

HIRBEMERDON TEPE DURING THE IRON AGE PERIOD: A case study in the Upper Tigris river region^{*}

Guido Guarducci & Nicola Laneri^{**}

The main purpose of this paper is to analyze the material culture uncovered from the Iron Age levels (ca. 1050-610 BC) at the site of Hirbemerdon Tepe, located along the upper Tigris river in southeastern Turkey. The first part of the paper includes a brief introductory chapter dedicated to the site location and its geographical and environmental context, with a second chapter on the Neo-Assyrian historical sources on the area here considered. The second half of the paper instead comprises a detailed analysis of the architecture and pottery found in Hirbemerdon Tepe's Iron Age levels with a specific focus on the most represented and best preserved phase, the Early Iron Age period (i.e., Phase IVA, ca. 1050-900 BC). Moreover, a catalogue describing the studied pottery fragments is attached at the end of the article as an Appendix.

The final section of the paper places the ceramic assemblage in a broader historical context to better define the role played by the site of Hirbemerdon Tepe during the Iron Age, with a specific emphasis on the transformation that occurred in the socioeconomic landscape of the upper Tigris river due to the arrival of the Neo-Assyrians in the area during the ninth century BC.

1. THE GEOGRAPHICAL AND ENVIRONMENTAL CONTEXT

The archaeological site of Hirbemerdon Tepe is situated in southeastern Turkey in the Diyarbakır province, 40 km east of the modern town of Bismil (Fig. 1). The settlement rises on a limestone cliff along the west bank of the Tigris river about 1 km east from the confluence of the Batman river tributary, situated in a strategic location overlooking almost the entire river valley from south to north. The site is also located at the beginning of the uplands that separates the upper Tigris region from the Tur 'Abdin and the Jazirah plain of northeastern Syria (Laneri *et al.* 2006).

* We would like to thank the Ministry of Culture and Tourism of Turkey for its support and the permit for archaeological work at Hirbemerdon Tepe, and, especially, Ms. Nilüfer Babacan for her kind support. The project was jointly planned with Mr. Mehmet Arif Bilici and Ms. Nevin Soyukaya of the Archaeological Museum of Diyarbakır, as part of the Ilisu dam rescue project, and to them goes our warmest acknowledgment.

Our best acknowledgments go also to the archaeologists and the workmen who worked at the site from 2003 to 2009. We would also like to thank Anacleto D'Agostino for his useful comments on an earlier draft.

** Guarducci: University of Florence, Laneri: Istituto Italiano per l'Africa e l'Oriente.

The diversity in the natural resources surrounding Hirbemerdon Tepe (i.e., the river basin and its terraces, the uplands, etc.) was also pivotal in defining the subsistence strategies used by ancient groups inhabiting the region. Thus, a combined economy based on agricultural and pastoral activities appears to have been a clear marker since the Chalcolithic period (Ur and Hammer 2009). Additionally, hunting as well as regional and long-distance trade along the river were fundamental for the development of these societies' economic resources (Laneri *et al.* 2008 and 2009). The vicinity of rich metal sources, such as the copper mines in the Ergani and Siirt areas (Belli 1991), increases the importance of this region within a broad Syro-Anatolian socio-political scenario. Moreover, the production of wine, the availability of timber, and the possibility of smelting metal attracted northern Mesopotamian merchants since the Middle Bronze Age (Forlanini 2006).

The complexity of the area's geology (i.e. river terraces and uplands, Ur and Hammer 2009) has also been pivotal for the site's settlement pattern throughout its entire history. In this regards, the archaeologists have been able to identify an area of occupation totalling about 10 hectares of extension that can be differentiated into three main areas (Fig. 2): the High Mound, a flat Outer Town on the eastern versant and the Lower Town on the western versant (Laneri 2005 and 2006).

The multi-phase¹ site has evidence for settlement since the Chalcolithic period (i.e., Phase I, Laneri *et al.* 2009). During the Early Bronze Age II (Phase II, ca. 2750-2500 BC), dispersed houses were located along the eastern edge of the High Mound (Area E). The settlement size expanded during the late third millennium BC (Phase IIIA, Laneri *et al.* 2006). However, it is during the Middle Bronze Age (Phase IIIB, 2010-1464 cal. BC) that Hirbemerdon Tepe reached its acme with a large architectural complex on the High Mound (Area A) and scattered architectural features dedicated to working activities in the Outer Town (Area B, Laneri *et al.* 2006, 2008, and 2009). The collapse of the Middle Bronze Age economic system in the region brought about a downsizing of the architectural complex during the Late Bronze Age (Phase IIIC, ca. 1500-1350). After a brief period of abandonment, it is during the Early Iron Age (Phase IVA, ca. 1050-900 BC) period that the site was reoccupied in the southern (Area D) and northern (Area A) sectors of the High Mound. During the following period (i.e., Phase IVB, Middle and Late Iron Age or the Neo-Assyrian period, ca. 900-610 BC), the architecture of the Early Iron Age was abandoned and the settlement becomes characterized by dispersed and probably temporary structures in the High Mound and areas dedicated to working activities in the Outer Town (Laneri *et al.* 2009). Numerous pits, siloi, and disturbed architecture dating to the Hellenistic (or post-Neo-Assyrian period, Phase V, ca. 600-300 BC) were found in the northern sector (Area A) of the High Mound (Laneri *et al.* 2006). A final level of occupation during the Medieval and Ottoman periods (Phase VI) is recognizable in both the eastern edge (Area E) and the northern sector (Area A) of the High Mound (Laneri in press) with the primary evidence being rubbish pits.

¹ An updated chronological sequence of the site will appear in Laneri in press.

2. THE HISTORICAL SOURCES

When viewed from an historical perspective, it is impossible to analyze northern Mesopotamia during the Iron Age without taking into account the Neo-Assyrian texts. In fact, royal inscriptions are rays of lights that serve to illuminate the historical geography of the region viewed from a diachronic perspective (Kessler 1995). Nevertheless, together with the written sources, archeological and surveying data enrich the picture expressed in the historical sources and support the creation of ancient landscapes on empirical foundations (Parker 2001). Moreover, the new emphasis laid on salvation excavation programs – such as the case of the Ilisu Dam Rescue Project in the upper Tigris river region – is finally giving a broad range of results, which rapidly is gaining a major role in portraying the socioeconomic and cultural aspects of this region and their interpretation.

In terms of the data emerging from the reconnaissance surveys in the region, the rapid transformation in the settlement patterns of the region that can be witnessed during the Iron Age appears as a clear indicator of a socioeconomic change in the area. In fact, the data brought to light by G. Algaze and his colleagues (1991) from their survey in the region demonstrate a significant increase in levels of inhabitation and related land use during the Neo-Assyrian period (i.e., an increase in settlement density of ca. 300 % from the Early Iron Age phase – ca. 1050-900 BC – to the Neo-Assyrian Imperial period – ca. 900-610 BC, Parker 2002: 385). The reasons for this rapid and dramatic transformation in the settlement pattern of the upper Tigris region must be considered within an historical context and more specifically as part of the deportation procedure used by the Assyrians during the height of their Imperial strategies of annexation and control of the Empire's peripheries (ca. 910-649 BC) in order to colonize and gain control over a large amount of land and its resources. The first step of this process has always been invasion and ground occupation. But to bring the territory to its full productivity there must have been a central organization located within the region (i.e., the provincial capital of Tušhan, Parpola 2008). Usually this was initially achieved by roughly blending in with indigenous traditions and social organization while at the same emerging as the new leaders during the first phase. This kind of domination would be finalized by provincialization or direct annexation, which was put into action during the second part of the Neo-Assyrian period.

In terms of historical sources mentioning the upper Tigris river region, written accounts dating to the Middle Assyrian period refer to the area north of the Kashiyari mountains (the modern Tur 'Abdin) as part of 'the lands of Nairi' (Parker 2001: 162). Geographically, Nairi can be collocated around the upper Tigris river region and northeast of it stretching from the Euphrates (west) to the Black Sea (north) and the regions around lake Van and the Urmia basin (northeast) (Liverani 1992: 89). Within this large geographical environ it is important to distinguish the land of Šubria that acted as a buffer zone between the Assyrian and the Urartian kingdoms (Kessler 1995). According to these earlier written sources, the region was a patchwork of different groups with diverse ethnic origins (e.g, Hurrians, Arameians, etc.) and the Assyrian kings, after the military victory over the Hurrian kingdom of Mitanni/Hanigalbat in the thirteen century BC (Radner 2006), would have moved to these regions to fight against local rulers in order to gain control over strategic routes most probably used for accessing precious natural resources

(e.g., timber, copper, iron, Postgate 1979: 199-200)² and commodities (e.g., wine, Radner 2006: 292-299), and to hunt wild animals, such as gazelles, ibex and deer (*ibid.* 2006: 284). However, the importance of the upper Tigris river region for the Assyrian kings was not only due to the possibility of economic gain, but also because ‘of the religious, magical and spiritual meaning of the source of the Tigris, which represents the essential resource for life and wealth in Assyria’ (Kreppner 2002: 375). The importance of the source of the Tigris in the religious topography of the Assyrians is proven by the rock reliefs left by Tiglath-pileser I and, later, by Shalmanaser III in the famous ‘Tigris Tunnel’ located in the modern province of Lice ca. 80 km northeast of Diyarbakır (*ibid.* 2002: figs. 11-12), as well as by a mention of the ceremony engraved in the inscription of the Shalmanaser III’s Black Obelisk and the scene dedicated to the journey to the source by the same king represented in the bronze friezes of the Gates of Balawat (*ibid.* 2002: fig. 13).

In his inscription, Tiglath-pileser I (1114-1076 BC) offers the perspective of an Assyrian king on the political fragmentation of the region when he lists the toponyms of the 23 kingdoms³ of ‘the lands of Nairi’ that oppose him in a military confrontation (Salvini 1967: 50; Budge and King 1902, col. IV, 71-82). The actions of alliance among these rulers are extremely important because they reveal how the territory was indeed connected and homogenous prior to the Assyrian conquest. These local kings recognized each other and, in cases of political endangerment, would unite against the common enemy. For example, the written sources made available by Tiglath-pileser I inform us that one of these rulers (i.e., Sieni, the king of Daiaeni) might have created and organized the alliance of these local kingdoms against the Assyrian king.⁴ This episode reveals that even though Nairi was fragmented into local communities they had a sort of commonality, probably of tribal or kinship origin, that was expressed in cases of emergency.

However, it is with Assurnasirpal II (883-859 BC) that a different approach is encountered in the military annexation of the region to the Assyrian kingdom and the creation of a provincial capital (i.e., Tušhan, modern Ziyaret Tepe). Assurnasirpal II erected a palace here (Grayson 1991: 202; Parpola 2008: 21-25) and the settlement grew from its original 3 hectares extent of the Early Iron Age to an impressive expanse of 32 hectares during the Neo-Assyrian period (Parker 2001: 210). This king also left behind a series of reliable historical resources, such as the famous ‘Kurkh monolith’ found at the modern site of Uçtepe in which his fifth military campaign is described (Kessler 1980 and 1995; Liverani 1992). His royal inscriptions are also important because they clarify the historical geography of the area in mentioning the neighbouring regions of Bit-Zamāni, Šubria, Nirdun and Urumu that were paying tribute to him, and that all belonged to the

² As pointed out by Postgate (1979: 199), even though there is no mention of the Ergani mines in Neo-Assyrian texts, the wide accessibility of metal sources in the area might call for a lack of acknowledgment in the written sources of used practice.

³ The 23 kingdoms are: Tumme, Tunube, Tuali, Kindari, Uzula, Unzamuni, Andiabe, Pilakinni, Aturgini, Kulibarzini, Šinibirni, Ḥimua, Pateri, Uiram, Šururia, Abaeni, Adaeni, Kirini, Albaia, Ugina, Nazabia, Abarsiumi and Daiaeni (Salvini 1967: 50; Budge and King 1902, col. IV, 71-82).

⁴ The same Assyrian king also mentioned other battles against Nairi in which up to 60 kings are mentioned (Budge and King 1902, col. IV, 96-101).

'lands of Nairi,' as noted by Parker (2001, endnote 794). Moreover, Assurnasirpal supported the Aramaic kingdom of Bīt-Zamāni whose capital was Amedi, most probably to be equated with the modern city of Diyarbakır (Parker 2001: 163). Located on his route from the provincial capital of Tušhan to Amedi are two additional important centres, which from east to west are Tidu (possibly Uçtepe) and Sinabu (possibly Pornak). With the advent of Assurnasirpal, the northeastern frontier of the Assyrian Empire is now greatly garrisoned and new and old installations are fully fortified (Parker 1997). This is probably the peak of the upper Tigris region development under the Assyrian control.

A later stele found at Uçtepe was created by Assurnasirpal's son, Shalmaneser III (858-824 BC). In the inscription he left behind (Grayson 1996), the name of the governor of Nairi, Ihtadi-lipūšu, is mentioned and we are also informed that the whole land of Nairi is now under the strict control of the Assyrians and has been officially turned into a province. Moreover, Shalmaneser III conducted various military campaigns against Urartu and Šubria.⁵

After Shalmaneser III's reign, Assyria lost much of its splendour. During his son's reign (Shamshi-Adad V, 823-811 BC), we enter a new period of incipient decline in the hegemony. Rebellions and responding expeditions continue to alternate with each other, here and in the northeastern areas as in Urartu.

In the following decades control over the upper Tigris region is again achieved, as confirmed by the tribute levying conducted by Adad-nirari III (810-783 BC). The primary objective of Assyria is now the destruction of the kingdom of Urartu. The following Assyrian kings, Shalmaneser IV (782-773 BC), Assur-Dan III (772-755 BC) and Assurnarari V (754-745 BC), suffered from the military strategies of the Urartian in addition to political problems within Assyria proper. Great energy was spent by the Assyrian kings in an attempt to cope with the northern forces of Urartu. In fact, it is during this period that Urartu possibly conquered a position within or very close to Assyrian borders, like the stronghold countries of Nihiria, maybe near Šubria, and Kummuh (Piotrovskij 1966).

Assyria finds a renewed lead over the region with Tiglath-pileser III (744-727 BC), who claims in his annals the long-lasting loyalty of Tušhan even when surrounding provinces and kingdoms rebelled. Together with his ability, and shortly after that, of Sargon II (721-705 BC), Assyria was able to recover its territories and restore some of the old borders, in addition to an expansion into Urartian land under the latter ruler.

With Esarhaddon (680-669 BC), the Assyrians definitely take control over Šubria, transforming it into two provinces while unifying those of Tušhan and Bīt-Zamāni (Radner and Schachner 2001: 766). Due to a need for direct power management of the available resources, the permitted autonomy *status* granted by the previous Neo-Assyrian

⁵ The multiethnic region of Šubria played a fundamental role in the history of the region during the Late Bronze and Iron Ages. In fact, it became a sort of outpost for the Hurrian people during their dispersal after the collapse of the kingdom of Mitanni, a buffer state throughout the Assyrian Imperial domination of the region, and home for a large part of the population who did not support the Assyrian Imperial annexation of the region. Spies, deserters and murderers found refuge in its lands up until Assyrian double provincialization by the eponymous cities Upummu and Kullimeri under Esarhaddon in 673. (Radner and Schachner 2001, 760).

kings must have come to an end in this period. Moreover, the most reliable historical sources of information recently found at the provincial capital of Ziyaret Tepe/Tušhan date to this final phase of occupation (Parpolo 2008).

The collapse of the Neo-Assyrian Empire occurred after the sack of the capital Niniveh in 610 BC. This dramatic event had its effects in the Imperial periphery, and the complex system of socioeconomic organization imposed with the arrival of the Neo-Assyrians slowly collapsed to bring about a period of political uncertainty that is not clearly recognizable in the archaeological data.

3. THE IRON AGE PERIOD AT HIRBEMERDON TEPE

In terms of chronology, the Iron Age in the upper Tigris river valley can be divided into two main phases. The first phase, which corresponds with the Early Iron Age period (i.e., Phase IVA at Hirbemerdon Tepe, ca. 1050-900 BC), is the result of the organization of local groups and is marked by the ubiquitous presence of locally produced ware (e.g., the so-called Groove Ware, see below). The second phase (i.e., Phase IVB at Hirbemerdon Tepe, ca. 900-610 BC) is clearly marked by pottery production related to the arrival of the Assyrians in the region and by a complete transformation of the settlement pattern with the abandonment of the architecture belonging to the previous phase.

It is during this later phase that the settlement patterns of the region was dramatically transformed by a more centralized administration and was based on a four-tier hierarchical pattern that consisted of provincial capitals (e.g. Ziyaret Tepe/Tušhan, Parpolo 2008) where a governor-like is in charge; medium-sized centres controlled by the local governor who paid tribute to the Assyrian king (e.g., Gre Dimse, Schachner 2003: 160); fortified farming villages or *dunnu* (similar to the Middle Assyrian ones, e.g., Giricano/Dunnu-ša-Uzibi, 11 km southeast of Bismil, Radner 2004);⁶ smaller hamlets of a similar rural character, probably named *kapru* (Radner 2003: 118), which possibly included Hirbemerdon Tepe. Dating to this phase is the Building Complex of Ziyaret Tepe/Tušhan in which were discovered a checkerboard river pebble mosaic, cuneiform tablets, objects in ivory and bronze, and many others remains (Matney *et al.* 2002; Matney and Rainville 2005; Matney *et al.* 2007; Parpolo 2008).

At Hirbemerdon Tepe all these phases are represented both architecturally and through the means of material culture. In particular, the Early Iron Age period (Phase IVA) appears to be the best preserved as highlighted by the architecture uncovered during the excavation.

3.1. Architecture

As mentioned before, Iron Age period evidence was uncovered in different sectors of the High Mound (Area A, Step Trench AC, and D) and the Outer Town (Area B) (Fig. 2):

⁶ The tablets found inside a ceramic vessel at Giricano date to the 11th century BC (Radner 2004).

- *Area A* – Due to the mound's steep slope, the action of weathering, and later pits, the architecture referring to the Iron Age period are badly preserved and in area A only a few patches have been brought to light. They consist of three intersecting wall segments (*loci* 193, 194, 195) forming a ‘T’ near the southwestern corner of the area. These walls are contemporaneous with the related structures found in Step trench AC and belong to an Early Iron Age horizon. At the northeastern corner of Area A two floors (*loci* 174, 192) and the remains of Early Iron Age period walls were found. Regarding the Neo-Assyrian and Late Iron Age phases, only pits were brought to light in this sector.
- *Step trench AC* (Fig. 3) – The Step Trench AC-AB stretches along the south-north axis of the northern sector of the High Mound and cuts through Area A. Regarding the Iron Age period, in the upper sector (i.e., Step trench AC) the archaeologists have uncovered two perpendicular walls (*loci* 68 and 74) forming the corner of an enclosed space (Room A) and its compacted clay floor (*locus* 72). Inside of this corner there is a semi-circular feature that might have functioned as a well (*locus* 70). As a whole the architecture is constructed of medium-sized stones. It was built on top of the Late Bronze Age filling of the *piazza*, dating to the Middle Bronze Age architectural complex (Laneri *et al.* 2008), and abuts the collapsed buildings of the uppermost and southern sectors of the complex. The material culture found inside the room belongs to an Early Iron Age horizon confirming that these architectural features must be in phase with the previously mentioned walls found in Area A. No architectural traces of later Iron Age phases were found in the step trench.
- *Area D* (Figs. 4-5) – This area is situated on the southern sector of the High Mound and is characterized by a series of open-ended rooms (4-5) aligned along an E-W axis and recognizable from the surface. The archaeologists have excavated part of one of these rooms (Room 1) that consists of two perpendicular stone walls (*loci* 4, 10) built on a foundation cut into the virgin soil, consisting of natural limestone bedrock and a thick layer of compacted pebbles. The bedrock was thus used to limit the western part of the building and as the floor for the rooms (*locus* 18). Except for a few pits dating to later Medieval periods, the whole building is in an excellent state of preservation and consists of a series of features that are connected with the bread preparation cycle. In fact, two elliptically shaped *tannur* ovens (*loci* 7, 19) were discovered inside one of these rooms situated along a wall (4). Across from them and in a central position there was a small pit (*locus* 16) that was probably used for water poured from the small bottle found *in situ* along the pit's western edge (Fig. 8). South of the pit was a grinding stone and next to it a large stone to be used in combination with the grinding stone and, in the nearby mortar in which a pestle was found, the crushing of whole grains was enacted. Another mortar is recognizable in the section closer to the northern side of the room. Moreover, the floor, as well as all the features found in the room, are heavily burnt confirming the hypothesis of the use of fire for enacting working activities in the room. Unfortunately part of the room is heavily disturbed by a Medieval pit, but the remainder of the findings form the basis of this extraordinary discovery of a ‘bakery’ that, according to the numerous pottery sherds and complete vessels of the Grooved Ware horizon found *in*

situ (see below), can be dated to the Early Iron Age phase, making it a unique discovery for the whole upper Tigris river valley. Moreover, the baking of bread in the modern Kurdish villages allow us to reconstruct the production cycle based on ethnographic analogies in which (1) the cereal seed is first pounded in the mortar with a pestle to separate the hull from the seed in the mortar; (2) after that, the stripped seeds are grinded into flour on the large stone by a process of friction exerted through the use of the grinding stone; then (3), the flour was mixed with water (i.e., contained in the bottle) in the small pit in order to obtain the dough, which was spread out and, finally (4) baked against the walls of the oven *tannur*.

- *Area B* (Fig. 6) – This area is located in the Outer Town. The *strata* here are poorly preserved due to their proximity to the plough zone and its vicinity to the river bed. The few relics found in upper most levels are two stone foundation walls (*loci* 1, 4), one of which (1) is monumental and with a large stone used as threshold, and the related enclosed floor (*locus* 5). This area revealed pottery sherds of Neo-Assyrian production (see below) together with a basalt bowl and a pair of cleft grinding stones (Fig. 9) that are distinctive of this later period (Laneri *et al.* 2006). These data confirm that this area must have been used for processing agricultural products during the Neo-Assyrian period.

3.2. Pottery

The sherds here presented were collected from Iron Age period (i.e., Phases IVA-B) archaeological contexts during Hirbemerdon Tepe's 2005-2009 archaeological seasons.

In order to identify and study the diagnostic sherds the following procedures were enacted: washing, labelling, drawing, analysis, description, photography, cataloguing, and, finally, comparative analysis. Based on these premises, the Iron Age assemblage *corpus* totals 552 diagnostic sherds, 400 of which have been selected for the creation of the site's Iron Age typology. 228 of these are presented in this publication and included the following: 182 rims and whole vases, 22 bases, 8 handles and 16 body sherds.

3.2.1. Wares, morphotypes and comparanda

According to commonalities in clay fabrics, surface treatments, class categories, and chronological seriation, the Iron Age pottery assemblages can be divided into the following categories or wares (table 1): A) Brown/Pink Ware (BPW) and B) Grooved Ware (GRW) belonging to the Early Iron Age phase (Phase IVA); C) Plain Ware (PW) belonging to the Middle/Late Iron Age phases (i.e., the Neo-Assyrian phase or Phase IVB). From among the pottery assemblage, a few painted sherds belonging to PBW were found, but it has not been possible to distinguish a proper Painted Ware category. Moreover, all three Wares present morphological and clay fabric characteristics that can lead towards the identification of a type within a *category* or, more likely, a variation of a type that has been named Cooking Pots (CP). The almost total lack of body sherds with evidence of use related to fire, makes it even more difficult to identify a Cooking Ware category from within our pottery assemblage. In the following section the purpose is to provide a general description of the three wares (and other unique fragments), a detailed

analysis of the morphotypes belonging to these broad categories and a comparative analysis with other similar pottery types in the region and neighbouring areas, here arranged by size. For a detailed analysis of the sherds described in this study, please refer to the catalogue in the Appendix.⁷

Brown/Pink ware (BPW) mainly features medium grain tempers with a slight trend towards mineral (i.e., sand, limestone, grit and mica) and vegetal inclusions (chaff + minerals) (see table 2). In some cases the sherd cores are under fired as revealed by a grey coloration. The colors of the slip and paste range from mostly brown to pink hues. The majority of the sherds present handmade traits, while a few may have been made on a potter's wheel. A strong to slight burnishing is widely present, usually applied in a rough manner and with incoherent direction. Observed decorations include a few incised or excised type variations, moulded or applied elements, mostly rope-shape bands (table 3). Open forms are the class of higher incident, and this is a detailed analysis of the types and *comparanda*:

Bowls

- Small/medium bowls with simple round rim. (Nr. 31-33) – (Lidar Höyük. Müller 1996, pl. 22 n. 1, 5, 9; Talavaş Tepe. Parker and Creekmore 2002, fig. 39 lett.T).
- Medium lug-bowls with simple round rim. (Nr. 38-40) – (No analogy found).
- Medium/large sinuous bowls with slightly everted simple square rim. (Nr. 41-43) (Norşuntepe. Bartl 2001, fig. 3 n. 2).
- Medium/large sinuous bowls with everted simple rim. (Nr. 48-50) – (Ziyaret Tepe. Matney and Rainville 2005, fig. 4 n. 9; Gre Dimse. Karg 1999, fig. 11 n. 9; Gundik Tepe. Parker 2001, fig. 4.5 lett. H)
- Medium/large bowls with slightly everted simple round rim. (Nr. 3-6) – (Near Çiçek Yordu. Parker 2001, fig. 4.10 lett. G; Kenan Tepe. Parker *et al.* 2003, fig. 6. Lett. F, I)
- Large/very large bowls with indented simple round rim. (Nr. 34-36) – (for Nr. 36: Parker 2001, Type 1 p. 285.) Numerous examples of this type.
- Large bowls with everted tapered rim (*bec du canard*). (Nr. 99-105) – (Lidar Höyük, Müller 1996, pl. 8 n. 3, 4, 8, 9).
- Large collar neck bowls with everted rim. (Nr. 71-75) – (Hakemi Use. Tekin 2006, fig. 4 n. 3. Gre Dimse. Karg 1999, fig. 10 n. 7; Lidar Höyük. Müller 1996, pl. 11 n. 8, 9; Ernis-Evditepe. Belli and Konyar 2003, fig. 29 n. 3, 4; Kurban Höyük survey. Wilkinson 1990, fig. B/11 n. 4).
- Medium/large squeezed neck bowls with inverted hammerhead rim. (Nr. 110-112) – (Kenan Tepe. Parker *et al.* 2003, fig. 6 lett. D)

⁷ To describe the pottery, the Munsell Soil Color Charts (2000 edit.) were used to identify the hue, while the Leicester University Geology Grain Card charts were used for the inclusions' grain, size, percentage and sorting.

- Large deep high carinated bowls with everted rim. (Nr. 66-70) – (Dilkaya. Çilingiroğlu 1991, fig. 03.5 n. 2 (end of EIA); Norşuntepe. Bartl 1994, fig. 11 n. 5; Gre Dimse. Karg 2001, fig. 7 lett. F; Ernis-Evditepe. Belli and Konyar 2003, fig. 29 n.1)

Painted bowls

- Open shape body fragments with rope-shape band decoration. (Nr. 227) – (No analogy found)

Jars

- Small globular jug with straight inverted tapered rim. (Nr. 127) – (Korucutepe. Winn 1980, pl. 52 n. 8, pl. 60 lett. D; Tille Höyük. Blaylock 1999, fig. 2 n. 9).
- Medium hole-mouth jars with oval thickened rim. (Nr. 163) – (No analogy found)
- Medium deep jars with oval thickened rim. Cooking Pot (Nr. 161-162) – (No analogy found).
- Medium/large conical neck jars with everted brim rim. (Nr. 148-150) – (Lidar Höyük. Müller 1996, pl. 75 n. 4, 5, pl. 94 n. 6; Kenan Tepe. Parker *et al.* 2003, fig. 6 lett. FF).
- Large high carinated jars with inverted rim. (Nr. 155-160) – (Norşuntepe. Bartl 2001, fig. 3 n. 7; Lidar Höyük. Müller 1996, pl. 55 n. 7).

Painted Jars

- Medium high carinated jar with inverted rim. (Nr. 158) – (Norşuntepe. Bartl 1994, fig. 3. Bartl 2001, fig. 3 n. 12; Near Yazlica. Parker 2001, fig. 4.5 lett. K).
- Small flared neck jug with everted round simple rim. Cooking Pot (Nr. 128) – (No analogy found).

Handles

- Cylindric/ribbon grooved handles. Cooking Pot (Nr. 208-212) – (Ziyaret Tepe. Matney and Rainville 2005, fig. 5 n. 15; Hakemi Use. Tekin 2006, fig. 8 n. 1, 2; Lidar Höyük. Müller 1996, pl. 60 n. 13; Korucutepe. Winn 1980, pl. 59 n. 66, 67).
- Cylindric/ribbon handles with ‘chain’ and ‘ladder’ motives decoration. (Nr. 205-207) – (Korucutepe. Winn 1980, pl. 60 lett. I).

Bases

- Small concave bases. (Nr. 192-195) – Numerous examples of this type.
- All sizes simple flat bases. (Nr. 183-187) – Numerous examples of this type.

Body sherds

- Open shape body fragments with rope-shaped band decoration. (Nr. 224-227) – (Kenan Tepe . Parker *et al.* 2003, fig. 6 lett. CC; Boztepe, Talavaş Tepe. Parker and Creekmore 2002, fig. 15 lett. J - fig. 39 lett. AA; Korucutepe. Winn 1980, pl. 56 n. 18; Kurban Höyük survey. Wilkinson 1990, fig. B.11 n. 53).

- Closed shape body fragments with rope-shaped band decoration. (Nr. 216-223) – (Taşkesen, Çengiler Tepe. Sagona and Sagona 2004, fig. 111 n. 3 - fig. 191 n. 4; Kurban Höyük survey. Wilkinson 1990, fig. B.11 n. 54; Birkleyn. Schachner 2009, fig. 126 n. 3, 6, 8, 9, 11, 13, 18, 21) Numerous examples of this type.
- Spout fragment. Possible Cooking Pot. (Nr. 213-214) – (Norşuntepe. Bartl 2001, fig. 4 n. 2, 4, 5, 7; Bartl 1994, fig. 13 n. 4; Ziyaret Tepe. Matney and Rainville 2005, fig. 5 n. 19; Hakemi Use. Tekin 2006, fig. 8 n. 6, 7; Giricano. Schachner 2003, fig. 6 lett. D, F).
- Body fragment with applied embossed decorations (the arched element had probably lug functionality). (Nr. 215) – (Norşuntepe. Müller 2003, fig. 4 n. 2; Gre Dimse. Karg 2002, fig. 3 lett. A).

Grooved Ware (GRW). The temper and hue are very similar to the previous BPW assemblage. The main characteristic of this group is its decoration that is usually located close to the rim, or between the rim and the vessel shoulder. The types of decoration consist of incisions or excisions, and sometimes a corrugated modelling of the area (indented or undulated), varying from one to four grooves. Moreover, almost every type features a variation with fingernail or fish-bone motive impressions within the grooves. The whole assemblage appears to have been handmade and, as in the previous case, low firing temperatures were used. For this phase the majority of GRW vessels are closed shapes, in particular hole-mouth jars, spouted jars and closed bowls (e.g., bossed and lugged bowls). The types belonging to the GRW assemblage are as follows:

Bowls

- Small/medium (occasionally sinuous) bowls with simple round rim. (Nr. 44-47) – (Ziyaret Tepe. Matney and Rainville 2005, Fig. 4 n. 7. Matney *et al.* 2009, fig. 17 lett. A; Kavuşan Höyük. Kozbe 2008, fig. 10 n. 7; Norşuntepe. Bartl 1994, fig. 6 n. 3. Bartl 2001, fig. 2 n. 11, 12; İmikuşağı. Köroğlu 2003, fig. 2 n. 2. Sevin 1995, fig. 15 n. 2; Tushpa. Terhan 1994, fig. 30 n. 7, 8, 9)
- Medium bowls with simple square rim. Possible Cooking Pot (Nr. 1-2) – (Kazancı. Köroğlu 2003, fig. 3 n. 10; Kenan Tepe. Parker *et al.* 2003, fig. 6 lett. H; Talavaş Tepe. Parker and Creekmore 2002, fig. 39 lett. K; Korucutepe. Winn 1980, pl. 53 n. 11; İmikuşağı. Sevin 1995, fig. 13 n. 4;
- Medium/large bowls with simple round rim. (Nr. 28-30) – (Ziyaret Tepe. Matney and Rainville 2005, fig. 4 n. 4; Kavuşan Höyük. Kozbe 2008, fig. 6, 8; Norşuntepe. Bartl 1994, fig. 9 n. 5; Hakemi Use. Tekin 2006, fig. 3 n. 1, fig. 5 n. 3. Kopekli. Köroğlu 2003, fig. 3 n. 3; Talavaş Tepe. Parker e Creekmore 2002, fig. 39 lett. M, BB; Tushpa. Tarhan 1994, fig. 22 n. 2; Korucutepe. Winn 1980, pl. 58 n. 29, 30; Birkleyn. Schachner 2009, fig. 124 n. 6, 11).
- Medium/large bowls with slightly inverted simple rim. (Nr. 116-120) – (Ziyaret Tepe. Matney and Rainville 2005, fig. 4 n. 3; Kavuşan Höyük. Kozbe 2008, fig. 11 n. 2; Lchashen-Metsamor. Avetisyan and Bobokhyan 2008, fig. 44 n. 3; Norşuntepe. Bartl

1994, fig. 6 n. 2; Hakemi Use. Tekin 2006, fig. 3 n. 2; Giricano. Schachner 2003, fig. 6 lett. A, B; Norşuntepe. Bartl 2001, fig. 2 n. 4, 5; Lidar Höyük. Müller 1996, pl. 60 n. 1, 4, 7; Kenan Tepe. Parker *et al.* 2003, fig. 6 lett. Q, Y; Ernis-Evditepe. Belli and Konyar 2003, fig. 28 n. 1, 2; Tushpa. Terhan 1994, fig. 30 n. 1, 5; Korucutepe. Winn 1980, pl. 52 n. 5; Hulvenk, Hankedi. Russel 1980, fig. 18 n. 278.19 - fig. 18 n. 281.16; Birkleyen. Schachner 2009, fig. 124 n. 1, 4; İmikuşağı. Sevin 1995, fig. 13 n. 1, 2; Holkan Hirbesi. Parker 2001, fig. 4.5 lett. N; Tille Höyük. Blaylock 1999, fig. 3 n. 8, 11).

- Large bowls with inverted square rim. (Nr. 113-115) – (Ziyaret Tepe. Matney 1998, fig. 7 n. 3; 2005, fig. 4 n. 1, 5; Kavuşan Höyük. Kozbe 2008, fig. 11 n. 4)
- Large/very large bowls with everted tapered rim. (Nr. 7-27) – (Ziyaret Tepe. Matney 1998, fig. 7 n. 4; Kavuşan Höyük. Kozbe 2008, fig. 10 n. 2, 4; Lchashen-Metsamor. Avetisyan and Bobokhyan 2008, fig. 43 n. 8, 10; Norşuntepe. Bartl 1994, fig. 6 n. 1, Bartl 2001, fig. 2 n. 3; Hakemi Use. Tekin 2006, fig. 5 n. 4; Kopekli. Koroğlu 2003, fig. 3 n. 1; Kenan Tepe. Parker *et al.* 2003, fig. 6 lett. K, M, N, O; Talavaş Tepe. Parker e Creekmore 2002, fig. 39 lett. J, L; Korucutepe. Winn 1980, pl. 58 n. 22, 30; Kazancı, Gökçetevek. Koroğlu 1998, fig. 16 n. 6 - fig. 16 n. 12; Birkleyen. Schachner 2009, fig. 124 n. 2; Çiçek Yordu, Sarı Köy, Rum Tepesi. Parker 2001, fig. 4.10 lett. K - fig. 5.12 lett. I, - fig. 4.10 lett. J; Tille Höyük. Blaylock 1999, fig. 3 n. 13, 17).

Jars

- Medium/large hole-mouth jars with pointed simple rim. (Nr. 173-176) – (Norşuntepe. Bartl 2001, fig. 2 n. 2; Lidar Höyük. Müller 1996, pl. 59 n. 8; Kenan Tepe. Parker *et al.* 2003, fig. 6 lett. V, W; Birkleyen. Schachner 2009, fig. 125 n. 4; Gre Migro. Parker 2001, fig. 5.25 lett. F, G, H; Tille Höyük. Blaylock 1999, fig. 3 n. 5).
- Medium/large hole-mouth jars with simple rounded rim. (Nr. 166-172) – (Van Castle Mound. Sevin 1994, fig. 21.5 n. 2, 3; Ziyaret Tepe. Matney 1998, fig. 7 n. 1. Matney and Rainville 2005, fig. 5 n. 19, 20. Matney *et al.* 2009, fig. 17 lett. B. Parker 2001, fig. 5.19 lett. H; Kavuşan Höyük. Kozbe 2008, fig. 15 n. 3, 4, 5, 6; Tille Höyük. French, Moore and Russel 1982, fig. 13 n. 11; Hakemi Use. Tekin 2006, fig. 6 n. 1, 2; Norşuntepe. Bartl 2001, fig. 2 n. 1; Lidar Höyük. Müller 1996, pl. 58 n. 2, 3, 4; Tushpa. Terhan 1994, fig. 30 n. 2, 6; Korucutepe. Winn 1980, pl. 52 n. 4; Hinsor. Russel 1980, fig. 118 n. 282.10; Birkleyen. Schachner 2009, fig. 125 n. 1; Tille Höyük. Blaylock 1999, fig. 3 n. 4, 15).
- Medium/large hole-mouth jars with simple square rim. Possible Cooking Pot (Nr. 177-182) – (Kavuşan Höyük. Kozbe 2008, fig. Hakemi Use. Tekin 2006, fig. 7 n. 1-4; Lidar Höyük. Müller 1996, pl. 64 n. 9, 10).

Body sherds

- Spout fragment. Possible Cooking Pot (Nr. 213-214). (Norşuntepe. Bartl 2001, fig. 4 n. 1, 3, 6, 8. Bartl 1994, fig. 13 n. 1, 2; Lidar Höyük. Müller 1996, pl. 60 n. 10-12, 14; Gre Dimse. Karg 2001, fig. 7 lett. A; Giricano. Schachner 2003, fig. 6 lett. E; Tille Höyük. Blaylock 1999, fig. 3 n. 2, 3, 12; Ernis-Evditepe. Belli and Konyar 2003, fig. 28 n. 5; Korucutepe. Winn 1980, pl. 52 n. 4, 5).

Plain Ware (PW) is mainly characterised by a medium mineral or, in minor frequency, a medium vegetal fabric (chaff face). The surface is commonly treated with a pink range slip, otherwise light reddish brown or light brown. Most the vessels of this category seems to have been thrown on a wheel. Only a few examples present decorations obtained with incised or excised techniques. Every type included in this ware shows variations in burnishing typical of this region, although resembling Neo-Assyrian models (Matney *et al.* 2007). Open shapes are majorly encountered. The types and *comparanda* for the PW assemblage are as follows:

Bowls

- Medium/large sinuous bowls with slightly everted simple square rim. (Nr. 41-43) – (Sogutlu, KazlARBogalzi Tepe. Sagona and Sagona 2004, fig. 119 n. 10 - fig. 183 n. 7; Hamilih. Blaylock 1990, fig. 23 n. 2).
- Large steep wall bowls with simple rim externally ridged. Possible Cooking Pot (Nr. 37) – (Kharabeh Shattani. Goodwin 1995, fig. 46 n. 4).
- Large/very large bowls with indented simple round rim. (Nr. 34-36) – (Kharabeh Shattani. Goodwin 1995, fig. 32 n. 5; For Nr. 36: Parker 2001, Type 1 p. 285).
- Large bowls with everted pointed rim (bec du canard). (Nr. 99) – (Ziyaret Tepe. Matney 1998, fig. 8 n. 1; Parker 2001, Type 1 p. 285).
- Large collar neck bowls with everted rim. (Nr. 71-75) – (Çimentepe. Sagona and Sagona 2004, fig. 160 n.1; Gre Dimse. Karg 2001, fig. 5 lett. M (smaller); Boztepe. Parker and Creekmore 2002, fig. 15 lett. C (smaller); Tell Hamoukar. Ur 2002, fig. 14 n. 11 (associated with other EIA inspired elements); Qasrij Cliff. Curtis 1989, fig. 7 n. 5. fig. 9 n. 23, fig. 24 n. 34; Silope Höyük. Parker 2001, fig. 3.6 lett. B).
- Large shallow bowls with inverted tapered rim externally thickened. (Nr. 80-85) – (Lidar Höyük. Müller 1996, pl. 35 n. 1, 3, pl. 36 n. 10, 11; Yankale Höyük. Parker 2003, fig. 9 lett. F; Boztepe. Parker and Creekmore 2002, fig. 15 lett. F; Qasrij Cliff. Curtis 1989, fig. 26 n. 57, 62, fig. 28 n. 92; Sultantepe. Anastasio 2007, fig. 51 n. 16, 17; Tell Es-Sweyhat survey. Wilkinson 2004, fig. 6.16 n. 3; Tell Shiukh Fawqani. Luciani 2005; pl. 10 n. 128, pl. 13 n. 152-153; Uçtepe. Köroğlu 1998, fig. 10 n. 7; Tell Abu Dhahir, Seh Gubba. Green 1999, fig. 5 n. 3, 5, fig. 7 n. 1; Nineveh. Lumsden 1999, fig. 4 n. 10).
- Medium/large steep wall bowls with hammerhead rim. (Nr. 88-98) – (Ayanis. Kozbe *et al.* 2001, pl. VI n. 10; Boztepe. Parker and Creekmore 2002, fig. 17 lett. I; Tell Es-Sweyhat survey. Wilkinson 2004, fig. 6.17 n. 27; Değirmentepe, Kaleköy. Ökse 1988, fig. 100, 102 - fig. 104; Çattepe. Parker 2001, fig. 4.11 lett. F).
- Large bowls with hammerhead rim. (Nr. 86) – (Harabe Bezikan Höyük; Khirbet Qasrij. Curtis 1989, fig. 27 n. 67; Sultantepe. Anastasio 2007, fig. 51 n. 28; ‘Ağığ region. Bernbeck 1993, pl. 94 lett. P; Tell Keisan. Lehmann 1996, pl. 8 n. 46/1).
- Large bowls with thickened hammerhead rim. (Nr. 87) – (Ziyaret Tepe. Matney 2007, fig. 18 lett. F. Parker 2001, fig. 5.17 lett. F; Lidar Höyük. Müller 1999, pl. 26. n. 6; Tell Shiukh Fawqani. Luciani 2005, pl. 9 n. 122).

- Large/very large shallow bowls with everted tapered rim. (Nr. 51-55) – (Tell Es-Sweyhat survey. Wilkinson 2004, fig. 6.16 n. 33; Tell Shiukh Fawqani. Luciani 2005, pl. 33 n. 390).
- Large high gently carinated bowls with everted tapered rim. (Nr. 56-62) – (Çorak Tepe. Sagona and Sagona 2004, fig. 125 n. 11; Takyān Tepe. Parker 2001, fig. 3.6 lett H).
- Medium/large high carinated bowls with indented simple rim. (Nr. 63-65) – (Ayanis. Kozbe *et al.* 2001, pl. XIV n. 14, pl. XIX n. 32; Lidar Höyük. Müller 1996, pl. 11 n. 4, 12; Değirmentepe. Ökse 1988, fig. 815).
- Large deep high carinated bowls with everted rim. (Nr. 66-70) – (Ayanis. Kozbe *et al.* 2001, pl. VI n. 8; Khirbet Qasrij. Curtis 1989, fig. 25 n. 42; Değirmentepe. Ökse 1988, fig. 121).
- Medium/large carinated bowls with everted rim. (Nr. 76-79) – (Ayanis. Kozbe *et al.* 2001, pl. XIX n. 25, 26; Lidar Höyük. Müller 1996, pl. 17 n. 16. Qasrij Cliff, Khirbet Qasrij. Curtis 1989, fig. 9 n. 22 - fig. 23 n. 7, fig. 24 n. 25. Hattara. Negro 1997, fig. 1 n. 5, 7; Kaleköy. Ökse 1988, fig. 225, 234. Basorin Höyük, Gre Migro. Parker 2001, fig. 3.8 lett. P - fig. 5.26 lett. I).
- Large thin walled and high carinated bowls with inverted rim (IV variants). (Nr. 106-109) – I (Ayanis. Kozbe *et al.* 2001, pl. XXI n. 1; Basorin Höyük. Parker 2001, fig. 3.8 lett. J) - II (Nineveh. Lumsden 1999, fig. 5 n. 21) - III (Gre Dimse. Karg 2002, fig. 7 lett. B; Qalat Şergat. Anastasio 2007, fig. 79 n. 4 lett. AB; ‘Ağīg region. Bernbeck 1993, pl. 93 lett. D; Yankale Höyük. Parker 2001, fig. 3.6 lett. F) - IV (no analogy found).

Jars

- Small/medium cylindric neck jars with “D” shape rim. (Nr. 121-123) – (Ziyaret Tepe. Matney 1998, fig. 9 n. 4; Lidar Höyük. Müller 1996, pl. 103 n. 7; Gre Dimse. Karg 2001, fig. 5 lett. O, P, fig. 6 lett. N; Kenan Tepe. Parker and Creekmore 2002, fig. 17 lett. H, P; Kurban Höyük survey. Wilkinson 1990, fig. B.11 n. 9, 19; Khirbet Qasrij. Curtis 1989, fig. 33 n. 167; Tell Beydar survey. Wilkinson and Barbanes 2000, fig. 3 n. 9; Değirmentepe. Ökse 1988, fig. 400, 406; Girik Tahti. Parker 2001, fig. 3.17 lett. L).
- Medium cylindrical neck jars with oval internal and external thickened rim. (Nr. 124-126) – (Ziyaret Tepe. Matney 1998, fig. 9 n. 5; Zeytin Bahçeli Höyük. Deveci and Mergen 1999, fig. 4 n. 5; Tell Hamoukar. Ur 2002, fig. 14 n. 7; Tell Beydar survey. Wilkinson and Barbanes 2000, fig. 2 n. 9; Tell Shiukh Fawqani. Luciani 2005, pl. 17 n. 190. Makinson 2005, pl. 17 n. 108; Değirmentepe. Ökse 1988, fig. 403).
- Medium deep jars with oval thickened rim. Cooking Pot (Nr. 161-162) – (Lidar Höyük. Müller 1996, pl. 65 n. 11, 18).
- Large neck-less jars with “D” shaped rim. Possible Cooking Pot (Nr. 151-154) – (‘Ağīg region. Bernbeck 1993, pl. 118 lett. L, pl. 119 lett. A; Çiçek Yordu, Gre Migro. Parker 2001, fig. 4.10 lett. I, H - fig. 5.27 lett. B).
- Medium flared neck jars with tapered everted rim. (Nr. 133-135) – (Kilise Ardi Tepe. Sagona and Sagona 2004, fig. 187 n. 7, 9; Tell Shiukh Fawqani. Makinson 2005, pl. 3 n. 12).

- Medium flared neck jars with everted thickened oval rim. (Nr. 145-147) – (Çengiler Tepe. Sagona and Sagona 2004, fig. 191 n. 3; Ayanis. Kozbe *et al.* 2001, pl. VII n. 6, pl. XVII n. 24).
- Medium/large flared neck jars with everted round simple rim. (Nr. 129-132) – (Ziyaret Tepe. Matney and Rainville 2005, fig. 4 n. 10; Ayanis. Kozbe *et al.* 2001, pl. III n. 12, pl. XVII n. 3, 4) Numerous examples of this type.
- Medium/large flared neck jars with everted pointed rim (bec du canard). (Nr. 136, 140-144) – (Uğrak Taslık Höyük. Sagona and Sagona 2004, fig. 112 n. 8; Lidar Höyük. Müller 1996, pl. 103 n. 10, 11; Gre Virike. Ökse 1999, fig. 7 n. 25; Tell Hamoukar. Ur 2002, fig. 14 n. 5) Numerous examples of this type.
- Small/large flared neck jars with everted thickened square rim. (Nr. 137-139) – Numerous examples of this type.

Bases

- Small concave bases. (Nr. 192-195) – Numerous examples of this type.
- Small/medium ring concave bases. (Nr. 196-199) – (Ayanis. Kozbe *et al.* 2001, pl. XIV n. 34; Khirbet Qasrij. Curtis 1989, fig. 44 n. 341, 348; Tell Shiukh Fawqani. Luciani 2005, pl. 28 n. 331; Tell Beydar survey. Wilkinson and Barbanes 2000, fig. 2 n. 14; 'Ağrıg region. Bernbeck 1993, pl. 128 lett. N).
- Simple flat bases. (Nr. 183-187) – Numerous examples of this type.
- Convex ring-bases. (Nr. 200-204) – (Eski Koyeri Tepe 1. Sagona and Sagona 2004, fig. 118 n. 4; Ayanis. Kozbe *et al.* 2001, pl. XIII n. 7, pl. XIV n. 36, 37; Gre Virike. Ökse 1999, fig. 6 n. 13; Tell Hamoukar. Ur 2002, fig. 14 n. 17; Khirbet Qasrij. Curtis 1989, fig. 44 n. 334, 349; 'Ağrıg region. Bernbeck 1993, pl. 128 lett. R, S, pl. 129 lett. G, K; Tell Shiukh Fawqani. Luciani 2005, pl. 28 n. 329, 330).
- Gentle ring-bases. (Nr. 188-191) – (Aksaçlı. Sagona and Sagona 2004, fig. 115 n.6; 'Ağrıg region. Bernbeck 1993, pl. 128 lett. F-I; Tell Shiukh Fawqani. Luciani 2005, pl. 28 n. 321).

Body sherds

- Body fragments with rope-shape band decoration. (Nr. 216-223) – (Kurban Höyük survey. Wilkinson and Barbanes 2000, fig. 2 n. 17; Çubuklu. Koroğlu 1998, fig. 16 n. 11; Gre Migro. Parker 2001, fig. 5.24 lett. A; Köşkerbaba. Değirmentepe. Ökse 1988, fig. 1096, 1126 – fig. 1097) Numerous examples of this type.

Others:

- Wedges. Baked clay objects that possibly had a wedge function used during the firing process. They are flat underneath and rounder on top, with small depressions at the ends (not always) perhaps the marks of what they were holding in place. In a few cases finger marks are evident. (Nr. 228) – (İmikuşağı. Sevin 1995, fig. 18 n. 7).

Wares	Assemblage	Sherds	%
BPW		66	28,9
GRW		54	23,6
	PBW+GRW	120	52,63
PW		104	45,6
	PW	104	45,6
N/A		4	1,7
<i>Total</i>		228	100

Table 1. Distribution of the main three Iron Age wares at Hirbemerdon Tepe.

Fabric	BPW		GRW		PW		N/A		<i>Total</i>	
	Sherds	%	Sherds	%	Sherds	%	Sherds	%	Sherds	%
Medium-fine	4	1,7	0	0	10	4,3	0	0	14	6,1
Medium	47	20,6	42	18,4	70	30,7	1	0,4	160	70,1
Medium-coarse	9	3,9	8	3,5	5	2,1	0	0	22	9,6
N/A	6	2,6	4	1,7	19	8,3	3	1,3	32	14
<i>Total</i>	66	28,9	54	23,6	104	46,6	4	1,7	228	100

Table 2. Types of fabric among the main three Iron Age wares.

Surface Treatment	BPW		GRW		PW		<i>Total</i>	
	Sherds	%	Sherds	%	Sherds	%	Sherds	%
Slip	25	10,9	30	13,1	48	21	103	45,1
Smoothing	35	15,3	19	8,3	36	15,7	90	39,4
Burnishing	28	12,2	22	9,6	24	10,5	74	32,4
Painted	2	0,8	0	0	1	0,4	3	1,3
Incision/excision	7	3	7	3	0	0	14	6,1
Applied	1	0,4	2	0,8	0	0	3	1,3
N/A	6	2,6	4	1,7	19	8,3	29	12,7

Table 3. Surface treatments recognizable on the surface of the vessels of the main three ware Iron Age groups.

3.2.2. Discussion

As noticeable from our archaeological data dating to the Iron Age period, the best preserved context at Hirbemerdon Tepe belongs to the Early Iron Age Phase (i.e., Phase IVA, ca. 1050-900 BC). For example, the information gathered from the ‘bakery’ context in Area D gives us a clear perception of the ceramic production belonging to this Early Iron Age phase, whereas the pottery from the subsequent phase IVB (i.e., the Neo-Assyrian phase, ca. 900-610 BC) was much more difficult to identify due to the disturbed and incoherent nature of the context.

Bearing these factors in mind, the pottery analysis of the Iron Age at Hirbemerdon Tepe produced three large groups of pottery (i.e., BPW and GRW for Phase IVA, and PW

for Phase IVB). For the earlier phase, the pottery assemblage shows clear local elements of production in which the predominance of the Grooved Ware assemblage and of a burnished version of the Brown/Pink Ware indicates strong links with other regions in eastern and southeastern Anatolia. Moreover, the pottery production of the Early Iron Age is marked by the predominance of large cauldrons without necks (i.e., hole-mouth jars) that are burnished and have some sort of decoration along the rim area.

In terms of the origin of the Grooved Ware, it is possible to identify earlier versions within the northeastern regions during the Late Bronze Age to Early Iron Age transitional period, such as Transcaucasia (Avetisyan 2008, fig. 44 n. 3, 8; Sorokin 1958, no. 2, 149 ff., fig. 2/1 - 3) and Iran (Brown 1948, fig. 36/643, 915 - 39/23). Even though these types are different from those found in eastern Anatolian, they can be considered as earlier examples of containers that will then spread into Anatolia during the Early Iron Age. However, the main examples of the Grooved Ware belongs to the mid-12th to the end-10th century period and from an area stretching from the Malatya-Elazığ region to the west, at least the Erzurum region to the north, Transcaucasia to the north-east, the Lake Urmia area to the east and the middle Euphrates river to the south. The Van region is interested by this ware as well, from or until the Middle Iron Age, although the chronological attribution is under debate (Konyar 2005; Koroğlu and Konyar 2008). Within this perspective, it is interesting to notice that the distribution of the Grooved Ware assemblage corresponds to a specific region that, according to early Assyrian royal inscriptions (for example those of Tiglath-Pileser I, Radner 2006) would correspond to the ‘lands of Nairi’ (Roaf and Schachner 2005). Thus, the archaeological data show a clear link with the historical sources in which the Assyrian kings mention alliances among small local kingdoms in the area against their troops.

The presence of Grooved Ware in numerous archaeological contexts in eastern Anatolia continues within the Middle Iron Age (e.g., Bartl 2001, p. 391; Konyar 2005 p. 2; Sevin 1991, p. 95; Koroğlu 2003, p. 233; Parker 2001, p. 232ff.). Moving towards the end the 9th century, the official presence of Neo-Assyrian groups in the area changes dramatically the pottery production, too. At Hirbemerdon Tepe, the Grooved Ware assemblage slowly disappears or it may have been substituted by a newer version. As with similar cited sites, Grooved Ware perhaps shows a sort of legacy during the Neo-Assyrian period. Many types at Hirbemerdon Tepe contain variations that may have been produced during the transition to the new phase or during the Middle Iron Age. While fabrics are similar to the classic Grooved Ware, forms are mostly of an open nature with tapered rims and characterized by slip and clay primarily of pink shades of color. It is during this phase that we find typical Neo-Assyrian pottery examples produced at a local level (e.g., the PW) using surface treatment techniques (e.g., burnishing) that are linked to an Anatolian tradition (Matney *et al.* 2007). Thus, the Neo-Assyrian presence in the area transformed the type of production without disentangling the local potters from their traditional way of ‘making’ the vessels.

4. Conclusions

As seen from the archaeological data at our disposal, the Iron Age phase at Hirbemerdon Tepe is marked by a transformation in the settlement pattern with the settlement of the Early Iron Age (Phase IVA, ca. 1050-900 BC) located both in the northern and southern sectors of the High Mound; whereas, in the following period (Phase IVB, ca. 900-600 BC) the architecture in the High Mound is abandoned and the area is probably transformed into temporary encampments used by nomadic or transhumant groups. Furthermore, the Early Iron Age period appears to have been marked by specialized areas dedicated to food-processing (in Area D where part of a ‘bakery’ was uncovered) that are neatly separated from the residential neighbourhoods (Area A and Step trench AC). During the later Neo-Assyrian phase, the working activities (and particularly food-processing) are transferred to the Outer Town probably for easier access to the agricultural resources located within the river terraces, and the High Mound is instead distinguished by temporary settlements and numerous garbage pits. Due to its geographical location (i.e., at the crossroad between river terraces and uplands), a combined subsistence economy that incorporates both pastoral and agricultural strategies has been predominant at the site and its surrounding region (Ur and Hammer 2009). In fact, the importance of pastoral activities is still recognizable in the Diyarbakır region where winter pasturelands (*kışlak*) of non-sedentary groups were in common use for at least two millennia and possibly much longer (*ibid.* 2009: 4) and these temporary encampments have been constant features in the region’s landscape.

This dramatic transformation in the settlement pattern is coupled with pottery production, with a slow, but recurrent abandonment in the use of the Grooved Ware assemblage during the Neo-Assyrian period. As conceivable from the historical sources, these changes are probably related to the Imperial strategies brought to the area by the Assyrians starting from the beginning of the IX century BC in the attempt to re-organize the region according to their political and economic needs. Changes in the socioeconomic landscape of the region are also confirmed by an increase in the quantity of the settled area as well as by the creation of large urban centres (e.g., Ziyaret Tepe/Tuşhan and Uçtepe/Tidu) that made their first appearance in the region after millennia marked by the constant presence of small-to-medium sized settlements (Parker 2001: 211).

The imposition of this new socio-political landscape by the Neo-Assyrians brought to a halt local cultural traditions that are epitomized by the production of the distinctive Grooved Ware that characterized the pottery production of a wide area including most of eastern Anatolia during the Early Iron Age. According to the earlier historical Assyrian texts (for example Tiglath-Pileser I during the 12th century BC), during the Early Iron Age period this area was considered as the ‘lands of Nairi’ and was fragmented into a series of small local kingdoms that united against the attacks of the Assyrians.

In conclusion, the study of the Iron Age levels at Hirbemerdon Tepe has contributed to a better understanding of the changes which occurred in the upper Tigris river region during the Iron Age period (i.e., from locally organized groups during the Early Iron Age to a complex system of central organization imposed by the Assyrian kings during the Neo-Assyrian period). In so doing, a diachronic perspective on the

transformation of the material culture appears to be the most effective investigating strategy to understand social and economic changes in ancient times.

REFERENCES

- Algaze, G., R. Breuninger, C. Lightfoot, and M. Rosenberg, 1991 – The Tigris-Euphrates archaeological reconnaissance project: a preliminary report of the 1989-1990 seasons. *Anatolica* 18, 175-240.
- Anastasio, S., 1999 – Prospection archéologique du Haut-Khabur occidental (Syrie du N.E.). Preliminary Information on the Pottery of the Iron Age. In: A. Hausleiter and A. Reiche (eds.), Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia. Altertumskunde des Vorderen Orients, Band 10 (Münster), 173-191.
- Anastasio, S., 2007 – Das Obere Haburatal in der Jazira zwischen dem 13. und dem 5. Jh. v.Chr. Die Keramik des Projektes ‘Prospection archéologique du Haut-Khabour Occidental (Syrie du N.E.)’, CET, (Firenze).
- Avetisyan, P., and A. Bobokhyan, 2008 – The pottery traditions of the Armenian Middle to Late Bronze Age “transition” in the context of Bronze and Iron Age. In: K.S. Rubinson and A. Sagona (eds.), Ceramics in transitions: Chalcolithic through Iron Age in the highlands of the Southern Caucasus and Anatolia. Ancient Near Eastern Studies supplement n. 27 (Leuven), 123-184.
- Bartl, K., 1994 – Die frühe Eisenzeit in Ostanatolien und ihre Verbindungen zu den benachbarten Regionen. *Baghdader Mitteilungen* 25, 473-518.
- Bartl, K., 2001 – Eastern Anatolia in the Early Iron Age. In: R. Eichmann and H. Parzinger (eds.), Migration und Kulturtransfer: Der Wandel vorder- und zentralasiatischer Kulturen im Umbruch vom 2. zum 1. vorchristlichen Jahrtausend. Kolloquien zur Vor- und Frühgeschichte Band 6 (Bonn), 383-410.
- Belli, O., 1991 – Ore deposit and Mining in Eastern Anatolia in the Urartian Period: Silver, Copper and Iron. In: R. Merhav (ed.), Urartu. A Metalworking Center in the First Millennium B.C.E. (Jerusalem), 16-41.
- Belli, O., and Konyar E., 2003 – Ernis-Evditepe: The largest early Iron Age necropolis in Eastern Anatolia. *Tel Aviv* vol. 30 n. 2, 167-203.
- Bernbeck, R., 1993 – Steppe als Kulturlandschaft: Das ’Ağrı-Gebiet Ostsyriens vom Neolithikum zur islamischen Zeit (Berlin).
- Blaylock, S., 1999 – Iron Age Pottery from Tille Höyük, South-Eastern Turkey. In: A. Hausleiter and A. Reiche (eds.), Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia (Münster), 263-86.
- Brown, B.T., 1951 – Excavation in Azarbajjan, 1948 (London).
- Budge, E.A.W., and L.W. King, 1902 – Annals of the Kings of Assyria (London).
- Curtis, J., 1989 – Excavations at Qasrij Cliff and Khirbet Qasrij. Saddam Dam report 10, Western Asiatic Excavations 1.
- Forlanini, M., 2006 – Étapes et itinéraires entre Assur et l’Anatolie des marchands Paléo-Assyriens: Nouveaux documents et nouveaux problèmes, *Kaskal* 3 (Venice), 147-175.
- Goodwin, J., 1995 – The First Millennium B.C. Pottery. In: D. Baird, S. Campbell and T. Watkins, Excavations at Kharabeh Shattani, Volume II (University of Edinburgh, Department of Archaeology. Occasional Paper No. 18) (Edinburgh), 91-141.
- Grayson, A.K., 1991 – Assyrian Rulers of the Early First Millennium BC (1114-859 BC). In: The Royal Inscriptions of Mesopotamia, Assyrian Periods 2 (Toronto).
- Green, A., 1999 – The Ninevite Countryside. Pots and places of the Esiki-Mosul Region in the Neo-Assyrian and Post-Assyrian Periods. In: A. Hausleiter and A. Reiche (eds.), Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia. Altertumskunde des Vorderen Orients, Band 10 (Münster), 91-126.

- Karg, N., 1999 – Grê Dimsê 1998: Preliminary report. In: N. Tuna and J. Öztürk (eds.), Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish dam reservoirs: activities in 1998. Middle East Technical University, Centre for Research and Assessment of the Historic Environment (Ankara), 262-296.
- Karg, N., 2001 – First soundings at Grê Dimsê 1999. In: N. Tuna, J. Öztürk, J. Velibeyoğlu (eds.), Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish dam reservoirs: activities in 1999. Middle East Technical University, Centre for Research and Assessment of the Historic Environment, (Ankara), 671-693, figures in 662-669.
- Karg, N., 2002 – Sounding at Gre Dimse 2000. In: N. Tuna, J. Öztürk, J. Velibeyoğlu (eds.), Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs Activities in 2000 (Ankara), 723-737.
- Kessler, K., 1980 – Untersuchungen zur historischen Topographie Nordmesopotamiens (Wiesbaden).
- Kessler, K., 1995 – Šubria, Urartu and Aššur: topographical questions around the Tigris sources. In: M. Liverani (ed.), Neo-Assyrian geography. Università di Roma La Sapienza, Dipartimento di Scienze storiche, archeologiche e antropologiche dell'Antichità, Quaderni di Geografia storica 5 (Roma), 55-67.
- Konyar, E., 2005 – Grooved Pottery of the Van Lake Basin: A Stratigraphical and Chronological Assessment. In: M. Alparslan and M. Alparslan-Dogan (eds.), Colloquium Anatolicum IV. Türk Eskiçağ Bilimleri Enstitüsü Yayınları, 105-127.
- Köroğlu, K., 1998 – Üçtepe I (Ankara).
- Köroğlu, K., 2003 – The transition from Bronze Age to Iron Age in Eastern Anatolia. In: B. Fischer, H. Genz, E. Jean, and K. Köroğlu (eds.), Identifying changes: the Transition from Bronze to Iron Ages in Anatolia and its Neighboring Regions. Türk Eskiçağ Bilimleri Enstitüsü (İstanbul), 231-244.
- Köroğlu, K., and E. Konyar 2008 – Comments on the Early/Middle Iron Age Chronology of Lake Van Basin. In: Peeters (ed.), A Re-Assessment of Iron Ages Chronology in Anatolia and Neighboring Regions. Proceedings of a Symposium held at Ege University, Izmir, Turkey 25-27 May 2005. *Ancient Near Eastern Studies* 45 (Leuven), 123-146.
- Kozbe, G., Ö. Çevik, and H. Sağlamtimur 2001 – The pottery. In: A. Çilingiroğlu and M. Salvini (eds.), Ayanis 1: Ten Years' Excavations at Rusahinili Eidurukai 1989-1998, (Documenta Asiana VI). Pubblicazioni dell'Istituto per gli Studi Micenei ed Egeo-Anatolici (Roma), 85-153.
- Kozbe, G., 2008 – The Transition from late Bronze Age to Early Iron Age in the Upper Tigris region, Southeastern Anatolia: identifying changes in pottery. In: K.S. Rubinson and A. Sagona (eds.), Ceramics in transitions: Chalcolithic through Iron Age in the Highlands of the Southern Caucasus and Anatolia. *Ancient Near Eastern Studies*, Supplement 27, 291-322.
- Kreppner, F.J., 2002 – Public Space in Nature: The Case of Neo-Assyrian Rock Reliefs, *Altorientalische Forschungen* 29, 367-383.
- Laneri, N., 2005 – Hirbemerdon Tepe 2003: A Preliminary Report. *Kazı Sonuçları Toplantısı* 26, 63-72.
- Laneri, N., 2006 – The Second Season of Archaeological Work at Hirbemerdon Tepe (Turkey): A Preliminary Report. *East and West* 56.4, 419-430.
- Laneri, N., A. D'Agostino, M. Schwartz, S. Valentini, and G. Pappalardo, 2006 – A Preliminary Report of the Archaeological Excavations at Hirbemerdon Tepe, Southeastern Turkey. *Anatolica* 32, 153-188.
- Laneri, N., M. Schwartz, J. Ur, S. Valentini, A. D'Agostino, R. Berthon, and M.M. Hald, 2008 – The Hirbemerdon Tepe Archaeological Project 2006–2007: a preliminary report on the Middle Bronze Age ‘architectural complex’ and the survey of the site catchment area. *Anatolica* 34, 177-240.
- Laneri, N., M. Schwartz, S. Valentini, A. D'Agostino, and S. Nannucci 2009 – The Hirbemerdon Tepe Archaeological Project: The First Four Seasons of Archaeological Work at a Site in the Upper Tigre River Valley, SE Turkey. *Ancient Near Eastern Studies* 46, 212-276.
- Laneri, N., in press – The Hirbemerdon Tepe Archaeological Project 2003-2008. In: N. Babacan *et al.* (eds.), Archaeological Work in the Ilisu Dam Rescue Project 2003-2008 (Ankara).

- Lehmann, G., 1996 – Untersuchungen zur späten Eisenzeit in Syrien und Libanon. Altertumskunde des Vorderen Orients (AVO), Ugarit-Verlag (Münster).
- Liverani, M., 1992 – Studies on the Annals of Ashurnasirpal II. Quaderni di geografia storica (Roma).
- Luciani, M., 2005 – Area G: The Iron Age Productive area (period IX) and the inhumation cemetery (period X). In: L. Bachelot, F.M. Fales (eds.), Tell Shiukh Fawqani, 1994-1998, Volume 2, 720-993.
- Lumsden, S., 1999 – Neo-Assyrian Pottery from Nineveh. In: A. Hausleiter and A. Reiche (eds.), Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia. Altertumskunde des Vorderen Orients, Band 10 (Münster), 3-15.
- Makinson, M., 2005 – IV: Le Chantier F, Archéologie la stratigraphie générale et l'occupation de l'Âge du Fer (Architecture et Matériel). In: L. Bachelot, F.M. Fales (eds.), Tell Shiukh Fawqani, 1994-1998, Volume 2, 411-580.
- Matney, T., 1998 – The First Season of Work at Ziyaret Tepe in the Diyarbakır Province: Preliminary Report. *Anatolica* 24, 7-30.
- Matney, T., M. Roaf, J. MacGinnis, and H. McDonald, 2002 – Archaeological excavations at Ziyaret Tepe, 2000 and 2001. *Anatolica* 28, 46-89.
- Matney, T., and L. Rainville, 2005 – Archaeological investigations at Ziyaret Tepe, 2003-2004. *Anatolica* 31, 19-68.
- Matney, T., L. Rainville, K. Köroğlu, A. Keskin, T. Vorderstrasse, N. Özkul Fındık, and A. Donkin, 2007 – Report on Excavations at Ziyaret Tepe, 2006 Season. *Anatolica* 33, 23-74.
- Matney, T., T. Greenfield, B. Hartenberger, A. Keskin, K. Köroğlu, J. MacGinnis, W. Monroe, L. Rainville, M. Shepperson, T. Vorderstrasse, and D. Wicke, 2009 – Excavation at Ziyaret Tepe 2007-2008. *Anatolica* 35, 37-84.
- Müller, U., 1996 – Die eisenzeitliche Keramik von Lidar Höyük, PhD dissertation. Fakultät für Orientalistik und Altertumswissenschaften. Ruprecht Karls Universität (Heidelberg).
- Moore, J., and H.F. Russel, 1982 – Excavations at Tille 1979-1982: An Interim Report. *Anatolian Studies* 32, 161-187.
- Negro, F., 1997 – Rapporto di scavo a Khirbet Hatara Saddam Dam, Eski Mossul, Iraq II. 18. *Mesopotamia* 32, 163-188.
- Ökse, T., 1988 – Mitteleisenzeitliche Keramik zentral-ostanatoliens. Mit dem Schwerpunkt Karakaya-Stauseegebiet am Euphrat. Dietrich Reimer Verlag (Berlin).
- Ökse, T., 1999 – Gre Virike 1998 araştırması (Gre Virike: Research in 1998). In: N. Tuna and J. Öztürk (eds.), Ilisu ve Karkamış Baraj Gölleri Altında Kalacak Arkeolojik ve Kültür Varlıklarını Kurtarma Projesi 1998 Yılı Çalışmaları (Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs Activities in 1998) (Ankara), 119-155.
- Parker, B., 2001 – The Mechanics of Empire. The Northern Frontier of Assyria as a Case Study in Imperial Dynamics (Helsinki).
- Parker, B., 2002 – At the edge of the Empire: conceptualizing Assyria's Anatolian frontier ca 700 BC. *Journal of Anthropological Archaeology* 21, 371-395.
- Parker, B., and A. Creekmore, 2002 – The Upper Tigris Archaeological Research Project (UTARP): A Final Report from the 1999 Field Season. *Anatolian Studies* 52, 19-74.
- Parker, B., A. Creekmore, L. Swartz Dodd, C. Meegan, E. Moseman, R. Paille, M. Abraham, and P. Cobb, 2003 – The Upper Tigris Archaeological Research Project (UTARP): a Preliminary Report from the 2001 Field Season. *Anatolica* 29, 103-174.
- Parpola, S., 2008 – Cuneiform Texts from Ziyaret Tepe (Tušan), 2002-2003. *State Archives of Assyria Bulletin* 17, 1-114.
- Piotrovskij, B.B., 1966 – Il regno di Van Urartu. Incunabola Graeca vol. XII (Roma).
- Postgate, J.N., 1979 – The Economic Structure of the Assyrian Empire. In: M.T. Larsen (ed.), Power and Propaganda. A Symposium on Ancient Empires. *Mesopotamia* 7 (Copenhagen), 193-222.

- Radner, K., 2003 – Ausgrabungen in Giricano I: Das mittelassyrische Tontafelarchiv von Giricano/Dunnu-Sa-Uzibi (Ankara).
- Radner, K., 2004 – Das mittelassyrische Tontafelarchiv von Giricano/Dunnu-sha-Uzibi (Ausgrabungen in Giricano 1). *Subartu* 14 (Turnhout).
- Radner, K., 2006 – How to Reach the Upper Tigris: The Route Through the Tur ‘Abdin. *State Archives of Assyria Bulletin* 15, 273-305.
- Radner, K., and A. Schachner, 2001 – From Tušhan to Amēdi: Topographical Questions concerning the Upper Tigris Region in the Assyrian Period. In: N. Tuna, J. Öztürk, and J. Velibeyoğlu (eds.), Salvage Project of the Archaeological Heritage of the Ilısu and Carchemish Dam Reservoirs Activities in 1999 (Ankara), 729-776.
- Roaf, M., and A. Schachner, 2005 – The Bronze Age transition in the Upper Tigris region: new information from Ziyaret Tepe and Giricano. In: Anatolian Iron Ages 5, Proceedings of the Fifth Anatolian Iron Ages Colloquium held at Van, 6-10 August 2001. British Institute at Ankara, BIIA Monograph 31, 115-123.
- Russel, H.F., 1980 – Pre-Classical pottery of Eastern Anatolia. British Institute of Archaeology in Ankara (Oxford).
- Sagona, A., and C. Sagona, 2004 – Archaeology at the North-East Anatolian Frontier, I: An Historical Geography and a Field Survey of the Bayburt Province. *Ancient Near Eastern Studies*, supplement 14 (Leuven).
- Schachner, A., 2003 – From the Bronze Age to the Iron Age: Identifying Changes in the Upper Tigris Region. The Case of Giricano. In: B. Fischer, H. Genz, É. Jean, K. Köroğlu (eds.), Identifying Changes: The Transition from Bronze to Iron Age in Anatolia and its Neighbouring Regions. İstanbul. Türk Eskiçağı Bilimleri Enstitüsü (London), 151-166.
- Schachner, A., 2009 – Assyriens Könige an einer der quellen des Tigris, Archäologische Forschungen im Höhlensystem von Birkeyn und am sogenannten Tigris-Tunnel. Istanbuler Forschungen Band 51, Ernst Wasmuth Verlag (Tübingen).
- Sevin, V., 1991 – The Early Iron Age in the Elaziğ Region and the Problem of the Mushkians. *Anatolian Studies* 41, 86-97.
- Sevin, V., 1994 – Three Urartian rock-cut tombs from Palu. *Tel Aviv* 21, 58-67.
- Sevin, V., 1995 – Imikuşağı I, Türk Tarih Kurumu Basımevi (Ankara).
- Sorokin, V.V., 1958 – Sledij drevnejsego poselenija u Karmir-Blura. *Sovjetskaia Arkheologija* 2, 149-163.
- Tekin, H., 2006 – Yatay Oluk Bezekli Bir Seramik Grubunun Ele Geçtiği Yeni Bir Merkez: Hakemi Use. *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi* 23/1, 151-172.
- Terhan, M.T., 1994 – Recent Research at the Urartian Capital Tushpa. *Tel Aviv* 21, 22-57.
- Ur, J., 2002 – Surface Collection and Offsite Studies at Tell Hamoukar. *Iraq* 64, 15-44.
- Ur, J.A., and E.L. Hammer, 2009 – Pastoral nomads of the second and third millennia AD on the Upper Tigris River, Turkey: archaeological evidence from the Hirbemerdon Tepe survey. *Journal of Field Archaeology* 34, 37-56.
- Wilkinson, T.J., 1990 – Town and country in southeastern Anatolia vol. 1: settlement and land use at Kurban Hoyuk and other sites in the lower Karababa Basin. Oriental Institute Publications no. 109.
- Wilkinson, T.J., 2004 – Excavations at Tell Es-Sweyhat, Syria Volume 1 on the margin of the Euphrates settlement and land use at tell Es-Sweyhat and the Upper lake Assad area, Syria. Oriental Institute Publications, Volume 124, The Oriental Institute of the University of Chicago.
- Wilkinson, T.J., and E. Barbanes, 2000 – Settlement patterns in the Syrian Jazira during the Iron age. In: G. Bunnens (ed.), Essays on Syria in the Iron Age. *Ancient Near Eastern Studies Supplement* 7, 397-422.
- Winn, M.N., 1980 – The Early Iron Age Pottery. In: M.N. van Loon (ed.), Korucutepe 3. Final Report on the Excavations of the Universities of Chicago, California (Los Angeles) and Amsterdam in the Keban Reservoir, Eastern Anatolia (1968-1978). (Oxford – Amsterdam). 155-175.

APPENDIX: POTTERY CATALOGUE OF THE IRON AGE PERIOD (FIGS. 10-21)

Nr	\varnothing	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
001	15	GRW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 6/4 light brown	Medium mineral sand, grit, mica	Slip Burnishing
002	18	GRW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 6/4 light brown to 7.5YR 5/1 gray	Medium mineral sand, grit, mica	Slip
003	24	BPW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium vegetal chaff, grit, limestone, sand, mica	Smoothing
004	28	BPW	7.5YR 8/3 pink	7.5YR 8/3 pink	7.5YR 8/3 pink	Medium vegetal chaff, sand, limestone, grit, mica	Smoothing
005	29	BPW	N/A	N/A	N/A	N/A	Excised decoration
006	40	BPW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 7/3 pink	Medium-coarse vegetal chaff, limestone, grit, sand, mica	Smoothing
007	25	GRW	7.5YR 7/4 pink	6/4 light brown	7.5YR 7/4 pink	Medium vegetal chaff, sand, limestone, mica	Smoothing Burnishing Fingernail incisions
008	25	GRW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown	Medium vegetal chaff, sand, grit, mica	Smoothing Burnishing
009	25	GRW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium vegetal chaff, sand, limestone, grit, mica	Smoothing
010	25	GRW	N/A	N/A	N/A	N/A	N/A
011	37	GRW	7.5YR 7/3 pink to 10YR 3/1 very dark gray (burned)	7.5YR 7/3 pink	7.5YR 3/1 very dark gray	Medium mineral sand, grit, mica	Slip Burnishing
012	30	GRW	7.5YR 7/2 pinkish gray	7.5YR 7/2 pinkish gray	out to 7.5YR 5/1 gray	Medium vegetal chaff, sand, grit, mica	Slip
013	30	GRW	5YR 6/4 light reddish brown	7.5YR 6/4 light brown	out to 7.5YR 7/4 pink to in	Medium mineral sand, chaff, grit, limestone, mica	Slip
014	33	GRW	7.5YR 6/3 light brown	7.5YR 7/3 pink	out to 7.5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Slip
015	45	GRW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	6/6 reddish yellow to 5/1 gray	Medium vegetal chaff, sand, limestone, grit, mica	Slip
016	N/A	GRW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	7.5YR 6/3 light brown to 7.5YR 4/1 dark gray	Medium mineral sand, limestone, grit, chaff, mica	Slip Burnishing
017	20	GRW	N/A	N/A	N/A	N/A	N/A
018	N/A	GRW	N/A	N/A	N/A	N/A	N/A
019	25	GRW	5YR 6/4 light reddish brown	5YR 7/6 reddish yellow	out to 5YR 4/1 dark gray to in	Medium vegetal chaff, sand, limestone, mica	Slip (inside)
020	25	GRW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	out to 7.5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Slip Slight burnishing
021	30	GRW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to 7.5YR 6/2 pinkish gray	Medium vegetal chaff, sand, grit, mica	Slip
022	30	GRW	7.5YR 7/2 pinkish gray	7.5YR 6/3 light brown	7.5YR 7/6 reddish yellow	Medium mineral sand, grit, chaff, mica	Slip
023	N/A	GRW	N/A	N/A	N/A	N/A	N/A
024	35	GRW	7.5YR 8/3 pink	7.5YR 8/3 pink	7.5YR 8/3 pink	Medium-coarse vegetal chaff, sand, grit, some mica	Smoothing

Nr	ϕ	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
025	35	GRW	5YR 7/4 pink	6/6 reddish yellow to 5/1 gray	5YR 7/4 pink	Medium vegetal chaff, sand, limestone, grit, mica	Slip Fishbone excisions
026	35	GRW	7.5YR 6/4 light brown	7.5YR 7/4 pink	out to 7.5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Slip Burnishing
027	40	GRW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	Medium vegetal chaff, limestone, grit, sand, mica	Slip Slight Burnishing
028	17	GRW	7.5YR 6/3 light brown	7.5YR 4/2 brown (burned)	7.5YR 6/3 light brown	Medium-coarse mineral sand, limestone, grit, mica	Slip
029	20	GRW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 6/3 light brown to 7.5YR 6/1 gray	Medium mineral sand, grit, chaff, mica	Slip
030	21	BPW	N/A	N/A	N/A	N/A	N/A
031	9	BPW	5YR 7/4 pink	5YR 7/4 pink	5/6 yellowish red	Medium mineral sand, chaff, limestone, grit, mica	Slip
032	15	BPW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5/6 yellowish red	Medium mineral sand, chaff, grit, limestone, mica	Slip
033	16	BPW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 5/6 yellowish red to 5YR 4/1 dark gray	Medium mineral sand, chaff, grit, limestone, mica	Slip Incised wavy line
034	30	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium mineral sand, limestone, mica, some grit	Slip Burnishing
035	41	PW	5YR 6/4 light reddish brown	5YR 6/6 reddish yellow	7.5YR 5/4 brown	Medium mineral sand, grit, limestone, chaff, mica	Slip Burnishing
036	45	BPW	N/A	N/A	N/A	N/A	N/A
037	35	PW	5YR 8/3 pink	5YR 8/3 pink	7.5YR 6/4 light brown	Medium-fine mineral sand, limestone, grit, mica	Slip
038	15	BPW	10YR 7/3 very pale brown	10YR 7/3 very pale brown	7.5YR 6/3 light brown	Medium mineral sand, grit, mica	Slip Burnishing
039	N/A	BPW CP	7.5YR 7/3 pink to 7.5YR 6/3 light brown	7.5YR 7/3 pink	7.5YR 5/3 brown	Medium mineral sand, limestone, grit, mica	Slip
040	21	BPW CP	7.5YR 6/3 light brown	7.5YR 7/4 pink	7.5YR 5/3 brown	Medium mineral sand, grit, mica	Slip Burnishing
041	25	PW	7.5YR 7/3 pink to 7.5YR 6/4 light brown	7.5YR 7/3 pink to 5YR 6/6 reddish yellow (few strokes)	5YR 6/4 light reddish brown to 5YR 7/6 reddish yellow	Medium-fine mineral sand, chaff, grit, limestone, mica	Slip
042	30	BPW	5YR 6/4 light reddish brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown to 7.5YR 5/3 brown	Medium vegetal chaff, sand, limestone, less than grit, mica	Slip Strong burnishing
043	33	BPW CP	5YR 6/2 pinkish gray to 7.5YR 7/2 pinkish gray	7.5YR 7/4 pink	out to 7.5YR 4/1 dark gray to in	Medium mineral sand, grit, limestone, chaff, mica	Slip
044	12	GRW	pink	pink	pink	Medium mineral sand, chaff, limestone, grit, mica	Smoothing
045	13	BPW	N/A	N/A	N/A	N/A	N/A
046	13	GRW	5YR 7/3 pink	5YR 7/3 pink	5YR 7/3 pink	Medium vegetal chaff, sand, grit, some limestone, mica	Smoothing
047	13	GRW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	out to 7.5YR 4/1 dark gray to in	Medium-coarse mineral sand, chaff, grit, mica	Slip

Nr	\varnothing	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
048	25	BPW	7.5YR 6/4 light brown and 7.5 6/3 light brown	7.5YR 5/4 brown	2.5YR 3/1 dark reddish gray	Medium vegetal chaff, sand, limestone, mica	Slip Burnishing
049	30	BPW	pink	pink	pink	Medium mineral	Slip
050	40	BPW	light brown	light brown	brown to gray	Medium vegetal chaff, sand, limestone, mica	Traces of strong burnishing
051	65	PW	7.5YR 8/3 pink	7.5YR 8/3 pink	7.5YR 8/3 pink	Medium-coarse vegetal – chaff, sand, limestone, mica	Smoothing
052	40	PW	7.5YR 7/2 pinkish gray	7.5YR 7/3 pink	7.5YR 8/4 pink	Medium mineral sand, chaff, limestone, mica	Slip
053	30	PW	5YR 6/4 light reddish brown	7.5YR 7/4 pink to 7.5YR 6/4 light reddish brown	out to 5YR 4/1 dark gray to in	Medium-coarse mineral sand, chaff, limestone, grit, mica	Slip
054	27	PW	N/A	N/A	N/A	N/A	N/A
055	32	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to 7.5YR 5/1 gray	Medium-fine mineral sand, mica, chaff	Smoothing Burnishing
056	26	PW	N/A	N/A	N/A	N/A	N/A
057	23	PW	7.5YR 6/4 light brown	7.5YR 7/4 pink	out to 7.5YR 4/1 dark gray	Medium mineral	Slip
058	21	PW	7.5YR 8/3 pink	7.5YR 8/3 pink	7.5YR 8/4 pink	Medium mineral sand, grit, limestone, chaff, mica	Smoothing
059	25	PW	N/A	N/A	N/A	N/A	N/A
060	50	PW	7.5YR 5/3 brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown	Medium mineral sand, grit, chaff, mica	Smoothing Burnishing
061	36	PW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	out to 7.5YR 4/1 dark gray	Medium vegetal chaff, limestone, grit, sand, mica	Smoothing
062	40	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 6/4 light brown	Medium-coarse vegetal chaff, sand, limestone, grit, mica	Slip
063	30	PW	N/A	N/A	N/A	N/A	N/A
064	35	PW	pink	pink	out to 7.5YR 6/1 gray	Medium mineral	Smoothing
065	40	PW	7.5YR 6/3 light brown	7.5YR 7/4 pink	out to 7.5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Slip
066	36	PW	pink	pink	out to 7.5YR 6/1 gray	Medium mineral	Smoothing
067	40	BPW	10YR 8/3 very pale brown	10YR 8/3 very pale brown	10YR 8/3 very pale brown	Medium-coarse vegetal chaff, limestone, grit	Slip
068	31	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to 7.5YR 4/1 dark gray	Medium vegetal chaff, sand, grit, limestone, mica	Smoothing
069	32	BPW	7.5YR 6/2 pinkish gray	7.5YR 5/3 brown	out to 5YR 3/1 very dark gray	Medium vegetal chaff, sand, grit, mica	Slip Rim/body excisions
070	30	PW	N/A	N/A	N/A	N/A	N/A
071	20	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 6/2 pinkish gray	Medium mineral sand, limestone, chaff, mica	Slip Burnishing
072	30	PW	7.5YR 6/3 light brown	7.5YR 6/4 light brown	out to 7.5YR 3/1 very dark gray to in	Medium vegetal chaff, sand, limestone, grit, mica	Smoothing
073	30	BPW	7.5YR 6/3 light brown	light brown	7.5YR 6/3 light brown	Medium vegetal chaff, limestone, sand, mica, grit	Smoothing
074	38	BPW	10YR 6/3 pale brown	10YR 6/3 pale brown	10YR 6/3 pale brown	Medium vegetal chaff, sand, mica	Smoothing Burnishing

Nr	\varnothing	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
075	36	BPW	7.5YR 6/4 light brown	10YR 7/3 very pale brown	5YR 6/6 reddish yellow	Medium vegetal chaff, sand, grit, limestone, mica	Slip Burnishing
076	20	PW	10YR 6/4 light yellowish brown	10YR 6/4 light yellowish brown	10YR 4/1 dark gray	Medium mineral sand, chaff, limestone, mica	Smoothing External burnishing
077	30	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 6/5 reddish yellow	Medium mineral sand, chaff, limestone, mica	Slip
078	31	PW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 6/6 reddish yellow to 5YR 5/1 gray	Medium-fine mineral sand, mica, limestone	Slip
079	35	PW	7.5YR 6/4 light brown	7.5YR 7/4 pink	out to 7.5YR 4/1 dark gray	Medium fabric	Slip
080	20	BPW	7.5YR 6/4 light brown	7.5YR 7/4 pink	7.5YR 6/4 light brown	Medium mineral sand, chaff, mica	Slip Burnishing
081	30	PW	pink	pale brown	N/A	N/A	N/A
082	30	PW	7.5YR 7/4 pink and 7.5YR 6/4 light brown ridges	7.5YR 7/4 pink	out to 7.5YR 5/2 brown	Medium mineral sand, grit, limestone, chaff, mica	Slip
083	30	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to gray 5YR 6/1	Medium vegetal chaff, limestone, mica, sand	Smoothing
084	35	PW	5YR 6/6 light reddish brown	5YR 6/6 light reddish brown	5YR 6/6 light reddish brown to gray – light gray 7/N and gray 5/N - GLEY1	Medium vegetal chaff, limestone, mica	Smoothing Slight burnishing
085	37	PW	5YR 7/4 pink to 10YR 4/1 dark gray (burned)	5YR 7/4 pink	5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Smoothing Burnishing
086	29	PW	7.5YR 7/3 pink	7.5YR 7/4 pink	7.5YR 5/1 gray	Medium mineral sand, limestone, mica	Smoothing Burnishing
087	N/A	PW	10YR 6/6 light red	10YR 6/6 light red	7.5YR 7/6 reddish yellow to 7.5YR 5/1 gray	Medium vegetal chaff, sand, grit, limestone, mica	Slip
088	34	PW CP	5YR 6/4 light reddish brown to 7.5YR 5/2 brown (burned)	5YR 6/4 light reddish brown	5YR 4/1 dark gray to in	Medium mineral sand, grit, limestone, mica	Smoothing Slight burnishing
089	15	PW	N/A	N/A	N/A	N/A	N/A
090	20	PW	5YR 7/4 pink	5YR 7/4 pink	5YR 7/4 pink	Medium mineral sand, limestone, chaff, mica	Smoothing
091	20	PW	5YR 7/4 pink	5YR 7/4 pink	5YR 5/3 reddish brown	Medium vegetal chaff, sand, mica	Slip Burnishing
092	22	PW	5YR 6/6 reddish yellow	6/4 light reddish brown	5YR 6/6 reddish yellow	Medium mineral sand, chaff, mica, limestone, grit	Slip
093	25	PW	7.5YR 7/3 pink	7.5YR 6/4 light brown	out to 7.5YR 6/1 gray	Medium vegetal chaff, sand, limestone, mica, grit	Slip
094	30	PW	N/A	N/A	N/A	N/A	N/A
095	31	PW	N/A	N/A	N/A	N/A	N/A
096	35	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	5YR 6/6 reddish yellow to 5YR 6/2 pinkish gray	Medium mineral sand, grit, chaff, mica	Slip
097	35	PW	7.5YR 6/4 light brown	10YR 7/3 very pale brown	5YR 6/6 reddish yellow	Medium vegetal chaff, sand, grit, limestone, mica	Slip Burnishing
098	45	PW	5YR 6/3 light reddish brown	7.5YR 7/4 pink	5YR 6/3 light reddish brown	N/A	Slip

Nr	ϕ	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
099	21	BPW	7.5YR 6/3 light brown to 7.5YR 3/1 very dark gray (burned)	7.5YR 6/3 light brown to 7.5YR 3/1 very dark gray	out to 7.5YR 3/1 very dark gray	Medium mineral sand, grit, chaff, mica	Slip Burnishing Fingernail excisions
100	25	BPW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium mineral sand, grit, limestone, chaff, mica	Smoothing Rim incisions
101	30	BPW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to 7.5YR 7/1 light gray to in	Medium mineral sand, chaff, grit, mica	Smoothing Slight burnishing Rim incisions
102	38	BPW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown	Medium-fine mineral sand, limestone, chaff, mica	Smoothing Strong burnishing
103	36	BPW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	N/A	Medium vegetal chaff, mica sand	N/A
104	30	BPW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown	Medium-fine mineral sand, limestone, chaff, mica	Smoothing Strong Burnishing
105	43	BPW	7.5YR 6/3 light brown	7.5YR 7/3 pink	5YR 6/5 light reddish brown	Medium-fine mineral sand, limestone, chaff, mica, grit	Slip
106	24	PW	N/A	N/A	N/A	N/A	N/A
107	N/A	PW	N/A	N/A	N/A	N/A	N/A
108	25	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 3/1 very dark gray	Medium mineral sand, grit, chaff, mica	Slip Burnishing
109	27	PW	N/A	N/A	N/A	N/A	N/A
110	15	BPW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 7/3 pink	Medium-coarse sand, grit, limestone, mica	Smoothing Burnishing
111	17	BPW	7.5YR 5/2 brown	7.5YR 5/2 brown	7.5YR 5/2 brown	Medium-coarse sand, mica	Smoothing Slight burnishing
112	N/A	BPW	N/A	N/A	N/A	N/A	N/A
113	25	GRW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	Medium mineral sand, chaff, mica	Smoothing Burnishing
114	N/A	GRW	5YR 6/4 light reddish brown	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium vegetal chaff, sand, limestone, grit, mica	Slip
115	30	GRW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium mineral sand, grit, chaff, mica	Smoothing Slight burnishing Fishbone incisions
116	19	GRW	7.5YR 6/3 light brown	7.5YR 7/4 pink	7.5YR 6/3 light brown	Medium mineral sand, limestone, mica, grit	Slip Fingernail excisions
117	20	GRW	5YR 7/4 pink	5YR 7/4 pink	5YR 7/4 pink	Medium-coarse vegetal chaff, sand, limestone, grit, mica	Smoothing Rope-shape impression
118	25	GRW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 6/4 light brown	Medium mineral sand, grit, mica	Slip
119	35	GRW	5YR 6/4 light reddish brown	5YR 7/4 pink and 5YR 6/2 pinkish gray	out to 5YR 5/1 gray	Medium vegetal chaff, sand, grit, limestone, mica	Slip
120	45	GRW	7.5YR 7/4 pink	6/3 light brown	Gley 1 3/N very dark grey	Medium-coarse vegetal chaff, grit, limestone, mica	Slip
121	11	PW	5YR 7/3 pink	5YR 7/3 pink	7.5YR 6/4 light brown	Medium vegetal chaff, sand, limestone, grit, mica	Slip
122	9	PW	pink	pink	light brown	Medium mineral sand, limestone, mica	Slip

Nr	ϕ	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
123	12	PW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	5YR 6/6 reddish yellow to 5YR 5/1 gray	Medium mineral sand, grit, chaff, mica	Slip
124	16	PW	5YR 7/4 pink	5YR 7/4 pink	out to 5YR 6/2 pinkish gray	Medium mineral sand, limestone, chaff, mica	Slip
125	22	PW	7.7YR 7/6 pink	7.5YR 6/4 light brown	7.5YR 6/1 gray	Medium mineral sand, limestone, chaff, mica	Slip
126	22	PW	5YR 6/4 light reddish brown	7.5YR 6/4 light brown	7.5YR 6/4 light brown	Medium vegetal chaff, sand, limestone, grit, mica	Slip
127	7	BPW	light brown	light brown	light brown	Medium mineral sand, chaff, limestone, mica	Smoothing
128	11	BPW	7.5YR 6/4 light brown to 7.5YR 4/1 dark gray	7.5YR 6/4 light brown	7.5YR 6/4 light brown to 7.5YR 4/1 dark gray	Medium mineral sand, limestone, grit, mica	Slip Burnishing Painted festoon 7.5YR 4/2 brown
129	13	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 6/4 light brown	Medium mineral	Slip Burnishing
130	14	PW	pink	pink	pink	Medium mineral sand, grit, chaff, mica	Smoothing Slight burnishing
131	15	PW	N/A	N/A	N/A	N/A	N/A
132	20	PW	pink	pink	out to pinkish gray	Medium mineral	Slip
133	15	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 6/4 light brown	Medium mineral sand, limestone, chaff	Slip
134	15	PW	pink	pink	pink	Medium mineral	Smoothing
135	17	PW	7.5YR 7/2 pinkish gray	7.5YR 6/3 light brown	7.5YR 7/2 pinkish gray	Medium vegetal chaff, sand, limestone, mica	Slip Burnishing (strong on top of rim)
136	30	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium vegetal chaff, sand, mica	Smoothing
137	25	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium mineral sand, grit, limestone, chaff, mica	Smoothing Burnishing (most on rim)
138	30	PW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	7.5YR 4/2 brown	Medium vegetal chaff, sand, limestone, mica, grit	Slip
139	40	PW	7.5YR 6/2 pinkish gray to 5/3 brown	7.5YR 6/3 light brown	7.5YR 6/2 pinkish gray to 5/3 brown	Medium vegetal chaff, sand, limestone, grit, mica	Slip
140	20	PW	5YR 6/2 pinkish gray	pinkish gray to 5YR 6/4 light reddish brown	5YR 6/2 reddish gray	Medium mineral sand, chaff, grit, limestone, mica	Slip Burnishing on rim
141	25	PW	N/A	N/A	N/A	N/A	N/A
142	30	PW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to 7.5YR 5/1 gray	Medium mineral sand, chaff, mica	Smoothing
143	35	PW	5YR 6/6 reddish yellow to 7.5YR 6/4 light brown and 7.5YR 4/2 brown (burned)	5YR 6/6 reddish yellow to 7.5YR 6/4 light brown and 7.5YR 4/2 brown (burned)	out to 7.5YR 3/1 very dark gray	Medium mineral sand, limestone, grit, mica	Smoothing
144	35	PW	pink	pink	out to gray	Medium mineral sand, limestone, chaff, mica	Smoothing
145	15	PW	N/A	N/A	N/A	N/A	N/A

Nr	\varnothing	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
146	15	PW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	out to 7.5YR 3/1 very dark gray	Medium mineral sand, chaff, grit, mica	Smoothing Burnishing
147	18	PW	10YR 7/3 very pale brown	10YR 7/3 very pale brown	5YR 7/6 reddish yellow	Medium mineral sand, limestone, chaff, mica	Slip
148	20	BPW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 7/3 pink	Medium mineral sand, limestone, chaff, mica	Smoothing Burnishing Impressions under rim
149	25	BPW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 7/3 pink	Medium mineral sand, limestone, chaff, mica	Smoothing Burnishing
150	30	BPW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 7/4 pink	Medium mineral sand, limestone, chaff, mica	Smoothing Incised rim
151	15	PW	N/A	N/A	N/A	N/A	N/A
152	21	PW	7.5YR 6/2 pinkish gray	7.5YR 6/2 pinkish gray	7.5YR 6/2 pinkish gray	Medium mineral sand, limestone, grit, mica	Smoothing Depressions on and under rim
153	35	PW	7.5YR 6/3 light brown to 10YR 4/1 dark gray	7.5YR 6/3 light brown to 10YR 4/1 dark gray	7.5YR 5/2 brown	Medium mineral sand, grit, mica	Slip Burnishing
154	35	PW	light brown	light brown	light brown	Medium mineral	Smoothing
155	27	BPW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 6/4 light red brown	Medium mineral sand, calcareous, mica	Smoothing
156	N/A	BPW	7.5YR 5/3 brown	7.5YR 6/4 light brown	7.5YR 5/3 brown	Medium vegetal chaff, sand, limestone, mica	Smoothing
157	34	BPW	light brown	light brown	light brown	Medium mineral	Smoothing
158	16	BPW	7.5YR 7/4 pink	7.5YR 7/4 pink	out to 7.5YR 5/2 brown	Medium-fine mineral sand, limestone, mica, chaff	Smoothing Burnishing Painted decoration (10R 4/6 red)
159	30	BPW	5YR 6/4 light reddish brown	5YR 6/6 reddish yellow	out to 5YR 5/1 gray	Medium vegetal chaff, sand, grit, limestone, mica	Slip
160	33	BPW	2.5YR 6/4 light reddish brown	2.5YR 6/4 light reddish brown	7.5YR 5/1 Gray	Medium vegetal chaff, limestone, grit, sand, mica	Smoothing Burnishing on rim
161	25	BPW CP	7.5YR 5/3 brown to 7.5YR 3/2 dark brown to 7.5YR 2.5/2 very dark brown	7.5YR 3/2 dark brown to 7.5YR 2.5/2 very dark brown	7.5YR 3/1 very dark gray	Medium-coarse mineral sand, limestone, grit, mica	Smoothing Burnishing
162	38	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	out to 7.5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Smoothing
163	15	BPW CP	7.5YR 5/3 brown	7.5YR 5/3 brown	out to 7.5YR to 7.5YR 5/1 gray	Medium mineral sand, grit, mica	Smoothing Burnishing
164	25	GRW	7.5YR 6/4 light brown to 7.5YR 5/3 brown to 7.5YR 4/2 brown	7.5YR 6/4 light brown to 7.5YR 5/3 brown to 7.5YR 4/2 brown	7.5YR 5/3 brown	Medium mineral sand, grit, mica	Smoothing Burnishing
165	25	BPW	N/A	N/A	N/A	Medium mineral	N/A
166	20	GRW	5YR 5/4 reddish brown	5YR 6/4 light reddish brown	out to 5YR 4/1 dark gray	Medium mineral sand, grit, mica	Smoothing Burnishing
167	30	GRW	7.5YR 7/4 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium-coarse sand, chaff, limestone	Smoothing
168	N/A	GRW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	7.5YR 6/3 light brown	Medium mineral sand, grit, chaff, mica	Smoothing Burnishing

Nr	\varnothing	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
169	30	GRW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	5/1 gray to in	Medium-coarse mineral sand, grit, limestone, mica, chaff	Smoothing Strong burnishing
170	35	GRW	5YR 6/2 pinkish gray	7.5YR 6/1 gray to out	7.5YR 5/1 gray to in	Medium vegetal chaff, sand, grit, limestone, mica	Slip – Rim and in burnishing Fish-bone excisions
171	N/A	GRW	7.5YR 6/3 light brown	7.5YR 7/4 pink	7.5YR 4/1 dark gray	Medium mineral sand, grit, limestone, mica	Slip Slight burnishing Rope-shape band
172	35	GRW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	5YR 5/3 reddish brown	Medium mineral sand grit, limestone, mica	Slip Burnishing
173	30	BPW	7.5YR 6/4 light brown	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium mineral sand, grit, mica, some limestone	Slip Burnishing
174	30	GRW	5YR 6/2 pinkish gray	5YR 6/2 pinkish gray	5YR 6/3 light reddish brown	Medium-coarse mineral sand, limestone, grit, mica	Slip – Slight internal and rim burnishing Diagonal excisions Dot line
175	N/A	GRW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	Medium mineral sand, chaff, limestone, grit, mica	Smoothing Slight burnishing
176	10	GRW	5YR 6/4 light reddish brown	5YR 6/2 pinkish gray	N/A	Medium mineral sand, grit, mica,	Slip Burnishing
177	20	GRW	light brown	light brown	light brown	Medium mineral	Smoothing
178	-	GRW	5YR 7/3 pink	5YR 6/3 light reddish brown	out to 7.5YR 4/1 dark gray to in	Medium mineral sand, grit, chaff, mica	Slip Burnishing
179	27	GRW	reddish yellow	(completely burned)	yellow to reddish yellow	Medium mineral sand, grit, chaff, limestone, mica	Smoothing
180	30	GRW	7.5YR 7/4 pink	7.5YR 7/3 pink	7.5YR 7/3 pink	Medium mineral sand, chaff, mica	Smoothing
181	30	GRW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	7.5YR 6/4 brown	Medium vegetal chaff, sand, grit, limestone, mica	Smoothing
182	N/A	GRW	5YR 7/3 pink	5YR 7/3 pink	5YR 7/4 pink	Medium vegetal chaff, sand, limestone, grit, mica	Smoothing
183	7	BPW CP	5YR 6/3 light reddish brown to 5YR 5/1 gray	5YR 6/3 light reddish brown to 5YR 5/1 gray	out to in	Medium mineral sand, limestone, grit, mica	Smoothing
184	8	N/A	N/A	N/A	N/A	N/A	N/A
185	10	PW	7.5YR 7/4 pink to 7.5YR 6/4 light brown	7.5YR 7/4 pink	out to 7.5YR 5/1 gray	Medium vegetal chaff, sand, limestone, mica	Slip
186	10	N/A	N/A	N/A	N/A	N/A	N/A
187	20	PW	7.5YR 7/4 pink	7.5YR 7/3 pink	out to 7.5YR 4/1 dark gray	Medium vegetal chaff, sand, grit, mica	Smoothing
188	7	BPW	5YR 6/4 light reddish brown to 7.5YR 6/4 light brown	7.5YR 6/4 light brown	out to 7.5YR 5/4 brown	Medium vegetal chaff, sand, limestone, mica	Smoothing
189	9	PW	7.5YR 8/3 pink	7.5YR 7/3 pink	5YR 5/6 yellowish red to 5YR 6/4 light reddish brown	Medium-fine mineral sand, limestone, mica, chaff	Slip Burnishing
190	15	PW	7.5YR 7/2 pinkish gray	7.5YR 6/3 light brown	out to 7.5YR 4/1 dark gray to in	Medium mineral sand, grit, limestone, chaff, mica	Slip
191	16	PW	5YR 6/4 light reddish brown	N/A	out to 5YR 4/1 dark gray	Medium vegetal chaff, sand, grit, mica	N/A

Nr	ϕ	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
192	10	PW	7.5YR 8/4 pink	7.5YR 8/4 pink	7.5YR 7/4 pink	Medium-fine mineral sand, chaff, limestone, grit, mica	Smoothing
193	4	PW	4123- 7.5YR 7/2 pinkish gray	7.5YR 7/4 pink	7.5YR 5/1 gray	Medium mineral sand, grit, chaff, mica	Slip
194	13	BPW	7.5YR 7/3 pink to 7.5YR 4/1 dark gray	N/A	5YR 5/4 reddish brown to 7.5YR 5/3 brown	Medium mineral sand, chaff, limestone, mica	Slip Burnishing
195	14	PW	7.5YR 8/3 pink	7.5YR 7/4 pink	5YR 6/6 reddish yellow	Medium-fine mineral sand, chaff, mica	Slip
196	5	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	out to 7.5YR 6/2 pinkish gray	Medium mineral sand, grit, limestone, chaff, mica	Smoothing
197	9	PW	7.5YR 6/4 light brown	7.5YR 6/4 light brown	7.5YR 3/1 very dark gray	Medium mineral sand, limestone, chaff, grit, mica	Smoothing
198	11	PW	N/A	N/A	N/A	N/A	N/A
199	17	PW	7.5YR 6/3 light brown	5YR 6/4 light reddish brown	in to 5YR 4/1 dark gray	Medium mineral sand, grit, chaff, mica	Slip
200	5	PW	7.5YR 6/2 pinkish gray	7.5YR 6/2 pinkish gray	7.5YR 6/2 pinkish gray	Medium-fine mineral sand, limestone, grit, mica	Smoothing
201	5	PW	7.5YR 6/4 light brown to 7.5YR 5/2 brown	7.5YR 6/4 light brown	reddish yellow to 7.5YR 5/2 brown	Medium-fine mineral sand, limestone, mica	Slip Strong burnishing
202	6	PW	N/A	N/A	N/A	N/A	N/A
203	13	PW	5YR 6/4 light reddish brown to 5YR 7/2 pinkish gray	7.5YR 6/3 light brown	5Y 5/6 yellowish red	Medium-fine mineral sand, chaff, limestone, mica	Slip Burnishing
204	20	PW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	7.5YR 6/6 reddish yellow	Medium mineral sand, chaff, mica	Slip
205	-	BPW	5YR 7/3 pink	5YR 6/4 light reddish brown	in to 5YR 4/2 dark reddish gray	Medium mineral sand, limestone, grit, chaff, mica	Slip
206	-	BPW	pink	pink	very dark gray	Medium mineral	Smoothing
207	-	BPW	5YR 7/4 pink to 5YR 6/6 reddish yellow	5YR 7/4 pink to 5YR 6/6 reddish yellow	out to 5YR 4/1 dark gray	Medium vegetal sand, chaff, mica, grit	Smoothing
208	25	BPW	7.5YR 6/3 light brown	7.5YR 7/2 pinkish gray	7.5YR 6/4 light brown	Medium mineral sand, grit, mica	Slip Burnishing
209	20	BPW	7.5YR 5/2 brown to 7.5YR 5/3 brown	7.5YR 6/3 light brown	7.5YR 5/3 brown	Medium mineral sand, grit, limestone, mica	Smoothing Excisions on pot
210	25	BPW	5YR 5/1 gray	5YR 5/1 gray to 5YR 7/4 pink	in to out	Medium-coarse mineral sand, limestone, grit, mica	Smoothing Burnishing
211	-	BPW	5YR 4/1 dark gray 5YR 6/2 pinkish gray and 5YR 5/1 gray	5YR 4/1 dark gray 5YR 6/2 pinkish gray and 5YR 5/1 gray	5YR 4/1 dark gray 5YR 6/2 pinkish gray and 5YR 5/1 gray	Medium-coarse mineral sand, grit, limestone	Smoothing
212	-	BPW	5YR 5/1 gray	5YR 5/1 gray to 5YR 7/4 pink	in to out	Medium-coarse mineral sand, limestone, grit, mica	Smoothing Burnished
213	-	BPW CP	7.5YR 5/2 brown to 7.5YR 4/1 dark gray	7.5YR 5/2 brown to 7.5YR 4/1 dark gray	7.5YR 4/1 dark gray	Medium-coarse sand, grit	Slip Burnishing
214	25	BPW	7.5YR 6/3 light brown	10YR 6/3 pale brown	7.5YR 5/3 brown to 7.5YR 6/2 pinkish gray	N/A	Smoothing External burnishing
215	-	BPW	7.5YR 6/3 light brown	7.5YR 6/3 light brown	7.5YR 6/3 light brown	Medium mineral sand, grit, mica	Smoothing Burnishing

Nr	\varnothing	Ware	Color (out)	Color (in)	Color (sec)	Fabric	Surface Treatment
216	-	PW	7.5YR 7/3 pink	7.5YR 7/3 pink	7.5YR 7/3 pink	Medium mineral	Smoothing Rope-shape band
217	-	PW	5YR 7/4 pink	5YR 7/4 pink	5YR 7/4 pink	Medium-coarse vegetal chaff, limestone, sand, grit, mica	Smoothing Rope-shape band
218	-	PW	7.5YR 7/4 pink	7.5YR 6/3 light brown	7.5YR 4/1 dark gray	Medium mineral sand, chaff, limestone, grit, mica	Slip Rope-shape band
219	-	GRW	7.5YR 7/3 pink	6/4 light brown	7.5YR 7/3 pink	Medium vegetal chaff, sand, limestone, grit, mica	Slip Burnishing Fish-bone incisions 2 rope-shape impressions 2 bosses
220	-	PW	5YR 7/3 pink	5YR 7/3 pink	5YR 7/3 pink	Medium-coarse vegetal chaff, sand, limestone, mica	Smoothing Rope-shape band
221	-	PW	7.5YR 7/3 pink	7.5YR 6/2 pinkish gray	7.5YR 7/3 pink	Medium vegetal chaff, sand, limestone, mica, grit	Slip Rope-shape band
222	-	BPW	5YR 6/4 light reddish brown to 5YR 5/2 reddish gray	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	Medium mineral sand, chaff, limestone, grit, mica	Smoothing Rope-shape band
223	-	PW	7.5YR 8/3 pink	7.5YR 7/4 pink	7.5YR 7/4 pink	Medium mineral sand, limestone, grit, mica	Smoothing External burnishing Rope-shape band
224	-	N/A	N/A burned	N/A burned	N/A burned	N/A burned	N/A burned
225	-	BPW	5YR 6/4 light reddish brown	10YR 4/2 dark grayish brown	10YR 3/2 very dark grayish brown	Medium mineral sand, chaff, limestone, mica	Slip Appliquéd band
226	-	BPW	5YR 5/4 reddish brown	5YR 5/4 reddish brown	5YR 5/4 reddish brown	Medium vegetal chaff, sand, limestone, grit, mica	Smoothing Burnished
227	-	PW	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	5YR 6/4 light reddish brown	Medium mineral sand, chaff, limestone, grit, mica	Smoothing Rope-shape band Painted bands
228	-	N/A	pink hues	pink hues	pink hues	Medium mineral	Fingerprints on some examples

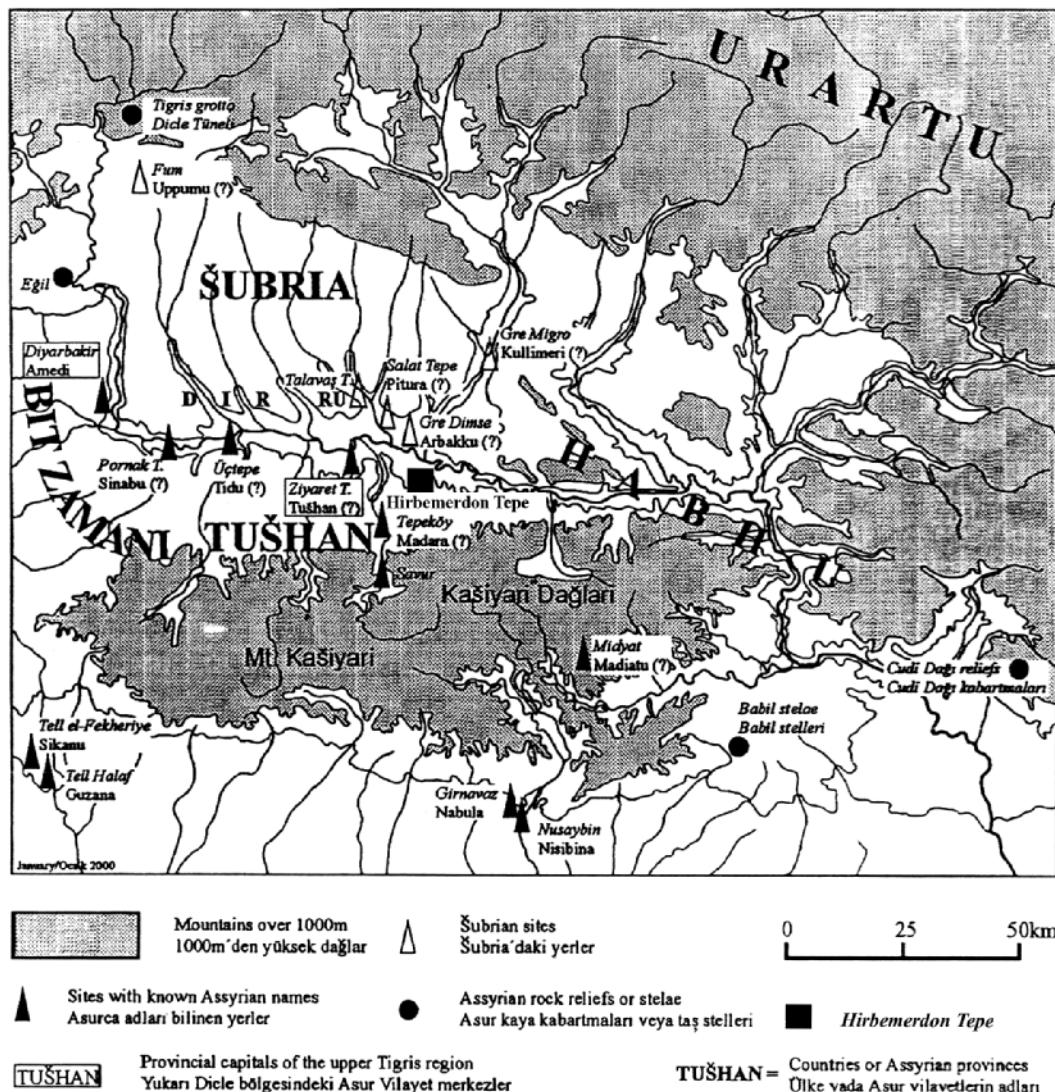


Figure 1. Map of the region showing the site of Hirbemerdon Tepe
and other ancient toponyms in Akkadian
(after Radner and Schachner 2001: Fig. 3).

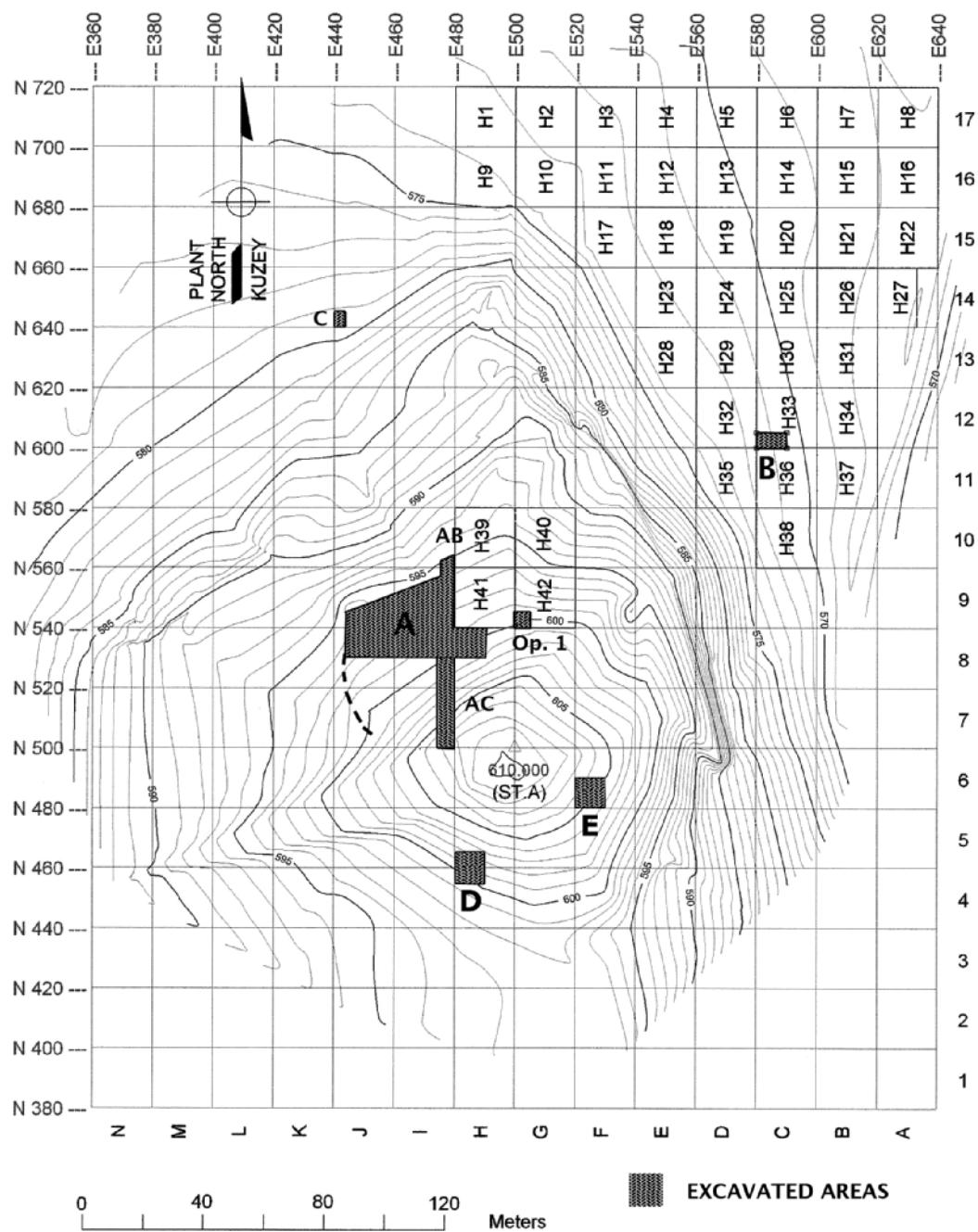


Figure 2. Topographic map of Hirbemerdon Tepe highlighting the excavated areas and the squares investigated by the means of magnetic survey.

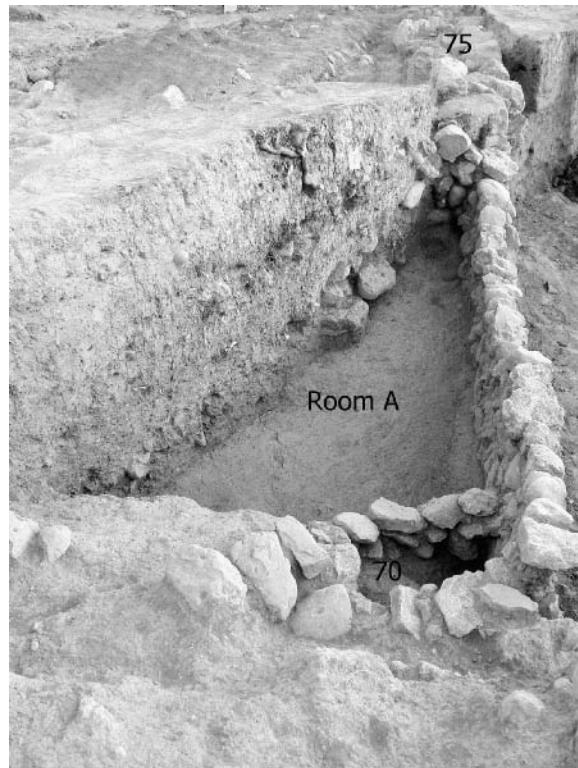


Figure 3. Photo of the Early Iron Age (Phase IVA) structures from Step Trench AC in the High Mound (view from south).

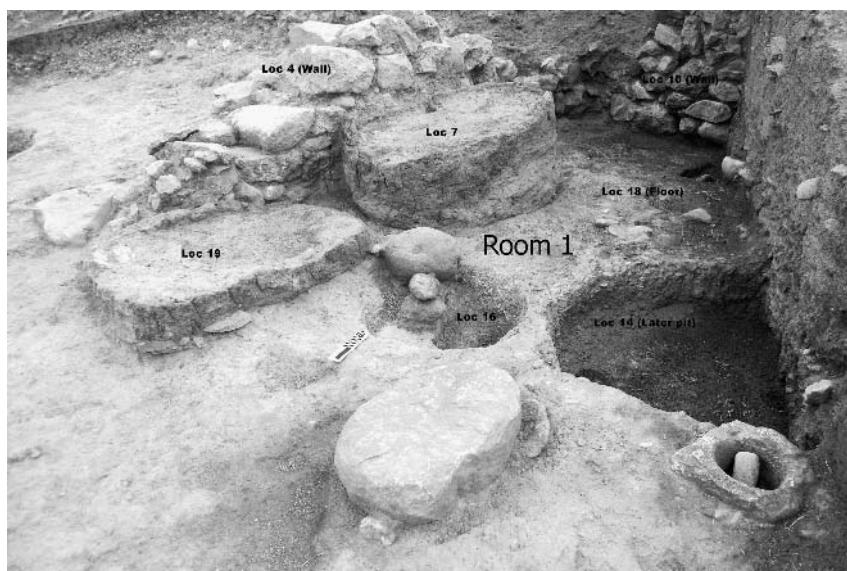


Figure 4. Photo of the Early Iron Age 'bakery' (Phase IVA) from Area D in the High Mound (view from south).

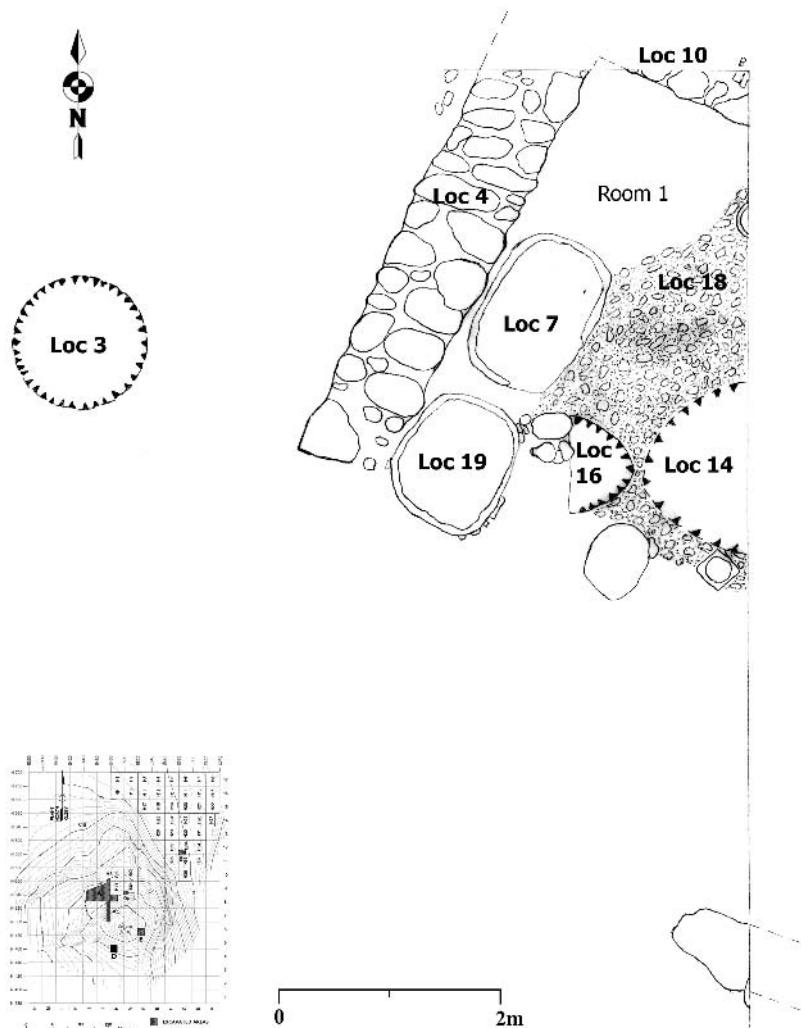


Figure 5. Map of the Early Iron Age phase from Area D.

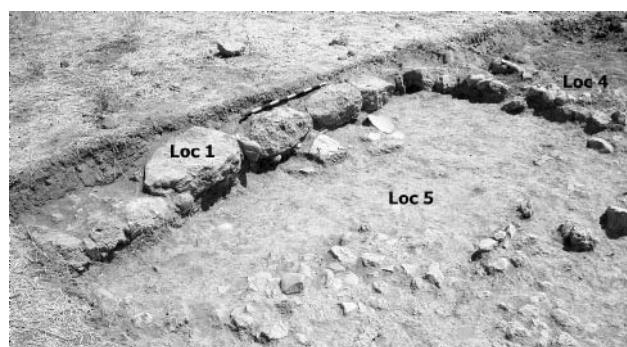


Figure 6. Photo of the excavated features of the Neo-Assyrian period (Phase IVB) from Area B in the Outer Town (view from west).

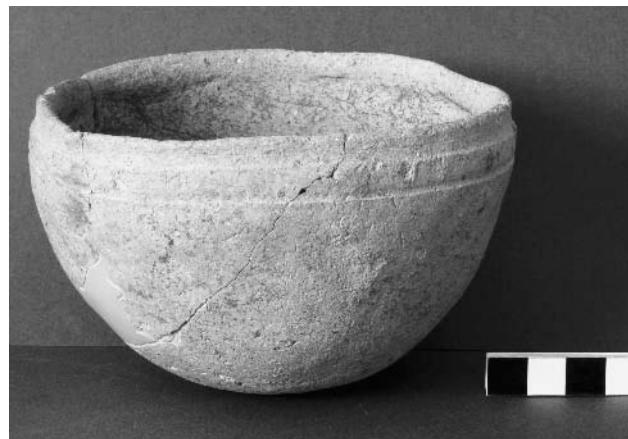


Figure 7. Bowl of the Grooved Ware (Phase IVA, Early Iron Age) found in situ in Area D.



Figure 8. Jug of the Brown/Pink Ware (Phase IVA, Early Iron Age) found in situ in Area D.



Figure 9. Grinding stones of the Neo-Assyrian period from Area B (Outer Town).

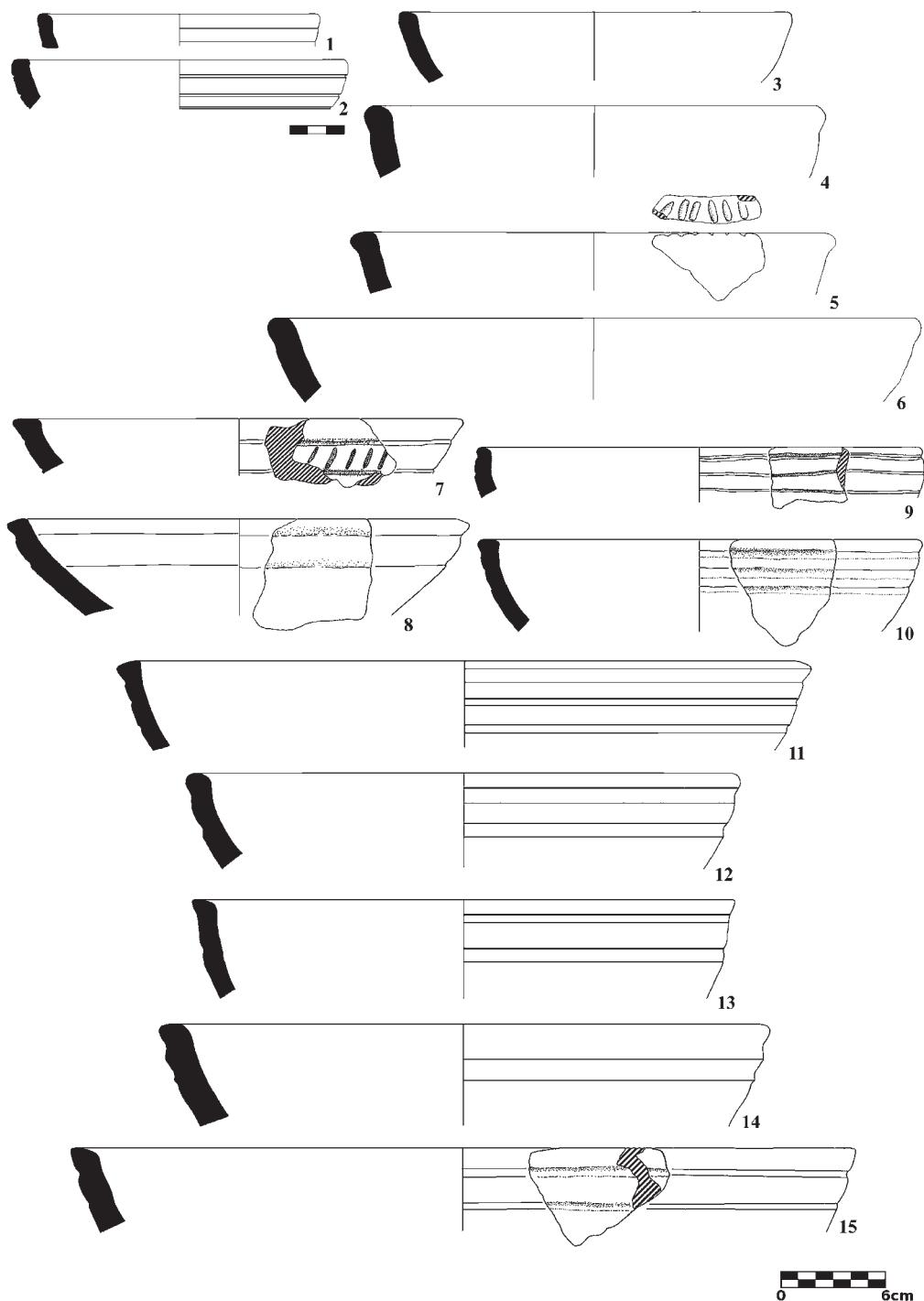


Figure 10. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 3-6); Grooved Ware (nr. 1, 2, 7-15).

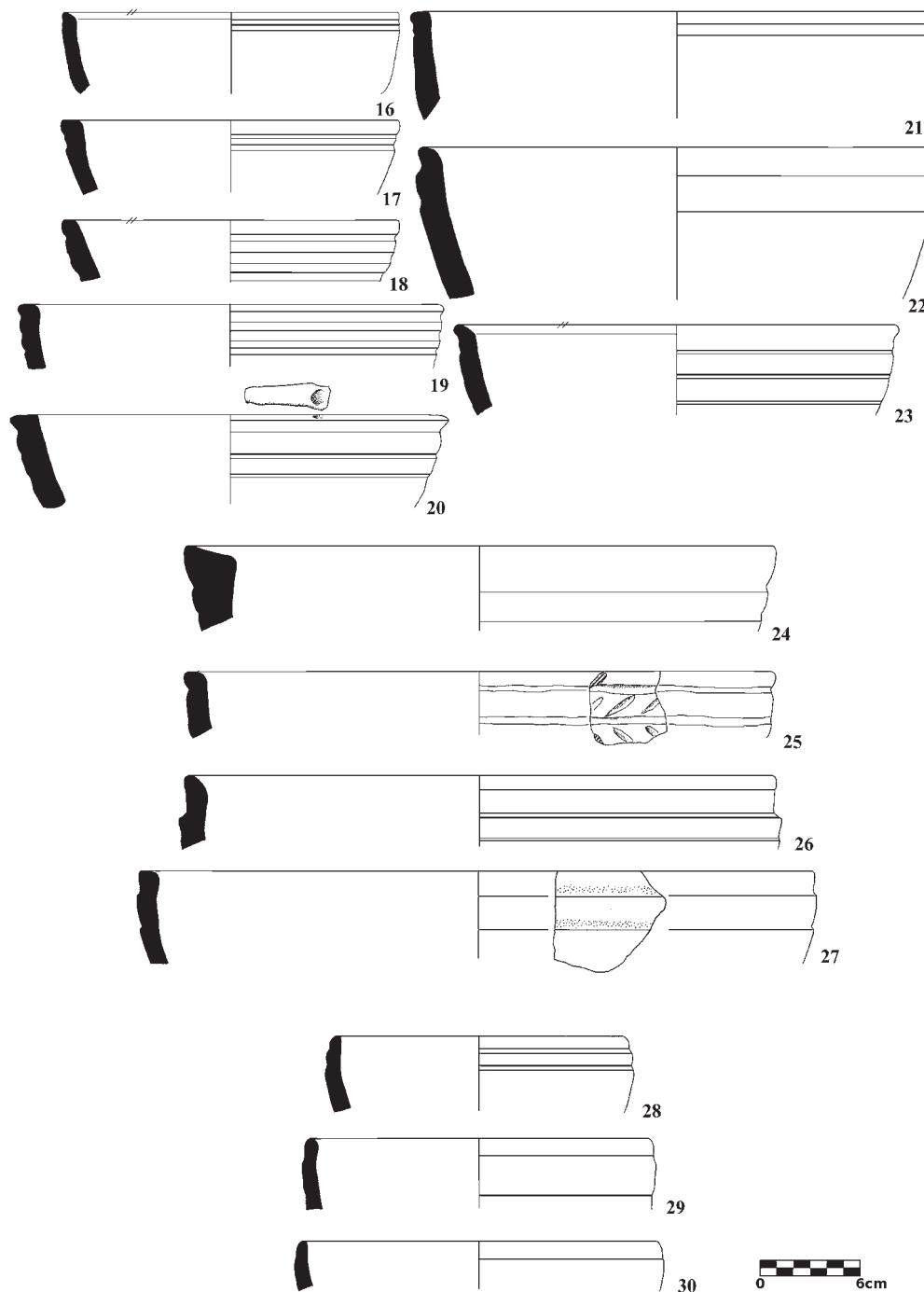


Figure 11. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 30); Grooved Ware (nr. 16-29).

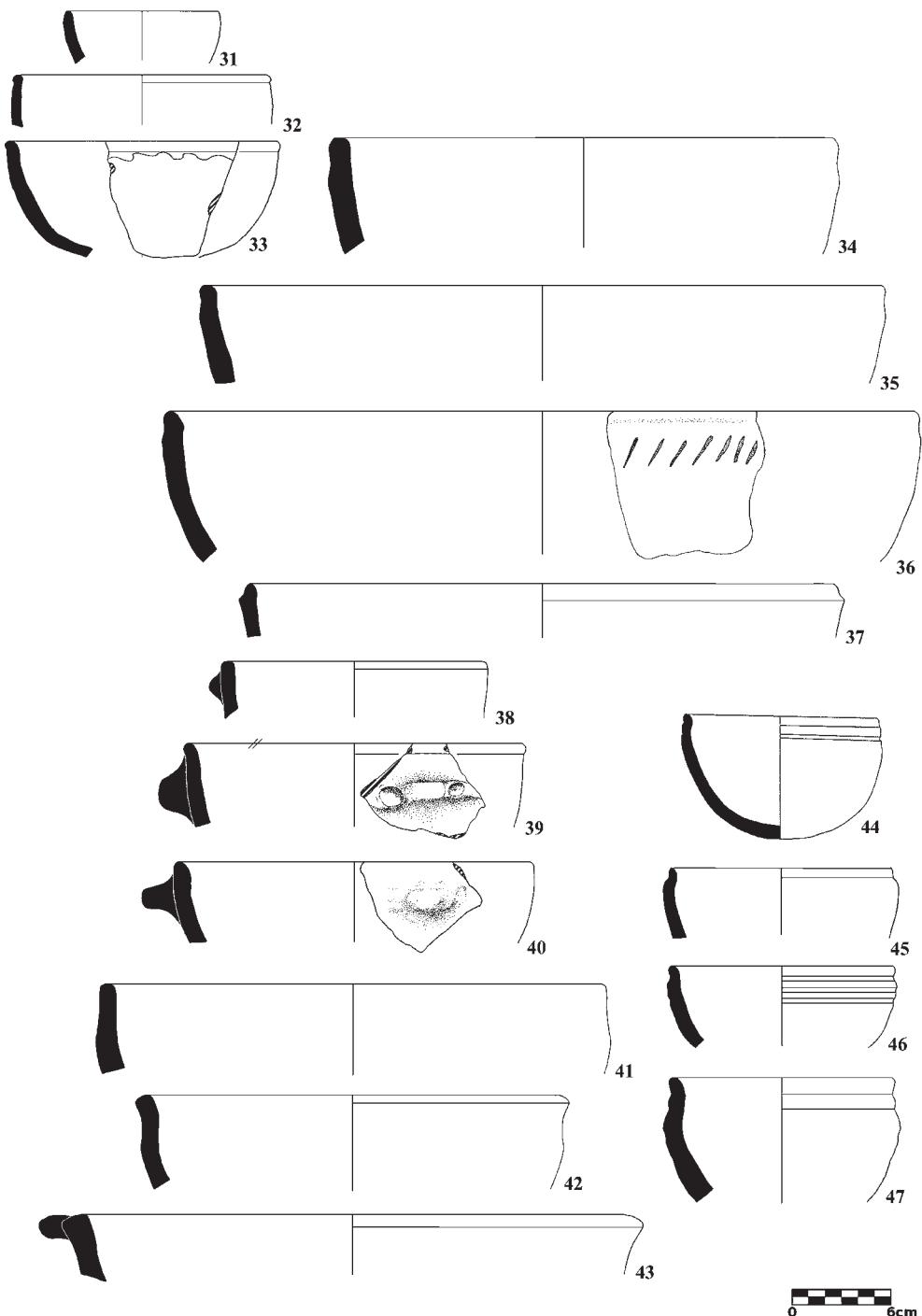


Figure 12. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 31-33, 36, 38-40, 42, 43); Grooved Ware (nr. 44, 46, 47); Plain Ware (nr. 34, 35, 37, 41).

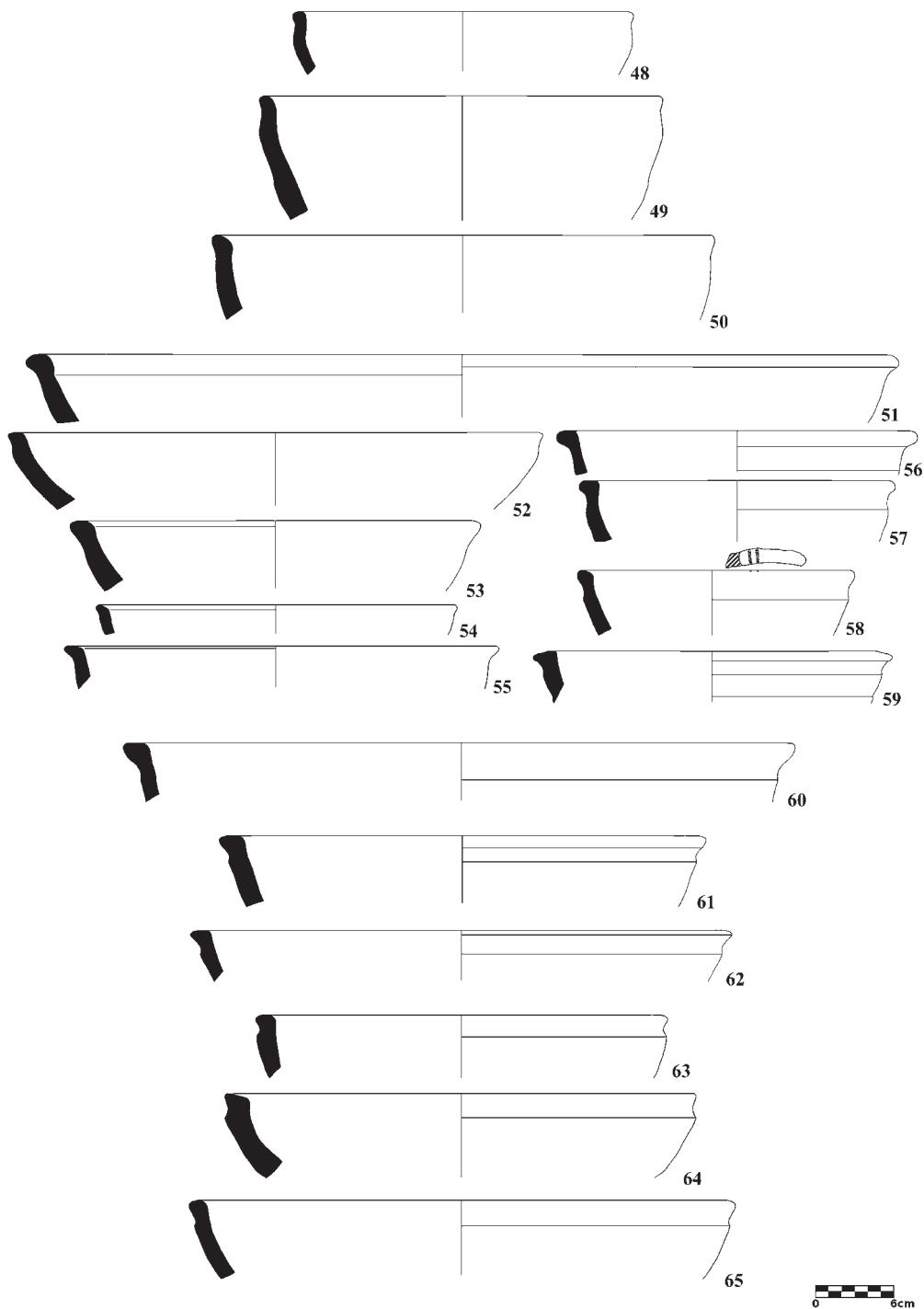


Figure 13. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 50); Plain Ware (nr. 51-65).

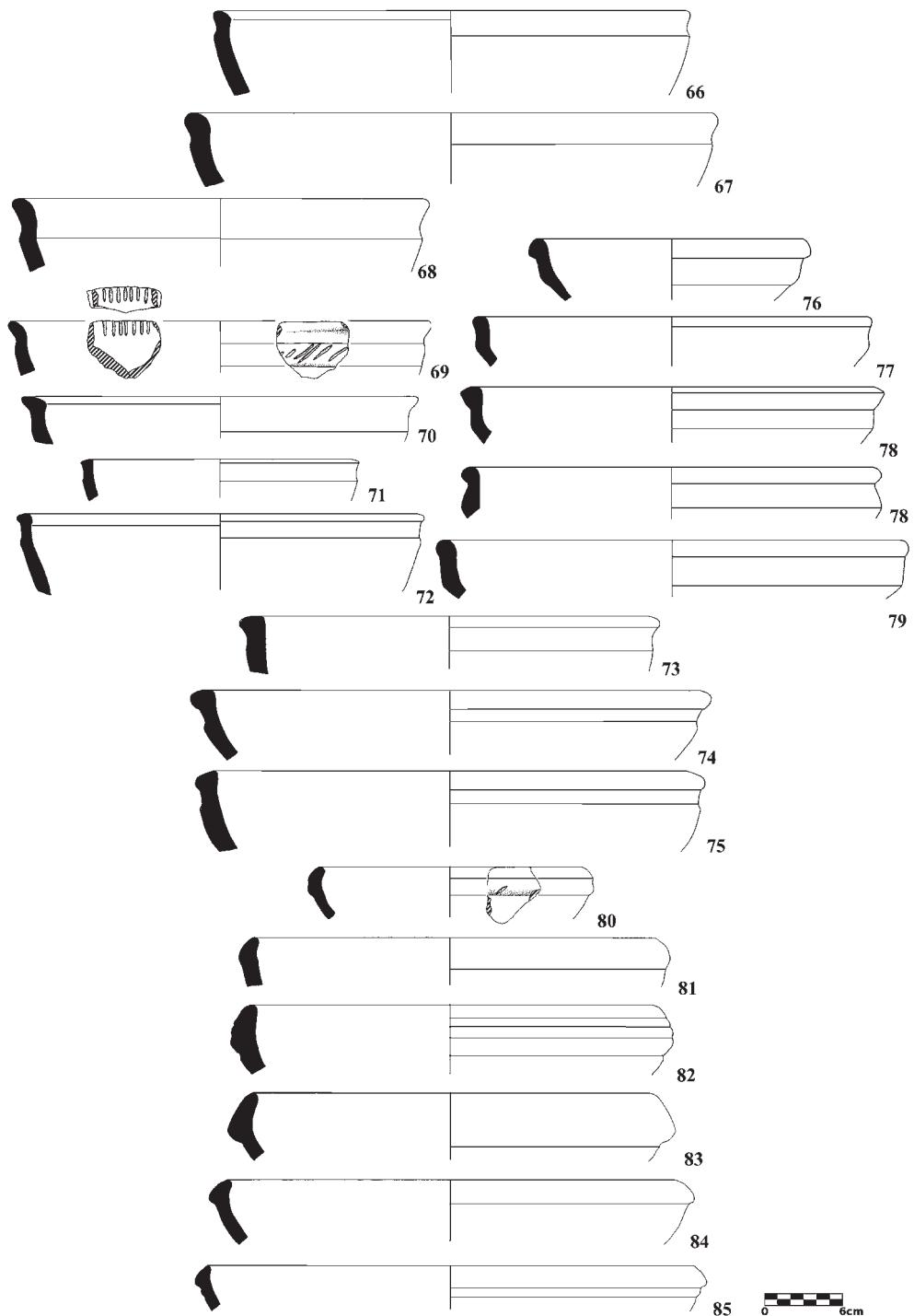


Figure 14. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 67, 69, 73-75); Plain Ware (nr. 66, 68, 70-72, 76-85).

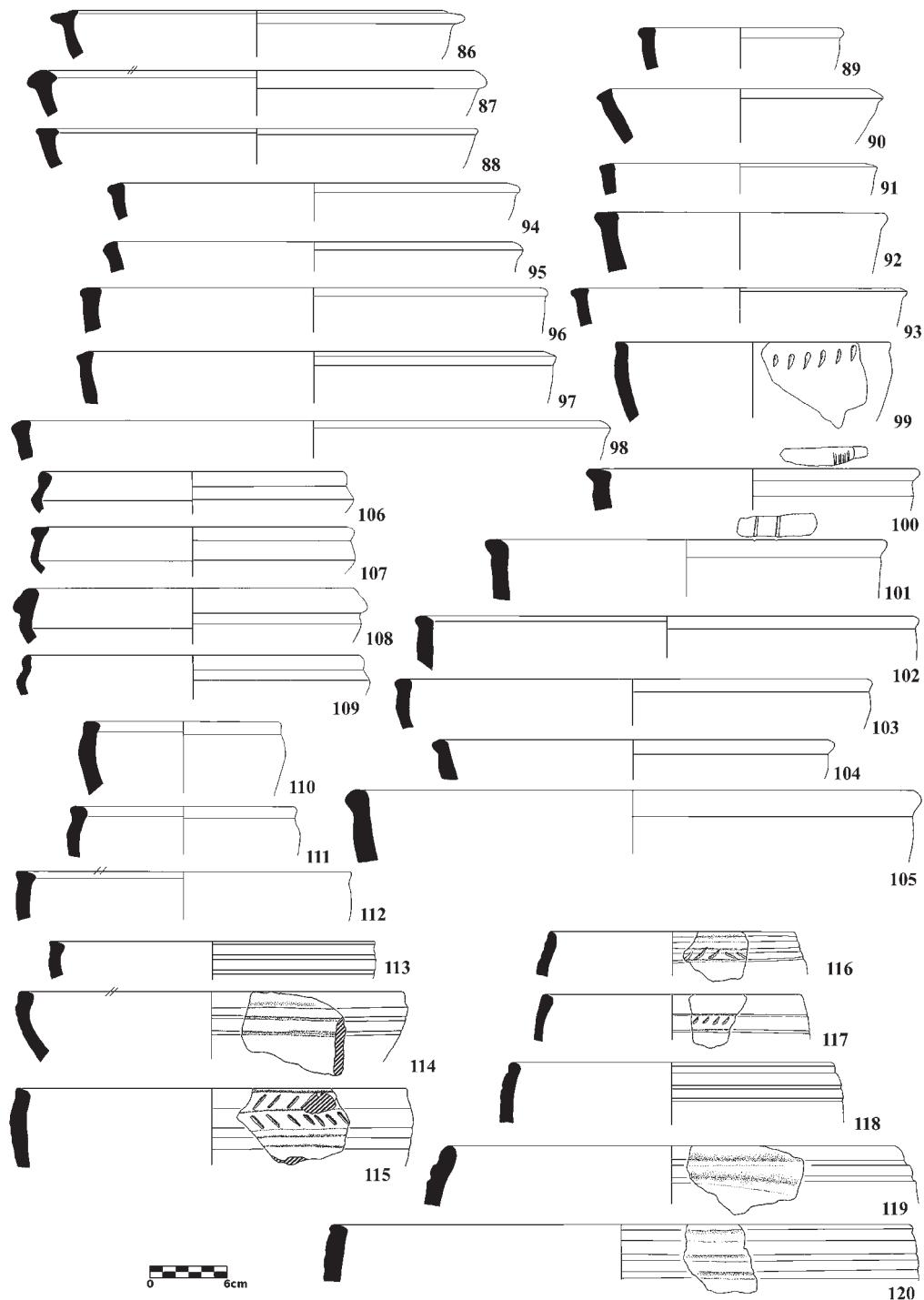


Figure 15. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 99-105, 110-112); Grooved Ware (nr. 113-129); Plain Ware (nr. 86-98, 106-109).

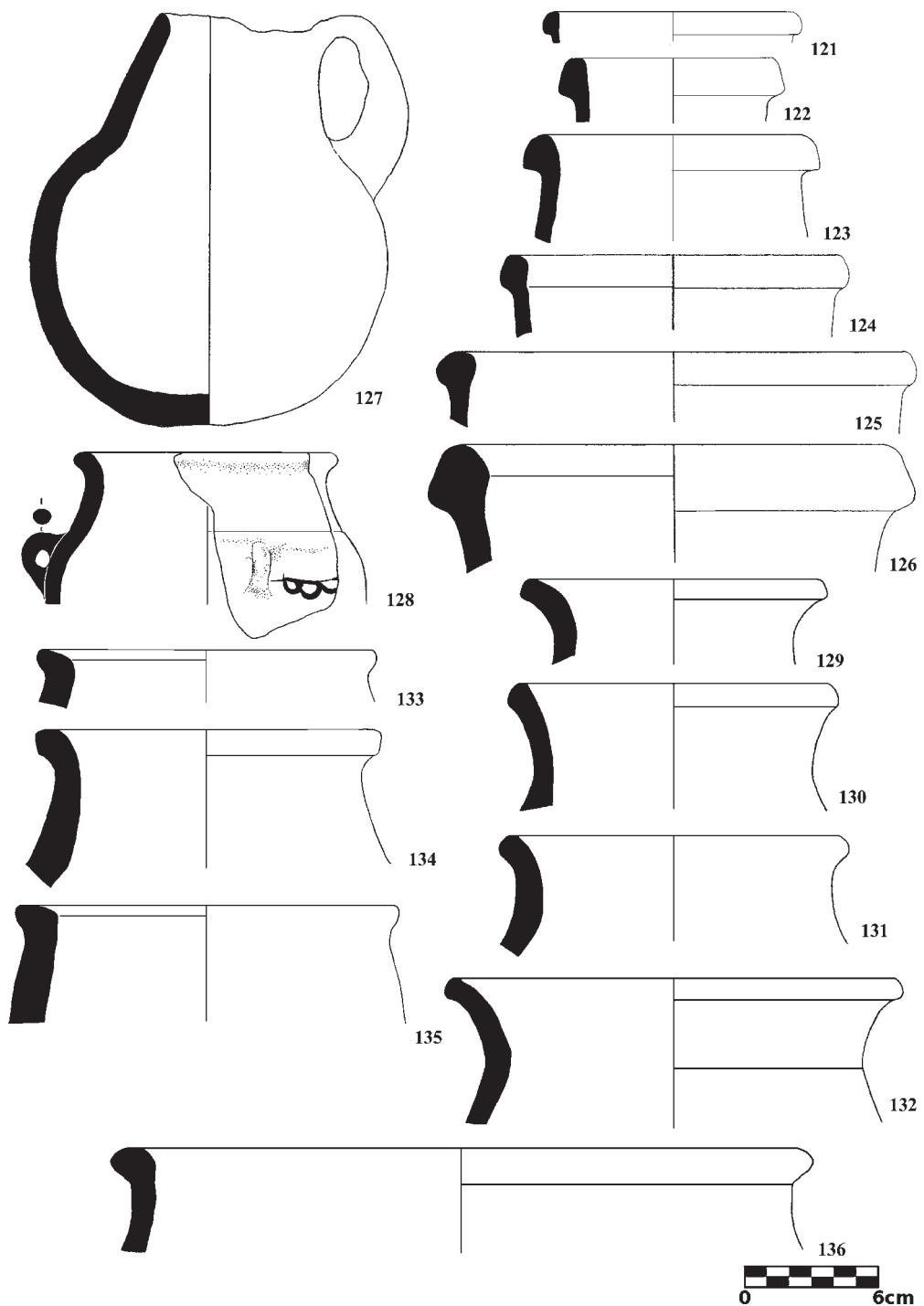


Figure 16. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 127, 128); Plain Ware (nr. 121-126, 129-136).

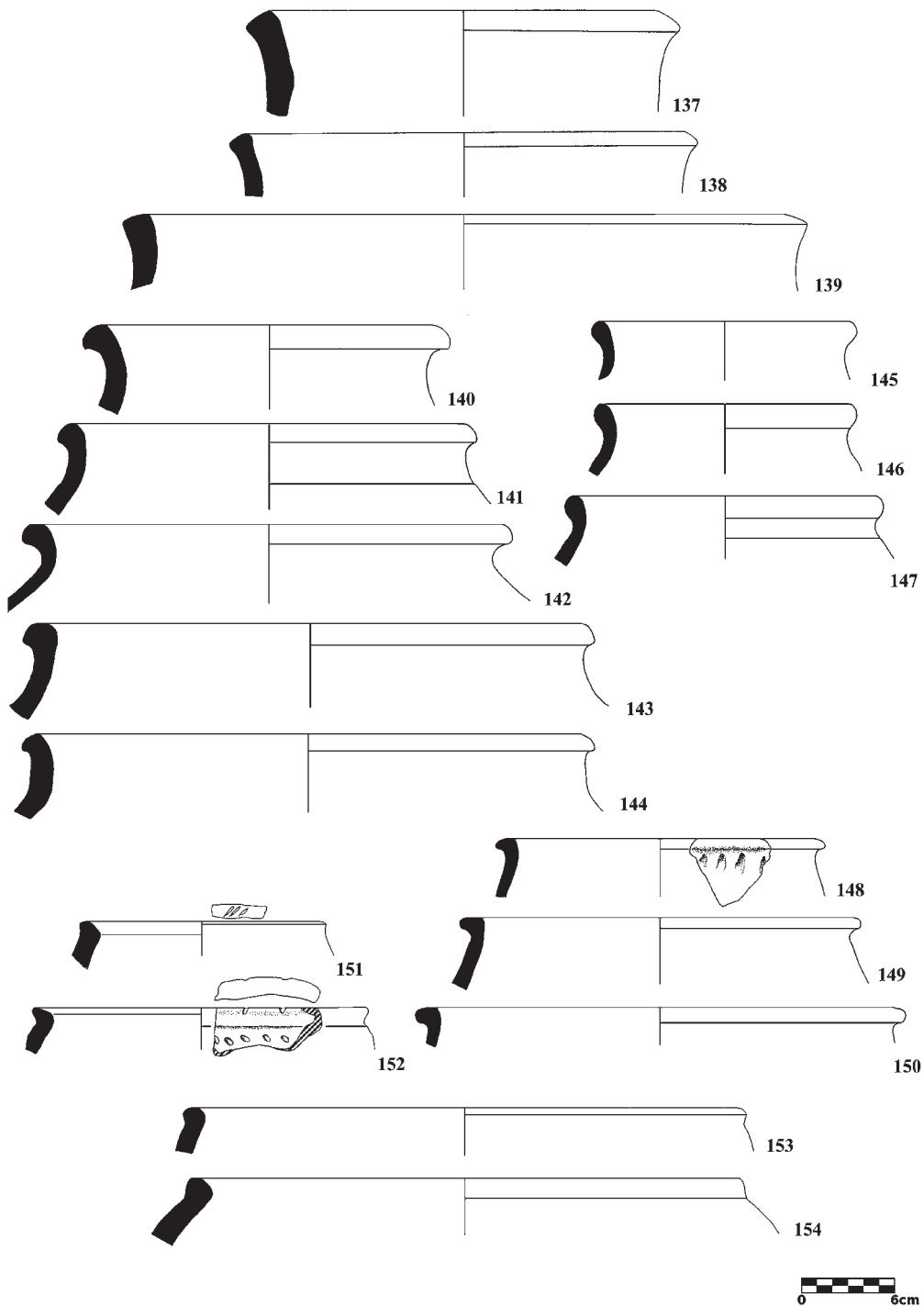


Figure 17. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 148-150); Plain Ware (nr. 137-147, 151-154).

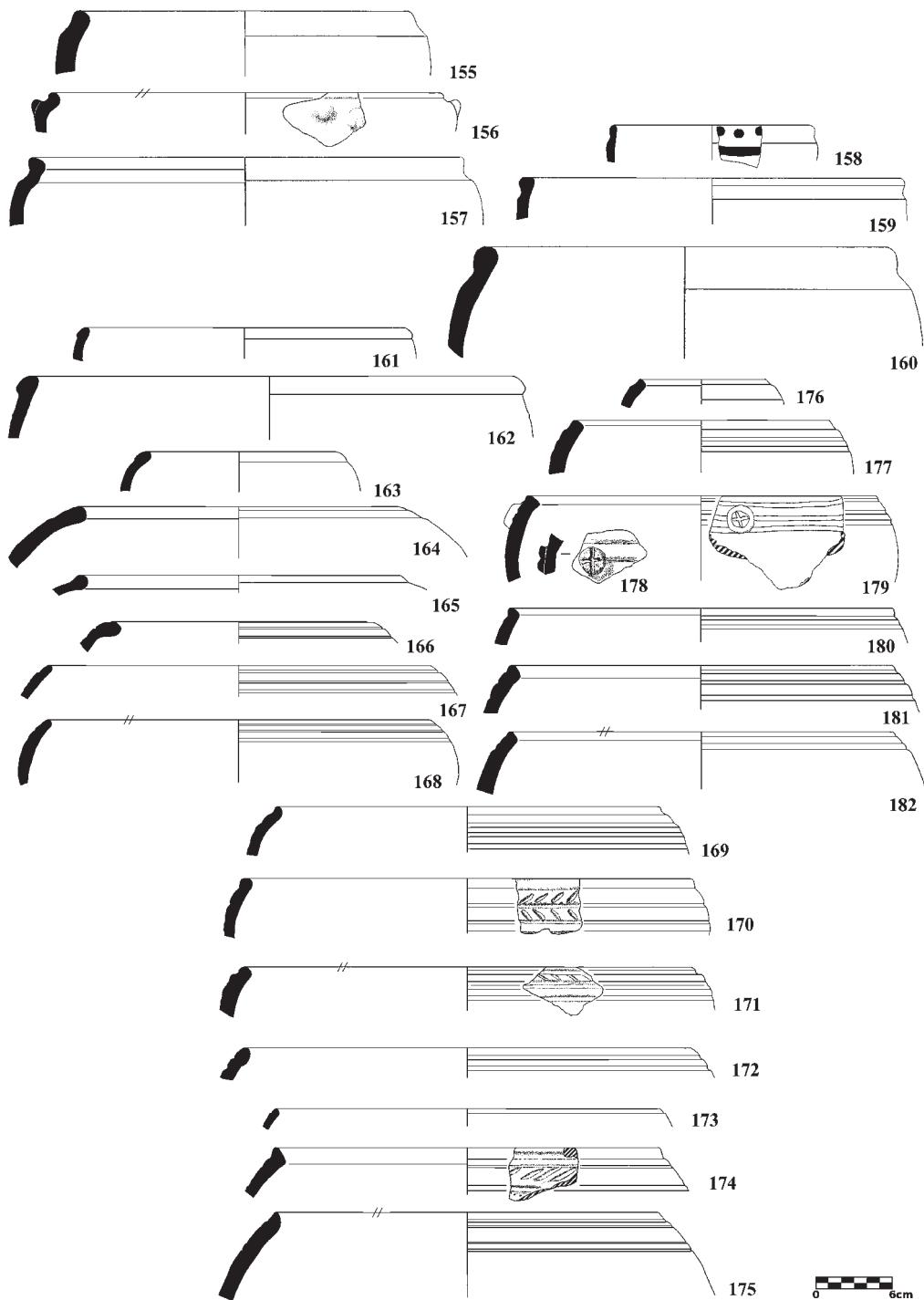


Figure 18. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 155-161, 163); Grooved Ware (nr. 164, 166-172, 174-182); Plain Ware (nr. 162).

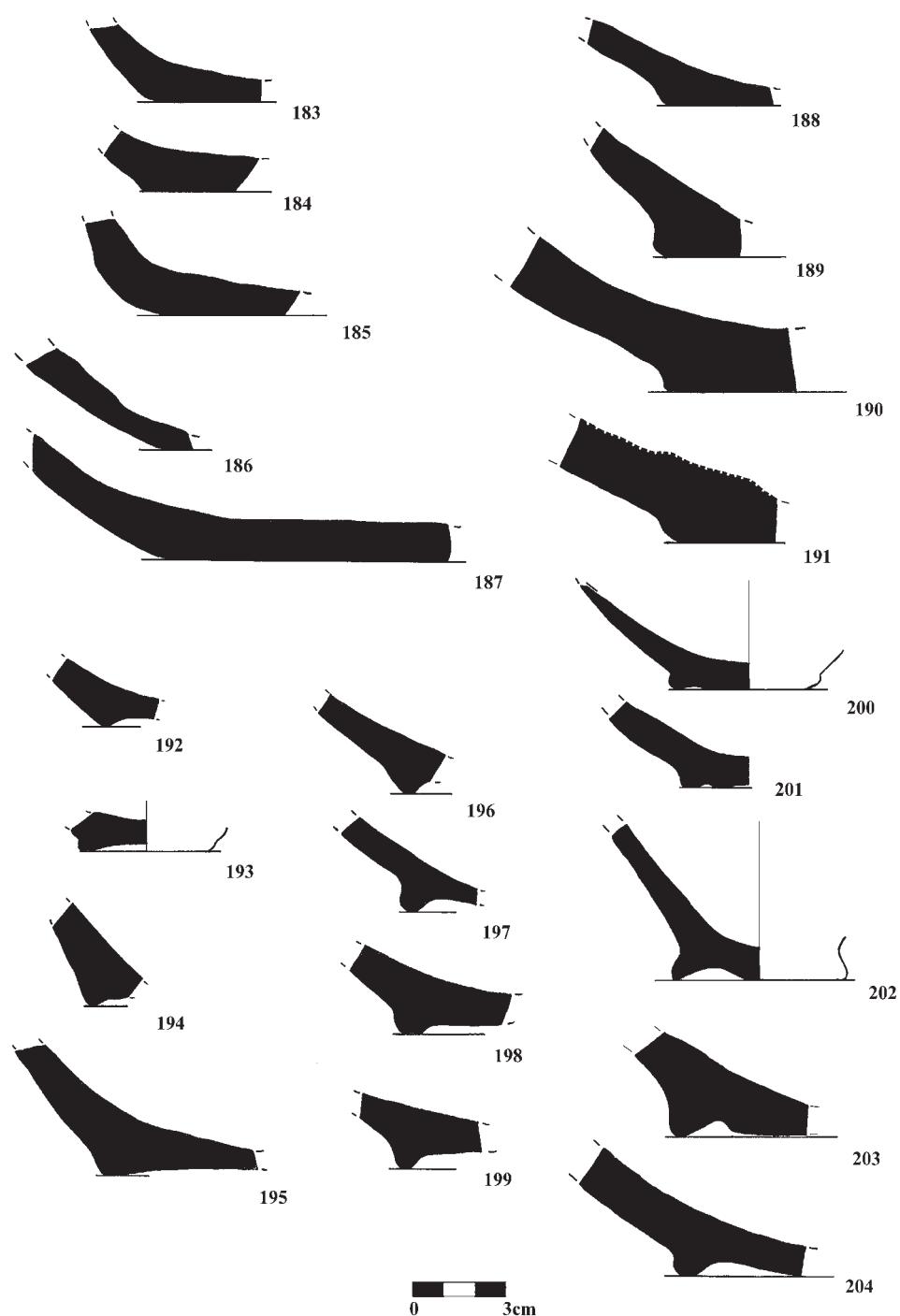


Figure 19. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 183, 188, 194); Plain Ware (nr. 185, 187, 189-193, 195-204).

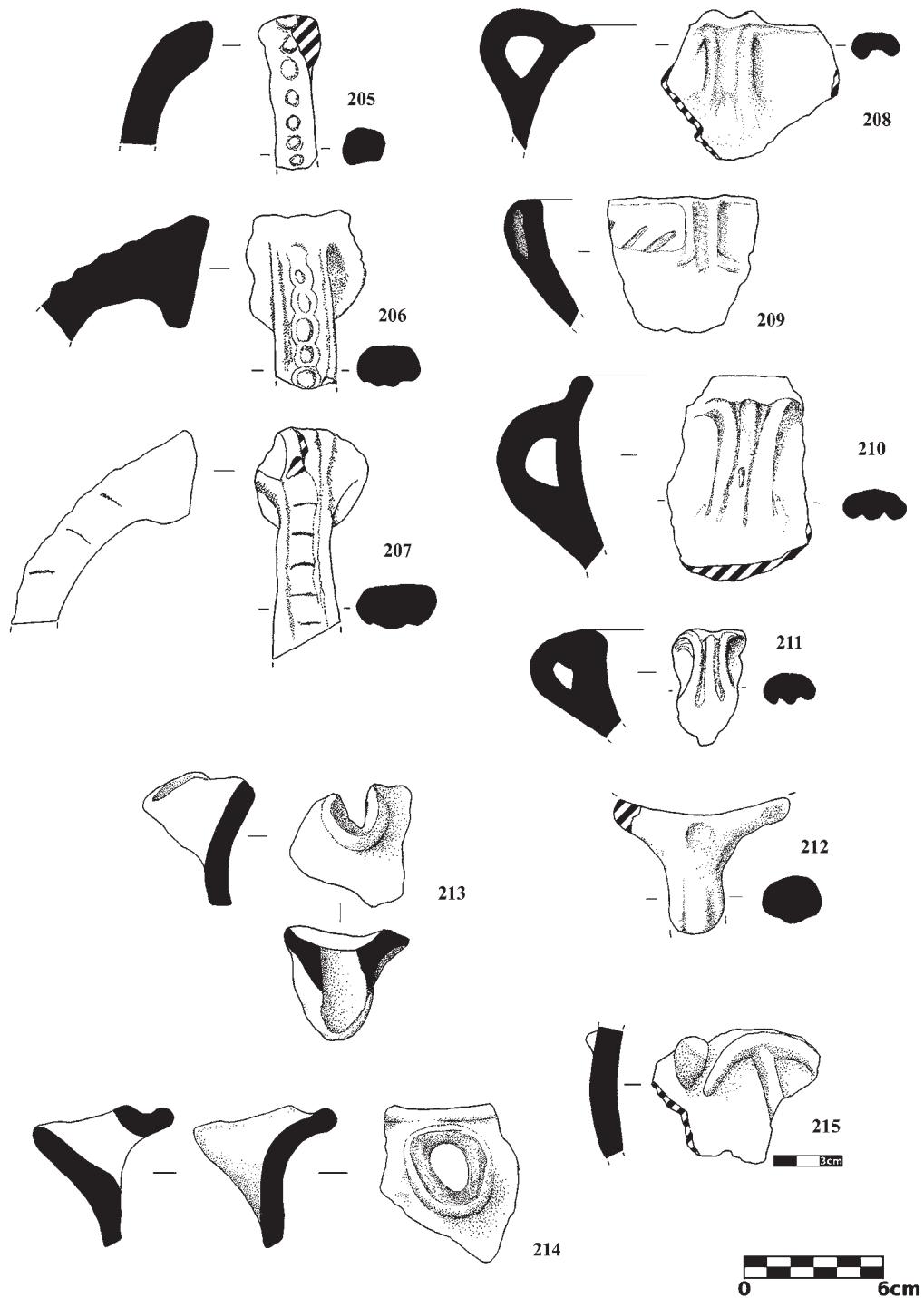


Figure 20. Drawings of pottery sherds of the Iron Age period. Brown/Pink Ware (nr. 205-215).

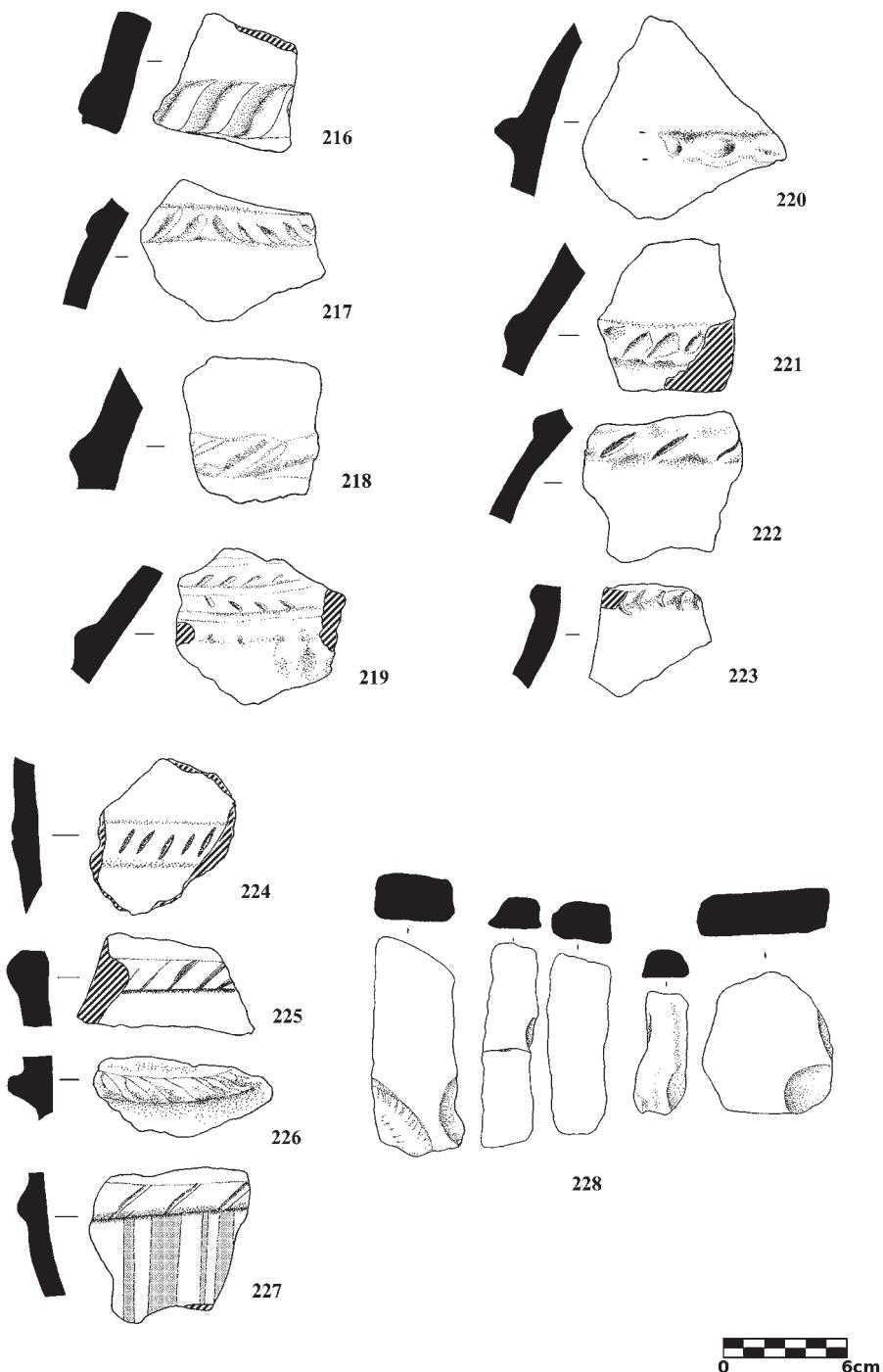


Figure 21. Drawings of pottery sherds of the Iron Age period.
Brown/Pink Ware (nr. 222, 225-227); Grooved Ware (nr. 219); Plain Ware (nr. 216-218, 220, 221, 223).