boiling the stigmas of the plant (Martinez 2022: 19, 21). Safflower remains were discovered in Operation J in the Iron Age III and were associated with oil production or textile dyeing (Morandi Bonacossi 2008a: 118-119; Peña-Chocarro, Rottoli 2007: 129, Table 18). Although no safflower remains were retrieved for the Iron Age III, it cannot be excluded that it was also used in this period.

As already discussed in Chapter 4.2.10.6, fruit-stands at Mishrifeh clearly had a utilitarian function connected to textile dyeing activities: four out of five fruit-stands found by the Italian mission were discovered in Building H-5 and installation 10081, while another specimen was found by the Syrian mission in a warehouse close to a textile workshop in Area O (Badawi 2015: 470-472). 1248 It is difficult to understand their function: they were perhaps used as a measurement unit for small quantities of raw materials (maybe powders) to be added to dyeing baths. Their pedestal bases indicate that they contained materials that needed to be elevated, perhaps to prevent them from getting wet (or from getting wet ahead of time if they needed to be added to dyeing baths at a precise moment): this seems reasonable, considering the discovery of a fruit-stand in the central basin in the lime-plastered floor of the southern room of Building H5. It is a cautious speculation and further research will be needed to arrive to a better understanding.

The other open shapes, especially deep bowls, also suggest the use of liquids or perhaps they contained raw materials or powdered pigments.

The remaining Iron Age II occupation is almost exclusively represented by pits used for the storage of agricultural produce and installations for the processing of foodstuffs (Phases K-3, H-T1 8-10), together with waste-disposal pits signalling the abandonment of the precedent

<sup>&</sup>lt;sup>1248</sup> This does not mean that fruit-stands could have not also been used as serving vessels, especially in domestic contexts: however, at Mishrifeh there is no proof at the moment of a fruit-stand utilised in contexts other than productive ones. The couple of specimens found by the Count du Mesnil du Buisson (one of which is uncertain since it is simply a base) come from unclear contexts characterized by simple stone walls: one comes from "La Colline Centrale" (du Mesnil du Buisson 1927b: 298, Pl. LXXXII:94) and the other from "L'Ouvrage des Tirailleurs" (du Mesnil du Buisson 1930 Pl XXXI:6, column 11).

phase (Phases K-2, H-T1 7, T2-7, T3-13, T4-7). No significant architecture was excavated in these levels, <sup>1249</sup> and most of the pottery comes from the fills of the pits or was reutilised in the installations. In Operation J a small cemetery came to light, although unfortunately devoid of grave goods.

Domestic occupation was instead found in Operations H North and T<sub>3</sub>-T<sub>4</sub>. The evidence from H North Phases 10-11 is poor and the pottery assemblage is scarce (Chapter 3.5.3-4). More noteworthy is the building found in Operations T<sub>3</sub>-T<sub>4</sub>, although not many finds were discovered.

In the more recent phase (T3-10 and T4-4, fig. 281, Table 180) the building was made up of seven rooms, mostly devoid of structures and installations (Chapters 3.8.1 and 3.9.1).

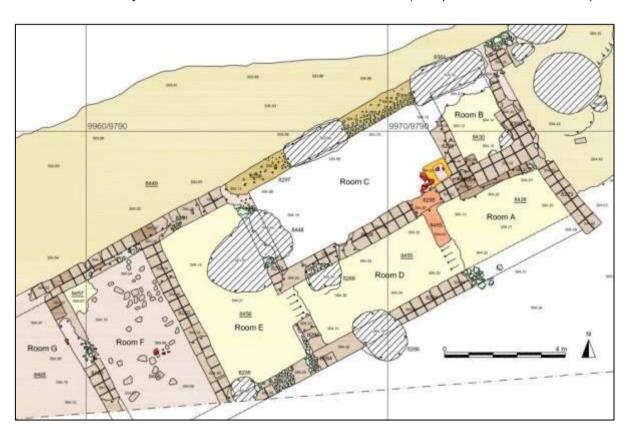
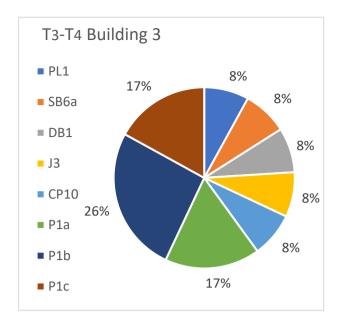


Fig. 280: Iron Age II. Phases T3-10 and T4-4. Detail of Building T4-3.

From Room F comes exclusively storage ware (P), which confirms its identification as a storage space together with Room G, from which no pottery was analysed. The assemblage from Room C is the most wide-ranging in terms of types: the situation however is unclear, also because of the poor state of preservation of the building remains and the lack of other material.

<sup>&</sup>lt;sup>1249</sup> Except for Building H12 in Phase H-T1 8, from which however come only a few potsherds.



Room	Typologies
Α	SB6a, CP10
С	PL1, DB1, J3, P1a, P1b, P1c
F	P1a, P1b, P1c

Table 180: Iron Age II. Phases T<sub>3</sub>-10 and T<sub>4</sub>-4. Pottery typologies subdivided by rooms in Building T<sub>4</sub>-3.

Fig. 281: Iron Age II. Phases T3-10 and T4-4. Percentage occurrence of pottery typologies in Building T4-3.

It may perhaps be interpreted as a domestic assemblage with serving wares (PL, DB), transport (J3) and storage vessels (P): the last of these may have been used for more short-term storage of food that remained available.

The presence of bowls and cooking pots in Room A may indicate either that cooking activities took place in the vicinity (although no pyrotechnical installations have been found in this phase), or perhaps that the room was used for eating. However, the interpretation of the eastern part of the building remains controversial and problematic.

In the earlier phase of occupation (T3-11 and T4-5, fig. 283), the building was composed of five rooms (C-G) and two spaces open to the outside (A-B).

The only pottery found inside the building was a cooking pot sherd (CP5) from Room B, which may have been connected to the square fireplace on the external floor. Most of the pottery was found on the outdoor floors surrounding Building T4-3 and the assemblage consists mostly of open shapes (55%, PL, DB), followed by storage ware (P) and kraters (KR). Considering the relatively high percentage of plates and also bowls, the vessels may be interpreted as part of a serving assemblage, with kraters used to mix liquids; most of these forms were found on the external floor 8468, outside Rooms C and E. The storage jars were instead found very close to the hearth and probably contained foodstuffs which were then cooked on the fireplace. It is possible that the food was cooked on the hearth outside the

building and subsequently eaten either on the floor outside Rooms C and E or inside one of these rooms.

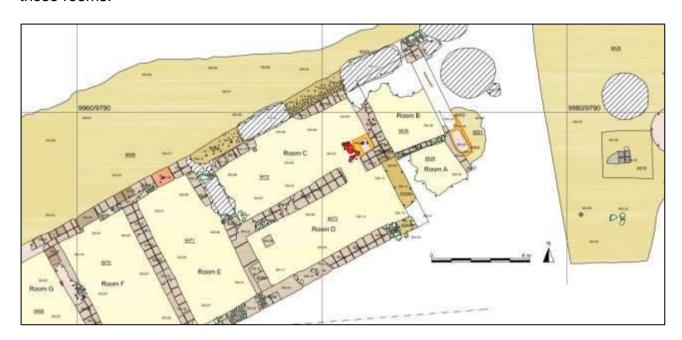


Fig. 282: Iron Age II. Phases T3-11 and T4-5. Detail of Building T4-3 and the outdoor floors.

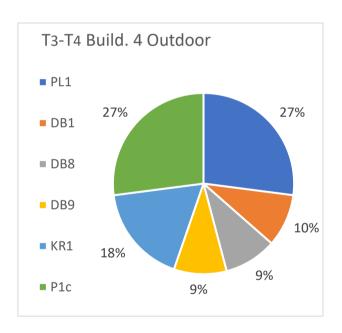


Fig. 283: Iron Age II. Phases T<sub>3</sub>-11 and T<sub>4</sub>-5. Percentage occurrence of pottery typologies of the outdoor floors related to Building T<sub>4</sub>-3.

## 4.6.4 IRON AGE I-II TRANSITION AND IRON AGE I

The transition between the Iron Age I and Iron Age II is represented by Operation K, of which the most important evidence is the multifunctional Complex K1 composed of two buildings (Chapter 3.4).

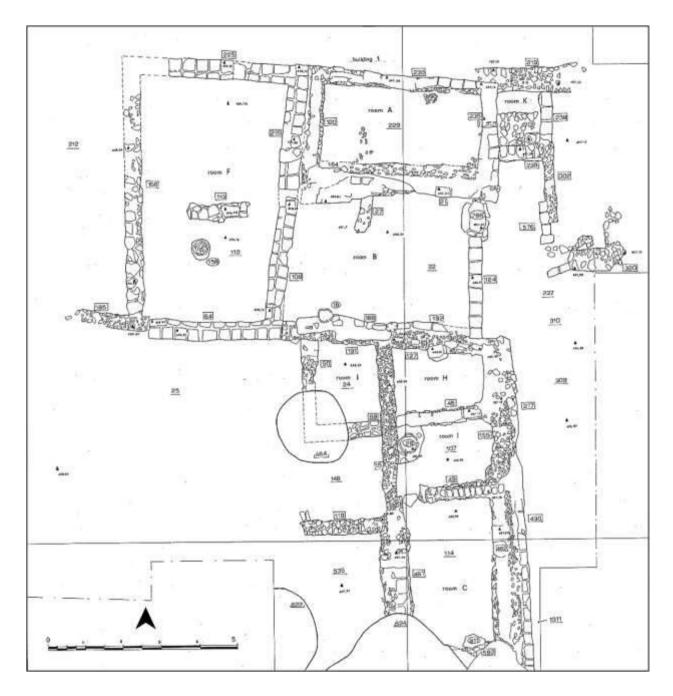
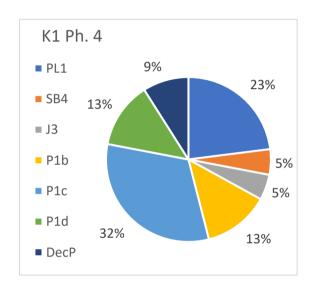


Fig. 284: Iron Age I-II. Phase K-4. Detail of Complex K1.

In the last phase of occupation (Phase K-4) Complex K1 returned a limited assemblage in terms of types (fig. 285, Table 181), thus a solid analysis based exclusively on the pottery is difficult to propose. The presence of serving wares (PL1) together with transport vessels

(J3) especially in Rooms A and B may indicate that the north building was the domestic area of the complex. In the other rooms the attestations are too scarce to permit a convincing interpretation.

Regarding the external floors (fig. 285), open forms and especially serving vessels (PL, DB) and cooking ware (CP) were concentrated around the northern building, which may be seen as further confirmation that this was the domestic area of the structure. This may be corroborated also by the fact that many decorated sherds (DECP) were found both inside (Room B) and around the northern building. Around the southern building storage jars are especially attested, which may have contained raw materials for the craft activities carried out in that sector.



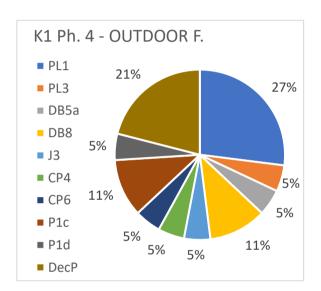


Fig. 285: Iron Age I-II. Phase K-4. Percentage occurrence of pottery typologies in Complex K1 and external floors.

Room	Typologies
А	PL1, P1b, P1c
В	PL1, J3, DECP
С	PL1
Н	P1c
I	SB4
N	P1c
0	P1d

Table 181: Iron Age I-II. Phase K-4. Pottery typologies subdivided by rooms in Complex K1.

In the earlier phase (K-5), the pottery was recovered exclusively from inside the building (fig. 287, Table 182). However, the situation is quite problematic, and it is quite difficult to find a pattern analysing the ceramic assemblage only.

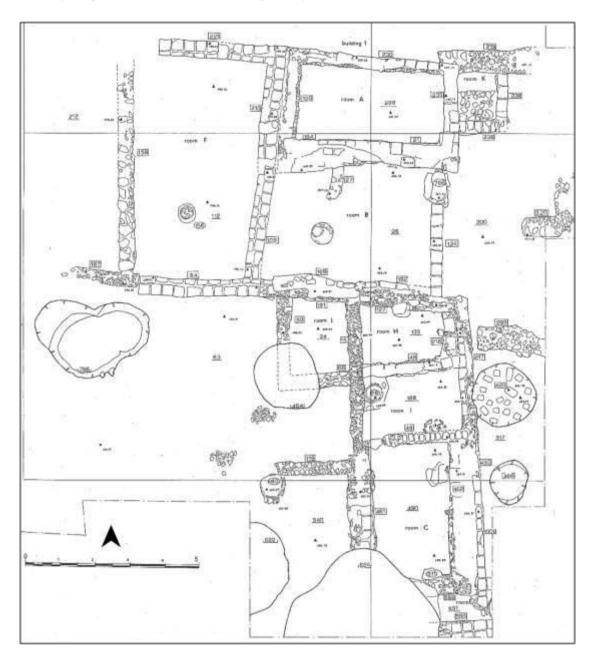
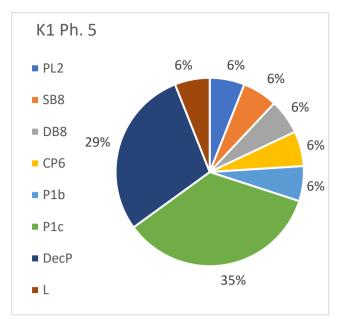


Fig. 286: Iron Age I-II. Phase K-5. Detail of Building K1.

The presence of cooking and storage ware (CP, P) in Room K may be seen as a sign of cooking activities, albeit a fireplace was not found. The lamp (L) in Room I may be cautiously interpreted as connected to the presence of an interred jar and storage ware: perhaps these jars contained oil to refill the lamp. This is clearly only a hypothesis, and the jars may have contained other materials used for the craft activities performed in the southern annex. For the other rooms no convincing explanation is possible.



Room	Typologies
Α	P1c
Е	DB8, DECP
Н	PL2, P1c
I	P1c, L, DECP
K	CP6, P1b
L	SB8

Table 182: Iron Age I-II. Phase K-5. Pottery typologies subdivided by rooms in Complex K1.

Fig. 287: Iron Age I-II. Phase K-5. Percentage occurrence of pottery typologies in Complex K1.

The assemblage of Phase K-6 is more easily interpretable (fig. 288, Table 183).

The northern building (Rooms A, B, F) is characterised by plates (PL), transport jars (J2) and cooking pots (CP). In the southern building the most remarkable ceramic repertoire comes from Room C: considering the presence of an oven and a crucible (Chapter 3.4.1. Luciani 2002: 161), the cooking pots in this case were probably associated with the metal-lurgical production and the storage jars (P) in all likelihood contained raw materials.

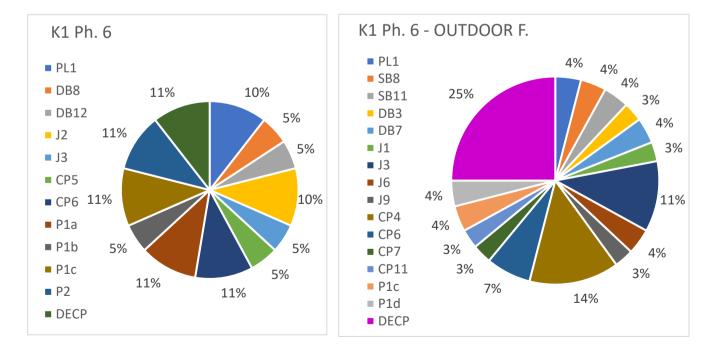


Fig. 288: Iron Age I-II. Phase K-6. Percentage occurrence of pottery typologies in Complex K1 and the outdoor floors.

Room	Typologies
Α	J2, DECP
В	J2, DECP
С	DB8, CP5, CP6, P1a, P1b, P1c, P2
D	PL1, DB12, J3
F	PL1, CP6

Table 183: Iron Age I-II. Phase K-6. Pottery typologies subdivided by rooms in Complex K1.

Regarding the outdoor floors, those surrounding the southern building are characterized especially by cooking pots and transport jars (J). Painted sherds (DecP) are also quite common all around the building.

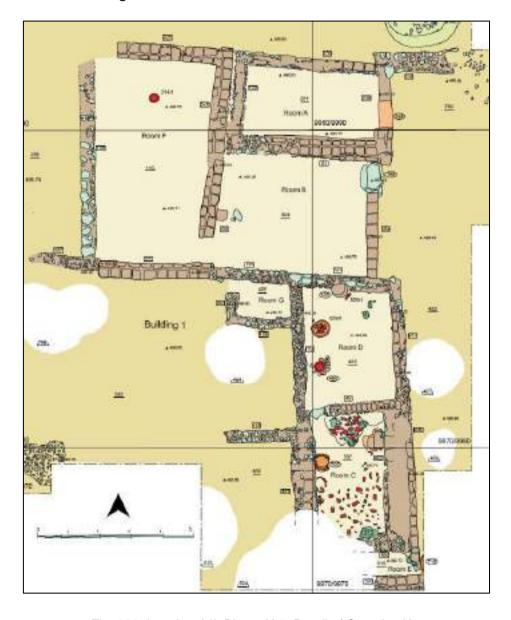


Fig. 289: Iron Age I-II. Phase K-6. Detail of Complex K1.

The assemblages of Phases K-7 and K-8 are too poor to make a convincing analysis, although some observations can be made.

In Phase 7 the presence of plates (PL3) and storage ware (P1a, P1c) in Room B can be noted, in a similar situation to Room A in Phase K-4. In Phase 8 the attestation of cooking wares (CP4) in the open space which became Room D in later levels may be connected to nearby Room C, which was already a productive area in this phase (Chapter 3.4.1-2, Luciani 2002: 160).

Regarding instead the assemblage of Phase K-9 (Iron Age I), the pottery comes mostly from the external surfaces and a clear pattern cannot not be discerned.

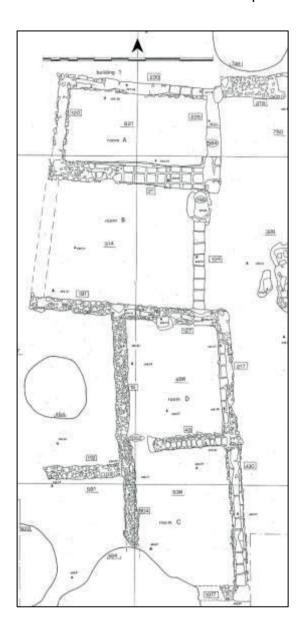


Fig. 290: Iron Age I-II. Phase K-7. Detail of Complex K1.

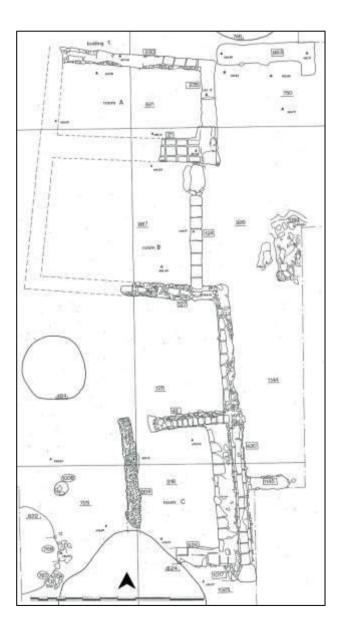


Fig. 291: Iron Age I-II. Phase K-8. Detail of Complex K1.

In conclusion, most of the pottery from the Italian excavations of Mishrifeh comes from productive and domestic contexts: productive ones are particularly attested and well documented, both with regard to architectural remains and the ceramic assemblage.

Observing the different typologies present in the two types of contexts (Table 184), it can be noted that productive contexts yielded assemblages that are typologically more wide-ranging. Furthermore, most of the types present in domestic contexts can be found also in productive ones: there is no clear difference in the two types of occupation regarding the pottery. This strong distinction in the quantity of typologies may of course depend on the fact that productive contexts are better documented and have yielded more pottery: in fact, the most important archaeological evidence comes from craft quarter of Operation H-T1, from which furnished a large percentage of the pottery analysed in this work.

TYPE OF OCCUPATION	DOMESTIC	PRODUCTIVE
	PL1	PL1
	PL3	PL2
POTTERY	SB2b	PL3
TYPOLOGIES	SB3a	PL5
	SB6b	SB3
	SB11	SB4
	DB1	SB6a-b
	DB2	SB7
	DB3	SB8
	DB5a-b	SB9a
	DB7	SB11
	DB8	SB13
	DB9	DB1
	DB13	DB2
	KR1	DB3
	J2	DB4
	J3	DB5b
	J4	DB6
	CP2b	DB7
	CP3	DB8
	CP4	DB9
	CP6	DB12
	CP9	KR1
	CP10	KR2
	P1	KR3
	P1a	JU3

P1b	JU5
P1c	J1
P1d	J2
	J3
	J4
	J5a-b
	J7
	J11
	CP2a
	CP2b
	CP4
	CP5
	CP6
	CP7
	CP8
	CP9
	CP10
	P1
	P1a
	P1b
	P1c
	P1d
	P2
 	P3

Table 184: Pottery typologies present in domestic and productive contexts.

The most common typologies of the Iron Age assemblage (PL1-3, SB8, DB1-2, DB7-9, J2-4, CP6-7, CP9, P1 and variants) are attested in both context types, with the exception of CP7 in domestic occupation: this may indicate that this type of cooking vessel was used mainly in productive contexts. There are a few types that are present exclusively in domestic contexts (SB2b, DB5a, DB13, CP3) and which may be interpreted as typical of domestic assemblages at Mishrifeh: these are serving vessels and a cooking pot type, and especially the DB5a form which may also have been used as a drinking vessel, considering its high, incurving walls. Moreover, the finding of a CP2b sherd near a *tannur* associated to farmhouse J12 may indicate the domestic use, albeit not exclusive, of these vessels.

It is thus clear that the pottery vessels were multifunctional: 1250 wares usually connected with eating and drinking, 1251 such as plates and bowls, jugs and kraters, at Mishrifeh are present especially in contexts devoted to craft activities. Plates can be employed as serving vessel (domestic occupation) or they may be connected to production processes, perhaps containing small quantities of raw materials or liquids (productive contexts, see the case of fruit-stands). The same might be supposed for shallow and deep bowls: they can be used for eating (deep bowls can also contain liquids), or to contain or transfer other materials. Jugs and transport and storage jars are especially attested in productive contexts, but could also be used in domestic ones to transfer or store food and/or liquids. Cooking pots can be either utilized, as their name implies, to cook food (domestic) or to boil dyeing agents or water for artisanal processes (productive).

It is of course quite difficult to recognize the type of occupation exclusively on the basis of the pottery. To reconstruct the probable use of a certain structure it is thus necessary to perform an integrated study analysing all the finds and installations associated with it, its architecture and how it is related to other possible structures and installations.

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<sup>&</sup>lt;sup>1250</sup> See also the discussion by Rice (Rice 1987: 413-432).

<sup>&</sup>lt;sup>1251</sup> See e.g. the "Tableware" of Venturi (Venturi 2020: 47).

## 4.7 POTTERY - CONCLUDING REMARKS

As previously mentioned, the pottery assemblage from Mishrifeh is generally homogeneous in terms of types and mostly made up of open forms, in Common Ware with an orange-reddish fabric or in Red Slip, and storage vessels. With regard to chronology, although earlier (Iron Age Ic and I/II) and later (Iron Age II/III and III) assemblages are well attested, the majority of the pottery analysed comes from Iron Age II contexts. As shown in the graphic (fig. 292), pottery from Iron Age II levels represents more than 80% of the corpus.

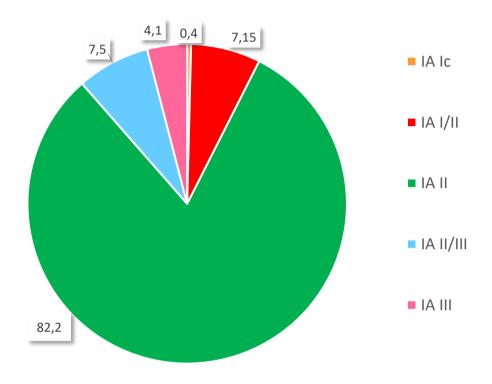


Fig. 292: Percentage distribution of the pottery by chronological period.

What is most evident is that there is not a clear difference between Iron Age I, II and III in terms of shapes; most forms that are already attested in the transitional Iron Age I/II period <sup>1252</sup> survive in the following periods, albeit their morphological evolution can sometimes be noted. For example, kraters with everted rim (KR1) in earlier periods often have a short tapering rim with a sharp inner angle (**PI. 31:4**), whereas in later specimens the rim is slightly longer and more rectangular, with a curved angle (**PI. 30**).

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<sup>&</sup>lt;sup>1252</sup> As already discussed in Chapter 3.4, the Iron Age Ic assemblage is extremely limited (about 20 sherds). So, while it has been inserted in the general discussion, the assemblage from transitional Iron Age I/II contexts is considered more statistically relevant.

	PL1	PL2	PL3	PL4	PL5	PL6	PL7	PL8	PL9
IA III	Х	Х	Х						
IA II / IA III	X	X	X		X				
Late IA II	Х	Х	Х	Х	Х			Х	Х
IA II	X	X	X	X	Х	X	X	X	
IAI/IAII	X	X	X			X		X	
IA Ic	Х						Х		

Table 185: Chronological distribution of plate types.

	SB1	SB 2a	SB 2b	SB 3a	SB 3b	SB4	SB5	SB 6a	SB 6b	SB7	SB8	SB 9a	SB 9b	SB 10	SB 11	SB 12	SB 13
IA III									Х		Х						
IA II / III			Х	Х	Х	Х	Х	Х	Х		Х				Х		Х
Late IA	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Χ	Х	Х	Х	Х	Х
IA II	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х		Х	Х	Х		Х
IAI/II						Х	Х				Х				Х		Х
IA Ic			Х								Х						

Table 186: Chronological distribution of shallow bowl types.

	DB1	DB2	DB3	DB4	DB5a	DB5b	DB6	DB7	DB8	DB9	DB10	DB11	DB12	DB13	DB14
IA III	Х	Х			Х	Х	Х	Х	Х	Х				Х	
IA II / III	Х	Х	Х	Х	Х			Х	Х	Х			Х	Х	
Late IA II	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х
IA II	Х	Х	Х	Х	Х		Χ	Χ	Х	Х	Х	Х	Х	Х	Х
IAI/II			Х		Х			Χ	Х	Х			Х		
IA Ic									Х						

Table 187: Chronological distribution of deep bowl types.

	KR1	KR2	KR3	JU1	JU2	JU3	JU4	JU5	JU6
IA III	Х								
IA II / III	Х		Х	Х			Х		
Late IA II	Х	Х	Х	Х		Х	Х	Х	Х
IA II	Х	Х	Х	Х	Х	Х	Х	Х	
IAI/II	Х			Х	Х	Х	Х		
IA Ic	Х								

Table 188: Chronological distribution of krater and jug types.

	J1	J2	J3	J4	J5a	J5b	J6	J7	J8	J9	J10	J11
IA III		Х	Х	Х		Х	Х					
IA II / III	Х	Х	Х	Х			Х	Х	Х	Х	Х	Х
Late IA II	Χ	X	Х	Х	X	Χ	Х	Х	Χ	X		Х
IA II	Χ	X	Χ	Х	X		Х	Х	Χ	X	X	Х
IAI/II	Χ	X	Χ	X	X		X	Х	Χ	X		
IA Ic												

Table 189: Chronological distribution of jar types.

	CP1	CP2a	CP2b	CP3	CP4	CP5	CP6	CP7	CP8	CP9	CP10	CP11
IA III			Х	Χ	Х		Х	Х		Х	Х	
IA II / III	Χ	Х	Х	Х	Х	Х	Х	Х		Х		
Late IA II	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Χ
IA II	Χ		Х	Χ	Х	Χ	Х	X	X	Х	X	Χ
IAI/II			Х		Х	Χ	Х	Х		Х		Χ
IA Ic					Х							

Table 190: Chronological distribution of cooking pot types.

	P1	P1a	P1b	P1c	P1d	P2	Р3	BA1	BA2	BA3	BA4	BA5	BA6	BA7	BA8	BA9	BA10
IA III	Х	Х	Х	Х	Х	Х		Х				Х	Х	Х	Х		
IA II / III	Х	Х	Х	Х	Х	Х		Х	Х	Х		Х		Х			Х
Late IA	Χ	Х	Х	Х	Х	Χ	Х	Х	Х	Х		Х	Х	Х	Х		Х
IA II	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
IAI/II		Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х		Х		Х
IA Ic		Х				Х			Х			Х					

Table 191: Chronological distribution of large storage jar and base types.

From a chronological point of view, the types identified at Mishrifeh can be subdivided as follows:

- a) Types found in all periods (from the Iron Age Ic or transitional Iron Age I/II to the Iron Age III): PL1, PL2, PL3, SB8, DB5a, DB7, DB8, DB9, KR1, J2, J3, J4, J6, CP2b, CP4, CP6, CP7, CP9, P1a-b-c-d, P2, BA1, BA5, BA6, BA8.
- b) Types found from the Iron Age Ic or transitional Iron Age I/II to the transitional Iron Age II-III: PL6, PL7, PL8, SB2a, SB4, SB5, 1253 SB11, SB13, DB10, DB12, JU1, JU2, JU3, JU4, J1, J5a, J7, J8, J9, CP5, CP11, BA2, BA3, BA4, BA10.
- c) Diagnostic types found exclusively in the Iron Age II (transitional Iron Age II/III included): PL4, PL5, PL9 (only Late Iron Age II), SB1, SB2b, SB3a-b, SB6a, SB7, SB9a (only Late Iron Age II), SB9b, SB10, SB12 (only Late Iron Age II), DB4, DB10, DB11, DB14, KR2, KR3, JU5, JU6 (only Late Iron Age II), J10, J11, CP1, CP2a, CP8, P3, BA9.
- d) Diagnostic types found in the Iron Age II and III: SB6b, DB1, DB2, DB5b, DB6, DB13, J5b, CP3, CP10, P1, BA7.

Long-lasting typologies, that is those in groups a) and b), together represent more than 80% of the Iron Age ceramic corpus of Mishrifeh: this is one of the reasons for the general sense of homogeneity of the assemblage.

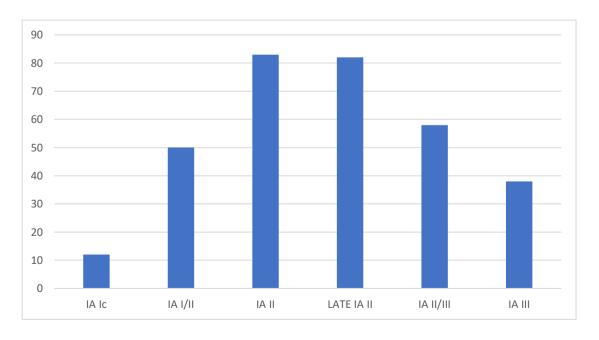


Table 192: Number of ceramic types attested in each chronological period.

<sup>&</sup>lt;sup>1253</sup> Albeit the specimen found in a transitional Iron Age II/III level pit may be residual.

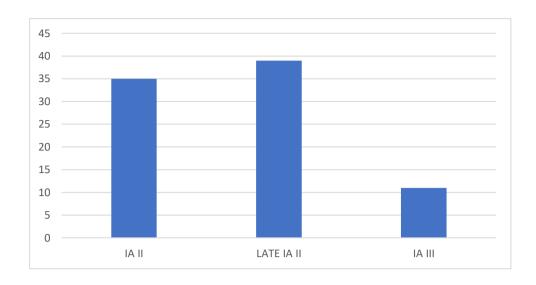


Table 193: Number of diagnostic types in the Iron Age II and III.

Summarising instead points c) and d) from the list above, in the pottery corpus there are 35 diagnostic types typical of the Iron Age II, 39 typical of the Late Iron Age II and only eleven types indicative of an Iron Age III chronology (Table 193). To note that the eleven diagnostic types that were found in Iron Age III contexts are also present in the Iron Age II: no ceramic types exclusively diagnostic of the Iron Age III have been found.

In the Iron Age I and transitional Iron Age I/II painted vessels are more common and in general painted decorations present a wider range of motifs (Chapter 4.4). In the Iron Age II the highest number of typologies is attested (Table 192) and Red Slip is widely documented: the large array of typologies registered for this period illustrates the diversity of pottery vessels present in the Iron Age II at Mishrifeh, mirrored in the variety of the features excavated.

In the Iron Age III the number of types sharply diminishes. While this may be because the assemblage is less numerous than in other chronological phases, it cannot be excluded that a decrease of the shapes in the forms present in the pottery repertoire effectively happened. Forms widely used in this period are storage jars and cooking pots, reflecting the domestic rural occupation of the period, whereas open shapes almost disappear. This is echoed in the minor presence of Red Slip, which occurs even less than in transitional Iron Age I/II levels (Chapter 4.3).

One of the most interesting characteristics of the Iron Age pottery assemblage of Mishrifeh is the presence of two different cooking pot groups, belonging to two different pottery traditions (Chapters 4.2.7 and 5).

The two categories are distinguished by a different chronological distribution in the repertoire. In fact, as stated in Chapter 4.2.7, short-necked pots recur most frequently in the assemblage of Mishrifeh, in the Iron Age II especially. Holemouth pots, in the form of the CP4 type in particular, are instead more common in the Iron Age Ic and the transition from Iron Age I to II. While they decrease notably in the Iron Age II, holemouth pots are slightly more common in Iron Age III levels than short-necked vessels (15 holemouth potsherds against 12 short-necked ones). Thus, the adoption of short-necked pots seems to have occurred slightly later than that of holemouth ones: while the data must be treated with caution due to the limited number of Iron Age I pottery fragments, it is significant that cooking pots are the most common shape in Phase K-9 and that all the six fragments found belong to the CP4 typology. CP4 is also the most common type of cooking pot in the later transitional Iron Age I/II levels, although short-necked specimens are attested, which clearly indicates the prevalence of the holemouth category in this period.

This change in the preferred cooking vessel perhaps indicates a change in diet and/or in culinary technique (Spagnoli 2010: 39) during the Iron Age II. The slight increase of holemouth pots in the Iron Age III may imply a return to the previous traditions, which had never been completely pushed aside. Another explanation could be that short-necked pots appear more with the increase of productive contexts, which were particularly present in the Iron Age II. However, there seems to be no distinction in the cooking pots depending on the type of context: holemouth and short-necked vessels are attested in both productive and domestic occupations and can often be found in the same strata.

Another noteworthy question is the scarcity of pottery fragments documenting Late Assyrian influence in the local pottery production, unlike the situation attested instead at Tell Mardikh (Pizzimenti 2018: 481), Tell Afis (Cecchini 1998: 286-287, 293 and figs. 21:11, 22:16, 27:14-16, 33::15, 35:18-20, 38:5) and Tell Tuqan (Baffi 2011d: 258; Baffi, Peyronel 2014: 24). Typical Late Assyrian bowls with a thickened rim and a depression under it (=SB7) and with hammerhead rims (SB6b) are rare at Mishrifeh (less than 1% of the Iron Age assemblage). Carinated bowls with flaring rim, which are quite common in the ceramic repertoire, at Mishrifeh probably did not derive from Late Assyrian influence (see discussion in Chapter 4.2.2.13).

A few sporadic sherds (SB9a H 2875.9, Pl. 15:2; DB14 H 3701.8, Pl. 27:1) may be connected to the Assyrian ceramic production, but they are statistically irrelevant in the

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<sup>&</sup>lt;sup>1254</sup> Most of the forms considered Assyrianizating at Tell Tuqan are carinated bowls with flaring rim. Baffi 2008c: 126-129; Fiorentino 2008: 167, 170; Fiorentino, Marinelli 2011: 186.

corpus (0.04%).

Considering the contraction in the quantity of finds and the typological repertoire documented starting from the transition from Iron Age II to Iron Age III and especially in the latter period, it appears that the incorporation of the region into the Assyrian Empire signalled a cultural contraction at Mishrifeh, mirrored in the archaeological record (Morandi Bonacossi 2007b: 86; Morandi Bonacossi 2009: 128-129). This contraction affected particularly the Kingdom of Hamath, probably as a result of the Assyrian conquest: Hama is thought to have been destroyed in around 720 BC by Sargon II (Ingholt 1942: 472)<sup>1255</sup> and at Tell 'Acharneh an Assyrian phase is not found. The latter site was probably abandoned at the end of the 8<sup>th</sup> century BC (Cooper, Fortin 2004: 48-51; Cooper 2006: 155). This topic will be further explored in the conclusions.

<sup>&</sup>lt;sup>1255</sup> Contra this interpretation, see Whincop 2009: 21-23, 56.

## 5. THE CERAMIC REGIONS AND THE POTTERY OF MISHRIFEH

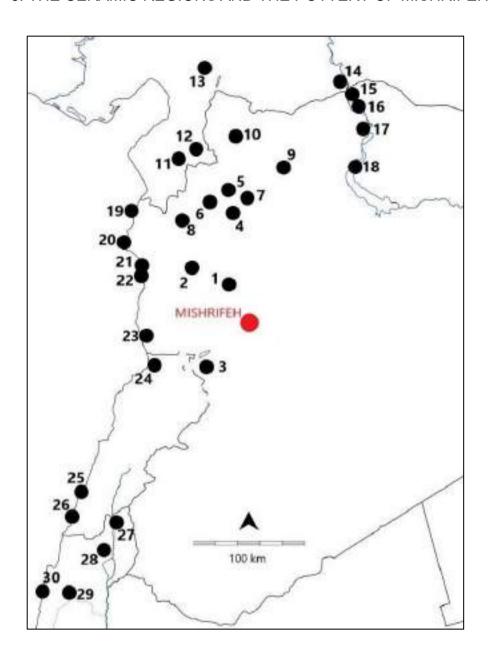
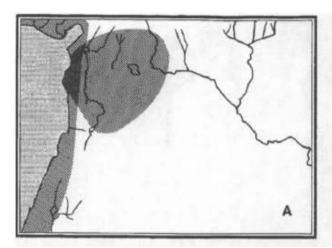


Fig. 293: Map of the Levant with the sites considered in this work: 1. Hama, 2. Tell 'Acharneh, 3. Tell Nebi Mend, 4. Tell Mardikh, 5. Tell Afis, 6. Tell Mastuma, 7. Tell Tuqan, 8. Tell Qarqur, 9. Tell Abou Danne, 10. 'Ain Dara, 11. Tell Tayinat, 12. Chatal Hüyük, 13. Zincirli, 14. Karkemish, 15. Tell Shiukh Fawqani, 16. Tell Ahmar, 17. Tell Jurn Kabir, 18. Tell Sheikh Hassan, 19. Ras al Bassit, 20. Ras Ibn Hani, 21. Tell Tweini, 22. Tell Sukas, 23. Tell Kazel, 24. Tell 'Arqa, 25. Sarepta, 26. Tyre, 27: Tel Dan, 28. Hazor, 29. Megiddo, 30. Tel Dan.

A ceramic region may be defined as a geographical unit where the sites are characterised by a high percentage of shared ceramic typologies in contemporary contexts (Iamoni 2012: 19). The subject of regional pottery traditions in the Iron Age Levant has been already discussed most notably by Gunnar Lehmann, Stefania Mazzoni and Matthew Whincop. In his study of the material culture of Syria and Lebanon in the Late Iron Age and Persian

period (Lehmann 1996, 1998), Lehmann recognized nine different pottery assemblages. Regarding Syria at the end of the Iron Age II, he distinguished between an inland repertoire and a coastal one (Assemblages 1-2, Lehmann 1998: 9-15, figs. 3-5). Albeit pioneering, Lehmann's study has two main problems, as Whincop highlights (Whincop 2007: 208; Whincop 2010: 32-35): first, the assemblages cover large cultural regions with the risk of generalizing them (Lehmann 1996: Abb. 4.4; Lehmann 1998: fig. 14:A – see fig. 294). Second, the differentiation into "inland" and "coastal" may over-simplify the material culture and the pottery distribution. Furthermore, his research is limited to the Late Iron Age II and III.



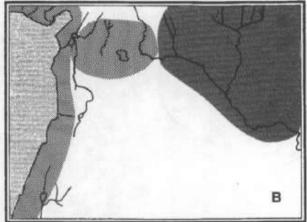


Fig. 294: Interactions between ceramic assemblages 1-2 from 750 to 550 BC according to Lehmann (Lehmann 1998, fig. 14).

Mazzoni has examined in depth all aspects of Syro-Anatolian material culture, often on the basis of her excavations of Tell Afis (Mazzoni 1992a, 1992c, 2000a, 2000b, 2000c, 2000d, 2014b). Mazzoni delineated a chronological sequence depending on various types of data (pottery, monumental art, inscriptions, architecture, craft productions such as ivories. Mazzoni 2000b, 2000c) and the stratigraphic and ceramic sequence of Tell Afis is one of the most important and more continuous Iron Age sequences (Akkermans, Schwartz 2003: 361, 363; Mazzoni 2014b: 354-356). Mazzoni and her team distinguish between the local pottery assemblage and external influences and/or imports 1256 (Mazzoni 2000a: 147-148; Mazzoni 2014b: 357). For Mazzoni, ceramic regions reflected "the development of society and its economic and political boundaries" (Mazzoni 2000a: 148). A multi-data approach was adopted by Fabrizio Venturi for his analysis of the Late Bronze / Iron Age I transitional levels in Areas E2-4 of Tell Afis (Venturi 2020). For the Late Bronze Age pottery repertoire he too

<sup>1256</sup> See pottery discussion in Degli Esposti 1998, Cecchini 1998, Mazzoni 1998, Venturi 1998. Also, Bonatz 1998.

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differentiated between ceramics typical of the Syrian Late Bronze tradition and new forms, some of which were perhaps of Anatolian influence (Venturi 2020: 231). Regarding the Iron Age I, Venturi recognized a "cultural *koinè*" encompassing Northern Syria and the 'Amuq Valley (fig. 295), characterised by strong and common Aegeanizing features brought by exogenous peoples and resulting in a cultural fusion (Venturi 2020: 231-232).

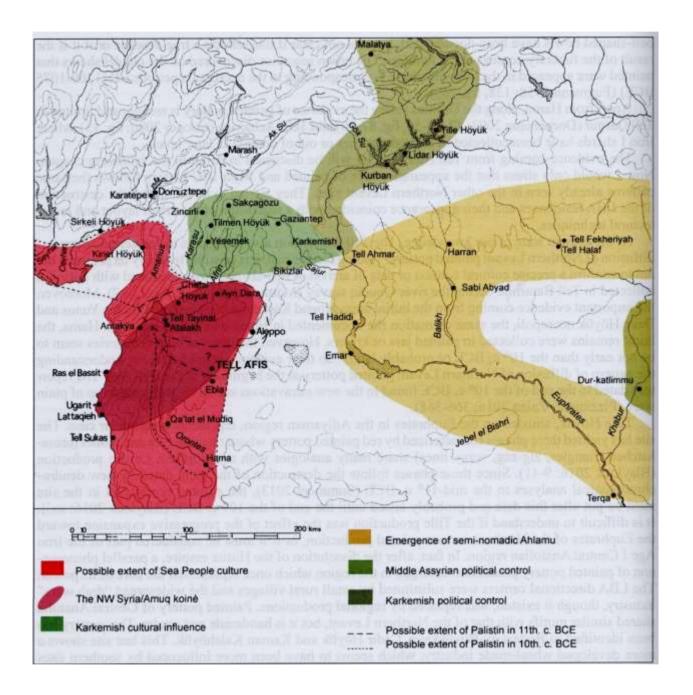


Fig. 295: The Northern Levant in the 12th century BC according to Venturi (Venturi 2020, fig. 46).

Whincop used a different approach to the concept of ceramic regions, criticizing earlier methods and analytical criteria. His major criticism is of the dichotomy between "local" and "foreign" elements in pottery assemblages and the explanation of the latter as the result of

interaction with other cultures, thus prioritizing individual specimens rather than the assemblage as a whole (Whincop 2007: 208-209; Whincop 2009: 90; Whincop 2010: 31-32). Instead, Whincop used Correspondence Analysis to investigate the distribution of pottery and the complete pottery assemblages (Whincop 2010). The first results of his study confirmed the existence of a difference between Inner Syria's ceramic assemblages and the pottery repertoires of the sites on the Levantine Coast and inland Northern Palestine (fig. 296). Then, he proceeded to investigate pottery influences based on mortuary and non-mortuary assemblages, dividing the assemblages into nine more localized geographical areas (Beqa' Valley, Northern Palestine, Jezreel Valley, Palestine Coast, Lebanon Coast, Syria Coast, North Syria, Syrian Orontes, Syrian Euphrates. fig. 297). The final results indicate that geographical location deeply influenced the ceramic repertoire. First of all, a maintained difference between inland and coastal areas can still be noticed. Second, the assemblages are clustered together on the basis of the nine geographical zones, which appear to be well defined (fig. 298).

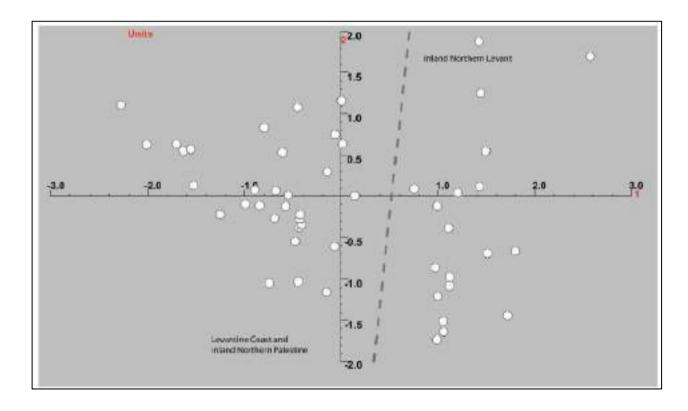


Fig. 296: The first results of Whincop's Correspondence Analysis indicating a difference between Coastal and Inland Northern Palestine pottery assemblages on the left, and assemblages from the Inland Northern Levant on the right (Whincop 2010, Chart 1a).

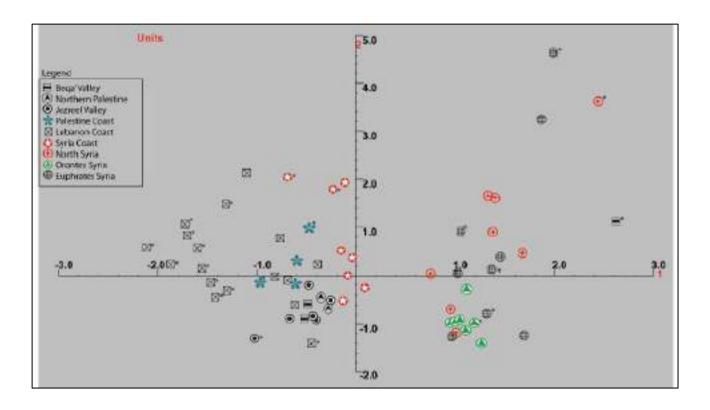


Fig. 297: The results of Whincop's Correspondence Analysis for mortuary (indicated by \*) and non-mortuary assemblages (Whincop 2010, Chart 2).

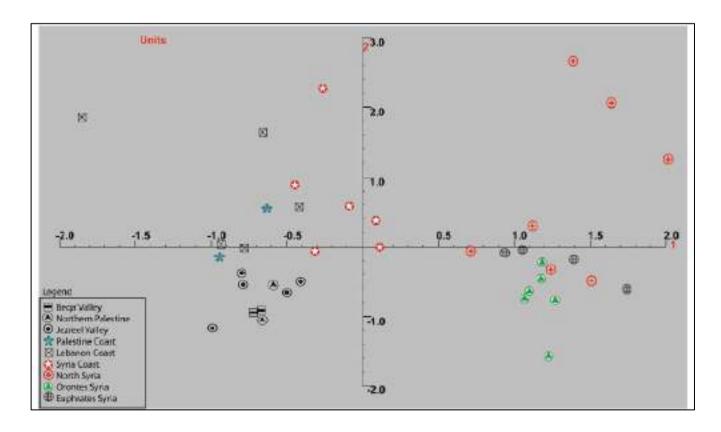


Fig. 298: The final results of Whincop's Correspondence Analysis on non-mortuary assemblages with most assemblages belonging to a particular geographic region clustered together (Whincop 2010, Chart 3).

Furthermore, a geographical progression can be observed. As Whincop states: "Starting with the inland Northern Levant (Orontes Syria and the Euphrates) at the bottom right of Chart 3 [fig. 298], it is possible to trace an arc across the chart, moving west to the Syrian Coast, southwards down through the Lebanese and then Palestinian coasts, to the Jezreel Valley, and up into northern Palestine and finally the Beqa' Valley. This geographic pattern might represent the direction of cultural interaction/information networks across the Northern Levant." (Whincop 2010: 42).

Whincop's study is complete and well grounded. His decision to group together assemblages of more limited geographic areas than Lehmann's serves to analyse in a more detailed manner the relations among the different regions. The final results, displaying a geographical progression and probably representing the trajectories of the cultural interactions between the Northern Levant and the Northern Palestine, are particularly interesting in view of the relation between Mishrifeh and the northern part of the Southern Levant (see below).

The approach to the study of ceramic regions used in this work is to analyse the assemblages of sites from different geographical and cultural regions to find parallels for both the ceramic typologies and common trends recognized in the Iron Age assemblage of Mishrifeh. Similarities in the distribution of Red Slip and the painted pottery have been searched for, as well as the presence of analogous decorations and potter's marks. The main focus was to establish a reliable chronological framework for the Italian excavations of Mishrifeh and the analysis of the pottery developments over time, while also studying the relations between Mishrifeh and the other sites considered.

A particular attention was then given to possible correlations between functional categories and the geographical distribution of the pottery comparisons, as were noted at Tell Nebi Mend (Whincop 2007: 206, fig. 12).

Thirty sites, gathered into six geographical and cultural areas, have been chosen for comparisons (fig. 299): the centres were selected on the basis of the importance of the site in specialist literature, the presence of clear archaeological contexts and the existence of published pottery from stratified contexts.

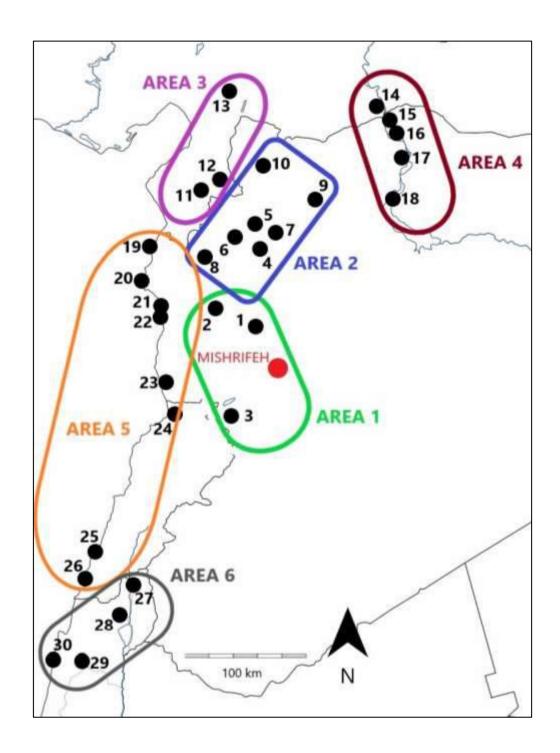


Fig. 299: Ceramic Regions. Area 1 (Inner Syria): 1. Hama, 2. Tell 'Acharneh, 3. Tell Nebi Mend. Area 2 (Northern Syria): 4. Tell Mardikh, 5. Tell Afis, 6. Tell Mastuma, 7. Tell Tuqan, 8. Tell Qarqur, 9. Tell Abou Danne, 10. 'Ain Dara. Area 3 (South-Eastern Anatolia = 'Amuq Valley and Southern Anatolia): 11. Tell Tayinat, 12. Chatal Hüyük, 13. Zincirli. Area 4 (Middle Euphrates): 14. Karkemish, 15. Tell Shiukh Fawqani, 16. Tell Ahmar, 17. Tell Jurn Kabir, 18. Tell Sheikh Hassan. Area 5 (Syro-Lebanese Coast): 19. Ras al Bassit, 20. Ras Ibn Hani, 21. Tell Tweini, 22. Tell Sukas, 23. Tell Kazel, 24. Tell 'Arqa, 25. Sarepta, 26. Tyre. Area 6 (Northern Israel): 27: Tel Dan, 28. Hazor, 29. Megiddo, 30. Tel Dan.

REGION	SITE	PARALLELS (SITE) <sup>1257</sup>	PARALLELS (REGION) <sup>1258</sup>
	Hama	17 + 2 OT	
Area 1: Inner Syria	Tell 'Acharneh	37 + 1 OT	
	Tell Nebi Mend	19	47/70 + 3 OT
	Tell Mardikh	32	
	Tell Afis	55 + 2 OT	
	Tell Mastuma	45 + 3 OT	
Area 2: Northern Syria	Tell Tuqan	35	67/70 + 4 OT
	Tell Qarqur	21	
	Tell Abou Danne	27	
	'Ain Dara	12	
Area 3: 'Amuq Valley - Southern Anatolia	Tell Tayinat	19 + 1 OT	
	Chatal Hüyük	37 + 1 OT	42/70 + 2 OT
	Zincirli	10	
Area 4: Middle Euphrates	Karkemish	15	
	Tell Shiukh Fawqani	37	
	Tell Ahmar	14	44/70
	Tell Jurn Kabir	9	
	Tell Sheikh Hassan	6	
Area 5: Syro-Lebanese Coast	Ras al Bassit	12	
	Ras Ibn Hani	4	
	Tell Tweini	3	40/70
	Tell Sukas	6	42/70
	Tell Kazel	10	
	Tell 'Arqa	6	
	Sarepta	12	
	Tyre	22	
Area 6: Northern Israel	Tel Dan	15	
	Hazor	45 + 1 OT	
	Megiddo	18	50/70 + 1 OT
	Tel Dor	22 + 1 OT	

Table 194: Pottery parallels.

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<sup>&</sup>lt;sup>1257</sup> Indicates the number of typologies (bases excluded) found in common between Mishrifeh and every site considered. The initials OT indicate the term "others", that is those forms defined as "others" in the typology: basins, incense burners, "teapot" style juglets and zoomorphic vessels.

<sup>&</sup>lt;sup>1258</sup> Indicates the number of typologies (bases excluded) found in common between Mishrifeh and the whole area considered out of the total number of typologies identified at Mishrifeh (70). The initials OT indicate the term "others", that is those forms defined as "others" in the typology: basins, incense burners, "teapot" style juglets and zoomorphic vessels.

The Iron Age pottery from Mishrifeh, as demonstrated in Chapter 4.2, has parallels in the whole Northern Levant and in the northern part of Southern Levant.

Mishrifeh/Qatna is located in Central-Western/Inner Syria and this geographical location is obviously reflected in the material culture of the site, which reflects Central-Western Syrian dynamics already from the Early Bronze Age (Besana, Da Ros, Iamoni 2008: 131-134) and especially from the Middle Bronze Age (Iamoni 2012: 182). Marco Iamoni has analysed the existence and extensions of ceramic regions in the late Middle Bronze Age and Late Bronze Age (Iamoni 2012: 182-188, figs. IV-2 and IV-3), noting that between the Middle Bronze Age and the Late Bronze Age there is not only an expansion of the ceramic horizons, but also that the borders between the pottery regions become "vaguer and more difficult to identify" (Iamoni 2012: 186).

This expanded horizon of the material culture, with homogeneous fabrics and diminished regionalization (Mazzoni 2000c: 125), seems to continue in the Iron Age: in this case the definition used by Stefania Mazzoni "A Paradigm of Extended Borders" (Mazzoni 2000a: 147) fits well also with Iron Age Mishrifeh. Marc Lebeau also commented that Levantine pottery in the Iron Age shares some common traits that give it an "air de famille" over a large geographic area (Lebeau 1983: 126). 1259

As Whincop has already noted for Tell Nebi Mend (Whincop 2007: 208), the Iron Age ceramic assemblage of Mishrifeh shows many parallels with sites over a wide area of the Northern and the northern part of the Southern Levant, and does not belong to a single, uniform, generic ceramic region.

The region where most parallels with Mishrifeh were found is Area 2, that is Northern Syria: 1260 it is rather surprising that there are more parallels than Area 1, 1261 the region surrounding Mishrifeh, although this may depend both on the quantity of the sites considered (three for Area 1, seven for Area 2) and the quality of the publications. In fact, the publications of the pottery of Hama are quite outdated (Fugmann 1958; Riis 1948; Riis, Buhl 1990) and the pottery of the Iron Age from Tell Nebi Mend was presented in an article by Whincop (Whincop 2007). Area 6 (Northern Israel) 1262 also gave many parallels, especially thanks to Hazor, which is one of the centres with most parallels with the Mishrifeh assemblage. The regions with less similarities are instead Areas 3, South-Eastern Anatolia, 1263 and 5, the

<sup>&</sup>lt;sup>1259</sup> Lebeau in particular highlights the common attributes of the pottery of Northern Palestine, Inner Syria and the Upper Euphrates and identifies them with the Aramean material culture (Lebeau 1983: 127).

<sup>&</sup>lt;sup>1260</sup> Tell Mardikh, Tell Afis, Tell Mastuma, Tell Abou Danne, Tell Tugan, Tell Qargur, 'Ain Dara.

<sup>&</sup>lt;sup>1261</sup> Hama, Tell 'Acharneh, Tell Nebi Mend.

<sup>&</sup>lt;sup>1262</sup> Tel Dor, Tel Dan, Hazor, Megiddo.

<sup>&</sup>lt;sup>1263</sup> Tell Tayinat, Chatal Hüyük, Zincirli.

Syro-Lebanese coast.<sup>1264</sup> This reflects the situation already attested in the Middle and Late Bronze Age, when the coast appears to be a separate area from the rest of the Levant (lamoni 2012: 185).

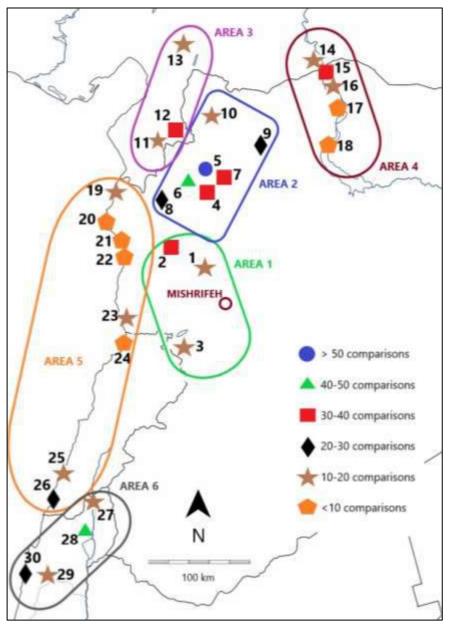


Fig. 300: Map of the Levant with the sites indicated on the basis of the number of parallels with Mishrifeh assemblage.

>50 comparisons: Tell Afis.

40-50 comparisons: Tell Mastuma, Hazor.

30-40 comparisons: Tell 'Acharneh, Tell Mardikh, Tell Tuqan, Chatal Hüyük, Tell Shiukh Fawqani.

20-30 comparisons: Tell Abou Danne, Tell Qarqur, Tyre, Tel Dor.

10-20 comparisons: Hama, Tell Nebi Mend, 'Ain Dara, Tell Tayinat, Zincirli, Karkemish, Tell Ahmar, Ras al Bassit, Tell Kazel, Sarepta, Tel Dan, Megiddo.

<10 comparisons: Tell Jurn Kabir, Tell Sheikh Hassan, Ras Ibn Hani, Tell Tweini, Tell Sukas, Tell 'Arqa.

However, it can be observed that in every geographical area, the situation is quite different for each site: as indicated in fig. 300, there is no common trend inside a determined zone. In fact, in the same area there can be centres with many (≥30) parallels and other sites with few.

Mishrifeh is clearly part of the same cultural region as Tell Afis and Tell Mastuma, the two sites with most typological comparison. Nonetheless, it is noteworthy that Hazor has the

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<sup>&</sup>lt;sup>1264</sup> Ras al Bassit, Ras Ibn Hani, Tell Tweini, Tell Sukas, Tell Kazel, Tell 'Arqa, Sarepta, Tyre.

same number of typologies in common with Mishrifeh as Tell Mastuma, indicating a continued relationship between Hazor and Mishrifeh from the Middle and Late Bronze Age. Observing the pottery forms in more detail, distinctions regarding their distribution according to geographical zones can be noticed.

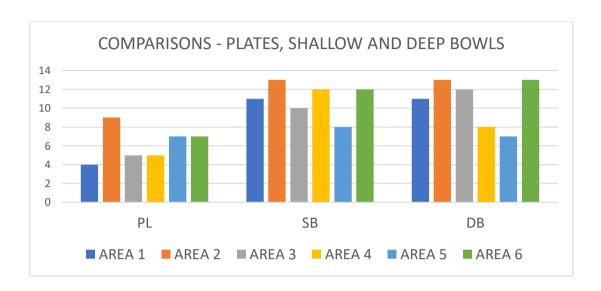


Table 195: Numbers of the typologies (plates, shallow and deep bowls) found in common between Mishrifeh and the geographical areas considered.

Regarding plates (Table 195), Area 2 is the region which gave more parallels (9 out of 9 typologies of plates), together with Areas 5 and 6. It seems clear that plates are a fairly common form throughout the Levant and that the pottery of Mishrifeh is firmly rooted in the Central-Western Syrian tradition, as indicated also by the high numbers of painted and red slipped specimens.

Shallow and deep bowls have a similar distribution (Table 195). Area 2 is once again the zone with more parallels (13 out of 13 typologies of shallow bowls, 13 out of 14 typologies of deep bowls), together with Area 6. However, there are also many parallels in Areas 1, 3 and 4 (the latter for shallow bowls).

Kraters (Table 196) are instead more attested in Areas 1 and 3 (3 out of 3 typologies), <sup>1265</sup> whereas in Areas 5 and 6 only one typology is attested. The Mishrifeh krater typologies are thus part of the Central-Western Syrian and 'Amuq Valley ceramic tradition.

Regarding jugs (Table 196), vessels similar to those from Mishrifeh are present particularly in Areas 2 and 6 (4 out of 6 typologies) and also in Areas 1 and 5 (3 typologies). Of these, while JU1 is widespread in all the Levant and not really diagnostic, type JU2 is distributed

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<sup>&</sup>lt;sup>1265</sup> For Area 3, however, this is due to Chatal Hüyük, which is the only site in the region where krater parallels are documented.

exclusively in the Southern Levant and JU3 is also more common in that area. JU6 and perhaps JU5 seem to be part of Northern Levantine assemblages.

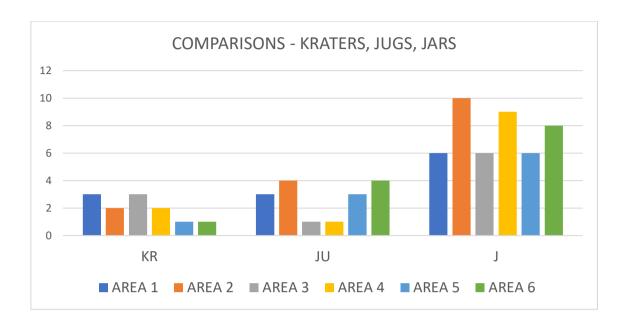


Table 196: Numbers of the typologies (kraters, jugs, jars) found in common between Mishrifeh and the geographical areas considered.

Serving vessels have thus parallels all over the Levant. Most typologies are well known and particularly widespread in Central-Western Syria, although similar specimens are also attested in other areas such as the north region of the Southern Levant. A few typologies (PL5, PL6, SB2, SB9b, JU2, JU3) seem to be particularly common in the Coastal and northern part of the Southern Levant, whereas only two shallow bowl types (SB6b, SB7) may be related to Late Assyrian influence.

Jars (Table 196) are quite widespread in the whole region considered. Area 2 is once again that with most comparisons (10 out of 11 typologies), together with Areas 4 and 6. Most of the jar types found at Mishrifeh are typical of North Levantine assemblages (J1, J2, J3, J4, J5, J6, J7, J10). J9, instead, circulated and was more common on the coast and in Northern Palestine.

The distribution of cooking pots (Table 197) follows the pattern already noted in Chapter 4.2: holemouth vessels are typical of Syrian and South-Eastern Anatolian assemblages (5 typologies out of 5 are present in Area 2), while they are almost completely absent in Coastal and Northern Palestine. The single holemouth attestation from Area 5 is related to the presence of the CP2 type at Ibn Hani, Tell Tweini and Tell Sukas.

Short-necked pots are attested in all areas, with Area 2 once again the zone with more attestations (4 out of 6 typologies): however, the CP8 and CP11 types are particularly

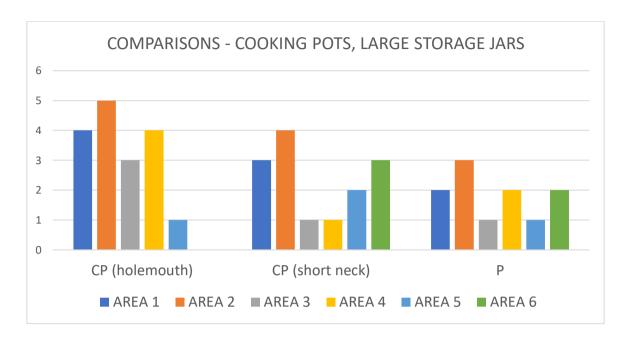


Table 197: Numbers of the typologies (cooking pots divided into holemouth and short-necked ones, storage jars) found in common between Mishrifeh and the geographical areas considered.

The distribution of large storage jars (fig. 197) reflects the one that has been already observed by Whincop at Tell Nebi Mend (Whincop 2007, fig. 12:A). They are mostly present in Syria, with Area 2 being as usual the region with more attestations (3 typologies out of 3), while they are almost completely absent on the Levantine Coast. In Area 5, in fact, analogous forms are present exclusively at Tell Kazel and in Area 6 at Hazor.

On the basis of the parallels, the pottery of Mishrifeh can be subdivided as follows:

- a) Typologies found almost exclusively at Mishrifeh: J11, CP7, CP9.
- b) Typologies typical of North Levantine (Syria, South-Eastern Anatolia) assemblages, although they may be found outside of this area: PL2, PL3, PL4, PL8, PL9, SB1, SB3, SB5, SB8, SB10, SB11, SB12, DB1, DB2, DB3, DB4, DB5, DB6, DB7, DB8, DB10, DB13, KR1, KR2, KR3, JU5(?), JU6, J1, J2, J3, J4, J5, J6, J7, J10, CP1, CP2, CP3, CP4, CP5, P1, P2, P3.
- c) Typologies typical of the Coastal and north part of the Southern Levant, although they may be found outside of this area: PL5, PL6, SB2, SB9b, JU2, J9, CP8, CP10, CP11(?).

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<sup>&</sup>lt;sup>1266</sup> As already discussed in Chapter 4.2, CP11 is a problematic typology, because while at Mishrifeh they are clearly cooking vessels, the parallels found are almost exclusively kraters.

- d) Late Assyrian typologies: SB7, SB6b, maybe SB9a.
- e) Common typologies evenly distributed throughout the Levant: PL1, SB4, SB6a, SB13, DB9, DB11, DB12, DB14, JU1, JU3, JU4, J8, CP6. 1267

Thus, most of the typologies found in the site clearly belong to the North Levantine tradition, whereas forms related to different ceramic traditions are also attested. The different influences merged at Mishrifeh into a homogeneous assemblage, where pottery was locally made, as demonstrated by the analysis of the fabrics (Maritan et al. 2005: 734; Maritan, Mazzoli, Speranza 2007: 211, 213).

So, Mishrifeh is fully embedded in the Central-Western tradition, well exemplified by sites such as Tell 'Acharneh, Tell Afis, Tell Mastuma and Tell Tuqan. Without any doubt, Area 2 is the area with the highest concentration of sites that exhibit many typological parallels with Mishrifeh. Furthermore, other common traits between Mishrifeh and Inner and Central-Western Syria are the painted plates with concentric circles and crosses, which are probably typical of the kingdom of Hamath (Chapters 4.7), the painted "teapot" type juglets and the large percentage of red slipped vessels, particularly open forms. The influence of the Central-Western Syrian tradition and that of the 'Amuq Valley seem also to have been present at Mishrifeh in the Iron Age I, especially in the painted motifs found on the pottery from Operation K (Chapter 4.4).

The data from Mishrifeh seem to confirm the difference in the ceramic repertoires between coastal and inland sites in the Levant already noted by Lehmann and Whincop (see above). While in fact the total comparisons equal the number found in South-Eastern Anatolia, meaning that a relative wide range of types can be found in common between Mishrifeh and the coastal region, the single sites examined returned very few parallels. More precisely, Ibn Hani and Tell Tweini are the sites with less comparisons in the catalogue (respectively, 4 and 3 parallels). Tell Sukas, Tell 'Arqa and Tell Sheikh Hassan on the Euphrates follow with 6 comparisons each.

The unequal distribution of typologies in sites belonging to the same geographical zone <sup>1268</sup> may partly depend on the state of research and the finds published, but it may also indicate a different, more localized, approach to the adoption of specific types of vessels. For example, hemispherical bowls with simple or tapering rims (DB1-2), which are well known

assemblages.

1268 For example, the lack of parallels regarding kraters at Tell Tayinat and Zincirli, compared instead to those found at Chatal Hüyük.

<sup>&</sup>lt;sup>1267</sup> CP6 is another problematic typology: short-necked cooking pots are typical of the Coastal and Southern Levant albeit they are also present in Iron Age I-II Northern Levant (see discussion in Chapter 4.2.7.6). However, precise parallels for the CP6 specimens of Mishrifeh have been found exclusively in Syrian assemblages.

in most of the Syrian assemblages (Chapters 4.2.3.1-2) including Inner, Central-Western, Northern Syria and the Middle Euphrates, are not attested at Tell Abou Danne. The site is located slightly eastward compared to Central-Western Syria, however it lies in the middle between that area and the Middle Euphrates, so geographically there would be no reason not to expect this form at the site. Furthermore, from a cultural point of view Tell Abou Danne is part of the Central-Western Syrian culture (Lebeau 1983: 126-127, 142). The reason must then be cultural, which means it must clearly be due to a conscious choice on the part of the site's inhabitants. However, it is difficult to discover the true reason behind this absence.

With regard to possible correlations between functional categories and geographical zones, the situation present at Tell Nebi Mend (Whincop 2007: 106), where a category corresponds to a precise geographical distribution, cannot generally be observed at Mishrifeh. As discussed above, in most pottery shapes a mix of cultural influences from all over the Levant is present, as noted for the bowls and the jars. Two exceptions are represented by cooking pots and large storage jars. As already extensively discussed previously, there is a marked difference between the spheres of influence/distribution of the holemouth pot and the shortnecked pot, with the former being typical of the Northern Levant and the latter of the Coastal and Southern Levant. Storage jars are especially widespread in the Northern Levant.

In conclusion, the different ceramic regions may indicate a general trend in pottery distribution; however, a more detailed look at the parallels highlights also the existence of privileged interactions between Mishrifeh and certain sites, rather than just with the whole cultural and geographic regions these sites are located in.

The most vivid example is Hazor: it is the centre of Area 6 where more typological parallels are present (45), than at Tel Dan (15), Megiddo (18) and Tel Dor (22). This is not due to a difference in the archaeological contexts or in the publications, as all sites have been excavated for a long time, various contexts have been brought to light and the finds have been published extensively. In a few cases, like for SB9b, Hazor is the only centre of the thirty considered in which it was possible to find a parallel. Another example is the case of J11, which seems to be a form typical of Mishrifeh, although an analogous specimen was indeed found at Hazor. This connection between Mishrifeh and Hazor, and more in general between Central-Western Syria and the hinterland of Northern Israel, was already present in the Middle and Late Bronze Age in a panorama of increased and more interconnected

<sup>&</sup>lt;sup>1269</sup> A similar form of a deep bowl with rounded rim is CL2 (Lebeau 1983 Pl. XIII:2-4), however it is not identical to the specimens in question.

<sup>&</sup>lt;sup>1270</sup> Albeit, as already observed, short-necked vessels are attested also in a few centres in Central-Western Syria in the Iron Age I and II (Tell Afis, Tell Mastuma).

relations all over the Levant and the Near East (Iamoni 2012: 185-186, fig. VI-3). This link seems to continue also in the Iron Age, especially in the Iron Age II.

## 6. CONCLUSIONS

## 6.1 THE POTTERY FROM MISHRIFEH IN THE CONTEXT OF THE NORTHERN LEVANT

The pottery assemblage from Mishrifeh is part of the regional ceramic horizon of Central Western Syria. During the Iron Age I and transitional Iron Age I/II periods, in the painted decorations related to Aegean production and the presence of Red Slip in these early contexts, the pottery of Mishrifeh displays parallels with the ceramic production of the 'Amuq Valley, particularly Chatal Hüyük and Tell Tayinat, and that of Northern-Western Syria, that is with Tell Afis and Tell Qarqur. The wavy lines, the cross-hatched triangles and the association of paint with a burnishing treatment are all indicators of the early Iron Age and are typical of the finds from Operation K. Mishrifeh and its region, therefore, seem to be also part, though on the periphery, of the "Aegean *koiné*" proposed by Venturi for the Iron Age I which includes Western Syria and the 'Amuq Valley (Venturi 2020: 231-232).

In the Iron Age II the horizons of the site broaden. While the pottery follows the general trends of Central-Western Syrian ceramic production, with a marked increase in Red Slip Ware, a decrease in painted pottery and the standardization of forms and fabrics, new influences from Coastal Levant and the northern area of Southern Levant are also attested, though in the presence of some new shapes (SB2, SB9b, J9, CP8). Some of these forms already appear in small quantities from the Iron Age Ic (SB2) or during the transition to the Iron Age II (J9), however their percentages increase in the Iron Age II. Noteworthy in this context is the relation with Hazor mentioned in Chapter 5, exemplified by the many parallels (45 typologies) found with the site, especially for types SB9b and J11. Not to mention the incised circles found on the cooking pots (perhaps potter's marks). This relation with the northern part of the Southern Levant may be due to the location of Mishrifeh: in fact, the site was in the south of the Kingdom of Hama and since the Middle and Late Bronze Age it had been open to influence from and links with the northern area of the Southern Levant (Iamoni 2012: 185-188). Some finds from Operation O also display parallels with Northern Israel (Hazor and Megiddo. Ziedan 2013: 165-167): in particular, jar type GI5, with a long narrow neck and two handles attached to the shoulder, and jug type BR2, with a carination and semi-globular shape (Ziedan 2013: 137).

The sharp increase in the use of short-necked cooking pots may also be seen from this perspective. As already discussed in earlier chapters, this category of cooking pot is particularly well attested in the Iron Age II Southern Levant. On the contrary, they are absent in the Northern Levant with the exception of Tell Nebi Mend (Whincop 2007: 205) and Tell

Mastuma (Wada 2009b, fig. 4.53:5). At Tell Afis short-necked pots were instead found in Iron Age I contexts (Degli Esposti 1998: 241; Venturi 2020: 114-115, types CP1b, CP2, CP3). The short-necked pots group at Mishrifeh is particularly well developed. There are six typologies included in this category and two of them, the two most common types (CP7 and CP9), are typical of Mishrifeh (Chapters 4.2.7.7, 4.2.7.9. Russo 2018: 605). The appearance of this group of cooking pots may have been due to Northern Palestinian influence. However, it became intrinsically part of the local ceramic production of Mishrifeh. Not only did Mishrifeh develop its own local forms, CP7 and CP9, starting from the transitional Iron Age I/II period, which became the predominant cooking pot types during the Iron Age II, but they were also locally produced (Maritan et al. 2005: 734).

The increase of short-necked pots in the Iron Age II may be related to the productive activities carried out in the site during this period. CP7 in particular seems to be connected to productive contexts (Chapter 4.6) although the other typologies do not appear to be exclusive to any particular type of context.

The general uniformity between ceramic assemblages found in productive contexts and assemblages from domestic contexts (Chapter 4.6, Table 184) is confirmed by the analysis of the pottery from Operation O, where a domestic unit was erected over Building III (Ziedan 2013: 110-112): most of the pottery types appear in both types of occupation (Ziedan 2013: 166).

The large quantity of red slip vessels mirrors what has been observed at Tell 'Acharneh (Cooper 2006: 143-144), Tell Nebi Mend (Whincop 2007), Tell Afis (Soldi 2013), Tell Mastuma (Wada 2009d), Tell Tuqan (Baffi, Peyronel 2014: 24), Tell Qarqur (Dornemann 2003a: 41, figs. 81-82), Tell Abou Danne (Lebeau 1983: 39-41, 49-50, 54-55, 132), Chatal Hüyük (Pucci 2019: 186-188; Pucci, Soldi 2019: 353-355), Tell Tayinat (Osborne et al. 2019, figs. 13, 17, 29) and Ras al Bassit (Braemer 1986). The Red Slip production in the 'Amuq Valley and Central-Western Syria is distinguished from that of the Lebanese Coast by the almost complete absence of Red Slip on closed forms. Shapes characterized by this treatment are usually plates, bowls and kraters, whereas it occurs rarely on jars or basins (Chapter 4.3. Osborne et al. 2019: 283; Pucci, Soldi 2013: 253; Soldi 2013: 206).

The pottery from Mishrifeh unfortunately does not allow a more precise chronological subdivision of the Iron Age II, other than identifying a late part of the period, thanks in part to a few distinctive typologies (PL9, SB9a, SB12, JU6). These forms however are represented by a scarce quantity of potsherds. The assemblage, as already discussed in Chapter 4.7, is generally homogeneous and composed largely of long-lasting types; fabrics are homogeneous as well. This confirms the general sense of standardization of the Iron

Age II pottery production in Syria, which also continues in the Iron Age III (Baffi, Peyronel 2014: 24-25; Mazzoni 2000b: 54-55; Mazzoni 2000c: 125).

What is remarkable is the local character of the Iron Age pottery. While Cypriot imports are attested in scarce quantities especially in Operations J and H-T1 (Chapter 4.5, **PI. 76:5-7**) and external stylistic influences are visible on the morphological aspects of some specimens (Aegean for the incense burners, Coastal and Southern Levantine for the forms already discussed, Late Assyrian for SB7 and SB6b), the production of Mishrifeh is locally made as attested by the archaeometrical study (Maritan et al. 2005: 734). In the Middle and Late Bronze Age Operation J was the location of a series of industrial-level pottery workshops (Iamoni 2012: 71-76; Morandi Bonacossi 2008a: 85-114), therefore there was a tradition of pottery-making at Qatna-Mishrifeh already before the Iron Age. A pottery workshop was installed at the end of the Iron Age II over the monumental building of Operation C (Al-Maqdissi 2003a: 223-225), although the large quantity of locally made pottery present throughout the Iron Age II<sup>1271</sup> suggests the presence of at least another (or more) pottery workshops, not yet localized, operating at the beginning of this period.

Forms displaying Assyrian influence such as bowls with triangular hammerhead rim (SB6b) or bowls with thickened rim and concave depression (SB7) appear already in the earlier Iron Age II. Adding the couple of sporadic sherds of SB9a (H 2875.9, **PI. 15:2**) and DB14 (H 3701.8, **PI. 27:1**) they reach their highest percentage in the Late Iron Age II, while in the Iron Age III their presence decreases sharply (Table 198).

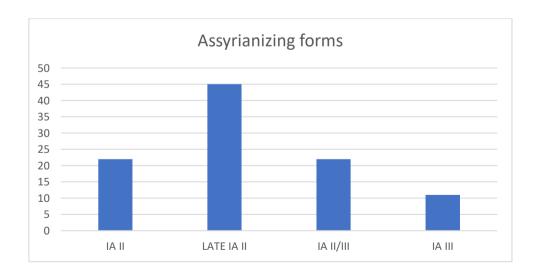


Table 198: Chronological distribution (in percentage) of the forms influenced by Late Assyrian productions.

<sup>&</sup>lt;sup>1271</sup> Considering also the assemblages documented by the German team (Russo 2018) and the Syrian team (Badawi 2015, Ziedan 2013).

These forms were found in Phases J-1 and J-5, H-T1 6a and 9-10 and T3 7-8. Assyrianising forms thus appear to be connected to the period and phases when productive activities were most developed in Mishrifeh. These types represent respectively 0.11% (SB6b) and 0.04% (SB7) of the entire Iron Age ceramic corpus: including the two SB9a and DB14 sherds, the total of the forms related to Late Assyrian productions is 0.19%. Therefore, they are rarely attested in Mishrifeh.

The Iron Age III production partly developed in continuity with the Iron Age II in terms of shapes. However, in general the assemblage appears impoverished. While most of the more common forms are still attested, <sup>1272</sup> the total number of typologies decreases and a notable change in the fabrics occurs due to a marked increase in fabrics with vegetable temper, which reaches 40% of the assemblage (Chapters 4.1 and 4.7). This situation appears similar to the Middle Bronze Age of Operation J (Iamoni 2012: 104, fig. V-10): the strong increase of mineral-vegetal tempered fabrics has been connected to a technological change in the firing technique, represented by the use of a new kiln type, perhaps as a consequence of the use of different raw materials (straw temper. Iamoni 2012: 103-104). In the Late Bronze Age fabrics with mineral and vegetal temper decrease; once again it may have depended on the access to raw materials perhaps due to different productive activities. An economy based on agricultural activities would have had easier access to a larger quantity of raw plant-derived materials (Iamoni 2012: 107-108).

A similar argument may have some value for the Iron Age III. The main productive activity registered for this period is the processing and storage of agricultural produce, with textile weaving activities attested only on a domestic scale (Morandi Bonacossi 2008a: 121). This would mean that straw or other vegetal matter was more easily available, especially with household-scale pottery production, highlighted by the total absence of potter's marks and/or inscriptions which — on the contrary —characterized the Iron Age pottery from the earlier levels (Chapter 4.4). In the Iron Age II, with its intensively developed textile industry, there could have been a reduced availability of straw for pottery-making — because it might have been used instead as animal feed.

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<sup>&</sup>lt;sup>1272</sup> PL1, PL2, PL3, SB8, DB1, DB5a, DB8, DB9, J2, J3, J4, CP4, CP6, CP7, CP9, P1a-d.

## 6.2 MISHRIFEH IN THE IRON AGE

The small village that developed in the final part of the Iron Age I, the late 10<sup>th</sup> century BC, in the lower town of Mishrifeh consisted of multifunctional complexes, with domestic and productive functions in different but connected buildings. These productive activities were metallurgy, textile production and food processing and storage, and were probably associated with domestic cults.

In this period, Mishrifeh appears to have had strong connections with the 'Amuq Valley and North-Western Syria in general. Not only does its pottery production indicates this, with Aegeanizing painted decorations and Red Slip appearing in Late Iron Age I levels, but so do other finds. These objects are the schematic basalt heads discussed in Chapter 3.4.1, two of which were found during earlier research on the site, while the third was discovered in Operation K. The first head (fig. 301) was found at the end of the 19th century, in 1894, in the area of the Royal Palace and it is now kept in the Aleppo National Museum: it is characterized by an elongated visage and a cap or headdress with incised curls (Morandi Bonacossi 2009: 131; Morandi Bonacossi 2013: 123). This head is quite similar to the one found by the Italian mission in Operation K (Chapter 3.4, fig. 301), which is however without a headdress (which may have been a separate piece). The third head was found by the villagers of Mishrifeh after the excavations of du Mesnil du Buisson and is in a poorer state of preservation: like the specimen from Operation K it lacks a headdress. Now it is stored in the Hama Museum (fig. 302. Morandi Bonacossi 2009: 131; Morandi Bonacossi 2013: 123-124).

The rendering of the headdress with curls has parallels with specimens from Tell Tayinat (Morandi Bonacossi 2013: 123). The first is a fragmentary colossal statue of an enthroned king presenting a similar headdress with curly hair and a similar artistic style in the sculpting of the eyes (fig. 303), now on display in the Oriental Institute Museum of Chicago. 1273 On the statue's throne a Luwian inscription is engraved, dubbed Tell Tayinat 1, which mentions a ruler of the "Land of Walastin" Halparuntiyas, possibly the Qalparunda known from Assyrian sources (Harrison 2009a: 179; Harrison 2001: 117; Morandi Bonacossi 2013: 123; Osborne 2021: 63).

Another basalt statue was discovered in 2012 (fig. 303) and presented a fragmentary inscription, dated to the 9<sup>th</sup> century BC, by king Suppiluliuma (II), probably the Sapalulme

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<sup>&</sup>lt;sup>1273</sup> The collection of the museum is available online. The archive entry related to the basalt head can be found at https://oi-idb.uchicago.edu/id/6f097112-dd6d-4584-be22-7e26d5be5f45.

king of Patina found in the Assyrian texts (Weeden 2013: 12). The statue has the same cap with curly hair as the previously described statues (Morandi Bonacossi 2019: 25).



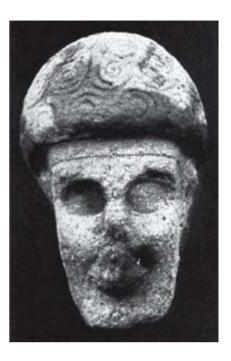


Fig. 301: Mishrifeh, two of the basalt heads. Left: the head from Operation K (Morandi Bonacossi 2009, fig. 13). Right: the head kept in the Aleppo National Museum (Morandi Bonacossi 2013, fig. 9).



Fig. 302: Mishrifeh, the basalt head kept in the Hama National Museum (Morandi Bonacossi 2019, fig. 12).



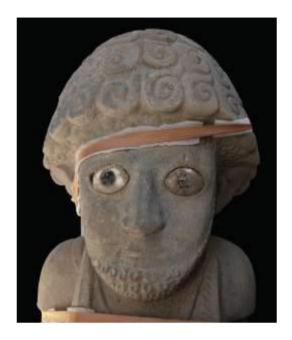


Fig. 303: Tell Tayinat. Left: fragmentary colossal head of an enthroned statue (courtesy of the Oriental Institute Museum, D. 15963). Right: statue of Suppiluliuma (Weeden 2013, fig. 4).

The third piece is a basalt orthostat, reportedly found at Tell Tayinat (Braidwood 1937, fig. 7): the sculpted scene depicts a chariot with two figures on board passing over a lying figure, probably an enemy. The curly hair of the two charioteers resembles of the headdress of the above-mentioned basalt heads (Morandi Bonacossi 2013: 123). The orthostat has been dated by Harrison to the 10<sup>th</sup> - 9<sup>th</sup> centuries BC on the basis of parallels with reliefs from Zincirli and Karkemish and considering that in Tayinat only undecorated orthostats are present from the late 9<sup>th</sup> century BC and later (Harrison 2009a: 179).

Tell Tayinat was the ancient Kunulua, capital of the kingdom of Palastin/Walastin, <sup>1274</sup> which included the 'Amuq Valley and the north of Syria until Aleppo. The discovery in the Temple of the Storm God at Aleppo of two Luwian inscriptions dated to the 11<sup>th</sup> century BC mentioning Taita as "hero and king of Palastin" furnished epigraphic evidence of one of the kingdom's first known kings (Harrison 2007b: 61; Morandi Bonacossi 2019: 2; Osborne 2021: 63). Another individual named Taita (who may be called Taita II) is known as king of Walastin from other inscriptions, probably dated to the 10<sup>th</sup> century BC, from the area of the Middle River Orontes not far from Hama, the Meharde and Sheizar inscriptions (Osborne 2021: 63; Weeden 2013: 13). This indicates that the kingdom of Palastin/Walastin for at least some time during the 10<sup>th</sup> century BC had influence over the region of Hama (Morandi Bonacossi 2019: 2-3). The evidence provided by study of the sculptures found in Mishrifeh therefore

<sup>&</sup>lt;sup>1274</sup> On Palastin/Walastin see also Weeden 2013: 11-12.

confirms the site's connection during the 10<sup>th</sup> century BC with the 'Amuq Valley indicated by the pottery analysis and the textual sources.

Known from HL	Inscription	Known from Assyrian Annals	Date
Taita I	Aleppo 6-7		11th century BC
Taita II	Meharde+Sheizar		10th century BC
Manana	Arsuz 1+2		10th century BC
Suppiluliuma I	Arsuz 1+2		10 <sup>th</sup> century BC
Halparuntiya I?	Tell Tayinat I		10th century BC?
		Lubarna I?	c. 875?, 858 BC
Suppiluliuma II	New Tell Tayinat	Sapalalme (+Lubarna I?)	858 BC
		Qalparunda II	857 BC
		Lubarna II	829 BC
		The Company of the Co	

Fig. 304: List of the kings of Palastin/Walastin (Weeden 2013, Table 2).

During the Iron Age II, Mishrifeh entered a phase of thriving development. The area inside the ramparts was almost completely settled, as indicated by the fact that almost every excavation area has yielded Iron Age II evidence. The site was characterized by various productive contexts, devoted in particular to the storage and processing of agricultural produce, probably wine and oil (Operations J, K, H-T1, O), and to textile production (Operations H-T1, T2-T3, O, *Maison 1*) especially in the later part of the period.

The pottery displays strong connections with the contemporary sites of Central-Western Syria, particularly Tell Afis and Tell Mastuma, but also shares distinctive traits with the centres closest to Mishrifeh. First of these is the adoption of short-necked pots as also recorded at Tell Nebi Mend (Whincop 2007: 205). Secondly, the large percentage of red slipped open forms and the presence of plates with painted concentric circles and/or straight or wavy radial lines as observed at Hama (Riis, Buhl 1990: 138-180, figs. 75-78, 80) and Tell 'Acharneh (Cooper, Fortin 2004: 34-35; Cooper 2006: 143-144). This type of painted plate appears already in the transitional Iron Age I/II period, and their presence increases during the Iron Age II, in a trend similar to that of the short-necked pots.

The material assemblages of the two large complexes found in Operations C (fig. 305. Al-Maqdissi 2003b: 1495-1500) and O (Buildings I-III, fig. 306. Ziedan 2013) included various seals (Al-Maqdissi 2003b: 1497; Ziedan 2013: 141-142), identifying them as administrative structures. The best-preserved complex, that in Operation O, was clearly involved in the central control of food storage and textile production. A similar function can be proposed for the building unearthed in Operation C, although its poor state of preservation does not allow a conclusive interpretation (Ziedan 2013: 58-59).

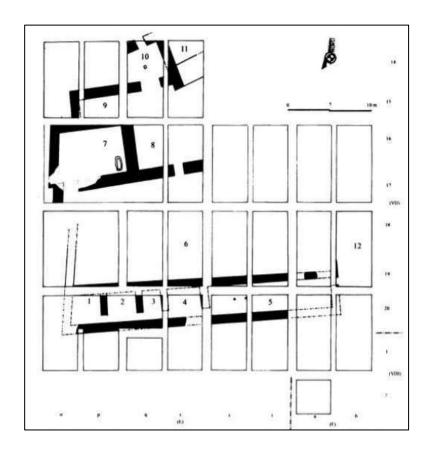


Fig. 305: Mishrifeh, Operation C, the administrative building (Al-Maqdissi 2003a, Abb. 7).

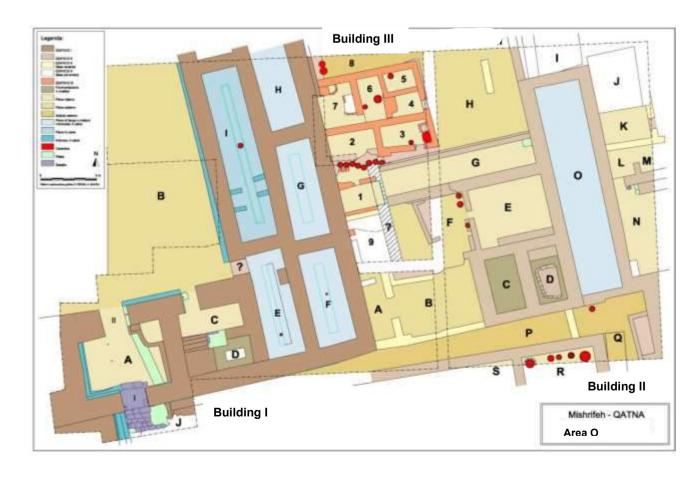


Fig. 306: Mishrifeh, Operation O, the multifunctional complex (Modified from Ziedan 2013, fig. 31).

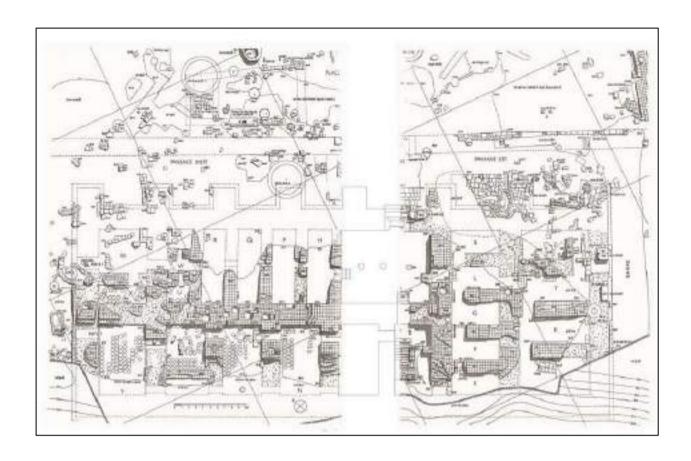


Fig. 307: Hama, Bâtiment II (Fugmann 1958, fig. 265).

The spatial arrangement and architectural features of the building of Operation C and Building I from Operation O are reminiscent of the structures of the Hama Citadel, especially *Bâtiments I* and *II* (fig. 307). The monumentality of the architecture, the impressive entrance of Building I with a basalt stairway, the presence of orthostats and the internal organization of the rooms have parallels with the architecture of Hama during Période E (Al-Maqdssi 2003b: 1500; Morandi Bonacossi 2019: 21-22; Ziedan 2013: 154-157, 167). Other than Hama and Mishrifeh, no other Central Syrian site has a monumental complex like that of Operation O (Ziedan 2013: 167), which points to the site's importance during the Iron Age II: not only as a productive centre specialized in textile production, but also as an administrative one.

The location of Mishrifeh close to Hama, the similar pottery production and the analogies between the multi-functional complexes of Operations C and O to the Hama Citadel indicate a close relationship between Mishrifeh and the kingdom's capital. The evidence suggests that Mishrifeh was an urban centre which oversaw the region south of Hama, under the direct political control of the capital (Morandi Bonacossi 2009: 127; Morandi Bonacossi 2019: 25-26). Since the administrative building of Operation C was close to Operations H-T1 and J, it may have been directly connected to the crafts quarter and the area of transformation

and storage of food produce (Morandi Bonacossi 2006: 88). The presence of many settlements dated to the Iron Age II in the land around Mishrifeh represents the site's projection into the surrounding rural landscape, which provided the wool for Mishrifeh's textile industry. Its location at the fringe of the semi-arid steppe, employed as pasture fields, was certainly useful in this sense (Morandi Bonacossi 2019: 23).

As Morandi Bonacossi has suggested, the emergence of a new dynasty of kings of Hamath in the 9<sup>th</sup> century BC (Urhilina and his son Uratamis, see also Mazzoni 2000b: 43-44; Riis, Buhl 1990: 10) may have interrupted or at least weakened the connections between the Middle Orontes Valley and the 'Amuq Valley (Morandi Bonacossi 2019: 5) and strengthened instead those between Mishrifeh and Hama. The inscriptions by Urhilina and Uratamis are all in Luwian, which probably indicates that they were representatives of the Luwian component of the kingdom (Morandi Bonacossi 2019: 4-5). Luwian hieroglyphs have been found at Mishrifeh as seals impressions on storage vessels from Operations C and O (Ziedan 2013: 142). These Luwian inscriptions are not the only texts found in Iron Age Mishrifeh. Large storage jar rims with unfortunately still undecipherable Aramaic stamped inscriptions have been found in the crafts quarter in Operation H-T1 (Chapter 4.4, **PI. 77:2-5**. Morandi Bonacossi 2019: 23).

Other Aramaic inscriptions were found in Operations C and O: from the first area come another large storage jar rim with a stamped inscription (Ziedan 2013: 142) and an *ostrakon* with a short Aramaic inscription (Al-Maqdissi 2003b, fig. 9B). In Operation O, in Room E of Building I a further large storage jar rim with a stamped inscription was discovered and has been dated to the 8<sup>th</sup> century BC or the beginning of the 9<sup>th</sup> century at the earliest (Ziedan 2013: 142). A last controversial Aramaic inscription composed of eight letters was found on another *ostrakon*, the place of discovery of which is unknown: it has been cautiously and preliminarily dated to the 10<sup>th</sup> century, which is a quite early date compared to the other inscriptions, after the palaeographic study (Ziedan 2013: 142). 1275

The presence of Aramaic inscriptions on storage jar rims found in locations used for administrative practices can be interpreted as proof of central control over economic activities (Morandi Bonacossi 2019: 22-23). Furthermore, at Mishrifeh a hybridization between Aramaic and Luwian features in official contexts can be observed (Morandi Bonacossi 2019: 23). This complex and mixed ethno-linguistic nature is a characteristic of the Syro-Anatolian City-States, and is one of the reasons why it is preferable to use ethnic definitions cautiously when referring to these polities (Osborne 2021: 40-41, 47).

<sup>&</sup>lt;sup>1275</sup> These inscriptions have been studied by Professor Mario Fales and Dr Ezio Attardo on the basis of the photographic documentation (Ziedan 2013: 142, note 297).

Regarding the relations between Mishrifeh and the northern part of the Southern Levant attested by the pottery, connections between the Kingdom of Hamath and the Kingdom of Israel are also documented by textual sources starting from the 9<sup>th</sup> century BC. Both King Urhilina of Hamath and King Ahab of Israel were part of the military coalition which faced the Assyrians at the battle of Qarqar in 853 BC (Niehr 2019: 379). A subsequent inscription by Urhilina's son and successor Uratamis (HAMA 7) records the expansion of the Kingdom of Hamath southward, as far as the Beqa' Valley, which was an area contested by Israel (Niehr 2019: 379, 382-384, 387). Amicable, or at least not belligerent, relations between the two polities continued in the 8<sup>th</sup> century BC, when at Hamath King Zakkur was in power (Niehr 2019: 380-381), until the expansion by King Jeroboam II (787-747 BC) of Israel, who conquered parts of the Kingdoms of Hamath in the Beqa' and of Damascus in northern Jordan (Niehr 2019: 382). Lastly, Yaubi' of Hamath led a revolt against the Assyrians in which Israel also took part. The rebellion was defeated in 720 BC at Qarqar and the kingdom of Hamath was conquered by Sargon II (Mazzoni 2014a: 697; Niehr 2019: 385-386).

Therefore, the intensification of relations between Mishrifeh and Northern Israel during the Iron Age II documented by the pottery can be explained by the historical connections between the two kingdoms of Hamath and Israel. These connections also included trade, as demonstrated by the weight stones found at Hama with the inscriptions *šql hmt* ("sheqel of Hamath") or '*šrtn* ("twenty") which are considered to refer to trade relations with Judah or Israel (Niehr 2019: 384).

Building I in Operation O was destroyed by a violent fire (Ziedan 2013: 74-75, 168) and on the floor of Room A (the vestibule) a basalt sphere weighting about 6.9 kg was found and interpreted as a catapult bullet (Ziedan 2013: 147). From the same space comes a probable iron arrowhead (Ziedan 2013: 150) while an ovoid sling projectile was discovered in the nearby Room D still embedded in the wall (Ziedan 2013: 140, 148). Other sling projectiles have been found on the floors of Rooms E and I (Ziedan 2013: 140). It is suggestive to attribute this destruction to the campaign of Sargon II against Hama in 720 BC: the presence of slingshots in a strategic area such as the entrance hall of the building would point in fact to a violent conquest, rather than an accidental fire (Ziedan 2013: 170). The ceramic assemblage of Building I dates the use of the structure to a period between the end of the Iron Age I and the beginning of the Iron Age III, with its main phase of use dated to the 9<sup>th</sup> and 8<sup>th</sup> centuries BC (Ziedan 2013: 123-135, 165-166, 168). Moreover, the archaeometrical analysis of some pottery fragments from the warehousing area of Building I gave a date of around 720 BC for these materials (Ziedan 2013: 170), corroborating the interpretation that the building was destroyed during Sargon II's conquest.

The end of the Iron Age II appears to mirror the end of Late Bronze Age Qatna, when only the administrative and political core centre (the Royal Palace) was destroyed, whereas the productive areas (the pottery workshop of Operation J) and peripheric political buildings (the Lower City Palace) were abandoned (Morandi Bonacossi 2007b: 82). Similarly, no other signs of destruction other than Building I in Operation O have been found in Iron Age II Mishrifeh so far. In fact, the crafts guarter of Operation H-T1 was most probably abandoned, as documented especially by the collapse of Building H5 (Garna 2011: 74). The productive and administrative areas of Operations C, J, H-T1 were later re-settled with a sparse domestic and rural occupation (Al-Magdissi 2007: 24; Morandi Bonacossi 2008a: 118-121). The passage to the Iron Age III proceeded without particular breaks in the material culture, as shown by the pottery horizon, whereas the building remains are markedly different with respect to the Iron Age II. First of all, urbanisation regressed and traces of late Iron Age occupation were found only in three Operations (C, J, T3). Moreover, passage from largescale productive activities controlled by a centralized power to the processing and storage of agricultural produce by domestic units on a household scale (Operation J. Morandi Bonacossi 2002: 124; Morandi Bonacossi 2008a: 118-121) or simply domestic quarters composed of small structures (Operation C. Al-Magdissi 2007: 24) can be observed. It is clear that the passage to Late Assyrian control led to Mishrifeh's drastic reshaping and the loss of the socio-economic importance that characterized the site in the Iron Age II. This was probably also the consequence of the loss of independence of the region's primary political centre, Hama.

The Assyrian presence at Mishrifeh is barely documented: the scarce quantity of pottery related to Late Assyrian influence has already been discussed (Chapter 6.1). Other attestations of Assyrian cultural influence at the site include a few cylinder and stamp seals (Morandi Bonacossi 2009: 132), one of which from the administrative complex of Operation C (Al-Maqdissi 2003b: 1497-1498, fig. 8). However, the attestations are too scarce for a solid interpretation. The finding of seals in administrative contexts and the fact that in the Late Iron Age II Assyrianising pottery reaches its highest percentage in the site compared to the other periods, may be seen as indicating economic relations between Mishrifeh and the Assyrians especially during this period. Whether this corresponded to the actual presence of Assyrian individuals in the settlement, it is difficult to say. The small cemetery of phase J-

6 (Iron Age II) represents an exception in the funerary landscape of Iron Age Syria: contemporary cemeteries are usually characterized by cremation burials, <sup>1276</sup> whereas those of Mishrifeh are inhumations. It is tempting to relate this cemetery with Assyrian funerary customs, which involve the burial of the body. <sup>1277</sup> However, cremation appears as a funerary custom also in Syrian centres controlled by the Assyrians such as Tell Sheikh Hamad (Dūr-Katlimmu. Kreppner 2008, 2014), <sup>1278</sup> albeit this is a site part of the proper Assyria and not a Levantine one. Neo-Assyrian cremation burials have been found also at Karkemish (Bonomo, Zaina 2016). Anthropological analysis has indicated that the Phase J-6 cemetery was probably of a group of blood-related individuals that practiced activities connected to agriculture (Canci 2002). The complete absence of grave goods makes it difficult to resolve the question and recognize this small, probably endogamous, group as being composed of either Assyrian or local Syrian individuals.

The sharp decrease in Late Assyrian-influenced pottery during the Iron Age III, in a period when the Assyrian control of the region was stronger (Mazzoni 2014a: 697-698), may be interpreted as an indication of the marginal role of Mishrifeh in this period.

The settlement's decline may also have been caused by depopulation due to the mass deportations conducted by the Assyrians (Morandi Bonacossi 2007b: 86). The deteriorating climatic conditions, with an increase in aridity attested by the environmental proxies from the site, may have contributed to its final abandonment during the Iron Age III (probably during the late 7<sup>th</sup> century. Morandi Bonacossi 2007b: 86; Cremaschi 2007a: 104). Finds dated to the late 7<sup>th</sup> century BC have been found outside the ramparts, on a small mound in front of the western gate: this might suggest that the settlement inside the perimeter of the ramparts was abandoned and transferred outside of them (Morandi Bonacossi 2008b: 369).

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<sup>&</sup>lt;sup>1276</sup> Hama (Riis 1948), Tell Shiukh Fawqani (Al-Bahloul, Barro, D'Alfonso 2005; Tenu 2009), Karkemish (Woolley 1939-1940), Deve Höyük (Moorey 1980), Ras al Bassit (Courbin 1993). On the Lebanese Coast see also Tell 'Arqa (Thalmann 1978: 73, 77) and Tyre (Aubet, Núñez, Trellisó 2014).

<sup>&</sup>lt;sup>1277</sup> For Nimrud see Hussein 2016 and Spurrier 2017. For a general overview Mofidi-Nasrabadi 1999.

<sup>&</sup>lt;sup>1278</sup> According to Kreppner, the cremation pit-graves of Tell Sheikh Hamad may indicate a cultural exchange between Assyrians and Aramaeans (Kreppner 2014: 182).

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## POTTERY CATALOGUE

## LEGEND

<u>Firing</u>: H (homogeneous), D (dishomogeneous), O (oxidised), R (reduced), ND (not determined).

Surface type: SS (self-slip), S (slip), NT (not treated).

Surface treatment: SM (smoothed), B (burnished), NT (not treated).

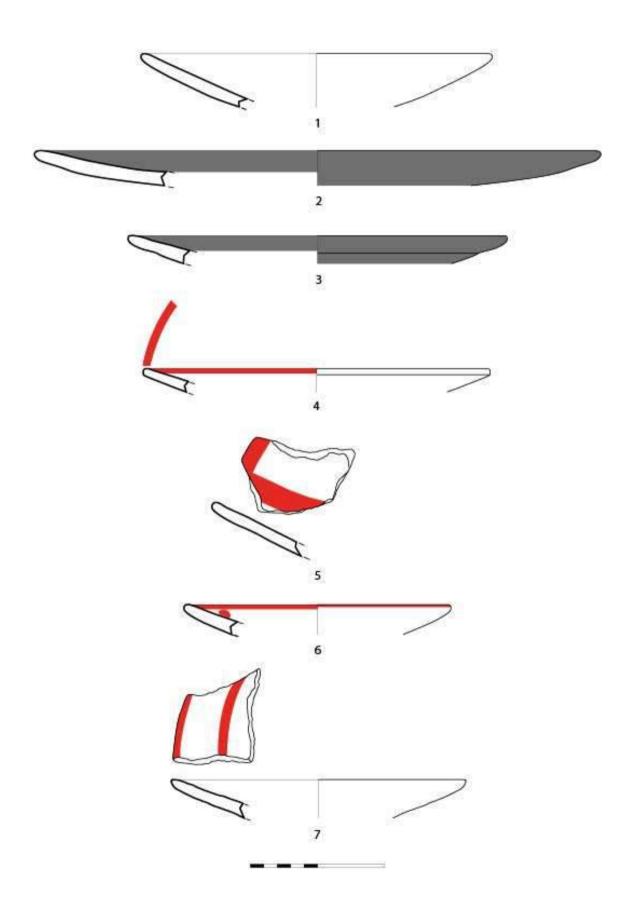
Production Technique: HM (handmade), W (wheelmade), HM+W (both techniques).

<u>Decoration / Treatment / Other particularities</u>: RS (Red Slip), PT (paint), I (incisions), GR (grooves), R (ridge), IM (impressions), FP (finger impressions), PM (potter's mark), Ar In (Aramaic Inscriptions).

The catalogue has been organized by pottery types. In every type, the vessels are presented starting from Common Ware specimens, and followed by red slipped and painted specimens if present, from more recent to earlier phases.

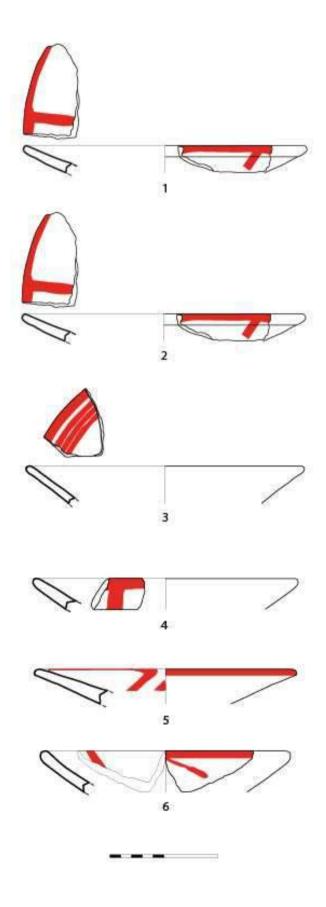
	1	ı	ı	ı	ı	Γ	
PHASE	T4-5	T3-5	T4-5	J-5	H-T1 9	H-T1 9	H-T1 9
TYPE	PL1	PL1	PL1	PL1	PL1	PL1	PL1
DEC	ON	RS	RS	PT	PT	PT	PT
PROD	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	W	W
EXT. COLOUR	5 YR 6/6	7.5 YR 6/6	10 R 5/6	5 YR 7/6	5 YR 7/6	5 YR 7/4	5 YR 7/6
INT. COLOUR	7.5 YR 7/4	2.5 YR 6/6	10 R 5/6	5 YR 7/6	5 YR 7/6	5 YR 7/4	5 YR 7/6
EXT. TREAT	SM	В	В	SM	SM	SM	SM
INT. TREAT	SM	В	В	SM	SM	SM	SM
EXT.	SS	Ø	Ø	SS	SS	SS	SS
INT. SUR	SS	Ø	Ø	SS	SS	SS	SS
FIRING	0	I	ď	I	ď	ď	I
MG	8a	8a	10	98	8a	8a	8a
FABRIC	120	1,1	4,2	5	4	4	120,3
WARE	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T4 8468.15 (deposit)	T3 7986.11 (floor)	T4 8468.14 (deposit)	J 397.5 (deposit)	H 6373.6 (fill)	H 6375.18 (installation)	H 7039.27 (fill)
FIG.	-	2	က	DI ATE	ა 1 _ PI 1	9	7

PLATE 1 – PL1



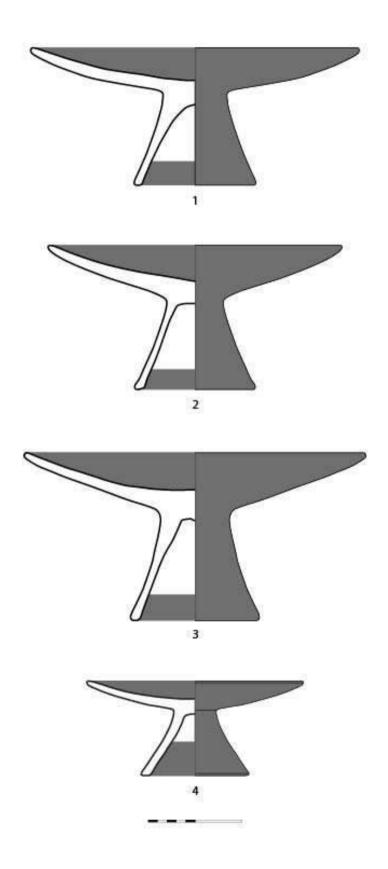
NR. Book         MARE         FABRIC         MG         FIRING         INT.         EXT.         INT.         EXT.         INT.         EXT.         INT.         EXT.         INT.         EXT.         INT.         EXT.         INT.         FAT. B         INT.         PHASE	Ī			ı	ı	ı	
WARE         FABRIC         MG         FIRING         INT.         EXT.         INT.         EXT.         INT.         EXT.         PROD         DEC           Common         120         8a         R         SS         SS         SM         SM         5 YR 6/4         5 YR 6/4         W         PT           Common         120         8a         R         SS         SS         SM         SM         5 YR 6/6         5 YR 6/6         W         PT           Common         120         8a         H         SS         SS         SM         SWR 6/76         5 YR 7/6         W         PT           Common         136         8a         H         SS         SS         SM         5 YR 7/6         5 YR 7/6         W         PT           Common         1196         8a         H         SS         SS         SM         5 YR 7/6         5 YR 7/6         W         PT           Common         119         SS         SS         SS         SM         7.5 YR 7/6         W         PT	PHASE	H-T1 9	H-T1 9	K-3	H-T1	H-T1	K-5
WARE         FABRIC         MG         FIRING         INT.         EXT.         PROD           Common         120         8a         R         SS         SS         SM         SM         5YR 6/6         2.5 YR 6/6         W           Common         120         8a         H         SS         SS         SM         SM         5YR 6/6         5YR 6/6         W           Common         136         8a         H         SS         SS         SM         SM         5YR 7/6         5YR 7/6         W           Common         119         S         SS         SM         SM         5YR 7/6         5YR 7/6         W	TYPE	PL1	PL1	PL1	PL1	PL1	PL1
WARE         FABRIC         MG         FIRING         INT.         EXT.         INT.         EXT.         INT.         EXT.         INT.         EXT.         COLOUR         COLOU	DEC	PT	PT	PT	PT	PT	PT
WARE         FABRIC         MG         FIRING         INT.         EXT.         INT.         EXT.         INT.           Common         120         8a         R         SS         SS         SM         SM         5 YR 6/6           Common         120         8a         R         SS         SS         SM         SM         5 YR 6/6           Common         120         8a         H         SS         SS         SM         SM         5 YR 7/6           Common         136         8a         H         SS         SS         SM         SM         5 YR 7/6           Common         136         8a         H         SS         SS         SM         SW         5.7 R 7/6           Common         119         P         SS         SS         SM         N         7.5 YR 7/6	PROD	>	<b>%</b>	<b>X</b>	<b>X</b>	*	>
WARE         FABRIC         MG         FIRING         INT.         EXT.         INT.         EXT.           Common         120         8a         R         SS         SS         SM         SM           Common         120         8a         R         SS         SS         SM         SM           Common         120         8a         H         SS         SS         SM         SM           Common         136         8a         H         SS         SS         SM         SM           Common         119         D         SS         SS         SM         SM	EXT. COLOUR	5 YR 6/4	2.5 YR 6/6	7.5 YR 8/6	5 YR 6/6	5 YR 7/6	7.5 YR 8/6
WARE         FABRIC         MG         FIRING         INT.         EXT.         INT.           Common         120         8a         R         SS         SS         SM           Common         120         8a         R         SS         SS         SM           Common         136         8a         H         SS         SS         SM           Common         119         D         SS         SS         SM	INT. COLOUR	5 YR 6/4	2.5 YR 6/6	5 YR 7/6	5 YR 6/6	2.5 YR 7/6	7.5 YR 7/6
WARE         FABRIC         MG         FIRING         INT.         EXT.           Common         120         8a         R         SS         SS           Common         18         8a         R         SS         SS           Common         120         8a         H         SS         SS           Common         136         8a         H         SS         SS           Common         119         D         SS         SS	EXT. TREAT	SM	SM	SM	SM	SM	SM
WARE         FABRIC         MG         FIRING         INT.           Common         120         8a         R         SS           Common         120         8a         R         SS           Common         136         8a         H         SS           Common         136         8a         H         SS           Common         119         D         SS	INT. TREAT	SM	SM	SM	SM	SM	SM
WARE         FABRIC         MG         FIRING           Common         120         8a         R           Common         120         8a         R           Common         120         8a         H           Common         136         8a         H           Common         119         D	EXT. SUR	SS	SS	SS	SS	SS	SS
WARE         FABRIC         MG           Common         120         8a           Common         120         8a           Common         136         8a           Common         119         8a	INT. SUR	SS	SS	SS	SS	SS	SS
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Common Co	MG	8a	88	8a	88	88	
	FABRIC	120	120	18	120	136	119
Fig. 1. (fill.)		Common	Common	Common	Common	Common	Common
<b>F</b>	NR. (Type of SU)	T1 8563.8 (fill)	T1 8563.9 (fill)	K 485.9 (fill)	H 6411.110 (installation)	H 6559.20 (fill)	K 804.1 (fill)
- N ω 4 ω ω  PLATE 2 – PL1		_	2	က			9

PLATE 2 – PL1



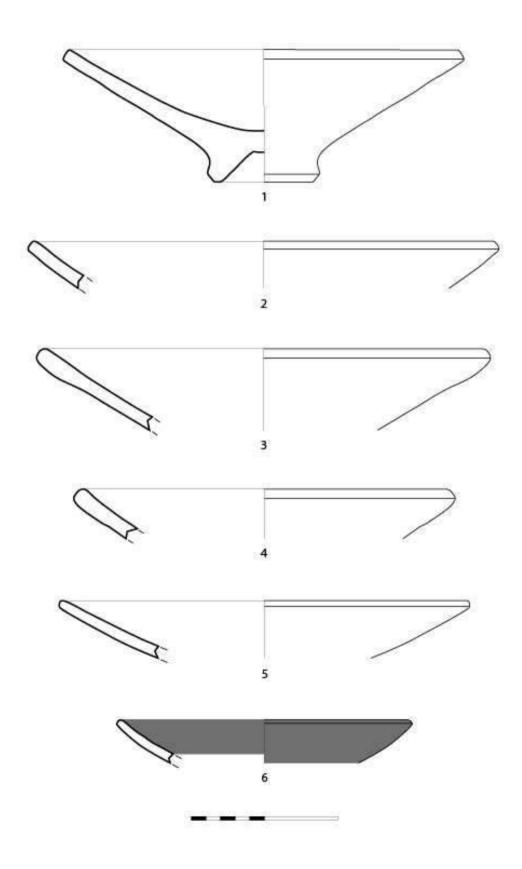
-				
PHASE	H-T1 6a	H-T1 6a	H-T1 6a	H-T1 7
TYPE	PL1	PL1	PL1	PL1
DEC	RS	RS	RS	RS
PROD TECHN	Α	<b>%</b>	<b>%</b>	Μ
EXT. COLOUR	5 YR 6/6	5 YR 6/6	2.5 YR 5/6	2.5 YR 5/6
INT. COLOUR	2.5 YR 5/8	2.5 YR 5/8	2.5 YR 5/6	2.5 YR 5/6
EXT. TREAT	В	В	В	В
INT. TREAT	В	В	В	В
EXT. SUR	S	S	S	S
INT. SUR	S	S	S	S
FIRING	н	I	α	н
MG	8a	8a	8a	8a
FABRIC	120	120	120	120
WARE	Common	Common	Common	Common
NR. (Type of SU)	H 5225.711 (floor)	H 5281.714 (deposit)	H 5399.701 (floor)	T1 7563.701 (fill)
FIG	_	8	ო	4

PLATE 3 – PL1

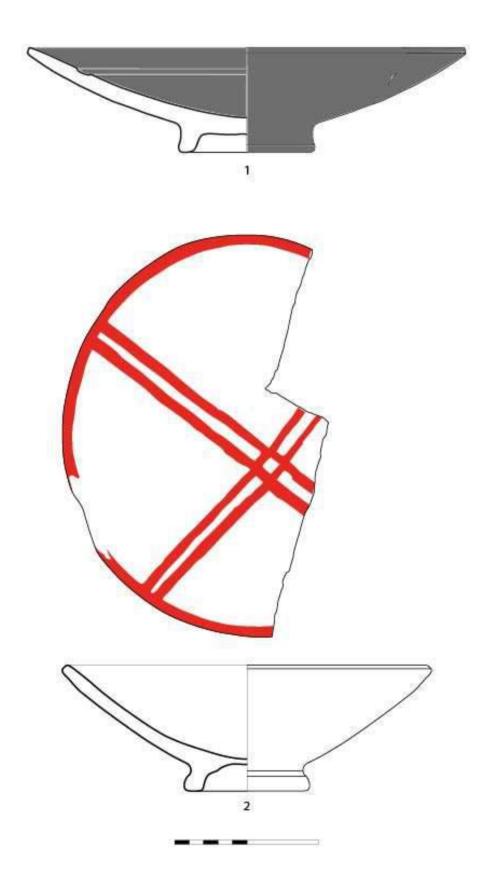


	ı		1	1	ı	1
PHASE	H-T1 6a	T3-5	H-T1 6a	T2-7	H-T1	H-T1 6a
TYPE	PL2	PL2	PL2	PL2	PL2	PL2
DEC	Q Z	ON N	Q N	O <sub>N</sub>	O <sub>Z</sub>	RS
PROD	W	W	M	W	W	×
EXT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/6	2.5 YR 7/4	5 YR 7/6	10 R 5/6
INT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/6	2.5 YR 7/6	5 YR 7/6	10 R 5/6
EXT. TREAT	SM	SM	SM	SM	SM	В
INT. TREAT	SM	SM	SM	SM	SM	В
EXT.	SS	SS	SS	SS	SS	Ø
INT.	SS	SS	SS	SS	SS	Ø
FIRING	т	Ι	ď	Ι	æ	т
MG	8a	88	98	88	88	112
FABRIC	120	120,3	137,1	137	4	က
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 5281.718 (deposit)	T3 7986.26 (floor)	T1 7529.16 (deposit)	T2 8020.21 (fill)	H 6644.100 (deposit)	T1 7374.1 (floor)
FIG.	~	2	ю	A bi VLE	ഗ 4 – PI 2	9

PLATE 4 – PL2

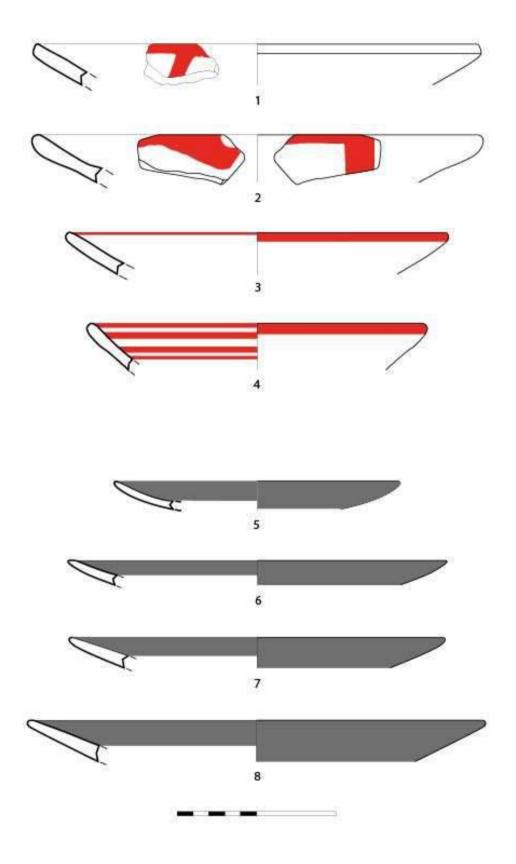


PHASE	K-3	H NORTH 15
TYPE	PL2	PL2
DEC	RS	PT
PROD TECHN	M	M
EXT. COLOUR	2.5 YR 6/6	5 YR 7/4
INT. COLOUR	2.5 YR 6/6	5 YR 7/4
EXT. TREAT	В	WS
INT. TREAT	В	WS
EXT. SUR	S	SS
INT. SUR	S	SS
FIRING	н	н
MG	8a	8a
FABRIC	120	120
WARE	Common	Common
NR. (Type of SU)	K 156.1 (installation)	H 8409.702 (floor)
FIG.	_	2



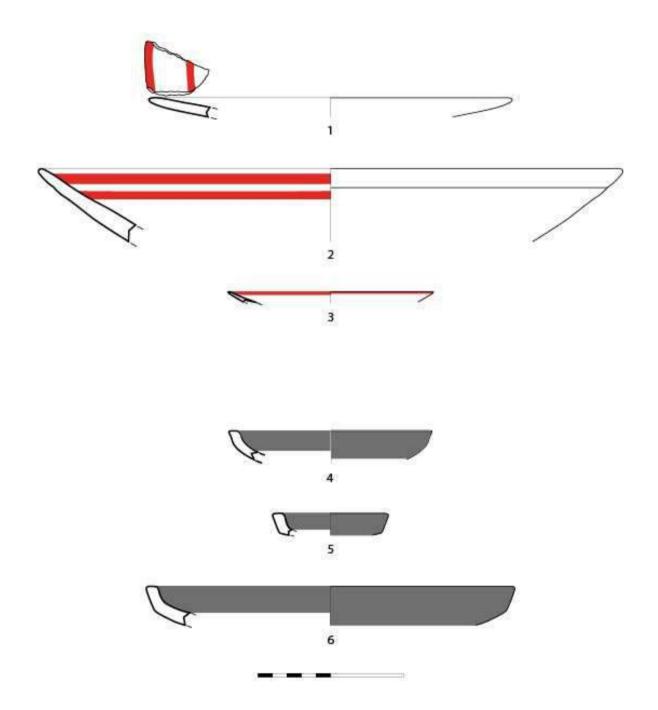
PHASE	H-T1 5	H-T1 6b	H-T1 9	<del>Х</del> 4	H-T1 5	H-T1 6b	H-T1 9	9-r
TYPE	PL2	PL2	PL2	PL2	PL3	PL3	PL3	PL3
DEC	PT	PT	PT	PT	RS	RS	RS	RS
PROD	W	<b>X</b>	<b>M</b>	<b>X</b>	W	W	<b>X</b>	*
EXT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 8/3	7.5 YR 7/6	2.5 YR 4/8	2.5 YR 5/6	2.5 YR 6/6	10 R 6/8
INT. COLOUR	5 YR 7/6	5 YR 7/6	7.5 YR 7/4	7.5 YR 7/6	2.5 YR 4/8	2.5 YR 5/6	2.5 YR 6/6	10 R 6/8
EXT. TREAT	SM	SM	SM	SM	Ф	Ф	Ф	В
INT. TREAT	SM	SM	SM	SM	В	В	В	В
EXT.	SS	SS	SS	SS	S	S	Ø	Ø
INT.	SS	SS	SS	SS	S	S	Ø	S
FIRING	н	工	æ	O	т	т	æ	I
MG	8a	8a	е	8a	o	9	2a	8B
FABRIC	120,3	1,,	133	12	101	137,2	3,1	21
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 3703.7 (fill)	H 6474.41 (fill)	T1 8027.108 (deposit)	K 151.113 (deposit)	H 1060.158 (fill)	H 6362.8 (deposit)	H 6366.93	J 281.1 (floor)
FIG.	-	2	ю	PLATE 6 -	ro Di a	9	7	ω

PLATE 6 – PL2, PL3



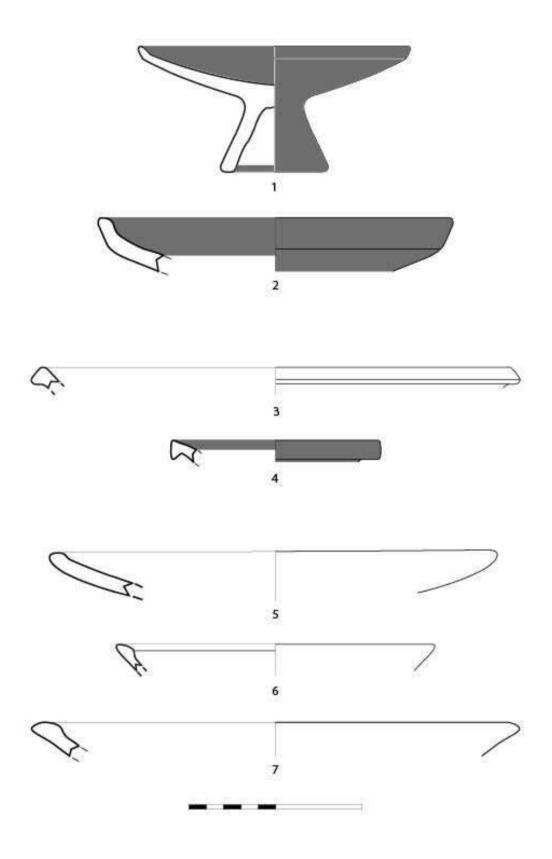
PHASE	H-T19	H-T1 10	K-4	H-T1 9	9-	K-3
TYPE	PL3	PL3	PL3	PL4	PL4	PL4
DEC	PT	PT	PT	RS	RS	RS
PROD	W	W	W	M	W	<b>X</b>
EXT. COLOUR	7.5 YR 7/4	10 YR 7/4	10 YR 8/4	2.5 YR 5/8	2.5 YR 6/8	5 YR 7/8
INT. COLOUR	7.5 YR 7/4	7.5 YR 6/4	5 YR 6/6	2.5 YR 5/8	2.5 YR 6/8	2.5 YR 6/6
EXT. TREAT	SM	SM	В	В	В	В
INT. TREAT	SM	SM	В	В	В	В
EXT.	SS	SS	SS	Ø	Ø	Ø
INT. SUR	SS	SS	SS	S	S	S
FIRING	т	Ж	Ж	Ι	O	т
MG	2a	8a	8a	8a		7
FABRIC	120,1	4	18	120	119	104
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 7039.22 (fill)	H 7083.21 (deposit)	K 237.4 (floor)	H 6366.46 (fill)	J 279.2 (fill)	K 595.19 (fill)
FIG.	~	2	ဇ	PI ATF 7 -	ம - PI 3 PI 4	9

PLATE 7 – PL3, PL4



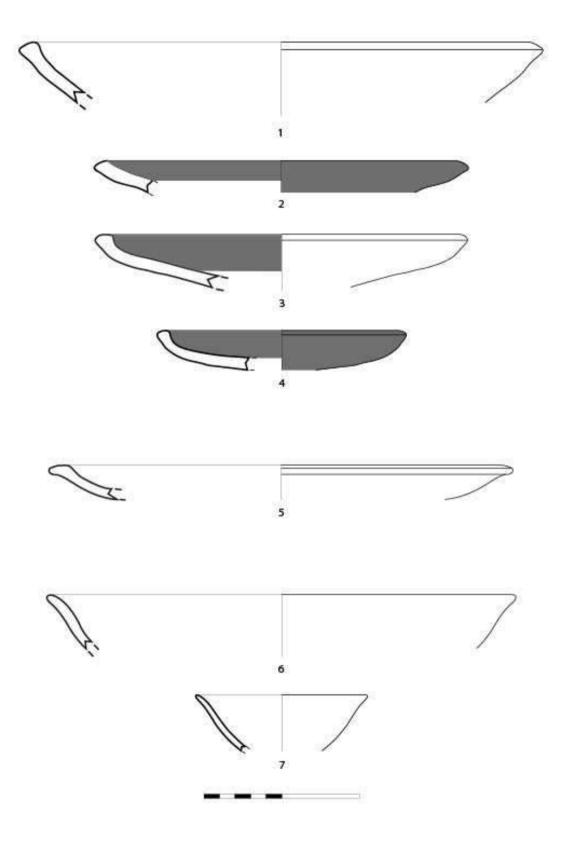
	I	T	T	T		ī	ı
PHASE	T3-1 (2010)	H-T1 6b	H-T1	K-5	T3-12	H-T1	K-9
TYPE	PL5	PL5	PL6	PL6	PL7	PL7	PL7
DEC	RS	RS	ON	RS	ON	ON	ON
PROD	>	>	>	>	>	>	<b>*</b>
EXT. COLOUR	10 R 4/8	5 YR 7/6	10 YR 7/3	10 R 5/8	5 YR 7/6	5 YR 6/4	5 YR 7/6
INT. COLOUR	10 R 4/8	2.5 YR 6/6	10 YR 8/3	2.5 YR 6/8	5 YR 7/6	5 YR 6/4	5 YR 7/6
EXT. TREAT	В	SM	SM	В	SM	SM	В
INT. TREAT	В	SM	SM	В	SM	SM	SM
EXT. SUR	S	S	SS	S	SS	SS	SS
INT. SUR	S	S	SS	S	SS	SS	SS
FIRING	Q Q	т	æ	т	0	エ	т
MG	8a	8a	10	8a	2a	5	
FABRIC	120	120	121	118	123	122	119
WARE	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T3 10082.701 (fill)	H 6474.72 (fill)	H 7083.23b (deposit)	K 574.30 (deposit)	T3 8212.24 (floor)	H 6559.57 (fill)	K 922.1 (fill)
FIG.	~	7	ဗ	4 4	ις I S DI S D	ω	7

PLATE 8 – PL5, PL6, PL7



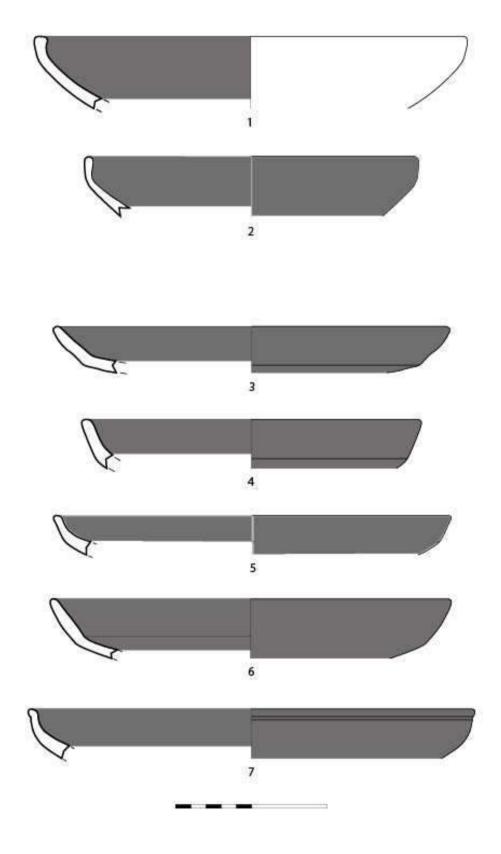
	1	T		1			
PHASE	K-5	T4-6	H-T1 6b	H-T1 01	J-5	H-T1 9	H-T1 6a
TYPE	PL8	PL8	PL8	PL8	67d	SB1	SB1
DEC	O <sub>Z</sub>	RS	RS	RS	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>N</sub>
PROD	*	*	<b>X</b>	<b>X</b>	*	<b>X</b>	W
EXT. COLOUR	2.5 YR 6/8	2.5 YR 5/4	7.5 YR 7/4	7.5 YR 7/6	5 YR 7/4	5 YR 7/6	5 YR 8/4
INT. COLOUR	2.5 YR 6/8	2.5 YR 5/4	7.5 YR 6/6	7.5 YR 7/4	5 YR 7/4	5 YR 7/6	5 YR 8/4
EXT. TREAT	Ф	Ф	SM	В	SM	SM	SM
INT. TREAT	SM	В	SM	В	SM	SM	SM
EXT.	SS	Ø	SS	Ø	SS	SS	SS
INT.	SS	Ø	Ø	Ø	SS	SS	SS
FIRING	ď	I	I	œ	ď	I	æ
MG	10	6	5	98	8a	8a	7
FABRIC	116	101	115	137,1	120	120	109
WARE	Common	Common	Common	Common	Common	Common	Fine
NR. (Type of SU)	K 791.18 (fill)	T4 8679.18 (deposit)	T1 7884.16 (deposit)	H 6421.51	J 2552.135 (deposit)	H 7040.7 (fill)	T1 7336.51 (deposit)
FIG.	~	2	ю	4 ATE 0 – P	ى I 8 PI 9 S	ဖ B1	7

PLATE 9 – PL8, PL9, SB1



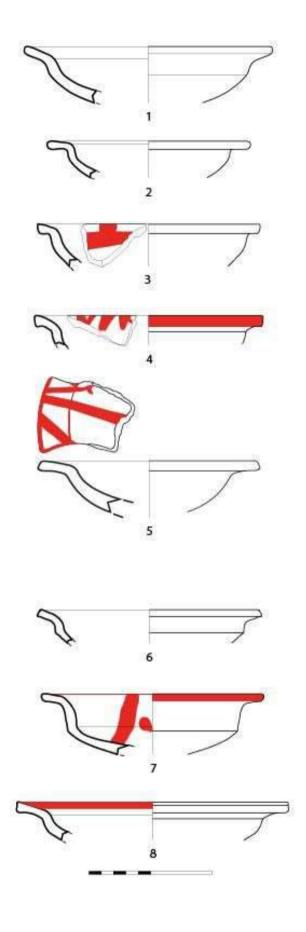
	I	I	I	I	I	I	1
PHASE	H-T1 6b	H-T1 9	T4-1	H-T1 6b	K-2	H-T1 10	K-9
TYPE	SB2a	SB2a	SB2b	SB2b	SB2b	SB2b	SB2b
DEC	RS	RS	RS	RS	RS	RS	RS
PROD	>	>	>	>	>	>	<b>*</b>
EXT. COLOUR	5 YR 7/6	2.5 YR 5/6	10 R 3/6	10 YR 8/3	10 R 5/8	5 YR 5/6	2.5 YR 6/6
INT. COLOUR	2.5 YR 6/6	2.5 YR 5/6	10 R 3/6	2.5 YR 6/6	10 R 5/8	10 R 4/8	2.5 YR 6/6
EXT. TREAT	SM	В	В	SM	В	В	В
INT. TREAT	В	В	В	SM	В	В	В
EXT.	SS	Ø	Ø	v	w	v	S
INT. SUR	S	S	S	S	Ø	S	S
FIRING	エ	エ	エ	0	۵	エ	工
MG	8a	2a	8a	10	8a	8a	8a
FABRIC	120	120,1	120	116	120,1	125	120,2
WARE	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 6474.121 (fill)	H 6467.17 (deposit)	T4 8258.701 (deposit)	H 6474.61	K 17.1 (deposit)	H 7083.703 (deposit)	K 1138.19 (fill)
FIG.	~	7	က	PI ATE	ம் 10 – SB2	9	2

PLATE 10 – SB2



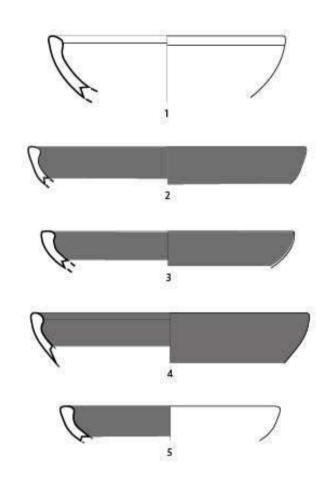
							_	
PHASE	H-T1 6a	H-T1	T3-8	H-T1	H-T1	H-T1 6b	H-T1 8	H-T1 9
TYPE	SB3a	SB3a	SB3a	SB3a	SB3a	SB3b	SB3b	SB3b
DEC	ON	ON	PT	PT	PT	ON	PT	PT
PROD	>	>	>	>	>	>	>	*
EXT. COLOUR	2.5 YR 5/6	10 R 6/6	10 YR 7/4	5 YR 7/6	5 YR 7/6	10 YR 8/4	5 YR 7/6	5 YR 7/6
INT. COLOUR	10 YR 8/4	5 YR 6/4	5 YR 7/4	5 YR 7/6	5 YR 6/4	5 YR 7/8	5 YR 7/6	5 YR 7/6
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	<u>«</u>	エ	エ	エ	ď	エ	エ	0
MG	8a	5	8a	8a	8a	8a	8a	8a
FABRIC	120	122	120	120,2	120,3	120	1,4	120
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 7661.3 (deposit)	H 6559.52 (fill)	T3 7993.1 (floor)	H 6626.10 (deposit)	H 7083.11 (deposit)	H 5781.8 (floor)	H 6326.23 (deposit)	H 7040.32 (fill)
FIG.	~	2	ю	4 PI	က ATF 11 _ 9	ω SB3	7	80

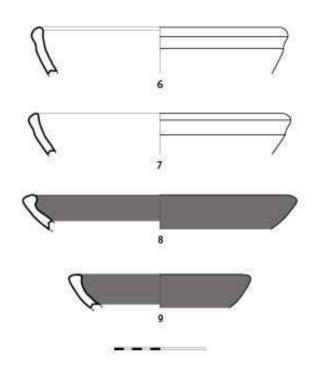
PLATE 11 – SB3



PHASE	H-T1 9	H-T1 6a	H-T1 6a	H-T1 6b	H-T1 9	주 4	X-5	H-T1 5	H NORTH 15
ТУРЕ	SB4 F	SB4	SB4	SB4	SB4 F	SB5	SB5	SB5 F	SB5
DEC	O	RS	RS	RS	RS	O S	O <sub>N</sub>	RS	RS
PROD I	>	>	*	*	*	>	>	*	>
COLOUR 1	5 YR 7/6	5 YR 6/4	2.5 YR 5/6	2.5 YR 5/6	5 YR 7/4	5 YR 7/6	5 YR 7/6	10 R 6/6	10 R 4/6
INT. COLOUR	5 YR 7/6	5 YR 6/4	2.5 YR 5/6	2.5 YR 5/6	2.5 YR 6/6	5 YR 7/6	5 YR 7/6	10 R 6/6	10 R 4/6
EXT. TREAT	SM	В	Ф	SM	SM	SM	SM	SM	В
INT. TREAT	MS	Ф	Ф	SM	Ф	SM	SM	SM	Ф
EXT.	SS	Ø	Ø	Ø	SS	SS	SS	S	w
INT.	SS	Ø	Ø	Ø	Ø	SS	SS	Ø	w
FIRING	I	ď	ď	ď	т	I	I	ď	<u>«</u>
MG	8a	8b	8a	8a	8a	8a	8a		2a
FABRIC	4	111	1,4	120	120	18	12	1,2	120,1
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 8027.51 (deposit)	H 3709.12 (deposit)	H 3701.13 (deposit)	H 6474.131 (fill)	H 6366.13 (fill)	K 160.4 (deposit)	K 19.1 (deposit)	H 1749.6 (fill)	H 8193.21 (deposit)
FIG.	~	2	ю	- PI ΔΤΙ	က F 12 – SB	و 4 SB5	7	∞	6

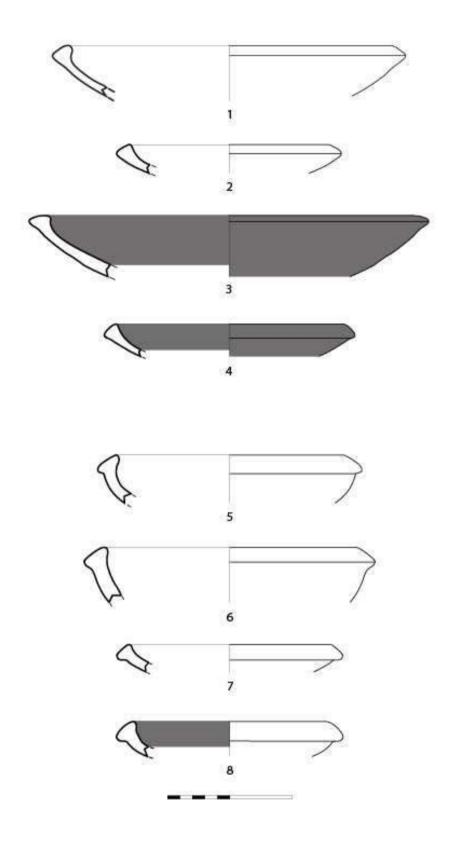
PLATE 12 – SB4, SB5





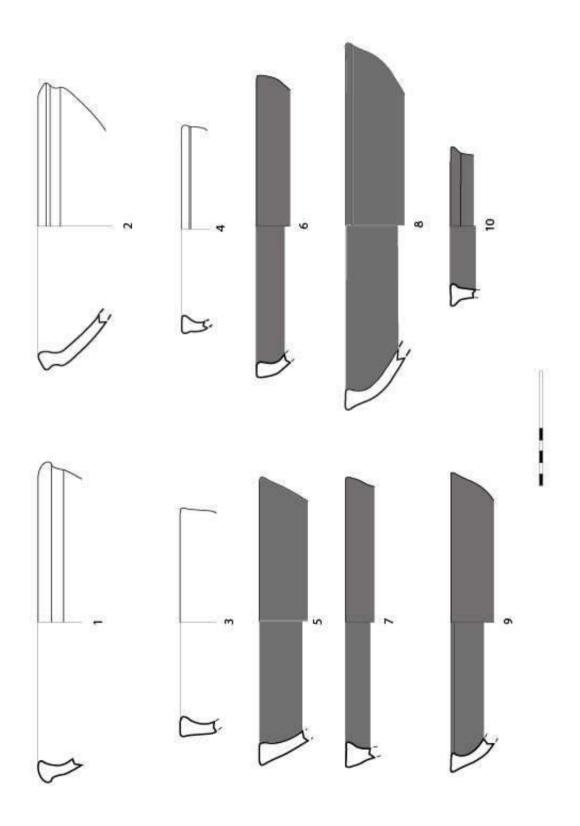
	I	I		I	I		I	1
PHASE	H-T1 6a	H-T1 6a	T3-1 (2010)	H- T1 9	<u>-</u> -	5-L	H- T1 10	T3-8
TYPE	SB6a	SB6a	SB6a	SB6a	SB6b	SB6b	SB6b	SB6b
DEC	ON	ON	RS	RS	ON	ON	ON	RS
PROD	<b>X</b>	<b>X</b>	<b>M</b>	<b>X</b>	<b>X</b>	W	<b>X</b>	W
EXT. COLOUR	10 R 6/6	5 YR 7/5	2.5 YR 7/6	5 YR 4/4	5 YR 7/6	7.5 YR 8/6	5 YR 6/3	10 YR 7/4
INT. COLOUR	2.5 YR 7/4	7.5 YR 7/4	2.5 YR 6/6	5 YR 7/6	5 YR 7/6	7.5 YR 7/6	5 YR 7/6	2.5 YR 6/6
EXT.	SM	SM	В	В	SM	В	SM	SM
INT. TREAT	SM	SM	В	В	SM	Z	SM	SM
EXT.	SS	SS	Ø	Ø	SS	SS	SS	SS
INT. SUR	SS	SS	S	S	SS	SS	SS	S
FIRING	工	工	т	工	工	O	工	т
MG	2a	88	9	88	8a	6	8a	2a
FABRIC	က	120,2	141	120	120	105	120,3	120,1
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 7341.7 (installation)	T1 7372.1 (fill)	T3 10082.1 (fill)	T1 8302.39 (fill)	J 2666.5 (fill)	J 175.4 (deposit)	T1 8136.51 (floor)	T3 8174.8 (floor)
FIG.	~	2	ဇ	4	ம் 13 - SB6	9	7	8

PLATE 13 - SB6



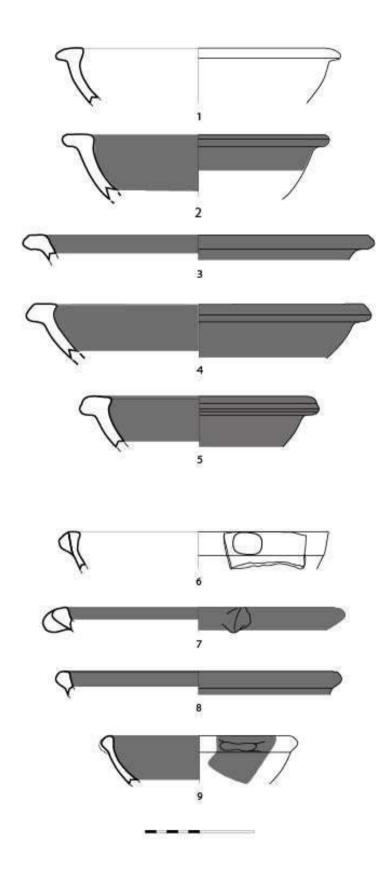
PHASE	J-5	H-T1 9	T3-6	H-T1	H-T1 6a	H-T1 6b	5-J	H-T1 6a	H-T1 9	K-7
ТҮРЕ	SB7	SB7	SB8	SB8	SB8	SB8	SB8	SB8	SB8	SB8
DEC	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	RS	RS	RS	RS	RS	RS
PROD	*	*	*	*	*	*	>	*	*	M
EXT. COLOUR	5 YR 7/4	7.5 YR 8/4	5 YR 7/6	5 YR 7/6	10 R 5/6	2.5 YR 6/6	10 R 4/8	10 R 5/6	7.5 YR 6/6	7.5 YR 8/6
INT. COLOUR	5 YR 7/4	7.5 YR 8/4	5 YR 7/6	5 YR 7/6	10 R 5/6	2.5 YR 6/6	10 R 4/8	10 R 5/6	7.5 YR 6/6	2.5 YR 7/8
EXT. TREAT	SM	SM	SM	SM	Ф	Ф	Ф	Ф	Ф	SM
INT. TREAT	SM	SM	S	SMS	В	Ф	Ф	В	В	SM
EXT.	SS	SS	SS	SS	Ø	Ø	Ø	Ø	Ø	v
INT. SUR	SS	SS	SS	SS	Ø	Ø	Ø	Ø	Ø	Ø
FIRING	I	I	I	I	Т	I	O	æ	Т	π
MG	8a	2a	8a	8a	5	8a	10	8a	8a	8a
FABRIC	120	3,1	120	120	122	4,4	116	17	120,2	120,2
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 175.25 (deposit)	H 7040.11 (fill)	T3 7988.10 (floor)	H 6559.42 (fill)	H 3330.40 (wall)	H 6294.5 (fill)	J 175.74 (deposit)	T1 7341.2 (installation)	T1 8302.44 (fill)	K 581.5 (floor)
FIG.	-	2	ю	4	5	φ 7 SD9	7	∞	o	10

PLATE 14 – SB7, SB8



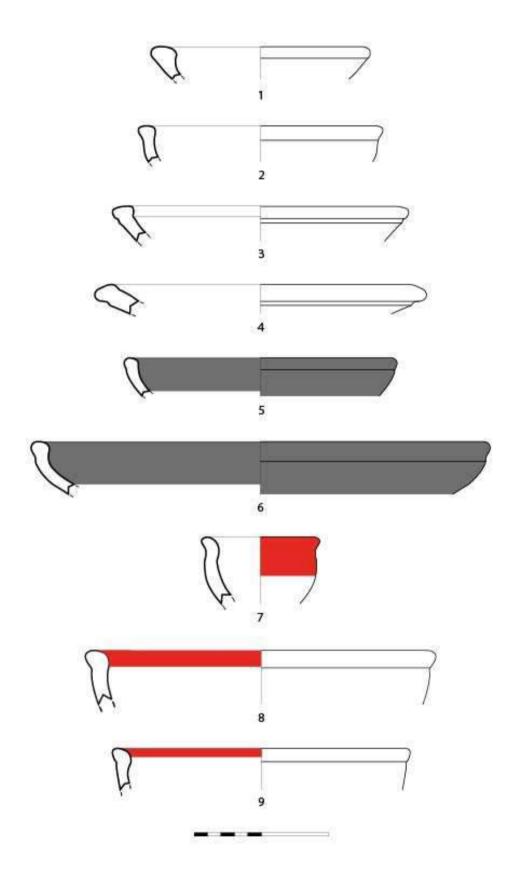
		Γ	<u> </u>	I	T	1	1	I	T 1
PHASE	J-5	H-T1 6a	H-T1 6a	H NORTH 15	H NORTH 15	H-T1 6a	9-f	H-T19	H-T1 9
TYPE	SB9a	SB9a	SB9a	SB9b	SB9b	SB10	SB10	SB10	SB10
DEC	ON	RS	RS	RS	RS	ON	RS	RS	RS
PROD	W	W	W	M	W	W	W	M	W
EXT. COLOUR	10 YR 8/4	10 R 4/6	2.5 YR 6/6	2.5 YR 6/8	2.5 YR 6/8	2.5 YR 5/5	2.5 YR 6/6	2.5 YR 6/6	2.5 YR 6/6
INT. COLOUR	10 YR 8/4	10 R 5/6	2.5 YR 5/8	2.5 YR 6/8	2.5 YR 6/8	2.5 YR 5/5	2.5 YR 6/6	2.5 YR 6/6	2.5 YR 6/6
EXT. TREAT	SM	В	В	В	В	В	В	В	В
INT. TREAT	SM	В	В	В	В	В	В	В	В
EXT.	SS	S	S	v	S	SS	S	v	S
INT. SUR	SS	S	S	S	S	SS	S	S	S
FIRING	н	н	Ж	工	т	工	æ	工	R
MG	2a	е	5	е	е	10	5	88	8a
FABRIC	120,1	106	126	106	106	116	126	120	120
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 2552.118 (deposit)	H 2875.9 (wall)	T1 7529.20 (deposit)	H 8412.12 (deposit)	H 8412.13 (deposit)	H 3701.18 (deposit)	J 770B.21 (deposit)	H 7088.19 (fill)	H 6371.17 (fill)
FIG.	~	7	е	4 01 ATE 15	ιο SDO SD1	9	7	∞	6

PLATE 15 – SB9, SB10



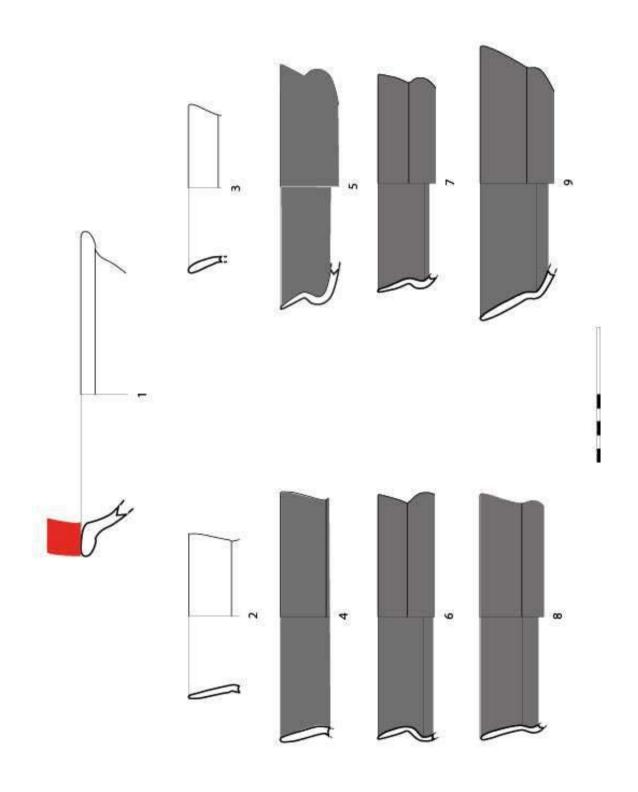
SE	φ	0 1	H-T1 9	φ	L 0	_ ~	Ö.	<u> </u>	27 0
PHASE	T3-8	H-T-	도	Ā 6-Ā	H-T1 6b	H-T1 6a	K-2	H-T1	H-T1
TYPE	SB11	SB11	SB11	SB11	SB11	SB11	SB11	SB11	SB11
DEC	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	RS	RS	PT	PT	PT
PROD TECHN	M	M	M	M	M	*	M	M	*
EXT. COLOUR	5 YR 6/4	10 YR 8/2	5 YR 7/6	7.5 YR 8/6	7.5 YR 6/4	10 R 5/6	2.5 YR 7/8	5 YR 7/4	5 YR 7/6
INT. COLOUR	5 YR 6/4	10 YR 8/2	5 YR 7/6	2.5 YR 7/8	10 R 4/8	10 R 5/6	7.5 YR 8/6	5 YR 7/4	2.5 YR 7/6
EXT. TREAT	SM	SM	SM	SM	SM	В	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	В	В	SM	SM	SM
EXT.	SS	SS	SS	SS	Ø	Ø	SS	SS	SS
INT. SUR	SS	SS	SS	SS	S	S	SS	SS	SS
FIRING	н	н	0	Q	Ι	エ	Q	ď	0
MG	8a	8	5	8a	8a	8a	8a	8a	1c
FABRIC	17	131	117	12	120,2	120	125	120	116
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T3 8174.5 (floor)	H 7092.2 (fill)	T1 8302.26 (fill)	K 331.20 (deposit)	H 6275.1 (deposit)	T1 7671.2 (floor)	K 116.1 (deposit)	H 7156.75	H 6559.15 (fill)
FIG.	~	7	က	4 PI ATE 1	ى د	9	7	8	6

PLATE 16 - SB11



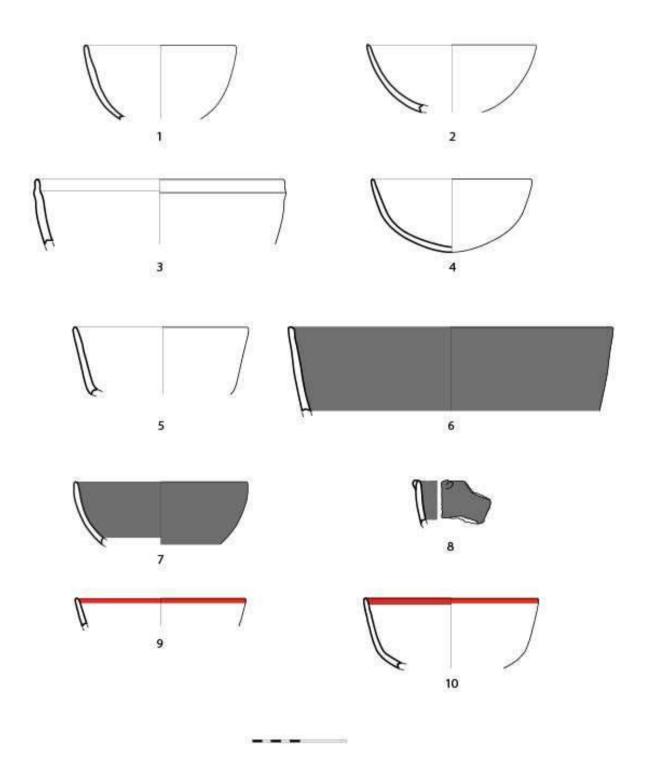
PHASE	J-5	<del>х</del> 8-3	<del>Х</del> 8-	J-5	H-T1 6a	H-T1 7	H-T1 9	H-T1	T3-13
TYPE	SB12	SB13	SB13	SB13	SB13	SB13	SB13	SB13	SB13
DEC	PT	O <sub>N</sub>	O <sub>N</sub>	RS	RS	RS	RS	RS	RS
PROD	<b>&gt;</b>	>	>	>	>	>	>	>	Λ
EXT. COLOUR	7.5 YR 8/4	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/8	7.5 YR 6/5	2.5 YR 5/8	2.5 YR 5/6	10 R 5/6	5 YR 6/6
INT. COLOUR	7.5 YR 8/4	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/6	2.5 YR 5/5	2.5 YR 5/8	2.5 YR 5/6	10 R 5/6	10 R 5/6
EXT. TREAT	SM	SM	SM	В	В	Ф	В	В	В
INT. TREAT	SM	SM	SM	В	В	В	В	В	В
EXT.	SS	SS	SS	Ø	Ø	Ø	Ø	Ø	S
INT. SUR	SS	SS	SS	S	S	S	S	S	S
FIRING	Т	I	н	н	I	I	0	Т	Н
MG	8a	5	8a	6	8a	2	8a	8b	8a
FABRIC	120	117	120	106	120,3	116	120,3	137,1	120
WARE	Common	Common	Common	Fine	Common	Fine	Common	Common	Common
NR. (Type of SU)	J 2552.78 (deposit)	K 424.1 (fill)	K 867.6 (floor)	J 253.42 (deposit)	H 3709.27 (deposit)	T1 7563.3 (fill)	H 7098.15 (fill)	H 6421.32 (fill)	T3 8703.12 (fill)
FIG.	-	2	ю	4	က 17 – SR1	o o	7	∞	6

PLATE 17 – SB12, SB13



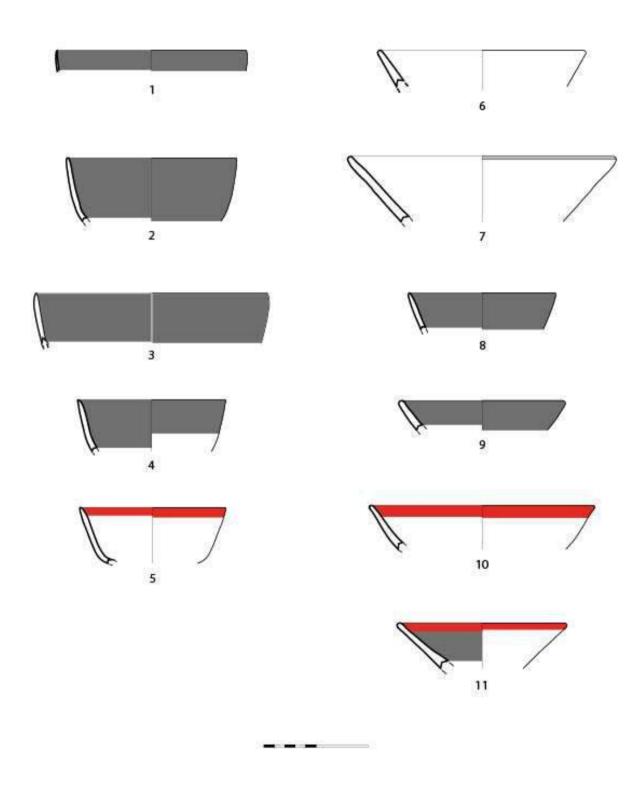
	I	1	I	I					I	1
PHASE	H-T1 5	H-T1 5	T3-11	H-T1	H-T1	T3-5	H-T1 6b	H-T1 6b	H-T1 6a	H-T1
TYPE	DB1	DB1	DB1	DB1	DB1	DB1	DB1	DB1	DB1	DB1
DEC	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	RS	RS	RS	PT	PT
PROD	M	M	M	M	W	×	*	W	M	W
EXT. COLOUR	2.5 YR 6/4	5 YR 5/6	10 YR 8/3	2.5 YR 7/6	5 YR 7/6	7.5 YR 4/6	2.5 YR 6/6	2.5 YR 5/6	5 YR 7/6	5 YR 7/4
INT. COLOUR	5 YR 7/6	5 YR 5/6	5 YR 7/6	2.5 YR 7/6	5 YR 7/6	10 R 4/6	2.5 YR 6/6	2.5 YR 5/6	5 YR 7/6	5 YR 7/6
EXT. TREAT	SM	В	SM	SM	SM	ω	æ	SM	SM	SM
INT. TREAT	SM	В	SM	SM	SM	В	В	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	Ø	Ø	Ø	SS	SS
INT. SUR	SS	SS	SS	SS	SS	Ø	S	S	SS	SS
FIRING	æ	Ι	Ι	Т	н	<b>x</b>	I	I	Ι	Н
MG	8a	8a	8a	8a	8a	8a	8a	8a	2a	8a
FABRIC	120	120	124	120	120	120,3	120,2	120,3	ဇ	120
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1060.10 (fill)	H 1060.123 (fill)	T3 8424.6 (floor)	H 6676.702 (floor)	H 6559.65 (fill)	T3 7986.20 (floor)	H 5489.35 (fill)	T1 7884.7 (deposit)	T1 7235.3 (floor)	H 7156.47 (fill)
FIG.	-	2	ю	4	ις ΤΕ 10 Γ	ω	7	∞	O	10

PLATE 18 – DB1



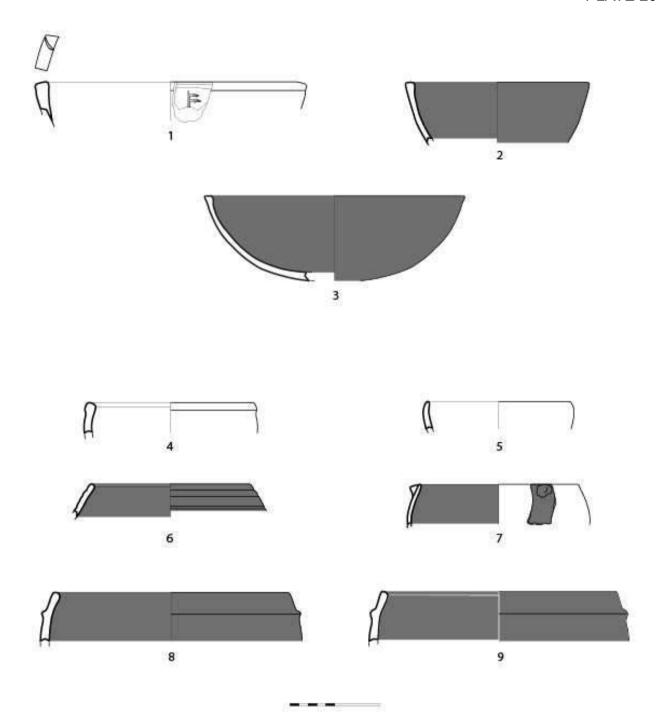
PHASE	H-T1 5	H-T1 6a	H-T- 10	H-T1	9-	H-T1 5	T3-1 (2010)	H-T1 6a	9-	H-T1	K-5
ТУРЕ	DB2	DB2	DB2	DB2	DB2	DB3	DB3	DB3	DB3	DB3	DB3
DEC	RS	RS	RS	RS	PT	ON O	ON ON	RS	RS	PT	PT+ RS
PROD	*	*	*	*	*	*	*	M	*	*	*
EXT. COLOUR	10 R 5/6	2.5 YR 6/6	5 YR 7/4	7.5 YR 6/4	7.5 YR 8/6	5 YR 7/6	5 YR 7/6	2.5 YR 5/6	10 R 4/8	5 YR 7/6	10 YR 8/4
INT. COLOUR	10 R 5/6	2.5 YR 6/6	5 YR 7/4	10 YR 7/3	7.5 YR 7/6	5 YR 7/6	5 YR 7/6	2.5 YR 5/6	10 R 4/8	5 YR 7/6	2.5 YR 7/8
EXT. TREAT	В	В	В	В	В	NS	SM	В	Ф	NS	S
INT. TREAT	В	В	В	В	NS.	NS.	NS.	В	В	SM	В
EXT.	Ø	Ø	Ø	Ø	SS	SS	SS	S	w	SS	SS
INT. SUR	Ø	Ø	Ø	Ø	SS	SS	SS	S	Ø	SS	S
FIRING	エ	ď	エ	エ	۵	エ	エ	œ	ď	エ	Q
MG	8a	2	8a	8a	8b	8a	8a	6	8a	2a	8a
FABRIC	125,1	126	120	120,2	2	120	120	101	120	120,1	8
WARE	Fine	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1038.2 (deposit)	T1 7529.21 (deposit)	H 6411.46 (installation)	H 7156.64 (fill)	J 280.4 (deposit)	H 1391.14 (deposit)	T3 10079.10 (fill)	T1 7529.4 (deposit)	J 770B.19 (deposit)	H 6422.7 (fill)	K 19.67 (deposit)
FIG.	-	2	ю	4	ഗ ATF 19 -	9	7	œ	6	10	11

PLATE 19 – DB2, DB3



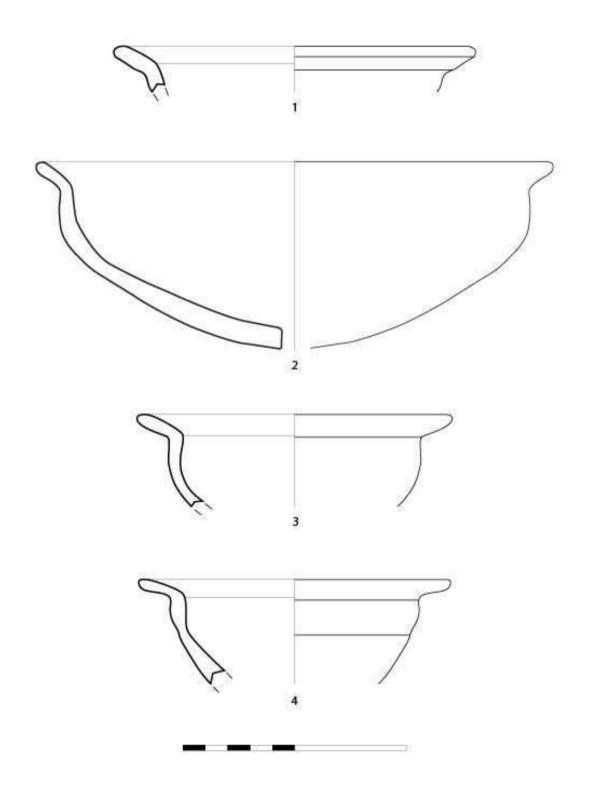
PHASE	J-5	J-5	H-T1 7	T4-1	H-T1 5	J-5	<del>7</del> А	7	J-5
TYPE	DB4	DB4	DB4	DB5a	DB5a	DB5a	DB5a	DB5b	DB5b
DEC	PM	RS	RS	ON	ON	RS	RS	RS	RS
PROD	M	W	M	M	M	<b>X</b>	×	M	*
EXT. COLOUR	2.5 YR 7/8	2.5 YR 6/8	10 R 4/6	5 YR 7/6	7.5 YR 7/3	2.5 YR 6/6	2.5 YR 6/6	10 R 5/6	2.5 YR 6/6
INT. COLOUR	2.5 YR 7/8	2.5 YR 6/8	10 R 4/6	5 YR 7/4	7.5 YR 7/3	10 YR 8/4	2.5 YR 6/6	10 R 5/6	7.5 YR 7/3
EXT. TREAT	SM	SM	SM	SM	SM	SM	В	В	В
INT. TREAT	SM	SM	SM	SM	SM	SM	В	SM	SM
EXT.	SS	S	Ø	SS	SS	Ø	Ø	Ø	Ø
INT.	SS	S	Ø	SS	SS	Ø	Ø	Ø	SS
FIRING	Q	Q	Ι	I	Ι	Q	I	I	I
MG	င	88	8a	8a		8a	8a	8a	е
FABRIC	112	120,2	137	12	119	125	120	125	112
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 175.87 (deposit)	J 253.69 (deposit)	T1 7563.6 (fill)	T4 8245.8 (deposit)	T1 7132.26 (deposit)	J 85.5 (deposit)	K 237.3 (floor)	J 85.2 (deposit)	J 175.18 (deposit)
FIG.	~	2	ဇ	4 PI ATE 20 -	ဟ - DB4 DB4	9	2	8	6

PLATE 20 – DB4, DB5



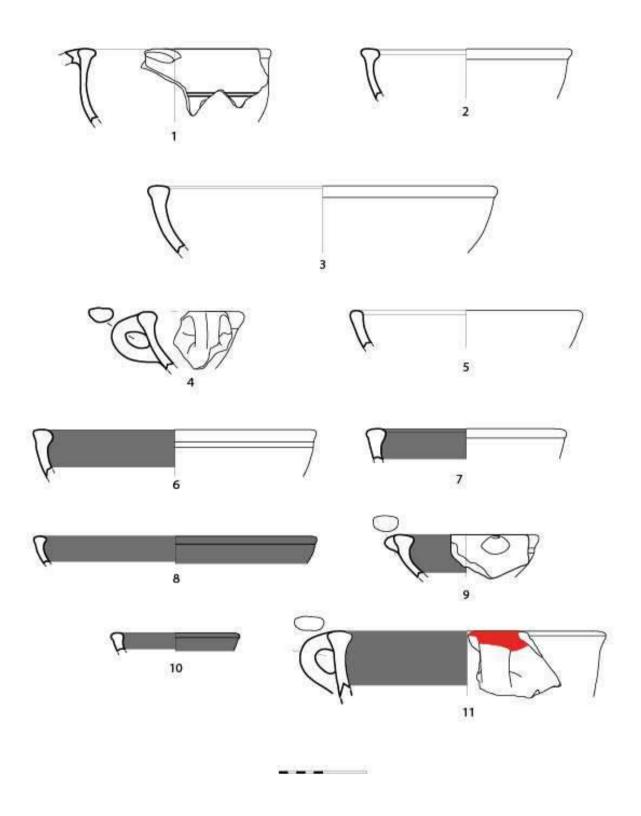
PHASE	13-6	H-T1 6a	H-T1 6b	H-T1 9
TYPE	DB6	DB6	DB6	DB6
DEC	ON	ON	ON	ON
PROD TECHN	M	W	W	W
EXT. COLOUR	5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 7/6
INT. COLOUR	5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 7/6
EXT. TREAT	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS
FIRING	н	т	т	Н
MG	88	88	5	8a
FABRIC	120,3	120	122	120
WARE	Common	Common	Common	Common
NR. (Type of SU)	T3 7988.1 (floor)	H 5281.719 (deposit)	H 6474.46 (fill)	H 7040.8 (fill)
FIG.	_	8	ဇ	4

PLATE 21 – DB6



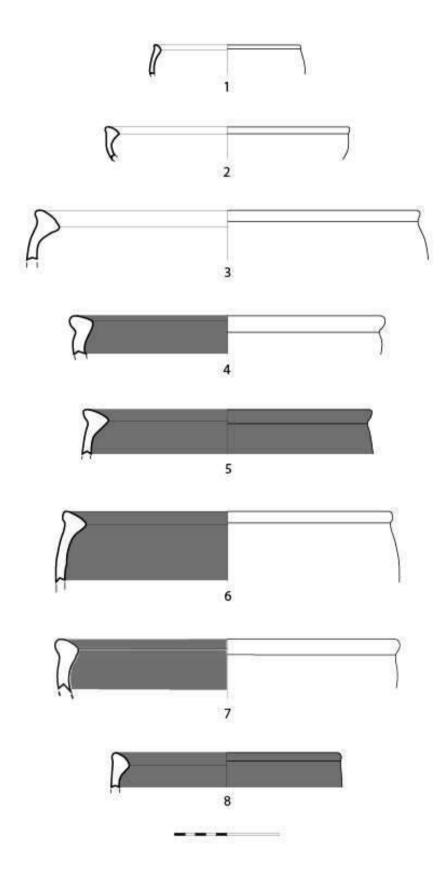
						<u> </u>		<u> </u>	1	Ī	
PHASE	H-T1 5	H-T1 6a	T3-1 (2010)	H-T1 9	А-6	T3-9	J-5	H-T1 9	H-T1	<del>Х</del>	T4-1
TYPE	DB7	DB7	DB7	DB7	DB7	DB7	DB7	DB7	DB7	DB7	DB7
DEC	_	ON	O <sub>N</sub>	ON	O <sub>N</sub>	RS	RS	RS	RS	RS	RS+ PT
PROD	>	>	*	<b>X</b>	*	>	>	>	*	*	8
EXT. COLOUR	7.5 YR 7/4	5 YR 7/3	7.5 YR 5/6	5 YR 7/6	5 YR 7/8	7.5 YR 7/3	2.5 YR 7/8	10 R 5/6	2.5 YR 7/4	5 YR 7/8	7.5 YR 7/6
INT. COLOUR	10 YR 8/3	5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 7/8	2.5 YR 6/6	2.5 YR 6/8	10 R 5/6	2.5 YR 5/8	5 YR 7/8	10 R 5/6
EXT. TREAT	SM	SM	SM	SM	SM	SM	Ä	SM	SM	В	SM
INT. TREAT	SM	SM	В	SM	SM	В	В	SM	В	В	В
EXT.	SS	SS	SS	SS	SS	SS	F	S	SS	Ø	SS
INT. SUR	SS	SS	SS	SS	SS	S	S	S	S	S	S
FIRING	エ	エ	ď	I	エ	エ	エ	ď	ď	۵	ď
MG	2a	8a	8a	8a	8a	1c	8a	2a	1b	8a	2a
FABRIC	120,1	120	120	13	135	115	120,2	3,1	132	118	120,1
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 3516.6 (fill)	T1 7232.28 (deposit)	T3 10079.24 (fill)	T1 8027.67 (deposit)	K 333.1 (deposit)	T3 8177.4 (deposit)	J 397.14 (deposit)	H 7088.15 (fill)	T1 8140.12 (deposit)	K 151.40 (deposit)	T4 8256.49 (installation)
FIG.	~	2	ဇ	4	ις DIATE 21	ω 2 DR7	7	8	6	10	7

PLATE 22 – DB7



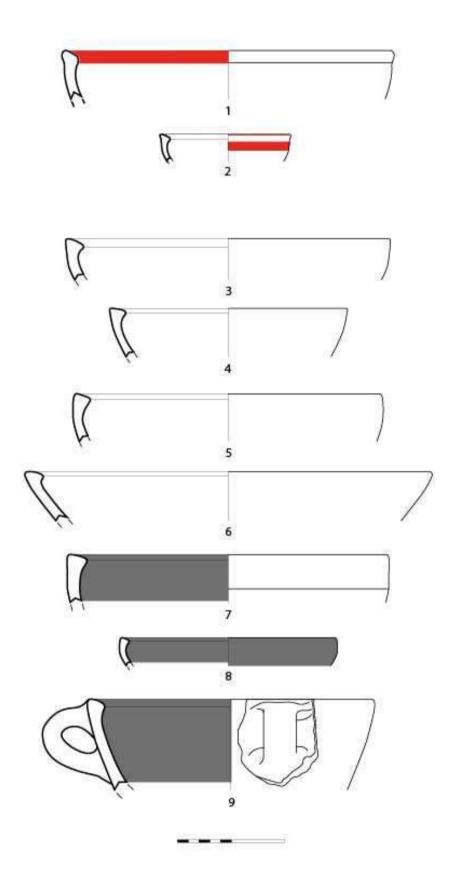
PHASE	J-1	5-7-	H-T1 10	H-T1 5	J-5	T5-6	H-T1	<del>У</del>
TYPE	DB8	DB8	DB8	DB8	DB8	DB8	DB8	DB8
DEC	ON	ON	ON	RS	RS	RS	RS	RS
PROD	<b>X</b>	M	W	<b>X</b>	<b>X</b>	W	<b>X</b>	<b>X</b>
EXT. COLOUR	10 YR 7/6	7.5 YR 7/6	5 YR 7/4	2.5 YR 7/6	2.5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 7/6
INT. COLOUR	5 YR 7/6	7.5 YR 7/6	5 YR 7/4	2.5 YR 6/6	2.5 YR 6/8	2.5 YR 5/6	10 R 5/6	2.5 YR 6/6
EXT. TREAT	SM	SM	SM	SM	SM	AM	SM	SM
INT. TREAT	SM	SM	SM	В	В	В	В	В
EXT.	SS	SS	SS	SS	w	SS	SS	SS
INT. SUR	SS	SS	SS	v	Ø	S	Ø	Ø
FIRING	н	D	т	I	Ι	æ	æ	I
MG	8a	8a	8a	8a	8a	2a	8a	
FABRIC	120	120,3	120	120	120,2	120,1	120,3	119
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 4051.14 (deposit)	J 175.73 (deposit)	H 6559.66	H 1391.32 (deposit)	J 880.16 (fill)	T5 9405.24 (floor)	H 6559.50	K 922.8 (fill)
FIG.	-	7	е	4	ى 23 – DB8	9	7	ω

PLATE 23 – DB8



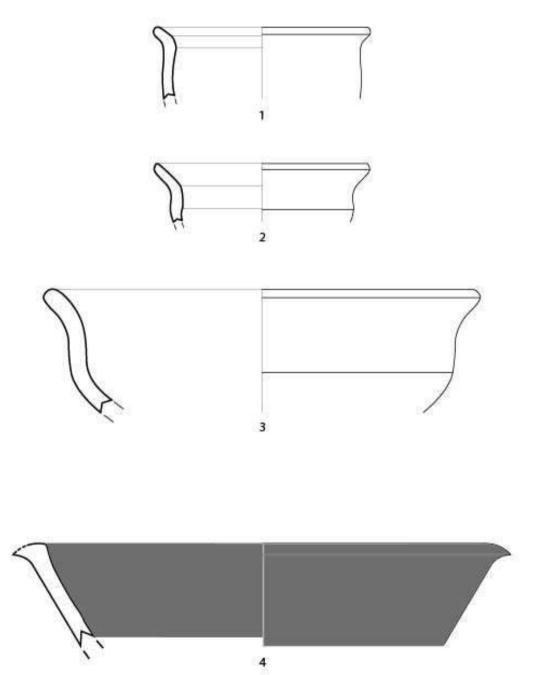
SE	F 0	T3-13	J-5	4	F 0	ιÒ	1.5	F 0	H-T1 10
PHASE	H-T1	Т3-	<u>ب</u>	T4-4	H-T1	₹ 5	H T	H-T1	Ŧ <del>_</del>
TYPE	DB8	DB8	DB9	DB9	DB9	089	DB9	DB9	DB9
DEC	P	PT	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	RS	RS	RS
PROD	M	M	M	M	M	*	*	*	*
EXT. COLOUR	7.5 YR 7/4	7.5 YR 7/4	5 YR 7/6	5 YR 6/6	5 YR 7/4	7.5 YR 7/6	5 YR 7/4	2.5 YR 5/6	5 YR 7/4
INT. COLOUR	7.5 YR 7/4	7.5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 7/4	7.5 YR 7/6	10 R 5/6	2.5 YR 5/6	2.5 YR 6/6
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	В	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	В	В	В
EXT.	SS	SS	SS	SS	SS	SS	SS	v	SS
INT. SUR	SS	SS	SS	SS	SS	SS	S	S	S
FIRING	Ж	н	Ж	т	工	工	æ	0	Я
MG	8a	1c	8a	8a	8a	8a	8a	8a	8a
FABRIC	120	116	18	4	120	120	18	120,3	120,3
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 6644.91 (deposit)	T3 8667.706 (deposit)	J 509.32 (fill)	T4 8288.4 (floor)	H 6559.87 (fill)	K 19.21 (deposit)	H 1749.18 (fill)	H 6422.1 (fill)	H 6633.34 (deposit)
FIG.	~	2	е	4 PI ATE 24 -	က - DB8 DB9	9	2	∞	6

PLATE 24 – DB8, DB9



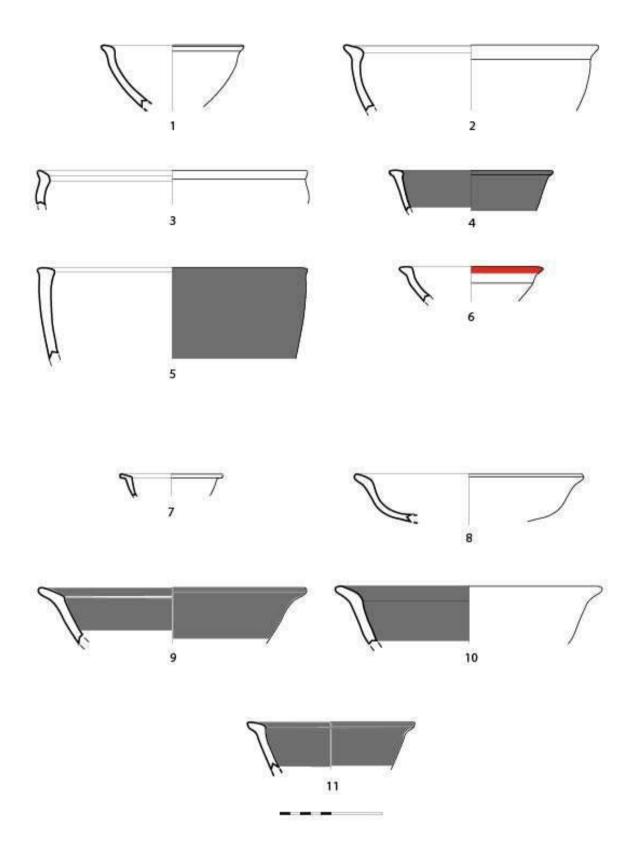
PHASE	H-T1 6a	H-T1 9	T3-12	H-T1 10
TYPE	DB10	DB10	DB10	DB11
DEC	ON	ON	ON	RS
PROD	W	W	W	W
EXT. COLOUR	10 YR 8/2	5 YR 7/6	10 YR 7/3	2.5 YR 5/6
INT. COLOUR	10 YR 7/3	5 YR 7/6	10 YR 7/3	2.5 YR 5/6
EXT. TREAT	MS	MS	SM	В
INT. TREAT	WS	WS	SM	В
EXT. SUR	SS	SS	SS	S
INT. SUR	SS	SS	SS	S
FIRING	Q	Н	н	Н
MG	8a	8a	8b	8a
FABRIC	120	120,3	11,1	120,3
WARE	Common	Common	Common	Common
NR. (Type of SU)	H 7063.3 (deposit)	T1 8302.14 (fill)	T3 8212.60 (floor)	H 7083.4b (deposit)
FIG.	_	2	ဇ	4

PLATE 25 – DB10, DB11



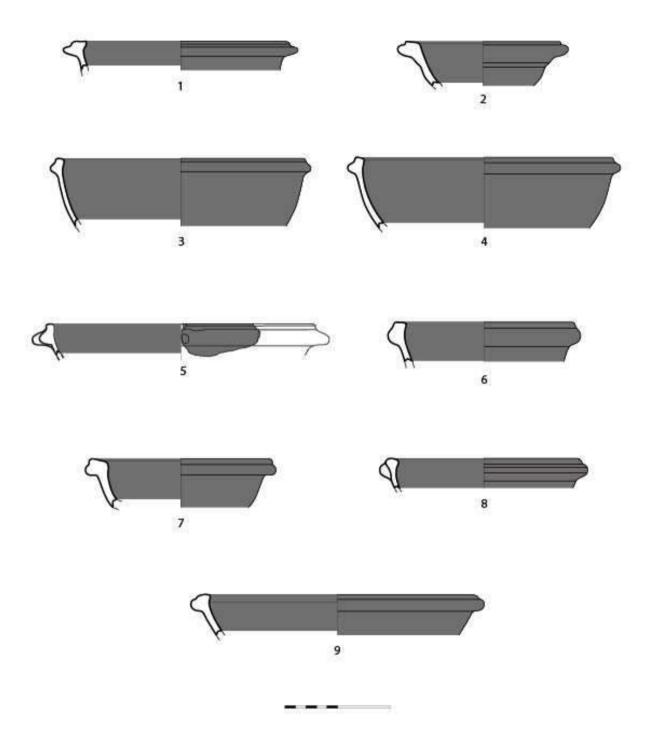
PHASE	H-T1 5	J-5	H-T1 10	H-T1 8	H-T1	H-T1 5	L-1	T3-9	T3-7	T3-7	H-T1 10
		12					13				
ТУРЕ	DB12	DB12	DB12	DB12	DB12	DB12	DB13	DB13	DB13	DB13	DB13
DEC	ON	O <sub>N</sub>	O <sub>N</sub>	RS	RS	PT	ON ON	Q 2	RS	RS	RS
PROD	Μ	Μ	Μ	M	M	M	Μ	M	M	8	*
EXT. COLOUR	7.5 YR 6/6	5 YR 7/6	5 YR 7/6	7.5 YR 5/1	5 YR 7/6	5 YR 6/6	5 YR 7/6	10 YR 8/4	2.5 YR 5/8	7.5 YR 7/4	2.5 YR 6/6
INT. COLOUR	7.5 YR 5/6	5 YR 7/6	5 YR 7/6	7.5 YR 5/1	5 YR 7/6	7.5 YR 5/6	5 YR 7/6	5 YR 7/6	7.5 YR 8/2	2.5 YR 5/6	2.5 YR 5/8
EXT. TREAT	В	SM	SM	В	В	SM	SM	SM	SM	SM	SM
INT. TREAT	В	SM	SM	В	SM	В	SM	SM	В	В	SM
EXT.	SS	SS	SS	Ø	S	SS	SS	SS	SS	SS	S
INT. SUR	SS	SS	SS	S	SS	SS	SS	SS	S	v	S
FIRING	т	I	I	ď	Ι	Ω	I	Ι	т	т	т
MG	8a	8a	8a	8a	8a	10	1c	8a		8a	8a
FABRIC	120	120,2	120,3	13	1,4	115	115	120	Q.	120	120.2
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1060.241 (fill)	J 253.7 (deposit)	H 7388.16 (deposit)	H 7711.1 (floor)	H 6644.59 (deposit)	H 1060.255 (fill)	J 42.29 (deposit)	T3 8425.4 (fill)	T3 8209.20 (fill)	T3 8211.17 (fill)	H 7083.83 (deposit)
FIG.	-	2	ဇ	4	სი TF 26 – I	9	► 813	ω	6	10	11

PLATE 26 – DB12, DB13



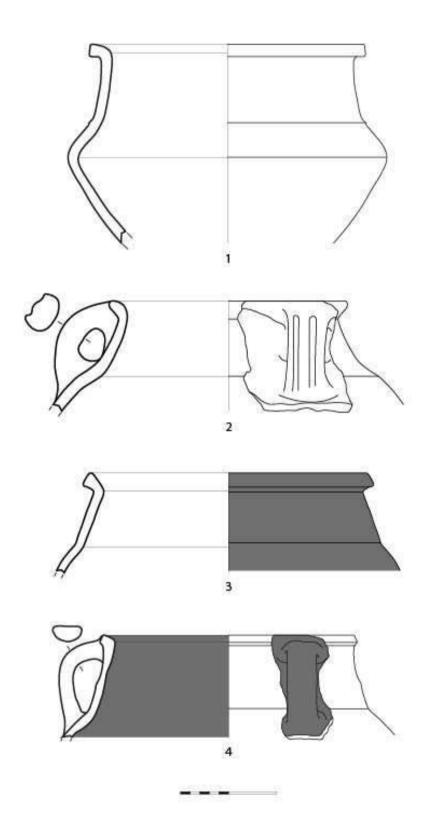
PHASE	H-T1 6a	H-T1 6a	H-T1 6b	H-T1 7	H-T1 6b	H NORTH 15	H-T1 9	H-T1 9	H-T1 9
TYPE	DB14	DB14	DB14	DB14 F	DB14	DB14 N	DB14 F	DB14 F	DB14 F
<b>F</b>	D	D	D	D	D	B D	B D	D	3G
DEC	RS	RS	RS	RS	RS	RS	RS	RS	RS
PROD	M	M	M	*	M	*	*	*	*
EXT. COLOUR	10 R 4/6	10 R 6/6	2.5 YR 6/6	10 R 4/6	2.5 YR 6/6	2.5 YR 5/6	10 R 5/6	10 R 5/6	10 R 5/6
INT. COLOUR	10 R 4/6	10 R 6/6	2.5 YR 6/6	10 R 4/6	2.5 YR 6/6	2.5 YR 5/6	10 R 5/6	10 R 5/6	10 R 5/6
EXT. TREAT	В	В	В	В	В	В	SM	В	В
INT. TREAT	В	В	В	В	В	В	SM	В	В
EXT.	Ø	Ø	Ø	Ø	v	Ø	Ø	Ø	o
INT. SUR	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
FIRING	工	ď	ď	エ	工	œ	工	工	т
MG	5	8a	7	8a	10	8a	е	6	8a
FABRIC	117	120,3	109	107	115	120,3	112	101	120,2
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 3701.8 (deposit)	T1 7232.28b (deposit)	T1 7880.8 (deposit)	T1 7563.9 (fill)	T1 7880.22 (deposit)	H 8412.5 (deposit)	H 7429.3 (deposit)	T1 8621.1 (fill)	T1 8366.4 (fill)
FIG.	_	2	е	4	ഗ 7 – DR14	9	2	∞	6

PLATE 27 – DB14



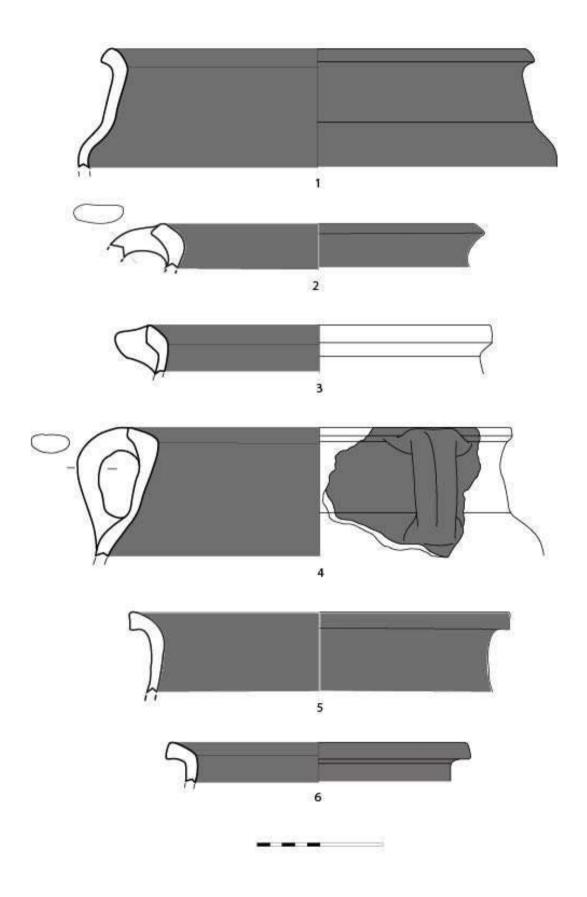
r				
PHASE	H-T1 9	K-9	H-T1 6a	H-T1 7
TYPE	KR1	KR1	KR1	KR1
DEC	ON	ON	RS	RS
PROD TECHN	Μ	W	Μ	W
EXT. COLOUR	5 YR 7/6	7.5 YR 7/6	2.5 YR 6/6	7.5 YR 6/8
INT. COLOUR	5 YR 7/6	7.5 YR 7/6	7.5 YR 7/6	2.5 YR 6/6
EXT. TREAT	SM	SM	В	В
INT. TREAT	SM	SM	SM	В
EXT.	SS	SS	Ø	S
INT.	SS	SS	SS	S
FIRING	æ	工	æ	т
MG	2a	2a	8a	8a
FABRIC	120,1	11,2	120,3	120
WARE	Common	Common	Common	Common
NR. (Type of SU)	H 7098.1 (fill)	K 1135.1 (fill)	H 2249.14 (floor)	T1 7563.27 (fill)
FIG.	_	2	ဇ	4

PLATE 28 – KR1

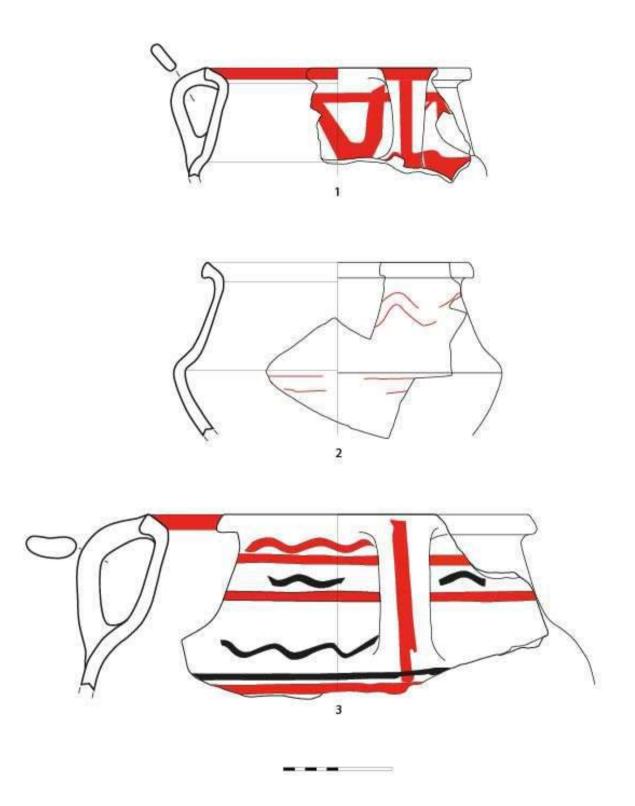


	ı		ı	ı	ı	1
PHASE	H-T1 6b	H-T1 6b	J-5	H-T1 9	H-T1 10	T4-7a
TYPE	X Z	KR1	X Z	X Z	X Z	XR7
DEC	RS	RS	RS	RS	RS	RS
PROD	>	<b>X</b>	>	>	>	>
EXT. COLOUR	10 R 5/6	2.5 YR 5/6	7.5 YR 6/6	2.5 YR 6/6	2.5 YR 5/8	10 R 6/6
INT. COLOUR	10 R 5/6	2.5 YR 6/8	2.5 YR 5/8	5 YR 6/6	2.5 YR 5/8	10 R 6/6
EXT. TREAT	SM	В	SM	Ф	Ф	В
INT. TREAT	SM	В	В	В	В	В
EXT. SUR	S	S	SS	S	S	S
INT. SUR	S	S	S	S	S	S
FIRING	エ	工	ď	ď	ď	π
MG	8a	8a	5	8a	8a	8a
FABRIC	120	120	126	120	120,2	120,3
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 7935.29 (fill)	H 6275.7 (deposit)	J 880.15 (fill)	H 7039.14 (fill)	H 7083.24 (deposit)	T4 9097.21 (deposit)
FIG.	~	2	ю	4	ις VP1	9

PLATE 29 – KR1

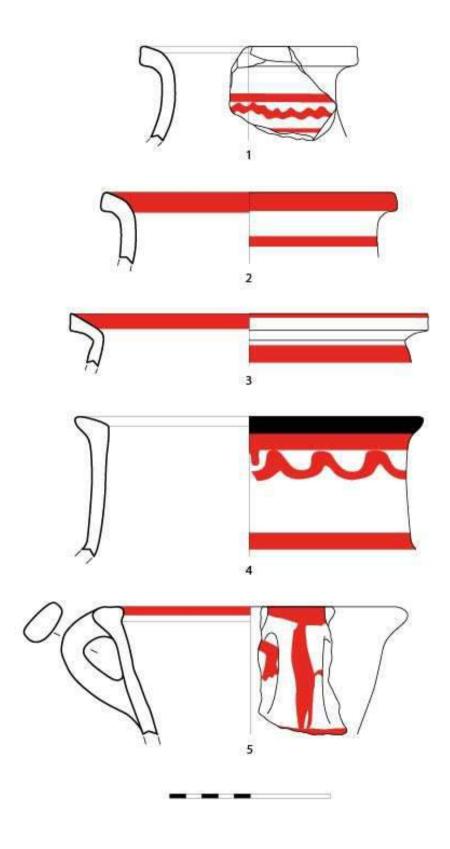


EXT.         INT.         EXT.         PROD TECHN         DEC         TYPE         PHASE           SM         5 YR 7/6         5 YR 7/6         W         PT         KR1         T3-5           SM         2.5 Y 7/2         2.5 Y 7/2         W         PT         KR1         H-T1           SM         5 YR 6/4         5 YR 7/4         W         PT         KR1         H-T18	
INT.         EXT.         PROD TECHN         DEC           COLOUR         COLOUR         TECHN         PT           5 YR 7/6         5 YR 7/6         W         PT           2.5 Y 7/2         2.5 Y 7/2         W         PT           5 YR 6/4         5 YR 7/4         W         PT	
SYR 7/6 5 YR 7/6 W  5 YR 6/4 5 YR 7/4 W	
SYR 7/6 5YR 7/6  5 YR 6/4 5 YR 7/4	
5 YR 7/6 5 YR 6/4	
SM SM SM	
SM SM SM	
SS	
SS SS SS SS	
T T	
88 8a 8a	
120 120 120,3	
Common	
NR. (Type of SU)  T3 7986.5 (floor)  H 5281.717 (deposit)  H 7297.701 (installation)	
FG 2 8	

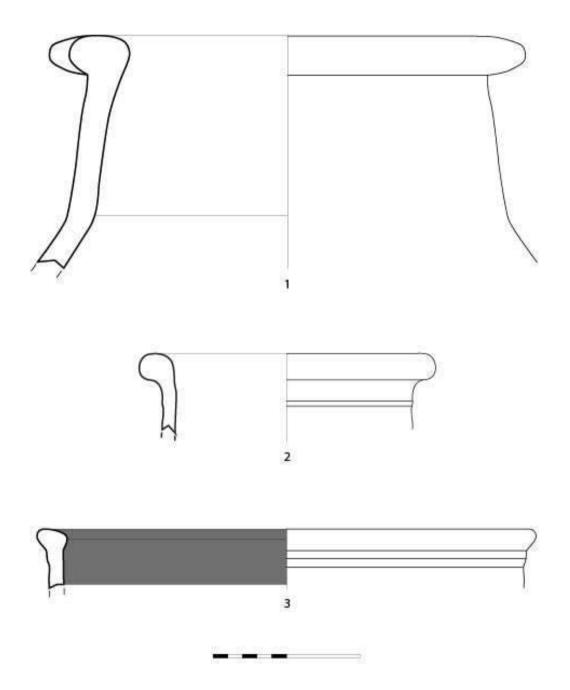


	1	ı	ı	ı	ı
PHASE	H-T1 9	H-T1 9	H-T1 9	곳 4	K-5
TYPE	KR1	KR1	KR1	KR1	KR1
DEC	F	P	P	P	PT
PROD	*	<b>%</b>	<b>%</b>	<b>%</b>	M
EXT. COLOUR	2.5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 7/8	5 YR 7/6
INT. COLOUR	2.5 YR 7/6	5 YR 7/4	5 YR 7/6	5 YR 7/8	10 YR 7/4
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	エ	œ	工	œ	æ
MG	8a	8a	8a	8a	8a
FABRIC	1,4	120	120	6	120,3
WARE	Common	Common	Common	Common	Common
NR. (Type of SU)	H 7084.8 (fill)	H 7088.23	T1 8302.6 (fill)	K 161.59 (deposit)	K 63.66 (floor)
FIG.	~	2	က	PI ATE 3	ம் 31 – KR1

PLATE 31 – KR1

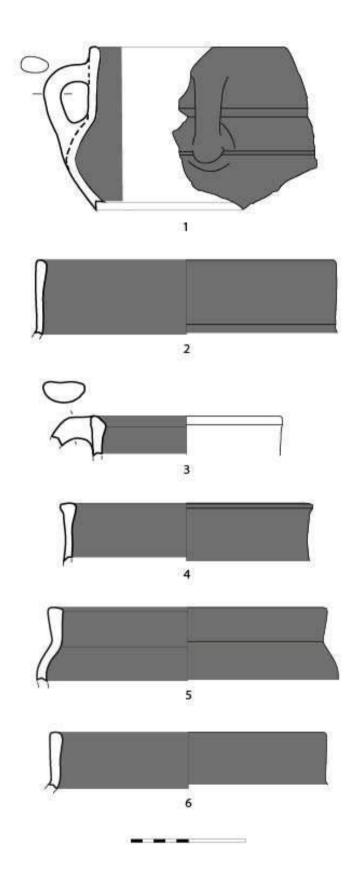


PHASE	H-T1 6a	H-T1 10	H-T1 9
TYPE	KR2	KR2	KR2
DEC	ON	ON	RS
PROD	<b>%</b>	W	W
EXT. COLOUR	5 YR 7/6	7.5 YR 6/3	7.5 YR 7/4
INT. COLOUR	5 YR 7/6	7.5 YR 6/3	2.5 YR 5/8
EXT. TREAT	SM	SM	SM
INT. TREAT	SM	SM	В
EXT. SUR	SS	SS	SS
SUR.	SS	SS	S
FIRING	Ж	н	R
MG	8a	10	1d
FABRIC	120	116	4,2
WARE	Common	Common	Common
NR. (Type of SU)	T1 7336.2 (deposit)	H 7083.22 (deposit)	T1 8302.8 (fill)
FIG.	~	8	3



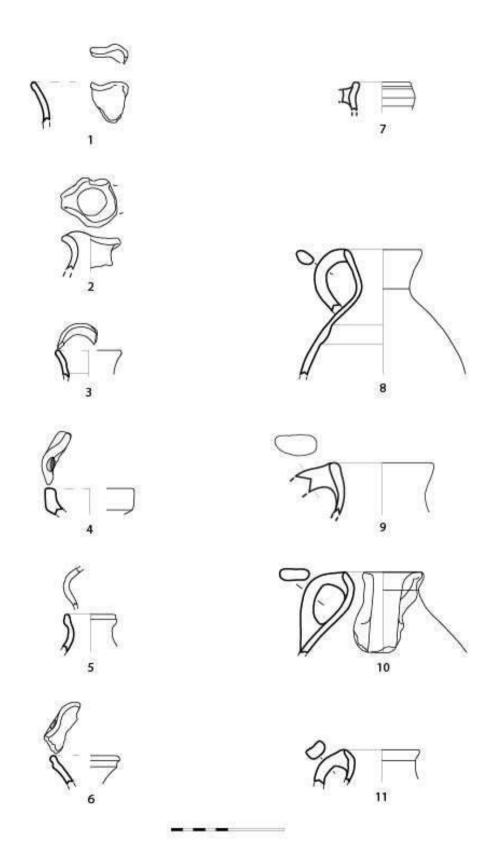
	ı		1	ı	I	<u> </u>
PHASE	H-T1 6a	H-T1 6a	T3-1 (2010)	H-T1 9	T3-13	T3-13
TYPE	KR3	KR3	KR3	KR3	KR3	KR3
DEC	RS	RS	RS	RS	RS	RS
PROD	×	W	W	M	W	W
EXT. COLOUR	2.5 YR 5/6	10 R 4/8	5 YR 7/6	2.5 YR 6/6	2.5 YR 5/6	10 YR 8/2
INT. COLOUR	2.5 YR 5/6	10 R 4/8	2.5 YR 5/6	2.5 YR 6/6	2.5 YR 5/6	2.5 YR 5/6
EXT. TREAT	В	В	SM	В	В	В
INT. TREAT	В	В	В	В	В	В
EXT. SUR	S	S	SS	S	S	S
INT. SUR	S	S	S	S	S	S
FIRING	т	н	工	工	α.	Н
MG	5	5	88	88	8a	8a
FABRIC	117	122	120	1,1	120	4,1
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 3656.8 (deposit)	H 3649.12 (fill)	T3 10082.24 (fill)	H 7084.4 (fill)	T3 8720.2 (fill)	T3 8720.11 (fill)
FIG.	~	2	т	4	یم 33 – KR3	9

PLATE 33 – KR3



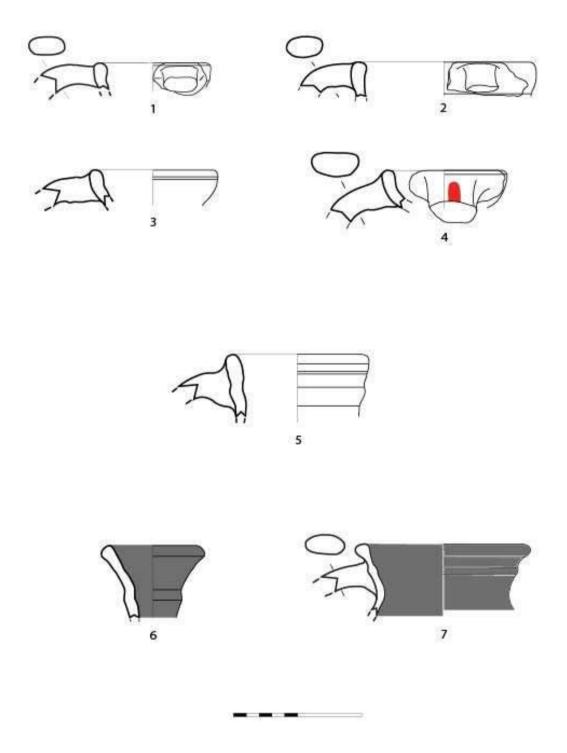
PHASE	H-T1 5	H-T1 6b	K-2	K-3	Ķ-3	<del>х</del> -3	H-T1	H-T1 6a	H-T1 8	H-T1 10	K-5
ТҮРЕ	101 1	LUL	LUL	LUL	LUL	JUL	JUZ	nn3	JU3	nn3	2013
DEC	9	9	9	9	9	9	9	9	9	9	O <sub>N</sub>
PROD	*	*	*	*	*	*	>	>	>	>	M
EXT. COLOUR	7.5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 8/4	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 7/6	10 YR 8/3	7.5 YR 7/6
INT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 8/4	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 7/6	7.5 YR 8/3
EXT. TREAT	S	S	S	S	SM	NS	NS	NS	NS	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	NS S	NS.	NS S	NS.	SM
EXT. SUR	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
INT.	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	т	т	т	Q	Q	I	ď	Ι	Ι	I	D
MG	10	8a	8a	98	8a	8a	8a	8a	8a	8a	8a
FABRIC	115	120	120,2	5	120,2	12	120,3	120	120,3	4-	12
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1060.197 (fill)	H 6474.10 (fill)	K 17.11 (deposit)	K 156.2 (installation)	K 491a.3 (fill)	K 595.21 (fill)	H 7083.70 (deposit)	H 1724.5 (deposit)	H 6326.13 (deposit)	H 6411.129 (installation)	K 19.57 (deposit)
FIG.	~	2	ဧ	4	რ TF 34 – J	ω 111 .1112	.1113	8	6	10	11

PLATE 34 – JU1, JU2, JU3



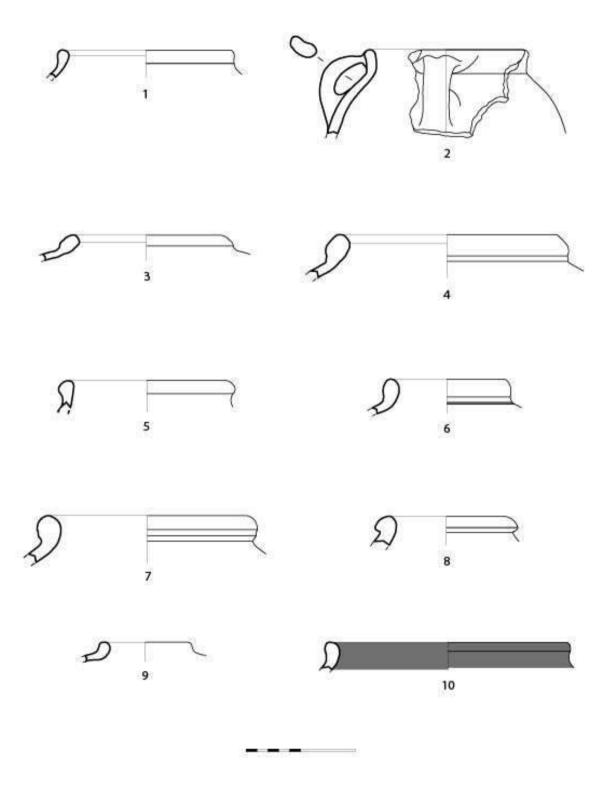
	1	ı	I	1	1	I	1
PHASE	H-T1 5	H-T1 7	H-T1 9	H-T1 10	H-T1 6a	H-T1 6a	H-T1 8
TYPE	JU4	JU4	JU4	JU4	JU5	JUG	9NC
DEC	ON	ON	ON	PT	ON	RS	RS
PROD	>	>	>	>	>	>	>
EXT. COLOUR	5 YR 7/6	10 R 5/6	7.5 YR 7/6	5 YR 7/6	10 YR 7/4	10 R 6/8	2.5 YR 6/6
INT. COLOUR	5 YR 7/6	10 R 5/6	7.5 YR 7/6	5 YR 7/6	10 YR 7/4	10 R 6/8	2.5 YR 6/6
EXT. TREAT	SM	Z	SM	SM	SM	SM	В
INT. TREAT	SM	Z	SM	SM	SM	SM	В
EXT.	SS	SS	SS	SS	SS	Ø	Ø
INT. SUR	SS	SS	SS	SS	SS	Ø	S
FIRING	I	ď	I	œ	œ	I	I
MG	10	8a	8a	8a	8a	8a	е
FABRIC	116	120	120	120	120	120	112
WARE	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1391.27 (deposit)	T1 7543.4 (deposit)	H 7040.15	H 6633.8 (deposit)	H 2875.6 (wall)	T1 7336.86 (deposit)	T1 7711.12 (floor)
FIG.	~	2	e PI	4 ATE 35 – .	က II I4 .II I5 .I	φ 116	7

PLATE 35 – JU4, JU5, JU6

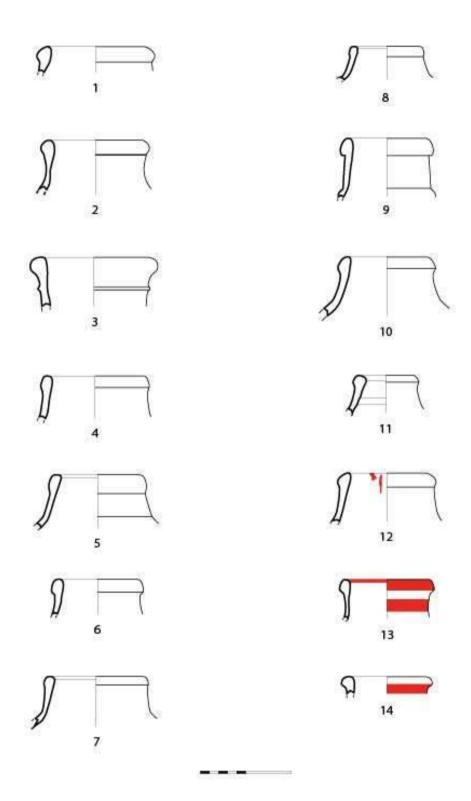


PHASE	H-T1 5	H-T1 6a	J-5	T2-5	H-T1 6a	T4-4	H-T1 9	K-5	K-6	J-5
TYPE	J.1	J1	JJ	١٢	J1	J1	J1	J1	J1	J1
DEC	ON	ON	ON	ON	ON	ON	ON	ON	ON	RS
PROD	W	W	W	W	M	M	×	W	W	W
EXT. COLOUR	7.5 YR 4/3	2.5 YR 7/8	5 YR 6/6	7.5 YR 8/4	10 R 5/6	7.5 YR 8/4	5 YR 7/6	5 YR 7/6	5 YR 7/6	2.5 YR 6/8
INT. COLOUR	7.5 YR 4/4	2.5 YR 7/8	2.5 YR 5/4	5 YR 7/4	10 R 5/6	7.5 YR 8/4	5 YR 7/6	5 YR 7/6	5 YR 7/6	2.5 YR 6/8
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM	SM	В
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM	SM	В
EXT.	SS	SS	SS	SS	SS	SS	SS	SS	SS	S
INT. SUR	SS	SS	SS	SS	SS	SS	SS	SS	SS	S
FIRING	I	I	Т	н	I	O	0	O	O	н
MG	<b>1</b> a	2a	9		3	3	8a	8a	<b>1</b> a	1c
FABRIC	120	120,1	134	1,2	131	133	120,3	12	129	115
WARE	Common	Common	Storage	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1060.134 (fill)	H 3709.32 (deposit)	J 717A.1 (floor)	T2 8002.9 (fill)	H 3717.2 (floor)	T4 8288.59 (floor)	T1 8302.9 (fill)	K 63.18 (floor)	K 331.4 (deposit)	J 175.115 (deposit)
FIG.	-	2	က	4	5	9	7	80	6	10
				DI	ATE OO					

PLATE 36 – J1

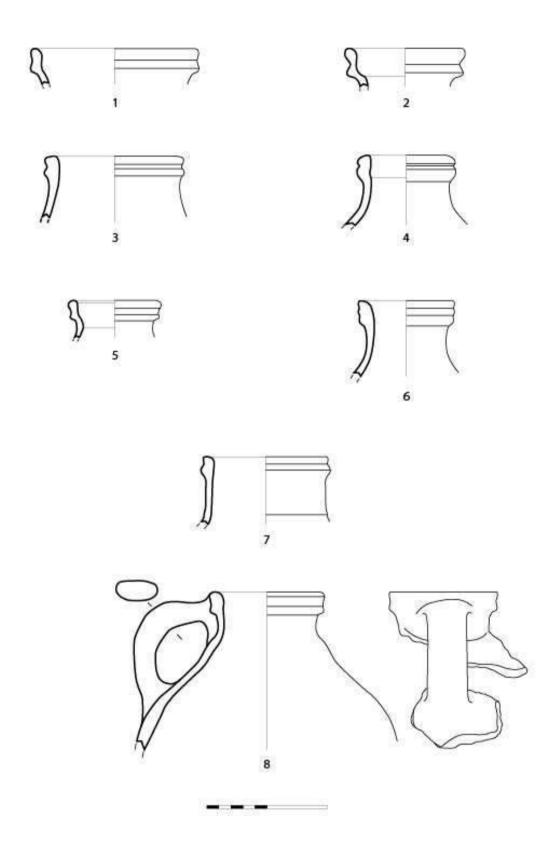


III		10												
PHASE	L-L	H-T1 5	Т3-7	T3-9	H-T1 6a	H-T1 6a	H-T1 6b	J-5	J-5	T2-7	H-T1 10	H-T1 6b	J-5	H-T1
TYPE	72	J2	J2	J2	72	J2	J2	J2	J2	J2	J2	J2	J2	J2
DEC	ON	ON.	ON	ON	ON	ON	ON	ON	ON	ON	ON	PT	ЬТ	PT
PROD TECHN	M	W	M	M	M	M	M	M	M	M	M	M	M	<b>X</b>
EXT. COLOUR	5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 7/3	5 YR 7/6	5 YR 7/4	5 YR 7/3	5 YR 8/4	5 YR 6/4	5 YR 7/4	5 YR 6/4	5 YR 6/6	2.5 YR 7/8	5 YR 7/4
INT. COLOUR	5 YR 7/4	5 YR 7/6	5 YR 7/6	5 YR 7/3	5 YR 7/6	5 YR 7/4	5 YR 7/3	5 YR 8/4	5 YR 6/4	5 YR 7/4	5 YR 7/3	5 YR 6/6	2.5 YR 7/8	5 YR 7/4
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	エ	エ	エ	エ	エ	Ω	エ	D	I	I	н	I	D	Ξ
MG	98	5	10	8a	8a	က	8a	8a	8a	2a	8a	8a	3	8a
FABRIC	11,1	117	110	120	120	112	136	120	120	120,1	136	120	106	137
WARE	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 2444.26 (floor)	H 3516.11 (fill)	T3 8231.1 (floor)	T3 8211.5 (fill)	H 6662.1 (deposit)	T <sub>1</sub> 7232.180 (deposit)	H 5855.1 (installation)	J 175.82 (deposit)	J 2552.120 (deposit)	T2 8057.105b (deposit)	H 7083.31 (deposit)	H 6474.78 (fill)	J 175.1 (deposit)	T1 8045.17 (floor)
FIG .	_	2	3	4	2	Ο ΟΙ ΑΤΙ	7	ω	6	10	11	12	13	4



PHASE	H-T1 5	H-T1 5	H-T1 6a	H-T1 6a	J-5	H-T1 6a	H-T1 8	T2-7
TYPE	51	51	£L	£L	£L	£L	£L	£L
DEC	ON	ON	ON	ON	ON	ON	ON	O <sub>N</sub>
PROD	M	M	×	>	>	>	>	>
EXT. COLOUR	5 YR 7/6	7.5 YR 7/3	5 YR 7/6	10 R 8/2	5 YR 7/6	5 YR 7/6	5 YR 7/4	2.5 YR 7/6
INT. COLOUR	5 YR 7/6	2.5 YR 7/4	5 YR 7/6	10 R 8/2	5 YR 7/6	5 YR 7/6	5 YR 7/4	7.5 YR 7/3
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS	SS
INT.	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	工	I	I	工	Q	Ι	工	т
MG	8a	8a	8a	8a	8a	8a	8a	5
FABRIC	120,3	6	120	120,2	120,3	120,3	120	122
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 1329.5 (deposit)	H 1749.24 (fill)	H 2875.5 (wall)	H 3656.2 (deposit)	J 175.41 (deposit)	T1 7232.27 (deposit)	T1 7711.2 (floor)	T2 8057.69 (deposit)
FIG.	~	2	က	4	ى 38 – .ا3	9	7	∞

PLATE 38 – J3



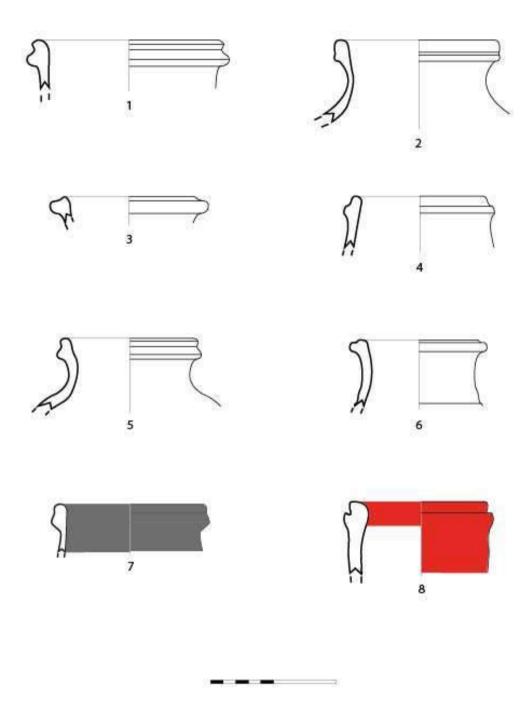
ш								
PHASE	T2-7	T4-4	H-T1 9	<del>х</del> -3	Э-	<del>,</del> 8	T3-5	J-5
TYPE	13	51	51	£L	£L	£L	£L	£L
DEC	ON	ON	ON	ON	ON	ON	RS	RS
PROD TECHN	M	M	M	M	<b>X</b>	<b>X</b>	>	>
EXT. COLOUR	2.5 YR 7/6	5 YR 7/6	5 YR 7/6	7.5 YR 7/4	5 YR 7/6	5 YR 7/6	10 R 4/8	10 R 5/8
INT. COLOUR	5 YR 8/3	5 YR 7/6	5 YR 7/6	7.5 YR 7/4	7.5 YR 6/6	5 YR 7/6	10 R 4/8	7.5 YR 7/6
EXT. TREAT	SM	SM	SM	SM	SM	SM	В	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	В	Z
EXT. SUR	SS	SS	SS	SS	SS	SS	Ø	Ø
INT. SUR	SS	SS	SS	SS	SS	SS	Ø	SS
FIRING	I	Ι	Ι	工	I	I	工	I
MG	9	8a	2a	8b	8a	8a	8a	8a
FABRIC	134	120,3	120,1	21	120,2	120	120,3	18
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T2 8057.103 (deposit)	T4 8454.17 (deposit)	H 7039.34 (fill)	K 485.10 (fill)	K 49.1 (wall)	K 910.18 (deposit)	T3 7986.25 (floor)	J 95.39 (wall)
FIG.	_	7	ဇ	4	ى 30 3	9	7	ω

PLATE 39 – J3



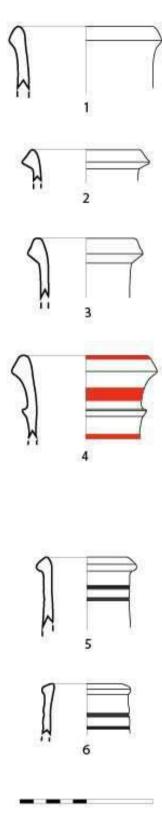
					1		1	
PHASE	L-J	T3-5	H-T1 6a	H-T1 8	H-T1	K-5	H-T1	<u>-</u>
TYPE	4C	4C	4C	J4	4C	4C	4C	4C
DEC	ON	O <sub>N</sub>	O <sub>N</sub>	ON	O <sub>N</sub>	O <sub>N</sub>	RS	PT
PROD	M	*	*	<b>%</b>	*	*	*	W
EXT. COLOUR	10 R 5/6	5 YR 7/6	7.5 YR 8/4	2.5 YR 6/4	2.5 YR 6/4	7.5 YR 7/6	2.5 YR 6/6	10 R 4/8
INT. COLOUR	5 YR 6/4	5 YR 7/6	7.5 YR 7/6	7.5 YR 6/2	2.5 YR 6/4	7.5 YR 7/6	2.5 YR 6/6	5 YR 6/4
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS	SS	Ø	SS
INT. SUR	SS	SS	SS	SS	SS	SS	σ	SS
FIRING	I	۵	エ	I	۵	۵	I	I
MG	8a	8a	8a	8a	8b	8a	8a	8a
FABRIC	120	120,3	136	120	137,1	120,2	120	137
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 681.3 (deposit)	T3 7986.2 (floor)	H 5282.2 (floor)	T1 7655.3 (floor)	H 6559.6 (fill)	K 19.26 (deposit)	H 7083.64 (deposit)	J 681.6 (deposit)
FIG.	~	2	8	4	2	ω PI ATF 4	10 – 14	8

PLATE 40 – J4



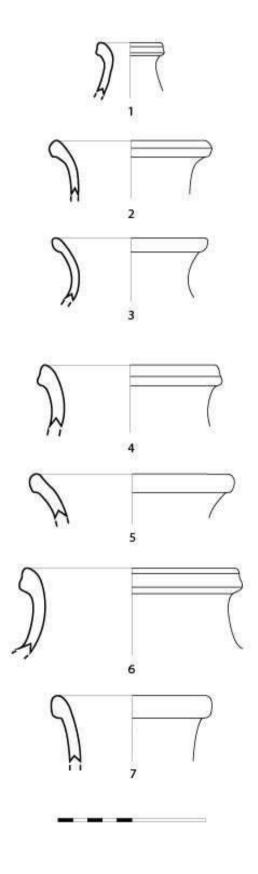
PHASE	g-ſ	K-3	K-5	K-2	1-ر	J-5
TYPE	Ј5а	J5a	J5a	J5a	q <b>S</b> f	J5b
DEC	NO	NO	ON	PT	GR	GR
PROD TECHN	W	W	M	M	W	W
EXT. COLOUR	5 YR 7/6	5 YR 8/4	5 YR 7/6	5 YR 7/8	5 YR 7/4	5 YR 7/4
INT. COLOUR	5 YR 7/6	5 YR 8/4	7.5 YR 7/6	5 YR 7/8	5 YR 7/4	5 YR 7/4
EXT. TREAT	SM	SS	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS
FIRING	I	н	I	I	н	Ι
MG		8a	8a	2a	8a	8a
FABRIC	119	114	120,2	11,2	120	120,3
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 253.2 (deposit)	K 157.35 (floor)	K 862.25 (fill)	K 17.2 (deposit)	J 2444.5 (floor)	J 175.49 (deposit)
FIG.	1	2	е	4	2	9

PLATE 41 – J5



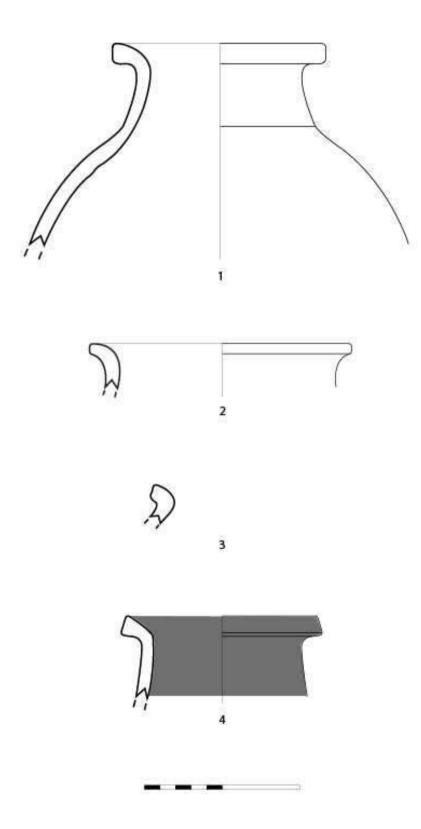
	I						1
PHASE	H-T1 6a	H-T1 8	H-T1 8	T4-4	9-	H-T1	T4-7a
TYPE	96	96	96	96	96	96	96
DEC	ON	ON	ON	ON	ON	ON	O <sub>N</sub>
PROD	>	>	>	>	>	>	>
EXT. COLOUR	2.5 YR 5/8	5 YR 7/6	5 YR 7/6	5 YR 7/4	10 YR 7/6	2.5 YR 7/6	10 YR 8/2
INT. COLOUR	2.5 YR 5/8	5 YR 7/6	5 YR 7/6	5 YR 7/4	10 YR 7/6	2.5 YR 7/6	10 YR 8/2
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS
FIRING	工	工	0	工	工	工	т
MG	8a	8a	8a	98	98	2a	8a
FABRIC	124	120,3	137	137,1	21	120,1	114
WARE	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 7336.110 (deposit)	H 6326.3 (deposit)	H 6326.7 (deposit)	T4 8288.55 (floor)	J 281.21 (floor)	H 7155.5 (fill)	T4 9071.52 (deposit)
FIG.	~	7	ю	DI ATE	ى 42 – يا6	O	2

PLATE 42 – J6



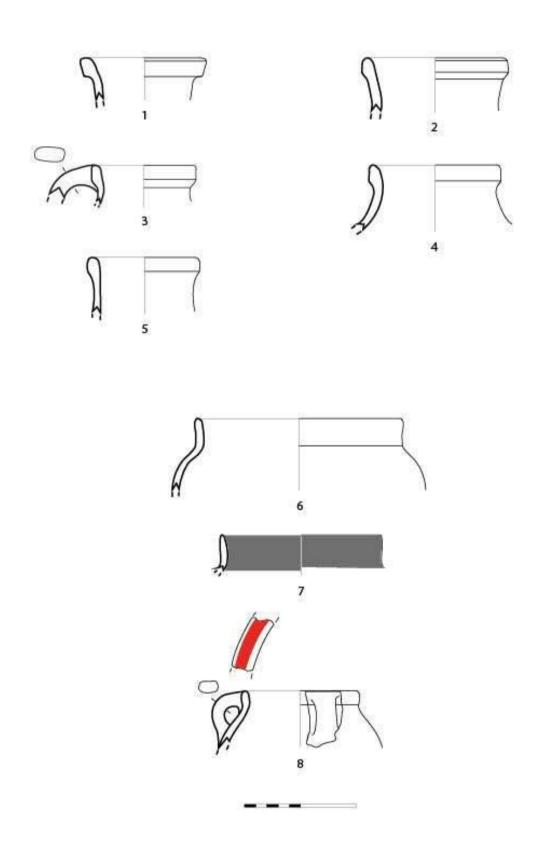
	1	1	1	1
PHASE	H-T1 6a	H-T1 10	K-5	H-T1 8
TYPE	2۲	7ſ	7ſ	7ر
DEC	NO	ON ON	ON.	RS
PROD	W	M	W	W
EXT. COLOUR	7.5 YR 7/6	7.5 YR 7/6	10 YR 7/4	2.5 YR 5/6
INT. COLOUR	7.5 YR 8/4	7.5 YR 7/6	10 YR 7/4	2.5 YR 5/6
EXT. TREAT	В	SM	SM	В
INT. TREAT	SM	SM	SM	В
EXT. SUR	SS	SS	SS	S
INT. SUR	SS	SS	SS	S
FIRING	Ι	工	ď	I
MG	8a	6	5	8a
FABRIC	120	101	122	120,3
WARE	Common	Common	Common	Common
NR. (Type of SU)	T1 7661.13 (deposit)	H 6676.1 (floor)	K 19.86 (deposit)	H 6326.29 (deposit)
FIG.	<b>←</b>	2	8	4

PLATE 43 – J7



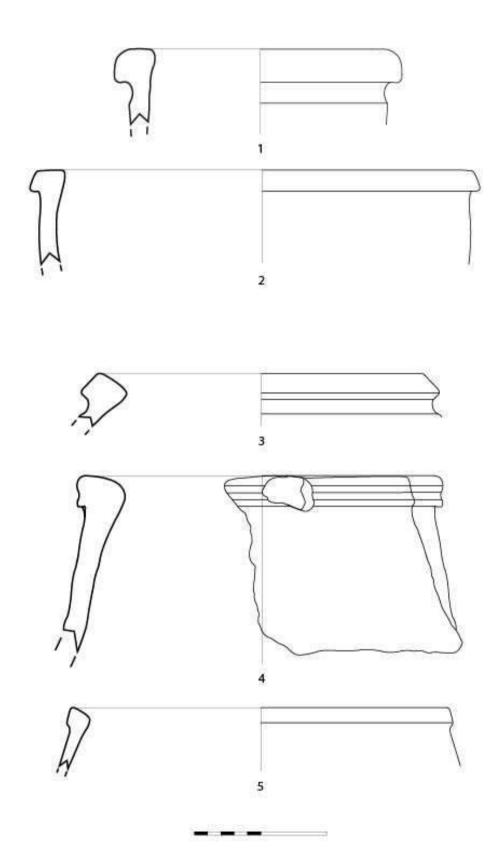
PHASE	H-T1 6b	T3-11	H-T1	K-3	K-6	H-T1	H-T1 6b	К-6
TYPE	918	86	86	86	86	66	9F	60
DEC	ON	ON	ON	ON	ON	ON	RS	PT
PROD	>	>	>	>	>	>	>	>
EXT. COLOUR	2.5 YR 7/8	7.5 YR 7/4	5 YR 7/4	7.5 YR 8/6	7.5 YR 7/8	5 YR 7/6	2.5 YR 6/6	7.5 YR 7/6
INT. COLOUR	2.5 YR 7/8	7.5 YR 7/4	5 YR 7/4	7.5 YR 7/6	7.5 YR 7/8	5 YR 7/6	2.5 YR 6/6	7.5 YR 7/6
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	Ø	SS
INT.	SS	SS	SS	SS	SS	SS	Ø	SS
FIRING	æ	I	I	Q	Q	工	I	т
MG	2a	е	8b	8a	98	8a	8a	8a
FABRIC	120,1	112	137,1	12	5	120	120	120,2
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 7880.21 (deposit)	T3 8439.1 (fill)	H 6644.6 (deposit)	K 489.14 (fill)	K 714.9 (fill)	H 6644.131 (deposit)	H 6474.51	K 332.13b (floor)
FIG.	~	7	ო	PI ATE 4	ம் 4 – .18 .19	9	7	ω

PLATE 44 – J8, J9

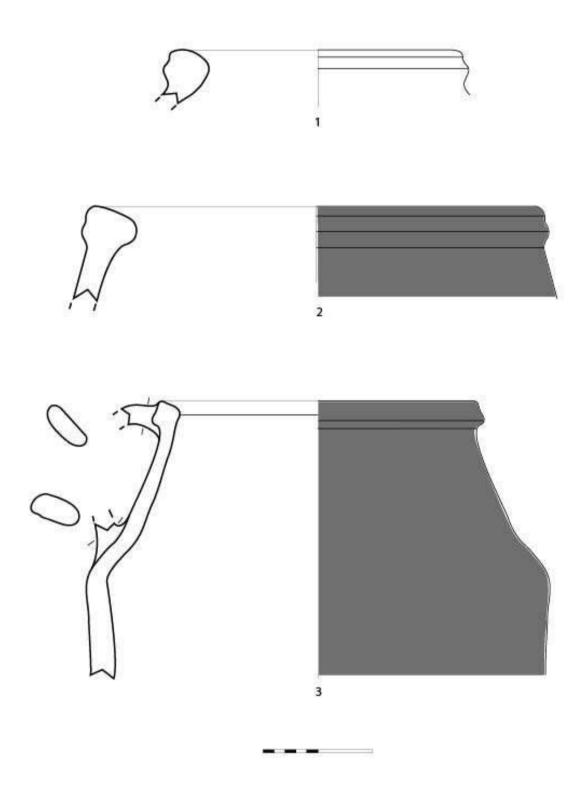


	1	1	1	1	1
PHASE	H-T1 5	H-T1 9	H-T1 5	H-T1 8	H-T1 10
TYPE	J10	J10	111	111	J11
DEC	O <sub>N</sub>	ON	ON	ON	ON
PROD	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	W
EXT. COLOUR	2.5 YR 7/4	7.5 YR 7/4	5 YR 7/6	5 YR 7/6	10 YR 7/4
INT. COLOUR	5 YR 7/4	7.5 YR 7/4	5 YR 6/6	5 YR 7/6	5 YR 7/6
EXT.	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	Z	SM
EXT.	SS	SS	SS	SS	SS
INT.	SS	SS	SS	SS	SS
FIRING	ď	工	æ	æ	Н
MG	8a	2a	88	8a	8a
FABRIC	12	11,2	12	120,3	136
WARE	Common	Storage	Storage	Storage	Storage
NR. (Type of SU)	H 7132.10 (deposit)	H 7084.23	T1 7132.6 (deposit)	T1 7711.13 (floor)	H 7083.41 (deposit)
FIG.	~	2	က	PLATE 45	ις,

PLATE 45 – J10, J11

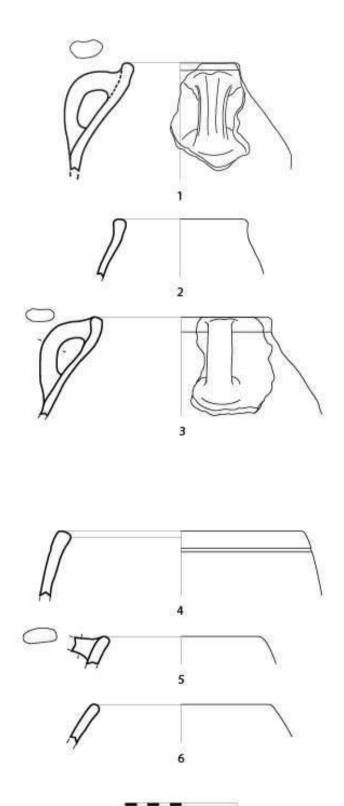


PHASE	9-ſ	H-T1 5	H-T1 6a
TYPE	J11	J11	J11
DEC	O <sub>N</sub>	RS	RS
PROD	<b>X</b>	<b>%</b>	W
EXT. COLOUR	5 YR 7/6	10 R 5/6	2.5 YR 5/6
INT. COLOUR	5 YR 7/6	7.5 YR 8/4	5 YR 7/6
EXT. TREAT	SM	В	В
INT. TREAT	SM	SM	SM
EXT. SUR	SS	S	S
INT. SUR	SS	SS	SS
FIRING	æ	Ж	Н
MG	2a	88	8a
FABRIC	2	4	120
WARE	Storage	Storage	Storage
NR. (Type of SU)	J 770B.2 (deposit)	T1 7006.12 (deposit)	H 5225.114 (floor)
FIG.	-	8	3



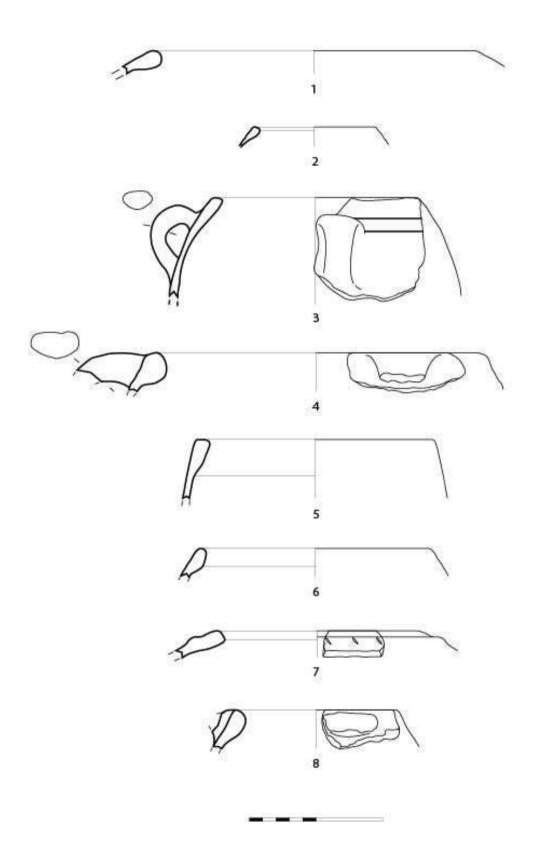
			ı	1	ı	
PHASE	H-T1 5	J-5	H-T1 9	T3-9	J-5	T4-4
TYPE	CP1	CP1	CP1	CP2a	CP2a	CP2a
DEC	ON	ON	ON	GR	ON	O <sub>N</sub>
PROD	W	W	<b>X</b>	<b>%</b>	<b>%</b>	<b>X</b>
EXT. COLOUR	5 YR 6/6	5 YR 4/6	5 YR 6/4	5 YR 7/4	7.5 YR 7/4	10 YR 5/6
INT. COLOUR	5 YR 6/6	5 YR 6/4	5 YR 6/4	5 YR 7/4	10 YR 7/4	10 YR 5/6
EXT. TREAT	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS
FIRING	н	Н	工	0	α.	т
MG	98	3	8a	7	88 8	5
FABRIC	137,1	<del>-</del>	135	7	18	122
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	H 1060.155 (fill)	J 2552.85 (deposit)	H 7429.29 (deposit)	T3 8221.2 (fill)	J 417.6 (floor)	T4 8288.56 (floor)
FIG.	<b>~</b>	2	က	4 ATF 47 -	CP1 CP2	9

PLATE 47 – CP1, CP2a



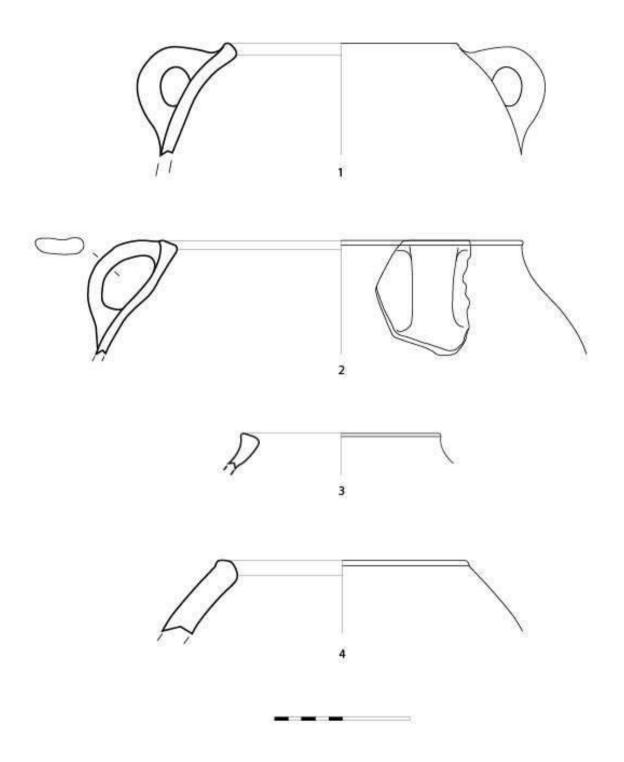
щ			2					
PHASE	J-1	<u>-</u> -	H-T1 5	T3-7	T3-9	J-5	J-5	H-T1 6a
TYPE	CP2b	CP2b	CP2b	CP2b	CP2b	CP2b	CP2b	CP2b
DEC	ON	O <sub>Z</sub>	_	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	R+IM	O <sub>N</sub>
PROD	Μ	W	M	M	M	M	M	>
EXT. COLOUR	7.5 YR 8/3	7.5 YR 8/3	2.5 YR 7/6	5 YR 5/4	7.5 YR 2.5/1	2.5 YR 4/1	10 YR 6/3	5 YR 5/1
INT. COLOUR	7.5 YR 8/4	7.5 YR 8/4	2.5 YR 7/8	5 YR 5/4	2.5 YR 4/1	2.5 YR 4/1	10 YR 6/3	5 YR 5/1
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	Ι	工	工	工	I	Q	Q	I
Ø Ø	8a	8a	88	<u>6</u>	<u>6</u>	8a	2	8b
FABRIC	6	6	120	129	129	120,2	122	1,1
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	J 2444.33 (floor)	J 4049.1 (installation)	H 3516.5 (fill)	T3 8128.6 (floor)	T3 8425.5 (fill)	J 175.90 (deposit)	J 175.95 (deposit)	T1 7232.46 (deposit)
FIG.	~	7	က	4	ა 8 – CP2h	9	7	ω

PLATE 48 - CP2b



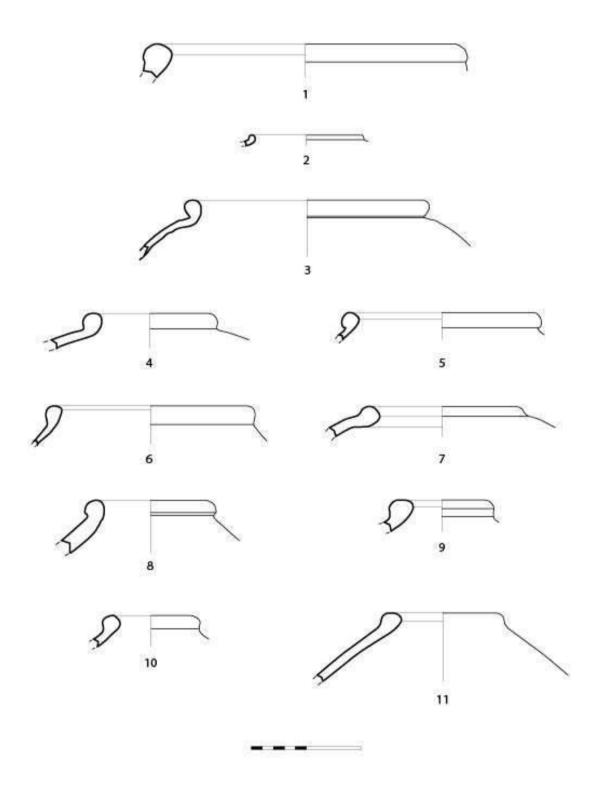
		•	1	T
PHASE	1-J	T3-9	T3-12	K-3
TYPE	СРЗ	СРЗ	CP3	СРЗ
DEC	NO	NO	O <sub>N</sub>	NO
PROD	<b>X</b>	W	M	W
EXT. COLOUR	2.5 YR 5/4	2.5 YR 5/6	5 YR 6/4	5 YR 6/4
INT. COLOUR	2.5 YR 5/4	2.5 YR 5/6	5 YR 6/4	5 YR 6/4
EXT. TREAT	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM
EXT.	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS
FIRING	I	0	ď	Ι
MG	10			2a
FABRIC	7	20,1	142	2
WARE	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	J 42.28 (deposit)	T3 8425.9 (fill)	T3 8212.38 (floor)	K 21.21 (wall)
FIG.	_	2	3	4

PLATE 49 – CP3



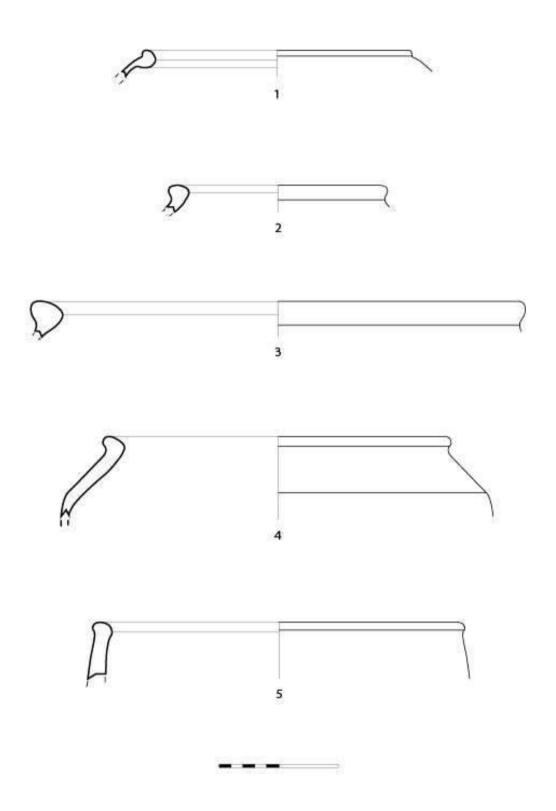
PHASE	1-T	1-1	H-T1 6a	J-5	H-T1 6a	1 9	K-3	K-3	X-6	8- 8-	K-9
PH/	<u>ل</u>	,	± 9	ب	± 9	H-T1	<u>×</u>	<u>×</u>	×	天	文
TYPE	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4
DEC	ON	O <sub>N</sub>	O <sub>N</sub>	ON	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>
PROD	M	M	M	M	M	M	M	M	M	<b>%</b>	*
EXT. COLOUR	7.5 YR 7/6	2.5 YR 6/8	2.5 YR 5/4	2.5 YR 7/6	10 R 5/6	5 YR 6/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 8/6	7.5 YR 7/8	7.5 YR 7/6
INT. COLOUR	7.5 YR 7/6	5 YR 6/6	2.5 YR 5/4	2.5 YR 6/8	10 R 5/6	5 YR 6/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 8/6	7.5 YR 7/8	7.5 YR 8/6
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	エ	エ	エ	エ	エ	エ	ď	エ	ď	エ	۵
MG	8a	5	3	1b		5	2a	8b	8a	8a	8b
FABRIC	18	126	140	127	20,1	126	2	5	130	12	111
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	J 85.10 (deposit)	J 4051.32 (deposit)	H 5281.140 (deposit)	J 717A.4 (floor)	T1 7232.23b (deposit)	H 7429.7 (deposit)	K 474.10 (fill)	K 480.6 (fill)	K 332.13 (floor)	K 725.13 (floor)	K 1096.1 (deposit)
FIG.	1	2	ဇ	4	ى PI ATF 5	9	2	8	6	10	11

PLATE 50 – CP4



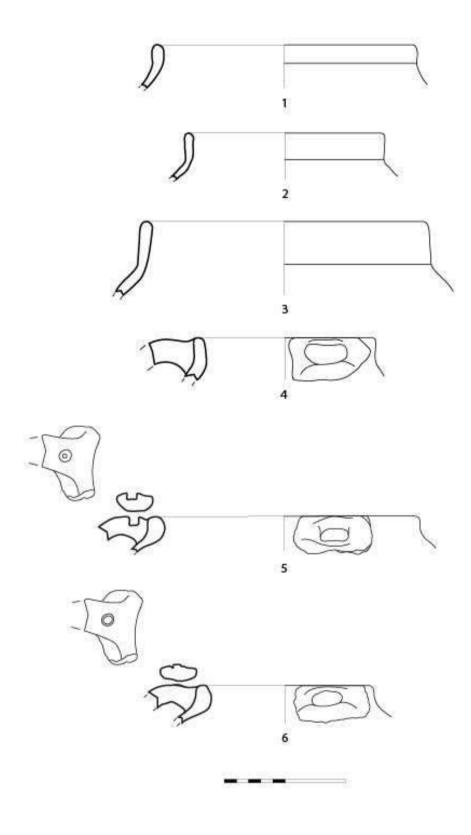
	1	1	r	T	1
PHASE	-5-L	H-T1 6a	T3-11	H NORTH 16	K-6
TYPE	CP5	CP5	CP5	CP5	CP5
DEC	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	ON
PROD TECHN	<b>X</b>	W	W	W	W
EXT. COLOUR	7.5 YR 7/6	5 YR 5/4	5 YR 5/4	10 R 5/6	5 YR 6/8
INT. COLOUR	7.5 YR 7/6	5 YR 3/4	5 YR 5/4	10 R 5/6	5 YR 6/8
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	æ	т	т	т	Н
MG	<u>1</u>			10	5
FABRIC	129	142	20,1	7	126
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	J 253.200 (deposit)	H 2742.4 (wall)	T3 8429.2 (deposit)	H 8414.1 (floor)	K 537.10 (floor)
FIG.	~	7	က	PI ATE #	် 51 – CP5

PLATE 51 – CP5



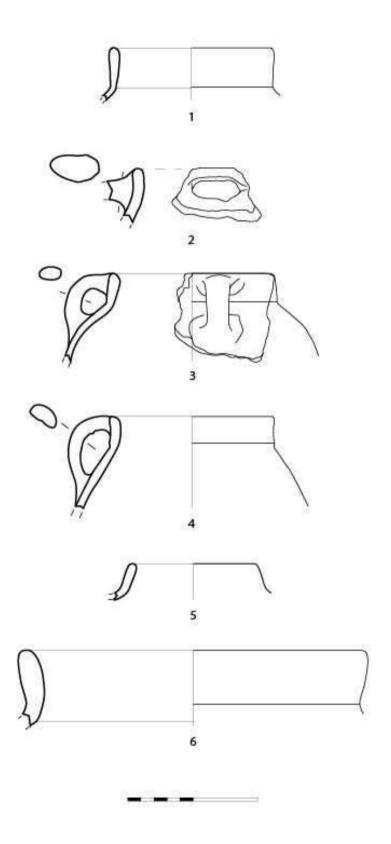
	1	1	1	1	T	, ,
PHASE	T3-5	H-T1 5	J-5	J-5	H-T1 6a	H-T1 6a
TYPE	CP6	CP6	CP6	CP6	CP6	CP6
DEC	ON	ON	ON	ON	PM	PM
PROD	<b>X</b>	W	M	W	W	W
EXT. COLOUR	5 YR 5/4	2.5 YR 6/6	5 YR 6/4	5 YR 6/6	5 YR 7/4	5 YR 7/4
INT. COLOUR	10 YR 7/2	2.5 YR 6/6	2.5 YR 5/8	2.5 YR 6/4	5 YR 7/4	5 YR 7/4
EXT. TREAT	SM	SM	В	SM	SM	SM
INT. TREAT	SM	SM	В	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS
FIRING	т	0	æ	工	œ.	Я
MG		10	8a	8a	8a	8a
FABRIC	20,1	2	120	124	120	120
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	T3 7986.15 (floor)	H 1060.17	J 509.128 (fill)	J 717A.1.2 (floor)	T1 7535.12 (deposit)	T1 7535.13 (deposit)
FIG.	~	7	ю	4	ιο 52 CD6	9

PLATE 52 – CP6



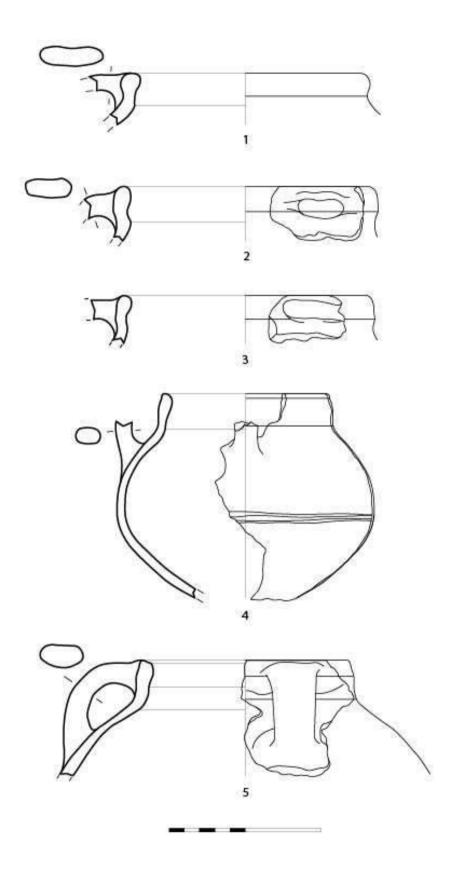
	1	1	1	1	1	1
PHASE	H-T1 6a	T2-7	H-T1 10	9-L	K-6	K-6
TYPE	CP6	CP6	CP6	CP6	CP6	CP6
DEC	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>N</sub>
PROD	M	M	W	W	W	W
EXT. COLOUR	0 R 5/6	10 R 5/6	10 YR 8/3	7.5 YR 7/6	2.5 YR 7/8	5 YR 6/6
INT. COLOUR	10 R 5/6	10 R 5/6	10 YR 8/3	7.5 YR 7/6	2.5 YR 7/8	5 YR 6/6
EXT. TREAT	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS
FIRING	π	工	工	工	工	Я
MG	88		8a	8a		8b
FABRIC	1,4	20,1	12	18	119	137,1
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	T1 7341.3 (installation)	T2 8057.33 (deposit)	H 7155.21 (fill)	J 281.18 (floor)	K 331.32 (deposit)	K 712.28
FIG.	~	2	ю	PI ATE !	ى 33 – CP6	9

PLATE 53 – CP6



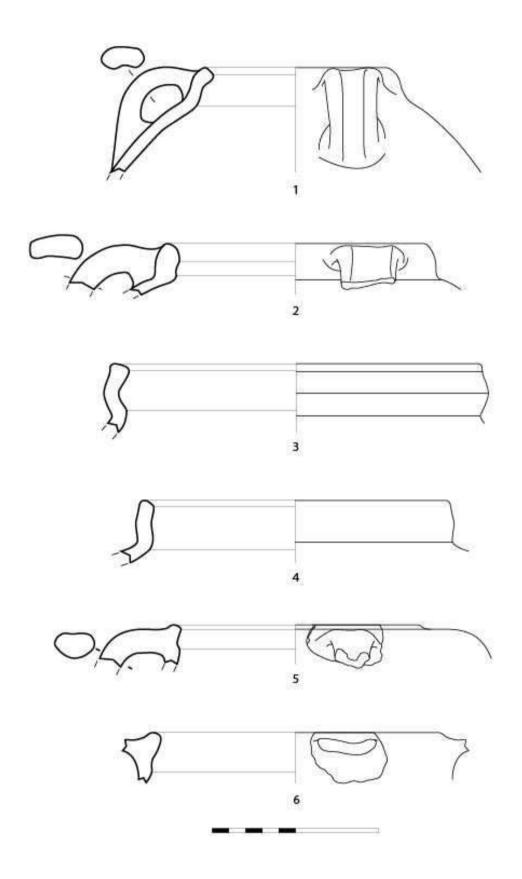
	T	ı	ı	ı	1 -
PHASE	<del>1</del>	T3-5	T3-9	H-T1 6a	H-T1 6a
TYPE	CP7	CP7	CP7	CP7	CP7
DEC	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	ON
PROD TECHN	M	M	M	M	W
EXT. COLOUR	2.5 YR 7/6	2.5 YR 5/6	10 R 5/6	5 YR 7/6	5 YR 7/6
INT. COLOUR	2.5 YR 7/4	2.5 YR 5/6	10 YR 5/1	5 YR 7/6	5 YR 7/6
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	Ι	æ	0	Q	Н
MG	8a		2a	8a	
FABRIC	1,4	20,1	128	120	5,1
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	J 2444.46 (floor)	T3 7986.9b (floor)	T3 8176.4 (floor)	H 3656.705 (deposit)	T1 7529.23 (deposit)
FIG.	~	7	က	PI ATE #	က 54 – CP7

PLATE 54 – CP7



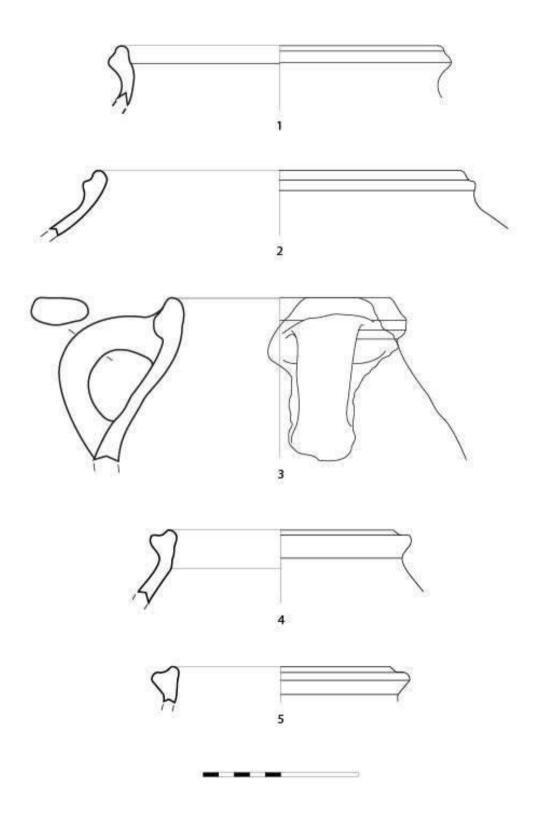
PHASE	T3-1 (2010)	T3-1 (2010)	H-T1	H-T1	<del>,</del> 6-	<del>х</del> 8
TYPE	CP7	CP7	CP7	CP7	CP7	CP7
DEC	O <sub>N</sub>	O <sub>N</sub>	Q Z	Q Z	O <sub>N</sub>	O <sub>N</sub>
PROD	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
EXT. COLOUR	5 YR 7/6	10 R 5/6	2.5 YR 5/6	2.5 YR 6/4	2.5 YR 5/8	2.5 YR 7/8
INT. COLOUR	5 YR 7/6	2.5 YR 7/1	2.5 YR 5/6	QN	2.5 YR 5/8	2.5 YR 7/8
EXT. TREAT	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS
SUR	SS	SS	SS	SS	SS	SS
FIRING	0	工	ď	I	æ	т
MG	8a		8a		င	8a
FABRIC	120	20,2	120	Q	22	136
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	T3 10079.26 (fill)	T3 10079.19 (fill)	H 6559.16 (fill)	H 6559.76 (fill)	K 422.2 (floor)	K 51.21 (deposit)
FIG.	~	7	ю	4	က 55 – CP7	9

PLATE 55 – CP7



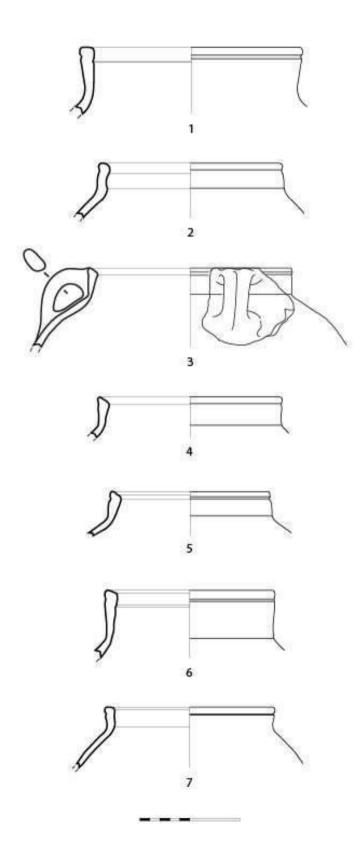
	1				
PHASE	H-T1 6a	H-T1 6a	H-T1 6a	T3-12	T3-12
TYPE	CP8	CP8	CP8	CP8	CP8
DEC	ON	ON	ON	ON	ON
PROD TECHN	<b>X</b>	M	M	M	W
EXT. COLOUR	10 R 5/6	7.5 YR 4/3	5 YR 5/1	5 YR 4/3	5 YR 6/4
INT. COLOUR	10 R 5/6	7.5 YR 4/3	5 YR 5/4	5 YR 4/4	5 YR 6/4
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	π	н	Ж	Ж	R
MG		4	<u>5</u>	10	1a
FABRIC	20,1	138	129	7	129
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	T1 7548.1 (installation)	T1 7548.26 (installation)	T1 7548.37 (installation)	T3 8212.45 (floor)	T3 8212.7 (floor)
FIG.	~	2	ဇ	DI ATE	د 20 – CP8

PLATE 56 – CP8



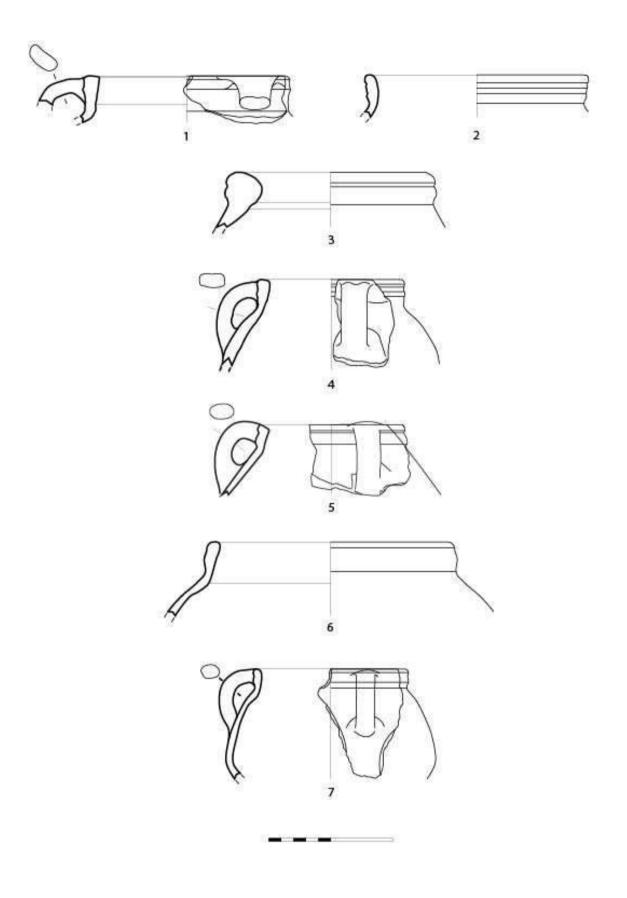
	ı	ı	ı	ı	ı	1	1
PHASE	T3-5	H-T1 5	H-T1 5	H-T1 7b	H-T1 8	H-T1 9	K-3
TYPE	CP9	CP9	CP9	CP9	CP9	CP9	CP9
DEC	O <sub>N</sub>	O <sub>N</sub>	O <sub>N</sub>	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>Z</sub>	O <sub>Z</sub>
PROD	>	*	*	*	<b>X</b>	<b>X</b>	<b>X</b>
EXT. COLOUR	5 YR 7/6	2.5 YR 6/6	2.5 YR 6/6	7.5 YR 8/6	2.5 YR 5/6	5 YR 7/6	2.5 YR 5/8
INT. COLOUR	5 YR 7/6	10 YR 7/2	2.5 YR 8/4	5 YR 8/2	2.5 YR 5/6	5 YR 7/6	5 YR 56
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS
INT.	SS	SS	SS	SS	SS	SS	SS
FIRING	Ι	Ι	Q	ď	I	I	Q
MG	8a	2a	5	ю		2a	8a
FABRIC	120	128	7	131	142	120,1	8
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	T3 7986.6b (floor)	H 1060.11	H 1060.31	T1 7888.4 (deposit)	H 6353.22 (deposit)	T1 8302.55 (fill)	K 485.11 (fill)
FIG.	~	7	ю	4	ம 57 – CP9	9	7

PLATE 57 - CP9



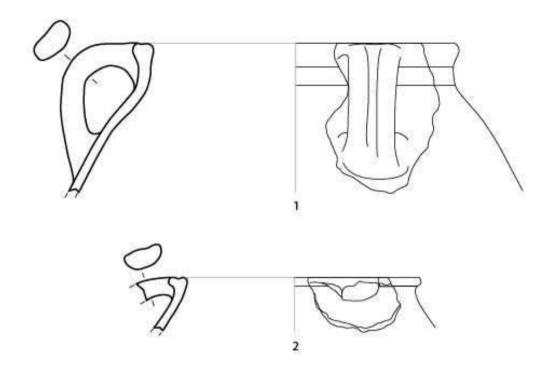
	1	1	1	r	T	1	, ,
PHASE	T3-1	T3-10	5-7	H-T1 9	H NORTH 15	H-T1 9	H-T1 9
TYPE	CP10	CP10	CP10	CP10	CP10	CP10	CP10
DEC	9	9	9	9	9	O <sub>Z</sub>	O <sub>N</sub>
PROD	*	*	*	*	<b>X</b>	<b>X</b>	W
EXT. COLOUR	2.5 YR 6/6	10 R 5/6	7.5 YR 8/4	2.5 YR 6/6	10 R 6/6	5 YR 5/6	10 YR 7/4
INT. COLOUR	2.5 YR 7/2	10 R 5/6	5 YR 5/1	2.5 YR 6/6	10 R 6/6	5 YR 5/6	10 YR 7/4
EXT. TREAT	SM	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS
FIRING	Ι	т	æ	æ	π	0	Н
MG	4	8a	8a	9	10		8a
FABRIC	20	137	6	137,2	2	142	125
WARE	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen	Kitchen
NR. (Type of SU)	T3 7986.1 (floor)	T3 8225.12 (floor)	J 175.2 (deposit)	H 6366.143 (fill)	H 8412.15 (deposit)	H 7039.43	T1 8563.22 (fill)
FIG.	~	7	က	PI ATE 5	ა 8 – CP10	9	2

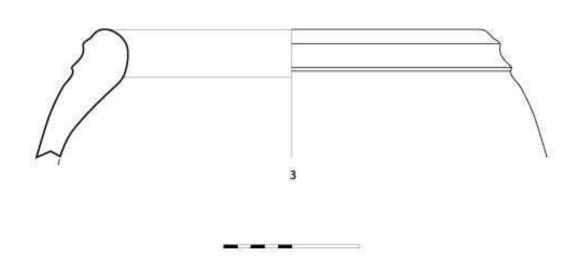
PLATE 58 – CP10



PHASE	K-3	K-6	H-T1 5
TYPE	CP11	CP11	P1
DEC	ON	ON	NO
PROD	W	Μ	W
EXT. COLOUR	10 R 6/8	10 YR 7/8	7.5 YR 7/4
INT. COLOUR	10 R 6/8	2.5 YR 6/1	7.5 YR 6/4
EXT. TREAT	SM	WS	SM
INT. TREAT	SM	WS	SM
EXT. SUR	SS	SS	SS
INT. SUR	SS	SS	SS
FIRING	۵	Ξ	I
MG	8a	8a	8a
FABRIC	107	4	18
WARE	Kitchen	Kitchen	Storage
NR. (Type of SU)	K 485.8 (fill)	K 331.3 (deposit)	H 1060.246 (fill)
FIG.	~	2	3

PLATE 59 – CP11, P1





ш			m			
PHASE	H-T1 69	H-T1 69	H-T18	H-T1 6a	J-5	H-T1 6a
TYPE	P1a	P1a	P1a	P1b	P1b	P1b
DEC	Ar In	Ar In	PM	Ar In	PM	PM
PROD	<b>X</b>	<b>%</b>	<b>M</b>	<b>X</b>	W	<b>X</b>
EXT. COLOUR	5 YR 7/6	5 YR 6/6	5 YR 7/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 7/4
INT. COLOUR	5 YR 7/6	5 YR 6/6	5 YR 7/6	5 YR 7/6	7.5 YR 7/6	2.5 YR 7/4
EXT. TREAT	SM	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS	SS
SUR	SS	SS	SS	SS	SS	SS
FIRING	æ	O	æ	Q	ď	æ
MG	8a	2a	8a	8b	8a	8a
FABRIC	120,2	2	120	<del></del>	120,2	120
WARE	Storage	Storage	Storage	Storage	Storage	Storage
NR. (Type of SU)	H 5482.701 (fill)	H 6325.702 (deposit)	H 5220.7 (fill)	H 5745.704 (deposit)	J 94.5 (deposit)	T1 7529.8 (deposit)
FIG.	~	7	ဇာ	DI ATE	ഹ 60 – P1	9

PLATE 60 – P1

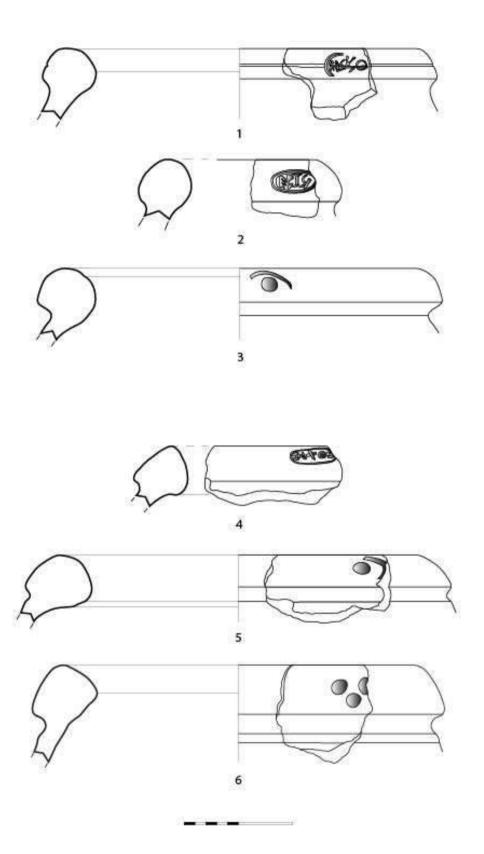
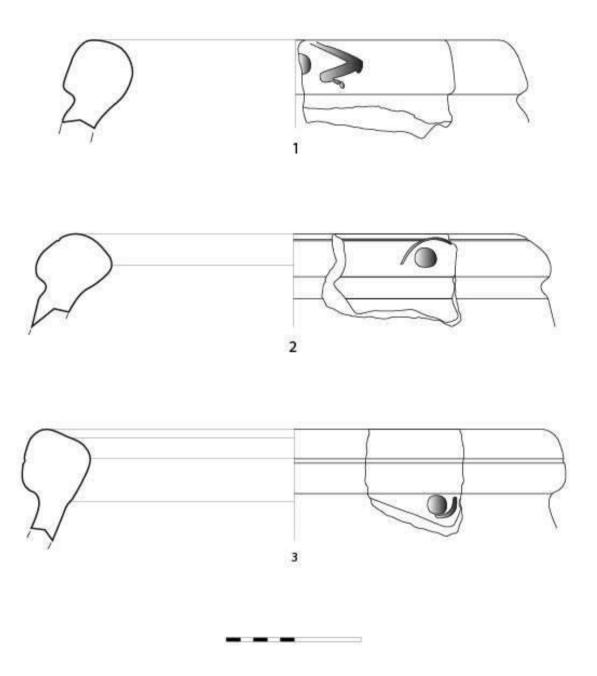
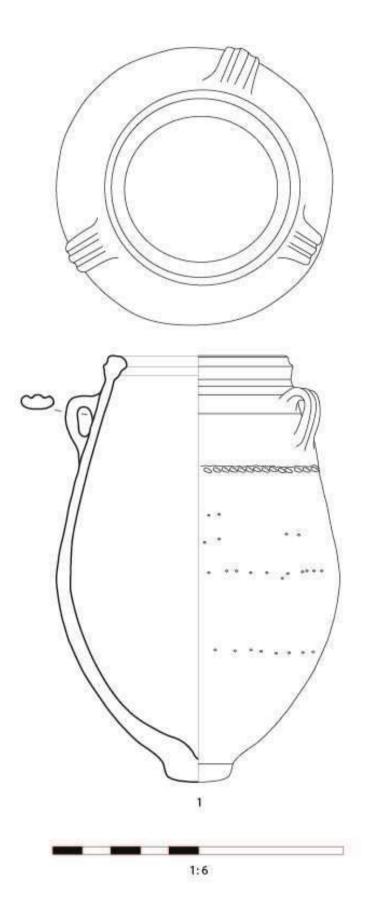


FIG.         NR. (Type of Sul)         WARE (Type of Sul)         FABRIC (Type of Sul)         INT.         EXT. (COLOUR ESUL)         INT. (COLOUR TECHIN Sul)         EXT. (COLOUR TECHIN Sul)         INT. (COLOUR TECHIN Sul)         FIG. (COLOUR TECHIN Sul)         INT. (COLOUR TECHIN Sul) <th></th> <th></th> <th></th> <th></th>				
NR. (Type of Sul)         WARE (Type of Sul)         FABRIC (Type of Sul)         INT. (Sul)         EXT. (CLOUR)         EXT. (CLOUR)         EXT. (CLOUR)         FECHIN (CLOUR)         PROD (DECHIN)           8057.703 (deposit)         Storage (Hill)         120,3         8a R SS S	PHASE	<b>7-</b> 2-7	H-T1 9	H-T1 9
NR. SUR	TYPE	P1b	P1b	P1b
NR. Table of Sul	DEC	PM	PM+ GR	PM+ GR
NR. Sult         WARE Sult         FABRIC Sult         MG         FIRING SUR         INT. SUR         EXT. TREAT TREAT TREAT TREAT TREAT TREAT TREAT TREAT TREAT TREAT TREAT TREAT TOLOUR         INT. SUR SUR SWA SWA SWA SWA (GHOSIL)           H 6463.103 (fill)         Storage (fill)         120,3         8a         R         SS         SS         SW SWA SWA SWA TOYR T/4         SW TOYR T/4	PROD	W	W	W
NR. SU)         WARE SU)         FABRIC SU)         MG         FIRING SUR SUR SUR SUR SUR SUR SUR SUR SUR SUR	EXT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/6
NR. Sul)         WARE Sul)         FABRIC Sul)         MG         FIRING SUR SUR SUR SUR SUR SUR SUR SUR SUR SUR	INT. COLOUR	5 YR 7/6	5 YR 7/6	10 YR 7/4
NR. SU)         WARE SU)         FABRIC SU 8057.703 (deposit)         MG         FIRING SUR 8a         INT. SUR 8B         EXT. SUR SUR SUR SUR SUR SUR SUR SUR SUR SUR	EXT. TREAT	WS	WS	SM
NR.         WARE SU)         FABRIC SU)         MG FIRING SUR SUR SUR SUR SUR SUR SUS 7.703 (deposit)         18         8a         R         SS           H G463.106 (fill)         H Storage (fill)         120,3         8a         R         SS           H Storage (fill)         120,3         8a         D         SS	INT. TREAT	WS	WS	SM
NR. VARE SU)         WARE SU)         FABRIC SU)         MG FIRING           T2 Storage (deposit)         18 8a R R R R R R R R R R R R R R R R R R	EXT. SUR	SS	SS	SS
NR.         WARE SU)         FABRIC MG           SU)         T2         Storage         18         8a           8057.703 (deposit)         Storage         120         8a           H (fill)         Storage         120,3         8a           H (fill)         Storage         120,3         8a	INT. SUR	SS	SS	SS
NR. MARE SU)         WARE SU)           T2 Storage (deposit)         18           H Storage (fill)         120           H Storage (fill)         120	FIRING	œ	œ	Q
(Type of Su)  T2 8057.703 (deposit) H Storage 6463.106 (fill) H Storage (fill) (fill)	MG	8a	8a	8a
(Type of SU)  T2 8057.703 (deposit)  H 6463.106 (fill)  H 6463.103 (fill)	FABRIC	18	120	120,3
	WARE	Storage		Storage
	NR. (Type of SU)	T2 8057.703 (deposit)	H 6463.106 (fill)	H 6463.103 (fill)
	FIG.	_		3

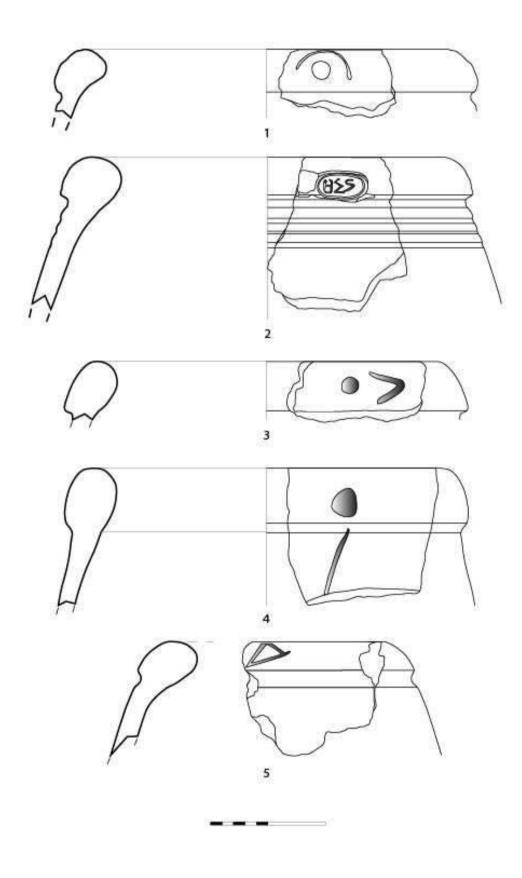


PHASE	T4-1
TYPE	P1c
DEC	M
PROD	Μ
EXT. COLOUR	7.5 YR 7/4 7.5 YR 7/4
INT. COLOUR	7.5 YR 7/4
EXT. TREAT	WS
INT. TREAT	SM
EXT.	SS
INT. SUR	SS
FIRING	Н
MG	8a
FABRIC	120,2
WARE	Storage
NR. (Type of SU)	T4 8254.701 (Jar in floor)
FIG.	<b>~</b>



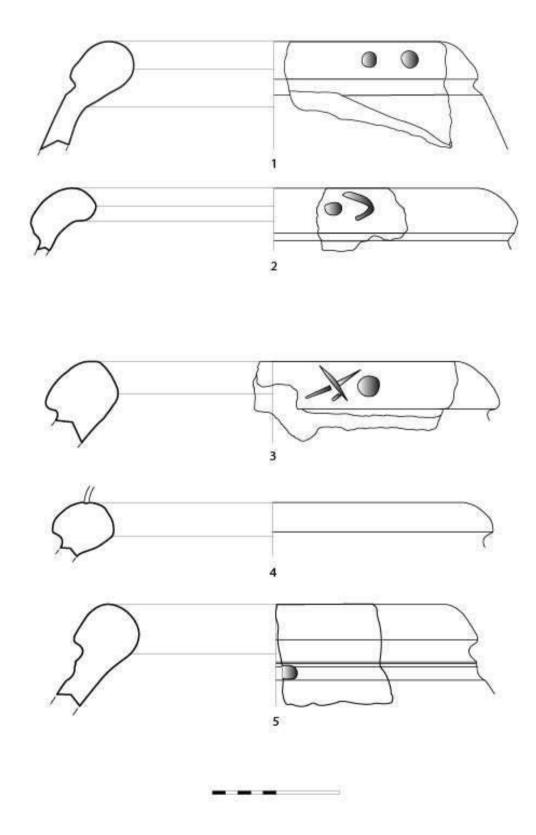
PHASE	H-T1 6a	H-T1 6a	H-T1 6a	J-5	5-L
ТУРЕ	P1c	P1c	P1c	P1c	P1c
DEC	Md	Ar In	Md	Md	PM
PROD	>	>	>	>	>
EXT. COLOUR	5 YR 5/1	5 YR 7/6	5 YR 7/4	7.5 YR 8/6	5 YR 7/4
INT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/4	7.5 YR 8/6	5 YR 7/4
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	Q <sub>N</sub>	Q	ď	I	工
MG	8a 8a	8a 8a	8a 8a	8a 8a	10
FABRIC	120	120,2	18	18	116
WARE	Storage	Storage	Storage	Storage	Storage
NR. (Type of SU)	H 2748.701 (wall)	H 2630.701 (installation)	T1 7535.18 (deposit)	J 253.23 (deposit)	J 2840.702 (fill)
FIG.	~	2	က	4	ις 63 D1

PLATE 63 – P1



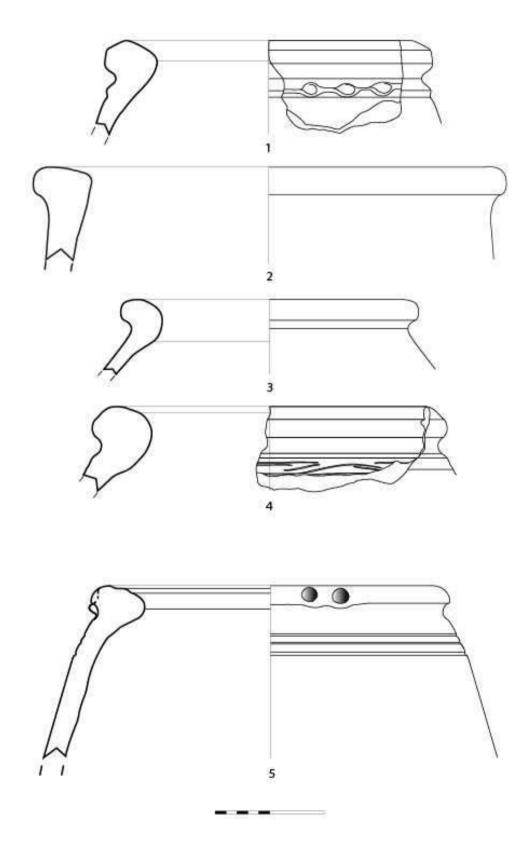
	I	I	I	I	I
PHASE	H-T1	H-T1	H-T1 6a	T2-7	H-T1 10
TYPE	P1c	P1c	P1d	P1d	P1d
DEC	Md	MA	M	ON	Md
PROD TECHN	*	*	*	*	M
EXT. COLOUR	5 YR 7/6	7.5 YR 7/4	2.5 YR 7/8	5 YR 7/4	5 YR 7/4
INT. COLOUR	5 YR 7/6	7.5 YR 7/4	2.5 YR 7/8	5 YR 7/4	5 YR 6/3
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	0	工	N	工	т
MG	88	88	8a	88	5
FABRIC	120,3	120	12	18	122
WARE	Storage	Storage	Storage	Storage	Storage
NR. (Type of SU)	H 7388.53 (deposit)	H 7156.52 (fill)	H 3329.701 (floor)	T2 8057.131 (deposit)	H 6644.107 (deposit)
FIG.	~	2	က	DI ATE	ശ 64 – P1

PLATE 64 – P1



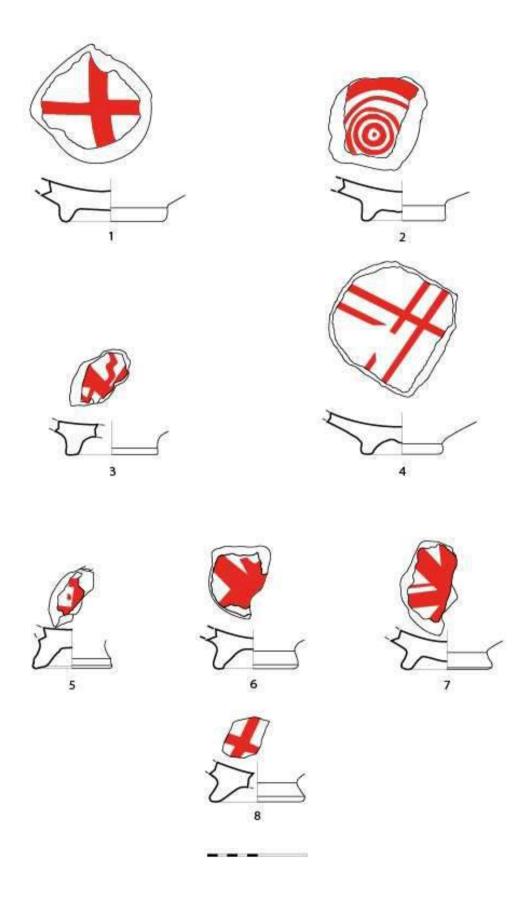
			,	,	
PHASE	5-7	H-T1 9	K-5	K-9	H-T1 6a
TYPE	P2	P2	P2	P2	P3
DEC	<del>7</del> <del>7</del>	O <sub>Z</sub>	O <sub>N</sub>	GR	PM + GR
PROD	×	M	M	×	W
EXT. COLOUR	7.5 YR 7/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 8/6	5 YR 7/6
INT. COLOUR	7.5 YR 7/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/6
EXT. TREAT	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	O	æ	Q	O	Н
MG	2a	8a	8a	8a	8a
FABRIC	123	4	12	120,2	120
WARE	Storage	Storage	Storage	Storage	Storage
NR. (Type of SU)	J 253.27 (deposit)	H 6668.7 (deposit)	K 714.5 (fill)	K 1103.1 (installation)	H 5225.101 (floor)
FIG.	~	7	ო	DI ATE 6	ى 5 _ P2 P3

PLATE 65 – P2, P3



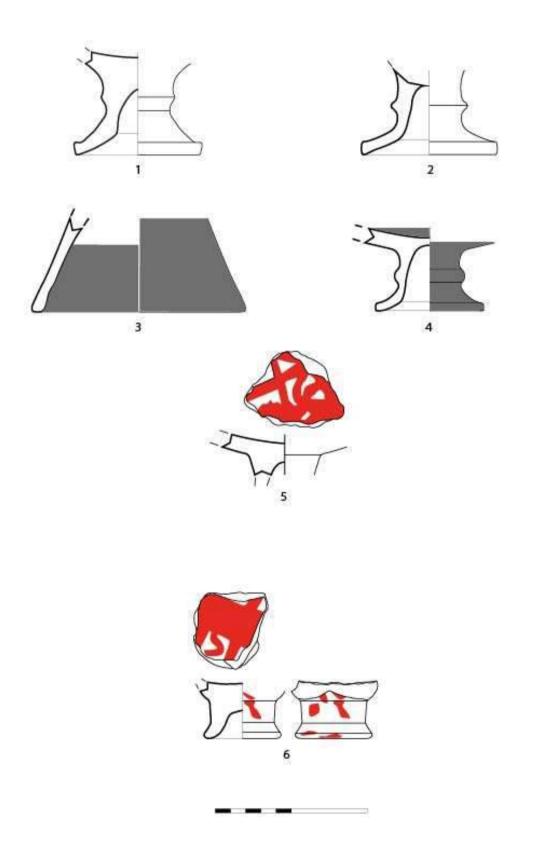
		I	1	<u> </u>	<u> </u>	I	П	П
PHASE	H-T1 9	H-T1	<del>Х</del> -А	K-6	J-5	H-T1 6b	H-T1	<del>7</del> -7
TYPE	BA1	BA1	BA1	BA1	BA2	BA2	BA2	BA2
DEC	PT	PT	PT	PT	PT	PT	PT	PT
PROD	W	W	W	W	W	W	W	M
EXT. COLOUR	5 YR 7/6	2.5 YR 7/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/6	7.5 YR 7/4	7.5 YR 7/6
INT. COLOUR	5 YR 7/6	2.5 YR 7/6	5 YR 7/6	7.5 YR 7/6	7.5 YR 7/6	5 YR 7/6	2.5 YR 6/6	7.5 YR 7/6
EXT. TREAT	SM	NS.	NS.	NS.	SS	SS	SM	SS
INT. TREAT	SM	SM	SM	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS	SS	SS	SS
INT.	SS	SS	SS	SS	SS	SS	SS	SS
FIRING	Я	ď	Ι	Ι	æ	Ι	工	ď
MG	8a	8a	8a	8a	2a	8a	8a	8a
FABRIC	6	120	120,2	120,2	2	136	136	120,3
WARE	Common	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 6366.102 (fill)	H 6411.50 (installation)	K 22.12 (floor)	K 537.21.5 (floor)	J 175.24 (deposit)	H 6474.136 (fill)	H 6559.24 (fill)	K 151.6 (deposit)
FIG.	-	2	м	→ PLATE 66	ιο 	9	7	ω

PLATE 66 – BA1, BA2



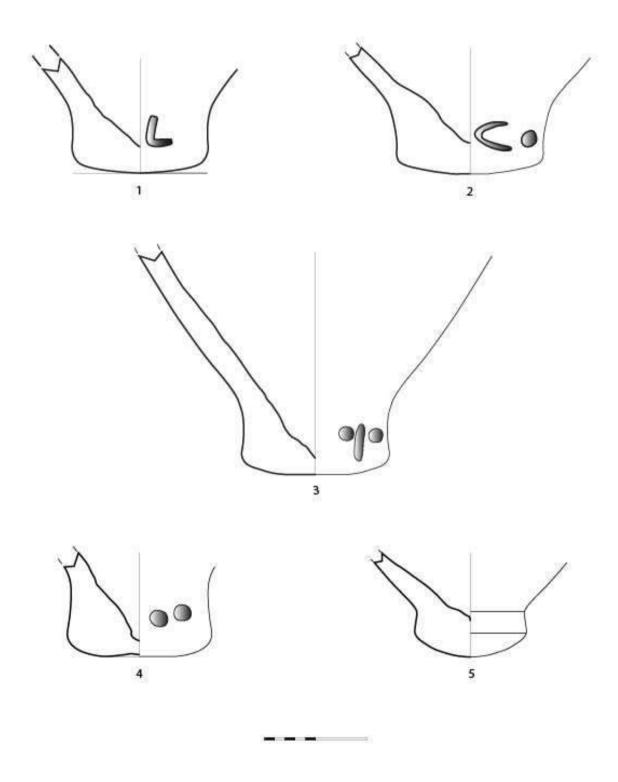
	1	T	T	1	T	
HASE	5-7	H-T1 9	H-T1 6a	H-T1 9	H-T1 6a	K-5
TYPE	ВАЗ	ВАЗ	ВАЗ	BA3	BA3	BA4
DEC	ON	ON	RS	RS	PT	PT
PROD	<b>X</b>	<b>X</b>	<b>X</b>	M	<b>X</b>	W
EXT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/6	2.5 YR 6/8	5 YR 7/6	5 YR 7/6
INT. COLOUR	5 YR 7/6	Q	2.5 YR 6/6	2.5 YR 6/8	5 YR 6/6	5 YR 7/6
EXT. TREAT	SM	SM	В	В	SM	SM
INT. TREAT	SM	Z	В	В	SM	SM
EXT.	SS	SS	Ø	Ø	SS	SS
SUR.	SS	F	Ø	Ø	SS	SS
FIRING	ď	I	I	Ι	I	Я
MG	8a	8a	10	8a	8a	8a
FABRIC	73	120	4,2	1,4	120,3	120,2
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	J 880.2 (fill)	H 7098-23	H 5281.136 (deposit)	H 6463.96	T1 7668.26 (deposit)	K 19.66 (deposit)
FIG.	~	2	က	4 PI ATE 67	ις - ΒΔ3 ΒΔ4	9

PLATE 67 – BA3, BA4



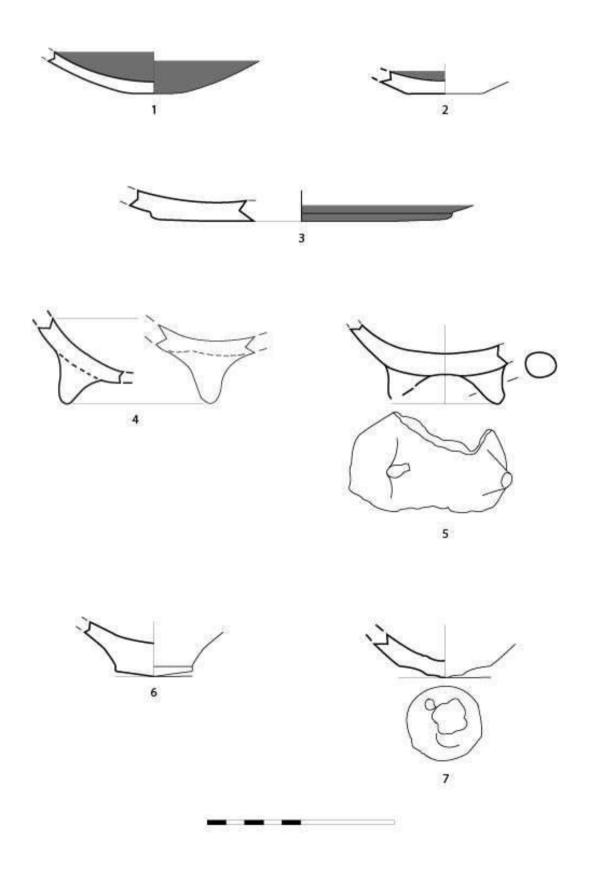
	1		Γ	ı	<u> </u>
PHASE	H-T1 6a	H-T1 6a	H-T1 6a	T4-5	K-3
TYPE	BA5	BA5	BA5	BA5	BA5
DEC	₽ M	PM	PM	9	O <sub>N</sub>
PROD TECHN	<b>%</b>	M	M	<b>%</b>	W
EXT. COLOUR	5 YR 7/6	5 YR 7/4	5 YR 7/6	10 YR 8/6	7.5 YR 7/6
INT. COLOUR	5 YR 7/6	5 YR 7/4	5 YR 7/6	10 YR 8/2	10 YR 8/4
EXT.	SM	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM
EXT.	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	π	н	н	æ	R
MG	88	88	88	8a	2a
FABRIC	120	120	120,3	120,2	123
WARE	Storage	Storage	Storage	Storage	Storage
NR. (Type of SU)	H 5281.107 (deposit)	T1 7336.114 (deposit)	T1 7661.11 (deposit)	T4 8468.25 (deposit)	K 485.13 (fill)
FIG.	~	2	ဇ	DI ATE 6	ς 38 – ΒΔ5

PLATE 68 – BA5



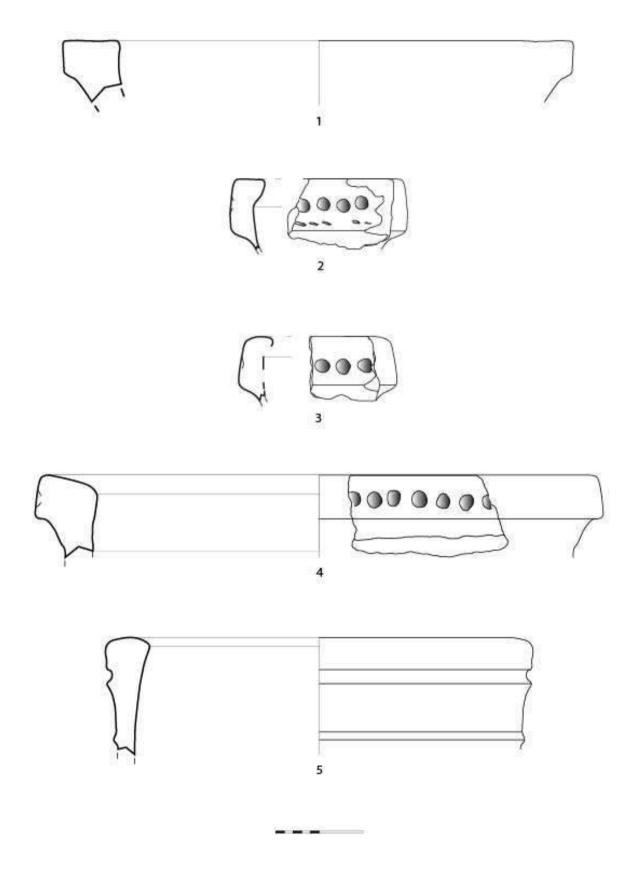
PHASE	H.T19	H.T1 10	H.T1 10	H.T1 10	H.T1 10	T3-8	H.T18
TYPE	BA6	BA7	BA8	BA9	BA9	BA10	BA10
DEC	RS	RS	RS	ON	ON	ON	ON
PROD	×	M	M	M	W	W	W
EXT. COLOUR	2.5 YR 5/6	7.5 YR 7/4	2.5 YR 5/6	5 YR 7/4	5 YR 7/6	10 YR 8/2	10 YR 7/3
INT. COLOUR	2.5 YR 5/6	7.5 YR 6/6	5 YR 7/6	5 YR 7/4	5 YR 7/6	10 YR 8/2	10 YR 7/3
EXT. TREAT	Ф	Ф	Ф	SM	SM	SM	SM
INT. TREAT	В	SM	SM	SM	SM	SM	SM
EXT.	Ø	Ø	Ø	SS	SS	SS	SS
INT. SUR	S	SS	SS	SS	SS	SS	SS
FIRING	エ	エ	エ	エ	0	エ	エ
MG	2a	88	е	88	8a		8a
FABRIC	120,1	120,3	112	120,3	120	119	130
WARE	Common	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	T1 8302.75	H 6411.116 (installation)	H 7083.91 (deposit)	H 7094.7 (deposit)	H 7204.16 (deposit)	T3 8134.3 (floor)	T1 8023.26 (deposit)
FIG.	~	2	m DI ATE 6	4 4	ις Λ7 DΛ9 D	ω	2

PLATE 69 – BA6, BA7, BA8, BA9, BA10



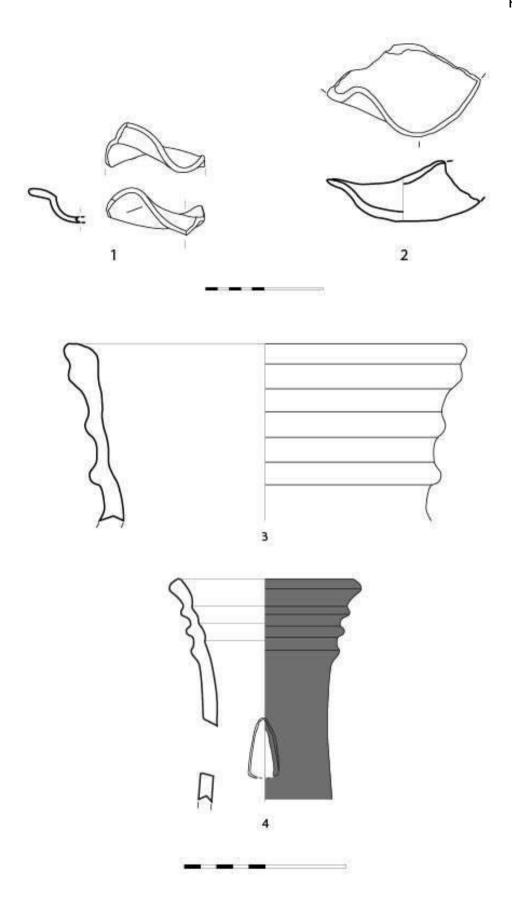
	1	1	1	1	,
PHASE	T3-11	H-T1 9	H-T1 9	H-T1 10	T3-12
TYPE	BASIN	BASIN	BASIN	BASIN	BASIN
DEC	ON	FP	FP	FP	ON
PROD	>	>	>	*	W
EXT. COLOUR	5 YR 7/6	5 YR 7/6	5 YR 7/6	5 YR 7/4	10 YR 7/3
INT. COLOUR	10 YR 7/3	2.5 YR 5/1	2.5 YR 5/1	5 YR 7/4	10 YR 7/3
EXT. TREAT	SM	SM	SM	MS	SM
INT. TREAT	SM	SM	SM	WS	SM
EXT. SUR	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS
FIRING	π	Q	O	Я	Н
MG	2a	88	88		2a
FABRIC	11.2	1,,	1,4	25	11,2
WARE	Storage	Storage	Storage	Storage	Storage
NR. (Type of SU)	T3 8439.15 (fill)	T1 8366.12 (fill)	T1 8366.13 (fill)	T1 8313.21 (fill)	T3 8212.81 (floor)
FIG.	~	2	ဇ	4 DI ATE 7	ري Basins

PLATE 70 - Basins



	1	1	1	1
PHASE	H-T1 6b	J-5	H-T1 6a	H-T1 6a
TYPE	LAMP	LAMP	INCEN SE B.	INCEN SE B.
DEC	O <sub>N</sub>	ON	ON	RS
PROD	<b>*</b>	M	<b>M</b>	W
EXT. COLOUR	5 YR 7/6	7.5 YR 7/6	10 R 5/6	2.5 YR 5/6
INT. COLOUR	5 YR 7/6	7.5 YR 7/6	5 YR 7/6	5 YR 7/8
EXT. TREAT	SM	SM	В	В
INT. TREAT	SM	SM	SM	SM
EXT. SUR	SS	SS	SS	S
INT. SUR	SS	SS	SS	SS
FIRING	0	ď	Q	Я
MG	2a	98	8a	8a
FABRIC	123	5	12	120,3
WARE	Common	Common	Common	Common
NR. (Type of SU)	H 6474.80 (fill)	J 175.8 (deposit)	H 1913.3 (floor)	T1 7246.701 (installation)
FIG.	~	2	m DI ATE	4

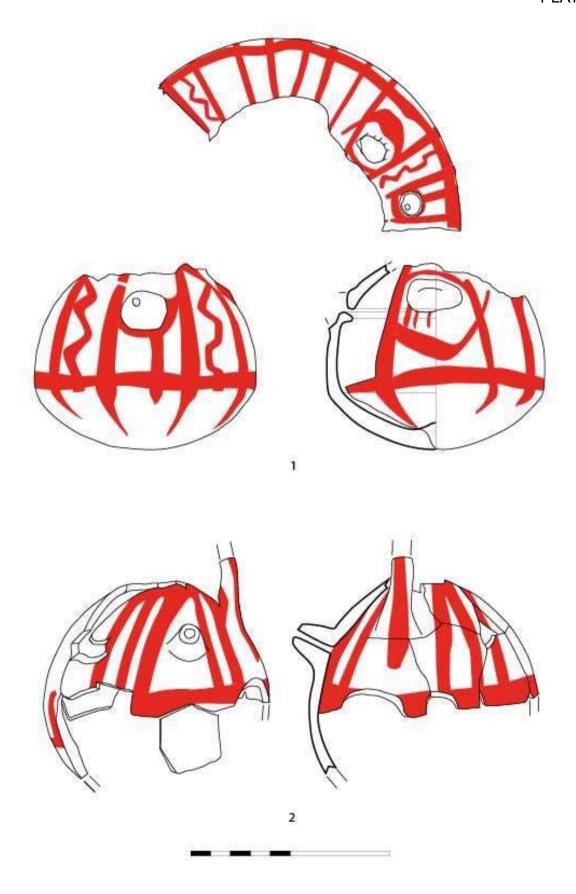
PLATE 71 – Lamps, Incense Burners



PHASE	H-T1 6a	H-T1 10
TYPE	JUGLET	JUGLET
DEC	PT	PT
PROD TECHN	Μ	Μ
EXT. COLOUR	5 YR 6/8	5 YR 6/8
INT. COLOUR	5 YR 6/8	5 YR 5/6
EXT. TREAT	MS	MS
INT. TREAT	WS	LN
EXT. SUR	SS	SS
INT. SUR	SS	SS
FIRING	н	Н
MG	8a	5
FABRIC MG	120	117
WARE	Common	Common
NR. (Type of SU)	H 5225.714 (floor)	H 7083.701 (deposit)
FIG.	~	2

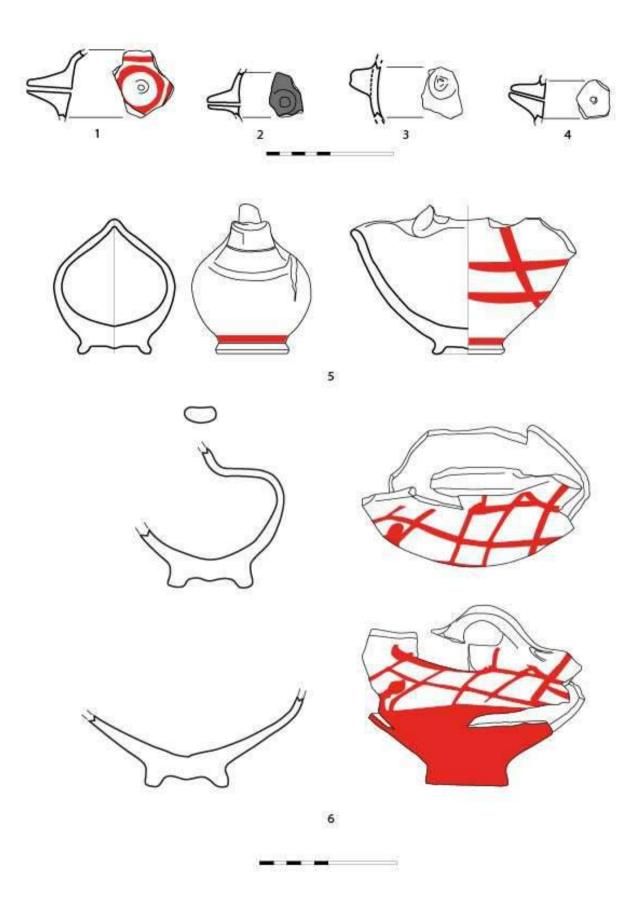
PLATE 72 – "Teapot" type Juglets

## PLATE 72

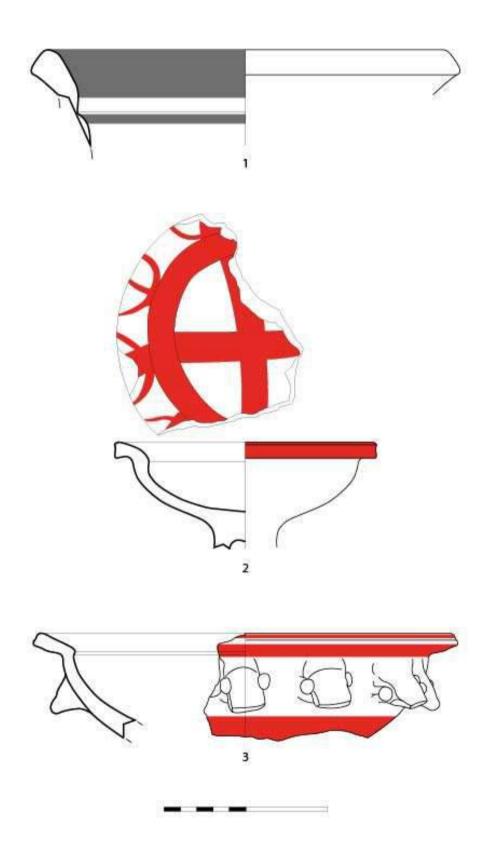


	T	Τ	I	I	T	1
PHASE	H-T1 5	H-T1 6a	H-T1 9	H-T1 9	H-T1 6a	H-T1 9
TYPE	SPOUT	SPOUT	SPOUT	SPOUT	ZOOM.	ZOOM.
DEC	PT	RS	O <sub>N</sub>	O <sub>N</sub>	PT	PT
PROD	ΣH	ΣH	ΣH	Σ I	>	<b>%</b>
EXT. COLOUR	5 YR 7/2	10 R 4/8	5 YR 7/6	2.5 YR 7/6	5 YR 7/6	2.5 YR 7/6
INT. COLOUR	5 YR 7/4	7.5 YR 6/6	5 YR 7/6	10 YR 7/4	5 YR 7/6	5 YR 5/2
EXT. TREAT	SM	В	SM	SM	SM	SM
INT. TREAT	SM	SM	SM	SM	SM	SM
EXT.	SS	Ø	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS
FIRING	D	т	工	工	т	R
MG	8a	6	2a	8a	8a	8a
FABRIC	107	105	3,1	120	120	137
WARE	Common	Common	Common	Common	Common	Common
NR. (Type of SU)	H 7066.17 (fill)	H 2099.4 (deposit)	H 7084.3 (fill)	H 8563.18 (fill)	H 5281.712 (deposit)	T1 8302.708 (fill)
FIG.	-	2	ю	4	2	9

PLATE 73 – Spouts, Zoomorphic Vessels

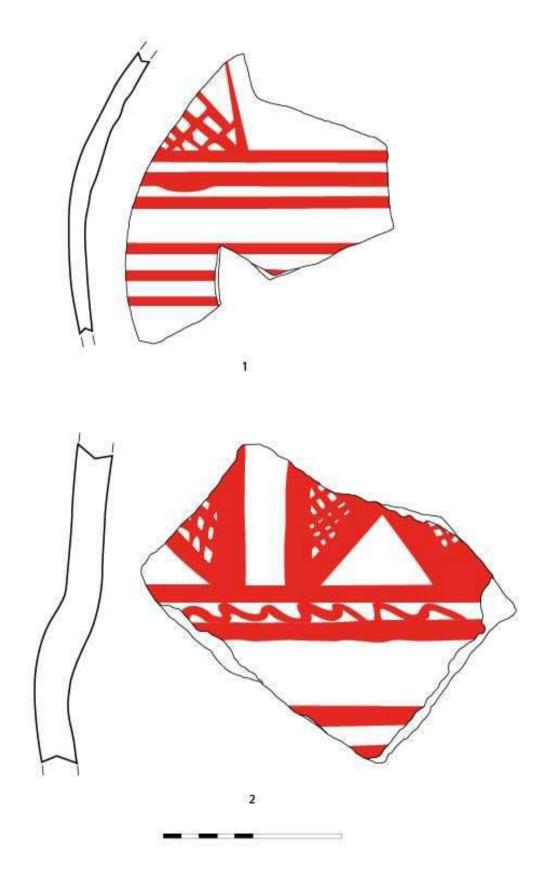


PHASE	H-T1 6a	H-T1 6a	H-T18
TYPE	KR?	BOWL	BOWL
DEC	RS	PT	PT
PROD TECHN	*	M	M
EXT. COLOUR	5 YR 7/6	7.6 YR 8(3	5 YR 7/6
INT. COLOUR	2.5 YR 5/6	7.5 YR 8/6	5 YR 7/6
EXT. TREAT	SM	SM	SM
INT. TREAT	В	SM	SM
EXT. SUR	SS	SS	SS
INT. SUR	S	SS	SS
FIRING	æ	ND	ND
MG	88	8a	8a
FABRIC	120,3	120	120
WARE	Common	Common	Common
NR. (Type of SU)	T1 7548.57 (installation)	H 3195.706 (fill)	H 6353.701 (deposit)
FIG.	-	2	3



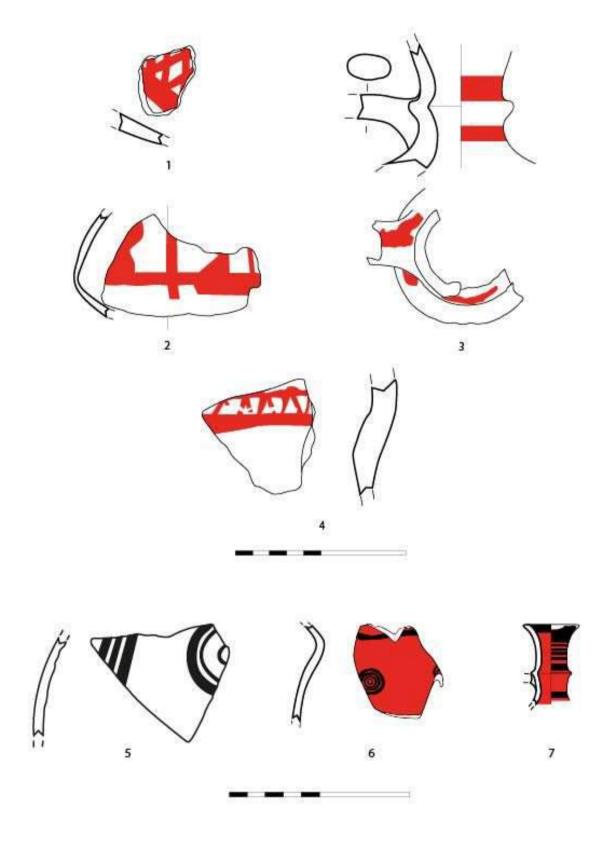
PHASE	K-3	K-3
TYPE	DECP	DECP
DEC	PT	PT
PROD TECHN	M	MH+M
EXT. COLOUR	2.5 YR 8/3 7.5 YR 7/6	7.5 YR 6/6 7.5 YR 6/6 W+HM
INT. COLOUR	2.5 YR 8/3	7.5 YR 6/6
EXT. TREAT	SM	В
INT. TREAT	SM	SM
EXT. SUR	SS	SS
INT. SUR	SS	SS
FIRING	т	т
MG	8a	8a
FABRIC	120,1	12
WARE	Common	Common
NR. (Type of SU)	K 480.20 Common (fill)	K 480.22 Common (fill)
FIG.	_	2

PLATE 75 - Painted Decorations



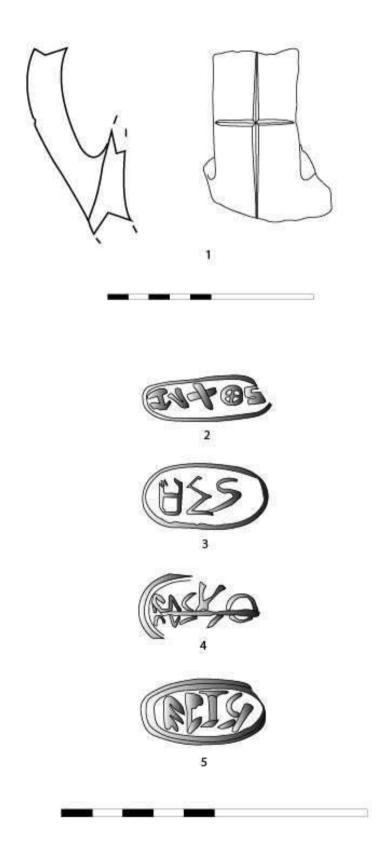
PHASE	<del>,</del> 구	<del>7</del> ъ	<del>7</del> -5-	자 6-	H-T1 6b	H-T1 8	H NORTH 15
TYPE	DECP	DECP	DECP	DECP	CYPR.	CYPR.	CYPR.
DEC	PT	PT	PT	PT	PT	PT	F
PROD	M	<b>M</b>	×	M	<b>X</b>	<b>X</b>	>
EXT. COLOUR	7.5 YR 6/4	2.5 YR 7/8	7.5 YR 7/6	10 YR 7/6	2.5 Y 8/3	5 YR 5/6	5 YR 5/6
INT. COLOUR	7.5 YR 7/6	5 YR 6/6	7.5 YR 7/8	7.5 YR 7/6	7.5 YR 8/1	10 R 6/6	10 R 6/6
EXT. TREAT	SM	SM	SM	SM	SM	В	SM
INT. TREAT	SM	SM	SM	SM	SM	В	SM
EXT.	SS	SS	SS	SS	SS	SS	SS
INT. SUR	SS	SS	SS	SS	SS	SS	SS
FIRING	O	O	工	工	工	Q N	ND
MG		8a	8a	8a	6	6	6
FABRIC	119	18	120	120,2	101	105	105
WARE	Common	Common	Common	Common	Fine	Common	Fine
NR. (Type of SU)	K 228.11 (floor)	K 48.1b (wall)	K 791.9 (fill)	K 331.2 (deposit)	H 6474.105 (fill)	T1 7711.707 (floor)	H 8412.701 (deposit)
FIG.	~	N PI	ო ATE 76 – I	4	ιo	σ Synriot nott	7

PLATE 76 – Painted Decorations, Cypriot pottery



PHASE	H-T1 6a	H-T1 6a	H-T1 6a	H-T1 6b	H-T1 6b
		ı "	ı "	ı "	I T
TYPE	Handle	PLATE 60:4	PLATE 63:2	PLATE 60:1	PLATE 60:2
DEC	_				
PROD	Σ I				
EXT. COLOUR	5 YR 7/6				
INT. COLOUR	5 YR 7/6				
EXT. TREAT	SM				
INT. TREAT	SM				
EXT. SUR	SS				
SUR	SS				
FIRING	۵				
MG	<del>1</del>				
FABRIC	4,2				
WARE	Common				
NR. (Type of SU)	H 1798.1 (deposit)	H 5745.704 (deposit)	H 2630.701 (installation)	H 5482.701 (fill)	H 6325.702 (deposit)
FIG.	-	2	ဇ	4	5

PLATE 77 – Incised handle, Aramaic inscriptions



## Estratto per riassunto della tesi di dottorato

L'estratto (max. 1000 battute) deve essere redatto sia in lingua italiana che in lingua inglese e nella lingua straniera eventualmente indicata dal Collegio dei docenti. L'estratto va firmato e rilegato come ultimo foglio della tesi.

Studente: Laura Zanazzo matricola: 956414

quando la Siria fu sotto il controllo dell'Impero Neo-Assiro.

Dottorato: Scienze dell'Antichità

Ciclo: 34°

Titolo della tesi<sup>1</sup> : La produzione ceramica dell'età dei Ferro II e III di Mishrifeh nel contesto regionale del Levante settentrionale

## Abstract:

ITA. Mishrifeh, antica Qatna, è un sito della Siria centro-occidentale, localizzato nella valle del medio Oronte. Dal 1999 al 2010, Mishrifeh è stato oggetto di scavi da parte di una missione congiunta siro-italo-tedesca. La missione italiana ha scavato in varie aree nella città alta (H, T) e bassa (K), portando alla luce una lunga stratificazione dal Bronzo Antico III al Ferro III. L'occupazione del Ferro più precisamente va dal tardo Ferro I (Ferro Ic, fine X secolo a.C.) al Ferro III (VII secolo a.C.). Il periodo di maggior sviluppo è il Ferro II (IX-VIII secolo a.C.), epoca in cui Mishrifeh era sotto il controllo di Hamath, e la varietà dei contesti rinvenuti (produttivi, domestici, funerari) dimostra la vivacità soprattutto economica del sito in quel periodo. Nonostante alcuni studi preliminari, la ceramica dell'età del Ferro proveniente dagli scavi italiani di Mishrifeh non è stata oggetto di un'analisi completa e diacronica: si è dunque proceduto con la creazione di una sequenza tipologica e cronologica, allo scopo di definire un'articolazione cronologica il più precisa possibile e di inserire Mishrifeh nel più ampio contesto regionale del Levante settentrionale. Inoltre, la produzione ceramica e lo studio di tutta la documentazione archeologica disponibile sono fondamentali per comprendere a pieno il ruolo di Mishrifeh all'interno del regno di Hamath nel Ferro II e successivamente nel Ferro III

ENG. Mishrifeh, ancient Qatna, is a site in central-western Syria located in the mid-Orontes Valley: from 1999 to 2010, the site was excavated by a Syro-Italian-German Expedition. The Italian mission excavated in various areas of the upper (H, T) and lower town (K), exposing a long stratigraphic sequence from the Early Bronze Age III to the Iron Age III.

The Iron Age occupation stretches from the late Iron Age I (Iron Age Ic, end 10th century BC) to the Iron Age III (7th century BC). The Iron Age II (9th – 8th centuries BC), when Mishrifeh was under the control of Hamath, was the most prosperous period and the variety of contexts (productive, domestic, funerary) found indicates the liveliness, especially economic, of the site in that moment.

Notwithstanding a few preliminary studies, the pottery of Iron Age Mishrifeh from the Italian excavations has not been object of a complete and diachronic analysis. Thus, a typological and chronological sequence was created, with the aim of defining the chronological subdivision of the site and to include Mishrifeh in the wider regional context of the Northern Levant. Furthermore, the pottery and the study of the available archaeological documentation are fundamental to understand the role of the site in the kingdom of Hamath in the Iron Age II and successively in the Iron Age III, when Syria was under Late Assyrian domination.

Firma dello studente lauko Łauczo

<sup>1</sup> Il titolo deve essere quello definitivo, uguale a quello che risulta stampato sulla copertina dell'elaborato consegnato.