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Feasting and Shared Drinking Practices in the Early Bronze Age II-  
III (2650-2000 BC) of north-central and western Anatolia

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## Declaration

I declare that this thesis has been composed by me and that the work is my own. None of the material within this thesis has been submitted for any other degree or professional qualification. NB: Some of the material in Chapter two was submitted, with the consent of my supervisors, for publication in the conference proceedings for the Broadening Horizons 4 conference on 30th June, 2012. It is currently under review.

Jessica Lea Whalen

30th June 2014

## Abstract

Feasting and shared drinking are long suspected to have been practiced in Anatolian settlements during the Early Bronze Age (EBA). New drinking vessels of metal and ceramic seem meant for drinking together with others. Platters and bowls seem intended to display food and vessel handling. No study has examined these practices in detail. This is largely because of a lack of evidence for the production of special beverages, for instance wine, beer, or mead.

The Early Bronze Age is a period of intensifying personal distinction. It is characterised by developments in metallurgy, craft production, long-distance exchange, and at some sites, monumental architecture. Yet how EBA Anatolian communities were organised is unclear. A lack of writing and a limited number of seals suggest that there was no central administration within settlements. This contrasts with contemporaneous sites in southeastern Turkey and in Mesopotamia, whose metallurgy, craft production, architecture, and other developments were overseen by temple and palace complexes.

This thesis uses feasting and drinking as a way to examine the social complexity of EBA Anatolian sites. It compiles evidence for these activities in both north-central and western Anatolia. It analyses the incidence of different drinking and pouring shapes across sites, and qualitatively assesses vessel features and the contexts in which they are found. This thesis also evaluates the role of drinking and feasting within settlements. It assesses the settings where drinking and feasting was practiced, together with other indices from each site.

Two theoretical models are used to evaluate these activities. One details how the use of objects facilitate social relationships. Another specifies how communities may be organised. Both models provide a wide spectrum for assessing the drinking, feasting, and organisational evidence from sites. These models allow for variation: in how drink and food are used to form social relationships, and also in social complexity. The approach is able to distinguish between different organisational and social strategies across sites and regions. This detail is key for beginning to understand Anatolia's unique development during the period.

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# Chapter One: Introduction and methodology

## A. Introduction

Beginning in the Early Bronze Age (EBA) II-III Period in Anatolia (2650-2000 BC), a series of new vessel shapes begin to appear. In western assemblages, the most iconic is a double-handled tankard or *depas amphikypellon*, which cannot be placed down whilst filled. Its long, double handles imply that it was meant to be passed between people. On the north-central plateau to the east, drinking and pouring vessels of precious metal are deposited in tombs and hoards. Jugs and goblets coated in gold, silver, and electrum (Yalçın 2011) show that both regions had become preoccupied with sumptuary or costly activities and social display.

The characteristics of these vessels suggest that they were used for communal dining, or feasting. Some vessels are deposited in graves, while others are smashed or twisted and thrown into pits. Their handles and bases imply special drinking methods. These vessels have a distinctly social purpose: they are meant to be seen, and to be seen in use before others. This is matched by other evidence that points to the Early Bronze Age as a period of intensifying personal distinction.

The social organisation of Early Bronze Age Anatolian settlements is difficult to assess. In central and western Anatolia, a lack of writing and extensive sealing practices suggests that there was no centralised control of resources or exchange. Yet the period sees the appearance of tin-bronze metallurgy, craft specialisation, long-distance exchange, and monumental construction. These features point to the presence of an élite. Yet it is difficult to assess what role this élite played without evidence that resources were centrally managed.

Drinking and feasting provide the opportunity to investigate Anatolian social organisation from a new perspective. Across the social sciences, drinking is recognised as an effective means to draw individuals together and to establish social relationships. It may also be used to manipulate power, attain control over resources, and indebted supporters. The properties of special beverages are suited to all of these functions. Drinking is just as easily associated with the community and unrestricted social events as it is with high status and social distance. Because feasting and drinking are appropriate to different settings, they are 'open' to a variety of interpretations. They also provide a flexible framework for investigating complexity because the social interaction that is facilitated by these acts may take a variety of forms. This is the ideal perspective from which to investigate the complexity of EBA Anatolian settlements. Drinking

and feasting may be used for collective purposes, or to enable competition. These actions have real, significant consequences for social organisation.

This study examines the evidence for feasting and drinking across north-central and western Anatolia during the EB II-III period. It examines drinking material, and the settings where drinking and feasting took place, across a variety of settlements in these areas. This is in order to determine how drinking was done, with whom, and where it was practiced. The aim of this thesis is to use drinking and feasting to better understand the social complexity of these areas during the period. This includes who was participating in drinking and feasting events, how this participation was characterised, and whether it changed according to different conditions.

The evidence for drinking and feasting will be assessed through two theoretical frameworks: social complexity, and material culture consumption. Drinking and feasting practices, considered together with settlement features, may indicate how settlements were organised. This is by considering food and drink materials as material culture. The *consumption*, or the taking up and use of objects, may facilitate any number of social relationships. This is especially true of food and drink, whose significance has been well documented within anthropological literature. Two 'open models' present a range of options for how social complexity may manifest, and how the use of objects may facilitate different social relationships. The use of 'open' approaches allows the evidence from different sites to be assessed individually. It also allows interpretation to be adjusted as new evidence for drinking and feasting practices is brought to light.

#### i. Existing approaches to the social organisation of EBA Anatolia

To date, the Early Bronze Age settlements of central and western Anatolia have not been discussed in detail. When they are, they are sometimes described as developing in a manner similar to that of settlements in eastern Anatolia and in southeastern Turkey (Yakar 1985, 40; Şahoğlu 2005; Efe 2007, 49). In some cases this has been extended to an interpretation of their drinking habits (Çalış-Sazcı 2007, 205). Researchers have pointed out that the communities of western, central, and eastern Anatolia all display different characteristics (Çevik 2007; Düring 2011a, 297-99; Schoop 2011). Yet this point is obscured by the popularity, across all regions of Anatolia during the EBA, of new tin-bronze metallurgy and long-distance exchange. Some sites in the west feature monumental architecture, as do the well-known sites in the east. Metallurgy, exchange, and monumental architecture are usually associated with a developing social complexity. It is only settlements in eastern Anatolia and southeastern Turkey that feature clear

evidence for writing and bureaucratic, hierarchical, administrative organisation. Settlements in western and central Anatolia have so far produced no evidence for these practices. This would seem to indicate that settlements in central and western Anatolia developed differently than those farther east, though they still featured a complex organisation. This has important implications for how the Early Bronze Age is characterised in Anatolia. It would change how the region is understood to have developed prior to the Hittite period of the Middle and Late Bronze Ages. It may also indicate new ways that social complexity may develop, and how it can be characterised.

Settlements in eastern Anatolia and southeastern Turkey are centralised and highly stratified. They feature cities with large-scale complexes, administration, and writing within an urbanised model, together with settlement hierarchy (Özdoğan 1977; Wilkinson 1990, 1994, 488; Algaze, Mısır, and Wilkinson 1992; Matney, Algaze, and Pittman 1997; Matney, Algaze, and Rosen 1999; Wattenmaker 1998; Stein 2001). Their development is tied to influence from Mesopotamia (Hauptmann 1982; Algaze 1989, 1993; Matney and Algaze 1995, 50), where cities feature central temple and palace complexes that control the production and exchange of goods from various industries.

Settlements in central and western Anatolia feature some of these characteristics. At a few sites, architecture is monumental in scale. This would seem to imply the presence of central rulers. At the very least, it indicates the ability to organise labour. The central citadel at Troy featured fortification walls, gateways and propyla, and ramps, all leading to the impressive scale of Megaron IIA (Blegen et al. 1950, 203-207, Figs. 417, 451, 453-55). Liman Tepe, also in the west, may have been even grander, from the size of its fortifications, ramps, and bastions (Erkanal 1996; 1999; 2008, 182). A breakwater extending into the sea was thirty metres in length (Erkanal 2008, 182). These structures would have required considerable effort to construct and also to maintain.

Central citadels would seem to physically demarcate a ruler living above the populace. They are identified at Troy (Blegen et al. 1950, 1951), Karataş (Warner 1994), Bademağaçı (Duru 2008), Küllüoba (Efe and Fidan 2008, 79-80), and Kanlıgeçit in Thrace (Özdoğan and Parzinger 2000). They are interpreted as palaces at Bademağaçı (Duru 2008) and Küllüoba (Efe 2000, 121; Efe and Ay Efe 2001, 48-50)<sup>1</sup> and as a religious authority at Liman Tepe (Erkanal and Günel 1997; Erkanal 2008, 183). Appropriately, a lower city is now known to have extended below the Early Bronze Age citadel at Troy (Figure 6.39; Jablonka 2001; Jablonka and Rose 2004, 619).

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<sup>1</sup> A large structure was also interpreted as a palace at Kültepe Level 11b. However, Level 11b postdates the period of time considered by this work, as will be explained later in this chapter.

<sup>2</sup> A final assessment of the central structure at Karataş has yet to be published.

Yet other features that would be appropriate to centralised organisation are not present at these settlements. No evidence of writing has been found at any site in central and western Anatolia during the Early Bronze Age. This is despite the extensive investigation of some sites, especially their central areas (e.g. Troy and Poliochni). At Troy, writing is absent until the thirteenth century BC (Korfmann 1998, 378-79). Other sites have not yet been finally published (e.g. Liman Tepe, Külliöba, and Karataş),<sup>2</sup> but to date they have not revealed any evidence of writing.<sup>3</sup>

At these sites, seals do not seem to have been used to mark the inventory or control of material. They are comparably few in number (see French 1969a, 421-35), and there are no large stores of sealings at central complexes. Of the twelve seals found at Karataş, seven were from domestic contexts, including a seal of lead (Warner 1994, 204, Pl. 186:g). One green stone seal from a Liman Tepe building complex was associated with ceramic vessels and ritual items (Erkanal 1998, 387, Fig. 2). Without writing, these sparse finds suggest that there was no accounting system to record the movement of goods. Such a system may have been unnecessary or impractical. Thus seals probably marked personal property rather than administrative control (French 1969a, 120; Pullen 1994, 44; Çevik 2007, 136; also Weingarten 1997).

Industries of the period also give little indication of being centrally organised. The EB II-III sees impressive new advances in metallurgy. This includes the development of tin-bronze (see Yener and Vandiver 1993, 208-209) and the use of new alloys to alter the appearance of vessels and other objects (Zimmermann, Yıldırım, Özen and Zararsız 2009; Yalçın 2011). Jewellery of the period demonstrates fine working techniques (Özgüç and Temizer 1993; Tolstikov and Treister 1996). Yet there is no clear indication that metallurgists operated under a central authority. Instead, they seem to have been organised in regional 'schools' (de Jesus 1980, 127-28, 154-55; Yakar 1984, 77) or to be otherwise unregulated (Özdoğan 2002, 67). Innovative metallurgy is practiced even at small sites during the Late Chalcolithic, where it was unrelated to outside trade or elite consumption (Schoop 2008; 2009a; 2011, 36). Despite the impressive craftsmanship of metal vessels during the EBA, they may not have been as valuable as is typically assumed. Düring (2011a, 278) suggests that metal vessels were relatively widespread during the period, and would therefore "be less exceptional than they appear to be from the archaeological record."

Yet long-distance exchange was extensive at this time, indicating that there was a market, in these communities, for foreign goods. 'Syrian' bottles and bone tubes are found across the

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<sup>2</sup> A final assessment of the central structure at Karataş has yet to be published.

<sup>3</sup> Public areas at the site of Alaca Höyük were unable to be investigated because they had been destroyed in the construction of the Hittite settlement.



Anatolian plateau, from northern Syria in the east to western Anatolia (Genz 2002, 2003; Zimmermann 2005, 2006a). Iconographic motifs are also shared across the region. The swastika recurs at Alaca Höyük, Troy, and Karataş (Schliemann 1880, 349-50, 418-21, 562-63, 572; Arık 1937, Pl. CXCIV; Blegen et al. 1950, Figs. 256, 266; Koşay 1951, Pls. CXXXIV, CLXXXVI, CCIV; Mellink 1956; 1986, 142; Toker and Öztürk 1992, 32-33; Eslick 2009, DC5:119, BL 27, 28, 29). Occasionally, items travel much farther, as with basket-shaped earrings at Troy, Poliochni, and Ur in Mesopotamia (Bass 1966, 1970; Easton 2000b; Benvenuti 2007, Fig. 5).

Thus even while craft production does not seem to have been centralised, communities in the west and centre were trading amongst one another. This may have been on the part of a few individuals or groups. It may have involved trade partnerships, and connections with regions farther afield. In the absence of guiding precepts, explanations for exchange without a central authority have become increasingly creative. Researchers have suggested that objects travelled on the part of itinerant smiths (Vorhys-Canby 1966; refute see Zaccagnini 1983, 258-67; for modern ethnographic Turkish parallel see Ertuğ-Yaraş 1997, 388), rich traders (Kouka 2002, 238-47, 297-99), the exchange of craftspeople (J.C. Wright 1998, 359), or hinterland populations or transhumance (French 1997, 573).

How, then, should settlements of western and central Anatolia be characterised? During the Early Bronze Age, they demonstrate complexity, but do not seem to have developed in the manner of settlements farther east. They do not feature large, bureaucratic, centralised complexes. Could they be developing towards this point? This question, however, may disregard a number of important distinctions. Schoop (2011, 32-33) points out that there is a tendency to view the EBA as a precursor to later developments. For instance, settlements of the west and centre are often described as 'kingdoms'. Yet this assigns to these settlements characteristics that are more appropriate to the Hittite period of the Middle and Late Bronze Ages. To Schoop, what is needed is to establish more detail about how settlements functioned. This "must include an enlargement of our stock of economic data and a targeted search for structural changes" (Schoop 2011, 36). A number of recent studies help to work towards this.

Ourania Kouka (2002) has evaluated the organisation of settlements across the northeast Aegean. Kouka sees the large public buildings at these settlements as evidence for a political authority. She connects this evidence for organised labour to economic wealth, visible in tin-bronze metallurgy and the nature and extent of ceramic imports. This is interpreted as a cultural 'koiné' in the region similar to Renfrew's (1972, 451-55, Fig. 20.5) "international spirit". Kouka determines that settlement organisation at each site was complex, and that a political authority was present at each by the EB III. Yet she is unable to detect administration or writing at any of

the sites that she investigates. The presence of an élite is reflected in exchange. Yet again, it is not possible to conclude that this élite controlled production. Without writing, it is difficult to claim that the import and export of goods was maintained by a larger entity.

Çevik (2007) has recently drawn attention to differences in the size of sites between central and western Anatolia and those of southeastern Turkey. Not only were settlements in central and western areas much smaller, but those farther east seem to have developed more quickly (Çevik 2007, 135). She characterises central and western settlements as regional centres, and distinguishes them from urban centres in the east. Çevik attributes the political development of these settlements to internal processes rather than to the demand for foreign materials. Further, she suggests that the topography of the region, along with its agriculture, may have "encouraged dispersed rather than concentrated settlement patterns" (Çevik 2007, 137-38).

Düring (2011a, 2011b) is critical of the interpretation that central complexes housed a ruling élite. He points out that the Troy II citadel was too small for this purpose, with a diameter of 125 metres (Düring 2011a, 284). Instead he suggests that the hall-and-porch structures served as ritual or entertainment spaces. The citadel at Liman Tepe is purported to be three hundred metres in diameter (Erkanal 2008, 182). This is nearly two and a half times that of the citadel at Troy. Yet as Çevik (2007, 135) points out, the overall size of Liman Tepe (six hectares) is seven times smaller than the 'small urban centre' of Titriş Höyük in the east (43 hectares). Both sites saw the undertaking of large works projects, from their central citadels, ramps, and fortification walls, and the Liman Tepe bastion. Yet as above, there is no evidence of writing or centralised accounting. Thus it is uncertain if the authority that commissioned these works also managed settlement resources.

In unpacking the assumption that large labour projects indicate an all-encompassing, central authority, Düring suggests new ways for them to have come about. In a recent article (2011b), he points out that large construction works may have served practical needs, such as protection from floods. The settlements of Demircihöyük and Bademağacı were surrounded by a sloping stone embankment, though both were small, village settlements (Korfmann 1983, 218; Duru 2008, 145-61). In this case, labour may have been coordinated for cooperative purposes. The process does not need to be egalitarian. It may involve corporate strategies for power (cf. Blanton et al. 1996; Feinman 2000; Feinman et al. 2000), in which authority figures seek influence not through conflict and control, but through more collectively-oriented and cooperative agendas. Monumental architecture may have served ideological purposes, such as élite aggrandisement (Bachhuber 2009, 12). Yet it may also be the result of potential rulers addressing the practical concerns of the community. This may indicate that there are different pathways to achieving

power and influence. These should be represented if we are to take a more detailed inventory of Anatolian settlements.

## ii. The significance of feasting and communal consumption in EBA Anatolia

Feasting and drinking provide a way to examine the complexity of settlements in a way that is consistent with these objectives. Food and drink have increasingly been recognised, within the social sciences, for their capacity to reflect, reproduce, and provoke social and political realities (Lévi-Strauss 1966, 1969b, 1978; Douglas 1966, 1975, 1984, 1987; Goody 1982; Mintz 1986; C.J. Adams 1990; Dietler 1990). They may provide insight into the social relationships within communities. Food and drink may also be manipulated to achieve any number of social, economic, or political agendas (Dietler 1996, 2001; with Herbich 2001; Hayden 1994, 1995, 1996, 2001a, 2001b). This provides a wide range of options for how food and drink may affect the complexity of settlements. This is ideal for investigating the communities of Early Bronze Age Anatolia, about which a great deal of information is unknown.

Across the social sciences, food and drink are recognised to be highly charged areas of human social life. Food and drink are a constant, daily necessity. They are therefore a powerful semiotic device, a "highly condensed social fact" (Appadurai 1981, 494). Slight variation in the amount or type of food and drink, or how it is consumed, is able to express a great deal of meaning. This is true for the most simple, common, or mundane foods, as well as the most complex to produce, prepare, or display. The power of food to convey meaning is reflected in its central role in ritual and religious beliefs. This includes food proscriptions amongst religious communities, and sumptuary laws that try to control who has access to specific foods (see Farb and Armelagos 1980, 155). Within our own modern, western societies, drink is often subject to a number of state-level sanctions (see Heath 1987). At the same time, food and drink is almost always a feature of the most confidential and intimate social engagements.

Food and drink may facilitate social interaction in a number of forms. They may establish and maintain social relationships by promoting unity (Weismantel 1988; Counihan 1998). Food and drink may also be used to manipulate social and political power, particularly at commensal events, or feasts (Dietler 1990, 1996, 2001, 2003, with Herbich 2001; Hayden 1996, 2001a; Bray 2003; Pollock 2003; J.C. Wright 1996, 2004a, 2004b, 76). Feasts may be used to incorporate members into the community (Fischler 1988). James Wright (2004a, 14) has argued that feasting and drinking are "instrumental in the forging of cultural identity." Sharing food may also be a means of accumulating influence and resources (Hayden 1994, 1995, 1996, 2001a) or mobilising

labour (Dietler and Herbich 2001). Because food and drink may be used in a variety of ways, they may signal any number of social interactions. This provides an open spectrum for investigating drinking and feasting evidence.

Because the interpretation of food and drink is flexible, it offers an advantage over other developments of the period. For example, metal is often interpreted as a rare, exclusive product to be controlled. This is because of its properties, and its association with high craftsmanship. Yet this is difficult to reconcile with the Anatolian EBA, where the organisation of settlements is uncertain. Understanding how metal was used would first require an explicit explanation of its value, and how it was circulated. This is problematic without a reappraisal of the entire economic system (Schoop 2011, 36-38). Food and drink do not require a broad reassessment of the region. Feasting and drinking are often well-known and central practices within societies, regardless of the nature of social and political complexity. They are also more accessible than metalworking. Accumulating a surplus of food and special beverages may be difficult, but it does not always require access to exclusive materials or special knowledge. In addition, feasting and drinking in Anatolia has been discussed much less often than metalworking. Early Bronze Age drinking equipment (Spanos 1972; Podzuweit 1979; Çalış-Sazcı 2007) is only beginning to be explored for its social use (Kouka 2011). This means that EBA Anatolian feasting and drinking practices do not need to be re-contextualised away from a model that is already élite-focused and hierarchical. They may be interpreted however the evidence dictates.

Drinking and feasting played an important role in Anatolian society in later periods. Libation acts were central to cult rituals of the Hittite Empire during the Middle and Late Bronze Ages. These scenes are described within texts (Gorny 1996, 152-53) and even depicted directly upon drinking vessels, inscribed along the rim (Akurgal 1962, Fig. 105; Muscarella 1974; Güterbock and Kendall 1995). While statues and altars of the period might have served as a conduit for divine communication (Selz 1997, 181; Collins 2005, 23), drinking vessels may have provided more direct access. Yağmur Heffron has conducted a close reading of texts relating to drinking anthropomorphic rhyta, or Hittite *Bibru*. From how they are described in the texts, she suggests that the vessels were used not to drink with the gods, or to drink like the gods, but to drink the gods themselves.<sup>4</sup> Drinking and pouring in the Middle and Late Bronze Ages fulfilled a social and a ritual purpose. But the act itself also seems to have facilitated a desired mental, spiritual, and even physical state.

Early Bronze Age drinking practices may have been similarly meaningful. Sharing food and drink may have served as a symbolic ritual gesture, or a platform for social communication. It

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<sup>4</sup> Talk given at the 8ICAANE Conference, 2nd May 2012 in Warsaw, Poland.

may also have been a means of action, enabling a condition, position, or state of being. On a larger scale, drinking and feasting may have played a role in Anatolian settlement organisation, which is difficult to characterise from the available evidence. In other parts of the ancient Near East, drinking and feasts have been recognised as important contributors to the development of states (Bottéro 1994; Neumann 1994; Joffe 1998; Bray 2003; Dietler 1990, 1996, 2003; Pollock 2003; Smith 2003; Sasson 2004). Understanding these practices in Anatolia may reveal both small-scale interactions, as well as wider changes.

### iii. Research questions

This study is guided by a series of research questions. They direct what evidence is examined, and how this evidence is assessed and interpreted. These questions reflect a series of broad goals of the research project. In the individual chapters, they are effected by more pointed questions about the features and characteristics of drinking and feasting evidence. The research methodology, described in the following section of this chapter, link directly to these questions.

This study sought to understand the nature of settlement organisation by examining drinking and feasting practices. Broadly, it asked what evidence existed for drinking and feasting during the EB II-III period in the settlements examined. It also asked whether or not this evidence was able to contribute to an understanding of Anatolian social organisation.

More specifically, this study was interested in the way in which drinking and feasting was done. Were communal consumption events open and participatory, or exclusive and reserved? The answers to these questions may indicate what purpose these activities served within the community. Did it mark the boundaries of different social groups? Was drinking and feasting used to draw individuals together, or to distinguish individuals from one another? Is there any evidence that some groups used these events to amass political influence? Or was drinking and feasting done for more cooperative purposes? Can these objectives be reconciled with the architecture or other site indices to reveal how settlements were organised?

As the evidence from each region is examined, these issues will be addressed through a series of more pointed questions about drinking materials. Questions pertaining to each area or region will be outlined at the start of each individual chapter. Generally, they ask whether drinking vessel characteristics provide information about drinking and feasting practices. Does the shape or features of vessels indicate how they were held and drunk from? Were any vessels intended to be used together with others: were they passed between individuals, or meant to be displayed? Does the number of vessels indicate the size of events?

The settings in which drinking and eating took place may also provide insight. Do the number of vessels indicate how many individuals were participating? Were these settings located in areas of restricted access, and does this imply that only certain groups could participate? Is it possible to reconstruct drinking practices from the way in which materials were deposited?

#### iv. Time period and geographical regions considered

This study will investigate drinking and feasting within a specific time period and geographical area. These parameters determine which evidence will be examined. They exclude some sites from consideration. It is necessary to explain these decisions at the outset of the investigation.

The time period covered by this thesis, the Early Bronze Age (EBA) II-III, ranges from 2650 to 2000 BC. This follows roughly from traditional tripartite divisions of EB I, II, and III developed by Efe (1988, Fig. 98). Dates are adopted from research of both coastal and inland western Anatolia. Kouka (2009, 146-47, Tables 6-8) dates the beginning of the EB II in western Anatolia to 2650 BC following Manning's (1995, 141-53, Table 2; 2008, 58-59, Tables 7-8) synchronisations in the Aegean. The date of 2650 aligns western Anatolia with the Kampos and Keros-Syros groups in the Cyclades (see Renfrew 1972, 170-85, 199-204, Tables 9.II, 13.II-VI; Dumas 1977, 18-20). Kouka places the end of the EB IIIA in western Anatolia at 2250 BC. Yet this thesis also discusses inland material. For the area of the Upper Sakarya Plain, Efe (Efe and Türkteki 2005, Fig. 10; Efe and Ay Efe 2007, 257) places the end of the EB III at 2000 BC. This marks the upper date of this study.

This chronology excludes a few sites from the analysis. Material from Tarsus and Kültepe will not be discussed, as their drinking material of interest is dated later than 2000 BC. This is determined by pottery synchronisations that link Tarsus with Troy, and Tarsus with Kültepe. Both Tarsus and Kültepe are large, well-known sites in Anatolia. Any analysis of central Anatolia would be expected to include these sites. That they are not must be explained at the outset of the study.

Red-crossed bowls mark the beginning of Troy V (Blegen et al. 1951, 138, 228), which recent 14C dates place after 2000 BC (Kromer, Korfmann, and Jablonka 2003, 48, Fig. 5). The Tarsus EB III assemblage, while similar to that of Troy II and III (Goldman 1956, 137ff, nos. 412-29), includes red-crossed bowls (Orthmann 1963, 94-95). This aligns the ware of Tarsus EB III with Troy V (Mellaart 1957, 71; French 1969a, 149), and thus after 2000 BC. This makes sense considering that the region of Cilicia, where Tarsus is located, seems to align with north

Syria rather than the rest of Anatolia (Goldman 1956; Mellaart 1957, 70; Özgüç 1986; Pinnock 2000; Zimmermann 2005, 2009). At Kültepe, striped depata drinking vessels of Level 12 are associated with alabastron-shaped 'Syrian' bottles (Özgüç 1986, 34, 41, Fig. 3.3) and other material of Tarsus EB III (Mellink 1965, 115). Thus the alabastron bottles and the local tradition (Spanos 1972, 83) of striped depata are not examined in this work. In Chapter six, these determinations will be revisited in the course of investigating drinking practices at western Anatolian sites.

#### v. Special beverages: what was being drank?

Drinking practices have remained largely undiscussed for the communities of Early Bronze Age Anatolia because physical evidence for special beverages has not been recovered. In the later Middle and Late Bronze Ages, the use of wine and beer is documented in textual accounts. No such records exist for the Early Bronze Age. However, a number of beverages could have been produced during the time. This establishes that drinking special beverages was possible during this early period, and that the act could have involved a great amount of variation.

Beer may have been the drink of choice in some Anatolian communities. It was known to neighbouring regions, and could have been produced at the time. In Mesopotamia, beer made from barley is well-documented during this period (Nissen 1993, 62-63; Michalowski 1994; Powell 1994, 1996). It could have been produced in households (Neumann 1994, 328) and in many varieties (Nissen, Damerow, and Englund 1993, 45-46). While there is no evidence for beer in the Aegean (Joffe 1998, 306), barley for food was distributed by the Mycenaean palaces (Palmer 1994; Nakassis 2007, 135). Sarpaki (1992, 69) argues that during the Bronze Age, barley was a more widespread cereal staple than wheat.<sup>5</sup> In Anatolia, barley is present in early assemblages (Hillman 1972; N. Miller 1991, 145, 151). During the Early Bronze Age its position in relation to other crops was similar to that seen in Mesopotamia (van Zeist and Bakker-Heeres 1985).

Honey mead may have been produced during this time. Mead was the drink of choice in early Europe prior to the adoption of beer (Joffe 1998, 308). Honey, its chief ingredient, was incorporated into drinks in the Aegean during the Late Bronze Age. A honeyed wine is referenced in thirteenth century BC texts from Pylos (Palmer 1994, 63). Recently, honey was identified in the chemical analysis of conical cups from Daskaloyianni, Chania on Crete, which suggested a

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<sup>5</sup> It is possible that a higher amount of barley use reflects the nature of the soil (Wilkinson 1990), or the use of barley as fodder for animals (Tully 1984; Schlee 1995, 31).

mix of honey, wine, and beer (Tzedakis and Martlew 1999, 106-109, 206-209). It is possible that the cups did not see these ingredients mixed together, but were re-used for different purposes (see Girella 2007, 152, footnote 61). Honey may have been present in drinks, or it may have been used as fuel for lamps, as at Late Minoan Mochlos (Evershed et al. 1997).

Wine may also have been produced in Anatolia during the Early Bronze Age. Evidence for grapes and grape processing is mainly found in eastern Anatolia and southeastern Turkey. From these areas were recovered numerous morphological grape seeds or *pips* dating to the EBA (van Zeist and Bakker-Heeres 1974, 113-14; 1975, 230; Follieri and Coccolini 1983, 609-10; N. Miller 1986, 88; 1996a, 1996b). Grape processing is evident at Kurban Höyük in pressed cakes of the fruit (N. Miller 1986, 89), and at Titriş Höyük in grape-processing basins featuring traces of tartaric acid (Matney 1995, 17-22). Evidence for the cultivation, or planting (cf. N. Miller 2008, 939) of grapevine for wine is found in the area of modern Georgia, and dates to the sixth millennium BC (Ramishvili 1983; see also Mustacich 2012). The earliest molecular evidence for wine production is found in the northern Zagros, and dates to the fifth millennium BC (McGovern et al. 1996). For Anatolia, Gökbayrak and Söylemezoğlu (2010) provide a detailed review of DNA analyses of the genetic diversity of different cultivars across the region.

Evidence for grapes and grape processing is less common in central and western areas of Anatolia. Grapevine grows naturally in western Anatolia (Zohary 1996, Map 2.1). The small number of pips that have been recovered from archaeological contexts in this region probably reflects a lack of sampling. Grapevine was cultivated in central Anatolia during the Hittite period, though it involved a number of considerations (Gorny 1996, 139-47). Nevertheless, in this region there are small pockets of land suitable for grapevine, especially along the Kızılırmak River and in Cappadocia (Gorny 1996, 137, 140). From Early Bronze Age sites, grape remains were recovered from İkiztepe on the Black Sea coast (van Zeist 2003, 551-52, Table 6). A single seed from Kaman Kalehöyük, which is located just under 150 km from Nevşehir in Cappadocia, was "probably domestic" (Fairbairn 2002, 205). In western Anatolia, pips were recovered from Troy, Liman Tepe, Beycesultan, and Yenibademli Höyük on the island of Gökçeada (Lloyd and Mellaart 1962, 45; Riehl 1999, 63, 110; Oybak Dönmez 2005, Table 1; 2006, 543, Tables 1-2).<sup>6</sup>

Generally, only domesticated grapes are thought to have been used for wine (Zohary 1996, 26-27). The seeds of wild and domesticated varieties of *Vitis vinifera* L. are distinguished from one another by their shape and size (Zohary 1996). Seed dimensions may also indicate

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<sup>6</sup> One oft-cited pip from Beycesultan reported by Helbaek (1961, 80-81, 88) was recovered from Late Bronze Age levels, within a collection of bread wheat. It is hardly indicative of Early Bronze Age Anatolian viticulture.



whether grapevine was wild or domesticated (Stummer 1911), though this is not a reliable method for reconstructing cultivation strategies. Seed dimensions are highly variable (Smith and Jones 1990; Zohary and Hopf 2000, 153). Domesticates may also yield seeds of intermediate dimensions (Janushevich 1976), as Riehl (1999, 110) has identified amongst grape pips from Troy. This may mean that seeds from Yenibademli Höyük (Oybak Dönmez 2005, 42) could be classed as domesticated. It may also mean that the issue of whether grapes are wild or domesticated is unimportant. The argument that wild grapes cannot be used for fermentation (Sherratt 1997, 389) because of their low sugar content (see Olmo 1996, 34) is countered by Rivera-Nuñez and Walker (1989, 214-15, 220). They point out that wine is made from tart grapes in many parts of the world. The authors also clarify that not all wild grapes are tart and unpalatable. There is evidence that wild grapes were processed for their juice at Lerna (Warren 1968; J.M. Renfrew 1973, 127; Rivera-Nuñez and Walker 1989, 223) and at Dikili Tash in Macedonia (Valamoti et al. 2007). At the latter site, wild grapes were crushed together with figs, possibly to sweeten the mixture (Valamoti et al. 2007, 55-58, Figs. 2-3). Given the difficulties in discerning wild grapes from cultigens, and the early evidence for grape processing, grape wine could have been produced during the EBA. Exploitation does not need to be preceded by domestication (Singleton 1996); instead, it may be that the process of intentional selection drives domestication in the first place (Rivera-Nuñez and Walker 1989, 220; N. Miller 2008, 944-45).

Ultimately, however, the identity of special beverages is secondary to the observation that drinking was special. This means that regardless of whether grape wine was produced from wild species, or whether drinks cause inebriation, drinking was an important social activity. It was significant within the community. It is the act of drinking that is considered to facilitate social participation, rather than the characteristics of drinks. Therefore drinking activities are assessed through drinking vessels, rather than through food and drink remains.

This study takes an interest in the kind of social participation that drinking facilitates. It is possible that different groups drank different beverages, and that these groups differed in terms of social class, rank, or other status. Thus wine may have been reserved for the most wealthy and élite, while beer was drunk by the rest of the community. From the above, drinks and drinking practices may have varied significantly. They may also have facilitated any number of social relationships. This thesis must assess the role of drinking and feasting in Anatolian communities in a way that recognises these possibilities. Where evidence is not available, interpretation must allow for different scenarios. This is appropriate to the nature of the material that will be evaluated. The following section outlines how drinking and feasting activities will be assessed. These methods tie directly to the research questions, and are tailored to the nature of the evidence.

## **B. Methodology**

This section of Chapter one introduces the research methodology that will be used within this thesis. It explains the techniques of data collection, and what methods are used to interpret the materials and contexts. A number of issues are also relevant to interpretation. The data is limited in some respects, and this may affect any results that are able to be detected. Also relevant are several considerations for dealing with mortuary data, which comprise much of the dataset.

### **i. Approach**

This thesis attempts to achieve two things. The first is to detail the evidence for feasting and drinking during the EBA in central and western Anatolia. The second is to use this evidence to better understand how settlements in these regions were organised. These aims helped to form the research questions, detailed in the above section, and they also directed how evidence was collected and interpreted.

The practice of drinking and feasting in EB II-III Anatolia is assessed through several forms of evidence. This includes drinking vessels from graves and ceramic assemblages, and a limited number of settings where drinking and feasting was practiced. As a result it employs a mixed approach to data analysis, using both qualitative and quantitative methods. This approach involves a number of methodological issues, which determine how the data is gathered, and also how it is analysed and interpreted. These are explained below.

Examining the settings where feasting and drinking was practiced introduces a number of additional considerations. Different circumstances determine what material is deposited, why, and how it survives. One especially relevant issue is evidence gathered from mortuary contexts. Much of the material that is analysed in this thesis is derived from burials. There are several key issues that are relevant for assessing such contexts. They include the various reasons for depositing grave goods, and what may be deduced about settlements from mortuary data. These issues are important for determining to what extent evidence is able to comment upon the structure of Anatolian settlements.

### **ii. Data collection and sampling strategy**

Most of the material that was chosen for analysis is already identified as for feasting and drinking within the literature. Often they are sites that researchers have long associated with food and drink, and publicised over generations of excavation and artefact studies. This includes contexts at Alaca Höyük, Horoztepe, Demircihöyük, and Troy. The cups from Ahlatlıbel are also well-known. The fireplaces at Karataş and the votive pit at Küllüoba have already been identified by the excavators as being related to drinking and gathering.

Other food and drink events are identified from their possessing a number of feasting features described by Hayden (1996, 137). These features include special foods, special vessels, and special grounds or structures appropriate for hosting feasts. The settings that are identified through these methods are Trench A at Horoztepe, graves at Resuloğlu necropolis, and Complex II at Küllüoba.

This thesis examines materials and settings across an extensive geographical area. This includes the north-central Anatolian plateau, as well as western Anatolia. The sampling method includes material that was already identified within the literature, as well as a search for material culture parallels at nearby sites. A more robust approach would have involved a systematic examination of all material within a smaller range of sites. Yet by examining a fairly large amount of material over a wide area, this study is able to compare evidence from different regions. This is the first examination of drinking and feasting evidence across the central and western areas of Anatolia. It is intended to obtain a broad overview of drinking and feasting practices. It may be able to detect different trends in these practices between regions. This is appropriate to an initial study of drinking and feasting practices. It should be followed by additional studies focusing upon the details of these practices within a smaller range of sites, or within a specific region.

This thesis attempts to include a greater volume of material from the sites that are examined. Domestic areas of settlements are sampled as well as central citadels. Settings for drinking and feasting are not limited to burials, 'treasure deposits', or other caches, but include areas of the settlement, and also pits. The vessels examined are not only those of precious metal, but also those of ceramic. For instance, this analysis examines ceramic single-handled cups, both decorated and undecorated, alongside more well-known metal varieties. By doing so it is poised to detect similarities in drinking behaviour across vessel materials, and possibly also across social classes, if they are present, or across social rank. In this way it is able to achieve a more representative account of the drinking and feasting practices of the period.

The method of sampling is still, however, somewhat biased. The ceramic vessels and domestic contexts that are included, and also the feasting events that are identified through Hayden's (1996, 137) criteria, are usually noteworthy cases in the literature. Despite considering a

greater volume of material, this sampling remains sporadic and selective rather than thorough. Because of these issues, this study is intended to be the first of a series of more in-depth investigations into Anatolian drinking and feasting practices. These should be accompanied by a more detailed investigation of the production of special beverages. They would also benefit from a more detailed assessment of settlements themselves, including agricultural production, domestic areas, and craft production. As Schoop (2011, 36-37) describes, a parallel goal should be to understand the economic structure of settlements. Detailing which products are produced in settlements and whether and how they are exchanged would help to explain the position of food and drink in relation to other industries.

### iii. Analysis and interpretation

As introduced above, this analysis used a mixed methods approach to analyse evidence for communal consumption. It assessed drinking and feasting materials through both qualitative and quantitative methods. A mixed approach was appropriate to the research questions and to the nature of the evidence.

Vessels for drinking and feasting were mostly assessed through qualitative methods. These materials were described for their features, including their decoration, shape, and the location of spouts and handles. These features provided clues as to how the vessels may have been used. Their finishing, including slip, polishing, and incision, or a lack of these features gave some indication of their significance within ceramic assemblages. For the most part, this information was obtained by an archival assessment of the vessels. This includes their description, and illustrations and photographs of the material within original site catalogues. This material was also assessed through a review of the relevant literature, which treated the material more broadly.

Some drinking and feasting vessels were handled firsthand through museum collections and in the field. This includes material from Troy II-III kept at the Museum für Vor- und Frühgeschichte in Berlin. The museum provided access to the vessel known as *depas amphikypellon*, as well as tankards and wheelmade plates (Chapter six). Some of the more notorious vessels are on permanent display at the Neues Museum in Berlin. These were observed and photographed from behind glass at that museum. Ceramics of Troy II-III were also handled at the site of Troy alongside researchers from the University of Tübingen. This provided firsthand experience with the shapes, wares, and finishing characteristics of the western Anatolian EB II-III ceramics that are discussed in Chapter six. It also provided an opportunity to compare my own impressions of the shapes and wares against the opinions of other researchers.

In one case it was clear how the Early Bronze Age inhabitants handled vessels for drinking. The single-handled cup in Resuloğlu Grave M141 was found still attached to the smallest finger of the skeleton (Zimmermann and Yıldırım 2007, Fig. 4). This method of handling was replicated using a found replica object that is similar to the cup in size and shape. Found replica objects were also used to model the use of shallow metal drinking bowls. These were handled in the manner of drinking that is demonstrated in relief sculptures of the Iron Age (Stronach 1996, Figs. 12.1-2, 12.7-8). In both cases it was noted where and how the shapes were difficult to manoeuvre, and whether or not they were effective for drinking. It is possible that the vessels were not usually handled in this manner, or that they were handled differently. Yet the use of found replica objects allowed a clear demonstration of the manoeuvrability of the vessel as it was modelled by the skeleton. It was a way to perceive an approximate simulation of the act of drinking as it was experienced by the Early Bronze Age inhabitants themselves.

At times, drinking vessels were assessed using qualitative methods. Single-handled cups of metal and ceramic from sites of the north-central Anatolian plateau were measured for their volume. They were drawn on a 1:1 scale and then traced using a computer programme developed by Jean-Paul Thalmann from the Université de Paris I Panthéon-Sorbonne.<sup>7</sup> The volume of these cups was then compared across sites in order to determine whether or not they were used in a similar manner. Statistical methods were used to determine the prevalence of beak-spouted jugs and lead bottles within graves at Demircihöyük-Sarket and Küçükhöyük necropolises. These vessels were assessed for their incidence across graves, as well as their co-occurrence with other items. The Chi-squared test for independence was chosen as the most appropriate statistical test, while Cramér's V helped to determine the strength of any relationship. The choice of which test to use was made in consult with two statisticians at the University of Edinburgh: Natalia Bochkina of the School of Mathematics<sup>8</sup> and Niall Anderson<sup>9</sup> of the Centre for Population Health Sciences. The tests were calculated by hand and also through the use of SPSS statistical software. The results that are presented in Chapter five are those that were calculated using SPSS.

It was important to assess each site on its own, within its own region and culture. This is because the sites themselves were often unique to each culture province. In other words, there were few to no sites in the immediate vicinity against which to compare material culture or other features. The sites of Alaca Höyük, Horoztepe, Ahlatlıbel, Küllüoba, and Karataş fall into this category. It would also have been inappropriate to compare vessels and other material from

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<sup>7</sup> Permission to use said program for the purposes of this PhD thesis was obtained from Professor Thalmann 15th June, 2012.

<sup>8</sup> Meeting 19th August 2011.

<sup>9</sup> Meetings 4th August 2011 and 31st August 2011.

different regions using the same criteria. Doing so would dilute the significance of the material from either region. It may also encourage any similarities to be interpreted as the result of borrowing between regions. For these reasons, no relationship was assumed to lie behind the adoption of special beverages in different regions. Vessels within each culture province were also assessed separately. Any similarities were presumed to be the result of similar objectives, particular to either culture, rather than to any connection between them.

#### iv. Limitations and assumptions

There are a number of limitations that are inherent in the design and approach of this study. They affect how this evidence was assessed, and how it may be interpreted. These limitations also constrain what conclusions may be drawn from the data, and how these conclusions may be extended to other populations.

It was not possible to determine with certainty whether vessels were used for drinking special beverages and for dining at feasts. To date, no residue analysis has been performed to test Anatolian drinking vessels for the presence of special beverages. Drinking vessels had to be identified using other criteria. Again, in some cases drinking and feasting events and settings had already been identified by earlier researchers. This includes the 'Royal' tombs at Alaca Höyük (Arik 1937, 71), ceramic beak-spouted jugs at Demircihöyük-Sarket necropolis (Seeher 2000, 28), and at Troy, the IIC 'Ledge' and IID Pits (Blegen et al. 1950, 206, 270). As described above, this analysis then sought similar material from other sites in each region. It was assumed that these vessels were also used for drinking and feasting.

In the remaining cases, it was the qualitative characteristics of vessels that suggested that they had been used for drinking and feasting. Omphalos bases are known to have been used for drinking in later periods (Toker and Öztürk 1992, 23-25; Stronach 1996, 188). Shallow vessels with omphalos bases from Horoztepe, Alaca Höyük, and Troy were assumed to have been also used for drinking. The single-handled cup from Resuloğlu Burial M141 was determined to be a drinking vessel from how it was worn by the skeleton within the grave (Zimmermann and Yıldırım 2007, Fig. 4). Because of this, single-handled cups with similar dimensions from other sites were assumed to have also been used for drinking. At times this is supported by other decorative features, which seem to suggest that the cups were reserved for special purposes.

These methods may have failed to acknowledge some drinking vessels, and misidentified others. Despite efforts to consider a wider variety of vessels, the method may also have placed a disproportionate emphasis upon cups used in élite contexts. It focused upon vessels with

interesting characteristics or decoration, and similar shapes in plain ware. Other plain shapes may have been used for drinking, yet were not identified. It is also possible that these special drinking vessels were used for other purposes. Some vessels may have been used for drinking mundane substances. Thus the settings in which they were used may not have been characterised by inebriation and a relaxing of behavioural norms and social group boundaries. However, it is clear that the drinking vessels that are identified in this thesis were attributed a special significance. They were deposited in rich graves, or positioned upon fingers, or decorated with complex incision. Even if individuals were drinking water, the act of using these cups was treated with some degree of importance. This likely indicates that the act of drinking had a broader relevance within the culture, and also an impact upon greater social processes.

Determining the use of drinking vessels depends upon a number of assumptions. The author assumed that the shape of vessels and the location of handles and spouts was a reflection of how the vessel had been used. These features determined which vessels were identified as for drinking, pouring, and feasting in the first place. They also directed the way that vessels were interpreted. The location of handles, shallow dimensions, or pointed bases established the hand positions that are assumed to have been adopted in using the vessels. This affected how the found replica objects were used in vessel modelling. It is possible that they were handled in a different manner. It is also possible that the author's own interests have influenced the observations that were made about this modelling.

## v. Further considerations

One of the aims of this thesis is to determine how drinking and feasting was related to the social organisation of settlements. Besides the characteristics of drinking and feasting materials, this is informed by the settings in which these materials were used and deposited. Two broad methodological issues are relevant for how this material is approached. The first is concerned with how evidence is assessed in general. The second deals specifically with mortuary contexts, from which a large amount of evidence was obtained.

### a. Drinking and feasting practices within settlements

Evidence for feasting and drinking must not be emphasised at the expense of other data. As explained above, settlements of the Early Bronze Age in central and western Anatolia lack written records and clear evidence of administration. The current state of research does not

indicate how the social organisation of these regions should be characterised. This study investigates whether or not feasting and drinking activities may shed light upon this issue. Yet this evidence is not more informative than that of architecture, exchange, craft production, agriculture, or any other indices. Drinking and feasting are simply one area of settlement life where social differences may be apparent.

Feasting and drinking evidence must therefore be considered together with other data from settlements. The information from architecture, exchange, crafts, agriculture, or any other areas place drinking and feasting activities in perspective in relation to the rest of the settlement. A number of features may indicate whether certain areas of a settlement were associated with a specific function, or with one particular social group. The significance of activities performed in these areas may be evident in the choice not to perform them in other areas of the settlement. Craft production may reflect the significance of using certain objects and materials rather than others. Of course, in some cases this information may be unavailable. Yet it is important to establish, at the outset, that these indices should be given as much weight in interpretations as feasting evidence.

Considering wider settlement features may also identify social groups or settlement areas that are missing from the archaeological record. For instance, high-quality craft production usually implies the presence of craftsmen. Written records may indicate that the settlement featured an administrative area. This may identify areas where more research is needed. Acknowledging where data is unavailable, therefore, allows the information about settlements to be accurately weighed. Recognising the scale of missing data ensures that certain contexts and materials are not given undue importance. This results in a more accurate assessment of the material, and also pinpoints where the analysis may be improved by future research.

## **b. Data from mortuary contexts**

Burials provide much of the evidence that will be investigated in this thesis. These must be assessed differently than living contexts. They are structured differently, influenced by different processes, and may also reflect different areas of settlement life or aspects of the culture. These considerations are outlined here. They will also be referred to within the relevant chapters of this thesis, and where necessary in assessing material from different regions.

Past approaches to burials treated the character of graves and their grave goods as a direct reflection of the personalities and characteristics of the deceased. Individuals were buried with gifts appropriate to their age, sex, gender, profession, family associations, and other traits



(Binford 1972). Further, the time, attention, and resources devoted to a grave were taken as a direct indication of the social status of the interred (Saxe 1971; Binford 1972). Graves requiring more energy, attention, and expense in their preparation were interpreted as conveying a higher rank (Tainter 1978, 125-28). A higher number of grave goods, including rare items, or a greater degree of variety were also taken to indicate a higher social status (Alekschin 1983, 140-43).

More recent perspectives recognise that burial involves a number of social processes. Several factors may influence how a grave is constructed, and what purpose it serves. Burial practices may refer to ritual beliefs rather than to everyday life at the settlement (Pader 1982; Parker-Pearson 1982, 100-101). Grave goods may also serve a number of purposes, and these need not relate to the personality of the deceased (Parker-Pearson 1999, 7-10). Grave goods may be mourner's gifts to the dead, rather than possessions of the deceased that reflect their character or profession. Grave goods may also be meant to appease the dead, rather than provision them. This provisioning may be for their journey to the afterlife, rather than the afterlife itself (van Gennepe 1960, 153-54; Thomas 1987, 455). Even if intended to represent the deceased, grave goods ultimately reflect the perception of the dead by survivors. Clothing and other adornment is a "strategic representation" (Parker-Pearson 1999, 9) of the deceased person that is contingent upon how effectively they represented themselves in life. It is also dependent upon how this is conveyed by those that survive them within the community.

This means that it is not always possible to infer the wealth and status of the deceased from the conditions of their burial. Equally, a collection of burials cannot be taken as a direct indication of the social structure of a settlement. Again, grave goods may reflect the intentions of mourners rather than the personality of the dead. They may also result from a number of complex social processes. In addition, the value of these objects is not just a function of the number of objects and their properties (cf. Alekschin 1983, 140-43) or how they are manufactured (Shennan 1975). It also includes their cultural meaning, or the value that is ascribed to objects by individuals within the culture. This ascribed value is always relative, as it may vary between different social, cultural, temporal, and geographic spheres (Barretto-Tesoro 2003, 312). For instance, objects may be considered of high value to one social group, but irrelevant to another. This may be due to their physical properties, or to more subjective reasons, such as their association with other groups or to specific ideologies. This means that it is important to consider the level of technology, socio-political complexity, and cultural integration of a culture when evaluating their burial practices (Barretto-Tesoro 2003, 312). The value of an object is as much derived from the technology and complexity of a culture as it may be an indicator of them.

Burial is also a time when the position of the deceased within society is most subject to change. It may be accompanied by a restructuring of the greater community. As Fahlander and Oestigaard (2008, 10-11) point out, reallocating the possessions of the deceased may include their resources as well as their family and sexual rights. Debts and obligations must be transferred or resolved. They characterise "the materiality of death (as) an active medium by which the social structure is transferred, restructured, reallocated or even challenged" (Fahlander and Oestigaard 2008, 10). These processes also affect how the monuments to the dead are treated afterwards. Graves may be revisited in order to continue their memory. They may be returned to in order to efface them. Subsequent cultures may also reuse graves for their own burials, which is likely to confuse how they are interpreted later.

Graveside rituals also function as much for the community as for the deceased. A graveside feast, for instance, may be an opportunity for the community to come together, rather than an act to honour the dead. Brody (2011, 134) points out that excess food may be left at graves because it is tainted and unsuitable for the living, rather than intended to provision the deceased (cf. Hartland 1928, 430-31). And again, this food may be meant for the journey to the afterlife, rather than the afterlife itself (van Gennep 1960, 153-54; Thomas 1987, 455).

The above examples illustrate that burial and graveside rituals may be motivated by a wide range of beliefs and cultural practices. They need not relate directly to the deceased. The exact details of the religious customs in EBA Anatolia are not known. Yet from the above, it is possible that such customs, if they were present, directed many if not all mortuary practices. It is important to leave room for these beliefs and traditions in any explanation of burial and graveside events. It is also important to recognise the potential bias of examiners in assuming that burial practices are similar to those within their own culture.

This analysis recognises that the above issues may have played a significant role in the use and deposition of drinking vessels. These issues are used to direct how drinking vessels and evidence for feasting from mortuary deposits is interpreted. They also determine to what extent burial evidence may be used to assess the social organisation of communities. Within the individual chapters, the above concepts are restated as evidence from burials is introduced. These issues will also be revisited as they are relevant to the interpretation of the evidence that is considered.

## vi. Theoretical framework

This thesis will examine the nature of feasting and drinking within different EB II-III communities across north-central and western Anatolia. It will assess whether these activities may be used to better understand the social organisation of settlements in either region. This is done by comparing the evidence against two theoretical frameworks, which are presented in the following chapter (Chapter two). The first framework discusses social complexity and the different options for how societies may be organised. The second outlines the different ways that material objects may be used to affect social relationships.

These frameworks are arranged as two 'open models'. Each model presents three options for how societies may be organised, and how material culture may be used, or consumed. These options combine existing and past scholarship of either concept. They do not present existing and recent ideas as discrete choices, but extract key points that are discussed across past and current research. In assessing the material from individual sites and settings, it is possible that one or a combination of options may be supported.

The following chapter discusses both open models in detail. They are preceded by a review of current and past research in the areas of social complexity and material culture. The options within each open model are taken directly from this history of research.

## vii. Thesis structure

Following a discussion of the theoretical background, the following chapters present evidence for drinking and feasting within four evidence chapters. These chapters have been arranged within the text according to geographical region, rather than chronology. The chapters advance from east to west. The first two evidence chapters (three and four) discuss sites of the north-central plateau. The focus then moves westwards to Eskişehir and Bilecik Provinces (Chapter five), an area which for a millennia has served as a crossroads between western and central Anatolia (Korfmann 1983, 189). The contexts that will be discussed in Chapter five pre-date those from the other sites. The final evidence chapter (Chapter six) discusses material from sites across the regions of inland and coastal western Anatolia.

**Chapter two** reviews the theoretical literature on social complexity and material culture consumption. It presents two open models that will be used to assess material for drinking and feasting from settlements. This chapter also gives different examples of how these open models may be used.

**Chapter three** is the first of two chapters to assess evidence for drinking and feasting from sites of the north-central Anatolian plateau. It uses a method of archival analysis to establish an inventory of all of the vessels that were found within the Alaca Höyük 'Royal' tombs. This inventory is used to assess whether or not there were any patterns in the incidence or combination of vessels between tombs. Many of the items are also evaluated for their placement within the tombs. This information may indicate how drinking vessels were used in mortuary ritual. A number of non-élite graves were contemporary with the 'Royal' tombs. The inventory and characteristics of these non-élite graves are compared against that of the 'Royal' tombs. It may be possible to deduce, from these different tomb groups, the nature of drinking at the site, and how it relates to settlement organisation.

**Chapter four** examines the evidence for drinking and pouring at other sites of the north-central plateau. It identifies other settings in which drinking and feasting seem to have been prominent activities. This includes burials, as at Alaca Höyük, as well as other, possibly non-mortuary contexts. Drinking vessels of metal and ceramic from the sites of Resuloğlu, Horoztepe, Kalinkaya, and Ahlatlıbel are compared for their dimensions and characteristics. This includes calculating the volume of several single-handled cups of both metal and ceramic. As at Alaca Höyük, this is used to assess the function of the vessels. It is also used to evaluate how drinking was done, and whether drinking practices were regional in scale.

**Chapter five** evaluates the incidence of drinking and pouring equipment in two cemeteries located within Eskisehir and Bilecik Provinces. The necropolises at Demircihöyük-Sarıket and Küçükhöyük are well-known for hundreds of ceramic beak-spouted jugs that were deposited in a mostly singular manner within their graves. This chapter evaluates how consistent was the deposition of jugs between tombs. It also assesses whether the presence of jugs depended upon the presence of other objects, or upon grave features. This is in order to determine whether the jugs were related to wealth or to other factors. It may also indicate the extent to which drinking was central to mortuary ritual, and if drinking was reserved for certain individuals or groups.

**Chapter six** assesses the material for drinking and feasting from western Anatolia. In this region, the EB II-III period sees the adoption of a series of three to four vessel shapes across a number of sites. The shape of these vessels emphasise drinking and foodsharing. This chapter takes a closer look at the features of these vessels, and how they may have been used. It investigates whether the adoption of these vessels was related to new ways of eating and drinking. It also assesses whether

the vessels, or any new practices, indicate changes in the organisation of settlements. Were the vessels adopted at different sites in one particular way? If there were differences, do they correspond to the size or location of sites, or to other aspects? This may indicate whether or not the vessels were taken up by communities in relation to greater social or organisational changes.

## Chapter Two: Theoretical approaches to social complexity, communal drinking, and material culture consumption

Communal drinking and eating, or feasting, is recognised across the social sciences as a highly-charged venue for establishing social relationships. In these settings, individuals confirm their allegiance to others or their membership within groups. They also negotiate their power and status through competition. These settings do not simply reflect the social relationships within settlements. They help to establish them, through the use of a broad range of behaviours.

This thesis will examine the social relationships within Early Bronze Age Anatolian communities through the lens of feasting. It will use drinking and feasting practices as a tool to better understand how individuals and groups interacted within communities. Relating this information to the social structure of settlements will be done using concepts developed in the areas of social complexity and material culture consumption. Social complexity research has outlined different possibilities for how societies may be organised. Material culture consumption provides a more broad framework for assessing the function of food, drink, and feasting. It also presents new ways to assess how these actions relate to, and help indicate, the social complexity of the wider settlement.

The purpose of this chapter is to explain the approaches to social complexity and food and drink that will be used throughout this thesis. It presents two theoretical frameworks that will guide how the evidence from different settlements will be assessed. These frameworks are constructed around key issues in current research, which will be explained together with a history of past approaches to both social complexity and food and drink.

The two frameworks are organised in the form of two 'open models'. Each open model will detail a spectrum of different approaches to the issues of social complexity and the communal consumption of food and drink. They will present different possibilities for how the evidence from sites may be interpreted. This is appropriate considering that the evidence for many aspects of Early Bronze Age Anatolian settlements is limited. This thesis examines only a handful of sites, across two vast regions, and the information from these sites is not comprehensive. As evidence is introduced, it will be compared against the open models. It is possible that none of the options within the models will be appropriate for a particular site or region. It is possible that the evidence from some sites and regions may suit more than one explanation. The purpose of each model is to consider social complexity and material culture consumption from different perspectives. The models are also meant to leave the interpretation of sites, settings, and communal events open to adjustment. This allows the question of how food

and drink were used and how Anatolian communities were organised to be re-assessed as evidence comes to light with future research.

This chapter will be divided into two main sections. The first section of this chapter will focus upon social complexity. It will explain past approaches to complexity, and perspectives in current research. It will then present the open model, and how it may be used to assess community social organisation. The second section of this chapter will explain how food and drink may be used to examine social complexity. It will explain the advantages of such an approach, as well as existing and current research methods. It will present a second open model, which may be used to assess Anatolian communities together with evidence of social complexity. Both of these frameworks are intended to be used in conjunction within the following evidence chapters of this thesis.

## **A. Social organisation**

This section of Chapter two explains the approach to social organisation that will be taken within this thesis. It is divided into three main parts. The first part will detail the various perspectives on social organisation within archaeological theory. This includes the key concepts related to organisation, and a review of influential studies and approaches. Many key concepts relate to wider trends in social theory, which will be revisited within the following section on material culture. The second part will review the issues in current research, including changes to the concept of social organisation. This is intended to guide how settlements will be assessed in this thesis. A third part will present the framework for evaluating the organisation of Anatolian communities. This is in the form of an 'open model' against which the evidence from the chapters will be compared.

The way that a society is organised is related to its social complexity, or the level of intricacy in its social structure and operation. The concept of social complexity emerged over the course of the past century, as researchers investigated how different societies were structured, what impacted them, and how they operated. Approaches to complexity have changed according to key developments in social theory. These will be introduced in the following pages. It is necessary to explain the key underlying concepts first because they will be revisited in the discussions of social organisation and food and drink. These concepts will determine the structure of the open model. They also clarify why this thesis focuses upon material culture. Developments in theory explain how a focus upon communal food and drink, or feasting, may contribute to an understanding of organisation in the first place.

## i. Past approaches to social complexity and key theoretical issues

Early approaches to social complexity were based in neoevolutionism. They were inspired by the anthropological work of Leslie White (1949, 1959) and Julian Steward (1955), who saw human societies as progressing from simple to more complex forms. Attention focused upon characterising societies at different stages of development. Childe (1936, 1942) was the first to outline a series of traits displayed by 'more complex' societies. To Childe, states featured urbanism, labour specialisation, food and luxury surpluses, class stratification, and long-distance exchange, amongst other features. Service (1962) and Sahlins (1968) developed a typology of different categories of organisation, which societies pass through as they become increasingly complex. Within these neoevolutionary step-typologies, the earliest stages of development are bands and tribes, which are organised around kinship ties. Societies may further develop into chiefdoms and states, which are organised around relationships outside of the kin-group (see Spencer 1990; Yoffee 1993, 63; contra Service 1962, 11). These typologies characterised societies of 'more complex' stages as featuring social ranking and hierarchy, labour specialisation, a central administration, and writing.

Neoevolutionary step-typologies are problematic for several reasons. They are unilinear, and assume that societies develop in a gradual and constant manner (Spencer 1990). They also do not leave room for variation and divergence (Yoffee 1993; Rothman 1994). Yet these models standardised terms for discussion that continue to be used in current approaches. They also demonstrate that early perspectives were focused upon the largest structures of a society, because those structures determined the level of development. This focused attention on the most visible and stable structures would continue within complexity research. As will be explained, the point would later be critiqued, and used to form a new perspective of complexity altogether.

Neoevolutionism drew attention to function and adaptation in the development of societies. Researchers focused upon how complex societies originate, and what factors cause them to change. Processualism, or the New Archaeology, considered social change to be an adaptive response to changes in the natural environment. It focused upon determining the ecological or technological aspects of a society, and how these led to permanent changes in organisation (Caldwell 1959; Binford 1962, 1965). Numerous studies attempted to isolate the most influential factors in bringing about changes in complexity, amongst them population pressure (H.T. Wright 1977), warfare (Carneiro 1970), irrigation (Wittfogel 1957), and other issues.



Other approaches recognised the impact of cognition and belief systems. Structuralist theory, which was adapted for anthropology by Claude Lévi-Strauss, had already argued that the way a society is structured affects how individuals approach their environment (Lévi-Strauss 1966, 1969a, 1969b, 1983). It also impacts the nature of their beliefs and high culture. Neo-Marxist perspectives emphasised the role of beliefs in controlling human behaviour (Bloch 1983; McGuire 1992, 1993). Conflict approaches to social complexity (Fried 1967; Krader 1968, 25) drew from both of these perspectives. They considered conflict and instability to drive social change, and inequality as resulting from specific groups who controlled access to resources.

Functionalist perspectives drew attention to all parts of a social system. Within other disciplines, structural-functionalism (see Fisher 2010, 74-75) argued that any system is composed of smaller parts that interact in an adaptive way. Instead of conflict and volatility causing social change, functionalism stressed stability. Applied to societies as 'systems theory', it stressed the interaction of external, cultural, and social factors within a total system (Bertalanffy 1969; Laszlo 1972a, 1972b, 1972c). In 1972, Flannery used systems theory to propose an ecological approach to social complexity. He argued that interacting subsystems within a society were hierarchically arranged, and that more complex forms were more centralised. The most complex social systems were also concerned with information processing, as they require higher levels of decision-making. Flannery's model significantly influenced studies of social organisation. It drew attention to the total social system rather than a single lineage or ruler. It recognised the impact of social and cultural factors in addition to those of the environment, and adopted a system-wide view of these developments. It also acknowledged the role of conflict. Instead of viewing societies as relatively stable entities, Flannery's model saw decision-making central administrations as a way for élites to control the resources within a society (Matthews 2003, 98). Following Flannery, several researchers sought to identify the number of decision-making hierarchies within a society, believing that these would indicate the specific level of complexity (see H.T. Wright 1977; Wright and Johnson 1975; G.A. Johnson 1978, 1982).

Yet this was still a narrow and selective approach to defining the complexity of a culture. Flannery's (1972) cultural ecology model drew attention to the total social system. Yet it continued to focus upon the most visible parts of a society (R.M. Adams 1981, 76-78), at the expense of other aspects such as households or commercial sectors (Blanton 1998, 138). At the same time that neoevolutionism was heavily critiqued, complexity discussions continued to focus upon stratification, hierarchy, and the ruling classes (see Marcus and Feinman 1998, 6-7; Parkinson and Galaty 2007, 115-16). The size of settlements continued to influence whether or not societies were considered to be 'complex' (see Feinman 1998). This was despite research that

demonstrated that scale is not a reliable indicator of complexity (G.A. Johnson 1982; Feinman and Neitzel 1984; see also Feinman 2011, 43). Most importantly, discussions also continued to view complexity as "a category, or a state of being that a society may or may not attain" (Wynne-Jones and Kohring 2007, 3). In some cases this has had the effect of complexity being equated with class-based societies and the concept of civilisation altogether (see Marcus and Feinman 1998, 4; R. Chapman 2007, 16-17; Souvatzi 2007, 38).

Systems approaches drew attention to subsystems and the role of feedback in decision making. As explained above, it emphasised the relationships between objects, institutions, people, places, materials, et cetera. In this sense it contributed towards a greater movement within archaeology, which was also occurring throughout the social sciences. Postprocessualist approaches within archaeology were related to new, poststructuralist perspectives that were emerging within other disciplines (see Preucel 2010, 120-23). These approaches emphasised the subjectivity and discourse that characterised human behaviour and interactions and the relationships between different entities. In archaeology, the various postprocessualist approaches rejected the determinism and hidden laws of structuralism (see M. Johnson 2010, 94, 105). These approaches instead emphasised that data is always interpreted through theory and the bias of researchers. They drew attention to the importance of considering cognition and ideology, context, and the impact of perspectives such as gender, ethnicity, and social class (see Preucel 2010, 123).

These developments meant that change could be effected by the individual. Amongst a number of important developments, postprocessualist approaches stressed that individual ideologies could resist change (Miller and Tilley 1984, 184), or be used to maintain power (Knapp 1988). Ideology could even direct the economy (Parker-Pearson 1984a, 63). Methodological individualism had already recognised the role of individual motivations in directing change (Brodbeck 1966; Lukes 1970; Watkins 1970a, 1970b).<sup>10</sup> Yet *human agency* also involved individuals reflecting upon themselves, the position of their society and environment, and their relationships with others. From the mid-1970s, Giddens (1976, 1979, 1981, 1984) began outlining his theory of structuration, in which he argued that agency operates together with social structure. It has a dual nature. As Sewell (1992, 4) explains, "structure shapes people's practices, but it is also people's practices that constitute (and reproduce) structures." Individual perceptions affect behaviours, and they also continually shape the environment, as individuals interact within it. Giddens termed this never-ending process *enstructuration*.

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<sup>10</sup> Methodological individualism saw individual actions as the result of intentions and motivations, and society to be the product of these actions (see Tilley 1982, 27; Dobres and Robb 2000, 4).

Agency also extends beyond the individual. In 1982, Hodder applied the term to material culture. Preucel (2010, 4) defines material culture as, "the manifestation of culture through material fabrications." It is the material objects that are created within a society, and which are culturally defined and produced. Hodder (1982, 12) argued that material objects take an active role in "forming and giving meaning to social behaviour." This *material agency* is actively manipulated. It also has a reflexive relationship to social structure: as structure shapes and directs material, so does material shape and direct structure. Like human agency, material objects do not simply reflect social relationships. They also alter them, and are altered by social structure. This includes broad, system-wide processes (Sewell 1992; Latour 1999, 190), as well as the mundane, daily activities of individuals (Malafouris 2008). As agency was extended to material objects, so did the concept continue to be identified at different scales, and in different relationships. The definition offered by Dobres and Robb (2000) captures this synthesis:

"(Agency encompasses) the conditions of social life, the simultaneously constraining and enabling influence of social, symbolic and material structures and institutions, habituation, and beliefs; the importance of the motivations and actions of agents; and the dialectic of structure and agency. Most would probably also agree that agency is a socially significant *quality* of action rather than... action itself" (Dobres and Robb 2000, 8, emphasis mine).

An expanded definition of agency means that more factors were understood to influence social relationships, and therefore social structure. As the quote from Dobres and Robb (2000) demonstrates, this includes material objects, as well as beliefs, habits, customs, social institutions, and other aspects.

As the concept of material agency expanded, so too did an understanding of what objects could reveal about social relationships. Actor-network theory (Callon 1986; Law 1992, 1999, 2002; Latour 1994, 1999, 2000, 2005) recognises that objects may work together with human actors to direct behaviour. Objects may even participate in social networks, and stand in for humans, or embody social rules (Latour 1999, 188-89). The way that individuals interact with objects may also provide information on social relationships. Dant (2005) argues that our physical relationship with objects is an important aspect of consumption. The creating, handling, and mastering of objects mediates relations between individuals, and between the individual and greater society. This thesis will use social drinking as a way to understand the social complexity of Anatolian communities. It will focus upon one category of material objects: food and drink. According to the concept of material agency, food and drink may impact social relationships, and be impacted by them. In EBA Anatolia, the use of food and drink may be detected through physical objects related to drinking. This includes drinking and pouring vessels, and the settings in which they were deposited. This thesis will use the framework of material culture consumption

to assess how these vessels were used, and the interaction between individuals within Anatolian societies. The concept of material culture consumption will be discussed in greater depth in the next section of this chapter.

## ii. Recent developments in social complexity research

Recent trends in research have continued to refine the concept of social complexity. As researchers recognised the impact of individual actors, ideas, cultural traditions, and belief systems, attention turned to understanding social behaviour. Complexity was redefined in terms of human social interaction. As researchers approached societies differently, so did their understanding of the role of conflict, centralisation, and hierarchy change. This section explains these changes. First, complexity is defined differently. This is demonstrated within the open model, presented in the following section. In addition, complexity may be studied through other means, for example through material culture. The theory behind this approach provides the focus for much of the rest of this chapter.

Recent perspectives acknowledge that not all unequal social relationships are initiated by conflict. A complex social organisation may also arise from a legitimate consensus between the ruler and the populace. This was the situation identified by Fortes and Evans-Pritchard (1940) and Lloyd (1965) in their study of traditional African states. They recognised an 'alternative pathway' to social complexity, which involved an agreement between the populace and the ruler of the rights and responsibilities of each. The situation was not altruistic, but inequality was not enforced by one group over the other. Instead of one group being compelled to surrender their freedoms for the benefit of another group (Service 1975), both parties may be agreeing to different roles. Rulers would be unsuccessful without the support of the populace. Likewise, not all citizens will aspire to a leadership role. It is often difficult for rulers to control their citizenry (see Marcus and Feinman 1998, 11). Leadership also involves political manoeuvring and competition with others (Fortes and Evans-Pritchard 1940, 11), activities that only some members will be interested in undertaking. On the other hand, central institutions offer a number of benefits to their populace. They are not just about inequality, but as Service (1975) describes, offer infrastructure, protection, and formal processes to investigate disputes. For these reasons, they may be largely supported by the population.

Complexity also involves processes other than centralisation. Thus societies may be complex even if they are not organised around a central, administrative core. Flannery (1972) had already recognised this point within his cultural ecology model. He defined complexity in terms

of two variables: centralisation and segregation. Centralisation represented the connection between features of the system, and segregation the amount of "internal differentiation and specialization" (Flannery 1972, 409) within subsystems. Other researchers also defined complexity through additional terms: McGuire (1983) identifies inequality as well as heterogeneity, which is the diversity of individuals within different social groups. Rothman (1994, 4) recognises centralisation as well as integration, which he considers to be vertical and horizontal differentiation, respectively.

This redefines complexity as variation. It may be identified across a number of societies, not only those that feature inequality and class stratification. Complexity may be evident in non-hierarchical societies. Using the example of Neolithic Greece, Souvatzi (2007) detects complexity in craft specialisation, domestic rituals, settlement layout, and several other settlement features. Large structures would have involved collective labour, special knowledge, planning, and coordination, as individuals performed different tasks. These are complex processes, even if they promote social integration rather than differentiation. Souvatzi (2007, 45) argues, "social dynamics are not only about economic inequality. They are also about social integration, interaction, cohesion and balance." While these practices are motivated by communal objectives, they still involve large-scale coordination and a chain of command.

Complexity may also involve decentralised processes. This is demonstrated by the concept of heterarchy (Crumley 1987, 1995; Brumfiel 1994; J.E. Levy 1995). Heterarchy provides the greatest contrast to centralised systems. Rather than complexity emerging from the '*top-down*', on the part of the most powerful within a society, heterarchy involves self-organisation, from the '*bottom-up*'. It is defined as, "the relation of elements to one another when they are unranked or when they possess the potential for being ranked in a number of different ways" (Crumley 1987, 158; 1995, 3). Complexity emerges through micro-processes, in the manner of human cognition (McCulloch 1945), ant colonies (Wilson and Hölldobler 1988), and computer programming. This is not to say that heterarchy is the opposite to hierarchy. Both may co-occur within the same society. Both processes are equally complex, and may be characterised by inequality. Applied to societies, heterarchy is present when the elements of a society are related to one another, but neither determines how another operates. A change in one area may bring about change in another area, yet not in a way where this is dictated between them.

Heterarchical processes may be competitive. This is demonstrated through factional competition, which is one example of heterarchical processes (Brumfiel and Fox 1994). Factions are informal groups that are similar in their structure and their membership, who compete against one another. They are "neither classes nor functionally-differentiated interest groups" (Brumfiel

1994, 4), more notable for competing against one another than for their specific political affiliations. For this reason, factions may be groups of élite, or they may be more emergent groups hoping to accumulate wealth and status. They are usually supporters of a particular individual, though to Brumfiel (1994, 4), this is not a necessary condition of factions. She points out that above all else, the central characteristic of factions is their competition with other, similar groups. Similarly, factions do not align themselves with a specific cause or ideological platform. They are non-revolutionary and noncommittal (Bujra 1973, 136-38), and stress legitimacy rather than political content. This is because the objective, for faction leaders, is to recruit as many supporters as possible, and strong views may turn potential supporters away. Clark and Blake (1994, 21) suggest that any inequality that results from the competition between factions is probably unintentional. In other words, the process by which factions compete for supporters may result in resources being distributed unequally. Yet this is not something that faction leaders set out to achieve. To Clark and Blake (1994, 21), it merely tends to result from the actions that faction leaders take.

Factions are characterised by cooperative relationships between their members, and competitive relationships with other factions (Clark and Blake 1994, 19). These processes compliment one another, and work to define each group. Competitive and cooperative processes also characterise the social relationships between individuals. Not surprisingly, they are therefore apparent in the structure and operation of human societies. Heterarchy and hierarchy are different manifestations of social complexity, though they may coexist within the same society. They may also develop independently, within that society, over time (Schoep and Knappett 2004, 24). One process may be more prominent than the other, and the two may also alternate. Societies, then, may be thought of as being composed of vertical and horizontal relationships. These relationships may function alongside one another, rising to become more or less predominate at any one time according to different internal or external forces.

This implies that there is a spectrum of possibilities for how power and influence may be achieved within societies. This spectrum is described by dual-processual frameworks (Blanton et al. 1996; Feinman 2000; Feinman et al. 2000). In dual-processual frameworks, competitive strategies are one possibility for how resources are mobilised. 'Network' strategies involve élite aggrandisement. They are individualistic, and mobilise resources by emphasising prestige and status, wealth distribution, or hereditary or lineal inheritance (Feinman 2000, 214). This includes prestige goods displays. By contrast, 'corporate' strategies stress solidarity and interdependence (Blanton et al. 1996, 6). They emphasise communal objectives for mobilising resources, for instance building projects and ritual events.

Dual-processual frameworks were inspired by Renfrew's distinction, in 1974, between 'group-oriented' and 'individualising' societies. Renfrew discussed a number of group-oriented, pre-state 'chiefdoms' that demonstrate complexity just as societies emphasising personal wealth and aggrandisement. He notes several societies (Renfrew 2001, 103-104) in which large-scale labour projects would have involved the coordination and direction of labour. While these projects were probably overseen by some personalities, in group-oriented societies these personalities would not have been singled out as exclusive. Group-oriented societies shun personal adornment in favour of collectivism. This is not to say that inequality is not present in group-oriented societies. Individuals may be ranked on the basis of sex, gender, age, or experience, amongst other reasons. Yet these differences do not result in resources being allocated unequally.

Within dual-processual frameworks, network and corporate strategies do not necessarily characterise whole societies or social classes. They may be initiated by individual actors from anywhere along the social spectrum. Norms of collectivism or individualism may characterise the ethos or philosophy of any group or individual. This includes the most significant actors within a social system, as well as small, minority groups. Dual-processual frameworks also recognise that neither strategy is more complex than the other. Network and corporate approaches are not to be associated with any specific social formation. Corporate, collectivist strategies may be employed within large-scale and centralised societies (Blanton et al. 1996, 6; Blanton 1998, 150-51). Non-élite groups may also resist the dominant social order (see Miller, Rowlands, and Tilley 1989) and continue to use network strategies that emphasise prestige, wealth, aggrandisement, and conflict.

These perspectives depict complexity as a continual process rather than as a finite point of development. Societies do not progress from a cooperative approach to one that is more competitive. The predominate strategy by which a society is governed may alternate between assertive, network strategies, and methods that are more collectively-oriented (Blanton et al. 1996). These strategies may be more or less effective at implementing different forms of control. For instance, Mann (1984, 188-89) distinguishes between 'despotic power' and 'infrastructural power'. Despotic power is the ability of a leader to enact decisions without needing the support of other officials or counsels. Infrastructural power, on the other hand, is the extent to which a centralised power is able to "actually penetrate civil society, and to implement logistically political decisions throughout its realm" (Mann 1984, 189). These are different forms of control, implemented through different ruling strategies. They are effective in different respects, and are probably enacted in response to different conditions, parameters, and objectives.

The degree to which a society is centralised may also be inconsistent. Rule by a centralised group may alternate between periods of consolidation, development and expansion, and dissolution (Marcus 1998). They may fit the definition of statehood in some periods, while in others they may be better described as city-states or be otherwise decentralised. Thus while different strategies correspond to different objectives, there is also a great deal of variation in different organisational categories. Societies may be more or less effective at fulfilling these objectives. Ferguson (1991, 171) suggests "overlapping, layered, and linked authority patterns... which individually might be located at different points along the political evolution continuum." These different strategies may predominate, alternate, or coexist depending upon which groups are involved, and upon the cultural preferences of the society in question.

Agency also impacts human social relationships. As was explained in the above section, Giddens (1979, 1984) observed that social structure and human agency affect one another through enstructuration. As Wynne-Jones and Kohring (2007, 7) explain, social interaction "at the level of the individual is an embodied experience dialectically inextricable from society writ large." Material agency may also impact social interaction. Like human agency, material objects do not simply reflect social relationships. They may also alter them, and be altered by social structure (Hodder 1982). It is possible that human social interaction may be detected through the way in which individuals create and use objects. That is the approach taken within this thesis. Material related to drinking may reveal more about drinking events as a social occasion. These events may, in turn, reveal the nature of social relationships within Anatolian communities, and how they were organised.

The following section explains the different possibilities for how societies may be organised. It presents this in the form of an 'open model' to social complexity. After the open model has been introduced, this chapter will discuss the theoretical concepts underlying food and drink as a form of material culture. That section will explain how it is possible to derive organisational information from the physical remains of different activities. It will also discuss the various ways that material culture may be used within a society, and present an 'open model' to material culture consumption. Both of these open models will form the theoretical points against which evidence for drinking will be discussed within the various chapters.

### iii. An open model of how societies may be organised

This section outlines three options for how social complexity may be manifested. They represent societies that are hierarchical and stratified, as well as those that are collectivist and



egalitarian. These options form a spectrum against which the evidence in this thesis will be compared.

The different options within this model draw directly from the concepts that were explained in the previous section. Social change is not only motivated by conflict. It may also result from cooperative social strategies, and be characterised by integrative forms of social interaction. These strategies are not completely distinct from one another. They manifest as a range of different options, and form a spectrum of diverse organisational forms.

The most recent perspectives on social complexity also influence how the open model is structured. Both hierarchical and egalitarian agendas may result in centralised political formations. Therefore the categories within the model do not describe different stages of social complexity. No single option represents a more complex form of social organisation. Centralisation is also not clustered at one end of the model. This is appropriate to the most recent social complexity research. It also directs how the evidence from settlements is evaluated within this thesis.

#### a. Hierarchical and stratified societies; network strategies

The first option for how societies may be organised is that they may be hierarchically structured. A topmost or central group regulates the production and distribution of resources. Thus the approach is often called *top-down*. This group is all-encompassing, and directs activities occurring at its centre as well as activities occurring farther away. As Flannery (1972, 1995) describes, in these societies commands flow downward, while tribute and information travel upward. Hierarchy is reflected in the level of administrators that operate within the system (an 'administrative hierarchy'). It is also reflected in the number and type of different settlements that operate in conjunction with a key centre ('settlement hierarchy'; Wright and Johnson 1975, 270-72; H.T. Wright 1977, 383).

Societies that are hierarchically organised exhibit social and economic inequality. The extent of this inequality varies, and researchers have described these differences by reworking various neoevolutionary terms. They may be stable and permanent, featuring a rigid social stratification, or ranking that is passed down through generations. They may also be less formal, with a less rigid chain of command, and still featuring a central authority. State-level societies are generally distinguished by having more than three or four hierarchical administrative tiers, and a centre that integrates thousands of inhabitants from the surrounding communities (Wright and Johnson 1975, 270-72; H.T. Wright 1977; Marcus and Feinman 1998, 6-7). Societies that are

hierarchically organised may also be smaller in scale and more flexible in their chain of command, yet still feature inequality and hereditary ranking. These societies have been termed 'chiefdoms', and they are extensively described in studies documenting their presence in the Near East and elsewhere (Service 1962, 1975; Sahlins 1968; Earle 1977, 1987, 1991, 1997; Johnson and Earle 1987; Stein and Rothman 1994; T.E. Levy 1995). The term 'chiefdom' has been effectively critiqued. Yoffee (1993) explains that the term has been applied to societies featuring a wide range of characteristics. Central elements of its definition have been changed altogether (Sahlins 1963; B. Douglas 1979; Carneiro 1981; Wright 1984; Earle 1977, 1987; Spencer 1990), as neoevolutionism has been challenged in favour of greater variability in the economics and organisation of settlements (Pryor 1977; Yoffee 1979; McGuire 1983; Allen 1985; Bawden 1989; Paynter 1989). Feinman and Neitzel (1984) introduce the term 'middle-range societies' as part of a greater movement away from neoevolutionist classifications. The term is less important than the recognition that societies may be complex and hierarchical, yet smaller in scale. This also makes clear that size cannot be taken to indicate social complexity (see also Feinman 2011). Thus the hierarchical societies of this 'Option A' include large-scale and all-encompassing societies as well as those that are smaller and more flexible in structure. Both forms of hierarchical organisation are considered to be equally complex in how they operate.

Top-down and hierarchical societies may be identified by several features. These are centred around identifying a topmost individual or group. Large-scale hierarchical societies are generally large and urban. They should feature significant buildings, which indicate the presence of a large, central administrative complex. During the Early Bronze Age, this arrangement is well-documented amongst settlements in Mesopotamia and in southeastern Turkey. There, the growth of large, urban cities, which feature writing and bureaucracy, are tied to the development of central temple and palace complexes (Özdoğan 1977; Wilkinson 1990, 1994, 488; Algaze, Mısırlı, and Wilkinson 1992; Matney, Algaze, and Pittman 1997; Matney, Algaze, and Rosen 1999; Wattenmaker 1998; Stein 2001).

If large-scale hierarchical societies are all-encompassing and centralised, they may also feature public works, such as canals or sewage pipes. This demonstrates the pre-planning of settlements, and the ability to organise and direct labour on a large scale. Writing is taken as evidence of administration. It implies that the production and exchange of resources and raw materials was complex enough that it needed to be recorded. Writing was a way to organise shipments, producers, overseers, and other aspects of production and exchange.

Hierarchical societies that operate at a more modest scale may be difficult to identify. They should still feature a central settlement, and also a central élite residence or administrative

complex. Writing may be present, though its absence should not be taken to indicate that the society was not hierarchical. Production and exchange may not have been recorded through an administrative institution, though these activities were still directed by a single individual or group. Craft specialisation indicates that some individuals were exempt from food-producing activities for at least part of the year. This may indicate a division of labour within the settlement; it at least implies that they were supported by others within their family or kin-group. These settlements may be relatively autonomous, though care should be taken to determine whether or not the site was subordinate to another in the region (see Flannery 1998, 16).

An élite-focused, top-down approach is not limited to social structure. It may also be identified at the level of human social relationships. Dual-processual approaches describe top-down *strategies* for achieving power and influence (Blanton et al. 1996; Feinman 2000; Feinman et al. 2000). Again, 'network' strategies are not confined to hierarchical populations. They may be observed in societies that are organised in a number of different ways. They are also contrasted with 'corporate' strategies, which emphasise interdependence. Both are a quality of action, and a way to mobilise resources. They do not characterise whole social systems (Feinman 2000, 213-16). Instead, the use of either strategy may be more or less prominent within a society at any one time (Blanton et al. 1996; Marcus 1998).

In the literature, élite strategies for promoting status and gaining influence have been well-described. They include displaying or distributing prestige objects in order to secure alliances (Frankenstein and Rowlands 1978; Renfrew and Shennan 1982) or to extract labour, surplus, or military service (Friedman and Rowlands 1977; D'Altroy and Earle 1985; Kipp and Schortman 1989). Élites may also promote their status using ideology (DeMarrais, Castillo, and Earle 1996; Baines and Yoffee 1998). These acts are individualising and exclusionary, and are therefore classed as network strategies. Earlier, conflict-based interpretations saw these strategies as directed by élites in order to legitimise their status and maintain their social position (Fried 1967; see also Service 1975, 32-33, 39; 1978, 21-26). These acts also demonstrate the social distance between élites and other, 'subaltern', non-élite groups. This allows élites or other central groups to maintain inequality within these societies.

Network, individualising, or top-down agendas do not need to be motivated by conflict. Costly-signaling theory, or CST (see Bliege Bird and Smith 2005; Plourde 2008; Glatz and Plourde 2011) presents a new way to interpret élite-based strategies. It argues that the display of prestige goods functions to advertise leadership qualities. This is not directed by one central political figure or group that aims to maintain inequality. Instead it is a practical way for such actors to obtain political support. Prestige displays advertise that one is fit to rule by

demonstrating the ability to accumulate surpluses (Neiman 1997, 269-70). Prestige goods are an indication of special skills, knowledge, or other abilities (Plourde 2008). These behaviours are likely to result in population success. The high cost of their display acts as a guarantor of these qualities (cf. Maynard Smith and Harper 2003, 16). High cost also means that the signal is less likely to be counterfeited because falsified signals would, over time, be abandoned (Neiman 1997, 270; Bliege Bird and Smith 2005, 224). Therefore individuals who continue to display prestige goods are likely to legitimately possess skills for leadership.

Costly-signaling theory is evolutionary in scope (Maynard Smith and Harper 2003), a perspective that is rejected by postprocessualists (see Trigger 2007, 445). Yet CST demonstrates that prestige goods do not need to signal inequality or manipulation. They are instead a functional indication of desirable leadership skills. CST also attributes an active role to both the élite and their audience; both roles are necessary for the success of prestige displays. This is similar to the 'second pathway' to state formation recognised by Fortes and Evans-Pritchard (1940) and Lloyd (1965). They argue that in some African political systems, leadership involves a legitimate consensus between leaders and their audience. This consensus even determines the nature and limits of power, as Fortes and Evans-Pritchard (1940, 12) describe:

"The structure of [one kind of] an African state implies that kings and chiefs rule by consent. A ruler's subjects are as fully aware of the duties he owes to them as they are of the duties they owe to him, and are able to exert pressure to make him discharge these duties."

In Costly-signaling theory, it is this legitimate consensus that causes prestige displays to be effective. The signal is a reliable indicator of ability that is practical for both élite and non-élite. The demonstrator obtains support, while the community acquires a leader who is able to generate surplus. Therefore aggrandisement may not always be directed by a central figure in order to maintain their status. CST demonstrates that aggrandisement may be practiced by individuals or groups who are competing for status within a society. This may occur within societies that feature a strict and rigid hierarchy. It may also occur within societies that are hierarchical but of a more modest scale, or that feature a more flexible hierarchy.

These recent research frameworks demonstrate that aggrandising behaviour and exclusionary strategies may serve a variety of purposes. They provide more options for how these acts may be interpreted. Within dual-processual frameworks, individualising political strategies are one possibility for how individuals and groups may centralise resources. Costly-signaling theory clarifies that these strategies are not always motivated by conflict, and for the purposes of managing inequality. These frameworks therefore revise the previous connotations of aggrandisement with control, autocracy, and conflict. If aggrandisement is also a functional

means to communicate leadership, then it may not always signal conflict between social classes or between different groups. Because of these observations, Option A of this 'open model' encompasses a wider range of organisational schemes and behaviours. It includes both large and small-scale hierarchical societies. Behaviours in this category may be driven by conflict, or by a more functional interplay between groups and individuals. As a result, exclusionary strategies and social display are interpreted through an open approach, which considers all possible evidence before determining their social significance.

#### b. Collectively-oriented strategies; egalitarianism

Egalitarian societies are collectively-oriented. They provide the greatest contrast to societies that are hierarchically organised, and to both network and top-down strategies. In early scholarship, egalitarian societies were imprecisely defined because they were only used as a concept against which to compare 'more complex' forms (Flanagan 1989, 245-47). Recent research has begun to detail how egalitarian societies function. It has clarified that collectively-oriented societies are no less complex than top-down and hierarchical systems. This affects how the category is contrasted with other options within this open model.

Collectivism is also a quality of action. It may be used as a political strategy within societies that are organised in different ways. Like network strategies, it is not confined to egalitarian societies. This distinction is crucial for understanding the third, 'integrative' category of organisational development within this open model.

In the past, collectivism was often defined from a contradiction, in western thought, between equality and individualism (Beteille 1969, 1986). Because of this influence, egalitarianism has been seen as the absence of hierarchy (Fortes and Evans-Pritchard 1940, 7-9; Middleton and Tait 1958; Fried 1967). For instance, neoevolutionary typologies list band societies as an egalitarian precursor to ranked and stratified chiefdoms and states (Service 1962; Fried 1967). This reflected the early view that as societies became more complex, they also became more unequal.

Subsequent research has redefined the concept. A number of researchers have argued that hierarchy is found in all social systems (Duncan 1962; A. Cohen 1974, 32, 78; Flanagan 1989; Roscoe 2000; Souvatzi 2007). Flanagan (1989, 247-48) separated the concepts of hierarchy, or inequality, from social stratification, which he defines as institutionalised and ranked categories within society. Flanagan (1989, 248) also places social stratification "firmly in the domain of social structure." This means that inequality is present in all societies, not only those with

different social classes. And finally, ethnographic research began to specify what egalitarian societies, though rare, actually do (see Hayden 1994, 226 for extensive references; also Blanton 1998, 152).

Egalitarian societies are characterised by a collective pooling of resources. This is not because they are more simple, or because they lack complexity. It is because community members work to maintain a collective system. Hierarchy is not absent; individuals may still be ranked in terms of their sex, gender, age, experience, or other characteristics (Mann 1986, 37; Flanagan 1989). Yet these differences are not institutionalised. There is a strong resistance against the concentration of power to a single individual or group (W.B. Miller 1955; Cashdan 1980; Woodburn 1982; Boehm 1993; Poyer 1993; Wiessner 2002). This is not to say that collectivist societies do not result in centralisation. They may, though in a form that maintains a collectivist agenda. These societies maintain their structure through the promotion of collectivist ideologies (Flanagan and Rayner 1988, 2-3; Rayner 1988; see Flanagan 1989, 250 for further references). Individualistic leaders may be deposed (Mann 1986, 68). Ultimately, the processes that are used to maintain a collective system are as complex as those within hierarchical and stratified societies or within network strategies. They may be characterised by equally complex operations. Collectivist objectives may result in long-term inequality (Hayden 1995; Wiessner 2002). They may also produce significant constructions. Renfrew (2001, 103-104) describes his 'group-oriented societies' mainly by their monumental structures. These structures demonstrate that collectivist societies may feature the infrastructural capabilities to organise and to direct labour.

Egalitarian may also be a quality of action, in addition to characterising a political formation. To Blanton (1998, 151), egalitarian includes "any behaviour that aims to establish and uphold restrictions on... exclusionary power." From this expanded definition, egalitarian strategies may be adopted by groups within both collectivist and hierarchical societies.

Collectivist is a form of interaction that may characterise how individuals or groups relate to one another. A collectivist agenda may be adopted despite the presence of hierarchy (Flanagan 1989, 248). It may also be used to mask individualism (Kuipers 1990). For these reasons, dual-processual approaches identify collective or 'corporate' *strategies* (Blanton et al. 1996; Feinman 2000; Feinman et al. 2000), rather than using collectivism to describe an entire political system.

Collectivism is not the absence of power. On the contrary, it may structure power strategies within complex societies. Blanton (1998, 147-48) describes that corporate strategies may manifest in societies as a form of "systemic power", and limit the ability of rulers to exercise power unilaterally. This is similar to the distinction, by Mann (1984, 184, 189), between despotic

and infrastructural power. Infrastructural power is a form of leadership that requires support beyond a single ruler, and which is also able to infiltrate farther into civil society. It describes a situation where 'civil society groups' have significant weight against sovereigns who would rule autocratically. They require that rulers gain the support of other groups and individuals in the running of a society. This may involve sanctioning exclusionary power. It may also be that autocratic power simply does not work in these societies, from a historic perspective. Rulers may be historically unsuccessful in the region if they do not represent the interests of their constituents. This is similar to the situation that is described by Fortes and Evans-Pritchard (1940) and Lloyd (1965) in their examination of African political systems. Ruling that requires a wider consensus is not less complex than autocratic or despotic forms. Rather, it is a strategy that is required according to the unique history of a population. It must also be actively maintained through processes that are as complex as those within other systems.

### c. Middle position: integrated approaches

Integrated approaches are situated in-between network or individualising agendas and collectivist objectives. They are not an intermediate stage of complexity. As above, no category within this model is more complex than another. This model describes hierarchical and egalitarian societies, as well as different *strategies* (individualising or collectivist) by which influence may be achieved. Élite, aggrandising, network strategies as well as collective, interdependent, corporate approaches were assigned, respectively, to Options A and B within this model. Option C of this model, integrated approaches, describe a situation in which both aggrandisement and interdependence are identified. In these scenarios, both processes may alternate, or coexist.

Societies may alternate between periods of political consolidation and decentralisation. These societies are not incipient, failing, or less complex, but are worthy of study on their own (cf. Blanton 1998, 139). The process has been noted to occur within pre-state hierarchical societies, also known as 'chiefdoms' (H.T. Wright 1977, 381; 1984, 42-43; Anderson 1994, 1-52). Political cycling has also been observed in ethnographic research (Friedman 1975; Redmond 2002), and it remains a key issue in theoretical discussions (Blanton 1998; Fowles 2002, 21; R. Chapman 2003; 2007, 15). Increasingly, researchers are appreciating cycling as a meaningful response to scalar stress and other factors (Feinman 1998, 105-107). This moves away from the idea that centralisation is associated with specific, discrete 'stages' of complexity. Instead, centralisation may shift in response to different conditions. To Kristiansen (2007), complexity features a mix of different indices, such that societies may be decentralised, but still feature

ranking and craft specialisation. These different phases are to be considered together in assessing the complexity of a site or region (e.g. Blanton et al. 1996; Marcus 1998). This is the approach that was taken by Edmund Leach in his studies of the Kachin of highland Burma. According to Leach, Kachin societies could be characterised by either of two social systems: a Shan feudal hierarchy, and a *gumlao* "anarchistic and equalitarian....'democracy'" (Leach 1970, 8-9). In-between are *gumsa*, which oscillate between Shan and *gumlao* principles. To Leach, these systems are always interrelated, always defined in relation to the other groups:

"The two types are, in their practical application, always inter-related. Both systems are in a sense structurally defective. A *gumsa* political state tends to develop features which lead to rebellion, resulting, for a time, in a *gumlao* order. But a *gumlao* community, unless it happens to be centred around a fixed territorial centre... usually lacks the means to hold its component lineages together in a status of equality. It will then either disintegrate altogether through fission, or else status differences between lineage groups will bring the system back into the *gumsa* pattern" (Leach 1970, 204, emphasis in the original).

Leach did not categorise the Kachin as incipient, or still-developing. Instead, he argued that the definition of how the Kachin were organised was only applicable for a specific point in time. The social system of even one Kachin village could only be defined temporarily. He considered *gumsa* and *gumlao* to be two phases of the same system. One did not decline in favour of the other; rather, both lack certain features, and offer different benefits (see Leach 2000, 219-25). The benefits and drawbacks of *gumsa* and *gumlao* can only be appreciated if they are considered together. This perspective has been adopted by the most recent research into political cycling. It is echoed by G.A. Johnson (1982) and in dual-processual frameworks (Blanton et al. 1996; Feinman 2000; Feinman et al. 2000), which consider individualising and collectivist agendas to co-exist within all societies. It is from this perspective that cycling is likely to be studied in the future.

Heterarchy also provides an example of an integrated approach (McCulloch 1945; Crumley 1987, 1995; J.E. Levy 1995). Heterarchical systems are self-organised. They may be unranked or "ranked in a number of different ways" (Crumley 1987, 158; 1995, 3). Yet heterarchical systems may coexist with network, individualising, and top-down agendas. The two operate differently, but they may both be present within the same society. Heterarchical and hierarchical processes may fluctuate or alternate with one another, in a manner that is similar to political cycling in chiefdoms. It is for these reasons that heterarchy is placed within the third category of this open model.

Factional competition is one example of a heterarchical process. Faction leaders compete against one another for supporters. They do this by using individualising, network strategies, displaying prestige goods and special, ritual knowledge. Élites are in competition with one another, yet they maintain a cooperative relationship with their supporters. As Clark and Blake



(1994, 21) describe, "the most successful aggrandizers... provide the most physical, social, and/or spiritual benefits to the most people on the most reliable basis." Cooperation is present alongside competition. This may still result in complex social formations. Schoep and Knappett (2004) argue that factional competition between élite groups on Minoan Crete played an important role in bringing about the development of the Minoan palaces. They point to an intensifying consumption of prestige goods and other craft production prior to the emergence of the palaces in the Middle Minoan (MM) IB period. These symbols helped to strengthen the relationships between élites by promoting group cohesion. They also signal an intensifying competition between other members. To the authors, this indicates an important self-organisation amongst élites that preceded the more visible hierarchy of later periods. Both processes contributed to the development of the palaces, though they operated differently. The authors explain, "whereas heterarchy might have been a slow-boiling, *evolving* process, hierarchy *exploded* onto the scene, perhaps as a direct, albeit non-linear result of heterarchical developments" (Schoep and Knappett 2004, 31, emphasis in the original). In this example, both heterarchical and hierarchical processes contributed to social and political development in Minoan settlements. They coexisted, though each was predominate at different times. It is by recognising both processes that a more complete understanding of Minoan palaces is achieved.

A similar process is argued for by Renfrew and Cherry (1986) in their model of peer polity interaction. The peer polity interaction model describes that it is the combination of lateral and lineal social relationships that results in change. Élites within different polities are laterally related, and they engage in prestige goods competition with one another. They share the latest technology in craft production, and this promotes the growth and development of these products. At the same time, these élite are also hierarchically related to non-élite within their own society. Using the first millennium BC Greek city-states as an example, Renfrew (1986a, 11) argues that they "emerged *together*, pulling each other up by the bootstraps, as it were" (emphasis in original). Peer polity interaction maps these interactions through the different ways that material goods are used. The following section of this chapter explains how the use of material objects may be used to assess the social organisation of settlements. That section also presents a second open model which focuses upon material culture consumption, in which peer-polity interaction occupies a similar position.

#### iv. Use of the open model

The categories of the open model describe different forms of social interaction. Individualising, network strategies and collectivist, corporate strategies are two possibilities. Both of these strategies may result in a centralised form of social organisation. Both forms of organisation may feature inequality. Both are maintained using methods that have the potential to be equally complex in their operation. Integrated approaches provide an in-between option. They include dual-processual approaches, which argue that both network and corporate strategies are present in all societies, but are more or less predominate at different times. The discussion surrounding heterarchical processes is somewhat similar. The open model attempts to represent the key perspectives that are represented in social complexity research. This is in order to provide an open framework for the interpretation of evidence in this thesis.

In this thesis, evidence from different settlements will be evaluated against the open model. Several issues must be kept in mind. The categories of the model do not correspond to different levels of complexity, or to different types of societies. Network and corporate strategies also cannot simply be assigned to whole societies, communities, or even to the settings where drinking and feasting were practiced. The categories of this open model describe strategies that are used for organising communities and social groups. There has also been a disproportionate amount of research devoted to either strategy. Network-based approaches have been well-described in the literature. Several Bronze Age societies of the Near East are centralised and hierarchical, with clear evidence for writing and a central administration. Research has often focused upon élite-centred, aggrandising strategies because these strategies are the most apparent within the large, all-encompassing settlements in the Near East and elsewhere. There is less evidence for collectivist societies, although recent research (Flanagan and Rayner 1988; Rayner 1988; Flanagan 1989; Boehm 1993; Poyer 1993; Wiessner 2002) has helped to clarify the concept. Integrated approaches are the most insecure to identify. These concepts have been introduced to the literature through studies that are relatively new. Any reference to integrated approaches within this thesis will make clear that they are the least documented of all of the approaches discussed here. Yet it is important to include all of these options for assessing EBA Anatolian communities. This is because many of the settlements that will be investigated are not fully understood.

This thesis will use drinking vessels to assess the organisation of EBA Anatolian settlements. This includes vessels for communal drinking and eating, or feasting, as well as for individual grave equipment, and vessels for more mundane purposes. The framework of material culture consumption provides a way to assess the use of all of these vessels, not only those used

for feasting. It also provides a way to determine whether drinking was done for purposes related to any of the above strategies for social interaction.

The following section will explain how material culture consumption relates to social complexity, and food and drink studies within anthropology. It will also explain how the use of objects may be used to assess the complexity of settlements. This section will present an open model for the different ways that objects may be used within a culture. Like the open model for social complexity, the evidence from settlements will be assessed according to this open model of material culture consumption. The approaches are similar: the use of objects may serve competitive agendas, or they may be used in a cooperative manner. These options form a spectrum of different options for how evidence may be interpreted. They are not to be assigned to whole sites, communities, settings, or events.

## **B. The consumption of food, drink, and material culture**

This section of Chapter two will explain how material related to food and drink may be used to assess social relationships. The significance of drinking practices in later periods of the Anatolian Bronze Age was explained in the first chapter of this thesis. This section of the second chapter will clarify how drinking and feasting relates to social complexity. It presents a review of the relevant theoretical literature. This section then presents the methods by which drinking and feasting evidence will be used to assess Early Bronze Age settlements.

Research within social anthropology has detailed the great significance of food and drink within human societies. Food and drink, and how it is prepared, shared, and served may carry a great deal of meaning. These acts have an important social dimension. Certain foods and dining practices reflect how specific groups and individuals interact. Feasting studies have demonstrated that sharing food and drink may have important social and political implications. All of these observations have established that food and drink, and how it is shared at feasts, are a promising area for examining human societies.

Yet in order to explore how drinking and eating relates to social complexity, we must examine these practices through the framework of material culture consumption. This is because the study of food and drink developed according to greater changes that were occurring across the social sciences. Early research had discussed food and drink for their properties, their cultural associations, and their symbolism. As poststructuralist approaches were explored by researchers, food and drink began to be appreciated for their active role in structuring human social

relationships.<sup>11</sup> Food and drink came to be seen as a form of material culture. This meant that food and drink could no longer be examined on their own, as isolated materials. From this point they came to be regarded as one category of products within a network of material objects that are available within society. Research began to consider the relationship of food and drink to other products and materials, and their use in different settings. These details provide insight into the role of food and drink in human social life.

Viewing food and drink as material culture is also appropriate to the methods that will be used to study eating and drinking within this thesis. Material culture studies view material objects as a means by which individuals actively structure social relationships. It considers that the way in which objects are used may indicate the nature of these relationships. Consumption may refer to both the taking up or use of objects, and the physical ingestion of food and drink. This study focuses upon the use of physical objects for eating, drinking, and feasting within Anatolian EB II-III communities. Cups, bowls, and other objects provide the most clear indication of the practices of drinking and feasting within settlements. The features of these objects and where they were used make it possible to infer how drinking and feasting was done, and possibly why. Material culture studies is rooted in the idea that "material aspects are not usefully separated from the social" (Sahlins 1976, 205). At the same time, the function of objects is not only arrived at by considering the social setting in which they were used or found. Material culture studies offers a wide theoretical discussion of how culture and society and the function of objects interact. It is appropriate that food and drink practices, which are detected by physical objects and which impact human social relationships, be discussed within this framework.

The following paragraphs will explain how food and drink is assessed within the framework of material culture consumption. First it will reiterate how food and drink provide insight into social complexity. This section will then explain past approaches to food and drink, and how this research reflects wider developments in social theory. This review of the theoretical literature does not explain the position of every food researcher. Rather its goal is to explain how the study of food and drink is changed by adopting a poststructuralist approach. It will begin by explaining early approaches to food and drink within anthropology. Then a number of theoretical works are explained, which shifted the discussion of food and drink towards how materials are

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<sup>11</sup> Preucel (2010, 122-23) offers a clear and concise discussion of the term, 'poststructuralist'. At its most general, poststructuralism is a critique of structuralism, and encompasses the series of perspectives across the social sciences in response to structuralism. In archaeology, these include postprocessual approaches. Both postprocessual approaches and poststructuralism in general focus upon the interpretation of evidence, and emphasise ideology and the impact of other social factors in decision making. This moves away from the emphasis on positivism and general laws that characterised the earlier processualism.

used to facilitate social relationships. This will also explain how the study of material culture consumption may be adapted to examine food and drink evidence from prehistoric Anatolia.

Finally, this section presents an open model of the different ways that material culture may be used within society. This model is developed according to the concepts that will be explained within the review of the theoretical literature. It presents the different ways that materials may be used, and how they may facilitate social relationships. This open model will guide the assessment of drinking and feasting equipment throughout this thesis. The open model provides a way to apply the abstract theory of consumption to the physical materials that will be evaluated in this work. It will be consulted together with the open model of social complexity in order to assess how Anatolian settlements were organised.

#### i. The significance of food, feasting, and communal consumption

Why examine Anatolian settlements through drinking and feasting practices? Food and drink may reveal a great deal of information about social relationships. Food and drink may reflect and also shape social and political relationships. This has been documented extensively in social science research. Feasting, or the act of sharing food and drink, may be one means of accumulating influence within settlements. Feasting studies have detailed the use of feasts for social bonding, as well as for political manoeuvring. Both areas of research help to understand how food practices relate to social complexity. They are briefly outlined here, and further explained through a review of the theoretical approaches to food studies and feasts in the next section.

Food and drink help to construct our social and cultural worlds. Drinking and eating patterns are bound up with greater political and cultural practices (Weismantel 1988). Access to food may serve to make and maintain social hierarchies (Goody 1982). These may be formalised: sumptuary laws (see Farb and Armelagos 1980, 155) try to make permanent decisions about who has access to specific foods (and other luxuries), and when. The harsh penalties for violating these proscriptions demonstrate that the symbols attached to food may become highly emotionally charged. Drinking is also a social lubricant. The intoxicating properties of drink create settings in which social objectives may be realised more quickly (Sherratt 1991; Sherratt and Sherratt 1991). These objectives may reflect reality, or they may be used to construct an ideal version (Douglas 1987).

The act of sharing a meal is an opportunity to put all of these processes into action. Feasts are "communal food consumption events that differ in some way from everyday practice" (Dietler

1996, 89). Across cultures, feasting and drinking together with others is a significant act. Feasts are often a venue for altering our social relationships, up to and including the political landscape of our societies. As a social activity, they bind host to guest, and participants to one another, and they are an effective platform for attaining political power. As a ceremony, feasting helps to establish and to express cultural identity (J.C. Wright 1996, 2004a; Wiessner 2001, 116; Pollock 2012, 2-4). Feasts may play an important role in incorporating members into the community (Fischler 1988). They may be used by individuals to accumulate resources, and to transform wealth into power (Hayden 1994, 1996, 2001a). These themes can also be manipulated: they may be used to mobilise labour (Dietler and Herbich 2001) and reinforce social distance, as well as to compel future obligations through reciprocity (Dietler 1996, 92-97). Feasting and drinking may play a role in the organisation of societies. In other studies of the ancient world, they have been recognised to be a key process in the articulation of social and political relationships (Sherratt 1991, 1995, 1997; Sherratt and Sherratt 1991; Dietler 1990; Gero 1992; Vencel 1994; Woolf and Eldridge 1994). As was introduced in the first chapter, these processes have also been cited amongst those impacting the development of ancient Near Eastern states (Bottéro 1994; Neumann 1994; Joffe 1998; Bray 2003; Dietler 1990, 2003; Pollock 2003; Smith 2003; Sasson 2004).

## ii. Theoretical approaches

Early perspectives on food and drink took a functionalist approach. These emphasised the different parts of food systems. Research was centred upon foodways, or how food and drink is produced, distributed, and consumed within a culture (Richards 1932, 1939; Firth 1934). Ethnographic research documented foodways and food taboos across a number of societies (Harris 1966, 1977, 1985; Rappaport 1968; Harris and Ross 1978, 1987). In these studies, eating and drinking practices were understood to be motivated by practical concerns. This includes ecology, nutrition, and the supply of food, amongst other factors.

Structuralism emphasised that eating and drinking are also cultural practices. Lévi-Strauss (1966, 1969a, 1969b, 1983) saw food and drink, like other aspects of a society, as governed by hidden laws. These laws are not articulated, but they are part of an underlying structure that determines cultural patterns. To structuralists, objects are significant within a culture because of their relationship to other objects. When these objects are deciphered as a sign, the relationship may be revealed. For example, the meaning of specific kinds of food and drink is due to its relationship to other foods, and to other objects. In *The Raw and The Cooked*, Lévi-Strauss (1969b) argues that the different states of food (raw, rotted, or cooked) and ways of

cooking (boiling, roasting, smoking) are oppositions that structure cultural distinctions. These distinctions are used to create social conventions over what is food, what is appropriate to eat, how it is eaten and when, et cetera. These conventions in turn help to create the social order. Structuralism drew attention to the place of the object within a wider social and cultural system. A focus upon the position of objects in relation to other entities would continue to be emphasised in later research.

Researchers also acknowledged that social factors affect food choices, as well as eating and drinking practices. Douglas (1966, 1975, 1984) drew attention to how the choice of foods and the structure of meals changed according to who is participating. She pointed out that these features depend upon the social distance between those present, and also upon wider social norms. To Douglas, food carries meaning, and it operates as a means of communication. Food is a "field of action... and food choices support political alignments and social opportunities" (Douglas 1984, 50). Food patterns are often interwoven with the political, cultural, and historical realities of the cultures in which they exist (Weismantel 1988). Access to food and drink may even serve to uphold the structure of these societies altogether (Goody 1982).

Barthes (1973, 1979) points out that meaning is often derived from the information surrounding a particular food, rather than the food itself. This is more than the position of that food within a particular cuisine or meal. It includes the way that it is presented and prepared, and how it is used in society. This meaning may be directly manipulated, for instance coffee depicted as a relaxant in commercial advertising (Barthes 1979, 24-26). These elements relate to larger social and economic processes within a culture, including social relationships. Barthes (1979) cites several examples in which specific foods are used to signify greater concepts, ranging from nationalism to physical sensations. Social class is also included. For instance, while sweet chocolate is preferred by the lower classes, bitter chocolate is the choice of more élite groups (Barthes 1979, 22). These preferences in chocolate are also accompanied by other kinds of objects, such as clothing and perfumes. Food preferences, then, often embody a "general system of tastes and habits" (Barthes 1979, 23), accompanied by a suite of other choices for specific materials within a culture. Food is one category within a broader range of commodities, and food choices are meaningful because of these other choices.

This approach was expanded by Douglas and Isherwood (1979) in their co-authored study *The World of Goods*. The authors recognised that food is one category of material objects amongst hundreds within a culture. They argue that in order to understand the meaning of goods, one must consider their position within this wide network. The authors also point out that this network of material objects relates to social relationships. Goods carry meaning, which relates

culturally-specific information. Goods "make and maintain social relationships" (Douglas and Isherwood 1979, 60), and they are also material markers, "chosen for their fitness to mark... events in an appropriately graded scale" (75). These *marking services* communicate social class and availability through *consumption periodicities*, or the widely-understood language of commodities within a culture. In other words, individuals use goods in order to navigate their social world. The network of materials within a culture provides a language through which any combination of messages may be expressed. Individuals use goods as a way to define their position in relation to others. To Douglas and Isherwood, this universe of goods translates into a universe of potential social relationships.

Material goods make sense of the world, and the position of the individual within it. Goods are not passive objects that reflect existing social relationships. Instead, they take an active role in constructing these relationships, because individuals choose specific goods due to their position in relation to other objects. Douglas and Isherwood's (1979) study makes clear that the question is not why and how people feast, and why they drink or consume prestige goods. Instead it is why individuals want goods- why they choose to participate- that bridges the gap between the use of objects and social complexity. In order to understand the meaning that objects convey, we must understand how particular objects are related to other objects. This will indicate why certain goods are chosen over others, and thus what kind of message they are intended to communicate.

From this point, food and drink began to be examined as material objects, and within the broader framework of material culture consumption. This is due to what Hicks (2010, 45) calls the "material culture turn." Structuralism had focused upon food and drink as a sign to be deciphered (Lévi-Strauss 1978; McCracken 1988). By contrast, material culture studies saw food and drink as one category of a multitude of objects that embodies our thoughts and interactions in the world. It therefore considers all types of objects within a culture. As Deetz (1977, 24-25) explains,

"A somewhat broader definition of material culture is useful in emphasising how profoundly our world is the product of our thoughts, as that sector of our physical environment that we modify through culturally determined behavior. This definition includes all artifacts, from the simplest, such as a common pin, to the most complex, such as an interplanetary space vehicle. But the physical environment includes more than what most definitions of material culture recognize. We can also consider cuts of meat as material culture, since there are many ways to dress an animal; likewise plowed fields and even the horse that pulls the plow, since scientific breeding of livestock involves the conscious modification of an animal's form according to culturally derived ideals..."

Thus attention shifted from objects themselves, to the ways in which objects are used within society, and how individuals interact with them. Considering all of the objects within a culture



means that it is possible to examine all possible consumption patterns. This corresponds to the "whole range of material engagements with the world" (Preucel 2010, 5). Even within archaeology, feasting studies have followed suit. In a recent reappraisal of the Shaft Graves at Mycenae, Wolpert (2004) uses the developments of material culture theory to understand consumption within the tombs. He explains, "consumption deserves the attention it now commands, as an array of affiliated behaviours (display, status competition, gift exchange, mortuary deposition, artifact destruction) determined what traces of prehistory were preserved." Therefore the most accurate appraisal of consumption activities is made by first acknowledging all possible behaviours and relationships, or at least as many as possible. It also involves recognising the different position of actors within these communities and at these events, and the different social relationships between them. Any study that examines behaviour through the lens of consumption should begin by outlining these possibilities.

### iii. Developments in the theory of material culture consumption

As attention shifted to the consumption of materials, researchers began to detail how objects facilitate different forms of human social relationships. At the centre of this focus was a small number of pivotal studies that were rediscovered in the 1980s. These key texts provided the first insight into how the consumption of materials may be used to direct social relationships. They led researchers to more closely investigate how individuals define and use objects. These developments in theory continued to adjust how the use of goods is understood to structure behaviours and social relationships. This includes the active role of materials in processes that affect social complexity.

The key texts that focused attention towards the role of objects in the social order are introduced below. They are central for understanding how goods may be used to facilitate and shape social relationships. Subsequent research outlined that these relationships are affected by a number of factors. Goods also facilitate social interactions in ways that are not conflict-oriented or competitive. An acknowledgement of the range of social associations between individuals and groups was encouraged by developments in theory. Chief among these was the practice theory of Giddens (1979, 1984) and Bourdieu (1977, 2010). Hicks (2010, 45-46) also identifies French structural Marxism and other schools. To these theorists, material culture was another means to explore the relationship between agency and social structure. As was introduced earlier, objects demonstrate *material agency*: they play an active role in "forming and giving meaning to social behaviour" (Hodder 1982, 12). It is also apparent that as individuals use materials, they become

influenced by them. Their relationship is reflexive, in the manner of Giddens' enstructuration (1979, 1984). Thus it is not only the relationships between objects according to individuals or within cultures that determines their meaning. The function and significance of objects is also constructed through the act of using them, which sets all of these processes in motion.

More recent perspectives include actor-network theory, materiality studies, and other, recent discussions emphasising connectedness (entanglement theory). These approaches follow from the concepts that were introduced by material culture studies. They describe additional methods for evaluating the relationships between entities, and the factors that influence these relationships. Here, all of these perspectives are combined in order to produce an outline of the different ways that materials may be used in social interactions. This makes it possible to characterise the range of human social relationships through the use of food and drink materials.

The work of Veblen (1970) and Simmel (1957) drew attention to the role of goods in class competition. Both theorists had argued, at the beginning of the twentieth century, that goods were consumed for their social meaning. These arguments were rediscovered by consumption theorists during the 1980s. In particular, Veblen and Simmel focused upon wealth, which engenders social status and prestige. They outlined two processes through which goods may be used to achieve status.

First, individuals may display wealth or *pecuniary strength* in order to be conferred high status. They achieve this through conspicuous consumption, or the wasteful or "vicarious" (Veblen 1970, 60) consumption of goods. Conspicuous consumption involves the spending of resources in order to advertise that an individual possesses wealth, and that they have access to key resources. For instance, an individual may host a feast where great quantities of food are eaten, or where precious luxury objects are destroyed. Spending or using up these resources indicates that the individual has more of such resources at their disposal.

Individuals may also spend resources with the expectation that they will be repaid in the future. In this case they manipulate reciprocity in order to make and maintain unequal social relationships. As Mauss (1990) documented in *The Gift*, the seemingly unselfish act of giving to others compels future, reciprocal gift-giving. Thus participants become indebted to one another. Both conspicuous consumption and reciprocity involve similar processes.<sup>12</sup> Both transform goods into a resource that may be spent, as are other forms of wealth. This is *cultural capital* (Bourdieu

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<sup>12</sup> Voutsaki (1997, 39) considers conspicuous consumption to terminate relations of reciprocity. Yet both conspicuous consumption and reciprocity may be considered to be different manifestations of the same behaviour. This is outlined by Bliege Bird and Smith (2005, 222-23). They explain that the difference between the two processes is merely that Mauss' reciprocity stops short of theorising prestige as it concerns the individual actor.

1977; 2010, 15-16), specialised knowledge that may be used as a resource in generating further influence or wealth. It is a "social currency" (Corrigan 1997, 21) along with other forms of capital: economic and social, any of which may be represented symbolically, as *symbolic capital* (Bourdieu 1985, 731; 1986, 56). However they achieve cultural capital, individuals may use the resulting prestige and status (symbolic capital) to accumulate more wealth by various means.

These processes are competitive because they use goods to attain an advantage over others, or to maintain an existing inequality. These processes also limit the number of competitors. Veblen (1970, 81) describes the *emulation motive* as "an invidious comparison which prompts us to outdo those with whom we are in the habit of classing ourselves." The result is an ever-increasing elaboration of signs, a "turnstile effect" (Appadurai 1986, 31) that continually re-establishes the amount or type of goods that are required to participate. For instance, élite group membership may require one to always obtain and display the latest clothing fashions. By continually generating new symbols, this keeps the number of participants limited, and prevents signs of wealth from becoming available to outsiders. Sumptuary laws are a formal example of this process. They involve one class restricting the consumption practices of another by way of official state policy (see Farb and Armelagos 1980, 55).

Yet goods are not only used to mark status differences. They may also be used to bring individuals together. This is not limited to bonding within egalitarian communities, but may be observed amongst all social groups. As Douglas and Isherwood (1979) observed, individuals use goods for communication in order to align socially with others. Marking services communicate according to cultural codes of meaning (Clarke, Hall, Jefferson, and Roberts 1976, 55), which allow individuals to create and to maintain social relationships.

Practice theory develops this concept further. It recognises that the use of material objects involves complex cultural, social, and psychological processes. In his study of different social classes in modern France, Bourdieu (2010) observed that the choice to consume food and other objects is socially conditioned. They are made *on the basis of the choices of others*. They do not always point to élite choices. They are not based upon an élite higher intellect, and an ability to detect higher or more complex art forms (a 'Kantian aesthetic': see D. Miller 1987, 149-50). They were also not motivated by a desire to impose legitimate choices upon the rest of society. Instead, élite consumption choices are a function of *habitus*, "the internalized form of class condition and of the conditioning it entails" (Bourdieu 2010, 95). *Habitus* involves dispositions acquired through socialisation, including interaction with institutions that encourage specific choices. These are forces to which the individual is largely unaware (Bourdieu 1977). Yet the individual is also actively engaged in creating and maintaining their social position through goods. They

choose specific foods and other products in order to express or negotiate their social position. This allows them to align with individuals of a similar social niche.<sup>13</sup> These choices also mark differentiation from others, in relation to a system of cultural codes of meaning that is endlessly defined and redefined (Corrigan 1997, 17). Thus social positioning and class membership involves agency. It is also redefined according to the choices of others, and therefore has a dialectical relationship with structure. Agency and structure also work together to influence consumption (see Allen and Anderson 1994, 70).

Even mundane objects may carry significant meaning, and be used to establish a social position in relation to others. These methods are no less effective; to Bourdieu (2010), the more mundane the object, the more effective it is at naturalising different ideological assumptions. Individuals may also use a combination of objects. Hebdige (2001, 26) describes the use of safety pins amongst punk rockers, one of several working-class youth subcultures in mid-twentieth century Britain. The pins held together a collection of humble objects that took on new meaning when they were assembled together. This *bricolage*, the creation of something from unrelated or even contrary objects, communicated significant meaning. The message was codified to those within the group. To insiders, this maintained the authenticity of the message. It also restricted the audience, and therefore restricted group size. This message was also innovated over time, in the same way that élites innovate trends in prestige goods. To outsiders, the message remained obscured, which maintained distance from more conventional groups and other subcultures. The safety pins, then, communicated two messages simultaneously, to two different audiences. This served to establish and uphold a social territory for group members.

The term *enchainment* also describes a process in which the consumption of objects serves to create or reinforce social relationships. Yet in this case, the object is not consumed by different people, but consumed between them. Enchainment is defined as "the succeeding chain of personal relations through exchange" (J. Chapman 2000, 5). It is one of two processes, along with *accumulation*, through which goods may embody social relationships. This is not limited to goods that are currently being used. It also includes goods that have been discarded. Thus the 'social lives' of objects (cf. Kopytoff 1986) does not end when they are deposited, or when they are no longer used (see also Vesa-Pekka 2005; Rehak 1995a, 1995b). To J. Chapman (1994, 1996, 2000; with Gaydarska 2007), the deposition or discard of an object is a structured act. It does not terminate a relationship, but may be used to establish or reinforce it. He describes,

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<sup>13</sup> To Bourdieu (1985, 725-27), these social niches, or categories, are not social classes but "classes on paper." They are taxonomical devices that helped to predict consumption choices (see Allen and Anderson 1994, 70).

"'rubbish' is no more dead than the newly deceased are dead but that, like the ancestors into whom the newly dead are transformed, objects that are deposited continue to hold a certain significance for the living (J. Chapman 2000, 5)."

The fragmentation of objects is one means by which enchainment may be put into practice. J. Chapman argues that the breaking or fragmenting of objects is deliberate, and expresses meaning amongst the social relationships of the community in which it occurs. It may also shape these relationships, through strategies that include masking power relations (Shanks and Tilley 1982) or naturalising them (Bourdieu 2010).

Like conspicuous consumption, fragmentation involves the destruction of an object. It may also be considered a means of wasting or spending the object. Yet this is not only done in order to demonstrate social distance. Fragmentation establishes a permanent relationship between the individuals who are involved in its destruction, however they are characterised. The object cannot be unbroken, and the enchainment between these individuals cannot be undone. Fragments of the object, if they are retained by participants, are more than a token of the act; they embody the social relationships between them. This significance may cause the fragments to become more valuable than the original object. The most well-known example of this process is the circulation of fragments of copper plaques broken within North American potlatch ceremonies of the Pacific northwest (Boas 1925, 353-54; Bracken 1997, 150-51; Hyde 2007, 32-33).

The physical consumption of food at feasts is another example of this process. The fragmentation of the carcass, and the distribution of beverages made from a local harvest, establishes an enchainment between participants (J. Chapman 2000, 41). It involves one resource, distributed to many people: the harvest, the cattle carcass, the stores of grain. All of the individuals present help to permanently consume the same supply. By sharing the same resource, the individuals present become permanently affixed to the event. The social relationships between these participants is also made more permanent. The feast does not need to be held for the purposes of social bonding. These relationships become better established no matter if they are competitive or cooperative. The process may be used to reify the social hierarchy between participants. As the feast is distributed, each portion incorporates these relationships, and the event, into the bodies, and thus into the lives, of those present.

Chapman's thesis can be taken further. S. Matthews (2007) suggests that J. Chapman and Gaydarska (2007) do not go far enough in their deconstruction of the concept of rubbish. He argues that the authors leave a broad conceptual gap between the individual biographies of objects, and broad object categories. He suggests that objects and fragments should also be considered for their physical condition, their materials, and how they are treated. Moreover, this

should include the role of the landscape in dispersing fragments. This would seem to leave room for de-contextualisation, from which objects may derive meaning, like the mundane symbols fastened by safety pins in Hebdige's (2001) study. It also recognises that objects may communicate a different meaning to different individuals, within the same social setting. This critique is consistent with more recent research concerning objects and materials.

Another area of material culture research focuses upon the role that individual objects play in these processes. Actor-network theory (Callon 1986; Law 1992, 1999, 2002; Latour 1994, 1999, 2000, 2005) considers objects to be actors, and therefore part of social networks. Actor-network theory acknowledges that objects interact with concepts, just as objects affect objects, and concepts affect concepts. Actor-network theory (ANT) therefore expands the dialectical relationship between objects and subjects that influenced Giddens (1979, 1984) and D. Miller (1987, 33) to encompass still more actors within each setting. Like Deetz (1977) and Douglas and Isherwood (1979), it considers the universe of objects that exist within a setting or event. Agency exists between humans and objects; it is apparent in their interaction, "resid(ing) in the blind spot in which (they) exchange properties" (Latour 1999, 190). As Hodder (2012, 92) explains, "action moves around like a viscous fluid- what any actor does depends on other actors; and yet each actor has its own stubborn specificity." To ANT, it is not that individuals use objects in a certain way. Rather, the way that objects are used is a product of the interaction between humans and the object.

Actor-network theory led a number of theorists to recognise the role of the object in distributing agency. Gell (1998) adopts a similar view of agency to ANT, but excludes non-human objects. Instead, he argues that a secondary agency allows objects to affect human social processes, though it is imbued to objects by humans. His work has inspired other researchers (Dobres and Robb 2000; Robb 2005). ANT also seems to have inspired the term *materiality* to become more established in the literature. Preucel (2010, 5, 13) defines materiality as "the social constitution of self and society by means of the object world." In other words, the term materiality is meant to express the changing meaning of materials, depending upon their setting and social factors, and over time. The term materiality has recently been used in place of the phrase, 'material culture' (Dant 2005; D. Miller 1998, 2005; Hicks 2010, 76; Knappett 2012, 192). Yet some remain sceptical. Ingold (2007, 314-15) has commented that he considers the concept of materiality to be generalised. As recently as 2008, Chevalier pointed out that these ideas are still developing within the discipline. To D. Miller (2005), consumption remains the focus of research, as it is the means by which individuals establish their social position. This thesis is also concerned with the social use of objects, rather than how they are produced. Therefore this thesis

will continue to use the term, 'material culture', with the understanding that this may change as these concepts continue to be debated.

Some theorists argue that actor-network theory does not go far enough. Edensor (2011) critiques the model for failing to account for factors outside of actor networks. Hodder (2012) points out that ANT does not address the attainment of power, or other long-term processes. In answer to the approach, Hodder (2012, 216) proposes a theory of entanglement, in which he attributes agency to objects beyond reliance, intentions, or contingency:

"Things have primary agency, not derived from humans and not associated with intentionality. Rather, things have primary agency in that they act in the world as a result of processes of material interaction, transformation and decay. Materials and the focus that flow through them afford humans certain potentials and constraints. In these ways things are actors."

Hodder is inspired by Heidegger (1973) and his concept of 'being-in-the-world', which describes the inseparable relationship between individuals, objects, and the settings in which they are used. To Heidegger, humans are always existing within a world populated by objects: neither concept exists without, or presupposes, the other. Hodder (2012, 52-58) also accepts the enchainment relationship between objects and other objects, or objects and humans, as described by J. Chapman. He acknowledges the multitude of objects that may be involved in behavioural and operational chains. Yet to Hodder, humans and things are related to each other beyond reliance and contingency. "There is also a tangled stickiness- a dependency in the sense of an unequal and constraining force" (Hodder 2012, 58). This quality pervades across thing-thing interactions, human-human interactions, and human-thing interactions. It affects the likelihood of conditions and events. It takes into account the physical and social setting, including social factors and the environment and climate. It considers these aspects to frame the perspective of actors, which affects how they interact with others and with objects. ANT acknowledged the agency of other actors, including objects. Entanglement theory acknowledges that perspective and historical context, amongst other issues, affects which actors are recognised. It also acknowledges that the roles these actors are able to play is constrained by many other issues.

All of the concepts and studies introduced above contribute to the approach to material culture that is taken in this thesis. Early perspectives pointed out that goods are used for communication, and to structure social relationships. Practice theory introduced that objects and structure are created together. The desire for goods is socially motivated, and is used to establish the social position of an individual or group in relation to others. Even mundane objects can be used for this purpose. Discarded objects may also impact social relationships. The role of the object is significant; according to actor-network theory (Callon 1986; Law 1992, 1999, 2002;

Latour 1994, 1999, 2000, 2005), objects may participate in social networks. To Hodder (2012), the relationship between objects and humans is more fundamental: both objects and humans may constrain and direct the actions of the other. All of these approaches draw attention to issues surrounding food and drink, which help to define the role that they assume within societies. All of these concepts, considered together, help form an open model for the different ways that material culture may be used.

#### iv. An open model of material culture consumption

Goods may be used for a range of purposes, and according to the range of social relationships that are possible within society. Goods may be used to differentiate individuals and to demonstrate social distance. They may also be used in ways that facilitate social relationships. The use of either approach does not characterise a particular social relationship as cooperative or competitive. As with social complexity, both strategies may be used for either purpose. It is also possible that the same interaction may be perceived in a different way by different individuals. Therefore this model also allows for an integrated approach, in which strategies may alternate or coexist. The model of peer-polity interaction (Renfrew and Cherry 1986) provides an illustration of how these strategies may co-occur.

The phenomena of object destruction, or the 'killing' of objects, demonstrates all of these concepts. The practice occurs within a number of settings associated with drinking in Early Bronze Age Anatolia. In the literature, object killing has been interpreted in a number of ways: as a competitive act, and as a means to connect individuals. It therefore provides an example of how the use of material objects may be used to facilitate various social objectives.

#### a. The use of objects for demonstrating social distance

Goods may be used to achieve high status positions and maintain unequal social relationships. Similar to élite-focused perspectives within social complexity research, early theories of material culture consumption focused upon the use of goods to legitimise hierarchy. Early approaches characterised these strategies as conflict-driven: systems of inequality are maintained by one group for their own interests, at the expense of another group. More recent approaches argue that this strategy is functional for different social groups. They continue to result in unequal access to desired resources, though they are not motivated by conflict.



First, conflict-driven strategies detail that goods may be used to establish or to uphold social distance between élites and non-élites. Goods may be used to mark high status, or they could be used by emerging élites to legitimise and develop their claim to status. Both Flannery (1968) and Helms (1988) identified cases in which, they argued, foreign goods had been used by élites to mark higher status. Later studies (Shennan 1982; Braithwaite 1984; Renfrew 1986b) focused upon how prestige goods could legitimate élite ideologies.

Goods may also be used to attain or secure social positions. Élites may use goods to attract supporters (Kipp and Schortman 1989; Dietler 1990). This allows them to manipulate key symbols, and manage access to a symbolic élite culture (Freidel 1986; Earle 1991; Marcus and Flannery 1996). These items may be strategically distributed to potential or existing supporters as a means to secure their loyalty (Renfrew and Shennan 1982; Earle 1987, 1991; Brumfiel and Earle 1987). Food and drink may also be used in this way. "Triple A" personalities (Hayden 1996, 132) may distribute food and drink in order to create a debt that is owed by participants to the host. In feasting typologies, *patron-role feasts* (Dietler 1996, 96-97) are events where hosts redistribute food and other goods to supporters. Participants are not expected to reciprocate, as in a gift-exchange system (Mauss 1990). Yet in accepting goods, participants accept the unequal status between themselves and the host. This may allow the host to successfully extract labour, military support, and surplus (Friedman and Rowlands 1977; D'Altroy and Earle 1985; Kipp and Schortman 1989). Frankenstein and Rowlands (1978) suggest that the strategic redistribution and exchange of foreign goods may lead to developments in social stratification and political centralisation. Dietler (1990), however, argues that luxury goods are important because of their social meaning. He points out that Greek drinking vessels were a mark of prestige in early Iron Age France not only because they were foreign. More importantly, they were used for élite status displays within the local culture. Dietler's argument drew attention to the social meaning of objects, a perspective that was being echoed by other poststructuralists of the period (Douglas 1975, 1984; with Isherwood 1979; Appadurai 1986; Baudrillard 1988; D. Miller 1995a, 1995b, 1995c, 1995d; see also Preucel 2010, 122-23). As explained above, this would usher in a new perspective for the uses of goods within society.

Feasting research describes several scenarios in which food and drink are used to maintain social distance. The most clear demonstration of this is at *diacritical feasts* (Dietler 1996, 98-99). Diacritical feasts are competitive in nature, and economically motivated. They serve to naturalise unequal status relationships. The diacritical feast is a venue for social competition; it is self-interested, and mainly concerned with self-aggrandisement (Hayden 1996, 129). It involves the competitive display of special types of food and drink, or elaborate materials

related to eating and drinking. This is aimed at other élites, to which the conspicuous and wasteful display, or *conspicuous consumption*, is a symbol of membership. Access to diacritical feasts is restricted to other élites. Yet the ostentatious display and consumption of resources is also observed by subaltern groups. Their being excluded marks their social distance from the élite. At the same time, it contributes to élite in-group identity (Nordquist 2008, 107).

Other feasts work to include non-élite groups, and these also function to maintain inequality and the high status of hosts. In the *work-party feast* (Dietler 1996, 93; Dietler and Herbich 2001), hosts recruit others to perform a task or to extract resources. The labourers are rewarded with food and drink when the work is completed, and the host keeps the proceeds of the labour. Those participating are repaid immediately, and they owe no further debt to the host. Yet the process may reinforce socioeconomic inequalities by reiterating who within the community will produce labour, and who will benefit from it (Dietler 1996, 95). Hosts may then use the proceeds of the work-party to obtain finished goods. This allows them to reinvest these proceeds in order to amass more luxury foods and other products (Hayden 1994, 232).

Work-party feasts reinforce unequal status relationships, yet they are not necessarily based in conflict. Both host and guest benefit from the transaction. Aggrandisement may also be reinterpreted in a way that does not involve conflict. Costly-signaling theory, or CST (Bliege Bird and Smith 2005; Plourde 2008; Glatz and Plourde 2011) was introduced in the previous section. CST sees élite strategies, involving the display and distribution of goods, as a functional method for selecting leaders within a community. According to this interpretation, goods are not displayed and distributed in order to maintain inequality. Instead, they communicate that an individual possesses leadership qualities (Plourde 2008). Élites display wealth and resources as an indication that they are able to accumulate surpluses, and are therefore fit to rule (Neiman 1997, 269-70). For the demonstrator, the high cost of these displays guarantees their honesty (cf. Maynard Smith and Harper 2003, 16). For the community, the signal is reliable, and allows them to choose an effective leader.

Like the work-party feast, costly-signaling theory suggests that strategies involving élite aggrandisement do not need to be conflict-oriented. Costly-signaling theory is evolutionary in scope, a perspective that is rejected by postprocessualists (see Trigger 2007, 445). Yet its approach to hierarchy is identical to the 'alternative pathway' to social complexity that was identified by Fortes and Evans-Pritchard (1940) and Lloyd (1965). The latter authors suggested that hierarchy in settlements is the result of a legitimate consensus between community members. Clark and Blake (1994) also suggest that hierarchy may be an unintended consequence of élite competition, rather than a system maintained by those benefitting from it. This perspective

attributes a more active role to non-élites within a society. Within CST, élites direct their signaling at community members in order to attain their support. At work-party feasts, the labour of non-élites allows élite hosts to accumulate resources. These models also break down the association between conspicuous consumption and conflict. This is not to say that conflict-based approaches do not occur. But it acknowledges that inequality may be maintained through different methods.

#### b. The use of material culture consumption to connect individuals

Goods are not always used to accumulate influence, power, or status. They may also serve to connect individuals. For instance, in their text *The World of Goods*, Douglas and Isherwood (1979, 59) argue that goods facilitate social relationships through *marking services*. Material goods are chosen for what they mean within a widely-recognised language commodities within a culture. These are *consumption periodicities*.

Douglas and Isherwood (1979) also observed that individuals often synchronise their consumption of goods with neighbours and other community members. This *consumption equivalence* is similar to Bourdieu's (2010) observation that individuals consume specific goods in order to mark out their place within society. In this thesis, the process will be termed a *synchronised consumption*. Consuming the same goods, often at the same time, draws individuals together into a shared experience. Bourdieu (2010) recognised that this occurred amongst social groups at all levels of society. This is because the consumption of specific goods was distinct to certain social groups.

The physical act of consumption illustrates this concept well. Observing drinking habits in British pubs in the 1930s, *Mass Observation* reported that pub-goers tended to synch the rate of their beer drinking (Mabey 1970, 47). This was often "within a quarter of an inch" of the level of their companions. The pub-goers were consuming together with others in a cooperative way. This is mirrored in the physical experience of drinking. Pubs generally encourage drinking in a cooperative manner. The atmosphere is, usually, far from exclusive. Drinks are often purchased in rounds, for the whole table; there is often little incentive to drink faster than others. Drinking at the same rate ensures that individuals will feel the effects of drinking at the same time that others experience it. This transforms the sensation of drinking, which is limited to the individual body, into something that can be perceived together with others.

Feasting research outlines two forms of communal eating and drinking for cooperative purposes. Hayden (1996, 128) names *celebratory* and *reciprocal aid* feasts. Celebratory feasts are

for the purposes of social bonding. They may be held for ritual or festive purposes. Reciprocal aid feasts include work-party feasts, where labour is rewarded by the organiser. This category also includes feasts that are held after labour in which community members help one another, such as barn raising or clearing land.

In a 2001(a) article, Hayden elaborates on alliance and cooperative feasts. The purpose of these feasts is to create and maintain social relationships. This may include advertising the host(s) as desirable allies to other groups (alliance feasts). Yet Hayden mainly discusses cooperative feasting in terms of traditional societies. His evolutionist approach (Dietler and Hayden 2001, 2; Earle 2002) has the result of associating different kinds of feasts with different levels of social complexity. In the same volume, Dietler (2001, 93) argues that these categories should be taken as "a progressively expansive repertoire of forms of political action through feasting." That is the approach taken within this thesis. Cooperative and competitive agendas should be taken as different strategies that may be employed in different situations. They are not to be associated with one form of social organisation, or one form of feasting. The use of goods may also involve a combination, or integration, of these approaches.

### c. Middle position: integrated uses for goods

Goods may be used in a way that is simultaneously cooperative and competitive. In general, this is because the same behaviour may be interpreted in different ways according to a different perspective. This situation is described in research by Bourdieu (2010). It is also demonstrated in the model of peer polity interaction (Renfrew and Cherry 1986). Both of these examples explain how the use of goods may simultaneously mark status and exclude, as well as connect individuals. Both examples also stress that either consumption strategy has the potential to enact change.

Bourdieu (2010) observed that the consumption of goods fell along a spectrum that was related to an individual's aesthetic. This was often a function of their income, profession, and level of education: their socialisation, or habitus. Individuals consumed specific products in accordance with their social position, which also allowed them to differentiate themselves from others. Not everyone strove to consume one universal register of high-class, luxury items. The choice to consume some items over others was particular to the individual and their specific social niche. The most clear demonstration of this process is that some individuals *avoided* items that were *too elite*. At the same time, these individuals made an effort to keep up their membership within their individual group.

Bourdieu (2010, 292) demonstrates this concept with the case of the avant-garde artist. These individuals maintain their own preferences in terms of clothing and other materials. They define themselves as different from the bourgeoisie, and also different from mainstream society. And this "double negation can lead... back, as if in defiance, to some of the preferences of popular taste" (Bourdieu 2010, 292). As within other groups, they desire to maintain their own aesthetic, and a "turnstile effect" (Appadurai 1986, 31) results in the innovation of new symbols. In other words, the avant-garde artist will strive to maintain their position within the group. They will acquire new goods, new behaviours, as these symbols are constantly redefined. These behaviours are competitive. Yet their aesthetic choices are concerned with aligning to the appropriate category in a *horizontal* manner, towards other artists. Their consumption is inclusive because it seeks to align with others. This position is also defined in relation to the preferences of other groups. Consumption is therefore also exclusive, as artists differentiate themselves from others both within and outside of their own group.

The framework of peer polity interaction, or PPI (Renfrew and Cherry 1986) provides a way to visualise these interactions. It combines competitive and cooperative uses for goods within the same model. It does this by considering interaction within a wider framework. Polities are "autonomous socio-political units" (Renfrew 1986a, 2). They may be villages, neighbourhoods, or cities. Individuals within and between these polities relate to one another in both a linear and a lateral fashion. Individuals look across to their peers within and between polities for mutual symbolic engagement. At the same time, they arrange hierarchically with others within their own polity.

These interactions are detected through material goods and innovations. Renfrew (1986a, 8-9) introduces the term *symbolic entrainment* to describe the adoption of goods between individuals when they serve a similar purpose, or are similarly used. This may include individuals within different polities. For example, élites exchange prestige goods across cultures. In each polity, these innovations are used as a dominant cultural symbolism. This may be because of its advanced technology, or because it is foreign in origin, and therefore prestigious (cf. Helms 1988). In Minoan Crete, Cherry (1986, 41) interprets the widespread adoption of ashlar masonry by the palaces as signaling a greater "currency of competition" between polities. This masonry demonstrated to other polities that the élites at that settlement were wealthy, had access to resources, and could mobilise labour. They were therefore worthy exchange partners. At the same time, this masonry marked the high status of élites within their own culture.

These interactions are both competitive and cooperative. They are competitive because individuals constantly seek to maintain their status in relation to others within their own

population. They are also competitive because symbols of élite status are constantly innovated, as élites try to outdo one another within and between cultures. This "turnstile effect" (Appadurai 1986, 31) limits who may participate. Overall, Renfrew (1986a, 8) views symbolic entrainment as a cooperative process. It facilitates the growth of a political entity that may bring stability to a society. For the individual, it also facilitates membership within a group of their peers. Prominent élite, then, have a partly cooperative relationship with peers in their own polity, and in the polities they are in contact with. At the same time, they may have a dominant, conflict-oriented, and competitive relationship with subaltern groups within their own culture.

Peer polity interaction views society as composed of a series of lateral interactions, at several levels of the social spectrum. Élites align with other élites through prestige goods. Bourdieu's (2010) research documented the same process amongst non-élite groups. Recent research into material culture consumption (Hebdige 2001) recognises that goods may carry a different meaning to different groups. Renfrew (1986a) argues that it is the combination of competitive and cooperative strategies that results in change. As each polity or social group adopts innovations, for instance in metallurgy or writing, they are adopted by neighbouring polities or groups. As these goods are replaced with more recent or innovative products, the former technology becomes more widely available. Renfrew suggests that in this way, polities "emerged *together*, pulling each other up by their bootstraps" (Renfrew 1986a, 11; emphasis in original).

#### v. Use of the open model

In terms of food and drink, innovative approaches mean that foodsharing events may be the venue for a number of interaction strategies. These strategies may alternate, or co-occur. They may be indicated by who has access to which foods, and whether the event is open and participatory, or exclusive. They may also be detected through the use of material goods. This includes how eating and drinking vessels were used and deposited.

The above research indicates that goods are chosen because of their relationship to other goods. Therefore, it is by considering all of the material goods that are available that one may understand the significance of consuming one particular product. Admittedly, this is difficult to apply to Anatolian settlements without being aware of the full range of food and drink materials and drinking behaviours. Yet being aware that materials may be used for different purposes improves how drinking and feasting practices are interpreted. For instance, prestige goods do not necessarily indicate that all interactions are exclusive, or conflict-oriented. The sharing of food

and drink is not enough to indicate that an event is cooperative in nature. These strategies may co-occur or alternate; they may also be identified within the same setting. Even if only a limited amount of evidence is available for a foodsharing event, the above model will be able to assist interpretation. Being aware of alternative explanations will alert the researcher to areas where additional evidence may alter how events are perceived.

The practice of destroying or 'killing' objects provides an example of the different approaches to material culture consumption. The phenomena has been interpreted according to each of the above concepts. It is therefore an opportunity to demonstrate how each concept may be put into practice. It also demonstrates how an interpretation of the use of objects benefits from an integrated approach.

#### a. The deliberate destruction of objects

The act of destroying or 'killing' objects has a long history of interpretation in the literature. These perspectives follow from the concepts described above. They illustrate how approaches to material culture consumption have changed. The most recent perspectives integrate competitive and cooperative strategies into a single interpretation of the practice. The act of destroying or 'killing' has been observed with a wide range of objects, including weapons and figurines. Discussion here will focus upon drinking vessels. This is relevant to the evidence that will be examined within this thesis.

Destroying or 'killing' objects is a deliberate, final act. It aims to make the object unusable, either by smashing, crushing, or specifically breaking a fundamental part ('killing'). Soles (1999, 787) also includes objects that are given up to a destruction context, such as a fire. These practices are followed by depositing the object within pits, and sometimes within tombs. Numerous parallels are noted across cultures (see Grinsell 1961, 1973; Soles 1999; J. Chapman 2000, 25-27), including the prehistoric and Bronze Age Aegean and Anatolia (see Hamilakis 1998, 122-23; Soles and Davaras 1996; Tzedakis and Martlew 2007; Morrison and Park 2008; Driessen, Farnoux, and Langohr 2008, 198-200). In some of these situations, numerous vessels are destroyed. Sixty-seven conical cups, amongst other vessels, were recovered from a well at Late Minoan IIIA2 Palaikastro; all had been deliberately broken (Dawkins and Currelly 1903, 223; MacGillivray, Sackett, and Driessen 2007). At coincident levels at Malia, at least 530 vessels were broken and deposited within pits adjoining Quartier Nu (Driessen, Farnoux, and Langohr 2008, 201). The pits also contained ash and bone fragments. From this evidence, the vessels seem to have been deposited at the culmination or end of a feast.

Early interpretations viewed destroying or 'killing' objects as motivated by a competitive agenda. It was understood to be economically-motivated, with objects sacrificed in order to increase value by limiting access or creating scarcity. 'Killing' or destroying objects prevented their use by others (Reinach 1906; Wiesner 1938, 170, 180; Fossey 1985, 23; Soles 1999) or removed their ritual power (Garfinkel 1994). From this perspective, the practice is conflict-driven.

Individuals may destroy or kill objects in order to maintain their social position. Breaking or smashing may be a form of conspicuous consumption, which accumulates *cultural capital* (Bourdieu 1977, 1986). It advertises prestige in a manner similar to the consumption of food and drink and related materials at diacritical feasts (Dietler 1996, 98-99). This capital can be used to attract supporters. It also legitimises status differences, distinguishing some individuals as having more resources than others. This does not need to be conflict-driven. According to costly-signaling theory (Bliege-Bird and Smith 2005; Plourde 2008; Glatz and Plourde 2011), individualising strategies advertise prestige and also communicate that élites are suitable leaders. The high cost of prestige displays, which may include destroying or 'killing' wealth, acts as proof that an individual has access to resources (Neiman 1997). This is a competitive act, as élites compete for supporters. Yet it is not antagonistic towards non-élite groups, whose support is won by the most successful candidate.

The destruction of vessels may also be interpreted as a cooperative act. Much like the sharing of food and drink, smashing may serve to draw individuals together in order to reaffirm group membership. As was introduced above, several researchers (Vesa-Pekka 2005; Rehak 1995a, 1995b; Hamilakis 1998) argue that depositing an object does not necessarily mark the end of its 'social life' (cf. Kopytoff 1986). The act therefore does not cause a void or disruption in the flow of commodities. By smashing or destroying, an object or vessel is permanently consumed. Yet rather than mark the end of the object, the act may carry meaning forward into existing social relationships, or create new ones. The act of smashing or killing objects is dramatic. The high cost, ritual connotations, and the sights and sounds of smashing make the event memorable. All of these elements are also experienced rather than witnessed. They employ the senses. The individuals who are present experience these elements together with others, at the same time. This *synchronised consumption* binds participants together. They experience the same sensations together with others, no longer limited by their individual bodies. And as the vessel is permanently destroyed, so are the social relationships between those present also made more secure or permanent.



To J. Chapman, the fragmentation of objects is a form of enchainment, in which social relationships are created or maintained through material culture (J. Chapman 1994, 1996, 2000; with Gaydarska 2007). J. Chapman (2000, 37) argues that object fragments embody the concept of the complete object. It demonstrates *fractality*, in which the complexity of an object or substance may be identified regardless of the scale that is examined (Mandelbrot 2004). The fragment embodies the properties of the object, and it also embodies details of the setting or event in which it was destroyed. This includes the landscape, which is also framed within enchainment social relations (J. Chapman and Gaydarska 2007, 106). This also includes the individuals who were present when the object was destroyed, and those who were excluded. The act of smashing creates an enchainment relationship between the individuals who are present, and the act of destruction. This relationship is embodied within the fragments, which if retained by participants, may become incorporated into other aspects of their individual lives. In this way, the relationships established or maintained by smashing are made to be more enduring.

The destruction of objects may be interpreted as both a competitive and a cooperative act. The individuals who are present at the destruction may be looking to establish group cohesion. They may also be competing against one another. Other individuals might have been excluded. Competition and cooperation are intertwined, because group membership involves both connection with, and differentiation from, other individuals and groups. These relationships are represented simultaneously in Renfrew and Cherry's (1986) model of peer polity interaction. This means that elite or aggrandising elements are not entirely competitive, or motivated by conflict, as is argued by costly-signaling theory (Bliege Bird and Smith 2005; Plourde 2008; Glatz and Plourde 2011). Likewise, collectivist elements do not indicate that an event is absent of competition. Competitive elements have been recognised within the collectivist rituals of traditional societies (Potter 2000; Potter and Perry 2000). Cooperation and competition, then, are not mutually exclusive. They may both be present in different situations to different degrees. Both are facilitated by the use of material culture consumption.

The methods used by actor-network approaches, materiality studies, and entanglement theory may assist how object destruction contexts are interpreted. They draw attention to key ways in which materials and people interact. This provides more detail of the setting in which objects are destroyed. Actor-network theory may identify additional actors within a setting. Entanglement theory may clarify how these actors are related, and the factors that influence this relationship. It is not possible to give an example, here, of a specific episode of object destruction interpreted according to ANT, materiality, or entanglements. In order to apply these concepts, one must identify specific details of the site and the situation. There is not space here to detail the

history of Malia and all of the factors that were involved in pit rituals at Quartier Nu. Similarly, in this thesis it may not be possible to interpret drinking settings or events entirely through ANT or entanglement theory. These methods require a high level of detail, which may not be available for the contexts that will be investigated. Yet ANT and entanglement theory help identify where and how interpretation is limited. They help researchers to recognise where additional information would alter how a site, setting, or event is interpreted.

The act of destroying or 'killing' objects demonstrates how the concepts of material culture consumption may be put into practice. It provides an example for each of the possibilities for interpretation: that the act is competitive in nature, or cooperative. If the practice is for competitive purposes, its agenda does not need to be conflict-driven. Likewise, interpretation may take an integrated approach, which sees object destruction as both competitive and cooperative. For example: a synchronised consumption may bind participants in a cooperative manner, but the social relationships between the individuals present need not be cooperative.

These examples illustrate how the open model of material culture consumption may be used to assess evidence. As evidence for drinking and eating is encountered within this thesis, it will be compared against the above model. At times, the settings where drinking and feasting was done also feature evidence for the destruction or killing of objects. Evidence for drinking and eating, and possibly feasting, will also be considered together with information that relates to the social organisation of each settlement. The open model of settlement organisation, presented in the previous section, will be used to compare this evidence against the different ways that societies may be organised. This encourages as much information as possible to be gathered about the site and settings where drinking and feasting occurred. It also encourages drinking and feasting practices to be assessed alongside information from the surrounding site.

These models also draw attention to areas where evidence may be missing. For instance, both open models make clear that competitive strategies may or may not feature conflict. Integrated approaches draw attention to the possibility that one event or action may be interpreted in different ways. These issues stress the need to consider as much evidence as possible. They also indicate where interpretation could shift due to additional information. As this information is assessed, it is also important to consider the properties of material culture. This includes how they operate and their relationship with human agency and structure. The research that was introduced in this section outlines existing and current approaches to these concepts.

## Chapter Three: Graveside drinking and feasting at Alaca Höyük on the north-central plateau

The site of Alaca Höyük provides the most clear evidence of Early Bronze Age drinking practices. The site is well-known for its fourteen 'Royal' tombs, which contained an abundance of metal objects, the most common of which were drinking vessels. The remains of animals were placed atop, within, and between the tombs. These were interpreted by the excavators to be the remains of graveside feasts (Arık 1937, 71; Koşay 1951, 157, 164, 166). The nature of this feasting activity, however, has not been investigated. The sophisticated character of metalwork at the site (see Yalçın 2011) suggests that the tombs housed a settlement élite. Unfortunately, much of the EBA settlement was destroyed by later builders. It is for this reason that the excavators did not offer an assessment of how the site was organised during the EBA. Feasting and drinking may provide a new way to assess the social complexity of the site. By examining the food and drink remains at the tombs, it may be possible to reconstruct the social relationships between participants, and within the community. Alaca Höyük is also one of the most well-known and well-studied sites of the Anatolian Early Bronze Age. Most sites of the north-central plateau are assessed with regards to the discoveries that were made here. A better understanding of Alaca Höyük therefore improves an understanding of the complexity of the greater region during this period.

This chapter will analyse the prevalence of drinking vessels within the 'Royal' tombs. It will attempt to establish the number and type of vessels within each tomb, and how they were deposited within the graves. Were drinking vessels intended as a personal item of the deceased, or were they deposited as the result of graveside feasting activity? Was drinking done by mourners? If so, how was it done, and how many participated? This chapter will also examine how drinking vessels were placed within the tombs, and whether specific shapes were common between them. Were certain items deposited in a similar way? This may indicate whether drinking involved a large or small number of people, and if it involved certain acts. From such information, it may be possible to determine whether drinking at the tombs was a public practice, or an activity restricted to élites.

This chapter will also evaluate the necropolis as an area of communal gathering. What was the relationship of the necropolis to the rest of the settlement? Are there features of the necropolis, or the process of interment, that explains more about the nature of tombside events? This may be able to indicate whether or not drinking events were open and unrestricted, or

limited to the members of specific groups. Was drinking at the tombs an expression of the power and influence that was held by the élite interred? Or was it a venue for different groups of aspiring élite to compete against one another for the support of the community? These scenarios hold different implications for the organisation of the settlement. The difference between them is significant for understanding the complexity of the period.

## **A. The 'Royal' tombs**

### **i. Introduction**

Alaca Höyük is a small settlement located approximately fifty km southwest of the town of Çorum and 160 km northeast of Ankara (Gürsan-Salzman 1992, 1). It sits within the bend of the Kızılırmak River on the Anatolian north-central plateau. Excavations were begun in the mid-1930s under the direction of first Remzi Oğuz Arık and then Hamit Koşay for the Historical Society of the new Turkish Republic. For the new government, the array of weapons, vessels, and ritual standards unearthed from the 'Royal' tombs became symbols of a new Turkish nationalism, which persists today (Zimmermann 2008, 509-11). For archaeologists, the 'Royal' tombs redefined their impressions of Early Bronze Age Anatolian societies. It established that an élite was present in settlements of the north-central plateau. They marked their status through precious metal status symbols and burial rites, and appeared to be as influential as the leaders of large centres farther west. Here were north-central Anatolian counterparts to the élite of the western settlement at Troy. At the same time, the iconographic symbols that were unearthed were different from those of sites in other regions. This was an advanced settlement whose culture was unique to the north-central Anatolian plateau.

Excavations revealed a total of fourteen 'royal' tombs (F, K, L, A, A1, C, E, T, T1, D, S, B, R, and H). They cluster at the southeastern corner, along the edge of or adjacent to the settlement (Figure 3.1). The tombs had been dug into a slope in an area between two hillocks "at the eastern end of the east-west running depression" (Özyar 1999, 80). The area excavated was around eight hundred square metres (Gürsan-Salzman 1992, 47-48, 67). It was suspected that the cemetery extended further to the north and west. Yet soundings to the north, east, south, and southwest did not reveal additional burials. It is likely that there had been more tombs, but that these were destroyed by later, Hittite builders. The area was also not exclusively 'Royal' or élite. Ten non-élite burials (G1, G2, G3, G4, P1, P2, Sk.18, FI, FII, FIII) indicate that the area had been in use from at least Levels 12-9 during the Early Bronze Age I or Late Chalcolithic periods. Six

of these burials (P1, P2, Sk.18, FI, FII, FIII) were determined to be roughly contemporary with the Early Bronze Age 'Royal' tombs (Gürsan-Salzman 1992, 108-9). Vessels for eating and drinking were recovered from both tomb groups. Thus it seems that the same burial practices were performed for the interment of élite individuals as well as non-élite members of the community.

The construction of each of the 'Royal' tombs was similar. After first digging a shallow pit, stones were lined along the base, after which the body and burial items were deposited upon clay platforms or stone slabs (Arik 1937; Koşay 1944, 1951, 1966). Aside from Grave B, which is trapezoidal (Zimmermann 2008, 511), the graves are mostly rectangular in shape. The depth of each shaft was between 0.5-1 m (Gürsan-Salzman 1992, 67; Bachhuber 2011, 160). Most had floors of stamped clay, with the exception of Tomb F, which had a stone floor (Koşay 1951, 165, Pl. CLXVIII). The boundaries of different tombs was often marked by boulders or walls or lines of stone. Most of the deceased were placed in the northwest corner of each tomb, flexed and turned toward the west, with the head pointed south. The entire construction was covered with a timber roof, filled in with pebbles and twigs, and then plastered (Arik 1937; Koşay 1951). This roof was then decorated with cattle skulls and hooves, often in rows and pairs, facing the same direction as the deceased (Figure 3.2). Also upon the roofs were placed metal ritual standards of intricate latticework, as well as bovid and stag figurines. These were placed either at the corners of the tomb roof or aligned with the cattle bones.

The tombs were located above the settlement. They had been arranged along the hillside, within almost three separate horizontal rows (Figure 3.3; Koşay and Akok 1966, Pl. 137). The bay-shaped incline would have made the tombs seem almost “theatre-like” to the Alaca inhabitants (Özyar 1999, 82, footnote 25, citing personal communication with Akok 1987). The necropolis bordered the living settlement, and may have been intermural, if the abandoned walls they border are from contemporary buildings (Gürsan-Salzman 1992, 43, 47; Hatçe Baltacıoğlu, personal communication February 2011). Their close proximity to the settlement may also have been practical, making it difficult for the tombs to be robbed or looted (Koşay 1951, 153). The tombs were a visual manifestation of the power, wealth, and status of the interred. Their placement would have functioned as an everyday, visual reminder of status and wealth discrepancies. At the very least, this proximity made the tombs and the identities of those interred a very salient and constant aspect of community life.

Again, the necropolis was not reserved for the élite. The presence of non-royal burials indicate that the area had long been used for interments. Some of these burials were contemporary with the 'Royal' tombs (Gürsan-Salzman 1992, 71). Therefore the necropolis was not exclusively

reserved for the élite even during the period in which the 'Royal' tombs were in use. This means that the discussion of the 'Royal' tombs must take into account that the area had long been accessed by the greater community. This analysis must also consider the contents of the contemporary non-élite graves, in order to assess drinking practices from all of the available material.

## ii. Stratigraphy and chronology

The most problematic aspect of the Alaca Höyük tombs is their stratigraphy. When the tombs were dug, they were not anchored to the occupation layers at the site for various reasons. First, the tombs were built on a slope, making the stratigraphic relationships difficult to infer. Some tombs appear to have been dug down from higher levels (Schaeffer 1948; Orthmann 1963, 34; Huot 1982, 59, 62; Gürsan-Salzmänn 1992, 44-47). Thus the use of the tombs is not necessarily associated with the level at which they appear. Complicating the matter is the issue of whether or not the tombs utilised the walls of abandoned buildings (Gürsan-Salzmänn 1992, 43, 47; Hatçe Baltacıođlu, personal communication February 2011). These buildings may have predated the tombs, or have been contemporary to them, if they were abandoned as the burials increased in number (Özgüç 1948, 47). In addition, much of this information was lost in the process of excavation. From the beginning, the excavators had to choose between preserving or destroying the structures in order to dig deeper (Koşay 1951, 115).

The chronological relationship of the tombs to the site, and to other sites outwith the region, has never been agreed upon. It is not the goal of this work to restate these arguments in depth, nor to find a solution. This analysis adopt a position so that the tombs may be understood in relation to the architecture and other features of the site. The first step is to connect the tombs to the occupation levels at the site. The next question is over how long a period they were built and in use. Gürsan-Salzmänn (1992, 44-48) provides a concise and attentive review of previous discussions. This analysis adopts her assignment of the tombs to each building level (Figure 3.4). This analysis then adjusts the absolute chronology of the tombs based upon arguments by Özyar (1999).

Gürsan-Salzmänn (1992, 37, 46, 71) places the tombs within three levels at the site: 4, 5, and 6. The majority of the tombs (A, A1, C, E, T, T1, F, K, and L) are placed within Level 6. This leaves four tombs (B, D, R, and S) to be dug later, in Level 5, which is marked by a burnt stratum up to one metre in depth. Tomb H is assigned to Level 4, as it is dug through the burnt layer that marks the end of Level 5.

Relating the tombs to the wider chronology of the region is problematic. Like Orthmann (1963) and Huot (1982), Gürsan-Salzmänn (1992, 71) relies upon the absolute levels to distinguish between occupations at the site. She uses pottery characteristics to anchor these levels to the greater chronology of the region, yet these associations are imprecise, and adjusted due to the stratigraphy. She focuses upon Complex ABC, three buildings which were built within the boundaries of the necropolis (discussed below). Gürsan-Salzmänn (1992, 22, 37, 43, 47) positions Complex ABC as overlaying Tombs C and A, which she assigns to Level 6. The Complex was also positioned beneath a burnt stratum that marks the end of Level 5. She notes that Complex ABC is earlier than Level 4 because its structural walls are not set at right angles, as are Level 4 buildings. Tomb H is assigned to Level 4 because it was dug into the burnt stratum of Level 5. Gürsan-Salzmänn (1992, 45-47, 274) assigns Tomb H to a period transitional to the Middle Bronze Age, though she notes that the objects within the tomb may be dated earlier. Most telling is the observation that three ceramic storage vessels from Tomb H are characteristically EB II in date (Gürsan-Salzmänn 1992, 55, 274).

The identification of Level 4 with the Middle Bronze Age I is also not secure. Özyar (1999, 81-82) points out that because the tombs were dug into the hill at different heights, the relative age of the tombs cannot be inferred from the absolute levels. She also argues that the burnt layer at the end of Level 5 does not need to signal the end of the Early Bronze Age. Her position is supported by the storage jars from Tomb H. This distinction is crucial. Many authors, including Gürsan-Salzmänn, leave four tombs (B, D, R, and S) to be dug after the EB III period, and Tomb H in level 4. This is because of the burnt stratum. By contrast, Özyar's interpretation suggests that the tombs were dug, and the items deposited, within the same occupation, and before the close of the EBA.

Assigning the tombs to the Early Bronze Age makes sense in terms of their internal sequence as well as with the material culture of other sites. Günter Mansfeld (2001, 24) identified which objects were similar between the different tombs. From this, he determined that the tombs spanned a period of no longer than 280-350 years, perhaps closer to 280. The objects found within the 'Royal' tombs are similar to material recovered from Horoztepe (Esin 1969; de Jesus 1980: 130-131), 164 km to the east.<sup>14</sup> Alaca Höyük and Horoztepe are probably separated by only a few centuries (Stronach 1957, 118-19; Özgüç and Akok 1958: 57-8). Objects from Alaca Höyük are also similar to items recovered from Mahmatlar, Kayapınar, and Kalınkaya (Koşay and Akok 1950; Temizer 1954; Gürsan-Salzmänn 1992, 287; Zimmermann and Yıldırım 2006;

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<sup>14</sup> Calculated using Google Maps. Distance 'as the crow flies.' According to Özgüç and Akok (1958, 39), Horoztepe is also 330 km northeast of Ankara.

Zimmermann 2007, 2008). At times, this includes objects from the Eskiypar treasure. Yet the excavators at Eskiypar determined that the objects from the 'Royal' tombs displayed a "more archaic character" (Özgüç and Temizer 1993, 628), and therefore should be dated earlier. The Eskiypar treasure also seems to be earlier than the 'Treasure' deposits from Troy II. While the Eskiypar treasure features an alabastron-shaped silver bottle (Özgüç and Temizer 617, Pl. 116:1), it is a globular flask that is found within Treasure A at Troy (see Tolstikov and Treister 1996, 32). Amongst the bottles, globular forms are known to precede ovoid or alabastron shapes (Zimmermann 2005, 161). Alabastron shapes also occur prior to the MBA; they are found at Kültepe Level 12, associated with vessels also known from Tarsus EB III (Özgüç 1986, Fig. 3.3). Therefore the Eskiypar treasure, which contains an alabastron-shaped flask, can be dated to as early as the late EB III. It also occurs later than both Treasure A at Troy and the Alaca Höyük tombs.

### iii. The social organisation of the settlement

The organisational complexity of Alaca Höyük is difficult to determine. Much of the architecture that is contemporary with the tombs was destroyed by later, Hittite builders (Gürsan-Salzmänn 1992, 22, 112-13), or is dealt with less extensively than the tombs. Thus there are very few contexts that may be investigated in order to assess life at the settlement during this time. There are very few plans of any recovered architectural structures, and almost no diagrams that combine the different structures that were assigned to each level. Some features of these surviving structures are able to provide insight into site organisation during the EBA. These features may be compared against what survives of the settlement from earlier and later periods. This helps to put the fragmentary evidence of architecture, and the information from the tombs, into perspective.

Figures 3.5 and 3.6 show the limited architectural remains for Levels 5 and 6. These were originally compiled by Gürsan-Salzmänn (1992, 385-86, Plans IIIb-c) in her study of the Bronze Age layers at Alaca Höyük. Within that larger study, Gürsan-Salzmänn notes that the limited architectural information from Level 6 points to developing complexity at the site. Excavations of this period revealed a substantial Building B (Koşay 1944, Pls. LV, LIV; 1951, Pls. XXXIII-XXXV), which was still preserved to a height of 1.10-1.60 m (Gürsan-Salzmänn 1992, 57, 239). The structure is very difficult to discern from site photographs. According to Gürsan-Salzmänn (1992, 239), the walls were 1.60 m thick, which indicates that the building was large. In Period 6, domestic structures had also changed from earlier periods. While in the Late Chalcolithic, houses



are small and individual, from Level 8 they are multi-room units, grouped around a central court. This continues into Levels 6 and 5 (Gürsan-Salzman 1992, 60).

By Level 6, burials at the site also point to social differentiation. A series of non-élite graves are contemporary with the 'Royal' tombs. They are located within or near to the 'Royal' necropolis, but are modest in their construction and grave goods (Arık 1937, Figs. 145, 217; Koşay 1944, 157; Koşay and Akok 1966, Pls. 48, 55, 54-55, 61, 142-46; see also Gürsan-Salzman 1992, 71, 101, 113, 116). There is no additional evidence for these non-élite inhabitants. However, the different character of the tomb groups suggests that social ranking was present at the site by this period. The individuals interred within the 'Royal' cemetery would seem to have had more wealth and status than others within the community. It remains uncertain what degree of control they were able to exercise, and whether they included a permanent, central group of rulers.

Large, non-domestic structures are present at the site by Level 5. These may suggest some form of administration. Complex ABC is three buildings, surrounding a central courtyard (Figure 3.7). It overlay or was contemporary with several of the tombs (above; Gürsan-Salzman 1992, 223). Building B is substantial, with walls 0.50-0.70 m in width. A lack of domestic features, i.e. hearths, ovens, or storage pits, suggested to Gürsan-Salzman (1992, 55-56) that it served a public function. The complex was located at the necropolis; thus it may have served as a temple or other ritual structure. Yet there was not enough evidence recovered from Complex ABC to support this purpose. Gürsan-Salzman (1992, 226) reports that stamp seals were associated with the complex, along with storage vessels and other rank-related items. Yet it is unclear if she is referring to the single stamp seal B 651 from Tomb B (Arık 1937, 62, Pl. CCXXIII; Gürsan-Salzman 1992, 94, 227). This stamp seal is the only object of its kind that was recovered from Levels 5 and 6. It is characteristic of Hittite layers 4 and 3 at the site (Koşay and Akok 1966, 162-64, 168-70, Pls. 22, 23, 32; 1973, 82-83, Pls. XLIII, LXXXIII). Therefore it is probably intrusive to Tomb B, and it is not possible to associate the seal with Complex ABC. Given these issues, it is uncertain whether or not Complex ABC served an administrative or a ritual function. This question must instead be left to future research.

Building E of Level 5 may have been used for ritual activity (Figure 3.8). The area around the structure featured two contexts that involve large-scale drinking. One is non-élite Grave FIII. The other is a large amount of drinking vessels, smashed and deposited as a single collection. It is not associated with a grave or any other mortuary features, and may not have been located within Building E. These drinking settings are treated in more detail later in this chapter.

Building E was located at least sixty-five metres to the northwest of the 'Royal' tombs,<sup>15</sup> towards the centre of the settlement (Figure 3.5). The structure was too fragmentary to determine its original function (Koşay and Akok 1966, Pl. 145b; Gürsan-Salzman 1992, 38-39, 57). Yet if large-scale drinking in this area was done for ritual purposes, then the structure may provide evidence for an organisational authority alongside Complex ABC.

By Level 4 at the site, which is associated with the Hittite period, a strong central administration is apparent. Stamp seals point to the centralised control of production and exchange (Koşay and Akok 1966, 162-64, 168-70, Pls. 22, 23, 32; 1973, 82-83, Pls. XLIII, LXXXIII). Streets and houses are planned, oriented east to west and north to south. Public works include a sewage canal system, with clay pipes installed underneath the roads (Koşay and Akok 1973, 59, Pl. XCI). Together with grain pits and storage facilities, these features led the excavators to define Hittite-era Alaca Höyük as a proto-urban settlement (Koşay and Akok 1973, Pl. LXXXVII). Whether or not this assessment is adopted, there is a significant contrast in the scale of development between Levels 4 and 6 (Gürsan-Salzman 1992, 54-55, 59-61). The Early Bronze Age levels at Alaca Höyük feature some evidence for large-scale architecture, based upon the limited evidence that is available. Complex ABC of Level 6 might have functioned as a public building or ritual edifice. Building E of Level 5 might have served a ritual purpose. Yet the construction of these buildings is not standardised, and the end result is not as formal as that seen in Period 4 (see Gürsan-Salzman 1992, 61). The scale of these practices is not comparable to that seen during the Hittite period. It is possible that an authority was present at the site during the Early Bronze Age. Yet even if it was, this authority was not as all-encompassing or extensive as that of later periods.

## **1. Feasting at the 'Royal' tombs**

Animal remains were prevalent at the 'Royal' tombs. They include both disarticulated bones and intact carcasses, which were deposited atop and within the tombs, and also alongside and in-between them. Aside from the cattle skulls and hooves atop the tombs, there were also reported the remains of goat, dog, pig, boar, and ass (Koşay 1938, 175-77 [Turkish]; Dilgimen in Koşay 1944, 183-85 [German]; Richter in Koşay 1951, 101-103 [Turkish], 198-99 [French]). Complete skeletons suggest that some animals were sacrificed. They may have been household pets intended to accompany their owners in death. Or they may have been provisions for the afterlife, as some tombs also featured jars containing food (Gürsan-Salzman 1992, 99, 128, 187).

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<sup>15</sup> Calculated from scaled Plan IIIb, Gürsan-Salzman 1992, 385. Distance 'as the crow flies'.

Disarticulated animal skeletons indicate graveside feasting. Some of the animal remains were displayed atop the tombs; the way they were arranged may have referenced harnessing and wheeled transport, or wagons. The presence of wagons has implications for the role of animals at the site, and thus of animal sacrifice at the necropolis. In addition, the animal remains may indicate the scale of tombside events. They may also be used to reconstruct a sequence of burial at the tombs. This includes the deposition of the human body, the vessels, and the animal remains.

#### i. Heads, hooves, and wagons

Cattle skulls and hoofs decorated the timber roofs of several tombs. From the first excavation season, Arık (1937, 71) suggested that the presence of skulls and hoofs and the absence of a spine indicated graveside feasting. These parts are the most difficult to consume and therefore are often left behind (cf. Piggott 1962, 112). Feasting was not limited to bulls; atop Tomb A were arranged the legs of goat (Figure 3.9; Koşay 1944, 81, Pl. LXII). Pairs of hooves were also deposited within the tombs (Bachhuber 2011, 163), as well as whole carcasses of goat, ass, pig, and boar. The presence of dog suggests that some animals were intended to accompany individuals to the afterlife. These practices extended across the plateau. Intact cattle are placed in pairs before seven burials at Demircihöyük-Sarıket necropolis (Seeher 2000, 30) as if pulling the deceased. At Ilıpınar, intact dog skeletons are associated with the burials of children and young adults (Roodenberg 2008, 338).

The arrangement of cattle bones atop five of the tomb roofs (L, A, E, B, and R)<sup>16</sup> and inside Tomb F alludes to wagons and harnessing. This was first suggested several decades ago (Mellaart 1966, 155-56; Orthmann 1967) from culture parallels with southern Russia and Georgia (Piggott 1962). The association between the tombs and wagons has since been dismissed. This is because of the association of wagons with diffusionist arguments of Indo-European migration into Europe (see Gimbutas 1970 for arguments and references; also Dexter and Jones-Bley 1997). The idea is also criticised on the basis of problematic chronology with the burial kurgans of southern Russia and the Caucasus (Chernykh 1992, 67-69; Rassamakin 2004, 205, Fig. 136; Zimmermann 2008, 512-14). Nevertheless, wagon arguments were recently revisited by Mansfeld (2001, 30-42). He interpreted unidentified metal pieces as evidence for bridle rings, draught pole

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<sup>16</sup> Though Bachhuber (2011, 163) claims that skulls atop Tomb L were not arranged in rows, this is recorded by the original excavators (Koşay 1951, Pl. CLXXXIX). It is also included in analyses by Mansfeld (2001, Fig. 5). Bachhuber does not elaborate on this point. Without additional information, this analysis assumes that bones at Tomb L were arranged in linear rows.

decorations, and wagon repair kits. Recently, Zimmermann and Geniş (2011) have added cattle prods.

Harnessing is supported by physical evidence from the tombs. Cattle skulls pierced by nose rings were recovered from Tomb T (Figure 3.10; Arık 1937, Fig. 118, Pl. CCLXXVI) and Tomb C (Koşay 1944, 88). Additional, joined pairs of rings were "continually recovered" ("recueillis continuellement") from Tomb T (Arık 1937, Pl. CCLXXVI). According to its description, the nose of a metal bull statuette within Tomb T is pierced by two thin metal wires (Arık 1937, CCLXX). This makes clear the association between rings and bulls. While bull statuettes in Tombs K, L, C, E, D, T, and H have not been described or photographed (Koşay 1944, Pl. XCVI-II; Koşay 1951, Pl. CXXX, CL, CLXII, CXCII, CLXXIII; Müller-Karpe 1974, Pls. 311-313), rings are observed on bull statuettes from Horoztepe (Özgüç and Akok 1957, fig. 7-8, 27-29; Özgüç and Akok 1958, 48, Pl. XI, fig. 2). Rings are also reported from Resuloğlu necropolis, roughly ninety km west of Alaca Höyük (Yıldırım 2006, 1-2, Fig. 17a; see also Yıldırım and Zimmermann 2006). With a diameter of 8.5 cm (Yıldırım 2006, 11, Fig. 17a), the rings from Resuloğlu are similar in size to those from Tomb T (5.6 cm: Arık 1937, Pl. CCLXXVI). Also at Resuloğlu were found cattle skulls and hooves "between the cover stones and on the sides or around the base of the [burial] pithoi" (Yıldırım 2006, 7). Perhaps they were also meant to represent cattle-driven vehicles.

Rings are not particular to male cattle; they are sometimes placed upon young calves to stop them feeding from mothers. Yet it is not unreasonable to assume that rings would have made bulls more manageable, along with castration. This practice is likely to have occurred during the period (Grigson 1989, 99). The management of bulls is supported through iconographic evidence. Yoke-like implements appear upon a ritual standard from Alaca Höyük (Figure 3.11; Arık 1937, Pl. CXC VII). A yoke-like object is also seen upon bulls of a statuette from the antiquities market (Tezcan 1960, 32, pl. XVIII). Both of these examples seem to deliberately reference harnessing.

Draught cattle suggest that feasting at the tombs involved wagon procession. It is possible that wagons were used in burial to carry the deceased to the grave. This is supported by ritual standards, sistra, and castanets (Arık 1937, 55-56, Pl. CXCI, CXCIV-CXCV; Koşay 1944, Pl. LXXXI; Koşay 1951, Pl. CXXVI; Özgüç and Akok 1958, 49), which are objects appropriate to procession. Procession and musical instruments point to ritual practices, which may serve a number of purposes. Ritual may be connected to longstanding community traditions, which serve to foster solidarity amongst participants. It may also be used to highlight the position of one specific group or individual, such as a religious authority.

## ii. Disarticulated cattle remains as evidence of graveside feasting

The number of cattle that were sacrificed at the tombs suggests that tombside feasts were large in scale. Pairs of skulls and longbones were arranged atop five tombs (L, A, E, B, R) and also upon the stone paved floor of Tomb F. Skulls atop each tomb amounted to two (A, R), five (F), six (E, B), to as many as ten atop Tomb L (Koşay 1944, Pl. LXII; 1951, Pls. CLVII, CLXVIII, CLXXXIX; Mansfeld 2001, Fig. 5). Their sacrifice would have yielded a significant amount of meat. This suggests that the tombs may have been intended to provision far more than the 'Royal' groups that were interred there.

The amount of meat that was yielded by the slaughtered cattle would indicate how many people could be fed by events at the tombs. The cattle bones were not analysed by the excavators; they did not record their size or characteristics. As a result they did not discuss the species of cattle, or the age or sex of the specimens. Yet it is possible to estimate how much meat could have been yielded by investigating three different aspects of cattle species and butchering practices. First, it is possible to establish the cattle species, and from there estimate their size according to age and sex. Various issues in cattle size help to assess a second issue: the possible 'live weight' of cattle and the amount of useable meat. Third, it is possible to approximate how much meat resulted from butchering practices, from the various issues that would have been involved. All of these factors, considered together, give an impression of the scale of meat consumption at the tombs.

The cattle that were present in Anatolia during the Early Bronze Age were likely domesticated *Bos Taurus*, or taurine or unhumped cattle.<sup>17</sup> Factors affecting the size of cattle include their sex, their age when they were killed, and diminution, or the reduction in size of domesticated species. It is not possible, from the evidence, to determine the age of the cattle that were sacrificed at Alaca Höyük. They could have been killed as calves, or later in life, after serving as draught. The cattle at the tombs also may not have been bulls. While rings bring to mind adult, male castrates (oxen), it was mentioned above that rings are sometimes placed upon young calves. Also, rings were not observed in all tombs. Horns, present on all skulls, were common to both heifers and bulls of the period (J.L. Mason in Jewell 1963, 100).

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<sup>17</sup> The presence of zebu or humped cattle species in Anatolia is not supported until the second millennium BC at the earliest (Matthews 2002, 442-44; Glatz and Matthews 2005, 58). The cattle at Alaca Höyük were likely domesticates, from the presence of domesticated species at other sites in Anatolia during the period. This includes EBA Tilbesar (Berthon and Mashkour 2008, 27, Table 1), Korucutepe (Boessneck and von den Driesch 1975, Tables 9-10), Arslantepe (Bökönyi 1983, 591, Fig. 5), Karataş (Hesse and Perkins 1974), and Early Chalcolithic Ilıpınar (Buitenhuis 2008, 208). Yet according to Rauh (1981), cattle at EBA Demircihöyük were wild.

The extent of diminution, or a reduction in size, of domesticated cattle during the Early Bronze Age is debated (Jarman 1969; Davis 1981; Grigson 1981; Clutton-Brock 2000, 87). Grigson (1989, 99) points out that the effects of diminution are difficult to establish because of different kill-off patterns between sites. In other words, the practice of killing younger specimens has often confused the size determinations of cattle at various sites. This makes it difficult to determine the rate of diminution for different periods, and whether it was continual, or intermittent. It is not possible to reliably estimate the effects of diminution for a specific point in time. This issue must be borne in mind when considering the live weight estimates that are provided by various researchers.

There are general estimates for the weight of cattle during the Early Bronze Age in the Near East. They try to take into account the effects of diminution, though again it is difficult to isolate the size of cattle for a specific period of prehistory. Gregg (1988, 105) explains that estimates of 'live weight' for EBA cattle are calculated by reducing the estimated size of Neolithic cattle based upon Grigson's (1981, 1989) observations. After allowing for diminution, the general practice is to estimate seven hundred kilograms for mature bulls, and four hundred kilograms for heifers (see Gregg 1988, 105, Table 18). It is estimated that fifty percent of this live weight gives the amount of useable meat (Gregg 1988, 105; Reitz and Wing 2004, 226). This yields three hundred and fifty kg of useable meat for bulls, and two hundred kg for heifers.

It is also possible to estimate the amount of meat that could have been recovered from the carcasses after butchering. Situational factors probably caused a significant amount of loss. This includes quick butchering in warm weather because of spoiling concerns. A significant amount of meat is also lost through barbecuing, which would have been the easiest and quickest way to cook at the necropolis. Alaca Höyük inhabitants may have economised the amount of meat by using the bones for stewing, though this is pure speculation. Two butchers<sup>18</sup> advised on these issues. Mr. William Christie estimates that one Scottish Highland bull, whose four legs each weigh 170 kg, could feed up to four hundred people. Accounting for the loss of meat through barbecuing, hurried butchering, and the use of pre-modern butchering tools, this number is reduced to between 200-250 people. Mr. Mark Wood has experience with Northamptonshire bulls. These are similar in size to the average *Bos Taurus*, with forelegs of around 150 kg and hind legs of around 160 kg. He estimates that two hundred people could have been fed from four legs, and three hundred from a whole carcass. This figure accounts for loss through de-boning, hurried butchering, and barbecuing, and is similar to meat yields given in the previous paragraph.

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<sup>18</sup> William Christie Butchers, Edinburgh, Scotland 16th April 2013 [Scottish Highland cattle]; Mark Wood Butchers, Finedon, England, 11th July 2013 [Northamptonshire cattle].

Davis and Payne (1993) investigated butchered Northamptonshire cattle within a Beaker-period burial in central England. They estimate a rate of consumption of one kilogram per person, per day. This suggests that at Alaca Höyük, two hundred people could be fed from one heifer, and three hundred and fifty people from each bull. Cattle of the Anatolian Early Bronze Age may have been smaller. It is also possible that a significant amount of meat was lost due to a number of other factors. Thus it seems reasonable to estimate that between fifty to one hundred individuals could be fed from each cattle carcass. This is before including the meat provided by other, additional species, which were deposited atop several tombs. These figures suggest that events at the tombs were intended to provision far more than the 'Royal' entourage or family members. No population estimates exist for Alaca Höyük. Yet using the most conservative meat yield estimates, tombs featuring four to five *pair* of cattle would have provisioned between at least four to five hundred people. It seems safe to assume that this would have been a significant portion of the wider community. The cattle were at least butchered in order to provide for a number of people far greater than the élite that would have been assembled.

It is possible that this meat was not distributed at the 'Royal' tombs. The cattle may have been butchered here, but without the community assembling. This practice is observed in modern Boğazkale, a village near to Alaca Höyük.<sup>19</sup> Thus the necropolis may not have been an area of public gathering, nor events at the tombs intended to include a wide audience. Yet even if the animals were not butchered before the community, the amount of meat that was sacrificed implies that the community was still involved. The above calculations suggest that these events were hosted on the part of some individuals or groups. Thus each portion of meat that was distributed has the potential to embody a relationship between the host and receiving individual or household. This relationship is present no matter if the cattle were butchered in public, or if they were later distributed. But the relationship is unable to be detected beyond the necropolis. Therefore this chapter is still focused upon whether or not there were events at the tombs. It is these events, if they took place, that may be able to provide insight into the social and political complexity at the site. Other aspects of the burials may resolve whether gathering and food and drink sharing was practiced at the tombs. This includes the number of drinking vessels within the tombs, and the arrangements of bone across the necropolis. Both of these issues are treated in detail in the following sections. These issues will then be assessed together with the evidence of the scale of animal sacrifice that is presented above.

### iii. The deliberate arrangement of animal remains

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<sup>19</sup> Professor Ulf Dietrich-Schoop, personal communication, 27th March 2014.

Animal remains at the necropolis include whole carcasses, and individual bones from disarticulated skeletons. Again, complete skeletons point to animal sacrifice. They are probably intended to provision the deceased or to satisfy other ritual objectives. They are not related to graveside feasts. When disarticulated bone is encountered, it suggests that animals were butchered, and that their remains were feasted upon at the tombs or elsewhere.

The individual bones, and the intact carcasses, were deliberately arranged at the necropolis. Whole carcasses were deposited within the tombs, and also left in-between them. The individual bones were sometimes arranged in patterns. This was not limited to the tomb roofs, but includes the areas in-between the graves. A closer look at these practices may reveal two things. It may comment further upon the method of interment, and thus provide information on the nature of tomb-side events. It may also comment upon the necropolis as an area of gathering at the settlement. This may provide more information on the role that the 'Royal' élite held within the community.

Several species were displayed at the tombs in addition to cattle. They are placed not only on top of the graves, but also within and between them. Again, atop Tomb A (Figure 3.9) the bones of a goat join that of cattle in tomb decoration:

“On the same level were two skulls, four pairs of hind legs of a cow and bones of a goat. The position of the bones implied that they were arranged with care. Underneath them was a thin layer of plaster which covered a number of short vertical beams...”  
(Koşay 1938, 79, translated from Turkish by Gürsan-Salzmänn 1992, 78).

Other tombs featured bones of additional species. In Tomb E, a pig skull was found atop a wall of the tomb (Figure 3.12; Koşay 1951, 164; Gürsan-Salzmänn 1992, 85) The complete skeleton of a dog was placed upon a pedestal not within, but south of Tomb H (Koşay 1951, Pl. CXXI). A collection of bone was deposited between Tombs H and D (Koşay 1951, CXLV). Arık (1937, 84) reports dog and sheep remains along a mudbrick pedestal, facing the interior of Tomb R, which was a small, badly disturbed tomb. Both skeletons featured a spine, suggesting that they were deposited intact, though it is not stated whether they had been placed inside the tomb. A third skeleton, probably a lamb (intact?), was found on two large stones 'not far' ("non loin") from Tomb B (Arık 1937, 85). The carcass of a sheep (intact?) is reported between Tombs B and T (Arık 1937, 85, Fig. 107). It overlay a gold circular band and a long stone wall, nearby to which was more animal bone.

Like the cattle skulls and hooves, the individual bones of various species were sometimes arranged in rows. Four longbones are arranged in a row, "in proximity to" Tomb D (Figure 3.13;



Koşay 1951, CXLV). Tomb illustrations show a scattering of what appears to be longbones on top of stones beyond the southern limit of Tomb C (Koşay 1944, LXII). This may have initially been an arrangement at the corner of the tomb. These displays seem to reference the number of animals that were butchered at the tomb. They may have been intended to display the amount of meat that had been eaten or sacrificed so that this could be counted or compared. It was perhaps an indication of prestige, associated with the individual that was interred, or with his family or friends. Gathering at the necropolis would have been an opportunity to compare current festivities with those that had already passed. This is one way in which the prestige of tombside slaughter events would have become more enduring in the minds of settlement inhabitants.

The butchering of the animals sometimes occurred before the tombs were closed. This is suggested by the placement of skulls and hooves on the floor or upon pedestals in Tombs L, B, R, and H (Arık 1937, 64; Koşay 1951, 157, 168, Pls. CXVII, CXC; Bachhuber 2011, 163). In Tomb B, skulls were placed with their horns facing upwards (Gürsan-Salzmänn 1992, 96). Food was also placed within the tombs; jars in Tombs K, A, C, D, and S<sup>20</sup> held charred grain or other foods (Gürsan-Salzmänn 1992, 99, 128, 187). These were probably intended to provision the deceased. In other cases, food remains point to graveside meals. Jars in Tombs A and S contained "what appeared to be meat hooks and remnants of bones" (Koşay 1938, 79; translation Gürsan-Salzmänn 1992, 79). Koşay (1938, 79) interpreted the hooks and the bone within the jars to be the remains of a funerary feast, and associated with the cattle skulls and hooves. Thin copper wire was also recovered from Tomb D (Koşay 1951, CXLVIII); this might also have been hooks for food. From the jars, hooks, and remains, Koşay (1938, 79) suggests that feasting occurred during deposition, and that it continued while the tomb was being closed. This means that it is possible that some of the vessels and other material within the tombs may have been related to the funerary feast.

The scale of tombside consumption events seems to have continued to be important after the feast had finished. Bachhuber (2011, 162) suggests that the necropolis was a centre for continuing ritual practices. He points to the adding or mixing of human burials after the tombs were closed. An extra skull was found in Tomb E, while the human female remains in Tomb D were scattered (Koşay 1951, 161, 164). Other tombs (C, T/T1, and R) are "clearly secondary interments" (Bachhuber 2011, 162). This may explain why some animal remains had been placed in-between the graves, rather than atop them, for instance between Tombs H and D (Koşay 1951, Pl. CXLV). The bones may have been moved during subsequent necropolis visits; they may have

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<sup>20</sup> Tomb H may also have contained food offerings: three ceramic storage vessels (H 128-130) were found in the centre of the tomb, two of which had lids.

been continually arranged by mourners during different events. If the bone arrangements communicated the prestige of certain burials, then it would seem that this prestige was altered and re-assigned during subsequent burials. The bones may have been a visual manifestation of the scale of tombside events, especially if they were feasts held at the necropolis. The end result would be a narrative of settlement history, made specifically on the basis of food consumption.

Tombside events seem to have been meant to attract participants. The slaughter of several animals, possibly including healthy draught cattle, would have been exceptionally dramatic. These events would have been remembered for long afterwards. Even if the community was not present, but received a share of the meat afterwards, the scale of these events would have been made known. That several animals were sometimes slaughtered introduces the question of whether or not the tombs were intended to showcase wealth and demonstrate social distance. Here élites may have displayed wealth and sacrificed animals in an effort to demonstrate their high social position. Rival élite groups, or factions, may have used these methods in order to coax support from the community. Drinking vessels within and between the tombs may shed light upon this issue. They may indicate whether or not people drank at the tombs, and if so, how large these events may have been. The characteristics of drinking vessels, and the number deposited within each grave, may indicate how drinking was done, and whether it involved specific drinking acts. These acts may further reveal the level of social participation at the necropolis.

## **2. Drinking and feasting at the tombs**

Drinking and pouring vessels were the most consistently-deposited class of objects within the 'Royal' tombs. Jugs for pouring and cups, goblets, and bowls for drinking were found in nearly every tomb. They include exquisitely crafted bronze and copper vessels that were coated in gold, silver, and electrum (Yalçın 2011). Ceramic versions were also placed within the tombs, of identical shapes to their metal counterparts. From the abundance of vessels, drinking was a central aspect of mortuary practices at the site.

Also within the tombs were found jars, pots, and ceramic bowls. They would seem to have been used to store food or other objects. Some of the pots contained food remains. From their placement, position, and shape, other objects may have been used to consume food and drink. While less abundant than drinking and pouring shapes, the jars and other objects indicate that food was a central component to mortuary ritual. They may also help establish whether or not the animal remains were consumed at the tombs.

Jugs and cups were abundant at the necropolis, yet their prevalence within and between the tombs has never been discussed. This includes the extent to which jars, pots, and other vessels for eating or storing food were consistent between the tombs. It is also of interest how these vessels were used. Some may have been intended to be used by the deceased. Other vessels may have been used and deposited by mourners. The position and characteristics of these vessels may clarify which were intended for the afterlife, and which were used for graveside drinking and feasting. Vessels placed close to the body were probably associated with the deceased. Those placed farther away may have been used by mourners to eat or drink at the tombs. Some may have stored food for the deceased.

The recurrence of two or more vessel forms across tombs may indicate drinking sets. They may have been used for specific drinking practices, for instance pouring from a jug into a cup or a goblet. Was this done before an audience? Collections of several vessels deposited in a heap or pile may give an indication of how many people were participating. Drinking acts, sets, and piles or heaps of drinking vessels may each comment upon the level of participation at tombside events. This information may indicate the relationship between the individuals present, and be used to further reconstruct the social organisation of the site.

This section of Chapter three analyses and compares the drinking vessels that were found within the 'Royal' tombs. It examines several features of these vessels, including their shape and decoration. It also examines how they were deposited within the tombs. This information is used to determine whether or not specific vessels were common between graves, and whether drinking sets or piles of vessels were present. It is first necessary, however, to determine whether or not specific vessels were used for drinking and eating. This analysis therefore begins with a determination of which vessels will be considered, and which will be excluded. Some vessels had a characteristic drinking or pouring shape, but seem to have been deposited in the graves for a different purpose. Other vessels were a shape unrelated to drinking or pouring, but seem to have been used for this purpose. This section first establishes which vessels will be considered in the analysis. Many vessels are discussed individually because of their particular shape, placement, or contents. This information is then used to assess the evidence for drinking, pouring, and eating at the tombs.

#### i. Vessels included in the analysis

Fifty-nine vessels were recovered or detected within the 'Royal' tombs. Of these, thirty-nine were metal, nineteen were of ceramic, and one was wooden with metallic inlay and copper

lid (Tomb A, A73a-b: Gürsan-Salzman 1992, 78-9).<sup>21</sup> Table 3.1 explains the type of vessels that were found within each tomb, and whether they were made of metal or ceramic. Tables 3.2 and 3.3 divide the vessels by their function. Tables 3.4 and 3.5 present the absolute numbers for the vessels that were found within each of the tombs. Figures 3.14-3.29 provide photographs or drawings of nearly all of the vessels for drinking and pouring that were found within the tombs. They are arranged by tomb.

Tombs B and K contained the highest number and the most varied collection of vessels. The largest tombs, H and K, contained the largest collection of vessels piled together. Most graves contained more vessels of metal than of ceramic, with the exception of Tombs C, T, and D. The number and type of vessels in each tomb, however, must not be taken as absolute. Preservation issues affected all of the tombs. It is likely that each tomb is missing some amount of objects or physical remains because of tomb collapse, destruction, water damage, or other issues. Their contents may have been pillaged by later inhabitants (Gerber 2006, 383-86). For these reasons any comparison of the number of vessels between tombs must be treated with caution.

The most common objects within the tomb were vessels for pouring. Metal varieties, exquisitely decorated with chevrons, cross-hatching, concentric circles, swirls, and swastikas were found in ten of the thirteen tombs in which items were recovered. The majority were beak-spouted jugs, found in eight tombs (K, A, E, D, S, B, R, H). Gold fragment T1829<sup>22</sup> may have been a beak-spouted jug or a teapot, though it was too fragmentary to be identified as either vessel in particular. Vessel L13 from Tomb L was originally thought to be a beak-spouted jug (Koşay 1951, Pl. CXCVI). Its restoration, however, revealed the vessel to be a bird-shaped convex vessel, or rhyton (Figure 3.30; Çınaroğlu 1989). It was placed close to the deceased, and from its shape should be classed as a pouring vessel. Therefore it is listed together with jugs in Tables 3.1 and 3.2.

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<sup>21</sup> This figure includes the gold and silver spoon L9 from Tomb L, even though it is not a vessel. This number also excludes vessels of Çiradere ware from Tomb D: D81, D82, D78 and D79, as these may have been intrusive. The L9 spoon is included because it may function as serving equipment. It is also a good indication that sumptuary activities were occurring at the tombs.

<sup>22</sup> Various fragments from Tomb T could be interpreted as a vessel. Gold fragment T1829 seems to be the best candidate (Arık 1937, Pl. CCLXVII-IX). It is counted in tomb inventories in Table 3.1, but its ultimate shape as a vessel cannot be identified. Additional fragments T1822-23, T1746, and T1828 were thought to be parts of a single vessel by the excavators (Arık 1937, CCLXVI); they are similar to pieces of a silver snake 'teapot' K41 from Tomb K (Koşay 1951, Pls. CLXXCIII-IX; Toker and Öztürk 1992, 58). In the tomb these fragments were placed away from the deceased, and near to animal skeleton XIX (Arık 1937, 85, Pl. CCLXVIII). In this analysis, only T1829 is counted, because all of these fragments may be pieces of the same object.

Tomb Name	Jugs Metal	Jugs Ceramic	Cups Metal	Cups Ceramic	Bowls Metal	Bowls Ceramic	Jars Ceramic	Other Vessels	Total Vessels	Vessels Excluded
F	--	--	--	--	--	--	--	--	0	--
K	3 K1 K39 K40	1 K48	2 goblets: K4 K5		3 K2 K3 K6			K41 silver teapot	10	
L	1 L13		1 L4					unnumbered plate; L9 spoon	4	
A (earlier)	1 A75		1 A65				2 A3 A4	Wooden bowl 73a-b	5	
A1 (later)			1 MA36		1 MA8				2	
C					1 C69		C37 C38 C39		4	
E	1 E25			1 E26				1 plate E27	3	
T (later)			1 T1745	1 T1764			2 T1073 T1074	T1829 fragment	5	Sherds-Çıradere
T1 (earlier)					1 T1 1085			1 'purse' T1 1750	2	1 T1 1057
D	1 D8						2 D72 D73		3	4: mugs D81 D82; bowls D78 D79
S	1 S1								1	Sherds-Çıradere
B	1 Al. 242		2: Al. 241 goblet; stem (unnumbered)	2 mugs B727 B738			1 B726 (bowl for storage)		6	B 1852-53 Sherds-Hittite
R	1 Al. 1082		1 Al. 1083		1 Al. 1084			plate- no number	4	
H	2 H118 H120		2 H15 H18		1 H16	1 H17	3 H128 H129 H130	1 H117 ladle	10	

Table 3.1 Vessel Inventory of the Alaca Höyük 'Royal' tombs

Tomb Name	Pouring vessels- jugs and other	Drinking vessels- cups and bowls	Food storage or consumption, and vessels either for food or drink	Uncertain or other	Total vessels
F	--	--	--	--	0
K	5: jugs K1 K39 K40 K48; K41 teapot	5: goblets K4 K5; bowls K2 K3 K6			10
L	1: bird-shaped rhyton L13	1: metal cup L4	2: unnumbered plate; L9 spoon		4
A (earlier)	1: jug A75	2: metal cup A65; wooden bowl 73a-b	2: jars A3 A4		5
A1 (later)		2: metal bowl MA8; metal cup MA36			2
C		1: metal bowl C69	3: jars C37 C38 C39		4
E	1: jug E25	1: ceramic cup E26	1: plate E27		3
T (later)	3: jars T1073 T1074; gold handle T1829	2: metal cup T1745; ceramic cup T1764			5 (excludes Çiradere sherds)
T1 (earlier)				2: silver bowl T1 1085; 'purse' T11750	2 (excludes T1 1057)
D	1: jug D8		2: jars D72 D73		3 (excludes mugs and bowls)
S	1: jug S1				1 (excludes Çiradere sherds)
B	1: jug Al.242	4: goblet Al.241; unnumbered goblet stem; 2 mugs B727 B738	1: bowl B726		6 (excludes B1852-53 and Hittite sherds)
R	1: jug Al.1082	1: metal cup Al.1083	2: unnumbered plate; copper bowl? Al.1084		4
H	2: jugs H118 H120	1: metal bowl H16	5: bowl H17, ladle H117, jars H128, H129, H130	2: cups H15 H18	10

Table 3.2 Vessels of the Alaca Höyük 'Royal' tombs for drinking and pouring or other purposes

Tomb Name	Drinking and pouring vessels associated with the deceased	Vessels possibly for food storage within the tomb	Vessels possibly for the funerary feast	Uncertain or other	Total vessels
F	--	--	--	--	0
K	10: K1 K39 K40 K48; K41; goblets K4 K5; cup K3; necked vessels K2 K6		1: unlisted pot that appears in Koşay 1951, Pl. CLXX (not counted in chapter)		11
L	4: bird-shaped rhyton L13; metal cup L4; L9 spoon; unnumbered plate?				4
A (earlier)	1: jug A75		3: jars A3 A4; cup A65	1: wooden bowl A73a-b	5
A1 (later)				2: MA8; MA36 (associated with the body? or in other areas of the tomb?)	2
C	1: metal bowl C69		3: jars C37 C38 C39		4
E	1: jug E25		2: plate E27; cup E26		3
T (later)	3: jars T1073 T1074; ceramic cup T1764			2: metal cup T1745; gold handle T1829	5
T1 (earlier)				2: silver bowl T1 1085; 'purse' T1 1750 (excludes T1 1057)	2
D			2: jars D72 D73	1: jug D8 (excludes mugs and bowls)	3 (excludes mugs D81 D82; bowls D78 D79)
S				1: jug S1 (excludes Çiradere sherds)	1 (excludes Çiradere sherds)
B	3: jug Al.242, goblet Al. 241, unnumbered goblet stem	1: bowl B726	2: mugs B727 and B738		6 (excludes B1852-53 and Hitite sherds)
R			4: Al.1082; Al.1084; Al.1083; unnumbered plate		4
H	1: metal bowl H16	3: jars H128, H129, H130	3: jugs H118, H120; spouted vessel H117	3: cups H15, H18; bowl H17 (position of H17 not recorded)	10

Table 3.3 Vessels of the Alaca Höyük 'Royal' tombs for use by the deceased or for other purposes

<b>Tomb</b>	<b>Vessels</b>
F	No vessels recovered
K	4 jugs: K1 K39 K40 K48 2 goblets: K4 K5 3 bowls: K2 K3 K6 1 teapot: K41 Total: 10 vessels
L	1 'jug' (anthropomorphic vessel): L13 1 cup: L4 1 plate: unnumbered 1 spoon: L9 Total: 4 vessels
A	1 jug: MA75 1 cup: MA65 2 jars: A3 A4 1 wooden bowl: 73a-b Total: 5 vessels
A1	1 cup: MA36 1 bowl: MA8 Total: 2 vessels
C	1 bowl: MC61 3 jars: C37 C38 C39 Total: 4 vessels
E	1 jug: E25 1 cup: E26 1 plate: E27 Total: 3 vessels
T	3 cups: 1745 1764 2 jars: 1073 1074 1 vessel fragment, unknown shape (T1829) Total: 5 vessels
T1	1 bowl: 1085 1 'purse' 1750 Total: 2 vessels
D	1 jug: D8 2 jars: D72 D73 Total: 3 vessels
S	1 jug: S1 Total: 1 vessel
B	1 jug: Al.242 2 cups: Al.241 and unnumbered stem 2 mugs: B727 B738 1 bowl: B726 Total: 6 vessels
R	1 jug: Al.1082 1 cup: Al.1083 1 bowl: Al.1084 1 plate: unnumbered Total: 4 vessels
H	2 jugs: H118 H120 2 cups: H15 H18 2 bowls: H16 H17 3 jars: H128 H129 H130 1 ladle: H117 Total: 10 vessels

Table 3.4. Absolute numbers of vessel types represented within each tomb



<b>Vessel type by material</b>	<b>Total</b>	<b>Inventory numbers</b>
Total jugs, metal	12	K1 K39 K40 L13 MA75 E25 D8 S1 Al.242 Al.1082 H118 H120
Total jugs, ceramic	1	K48
Total cups, metal	11	K4 K5 L4 MA65 MA36 1745 Al.241 Al.1083 H15 H18; 1 unnumbered goblet stem
Total cups, ceramic	4	E26 1764 B727 B738
Total bowls, metal	8	K2 K3 K6 MA8 MC61 1085 Al.1084 H16
Total bowls, ceramic	1	H17
Total jars, ceramic	13	A3 A4 C37 C38 C39 1073 1074 D72 D73 B726 H128 H129 H130
Total 'Other' vessels	16	
Total 'Other' vessels included in analysis	9	1 Teapot: K41 1 spoon: L9 3 plates: E27; 2 unnumbered 1 wooden bowl: 73a-b 1 gold fragment: T1829 1 'purse': 1750 1 ladle: H117
Total 'Other' vessels excluded from analysis	6	1 ceramic handle: T1 1057 (intrusive) 2 mugs: D81 D82 (intrusive) 2 bowls: D78 D79 (intrusive) 1 fragment: B1852-53 (unknown shape)

Table 3.5. Absolute numbers of vessel types represented across all tombs

In terms of shape, ceramic jugs are identical to those of metal. Ceramic jugs within non-élite Grave FIII (Figure 3.31) have been compared to silver<sup>23</sup> versions from Tomb H (H118, H120; Koşay 1951, Pl. CXXXII; Koşay and Akok 1966, Figs. 54-55; Gürsan-Salzmänn 1992, 114). One ceramic, black-burnished jug K48 from Tomb K (Koşay 1951, Pl. CLXXXIV) has the same shape as jugs of silver or gold from the same tomb (K39 and K1, Koşay 1951, Pl. CLXXIX; Gürsan-Salzmänn 1992, 73). Ceramic vessels were placed alongside objects of metal in many of the tombs. That they could be identical in shape suggests that they were used for the same purpose. Ceramic vessels were not tools for mimicking drinking and pouring practices of the élite. They were important vessels in their own right, and were used for practices that had long been popular at the site. Vessels for drinking are found in graves of the Late Chalcolithic or EB I at the site (Koşay and Akok 1966, Pls. 53-55, 60, 145b, 148; Gürsan-Salzmänn 1992, 101-13); thus drinking had been a feature of burial from an early period. The presence of jugs within EBA non-élite Grave FIII indicates that these practices continued regardless of whether the burial was élite or non-élite.

## ii. Differences with previous studies

Earlier studies of the tombs considered fewer vessels than those investigated here. Gürsan-Salzmänn (1992) reports between fifty-three to fifty-four vessels within the tombs:<sup>24</sup> thirty-seven of metal, and seventeen of ceramic. This discrepancy is a result of the different objectives of either study. Gürsan-Salzmänn's analysis focused upon pottery at the site, rather than the contents of the tombs. This led her to include vessel fragments that are dismissed in this study. This study also includes vessels that were published after her analysis was completed.

A number of additional vessels of metal and ceramic were not included in Gürsan-Salzmänn's study. They include a gold goblet stem from Tomb B published by Toker and Öztürk (1992, 45, 186, No. 11728),<sup>25</sup> and a wooden bowl A73a-b from Tomb A (Gürsan-Salzmänn 1992, 78-79). In addition, a number of fragmentary items are counted. A plate or platter was attested within Tomb R, but was never assigned a catalogue number due to its state of decay (Arık 1937,

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<sup>23</sup> H118 and H120 are originally described as of silver ('gümüş', 'argent': Koşay 1951, 65, 160), not gold as suggested by Gürsan-Salzmänn (1992, 114).

<sup>24</sup> In her analysis, Gürsan-Salzmänn (1992, 129) states, "fifty-three vessels, of which twenty-five are ceramic and the rest metal." Her vessel inventory, on pages 139-149, yields fifty-four vessels, of which seventeen are ceramic. This discrepancy is likely due to sherds in Tombs E, T, T1, D, and B.

<sup>25</sup> These goblet fragments were published in 1992, the same year of Gürsan-Salzmänn's dissertation. They were probably published too late to be included in her analysis.

75). Vessel E27 from Tomb E is considered here as a plate (Koşay 1951, 165, Pl. CLXV),<sup>26</sup> as well as an unnumbered plate or platter from Tomb L (Koşay 1951, Pl. CXCVI). Handle fragment T1829 is considered here to represent a vessel (Arık 1937, Pl. CCLXIX), as is jar E26 from Tomb E (Koşay 1951, Pl. CV; Orthmann 1963, 143, Pl. 50:11/114). The same applies to the ceramic handle A1.738 from Tomb B (Arık 1937, CCXIII). Ceramic handle T1764 (Arık 1937, CCLXXXIX) is reported by Gürsan-Salzmänn (1992, 86, 145) as within Tomb T1 in tomb inventories, and in grave illustrations as within Tomb T. Here it is considered to be original to Tomb T.

Other vessels included by Gürsan-Salzmänn are eliminated on the basis of their characteristics or because they may have been intrusive. From their shape, metal pieces A1, A12, A13, and A20 from Tomb A1 were not vessels (Koşay 1944, 118-120, Pl. LXXI). Instead, they seem to have been parts of other implements. A similar determination is made for fragments B1852-53 from Tomb B (Arık 1937, Figs. 86 a-b, Pl. CLXXXIV); this is explained below. Other forms are considered intrusive to the tombs. These include ceramic handle T1 1057 from Tomb T1 (Arık 1937, CCLXXXV), Hittite sherds from Tomb B (Arık 1937, Pl. CCXIII, CCXV; Gürsan-Salzmänn 1992, 94),<sup>27</sup> and Çıradere sherds from Tombs T, S, and D.

### iii. Vessels eliminated from the analysis

This analysis focuses upon vessels for eating, drinking, and pouring. Vessels that were determined to have performed functions other than these were eliminated from the analysis. These decisions are summarised in Table 3.2, which divides vessels for drinking and pouring from those for other purposes.

Form does not always indicate function. Despite their drinking shape, some vessels were eliminated due to their contents, placement, or other characteristics. Cups H15 and H18 from Tomb H were found within a pile of objects placed close to the body of the deceased, but contained jewellery (Koşay 1951, 156, Pl. CXXIV). They are not considered to have been

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<sup>26</sup> Vessel E27 is classed as a shield fragment by Koşay (1951, 165, Pl. CLXV) and Gürsan-Salzmänn (1992, 143). However, from its dimensions and site photograph, the item could also be interpreted as a plate or platter. A similar object within Tomb L may also have been a platter (Koşay 1951, CXCVI). Both of these objects are counted as vessels within this analysis, along with the plate or platter from Tomb R.

<sup>27</sup> Gürsan-Salzmänn (1992, 94, 214, 241-43) describes buff wheelmade ware within Tomb B as “early Hittite”. To her, this is a chronological indicator. Yet the association of wares may not be secure, and she also notes the presence of buff wheelmade ware in level 5.

drinking vessels. Vessel T1 1085<sup>28</sup> from Tomb T1 is, technically, a bowl, yet its use as one seems unlikely, so much so that the excavators photographed it upside-down (Figure 3.22; Arık 1937, Pl. CCLVII).

Other forms are too problematic to be included. Ceramic bowl A1.726 from Tomb B seems appropriate for eating food, but elsewhere at the site it is considered to be a storage vessel (Gürsan-Salzman 1992, 187). It is assigned to a storage category in Tables 3.2-3.3 along with jars from Tombs A and H. Silver and gold 'handle' fragments B1852-53 from Tomb B are not counted; there is little from their surviving pieces to suggest that they were vessels (Arık 1937, Figs. 86 a-b, Pl. CLXXXIV). Ceramic handle T1 1057 from Tomb T1 (Arık 1937, CCLXXXIV-V) is nicely burnished, perhaps in metal imitation, yet was found within tomb walls.<sup>29</sup> It cannot be regarded as a tomb gift. The Çıradere vessels in Tomb D comprise two cups (D81, D82) and two bowls (D78, D79; Orthmann 1963, 143-44, Pl. 50; Öktü 1973, 130, 238-43). They likely belong to a later period. Öktü (1973, 130) associates Çıradere ware with Intermediate Ware and Kültepe level 13. This level is contemporary with EB III Tarsus and Troy V based upon its association with red-cross bowls (Orthmann 1963, 94-95, contra Özgüç 1986, 36).

Not all vessels without provenance were problematic. Though the location of jar E26 within Tomb E was not recorded by Koşay (1951, 69, 164-65, Pl. CV:1), fingernail decoration is characteristic of the EB II (Orthmann 1963, 72, 143, Pl. 50:11/114; Gürsan-Salzman 1992, 170-71, 261-62, 267). The intact jar would have been suitable for drinking; the shape is therefore considered as a possible drinking vessel. It is listed in Table 3.1 under ceramic cups.

#### iv. Vessels for food

Some vessels within the tombs seem to have been related to the serving or storage of food. This includes three plates or platters that were found within three tombs (E, L, and R), as well as storage jars within five tombs (A, C, D, B, and H). In a few instances, these vessels contained the physical remains of food. They clarify at what point food was consumed during the burial process.

Three plates or platters were found within Tombs E, L, and R. These were unnumbered except for E27. They may have been used to display or to serve food at the tombs. Their

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<sup>28</sup> The correct catalogue number for the silver bowl from Tomb T1 is T1 1085. It is assigned number A1.1081 in catalogue photographs, though this error was corrected in the item description (Arık 1937, CCLVI-II).

<sup>29</sup> Cup handle T1 1057 is recorded as, 'Recovered within [Tomb] T.M. (in the) thickness of the walls' (Arık 1937, CCLXXXIV).

identification as platters, however, is tentative. The plate from Tomb R was fragmentary, and was not photographed due to its state of decay (Arik 1937, 75). E27 appears to be a plate from its two layers or gradations. These are visible in site photographs. It was classed as a shield by the excavators (Koşay 1951, 165, Pl. CLXV). Another large platter or shield was recovered from Tomb L; it is not numbered or described, but is photographed (Figure 3.32; Koşay 1951, Pl. CXCVI:3).

Some vessels at the tombs were for storing food. They include storage jars, and vessels that contained or were associated with food. They may have been intended for the deceased to use in the afterlife, or they may have held the remains of graveside feasts. These purposes may be distinguished from how the jars were placed within the tomb, and what they contained.

Most storage vessels were placed far from the deceased, as opposed to personal vessels for eating and drinking, which were located close to the body (Gürsan-Salzman 1992, 114). The vessels that were placed close to the body are likely to have been intended for the deceased. The vessels that were placed away from the body, or in other areas of the tomb, may have been used for two key purposes. They may have held food intended for the afterlife. They may also have been used and deposited by mourners as the animals at the tomb were being butchered. It is difficult to distinguish between these purposes. One indication may be the vessels' association with intact or butchered animal skeletons, and whether or not the vessel mouth was covered with a lid.

Of course, there are other reasons why vessels may have been deposited in the tombs. They may have been grave goods, deposited by mourners in honour of the dead, in relation to their personality, as gifts, or for many other reasons (see Parker Pearson 1999, 7-11). Ultimately, it is uncertain how any of the vessels that were placed away from the body were used. This analysis is concerned with feasting. It distinguishes between vessels that were used by the deceased, and those that were used for other purposes. Although the use of vessels for graveside feasts cannot be proven, it is one possibility which suits the abundance of disarticulated animal remains. This analysis identifies as many vessels as possible that may have been used for this purpose. The following pages explain which vessels are considered to have provisioned the dead, and those that may have been used by mourners. These decisions are also represented in Table 3.3 and Graph 3.3. A separate issue is whether or not the vessels within the tombs may indicate the wealth or status of Alaca inhabitants. This question will be addressed at the end of this chapter, when the vessels are assessed together with the architecture and other settlement indices.

In Tomb T, Jars T1073 and T1074 were placed directly behind the neck of the deceased (Figure 3.33; Gürsan-Salzman 1992, 86). They are storage vessels (Arik 1937, CCLXXXVIII-

IX) but contained no traces of food. Because of their position directly behind the body, they were likely intended for the deceased. Despite their storage shape, they probably stood in for jugs, which usually took this position (see below).

In Tomb H, three jars (H128, H129, H130) were placed in the centre of the tomb, away from the deceased and not far from two cattle skulls and hooves (Koşay 1951, 112, Pl. CXVII).<sup>30</sup> Two featured lids (H128, H129), suggesting that they had held food, although no traces of food were reported (Koşay 1951, 160-61). Because they had lids, these vessels would seem to have been intended for the deceased. They also appear to have been placed on a lower platform than that holding the disarticulated cattle skulls and hooves (Koşay 1951, 112, Pl. CXVII). Yet from tomb photographs (Figure 3.34; Koşay 1951, Pl. CXXVII), animal bone does appear to have been associated with the jars. If the jars and bone were originally associated within the tomb, then the cattle may have had been butchered before the tomb was closed. This may mean that feasting occurred while the tomb was still open. Ultimately, because of their lids and placement in the centre of the tomb, the jars are considered to have been intended for the deceased. It is also possible that the butchered cattle was partly intended for the deceased, or was added to jars containing other foodstuffs. In Tables 3.2 and 3.3, the jars are listed as for storing food.

Bowl B726 from Tomb B was also associated with an animal skeleton in the tomb, as well as an altar or hearth (Arik 1937, CCX). Mug B727 and ceramic mug handle B738 seem to have been placed in the same area, which was located away from the deceased. Bowl B726 may have been a bowl for storing food; the shape is used for storage within the settlement (Gürsan-Salzman 1992, 187). For this reason it is classed as a storage vessel within Tables 3.2-3.3. This leaves the two mugs B727 and B738. It is uncertain if the 'animal skeleton' near to which they were placed (Arik 1937, CCXIII) was a skull positioned vertically along a wall (Arik 1937, 64). It may also have been an intact skeleton that was sacrificed but not butchered (and therefore not consumed at the tombs). If the animal skeleton was intact, then the mugs may have been placed in the tomb in order to provision the deceased, together with the bowl B726. If the vessels are associated with a skull, then they may have been placed in the tomb during the butchering and consumption of the animal. Again, this analysis aims to identify all of the vessels that may have been used for feasting. For this reason, the mugs are listed under, 'Vessels possibly for the funerary feast' in Table 3.3.

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<sup>30</sup> Koşay (1951, 157) describes these jars as being placed 'right in the middle of the tomb'. This is reflected in Pl. CXVII, a colour illustration close to the tomb description (on pages 112-13), but is not clear in Pl. CXVIII, which appears much later in the catalogue.

Some storage vessels held what appears to be the discarded remains of feasts. This seems to be direct evidence that feasting was performed at the tombs. Storage jars A3 and A4 had been placed atop the roof of Tomb A after it was closed (Koşay 1944, Pl. LXVI). They held charred grain, pieces of bone, and thin copper J-shaped hooks, which Koşay (1944, 100-101, Pl. LXXX) interpreted as for handling meat ('meat hooks').<sup>31</sup> Hooks were also detected in Tomb S (Gürsan-Salzmänn 1992, 79), to which may be added thin copper wire from Tomb D (Koşay 1951, CXLVIII). Jars were also left atop Tombs C and D. Jars C37, C38, and C39 contained charred grain, like jars A3 and A4 (Gürsan-Salzmänn 1992, 187). They were similarly placed atop the roof of the closed Tomb C (Koşay 1944, Pl. LXII). Vessels D72 and D73, from Tomb D, are a third set of vessels that were placed on the roof of a closed tomb (Koşay 1951, 161, Pls. CXLII, CL). These also contained traces of food (Gürsan-Salzmänn 1992, 128). Koşay (1944, 84) hypothesised that the hooks and bones had been deposited in the jars during the post-burial feast. He suggests that the tomb was closed, the animals slaughtered, and that the jars containing these remnants were then left atop the tomb. Thus the jars are classed as possibly related to feasting in Table 3.3. The jars atop tombs A, C, and D are also united in their decoration. Black burnishing upon jars A3, A4, D72, and D73 and the silver inlay upon jar C39 may reflect their special purpose for the post-burial feast.

#### v. Vessels for drinking and pouring

Many vessels for drinking and pouring were associated with the upper torso of the interred. They were placed before the chest, head, or arms, and behind or above the head, neck, or upper back. This is best demonstrated for jugs, followed by cups. In a few instances, other vessel shapes were also placed very near to the head, neck, and shoulders of the upper torso. This suggests that in some cases, additional vessel shapes could be used for drinking.

Metal jugs in Tombs K, E, and B were placed directly before the chest of the deceased (Arik 1937, 79-80; Koşay 1951, 164-66, Pls. CLXV, CLXX; Gürsan-Salzmänn 1992, 73, 85, 93). The L9 spoon was placed before the deceased in Tomb L (Koşay 1951, 168, Pl. CXC).<sup>32</sup> Jug A75 from Tomb A was also placed before the chest, according to the tomb illustration (Figure 3.35; Koşay 1944, illustrated plates). Cups and jugs and other pouring vessels appear at the back of the head in Tombs L, T, and B (Figures 3.33, 3.36-3.37). This includes the ceramic handle fragment

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<sup>31</sup> These thin copper hooks for meat are different from the large crescent-shaped hooks, which may have been attached to the ritual standards. See Gürsan-Salzmänn 1992, 79, 132.

<sup>32</sup> The unnumbered plate may also have been placed before the body in Tomb L, from the tomb illustration which shows unnumbered, circular objects (Koşay 1951, Pl. CXC).

T1764, which was placed behind the skull in Tomb T (Arik 1937, Pl. CCLXXXIX; Gürsan-Salzman 1992, 86). From their very close proximity to the body, these vessels were intended to be personal items for the deceased (Gürsan-Salzman 1992, 114). The association of the head, neck, and upper torso seems to reference the mouth and drinking. They therefore seem to have been personal drinking vessels, intended for 'one last drink' or for the deceased to use in death (Table 3.3).

From their placement within the tombs, shapes other than cups and jugs were also personal drinking vessels. Necked vessels K2 and K6 from Tomb K (Koşay 1951, CLXXV-CLXXVI; Gürsan-Salzman 1992, 74) were also placed around the body, in areas generally reserved for drinking and pouring vessels (Figure 3.38). In Tomb H a small gold bowl H16 was placed directly behind the skull (Figure 3.39; Gürsan-Salzman 1992, 98), though its shape is neither cup nor jug (Figure 3.29; Koşay 1951, CXXXI). It is counted here as a bowl for drinking (Tables 3.2 and 3.3). Bowls from Tombs C and A1 (C69, MA8) were placed close to the skeletal remains, or with items usually associated with them (Gürsan-Salzman 1992, 81, 83). Upon the base of MA8 is a small omphalos. The omphalos is a characteristic feature of drinking bowls during the Iron Age (Toker and Öztürk 1992, 23-24), used to stabilise the bowl as it is drawn towards the mouth. This function is appropriate to the Alaca Höyük bowls considering their broad, shallow shape. Bowls with nearly identical dimension were recovered from Trench A at Horoztepe (Özgüç and Akok 1958, 13, 44, Figs. 17-18, Pl. VI,4, VI,6). This may indicate that certain drinking practices were regional in scale (Chapter four).

In Tomb T, the vessels placed closest to the deceased are shapes that are not usually associated with drinking and pouring. Again, the ceramic jars T1073 and T1074 were placed directly behind the neck of the body (Gürsan-Salzman 1992, 86). They are storage vessels but do not feature lids (Arik 1937, CCLXXXVIII-IX), and no trace of food was found within them. From their black burnishing, these vessels seem to have been used for special purposes, like vessels within Tombs A, D, and C. Their position close to the body was probably intentional, and used for the same purpose as jugs. For these reasons the jars are considered to be pouring vessels and are listed together with jugs in Table 3.2. Also associated with the jars was ceramic cup T1764. It is placed behind the skull (Gürsan-Salzman 1992, 86) and is therefore considered to be associated with the deceased.

A number of drinking and pouring vessels were located away from the body, in unrelated areas of the tomb. They may have fulfilled a different purpose than the vessels that were placed close to the body. In Tomb R, a collection of vessels was associated with a cattle skull. They include vessel (bowl?) Al.1084, jug Al.1082, cup Al.1083, and an unnumbered plate; Arik (1937,



75) suggested that they had been deposited together at the end of a graveside feast. In Tomb B, ceramic bowl B726 and mugs B727 and B738 were placed away from the deceased. They were associated with an animal skeleton (Arik 1937, CCXIII), though it is uncertain whether or not this skeleton was intact. As discussed above, it is therefore uncertain if the mugs should be associated with graveside consumption activities, or with sacrificing an intact carcass for the deceased. In Tomb T, the tomb plan drawn by Gürsan-Salzmänn (1992, 86) places a series of gold fragments T1822-23, T1746, and T1828 (Arik 1937, CCLXVI) away from the body. These fragments may have been related to T1829, and in this study all of the pieces are counted as a single vessel (under T1829). The gold cup T1745 was found in five pieces (Arik 1937, CCLIV), though it is uncertain where in the tomb it had been found. Some fragments are reported as having been found near to animal skeleton XIX (Arik 1937, 85, Pl. CCLXVIII). Yet much of the material between Tombs T and T1 was mixed. It is thus difficult to determine where in the tomb these vessels had been placed, and how they had originally been used.

In some of the tombs, the sequence of interment may associate some vessels with the butchered cattle remains. In Tomb K, a collection of objects at the opposite end of the tomb includes at least one pot along with ritual standards and pins (Figure 3.40; Koşay 1951, 166, Pl. CLXX). From one photograph (Figure 3.41; Koşay 1951, Pl. CLXXIV) there appears to be more vessels beyond the area, though none<sup>33</sup> are unaccounted for in the tomb inventory. This area of the tomb was constructed last (Koşay 1951, 166), and it is possible that the standards and pot were deposited while the cattle were being butchered. The pot and standards are bordered by a partial line of stones, within the tomb. This may have formed a hearth where rituals were carried out during the burial. The position of the pot is also similar to that of the K41 silver snake teapot at the opposite corner of the tomb. The teapot is also set amongst a number of stones (Figure 3.40; Koşay 1951, Pl. CLXX); perhaps this is the personal hearth of the deceased. Thus in Tomb K there seems to have been one hearth intended for mourners, and another for the deceased. This area may have been meant to be used by the dead, or it could have been an area where rituals were performed for them.

A similar situation is found in Tomb H. Here, silver jugs H118 and H120 and the spouted bowl or ladle H117 are reported to have been placed in empty areas of the grave, away from the body (Koşay 1951, 156-57). They may be joined by bowl H17, whose position was not recorded. Tomb H also featured disarticulated cattle remains, placed atop an earthen pedestal (Koşay 1951,

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<sup>33</sup> Technically, bowl K3 is not given a position by Koşay (1951, 165-66). However, the vessel is photographed together with K6 in Pl. CLXXV as if it had been within the collection of vessels around the body. It is assumed to have been original to this collection or pile.

112, Pl. CXVII). The jugs may have been deposited before the tomb was closed; the position in "empty areas of the tomb" (Koşay 1951, 156) is unspecific. It may refer to the area behind the platform, visible in Figure 3.42 (Koşay 1951, Pl. CXVII). If so, this area may have been closed separately, possibly in the later stages of the burial, when the cattle was being butchered. What Tombs K and H have in common is an area of the tomb that is clearly distinguished from the area around the deceased. In Tomb K, this area saw the deposition of ritual standards and possibly also objects that are related to food and drink. The empty area of Tomb H may have been similarly used, especially if some disarticulated bone was originally left near to jars H128, H129, and H130 (Figure 3.34; Koşay 1951, Pl. CXXVII). One may speculate that feasting may have been performed in these areas of the tombs. At the very least, they may have been areas where materials for the graveside feast were deposited. The organisation of the tomb also parallels that of the non-élite Grave FIII, which will be discussed later in this chapter. In each of these tombs, there seem to be areas reserved for the dead, and areas reserved for mourners. Both areas either reference or contain the remains of consumed food and drink. They suggest parallel feasting rituals, practiced figuratively by the deceased and also by mourners, at opposite areas of the tomb.

In some cases, the location of drinking and pouring vessels was not available. In Tomb E, the metal pitcher E25 was placed before the body, but the location of cup E26 was not recorded, nor the plate or shield E27 (Koşay 1951, 164). The position of the plate or shield in Tomb L was also not recorded (Koşay 1951, 168). However, two circular objects are placed before the deceased in tomb illustrations (Koşay 1951, Pl. CXC). It is possible that one of these is the unnumbered shield or platter. In Tomb A, jug A75 was placed before the body, but the position of cup A65 is not illustrated by Koşay (1944, illustrated plates) or Gürsan-Salzmänn (1992, 78). Within these tombs, the position of the other objects and materials had, for the most part, been recorded by the excavators. Thus the missing position of these vessels is not because the material has been badly disturbed. These vessels were also different from the personal drinking equipment of the deceased that was placed immediately before the body. Therefore they are listed as having possibly been used for the funerary feast in Table 3.3.

In other cases, the use of drinking and pouring vessels was difficult to characterise for other reasons. This could be because their placement was unique, or because their relationship to the body could not be reconstructed. In Tomb A, The wooden bowl A73a-b was placed at the foot of the skeleton (Figure 3.43; Gürsan-Salzmänn 1992, 78). Because it was not placed before the head, neck, or chest, it was not considered to be a personal drinking item. This role is also already taken up by the metal pitcher A75, which was placed before the chest (Figure 3.35; Koşay 1944, illustrated plates). Instead, the wooden bowl A73a-b may have been a grave gift; it is therefore

classed as having an 'uncertain' purpose in Table 3.3. For Tomb A1, Gürsan-Salzman (1992, 81) has mapped the location of the metal bowl MA8 and metal cup MA36. Yet the position of the human skeleton is uncertain (Koşay 1944, 84, Pl. LXII). The same problem prevents an assessment of the relationship of the skeleton to vessels in Tombs D, S, and T1, whose preservation conditions were exceptionally poor (Koşay 1938, Pl. 95; 1944, 88, Pl. LXII; 1951, Pl. CCI). With the exception of bowl A73a-b, in all of these cases the relationship of the vessel to the skeleton is completely unknown. It may have been placed close to the deceased, or it may have been deposited farther away. For this reason, all of these vessels are listed as, 'uncertain' within Table 3.3.

Other drinking shapes seem to have been intended for non-drinking purposes. Two metal cups in Tomb H (H15 and H18) were placed immediately before the corpse, but contained jewellery (Koşay 1951, 156). Gold bowl H16, placed behind the skull, may have fulfilled the practice of depositing a drinking vessel near to the deceased for that tomb. But cups H15 and H18 raise the question of whether some drinking vessels may have served entirely different purposes. Thus the vessels placed in empty areas of the tombs may have held non-food items or have been intended to serve non-food related purposes. It is worth repeating that one purpose of this study is to identify all of the vessels that may not have been intended for the deceased. Not all of these vessels need to have been used for feasting by mourners, though it is impossible to determine their exact purpose from the available evidence.

Drinking practices may also have varied between the different graves. For instance, perhaps drinking was a gendered activity, and this explains why jewellery filled the cups in Tomb H. This is testable because sex determinations were made for the skeletons within nine out of the fourteen tombs (Kansu 1937; Şenyürek 1941; Kansu and Tunakan 1946). The skeleton in Tomb H was female; however, similar practices were not detected in the other female graves (Tombs H, T, A, L were female; Tombs B, R, T1, A1, and K were male). There was also no difference in how the drinking vessels had been placed within male and female graves. In the other female tombs, vessels were placed behind the torso (L, T), though the same was observed in the male Tomb B. The female Tomb A also featured a jug before the body (Figure 3.35). The sex was not able to be determined for the skeletons within Tombs C and E. In both of these tombs, vessels had been placed near to the body.

There are some objects that seem to have been distributed according to sex. Gürsan-Salzman (1992, 115-16) found that utilitarian objects featured in all male burials, but appeared in only a few female graves. Earplugs were associated with male graves, and castanets with those of females. All female graves contained a diadem, standard, and a hook; these objects were found

in a few male graves, but not all. Personal ornaments featured in both. There was not enough information, however, to determine if objects were gendered male or female (associated with a gender regardless of the sex of the skeleton). There is no basis upon which to assume that vessels, or any other items, were divided according to gender identities. Thus the different practices within Tomb H might have been related to the personality of the deceased rather than to her sex. They also may be due to general variation in burial practice.

### 3. Drinking acts

After eliminating a number of tomb vessels, a total of thirty-seven are considered to have been used for drinking and pouring (Table 3.2). Another eighteen vessels are determined to have been related to food or to serving drink. Of the thirteen tombs in which vessels were found (all tombs excluding F), ten contained jugs or vessels that might have performed the function of jugs (K, L, A, E, T, D, S, B, R, and H).<sup>34</sup> Of drinking vessels, the most common were single-handled cups, found in six tombs (L, A, A1, E, T, and R).<sup>35</sup> In addition, Tombs K and B contained goblets, Tomb C contained drinking bowl C69,<sup>36</sup> and Tomb H a similarly-placed carinated bowl H16. This increases the number of tombs with drinking vessels to ten. Tombs A1, C, and T1 contained drinking vessels but no pouring implements.<sup>37</sup> Tombs D<sup>38</sup> and S contained a jug but no drinking vessel, though this may be a function of preservation (see Gürsan-Salzman 1992, 91). These pairings are presented in Table 3.5. A more detailed account is provided in Table 3.2.

Tomb	F	K	L	A	A1	C	E	T	T1	D	S	B	R	H
P/D		X	X	X			X	X				X	X	X
P										X	X			
D					X	X								

Table 3.6. Vessels for drinking and pouring within the Alaca Höyük 'Royal' tombs. Tombs containing both a vessel for pouring and a cup or other vessel for drinking (P/D), or only one jug or other pouring implement (P), or only vessels for drinking, such as cups, goblets, or bowls (D).

<sup>34</sup>Again, gold handle T1829 from Tomb T is counted as a pouring vessel. Additional pieces Al. 1746, 1822-23, and 1828 might have been parts of the same vessel, as is suggested by Arık (1937, pl. CCLXVI). Jars T1073 and T1074 from Tomb T are considered pouring vessels from their position in the grave.

<sup>35</sup>Cups H15 and H18 in Tomb H are not counted as drinking cups because they contained jewellery (Koşay 1951, 156).

<sup>36</sup>Bowl C69 was probably used for drinking from its association with the human remains (Gürsan-Salzman 1992, 83).

<sup>37</sup>The silver bowl T1 1085 from Tomb T1 is not considered to have been used for drinking or pouring. Its use seemed so ill-fitting for either purpose that the excavators photographed it upside-down (Figure 3.22; Arık 1937, Pl. CCLVII).

<sup>38</sup>Çıradere cups D81 and D82 were eliminated due to their uncertain provenance. Because of this, Tomb D is considered to have contained only one pouring vessel: jug D8.

Both cups and pouring vessels tended to be placed in graves on their own. Of the ten tombs containing jugs (K, A, E, D, S, B, R, H) or jug-functioning vessels (L, T), seven contained only one (L, A, E, D, S, B, R). Single-handled cups, when they were found, were almost always the only vessel of their shape within the tomb (L, A, A1, E, R).<sup>39</sup> The same can be said for metal bowl C69 in Tomb C, and perhaps the carinated bowl H16 in Tomb H. The presence of additional vessels in Tombs K and H may be due to their being the largest and the most wealthy tombs (Gürsan-Salzman 1992, 98, 117-18). Yet even in Tomb K, there seems to be an emphasis upon one vessel. While Tomb K contained four jugs, only one (K1) had been placed directly before the head and neck (Figure 3.38; Gürsan-Salzman 1992, 73).

A single jug or cup may have been intended as 'one last drink' in the graves. Vessels placed near to the body are likely to be personal items, as is observed for other types of objects (Gürsan-Salzman 1992, 114). Their position near to the head, neck, or chest also seems to reference the mouth and drinking. Laying down the body, the grave offerings, and other personal items, including 'one last drink', may have comprised one stage of the burial. We can imagine that a second stage involved the slaughter and butchering of animals. This may have taken place in different areas of some tombs, or outside of others. These stages may have co-occurred. Either stage may have involved procession and other ritual acts, judging from the consistency of certain implements between tombs (ritual standards, statuettes, and jugs for pouring). The next sections examine these aspects in closer detail. They will assess whether specific vessels were common between tombs, and how vessels were deposited. This information may comment upon the role of mourners, as well as the scale of graveside events.

#### i. Drinking sets

Drinking and pouring vessels may have been meant to be associated with one another as a drinking 'set'. These shapes co-occur within several tombs (Table 3.5). They may have been used to pour from one into another. This is reminiscent of the practice of pouring libations in later, Hittite periods (see Güterbock and Kendall 1995, 50-51; Gorny 1996, 152-53). More to the point of this thesis, sets imply drinking or pouring acts, performed before an audience. This is appropriate to the great scale of feasting events suggested by the animal remains. Drinking or pouring acts may also have been done for ritual purposes. Élites may have performed these practices at the 'Royal' tombs along with other rituals in order to position themselves within wider

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<sup>39</sup> Tomb T contained two single handled cups: T1764 of ceramic, and T1745 of gold. The latter cup is only described in the original site reports. It is not photographed or illustrated (Arnk 1937 CCLIV).

belief systems at the site. In this scenario, participants at the tombs may have played a role in authenticating the position of élites.

Both jugs, jars, or other vessels for pouring and cups or bowls for drinking occur in eight tombs (K, L, A, E, T, B, R, and H). Tomb A1 may be added to this list because of the close proximity of bowl MA8 and cup MA36, though they are both drinking vessels. If these vessels share characteristics in their placement or appearance, then they may have been used together. It is possible that 'sets' had also featured within graves suffering from deterioration and disturbance (F, C, T1, D, and S), and their presence cannot be detected.

Within these nine tombs, the placement of drinking and pouring vessels is often related. They are placed aside each other in Tombs K, L, T, and R, and on opposite sides of the body in Tomb B.<sup>40</sup> The bowl MA8 and cup MA36 in Tomb A1 may also have functioned as a 'set', as both were associated with a large collection of items (Gürsan-Salzman 1992, 81). We are prevented from knowing whether this trend continues in Tombs A and E by incomplete recording or poor preservation. In Tomb E, jug E25 is placed before the skull, yet the original location of jar E26 remains unknown (Koşay 1951, 164). The vessels in Tomb H cannot be related as a set. Jugs H118 and H120 had been placed in empty areas of the tomb (Koşay 1951, 156). They could not be associated with the metal bowl H16, placed behind the head, or cups H15 and H18, which contained jewellery.

Decoration further suggests that drinking and pouring vessels were intended to be used and deposited together. The jug Al.242 and goblet Al.241 from Tomb B are of similar size (miniature), and both are fluted (Arik 1937, Pl. CLXX-CLXXI; Töker and Öztürk 1992, 30-31, 41). They appear to have been a set to begin with. From excavation photographs they were both placed close to the body (Figures 3.37; Arik 1937 Figs. 79-80; Gürsan-Salzman 1992, 93). Jug K1, goblet K4, and necked vessel K2 also feature similar fluting (Toker and Öztürk 1992, 32, 42, 50). In Tomb K they were interspersed around the torso of the deceased (Figure 3.38; Gürsan-Salzman 1992, 73).

Vessels placed together within the tombs were not always composed of the same material. At least, they do not appear to be. These observations may not be reliable; metal vessels from the site are now understood to be copper vessels coated in gold, silver, and electrum (Yalçın 2011). In the original site reports, the vessels were inaccurately described as being composed

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<sup>40</sup> Jug Al.242, goblet Al.241, and an unnumbered goblet stem seem to have been placed together, from photographs of Tomb B (Arik 1937 Figs. 79-80). In Gürsan-Salzman's (1992, 93) illustration they appear on opposite sides of the body. This discrepancy only affects the decision of whether or not vessels were sometimes deposited in heaps or piles, together with other objects (below). It does not affect the interpretation that vessels were used for drinking, by the deceased or by others. This is because, in either scenario, the vessels are still associated with the upper torso of the body.

entirely of one type of metal. Yet these observations may still be useful as a general indication of vessel appearance. After all, the metalsmiths of the north-central region were deliberately altering the appearance of vessels (Zimmermann, Yıldırım, Özen, and Zararsız 2009). Relying upon the original observations of the excavators, results are mixed. In Tomb T, ceramic black-burnished jars T1073 and T1074 were placed behind the skull alongside ceramic, black-burnished cup T1764. All three were inspired by metal pieces (Arık 1937, Pls. CCLXXXVII, CCLXXXIX). They are suggestive of sets even without including the gold cup T1745 (Pl. CCLIV). Similarly, jug Al.1082 and cup Al.1083 from Tomb R are both of 'potentially silver' composition (Arık 1937, CCXXXIV, CCXXX). They were grouped together with the copper vessel (bowl?) Al.1084 and the uncatalogued plate. The cup and bird-shaped rhyton (here taken to be a pouring vessel) in Tomb L are dissimilar. One is reported to be of gold, and the other of silver (Koşay 1951, 169). In Tomb H, gold cup H16 is placed away from jugs H118 and H120, which are both of silver.<sup>41</sup> The jug and plate in Tomb E are of silver, while the E26 handle fragment is of ceramic (Koşay 1951, 165). In Tomb A, both jug A75 and cup A65 are reported to be of silver (Gürsan-Salzmänn 1992, 141), though again, the location of cup A65 is not reported.

From this evidence, the presence of sets is only marginally supported. Vessels within five tombs seem to be related to each other from how they were placed. At times, this was supported by their décor or composition. This includes a jug, goblet, and necked vessel within Tomb K, and a miniature jug and miniature goblet in Tomb B. A jug and cup are related in Tomb R, as well as storage vessels and a cup within Tomb T. A cup and a rhyton are placed together in Tomb L. They are made of different materials, though this might be arbitrary. As above, paired objects were not always similar in their appearance. Additional sets may have existed within Tombs E and A, however in either tomb, the location of one vessel is unknown.

Taken together, jugs and cups were deposited in a consistent way within the tombs. This is a good indication that they were used for a standard grave practice. Yet the shapes were not consistently associated with each other in the majority of the tombs. It is not possible to state that burial always involved both of these shapes. Therefore it is not possible to conclude that burial always involved drinking practices related to these shapes. However, in most of the tombs, at least one jug or cup was placed near to the chest of the deceased. Even if the shapes were not always paired together, they were each a consistent feature of the tombs. This indicates that drinking and pouring were two essential, if not always related, elements of burial.

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<sup>41</sup>H118 and H120 are described by the excavators as being silver in composition ('gümüş', 'argent': Koşay 1951, 65, 160), not gold as labelled by Gürsan-Salzmänn (1992, 114).

## ii. Vessels deposited as a collection within the tombs

In at least one tomb, several vessels were found together, unrelated to other objects and aside from the pairing of objects within drinking 'sets'. This may be the result of individuals depositing their vessels together in a heap following tombside drinking acts. Tomb K provides the most clear example of this practice (Figure 3.44). A small number of other tombs may have also featured collections of vessels and other objects.

Within Tomb K, several vessels were deposited together, directly before and behind the upper torso of the deceased (Koşay 1951, Pl. CLXXV; Gürsan-Salzman 1992, 73, 117). The collection consisted of nine items,<sup>42</sup> including four beak-spouted jugs (K1, K39-40, K48), two goblets (K4-5), one cup (K3), and two necked vessels (K2, K6). As above, jug K1, goblet K4, and necked vessel K2 were similar in their décor. They seem to have been interspersed around the upper torso, from the back of the head (K2) to before the chest (K1, K4). They may have been used together. The remaining seven vessels feature different décor and construction. A silver snake teapot, K41, was placed in a corner of the burial platform, behind the deceased and farther away than the necked vessel K2 (Figure 3.40; Koşay 1951, Pls. CLXX, CLXXII). It was not part of the collection around the deceased, but was probably related to these objects as tomb provisions.

Objects may also have been deposited in heaps or piles within Tombs R and B. In Tomb R, the copper vessel (bowl?) Al.1084 was associated with jug Al.1082, cup Al.1083, the unnumbered plate, and also a cattle skull (Arik 1937, 75, Pl. CCXXXIV). In Tomb B, goblet Al.241, jug Al.242, and the unnumbered goblet stem appear from tomb photographs to have been deposited in a small pile (Figure 3.45; Arik 1937, Fig. 80).

These heaps or piles draw attention to the role of mourners in placing vessels within the tombs. It is possible that each mourner deposited a single item, and was unconcerned with the types of items deposited by others. Thus a single-handled cup MA36 in Tomb A1 is joined by the omphalos bowl MA8 because they were deposited by two different individuals. This may mean that pairs of vessels were deposited by individual drinkers, and not as a drinking set. It may also indicate the number of tombside drinkers. Jugs H118 and H120 and the 'ladle' H117 may have been placed in a corner of Tomb H by two or three different individuals. In other tombs, vessels might have been deposited as the result of both processes. For example, in Tomb T, black-

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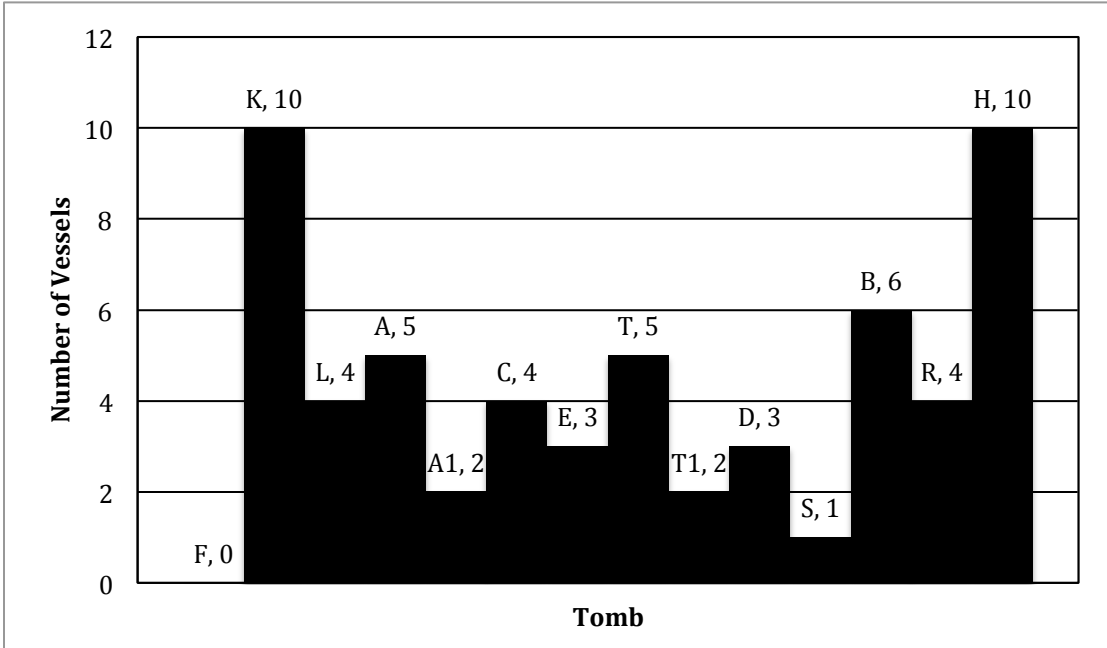
<sup>42</sup> While Gürsan-Salzman (1992, 117) reports that nine vessels were placed around the body, she is probably restricting her discussion to metal items. In her illustration of the tomb, ceramic beak-spouted jug K48 was also placed close to the other vessels and directly before the upper torso.



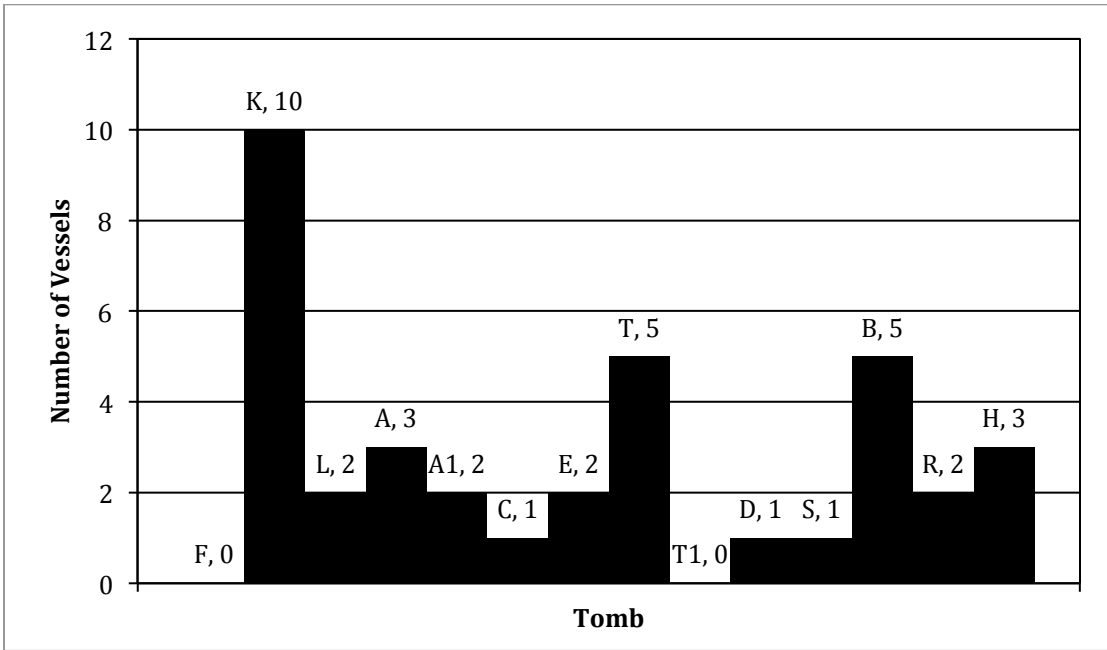
burnished jugs T1073 and T1074 and cup T1764 were deposited close to the body, and were intended for the deceased. The gold cup T1745 and vessel fragment T1829, which were found in an unrelated area, may be the result of drinking by others. Perhaps mourners performed a drinking act together, to which the deceased was meant to figuratively participate. This may be the reason that cups were also placed near to the mouth of skeletons within two graves at Resuloğlu necropolis (Chapter four).

The presence of several vessels within most tombs suggests that tombside events involved a large number of participants (Graphs 3.1-3.3). Yet this is far fewer participants than that implied by the amount of meat sacrificed at the tombs. Above it was explained that the sacrificed cattle and other animals would have fed hundreds of participants. This may mean that far fewer mourners drank at the tombs than feasted upon the butchered meat. The community may have been present, but drank using vessels made from other materials, or did not deposit them. It is also possible that the events at the tombs involved only a small number of individuals. The animals may have been butchered here, but the meat was carried away, and distributed to the community without their being present for the burial.

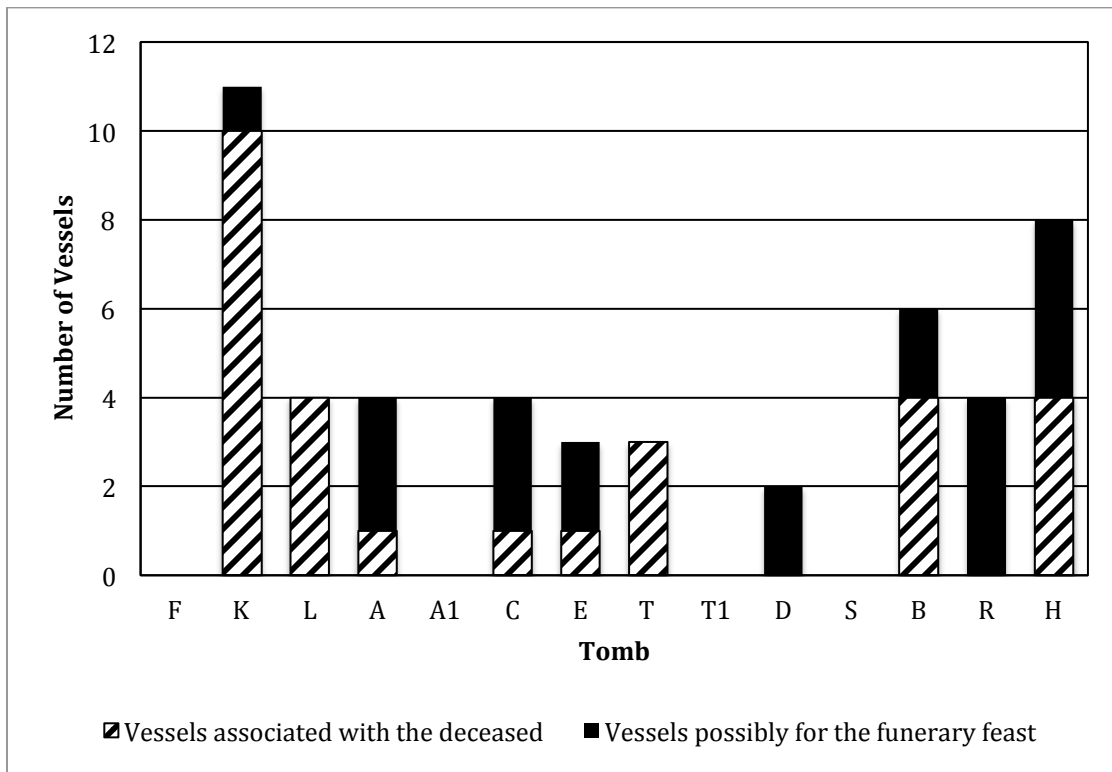
Yet even if graveside events involved far fewer individuals than the butchered animals imply, they would still have functioned as a significant display of wealth. The slaughter of cattle and other animals is expensive. Even if the meat was distributed after the event had finished, this does not change the cost, nor its being advertised throughout the community. Because of their cost, the community would also have been aware of the precious metal vessels, jewellery, and other implements that had been deposited. Whether graveside events were closed to a small number of élite or open to the greater community, the impact upon settlement organisation would have been significant. The few non-élite graves at the necropolis may clarify whether the practices at the 'Royal' tombs were unique to burials of the period. They may also clarify the nature of drinking practices, and who was meant to participate. Comparing the practices between these tomb groups is able to give some perspective of the role of drinking and feasting practices at the settlement. In turn it might be possible to identify if and to what extent these practices shaped the organisation and complexity of the community.



Graph 3.1. Alaca Höyük 'Royal' tombs. Number of vessels by tomb (see also Table 3.1).



Graph 3.2. Alaca Höyük 'Royal' tombs. Number of drinking and pouring vessels by tomb (see also Table 3.2).



Graph 3.3. Alaca Höyük 'Royal' tombs. Number of vessels intended for the deceased and number of vessels possibly for the funerary feast (see also Table 3.3).

### B. Drinking and feasting at the Alaca Höyük non-élite tombs

Despite the wealth on display at the 'Royal' tombs, the necropolis was not reserved for the élite. Ten non-élite burials were also located within or near to the grounds of the 'Royal' cemetery. Most were inhumations (FII, FIII, P1, P2, G2, and G3), but the burials also included pithos (F1, Sk.18) and chamber burials (G1, G4). Several of these graves are probably contemporary with the 'Royal' burials. They are modest in comparison, and suggest that social differentiation was present in the community during the period in which the 'Royal' tombs were established.

The chronology of the non-élite graves is as problematic as that of the 'Royal' tombs. Gürsan-Salzmänn (1992, 71) assigns the non-élite tombs to different settlement levels based mainly upon their stratigraphic position. At times, the pottery also acts as a chronological indicator. From this evidence, six graves (P1, P2, Sk.18, F1, FII, FIII) were determined to be roughly contemporary with the 'Royal' tombs (Gürsan-Salzmänn 1992, 71). In general, the contents and general characteristics of these graves are comparable to that of the 'Royal' tombs. It is possible to make general observations about the different kinds of burials based off of this

information. However, the issues that complicate the relationship of the 'Royal' tombs to the wider settlement at Alaca Höyük also apply to the non-élite graves. These issues include the stratigraphy and a lack of architectural remains for reconstructing a plan of the buildings of Levels 5 and 6. This analysis is only concerned with comparing the general features of the non-élite graves to the 'Royal' tombs, and this evidence is robust and available. A more pointed discussion that attempts to assign specific features or burial practices to building levels at the site would deserve further scrutiny.

The non-élite graves contained vessels for drinking. At times, there is evidence for graveside feasting. Of the six graves that may align with the 'Royal' tombs, four contained a small amount of grave goods (Sk.18, P2, FII, and FIII; Gürsan-Salzman 1992, 106-10). Aside from the pin in Grave P2, all of these goods were related to food or drink. Sk.18 contained an empty jar closed with a stone, suggesting that it had held food. The only item within Grave FII was a miniature goblet f92 (Koşay and Akok 1966, Pl. 56). This may have been intended for 'one last drink'. It is unknown, however, if the goblet had been placed close to the deceased, as they were within the 'Royal' tombs. Drinking vessels were also placed within graves that are assigned to earlier periods (Gürsan-Salzman 1992, 102-106). Grave G1, a chamber tomb, contained several fruitstands, jars, and a burnished and incised mug (Koşay and Akok 1966, Pl. 60). According to Gürsan-Salzman (1992, 104), these materials are appropriate to Level 9 at the site. From this information, drinking had long been a feature of burial, and sometimes involved a great number of vessels placed within a single tomb.

Non-élite Grave FIII is assigned to Level 5, contemporary with the 'Royal' tombs. This is relatively secure because its contents are typical of Level 5 at the site (Gürsan-Salzman 1992, 110). Grave FIII also demonstrates a number of similarities with the 'Royal' tombs (Figure 3.46). These include feasting upon butchered animal remains, and drinking together with others. Within Grave FIII, the deceased was placed upon a platform. At the feet of the flexed skeleton was a large amount of animal bone that was broken, charred, and scattered (Koşay and Akok 1966, Pl. 145b). This suggests that the animal was consumed at the grave. Grave FIII also contained no less than seventeen drinking vessels. These were deposited as one large collection of vessels, on the opposite side of the grave from the skeleton. All were drinking and pouring shapes (Figure 3.31; Koşay and Akok 1966, Pls. 53, 55, 145b). They included ten beak-spouted jugs (f16-25), three wheelmade flaring cups (f27-29), one cup with a handle (f26), and one anthropomorphic vessel (f15). Also included was a shallow bowl (h119) and a buff wheelmade and incised teapot (f35). None of the vessels were deposited upright. They were probably empty when they were set in the tomb. From their shape, the flaring cups were for drinking, as could have been the shallow bowl,

from a handle attached to its side (Koşay and Akok 1966, Fig. 55). The flaring cups also find parallel at Böğazköy NW-slope 9 (Orthmann 1963, Pl. 61; Gürsan-Salzmänn 1992, 266), where their bases are sometimes shaved to a point (Schoop 2009b, Fig. 3B). This suggests that the flaring cups in Grave FIII were used for drinking special beverages. The jugs in non-élite Grave FIII were uncovered; they were probably used for drink, rather than food. The burnished teapot is similar to the silver snake teapot K41 from 'Royal' Tomb K (Koşay 1951, Pl. CLXXCIII-IX, CXXXII; Toker and Öztürk 1992, 58). According to Gürsan-Salzmänn (1992, 114), the ceramic jugs within FIII are of the same type as silver jugs H118 and H120 from Tomb H.

Grave FIII is similar to the 'Royal' tombs in several respects. Yet there are also a number of important differences, and these may help explain the practice of graveside drinking. Grave FIII was located towards the centre of the settlement and near to Building E (Figure 3.7; Gürsan-Salzmänn 1992, 109-10, Plan IIIc). It was not dug at the necropolis, though this is not unusual; burials were located throughout the settlement during the EBA (Gürsan-Salzmänn 1992, 48, 69, 112). The grave may have been related to ritual events occurring within Building E (below). Grave FIII also contained a juvenile, or subadult (Gürsan-Salzmänn 1992, 109). The young age of the interred may point to ascribed status, or status that is assigned to an individual through their social associations. It is not earned by merit or other achievements, which presumably a juvenile has had little opportunity to accrue or demonstrate. Ascribed status would explain the effort and expense of Grave FIII. Yet despite the large number of vessels and sacrificed remains, the level of wealth at FIII is not comparable to that of the 'Royal' tombs. It seems premature to class FIII amongst the 'Royal' tombs on the basis of age and the amount of vessels. Grave FIII contained ceramic vessels, while the 'Royal' tombs held vessels of metal. In terms of its contents, FIII seems more akin to Grave G1, which also contained a large number of drinking vessels but which is dated earlier than the EBA. In this light, Grave FIII seems to be a continuation of longstanding burial traditions, rather than a less costly version of 'Royal' burial rites.

From Grave FIII, graveside drinking was not strictly an élite activity. It was a tradition that extended back much earlier, from the large amount of vessels that were placed within Grave G1 (Koşay and Akok 1966, Pl. 60). In the EBA, this custom was still being practiced, and by different social groups. Special beverages were at least occasionally available and affordable to high-status groups as well as the non-élite. From the number and variety of vessels in Grave FIII and the 'Royal' tombs, burial was a social occasion. It involved a large number of people, who drank and ate together. A single vessel or vessel pair was often placed near to the torso of the skeleton. This may have been meant to include the deceased in drinking occurring outside of the tombs.

Drinking and feasting was done in a similar way between both tomb groups. The extra vessels in 'Royal' Tombs K, T, B, R, and H (above) may have been the result of drinking by mourners. In Tomb K, ritual standards and an unnumbered pot were placed across from the deceased, in an open area of the tomb (Koşay 1951, Pl. CLXX). This may also have occurred in Tomb H (above). This is also detected at Grave FIII. Grave FIII was an inhumation burial, and so was probably not reopened. The animal bones were charred and broken fragments; therefore the animal carcass was consumed, and the bones deposited, before the tomb was closed. The drinking vessels were deposited at the opposite end of the tomb, which suggests that drinking continued for some time afterwards. From the food vessels atop the 'Royal' Tombs A and C (Koşay 1944, Pls. LXII, LXVI), these activities could also continue long after the grave had been closed.

The non-élite graves clarify that the 'Royal' burials did not create new symbols or drinking practices. Instead, they *repeated* these themes, which had long been practiced within the culture. Individuals did not participate in feasts because they provided access to new and restricted food and drink. Instead, they would have attended because graveside drinking was a well-known social practice. Feasts at the 'Royal' tombs may have involved more rare or costly varieties of food and drink, or offered food and drink in greater abundance. But these were variations upon an activity that was already long-established within the settlement.

### **C. Drinking in a non-mortuary setting: the tulip-shaped goblets of Level 5**

Shared drinking was not only practiced at burial events. Level 5 also features evidence for shared drinking in a non-mortuary setting. This provides a way to compare the act of drinking in different settings. The characteristics of the vessels that were used and how drinking was done may be compared between them. Concepts from social anthropology discuss the social purposes of shared drinking. This provides one way to better understand the purpose of drinking at the 'Royal' tombs, and how it relates to the organisation of the settlement.

The excavations of Level 5 at the site unearthed a large collection of goblet sherds. They had been smashed and deposited in a heap or pile immediately below Level 4. The original excavators suggested that the sherds were the remains of a feast (Koşay 1966, 64-65). In the process of studying pottery from the site, Gürsan-Salzman (1992, 181) reconstructed "at least 71 vessels from these sherds." The number of vessels that were originally deposited may be higher. Some sherds may have been undetected or lost during the original excavation, which would result in a greater number of reassembled vessels. The position of the collection, at squares 40-42/XXXII-XL, was nearby to Building E. The context may have been originally located inside of

the building, though the remains of Building E are too fragmentary to tell (See Figure 3.5; Gürsan-Salzmänn 1992, 181). During Level 5, Building E is located around sixty-five metres to the northwest of the 'Royal' tombs.<sup>43</sup> This is close to the centre of the höyük.

The setting in which the vessels were used is poorly understood. Building E was incompletely excavated (Koşay and Akok 1966, Pl. 145b; Gürsan-Salzmänn 1992, 57, 369). Its purpose was unable to be determined. Vessel characteristics provide some degree of insight. The vessels are classed by Gürsan-Salzmänn (1992, 181-82, 266) as tulip-shaped goblets, and are related to fruitstands. They form a large part of the Level 5 assemblage. They feature an S-profile, cylindrical body, and wide-arching strap handle (Figure 3.47; Koşay 1973, Pl. LXXIX, r5; Gürsan-Salzmänn 1992, Pl. 3.3). Thumbmark depressions at the centre of their spherical bases may have functioned to stabilise the goblet. This depression may also be a reference to omphalos bases, which would become an iconic feature of drinking bowls during the Iron Age (Toker and Öztürk 1992, 23-24). Again, an omphalos bowl was recovered from "Royal" Tomb A1 (Figure 3.18; Koşay 1944, 118, Pl. XCIV). These bowls are found at other sites in the north-central plateau (Chapter four), including Trench A at Horoztepe (Figure 4.7; Özgüç and Akok 1958, 44, Fig. 17, Pl. V1:4), and omphalos bases are also applied to cups from Ahlatlıbel (Figure 4.14; Koşay 1934, 52-53, Fig. 408).

The goblets seem to be a reference to metal vessels. Some are painted with red horizontal bands, but most are black-slipped and highly burnished, with a metallic lustre (Gürsan-Salzmänn 1992, 181, 241, 266, 395). All of the vessels are thin-walled, suggesting that they might be imitations of metal vessels. Because they are thin-walled and burnished, they probably made a high-pitched sound when they were hit together, similar to metal vessels. One wonders if the goblets were deliberately made of ceramic so that they could be satisfyingly smashed.

The tulip-shaped goblets seem to encourage drinking in a manner that is also seen in other regions of Anatolia. The base of the goblets are spherical. They may have been difficult to set down while they were filled with liquid. It is probably for this reason that Gürsan-Salzmänn (1992, 266) names the vessel a local variant of the western *depas amphikypellon* drinking vessel. The *depas* is considered to be an explicit reference to drinking when it emerges in western Anatolia during the EB II (Chapter six). The pointed base of the *depas* means that the vessel must stay in motion. While the *depas* was not widely adopted in north-central Anatolian settlements during the EBA (Spanos 1972; Rahmstorf 2006, 52-55), a few isolated *depata* were found in the

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<sup>43</sup> Calculated from scaled site plans provided by Gürsan-Salzmänn (1992, Plan IIIb). This distance does not take into account a difference in elevation between the 'Royal' tombs and the settlement. The tombs were located along a slope along the southern hillock at the site. The area around Building E was lower, and located towards the centre of the höyük. This may have also been close to the centre of the EBA settlement.

region. Two of these are from Alaca Höyük (Koşay, Ünal, and Çızgen 1967, 171, 212; Gürsan-Salzman 1992, 179, 232, 266). One handmade, black-slipped, and finely-burnished depas is reported from the deposit over Tomb L. A second depas probably postdates the tombs, as it is assigned to Level 4, and is wheelmade. A two-handled cup, similar to the depas, was recovered from Resuloğlu cemetery, roughly ninety km to the west (Figure 4.18; Yıldırım 2006, Fig. 11; Yıldırım and Zimmermann 2006). It is possible that the depas trickled in during the Early Bronze Age by the occasional import. Regardless of the inspiration for the shape, residents of communities in both the west and north-central Anatolia were sharing their drink in a similar way. The two wide handles of the depas imply that it was passed between drinking participants. The tulip-shaped goblet was more likely a personal drinking vessel, from its single handle. But it may have had to stay in motion. At the very least, the exaggerated arc of the goblet and its spherical base demonstrate similar objectives in drinking. This includes drinking together with others, and in a setting in which drinking does not stop.

The way that the tulip-shaped goblets of Level 5 were used also demonstrates shared drinking. The goblets were smashed and deposited in a single collection, possibly located within Building E. Even if the vessels had accumulated over several drinking events, the manner of their deposition remained the same. They were always smashed and left in one specific place. It is likely that they were used by several participants at once, at one or more events. The act of smashing goblets would have transformed the act of drinking into a shared experience. Food and drink must be used up, spent. Ingesting food may be quiet, gradual, and felt only by the individual, though it may be witnessed, seen and heard, by others. By contrast, smashing is an act that is felt, seen, and heard together *with* others. It is experienced simultaneously. Just as one may drink with others and experience the taste of the same beverage, so may smashing draw participants together through a common sensation. Yet in smashing, the experience is reduced to a single, immediate, and tangible instance.

Theory related to the ritual smashing or breaking of objects was presented in the previous chapter. There it was explained that the ritual smashing or breaking of objects does not need to be interpreted as killing or sacrifice. It may not be to take anything away from the object, such as its ritual power (cf. Fossey 1985, 23; Garfinkel 1994; Soles 1999). Such a view focuses upon loss of the object. It interprets the practice as a disorder in the flow of commodities, an end to its 'social life' (cf. Kopytoff 1986). Yet the deliberate destruction of objects may also serve a social function. It may be interpreted as a purposeful and structured act (Vesa-Pekka 2005; Rehak 1995a, 1995b; Hamilakis 1998). J. Chapman (2000; with Gaydarska 2007) sees the destruction of objects as embodying social relationships. Through enchainment, the physical fragments of



objects, when kept, represent the event where were broken, and the individuals who were present at the event. The smashing of the tulip-shaped goblets was significant because it involved a number of individuals: it was a social event. It does not matter if the event was large, smashing all seventy-one vessels at once, or if it involved a small group, over several events. The objective was to experience the event together with others. This concurrent sensation overcomes the physical, bodily limitations of consumption. It transforms drinking from a personal experience into something that can be felt together with others, and is a means to draw individuals together. Smashing also would have made the event more permanent. The destruction of the vessel ensures that the event and the occasion cannot be duplicated, and therefore the bonds between participants cannot be undone. The vessels and participants are permanently affixed to that particular sensory experience, and that specific communal consumption event.

The goblets demonstrate that shared drinking at Alaca Höyük was not restricted to the 'Royal' tombs. They also demonstrate that shared drinking was an experience that extended beyond the physical consumption of substances. It incorporated additional sensory responses, including sight and sound. Hamilakis (1998, 117) attributes the power of shared food and drink to a 'bodily mnemonic' that "generate(s) bodily sensory and emotional experiences, resulting in habitual memory being sedimented in the body." In other words, physical ingestion more firmly cements relationships because it involves a sensory response, which may, at times, be emotional. Drinking at the 'Royal' tombs would have incorporated a number of sensations, including sight, sound, and smell. The practice may also have involved procession, from ritual standards, castanets, and maybe also draught-pulled wagons, before animal slaughter and the roasting and cooking of meat. These elements are dramatic. They would have made the event memorable to participants. As individuals participated in the feast, the social relationships between them became more secure. This is also facilitated by fragmentation, most tangibly the physical destruction of key features of the feast: the butchering of animals at the tombs. As J. Chapman (2000, 40) explains:

"The division of the carcass... provides an archetypal instance of a fractal resource, where each portion carries its own value as well as the symbolic value of the whole animal and that of the [larger event]... exchange of the portions of large animals... would be an important means of incorporating exchange partners into an ongoing network, which can be maintained only through constant reiteration of food exchange."

In consuming the animals butchered at the 'Royal' tombs, participants were contributing to the destruction of a resource. This bound participants together, and highlighted the distinctions between them. For instance, there may have been a hierarchy in the distribution of certain cuts of meat. This hierarchy would not only have been witnessed by participants, but also supported by

them through their presence. As the meat was eaten, the nature of these social relationships, whether inclusive or exclusive and hierarchical, was incorporated into the physical bodies of participants. This "bodily mnemonic" (Hamilakis 1998) made them more enduring and permanent. At the 'Royal' tombs, a great deal of information may be extracted by comparing the objects that were deposited within them. The distribution of drinking vessels between the tombs and how vessels were used and deposited may provide information about the social relationships between participants. Non-élite graves indicate whether or not these practices are particular to social class. This information, along with the processes that are involved in shared drinking, may be combined to assess the nature of social complexity at the site.

#### **D. Conclusion**

Alaca Höyük provides evidence for drinking across several situations. This includes its fourteen 'Royal' tombs, as well as several non-élite graves. Drinking is also observed within a non-mortuary setting near to Building E in Level 5. This chapter examined the material that was associated with these contexts. The number and character of different drinking vessels, as well as details of how they were used, were analysed in order to determine the significance of drinking at the site. In particular, this analysis was interested in how drinking could be used to assess the nature of social complexity.

Drinking and feasting material is considered alongside information about the Alaca Höyük settlement. Periods 6 and 5 at the site, coincident with the tombs, saw the construction of large buildings. It is unknown if they served an administrative or ritual function, or if they were community workshops or storerooms. Rich metalwork from the tombs indicates the presence of specialist craft producers. Although this evidence is limited, craft specialisation points to at least seasonal labour differences within the community. For at least part of the year, craftsmen were not engaged in growing their own food. Combined with the presence of non-élite graves, this signals some degree of ranking within the Alaca Höyük population. Thus while events at the 'Royal' tombs may have been held for collective, celebratory purposes, it is unlikely that they had purely egalitarian objectives. A number of questions may help to better understand what role these events held within the community. Did drinking at the tombs involve a large number of participants, or was access to these events limited? Were they closed to non-élites? Was drinking here an expression of high status and prestige? Was it used to demonstrate social distance, or to express social solidarity, even if this masked more competitive objectives? Or was the practice open and participatory, and intended to facilitate relationships between community members?

The 'Royal' tombs point to developing wealth within the Alaca Höyük community. Again, many of the objects that were deposited within the tombs were crafted using advanced metalworking techniques. The tombs also saw the costly slaughter of dozens of animals. All of these elements would have communicated that some individuals within the settlement had access to greater wealth and resources. Yet it is unclear to what extent these individuals were able to control the production or exchange of resources at the settlement. There are no indications of writing or other record-keeping. The single seal B 651 from Tomb B (Arık 1937, 62, Pl. CCXXIII; Gürsan-Salzman 1992, 94, 227) is likely intrusive. It is not enough to indicate that resources were centrally managed. Élites may have directed some developments. But what is of interest is whether their influence had expanded into the development of an all-encompassing, centralised system.

Events at the 'Royal' tombs may have been a way for emerging élites to advertise and maintain their higher status within the community. In this scenario, events at the tombs were used to demonstrate social distance, and to reinforce existing differences in wealth, status, and power. This could be done through a variety of techniques. First of all, the destruction of resources would have been an effective way for élites to establish and advertise their higher status. Slaughtering animals, especially draught cattle, would have been an incredible demonstration of wealth. So too would have been the sacrifice of prestige objects within the tombs, such as tin-bronze vessels coated (Yalçın 2011) in gold and silver. This conspicuous consumption (Veblen 1970, 60) of resources would have communicated that the individual depositing or wasting wealth had more of it to spare. This suits Dietler's (1996, 98-99) description of the diacritical feast, which use elaborate foods, food settings, and related objects in order to facilitate competition with other élites. Displaying these objects also communicates status to the rest of the community. Even if the audience at the tombs was limited, the butchered meat suggests that these events were performed with a larger audience in mind. At the 'Royal' tombs, several elements are appropriate to performance and display. Drinking sets suggest that drinking rites were performed. This may have involved libations or toasts. From cattle wagons, ritual standards, and musical instruments, these acts may have been done within a larger procession. These elements are dramatic. They involve special, expensive materials, perhaps even supernatural connotations. They would have associated the 'Royal' interred with these features, and thereby communicated prestige according to the highest and most powerful symbolism within the culture.

Élites may thus have achieved influence by positioning themselves within the greater system of cultural beliefs. The necropolis had long been an important and symbolically-charged area in the community. Rituals were repeated at the tombs across the different occupations at the

site. Food within the tombs speaks to a belief in life after death (Gürsan-Salzman 1992, 128). 'One last drink' seems to have been a feature of almost every burial. It dictated how many of which kind of vessel was deposited, and where. These traditions continued from earlier periods, from the contents of other, more humble, non-élite graves at the necropolis. Graves of the EBA referenced these earlier beliefs. Tombs are decorated as wagons, and they contain statuettes and standards featuring the bull or the stag. It is possible that, by the EBA, bulls, stags, and wagons were being adopted to suit an élite agenda. Rulers may have associated themselves with these beliefs in order to express that their position was permanent and ordained by a higher power.

Tombside drinking and eating would have reinforced these associations. If it was the élite who provided food and drink, then they would have established obligations of reciprocity on the part of community participants. In taking part, the community would have become indebted to them (Mauss 1990), and obliged to accept the higher status of their hosts. Provisioning the feast may also have secured the loyalty of participants (Earle 1987, 1991). This was not only by providing a desirable resource. It also might have done so through processes of fragmentation. As was explained in Chapter two, fragmenting an object may create an enchainment relationship between participants (J. Chapman 2000; with Gaydarska 2007). It may make their relationship, and their association to the event, more permanent. This is most tangible in the slaughter of animals at the tombs. The carcass is divided amongst participants, illustrating how their individual roles combine to create the greater event. This process also reinforces, for the participant, their social position in relation to the event and the community. This includes their position as a guest or as a host, and in relation to the other individuals present. Consuming the meat and drink causes these roles to become incorporated into the individual lives of participants.

It is also possible that the 'Royal' tombs served as a place of competition between different élite groups. In this scenario, there was no single, central leader or administration at the site. Instead, a number of groups may have been present within the community, who competed against one another for the same resources. These are factions, defined by Brumfiel (1994, 4) as "structurally and functionally similar groups which, by virtue of their similarity, compete for resources and positions of power and prestige." Factions do not provide a better explanation for why the 'Royal' tombs were created. But they do provide an alternative for what role was held by the 'Royal' élite within the Alaca Höyük community. The EBA occupation at the site was largely destroyed, and the remaining evidence gives no indication of writing or of administration. Therefore, despite the wealth of the 'Royal' tombs, it is not possible to assume that they held ruling princes or one all-powerful group of leaders. Factions provide another option for how the

site might have been organised. How this option functioned may be illustrated specifically through food and drink.

Tombside events function in a similar manner regardless of whether they are organised by competing factions or by a single ruling élite. In both instances, meat and drink would be used to attract the community and to gain support from them. This introduces obligations of reciprocity between host and guest (Mauss 1990). Expensive metal jewellery and vessels would be used to advertise wealth and status. Procession and ritual would also position the host within a wider belief system, and thereby justify their political claim. Yet factions are difficult to identify within the archaeological record. They are often indistinguishable from each other (Brumfiel 1994, 4), and may appear as a single class of élite. This is because factions avoid adopting specific political positions so that they do not turn away any potential supporters (Brumfiel 1989, 132-33). Instead, they promote themselves using the belief systems that are already popular within the culture.

Factions are no less able to support craft production and large-scale architecture. Factions create a demand for high-quality prestige goods just as do the members of a single, established group of ruling élite. According to J.C. Wright (2004b, 73, 77), factions are also able to mobilise labour and create stabilising governing mechanisms. Schoep and Knappett (2004) argue that it was competing élite factions that motivated the construction of 'palatial' architectural features at Quartier Mu at Malia. From this perspective, factions could also have directed the construction of large buildings at Alaca Höyük. Some evidence for them might exist at the site. Gürsan-Salzman (1992, 136) detects two 'levels' of élite at the tombs: "ruling" and "non-ruling", based upon the number of objects that were interred with them. Yet between them, these tomb groups are identical in the type of *ritual* items that were deposited. They feature the same bull and stag iconography upon ritual standards and statuettes. This is exactly what we would expect from groups that are indistinguishable in their political platforms.

There is no reliable method for determining whether the 'Royal' tombs housed a single, established élite, or members of several competing élite groups. These differences in social position are too precise to be reconstructed from grave goods alone. It is also questionable to assume so, given the nature of mortuary data. As explained in the first chapter of this thesis, grave goods do not necessarily reflect the social position of the interred (Parker-Pearson 1999, 7-10). Attempting to infer such differences without additional settlement data ignores the different reasons that grave goods may be chosen, and who has deposited them (Parker-Pearson 1999, 8). It also ignores that individuals make fine distinctions between different kinds of objects. Objects within graves may reference familial or group associations, individual identities, or reflect an individual's level of integration within a culture (Barretto-Tesoro 2003, 312). They may express

subversive views about a society, rather than document any specific social position. Burial is also a time when these identities are most likely to be challenged, covered up, or altered by survivors (Fahlander and Oestigaard 2008, 10).

Grave goods are also unhelpful for distinguishing between an established élite or the presence of competing groups. In either scenario, the use of grave goods is identical. Individuals would have used valuable prestige goods to advertise status whether they belonged to a group of established élite, or one of several competing groups. Ideology, indicated by ritual standards and statuettes, could have legitimated the authority of either one or many groups. A "narrowing... of symbolic meaning" is characteristic of factions (J.C. Wright 2004b, 77). Yet repetition of the same ritual symbols is also characteristic of established élite groups within a centralised political organisation. As one group becomes dominant, the symbols associated with them are seen more frequently. In the archaeological record, this would be indistinguishable from competing groups who use the same iconography.

There is also no evidence that the élite at Alaca Höyük were restricted to, or obligated by, the interests of the community. There are no large construction projects that seem to have served community interests rather than élite aggrandisement. Thus while tomb-side events certainly may have provisioned the entire settlement, it is unclear what role the community would have played in the situation. Graveside drinking was a longstanding practice within the local culture. This would have attracted participants to the tombs, or facilitated the provision of meat to households later on. It is possible that élite groups, who competed against one another, used the tombs as a way to advertise their legitimacy and jostle for support. This includes distributing meat to the community, displaying ritual iconography, demonstrating special drinking acts, and ingesting special beverages together with others. Yet these acts could also have been used by an established group to maintain their position. They could also use longstanding themes of community participation in order to mask these self-interested objectives (cf. Hayden 1996, 132). There is little in the iconography of the tombs to distinguish between either scenario.

The problem may be in how these objectives are assumed to have been accomplished. It is possible to interpret the operation of top-down, élite-centred development at Alaca Höyük from a different perspective. Costly-signaling theory, or CST (Bliege Bird and Smith 2005; Plourde 2008; Glatz and Plourde 2011) suggests that the display and distribution of prestige goods was a functional means of communicating fitness for leadership. It argues that conspicuous consumption is used in order to advertise leadership success (Plourde 2008, 376-77) and the ability to accumulate surplus (Neiman 1997, 269-70). These displays are practical for the demonstrator as well as the observer. CST may have been used by either competing groups of

élite, or by one established, central, prime élite group. It may have been especially useful during a period of developing political complexity, as a way for the community to distinguish between possible leaders. It may also have been used by established leaders within the community as a way to maintain their position. In both scenarios, groups do not advertise status and prestige in order to coerce individuals into conditions of inequality. They do so in order to advertise their leadership qualities. Inequality might develop not as an intentional manipulation by those at the top, but gradually, as some groups come to accumulate resources (cf. Clark and Blake 1994).

Graveside feasting at the 'Royal' tombs seems to have included the wider community, from the amount of meat that butchering would have yielded. The most likely explanation is that the support of the community was necessary for the political process. Unfortunately, we are prevented from knowing whether the élites at the tombs were members of competing factions, or members of one, dominant group. If these events were hosted by one uppermost élite group, there is no evidence that they formed a centralised administration. Such evidence might have been destroyed by later disturbances at the site. Yet it is unlikely that site organisation reached the heights that it did during the Hittite period, whose sewage system included clay pipes set beneath the roads (Koşay and Akok 1973, 59, Pl. XCI). From the presence of drinking vessels in earlier tombs and EBA non-élite graves, drinking and access to special drinks was not restricted. It is possible that other resources at the settlement were also not strictly controlled. This means that events at the 'Royal' tombs did not distribute products that were normally reserved for the uppermost classes. Therefore there is no evidence that élites obtained their position by redistributing these products, although it is possible that they distributed versions of a rare or better quality. But tombside drinking was a longstanding practice. It could have been manipulated for various purposes. This may have been on the part of several, competing élite groups, or by one established group. Both scenarios involve aggrandisement through precious materials, and possibly ritual elements. Both scenarios also depend upon the participation of the greater community. And in both of these instances, participating in graveside feasting ceremonies would have normalised the differences between individuals. This would have resulted in ranking and inequality within the settlement.

## Chapter Four: Drinking vessels and drinking practices at sites of the north-central plateau

Drinking vessels are deposited in graves and hoards at sites across the north-central plateau. These sites range from Ankara at the south of the plateau, north to the Black Sea coast. The sites are few in number, and have not been excavated on a large scale. There is very little information available with which to characterise settlements, such as domestic architecture, food production, or other aspects of site functioning. Yet taken together these sites provide a broad range of settings through which to investigate drinking. Drinking vessels are known from graves as well as non-mortuary contexts. In most cases the characteristics of these vessels has been well described in the literature. These details may provide insight on how the vessels were used, and also on the nature of drinking practices during the period.

This chapter will examine drinking vessels from sites across the north-central plateau. It will assess their characteristics, and the range of settings in which they were deposited. The analysis will compare the dimensions of vessels that were found at a number of north-central sites. Where enough dimensions are available for a vessel, this analysis will also attempt to calculate their volume capacity. These measurements are studied in order to determine how, and to what extent, vessels are similar between sites. This may indicate whether or not drinking vessels were used in a similar way. Was drinking reserved for special purposes? What was the nature of drinking practices? Who participated? Determining more about drinking may reveal more about the role of social gathering. This may also reveal more about the nature of social relationships, and also social organisation in the region.

It is also possible to examine how drinking vessels were used from the way in which they were handled and drank from. The handling of drinking vessels will be modelled by using objects of similar dimensions and characteristics. They will be handled in a manner imitating drinking practices of later periods. The way in which vessels were drank from will also be inferred from the settings in which these vessels were deposited. These methods will attempt to understand whether vessels were simple to manoeuvre, or difficult. Did drinking from them require skill? Were these skills difficult to learn? The ease with which vessels are manoeuvred may also provide more information about how drinking was done in different settings. This may comment upon the social nature of drinking acts. It also provides a way to test the interpretation of the vessels that is drawn from their dimensions.



## A. Vessel contexts

The drinking vessels that will be examined in this chapter are single-handled cups and shallow bowls. Both of these vessels are known from sites across the north-central plateau. At Resuloğlu and Kalinkaya, nearby to Alaca Höyük, cups were recovered from graves. These cups are similar to some of those recovered from the 'Royal' tombs at Alaca Höyük (Chapter three). Horoztepe and Ahlatlıbel, which are located at either end of the north-central region, feature cups and bowls in a variety of materials. At these sites, the settings in which the cups and bowls were used may not have been mortuary in character.

Small, single-handled cups were recovered from all of the sites described here. They have similar characteristics, even though they were found at different sites. The cups have similar dimensions. They were made of metal as well as of ceramic, and some feature similar decoration. From these similarities, it is possible that the cups were used in the same way, at different sites. This introduces the question of whether or not the cups were used for drinking the same products, for instance special beverages. They may have used in similar ways, for drinking acts or other practices.

Shallow bowls sometimes accompany single-handled cups. In later periods, shallow bowls are used for drinking. They are handled in ways that require difficult manoeuvring and specific drinking postures. It is possible that the shallow bowls from the sites described here were also used for drinking. If so, this may give some indication of whether or not drinking involved difficult manoeuvring, performance, and social display. These behaviours may be related to the nature of social participation at drinking events. They may give some indication of the social relationships between participants.

Vessel characteristics may provide very specific detail about how the cups and bowls were held and drank from. This allows a different kind of information to be extracted from the vessels. This chapter also analyses the manoeuvres and posturing required in the handling of drinking cups and bowls. The ease with which these behaviours could have been learnt draws attention to the social motivations for drinking. It may have been drinking behaviours that were shared across sites. Could this be related to vessel contents? The cups and bowls may have been associated with a specific product that was shared at sites across the plateau. This may indicate that there were broad trends in drinking practices during the period.

The following section introduces the sites where these vessels are found. A description of each site includes the number and type of the vessels that were recovered. It also explains basic information that is available as to the situations in which they were deposited. The analysis then

moves on to compare the characteristics of these vessels between sites. Single-handled cups are examined first, followed by drinking bowls.

#### i. Resuloğlu necropolis

The necropolis at Resuloğlu is located on a ridge overlooking the Delice River Valley, near to the Kızılırmak or Halys River (Yıldırım 2006, 1-2). It is surrounded by three settlements, all of which contributed to its burials. As of 2006, burials at the necropolis numbered 118. More recently, Yakar (2011, 350) has claimed that the number of burials exceeds 150. No plans are available for this necropolis. Instead, its location is marked on Map 1.

Resuloğlu is located around ninety km west of Alaca Höyük (Yıldırım and Zimmermann 2006). The burials at Resuloğlu are far less elaborate and wealthy than those at the Alaca Höyük 'Royal' tombs. Yet despite this difference in wealth, there are a number of similarities between the two necropolises. These similarities suggest that the two sites were part of the same culture complex. Several graves at Resuloğlu featured cattle skulls and hooves. Pairs of metal rings were also found (Yıldırım 2006, 7, Fig. 17:a). From the scale of the photographs, they appear to be around 8.5 cm in diameter, which is slightly larger than the rings from Alaca Höyük (5.6 cm: Arık 1937, Pl. CCLXXVI). This may indicate that burials at Resuloğlu also involved the slaughter of draught cattle. Metalwork is similar between the two sites. At Resuloğlu, high amounts of tin and other alloying agents suggest that the final colour of metalwork was altered (Yıldırım and Zimmermann 2006, Fig. 6; Zimmerman and Yıldırım 2007; Zimmermann, Yıldırım, Özen and Zararsız 2009). This was also observed at Alaca Höyük (Yalçın 2011).

At Resuloğlu, the dead were also provisioned: Yıldırım (2006, 7) interprets uncovered vessels within the graves to be liquid offerings to the deceased. Drinking vessels were found in-between the graves, which suggests graveside drinking (Yıldırım 2006, 7). They include ceramic and metal vessels that were deliberately broken and left in-between the graves. Many metal vessels and daggers placed within the graves had also been deliberately bent and crushed. Animal bone was also found outside of the graves (Yıldırım 2006; Zimmermann and Yıldırım 2007). Yıldırım (2006, 7) writes: "By few examples, cattle skulls or feet bones are found between the cover stones and on the sides or around the base of the *pithoi*" (emphasis in the original). These bones are joined in-between the graves by miniature pots and layers of ash, which point to the graveside consumption of food (Yıldırım 2006, 7). It is possible that there were additional similarities in drinking practices between the two sites, for instance drinking sets and collective drinking acts. Future investigations at Resuloğlu may reveal whether or not this is the case.

Single-handled cups were found within two burials at Resuloğlu. Within Grave M141, one cup was placed upon the smallest finger of one hand of the skeleton (Zimmermann and Yıldırım 2007, Fig. 4). This hand was raised towards the mouth of the skeleton and overlay the other arm (Figure 4.1). From scaled photographs (Figure 4.2; Zimmermann and Yıldırım 2007, Fig. 4), the intact cup from Grave M141 measures roughly 2.5 cm in height, and 6.5 cm in diameter. Grave M141 also contained a second metal cup. This cup had been crushed and placed directly beneath the hand and the first, intact cup, and was also positioned near to the mouth.<sup>44</sup>

Grave M107 at Resuloğlu also contained a metal cup. This cup was not attached to a finger, but its treatment is identical to the second cup within M141. It was deliberately crushed and placed near to the mouth. Though the vessel was crushed, it appears from burial photographs to have originally been wide and rounded in shape (Figure 4.3; Zimmermann and Yıldırım 2007, Fig. 3). No dimensions for this cup are able to be reconstructed.

The metal composition of the cups is not described. From other implements at the site, it is likely that the cups were made of tin-bronze (Zimmermann and Yıldırım 2007, Fig. 6). The contents of the rest of the graves at the necropolis have not been published. Yet photographs of additional single-handled cups (Figure 4.4; Yıldırım 2006, Fig. 13) imply that they may have been a regular feature of at least some graves.

The placement of the intact cup within Burial M141 upon the smallest finger was deliberate.<sup>45</sup> This indicates that drinking from the cups was not intended to be a regular, comfortable, and practical act. Using the cup via the smallest finger would have required unnecessary effort, and energy expended for an impractical purpose. This purpose was likely social in nature. The deliberate destruction of the cup in Grave M107 and the second cup in Grave M141 echoes the treatment of goblets at Alaca Höyük Building E. Both of these elements- special handling and vessel destruction- are also seen farther east, towards the Black Sea coast, at the site of Horoztepe. It seems that the practices that were associated with the cups and with drinking extended across the region.

## ii. Horoztepe

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<sup>44</sup> Prof. Thomas Zimmermann, Bilkent University, personal communication, 22nd October 2012. The cup was not published in Zimmermann and Yıldırım (2007), and no dimensions for this second, crushed cup are available.

<sup>45</sup> Prof. Thomas Zimmermann, Bilkent University, personal communication, 22nd October 2012.

The site of Horoztepe is located near to Erbaa in the Tokat region of Turkey, towards the Black Sea coast. It lies around 164 km, or 102 miles, from Alaca Höyük,<sup>46</sup> at the northern limit of the central plateau (Yakar 2011, 345). It is both the northernmost and easternmost site considered here. Rescue excavations were begun in 1956 by Mahmut Akok and Tahsin Özgüç and continued into the 1960s. The most well-documented and complete account of the site investigations is provided by an early monograph (Özgüç and Akok 1958). Excavations continued after the publication of the monograph, with the results appearing in a series of short articles (Tezcan 1960; Özgüç and Akok 1957; Özgüç 1964).

The site of Horoztepe was not fully excavated. The project began as a rescue excavation in the area of a modern cemetery, after a number of objects were unearthed in digging new graves. A small mound, which featured evidence of Hittite and EBA occupation, was not explored (Özgüç and Akok 1958, 39). The 1958 monograph described nine trenches that were opened on relatively flat ground, within the modern cemetery. This was located four hundred metres to the southeast of the mound. It is unclear if more trenches were opened as excavations continued at the site. Even if they were, these trenches would not have been in the area of the mound.

The objects unearthed from these trenches were similar to those found within the Alaca Höyük 'Royal' tombs. Many items share a similar iconography; metalworking techniques are also comparable. This indicates that the sites were part of the same culture complex (Özgüç and Akok 1958, 57, 59-60; Esin 1969; de Jesus 1980, 130-31; Yakar 2011, 358-62). More specific similarities between the weapons, jewellery, and other implements suggest that Horoztepe is to be dated only slightly later than the 'Royal' tombs (Özgüç and Akok 1958, 43, 55-59).

Trench A was the largest context that was reported within the 1958 monograph. Within the trench were found six discrete hoards of objects that were bent, twisted, and sometimes hammered shut. They may have been deposited within wooden boxes (Özgüç and Akok 1958, 41). Two of the hoards contained mostly vessels. These include three beak-spouted pitchers, one teapot, two small jars or mugs, a platter containing two cups and two bowls, and a pedestal resembling a fruit stand (Özgüç and Akok 1958, 10, 43, Fig. 2-3, Pl. IV:1-2). Many of these objects had been deliberately destroyed, which suggests that they had originally been deposited together.

Trench A is poorly understood. It is described as a grave by the excavators (Özgüç and Akok 1958, 40), yet the context does not need to be interpreted in this way. There were no tomb

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<sup>46</sup> Calculated using Google Maps. Distance 'as the crow flies.' According to Özgüç and Akok (1958, 39), Horoztepe is also 330 km northeast of Ankara.

walls or other boundaries to suggest that Trench A was a tomb. Bones within the trench were scattered (Özgüç and Akok 1958, 41, 51). The soil was sterile, as would be appropriate to refilling a tomb. Yet it is also possible that the objects were deposited as a hoard beneath the floor of a house or other structure.

In this analysis, Trench A is interpreted as a hoard. This is in order to maintain a conservative approach to the deposit, and to avoid drawing unsupported parallels between Horoztepe and Alaca Höyük. All of the objects within Trench A were bent, twisted, hammered shut, or crushed. They are considered to have been used together, and deposited in a ritual manner. Yet they are not interpreted as mortuary objects, as this question must be left to future research.

Two metal single-handled cups were recovered from the largest hoard within Trench A (Figure 4.5). They had been crushed within a platter that had been hammered shut (Figure 4.6; Özgüç and Akok 1958, 41, 44, Pl. V:3-5). The platter also contained two metal bowls (Figure 4.7; Özgüç and Akok 1958, Fig. 17), a pedestal, discs, and a spindle. These had all been crushed. The bowls were of two shapes. One featured a simple profile, with a convex base, and the other was carinated. The bowls measured seventeen cm in diameter and between two to three cm in depth (Özgüç and Akok 1958, 44).<sup>47</sup>

The metal bowls that were found in Trench A were not used for food. The convex, possibly even pointed (Figure 4.7) base of the first bowl means that the vessel would have tilted when it was set down. The second bowl featured an omphalos depression at its centre. This feature suggests that the bowls were used for drinking. The omphalos is applied to drinking bowls in later periods, where it is used to aid the drinker in bringing the bowl to the mouth (Toker and Öztürk 1992, 23-24). A large number of omphalos bowls were recovered from Iron Age Phrygian tumuli at Gordion, also located in central Anatolia, in the region of Polatlı (Young 1981). The excavators at Horoztepe stated that more carinated bowls with concave bases were recovered from Trench A (Özgüç and Akok 1958, 44, Figs. 12-13). One bowl is illustrated (Figure 4.8). Its illustration is questionable, however. From its scale this bowl is significantly smaller than the others. It is also unclear how many of these bowls are meant to be represented by the single image. Because of these issues, this analysis will focus upon the two bowls that were more fully described.

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<sup>47</sup> Only the depth and diameter of the convex-bottomed bowl was provided by the excavators (Özgüç and Akok 1958, 44). Yet it is possible to infer dimensions from scaled illustrations that appear in the 1958 monograph. According to these drawings, the bowls appear to have the same diameter, and to differ in their depth by one centimetre.

The metal cups from Horoztepe Trench A are small and shallow, and are similar to the single-handled cups from Resuloğlu. On the smaller cup, the single handle curls upwards and away from the rim (Özgüç and Akok 1958, Figs. 15-16, Pl. VI: 1-5). On the larger cup, the handle curves upward before pointing down, as if it may have been hung along the rim of a larger vessel. Both cups have slightly pointed bases. They are shallow, and while crushed, from the scaled illustrations would have measured around 2.5 cm in height. The diameter of each cup is stated by the excavators to be 7.5 cm and 11.2 cm. These dimensions are nearly identical to the cups from Resuloğlu.

Trench A also contained material related to feasting. Two metal tables with anthropomorphic legs were found together with the platter that contained the single-handled cups and shallow bowls (Figure 4.9; Özgüç and Akok 1958, 42-43, Figs. 1-2, Pls. II-III). They were deposited together, suggesting that they were used in conjunction. This may have been as part of drinking 'acts' or rites, as was investigated at Alaca Höyük (Chapter three). The tables were each only sixteen cm and thirty-four cm in height. As the excavators suggest, they would have been appropriate to seated individuals. It is also possible that the tables were used in procession. They could have been carried, or acted as a platform upon which libations were performed.

Objects with anthropomorphic legs are also found in western Anatolia. This includes a bowl from Yortan cemetery (Figure 4.10; Kâmil 1982, 95, Fig. 83:18, Pl. XV: 18) and an unattached leg from Level X at Beycesultan (Lloyd and Mellaart 1962, Fig. 56:7). A small ceramic table or altar in the Janus Pannonius Museum in Pécs, Hungary is nearly identical to the metal Horoztepe tables (Figure 4.11; Mozsolics 1938, 284; Bándi and Zoffmann 1966, 48, Pl. VII t.1; Kiss 2007, 119-20, XXIII i-l). It is associated with a human figurine. Footprints on top of the table (or altar) suggest that the figurine stood atop it. It is possible that the tables from Horoztepe were also stood upon. Libations may have been poured from the jugs into the cups and bowls by an individual in this position.

Ritual objects were also associated with the cups, bowls, and tables in Trench A. Of particular interest are castanets, a sistra, and a ritual standard (Özgüç and Akok 1958, 44-45, 48, Fig. 20, Pls. VII:2-3, XII: Ia-Id), because they are appropriate objects for procession. They suggest that audial stimuli may have accompanied drinking, and possibly also the twisting and crushing of vessels and other objects. Again, this parallels the material from Alaca Höyük. Castanets, sistra, and standards from Alaca Höyük (Arık 1937, 55-56, Pl. CXCI, CXCIV-CXCV; Koşay 1944, Pl. LXXXI; Koşay 1951, Pl. CXXVI; Özgüç and Akok 1958, 49) suggest that procession was a feature of burial at the 'Royal' tombs (Chapter three). It may have served a similar purpose to the sound of smashing goblets within Alaca Höyük Building E (Chapter three).

Similar iconography featuring a bull and a small standard has also been recovered from the site of Kalinkaya (Yıldırım and Zimmermann 2006, Fig. 2; Zimmermann 2006b, Fig. 2; Zimmermann 2007, Fig. 11). This suggests that these practices may have extended across the region.

### iii. Kalinkaya

Drinking vessels were also deposited within graves at the settlement of Kalinkaya. The site is located three km to the northeast of Alaca Höyük (Zimmermann and Yıldırım 2006, 275). It was first excavated in two short rescue campaigns in 1971 and 1973 under the direction of Raci Temizer and Mahmut Akok. A few recent articles have sought to more clearly document the finds from these excavations by publishing their details in both German (Zimmermann 2006b, 2007) and English (Zimmermann and Yıldırım 2006). There are no plans available for the site. Its position is indicated on Map 1.

The excavations revealed little about the settlement at Kalinkaya, but unearthed both intramural and extramural burials. Forty-nine of these date to the Early Bronze Age (Zimmermann and Yıldırım 2006, 278-82). Cups are recorded within several graves. No information is available as to their shape or dimensions. The images and illustrations provided by Zimmermann (2007, Figs. 4-5) are limited to a few ceramic carinated bowls. Yet there are several parallels with the Alaca Höyük 'Royal' tombs. This may suggest that graveside drinking was practiced at Kalinkaya as it was at Alaca Höyük. A small ritual 'standard' and bull statuette are similar to those recovered from the 'Royal' tombs (Yıldırım and Zimmermann 2006b, Fig. 2; Zimmermann 2007, Fig. 11). This suggests that both sites were part of the same culture group, which is appropriate, considering they were located only three km from each other. Within some of the Kalinkaya graves, cups were placed together with jugs (Zimmermann and Yıldırım 2006, 282-83). It is possible that burials at Kalinkaya involved specific drinking and pouring acts or drinking sets, as is suspected to have occurred at Alaca Höyük (Chapter three).

### iv. Alaca Höyük

Metal single-handled cups were recovered from seven of the 'Royal' tombs at Alaca Höyük (K, L, A, A1, T, R, and H). Of these, measurements are available for four (K3, L4, MA36, and H15). These are provided in Table 4.1. The cup within Tomb L is larger than the others; this might be why Koşay (1951, 169) refers to it as a bowl. With cup L4 included, the height of the

cups from Alaca Höyük averages 3.03 cm, and diameter 7.35 cm. Without considering cup L4, the cups average 2.73 cm in height, and 7.13 cm in diameter.

The 'Royal' tombs are treated in more detail in the previous chapter. Yet it is helpful to briefly describe the placement of the single-handled cups within Tombs K, L, A1, and H. Cup K3 had been deposited in Tomb K together with four beak-spouted jugs, one teapot, two goblets, and two necked vessels (Koşay 1951, Pl. CLXXV; Gürsan-Salzmann 1992, 73, 117, 139). This heap of objects had been placed directly before and behind the upper torso of the deceased. Cup H15 was also placed within a pile of objects, but the cup contained jewellery (Koşay 1951, 156). Cup L4 was placed behind the torso of the skeleton within Tomb L (Gürsan-Salzmann 1992, 75). Within Tomb A1, cup MA36 was placed together with an omphalos bowl, and near to the skeleton (Gürsan-Salzmann 1992, 81). Gürsan-Salzmann (1992, 142) reports more vessels from Tomb A1 (MA12, MA13, MA20), but from the excavation photographs (Koşay 1944, Pl. LXXXI) these are pieces of metal.<sup>48</sup> There is little to indicate that they are pieces of a vessel.

Shallow bowls were recovered from Tombs A1 and C (Figures 3.18-3.19; Koşay 1944, 118, Pls. XCIV, CIV). They were placed within the 'Royal' tombs in the same location as cups and jugs, and this suggests that they were used for drinking (Chapter three). The bowl from Tomb A1, as at Horoztepe, featured an omphalos base, while the bowl from Tomb C was fluted with a convex base. The bowls from both sites are similar in their dimensions (Koşay 1944, 118, 130). Bowl MA8 from Tomb A1 measured 19.15 cm in diameter.<sup>49</sup> Bowl C69 from Tomb C measured seventeen cm in diameter and four cm in depth. This is similar to the bowls from Horoztepe (Table 4.2), which measured seventeen cm in diameter and between two to three cm in depth (Özgüç and Akok 1958, 44).<sup>50</sup>

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<sup>48</sup> The inaccurate identification of MA12, MA13, and MA20 as 'vessels' probably stems from item descriptions by Koşay (1944, 100). There, he describes objects A12 and A13 (from Tomb A) as "Kugeln", bowls or balls. Yet this description refers to two small balls pictured in Plate LXXX. Similarly, object A20 is identified as "Hülse". The term may be interpreted as a pod, husk, hull, case, et cetera. This object is also photographed in Plate LXXX, and appears to be a very small metal sheath. None of these objects may be interpreted as a vessel.

<sup>49</sup> No depth measurements for MA8 were provided. See Koşay 1944, 118.

<sup>50</sup> As was described above, the depth and diameter of the second, omphalos bowl from Horoztepe was calculated from the scaled drawing provided by the excavators (Özgüç and Akok 1958, Figs. 17-18). The dimensions of the convex-bottomed bowl are provided (Özgüç and Akok 1958, 44). According to the scale in Figs. 17-18, the bowls have the same diameter. The scale also indicates that the omphalos bowl measures one centimetre less in depth than the convex-bottomed bowl.



<b>Tomb and Site</b>	<b>Vessel number</b>	<b>Height (cm)</b>	<b>Diameter (cm)</b>	<b>Reference</b>
Tomb K	K3	2.3	6.5	Koşay 1951, 166, Pl. CLXXV.
Tomb L	L4	3.9	8.0	Koşay 1951, 169, Pl. CXCVI.
Tomb A1	MA36	3.1	7.7	Koşay 1944, 120, Pls. LXXXII, CXII.
Tomb H	H15	2.8	7.2	Koşay 1951, 157, Pl. CXXXI.

Table 4.1. Dimensions of metal single-handled cups from Alaca Höyük.

<b>Vessel</b>	<b>Height (cm)</b>	<b>Diameter (cm)</b>	<b>Reference</b>
Alaca Tomb C-C69	4	17	Koşay 1944, 130.
Alaca Tomb A1-MA8	--	19.15	Koşay 1944, 118.
Horoztepe Bowl 1	3	17	Özgüç and Akok 1958, 44, Fig. 17.
Horoztepe Bowl 2	2	17	Özgüç and Akok 1958, 44, Fig. 18.

Table 4.2. Dimensions of shallow metal bowls from Alaca Höyük and Horoztepe. No depth measurements were available for Bowl MA8 from Alaca Höyük Tomb A1.

#### a. Drinking bowls at other sites

Drinking bowls are known from other sites during the period. At the EB II necropolis of Demircihöyük-Sarıket,<sup>51</sup> shallow ceramic bowls with an S-Profile are found within three graves (Figure 4.12; Seeher 2000, G 106a, 144c, 144i, 315b, Figs. 24, 26, 38). Bowls 106a and 144i feature incision, in the form of hanging semicircles. This is similar to decoration upon the No. 408 single-handled cup from Ahlatlıbel (Koşay 1934, 53, No. 408), which will be introduced

<sup>51</sup>As will be explained in Chapter five, Seeher (2000, 32) aligns the graves at Sarıket necropolis with the Demircihöyük settlement Levels K/L to P. A few graves are dated to Level Q. From calibrated 14C dating, this occupation is dated to 2650-2500/2450 BC (Weninger 1987, 4-13).

below. The bowls from Sariket, along with other drinking vessels from the site, will be discussed in more depth in Chapter five.

Elsewhere on the north-central plateau, a silver bowl with an omphalos base was deposited within the Eskiypar treasure (Özgüç and Temizer 1993, 617, 625, Fig. 47, Pl. 116:2). The Eskiypar bowl is smaller than the other bowls described here (diameter 11 cm, height 6.2 cm). Eskiypar is located twenty km southeast of Alaca Höyük, and is dated to just after the period that is considered in this thesis (Özgüç and Temizer 1993, 628; Zimmermann 2005, 161-63).<sup>52</sup>

In western Anatolia, drinking bowls are found at Troy. Within level IId, a silver bowl with a ring base was deposited in a pit together with animal bone and other vessels for eating and drinking (Figure 4.13; Blegen et al. 1950, 281, Nos. 36-449, Fig. 359). Bowls are also found within the Treasure A deposit at Troy IIG (Figure 4.14; Schliemann 1880, 469, No. 786; Schmidt 1902, 231, No. 5868; Blegen et al. 1950, 281) and at Troy I (Schmidt 1902, Nos. 6255-6256). The evidence for drinking and feasting at Troy II is described in more detail in Chapter six.

Similar bowls are also found farther west, in the Aegean. Renfrew (1967, Pls. 1:17 and 10:e) reports silver carinated bowls from Amorgos and Euboea. Shallow bowls are increasingly produced from the Early Minoan IIIA period on Crete (Warren 1972, 114-17; Wilson and Day 1999, 9, Fig. 3.1; see also Day and Wilson 2004, 48) and in the Cyclades and on the Greek mainland (Wilson 1999, 121-22; Weincke 2000, 596, 601). This does not necessarily mean that these sites were in communication with one another, or that bowls were exchanged between centres. The idea of drinking from such implements may have been novel and exceptional, or *salient*, and this may have carried the practice beyond areas of direct contact.

## v. Ahlatlıbel

Single-handled cups of ceramic are reported from the site of Ahlatlıbel. The site is located fourteen km southwest of the Ankara province, near to the village of Yalıncağ.<sup>53</sup> It represents the western boundary of the sites considered in this chapter. Ahlatlıbel was excavated

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<sup>52</sup> The Eskiypar treasure contained a Syrian bottle of alabastron shape (Özgüç and Temizer 1993, 117, Pl. 116:1). The shape is also known from Kültepe levels 12-11 (Özgüç 1986, 34-35). This indicates that the Eskiypar hoard dates to the period transitional to the Middle Bronze Age. This is supported by imports from the southeast (Zimmermann 2005, 161-62). The alabastron-shaped 'Syrian' bottle also aligns with Troy III (Blegen et al. 1951, 58, Pl. 70, No. 34.750; Zimmermann 2005, 163), while the globular shape is evident at Troy IIG (Tolstikov and Treister 1996, 32, No. 4; Treister 2002).

<sup>53</sup> Per the TAY settlement database: [http://www.tayproject.org/TAYages.fm\\$Retrieve?CagNo=60&html=ages\\_detail\\_e.html&layout=web](http://www.tayproject.org/TAYages.fm$Retrieve?CagNo=60&html=ages_detail_e.html&layout=web), last accessed 24th March 2014.

in 1933 by Hamit Zübeyr Koşay. The architecture unearthed by his excavations included a fortified structure. Koşay (1934) detected the presence of double fortification walls, and interpreted the structure to be a citadel rather than a settlement (Figure 4.15). The site was occupied for only a short time before it was abandoned. Excavations were resumed by Middle East Technical University (METU) in 2006 under Jan-K. Bertram and Gülçin İlgezdi-Bertram (Bertram and İlgezdi 2009). The site is located near to the METU campus in Ankara,<sup>54</sup> and is dated to the middle of the third millennium BC by the excavators.

Dozens of single-handled cups were recovered from the site. They include both red- and black-polished varieties (Koşay 1934, 21, 43-50). The cups were crafted with care; several were burnished and feature incision, fluting, and lugs (Figure 4.16; Bittel 1934, Taf. VI). They seem to have been inspired by metal prototypes similar to cups found at Resuloğlu, Horoztepe, and Alaca Höyük. It is possible that metal cups were also used at Resuloğlu, but that they were carried from the site when the residents chose to settle elsewhere. The most elaborate cup is shown in Figure 408 of Koşay's (1934, 52-53) report of the site (Figure 4.17). In this thesis, it is referred to as, 'No. 408'. The vessel measures 2.7 cm in height and 7.5 cm in diameter. Upon the base of the cup is a small depression, or omphalos. The indentation is purely decorative because both the handle and the small size of the cup would have been effective for using the vessel. On the inside of the cup, the omphalos is surrounded by fluting that meets at the centre. Again, the omphalos is a feature of drinking bowls from later periods (see Toker and Öztürk 1992, 23-24). It is also seen upon bowls from Horoztepe and Alaca Höyük. Therefore the omphalos upon cup No. 408 is a reference to drinking, and suggests that single-handled cups at the site were used for this purpose.

There seems to have been numerous single-handled cups recovered from Resuloğlu that are similar in size to No. 408. Within one photograph (Figure 4.18; Koşay 1934, 13), dozens of cups are arranged in rows, next to one another. They appear to be relatively similar in their dimensions and finishing, though it is unclear if this photograph includes all of the cups that were recovered. Nineteen vessels from the catalogue can be verified as single-handled cups from illustrations or photographs;<sup>55</sup> of these, eleven are provided dimensions (Table 4.3). These dimensions are similar except for No. 588, which is better described as a deep bowl (Height: 7.7 cm; Diameter: 15 cm). Excluding No. 588, the average height of the cups is 2.8 cm, and the average diameter is 6.32 cm. These dimensions are plotted in Graph 4.1. From the graph, the

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<sup>54</sup> Per <http://tacdam.metu.edu.tr/node/78>, last accessed 24th March 2014.

<sup>55</sup> No. 428, 244, 49, 532, 588, 88, 227, 140, 532, 145, 109, 139, 624, 554, 413, 553, 408, 591, and 622, listed in the order in which they appear (Koşay 1934, 16, 17, 37, 44, 45, 47, 52, Plates 1 and 4).

height of the cups was mainly concentrated between 2.0 and 2.5 cm, and diameter between 5.5 and 6.5 cm.

It is difficult to identify additional handled vessels within the Ahlatlıbel site catalogue. It is not always clear if vessels have handles or not, or if they are vessels at all. For example, flat, rounded objects that are best described as lids are included within the section, 'handleless vessels' ("Kulpsuz Çanaklar": Koşay 1934, 38-40, 46). Thirty-eight 'handled' vessels ("Kulpu Çanaklar") are listed in the catalogue, yet they are not illustrated or photographed (Koşay 1934, 43, 52). The dimensions of five of these vessels are available, and they are provided in Table 4.4. Yet without images, it is not possible to determine whether or not these five vessels are cups. Therefore none of their dimensions are included in Graph 4.1.

Ahlatlıbel may be chronologically aligned to Resuloğlu and Alaca Höyük. At Resuloğlu, ceramic single-handled cups have not been reported. However, metal cups within the graves were associated with ceramic juglets. These juglets are similar to the Ahlatlıbel cups in their incision and black burnishing (Figure 4.19; Yıldırım 2006, Fig. 12). This decoration is also seen at Alaca Höyük. At that site, cups of "Ahlatlıbel type" are first introduced in Level 8,<sup>56</sup> which Gürsan-Salzmänn (1992, 232) places in the EB II. The form becomes more popular in Levels 6-5, contemporary with the 'Royal' tombs. The cups continue into Level 4 as slow-wheel pottery production begins to be applied to this and other forms (Gürsan-Salzmänn 1992, 243).

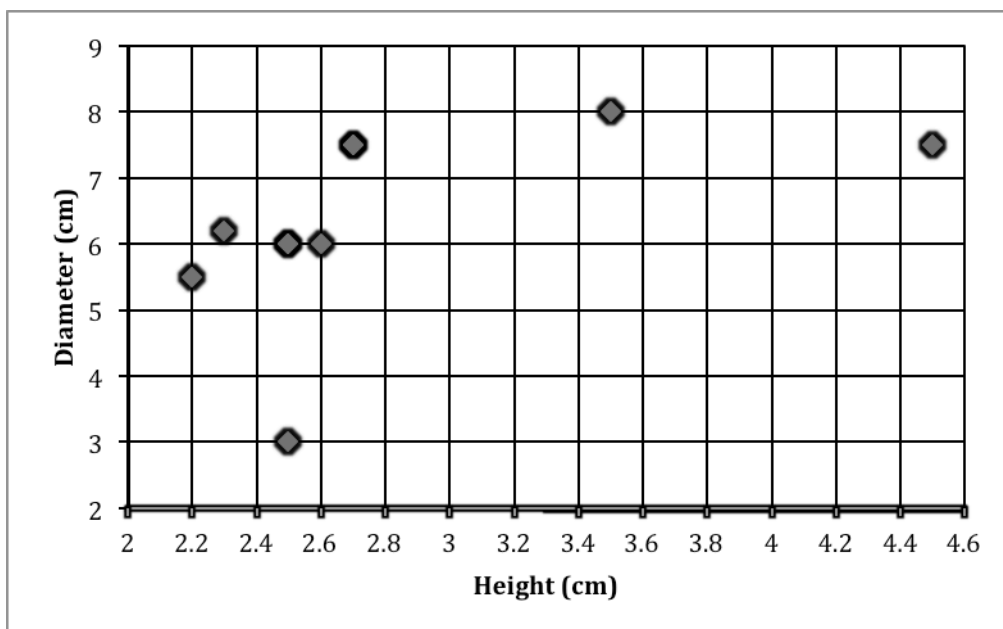
Vessel Number	Height (cm)	Diameter (cm)	Reference
No. 49	4.5	7.5	Koşay 1934, 45
No. 588	7.7	15	Koşay 1934, 38
No. 88	2.5	6	Koşay 1934, 44
No. 227	3.5	8	Koşay 1934, 44
No. 140	2.7	7.5	Koşay 1934, 45
No. 532	2.5	3	Koşay 1934, 37
No. 145	2.3	6.2	Koşay 1934, 52
No. 624	2.5	6	Koşay 1934, 52
No. 554	2.2	5.5	Koşay 1934, 52
No. 408	2.7	7.5	Koşay 1934, 52
No. 622	2.6	6	Koşay 1934, 52

Table 4.3. Eleven single-handled cups from Ahlatlıbel that are illustrated or photographed within the catalogue.

<sup>56</sup> 'Ahlatlıbel' cups at Alaca Höyük may appear as early as Level 9, as one example was found within Grave GI (Gürsan-Salzmänn 1992, 232). It is not known if this material was abundant during Level 9, as there was only a limited amount of Level 9 material available (Gürsan-Salzmänn 1992, 238).

Vessel Number	Height (cm)	Diameter (cm)	Reference
No. 229	5.0	13.0	Koşay 1934, 38
No. 69	8.0	3.0	Koşay 1934, 44
No. 227	3.5	8.0	Koşay 1934, 44
No. 4	2.5	7.0	Koşay 1934, 43
No. 657	7.5	none provided	Koşay 1934, 47

Table 4.4. Single-handled cups listed as 'handled' that are provided dimensions in the Ahlatlıbel catalogue, but which are not illustrated or photographed.



Graph 4.1. Ten single-handled cups from Ahlatlıbel (excluding No. 588). Cups Nos. 88 and 624 and Nos. 140 and 408, respectively, are identical in dimensions and are therefore represented by two points between the four of them.

## B. Vessel characteristics

The rest of this chapter will discuss the characteristics of the vessels that were recovered from these north-central Anatolian sites. Again, this analysis will focus upon single-handled cups and shallow bowls because it is these vessel shapes that are likely to have been used for drinking. Both vessel forms are represented in metal as well as in ceramic. More information is available for single-handled cups, and therefore these are discussed first.

This analysis first considers the physical properties of single-handled cups. Their dimensions and volume capacities are compared across sites. This analysis then considers the way in which both cups and bowls were handled and drunk from. This is determined by handling objects of a similar size and shape.

## i. Similar dimensions

Dimensions are available for several of the single-handled cups. They are compared in order to determine how similar the cups were between sites. The dimensions of all of the cups is presented in Table 4.5. These are plotted in Graphs 4.2-4.3. Graph 4.2 considers only the metal vessels from Resuloğlu, Horoztepe, and Alaca Höyük. Graph 4.3 repeats these dimensions, but includes the ceramic cups from Ahlatlıbel. Figures 4.20 and 4.21 show all of the cups from these sites drawn according to an identical scale.

The dimensions of many cups from Alaca Höyük and Ahlatlıbel were provided by the original excavators. At Alaca Höyük, this included cups from four out of seven graves from which the vessel was recovered. At Ahlatlıbel, the dimensions of vessels were included if it could be verified, through photographs or drawings, that the vessel was a cup (i.e. if it had a handle). The dimensions of cups from Resuloğlu and Horoztepe were not provided by the excavators. For this analysis, they were reconstructed from scaled photographs and drawings (Özgüç and Akok 1958, Figs. 15-16; Zimmermann and Yıldırım 2007, Fig. 4). These images were first enlarged. The dimensions were then reconstructed through the process of redrawing the vessels according to the scale provided in the original image.

The cups from Ahlatlıbel are represented in Table 4.5 in two ways. The first is an average of ten cups, including cup No. 408. In addition to an average of all of the cups, the dimensions of cup No. 408 are added again, on their own. This is because the diameter given from the averaged ten cups is not considered to be representative of the sample.<sup>57</sup> Adding cup No. 408 on its own is an alternative to excluding the dimensions of some of the ten cups, which could be considered outliers. Including cup No. 408 on its own does not affect the average dimensions of the metal and ceramic cups when they were considered together.<sup>58</sup>

The metal cups from Resuloğlu, Horoztepe, and Alaca Höyük feature similar dimensions. Across all seven metal cups, the average height is 2.8 cm with an average diameter of 7.8 cm. These numbers are reduced slightly when adjusting for outliers. Cup L4 from Alaca Höyük Tomb

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<sup>57</sup> The average dimensions of the ten Ahlatlıbel cups (excluding No. 588) was 6.32 cm for diameter, and 2.8 cm for height. The diameter of 6.32 cm was significantly smaller than the diameter of 7.5 cm of three cups (Nos. 49, 140, and 408). These cups comprised thirty percent of the sample. Adding No. 408 again on its own was a way to represent the cups with a greater diameter without having to exclude more outliers such as No. 532.

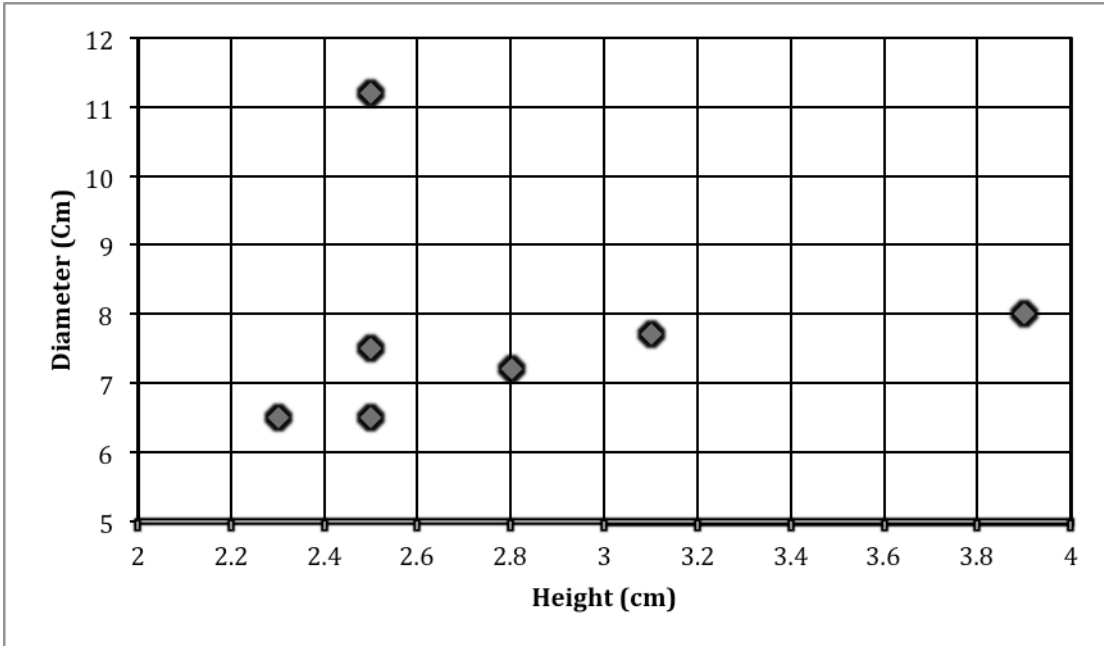
<sup>58</sup> Considering No. 408 on its own does little to change the average across all cups of metal and ceramic. Adding No. 408 on its own, in addition to the averaged Ahlatlıbel cups, produces an average height across all cups of 2.78 cm. The average diameter was 7.6 cm. The average across all metal and ceramic cups without considering No. 408 on its own produced an average height of 2.8 cm, and an average diameter of 6.15 cm.

L is taller than the others. After eliminating this vessel, the height of the metal cups varies between 2.5 to 3 cm. Similarly, when disregarding the larger Horoztepe cup, which is broader than the rest, the diameter ranges between 6.5 to 8 cm.

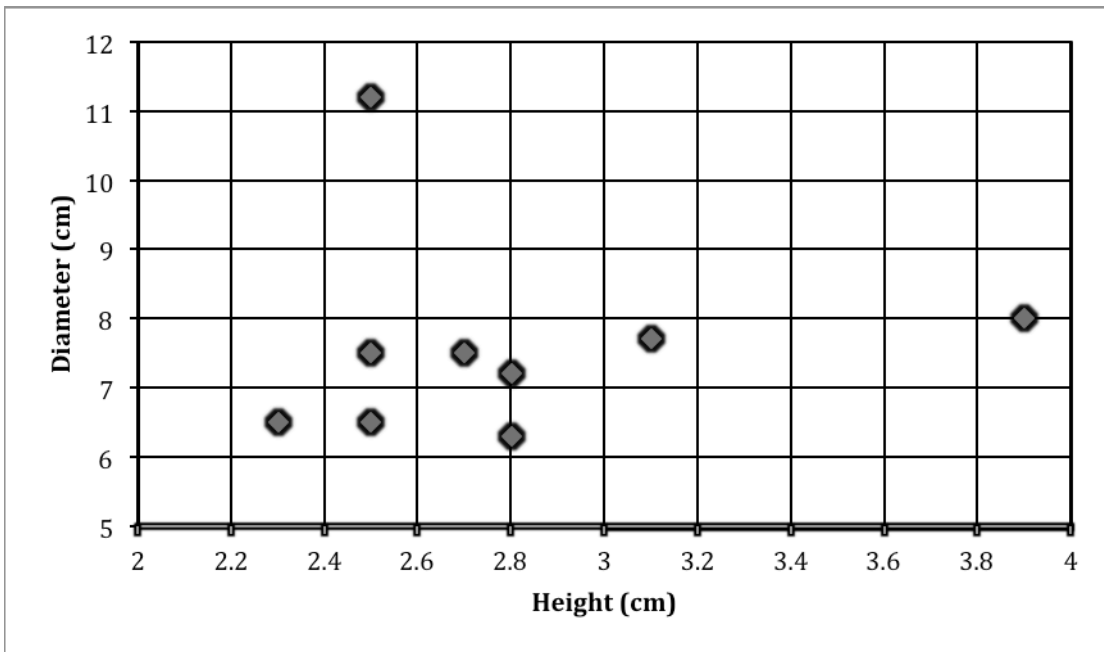
Comparing the cups on the same scale shows the effect of outliers to be slight (Figures 4.20-4.21). The larger Horoztepe cup is just as shallow as the others. While it is more elongated in shape, it still seems to be intended for drinking a small amount of liquid. It is also possible that the cup functioned as a ladle for pouring into the smaller cup that was deposited alongside it. The height of cup L4 may be due to a different method of manufacturing. The handle of the cup appears to be uniform in width (Figure 4.21; Koşay 1951, Pl. CXCVI; Toker and Öztürk 1992, 46). It may have been constructed using a mould. The cup may have been made taller in order to attach this moulded handle. Its dimensions, then, may result from a different method of manufacturing, rather than its being intended for a different use.

<b>Tomb and Site</b>	<b>Height (cm)</b>	<b>Diameter (cm)</b>	<b>Reference</b>
Ahlatlıbel average	2.8	6.3	---
Ahlatlıbel No. 408.	2.7	7.5	Koşay 1934, 52-53.
Resuloğlu M141	2.5	6.5	Zimmermann and Yıldırım 2007, Fig. 4.
Horoztepe smaller	2.5	7.5	Koşay and Akok 1958, 13, 44, Fig. 15, Pl. VI,1.
Horoztepe larger	2.5	11.2	Koşay and Akok 1958, 13, 44, Fig. 15, Pl. VI,2.
Alaca Höyük Tomb K	2.3	6.5	Koşay 1951, 166, Pl. CLXXV.
Alaca Höyük Tomb L	3.9	8.0	Koşay 1951, 169, Pl. CXCVI.
Alaca Höyük Tomb A1	3.1	7.7	Koşay 1944, 120, Pls. LXXXII, XCII.
Alaca Höyük Tomb H	2.8	7.2	Koşay 1951, 157, Pl. CXXXI.

Table 4.5 Dimensions of single-handled cups across four sites of the north-central plateau. Dimensions for Ahlatlıbel include an average of ten cups (including No. 408 and excluding No. 588), as well as No. 408 included again on its own.



Graph 4.2. Dimensions of metal single-handed cups across three sites of the north-central plateau: Resuloğlu, Alaca Höyük, and Horoztepe.



Graph 4.3. Dimensions of single-handed cups across four sites of the north-central plateau. Dimensions for Ahlatlıbel include an average of ten cups (including No. 408 and excluding No. 588), as well as No. 408 included again on its own.

The cups were similar in size, but they were not exactly identical. This is appropriate to the period. Standardisation is most likely to occur within industries that are centrally managed. There is very little evidence for centralisation at any of the sites considered here. Even while



information is lacking for these settlements, none feature evidence of administration. There are no indications of writing or of any other evidence that industries were monitored or controlled. As was explained in Chapter one, this thesis is concerned with determining how settlements were organised because of a lack of evidence for centralisation. It would therefore be out of place for the cups to feature identical dimensions. This makes their similar size all the more significant. The cups were not standardised, yet they were often of similar dimensions. Their small size was intentional, and central to the idea of the single-handled cup. This may indicate that the cups were used for a similar purpose, and that this purpose was shared across sites.

The ceramic cups from Ahlatlıbel have similar dimensions to the cups of metal. This can clearly be seen in Figure 4.20, where cup No. 408 is compared to several of the metal cups on the same scale. Adding the ceramic cups also does little to change the average dimensions of all of the cups. The average of all cups, when including those from Ahlatlıbel, is 2.78 cm in height, and 7.6 cm in diameter. Excluding the cups from Ahlatlıbel, the average dimensions of the cups (all metal) was 2.8 cm in height and 7.8 cm in diameter.<sup>59</sup> Thus despite their different materials, the cups from Ahlatlıbel were intended to be the same size as those of metal. Again, No. 408 from Ahlatlıbel features elaborate incision and fluting, and seems to have been copied from metal prototypes. It is likely that small metal cups were also made and used at the site.

There was probably no difference in the function of the metal and ceramic cups. The decoration of the ceramic cups was inspired by metal prototypes, yet this does not mean that they were used for non-élite purposes. At the 'Royal' tombs at Alaca Höyük, ceramic jugs, jars, and cups were placed in graves alongside those of metal. Metal and ceramic varieties were also identical in shape, no matter if they were deposited in 'Royal' tombs, or within non-élite graves. Ceramic jug K48 from Tomb K was indistinguishable in shape from the metal jugs with which it was associated (Gürsan-Salzmann 1992, 73). Within non-élite Grave FIII, a teapot and jugs were also identical to metal and ceramic counterparts within the 'Royal' tombs (Gürsan-Salzmann 1992, 114). From their size and decoration, the cups from Ahlatlıbel were symbolically-charged objects. They need not have been imitations or less prestigious alternatives. The cups may have been used in an identical manner to other metal cups at the site. They may also have fulfilled an identical purpose to the metal cups from Alaca Höyük, Resuloğlu, and Horoztepe.

The power of these observations is, however, limited by the nature of the evidence. The sample of vessels considered in this analysis is exceedingly small. They may not have been representative of drinking practices at each site. Single-handled cups may have been common to

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<sup>59</sup> Again, the average of all of the metal cups may be further adjusted for outliers. Eliminating the tall cup L4, the average height of the metal cups was 2.6 cm. The average diameter was 7.8 cm.

other, very different settings, or they may have been used for other purposes. They may not always have been used for drinking special beverages. Or, drinking may have been done using other vessels, which have not been detected or recovered. These limitations also extend to the use of drinking bowls. They are also exacerbated when trying to compare the use of vessels between sites.

The settings in which the cups were found makes it difficult to identify how they were used. At Resuloğlu, the contents of a further 116 graves remain unpublished. The placement of cups in Graves M107 and M141 clearly emphasise drinking. Yet they may not be representative of drinking practices across the necropolis, let alone at the three settlements which contributed to the burials here (Yıldırım 2006, 1). Trench A at Horoztepe is also unique amongst the nine trenches dug at the site. Even at Alaca Höyük, cups may not have been used for drinking: cups H18 and H15, placed immediately before the deceased, contained jewellery (Koşay 1951, 156). At Ahlatlıbel, excavations unearthed a significant amount of small cups and bowls, as was documented within site photographs (Koşay 1934, 13). Yet it is uncertain how they may have been used. Only fragmentary information is available as to the settings in which the cups were found, and how they are represented across the site. It is also possible that this chapter, driven by the dramatic demonstration of drinking within Resuloğlu Grave M141, has selected parallels at other sites erroneously. In other words, vessels may have been compared across sites without a full assessment of their function. Thus a vessel occasionally used for special drinking events at Resuloğlu is considered against a vessel used for mundane purposes at Ahlatlıbel or Horoztepe. This is very possible, given the limited contextual information.

Many of these issues may be resolved by obtaining more information. This could include an in-depth analysis of materials that have already been excavated from these sites, as well as further excavation. At Resuloğlu, the photographs of crushed metal single-handled cups (Yıldırım 2006, Fig. 13) and the second cup within Grave M141<sup>60</sup> have the potential to reveal more about drinking practices. To date, these vessels have yet to be published. The material from Ahlatlıbel should also be reassessed, as well as the architectural features. This is currently being undertaken by Jan-K. Bertram and Gülçin İlgezdi-Bertram of METU University in Ankara.<sup>61</sup> At all of the sites considered here, there are additional areas that have yet to be investigated. These may be significant, such as the unexplored mound at Horoztepe. Further research at these sites could serve to redefine much of what is known about the Anatolian Early Bronze Age. This includes re-examining sections of previously excavated sites, as is being undertaken at Alaca Höyük by

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<sup>60</sup> Thomas Zimmermann, personal communication, 22nd October 2012.

<sup>61</sup> per <http://tacdarn.metu.edu.tr/metu-survey-project-2006-2009>, last accessed 25th March 2014.

Aykut Çınaroğlu of Ankara University.<sup>62</sup> These investigations would provide the opportunity to assess cups and bowls within a more complete vessel assemblage, and with a better understanding of the site altogether. This would lead to a better understanding of the role of drinking within individual communities, and the impact of these practices across the greater region.

The characteristics of cups and bowls may reveal more about drinking events. Their size and features may indicate how these vessels were held and drank from. Their volume capacity may provide some information on the type of drinks that were consumed from them. If certain characteristics are common across vessels from different sites, then these characteristics may have been central to how the vessel was used. For instance, the previous section explained that the dimensions of single-handled cups was similar, but not exact between sites. This indicates that the cups were not standardised. Yet it also suggests that the concept of the cups was related to their small size. The following sections investigate additional detail from the cups, as well as from drinking bowls. This is in order to better understand how they may have been used. First, the volume capacity of the cups is compared, before investigating the way in which they may have been handled.

## ii. The volume of single-handled cups

This section examines the volume capacity of the single-handled cups. These measurements provide a better understanding of how the cups were used. They may indicate whether the size of the cups was related to how much liquid they would have held. Understanding the volume of the cups also allows the vessels to be understood in terms of the use of modern drinking vessels. To determine their volume, the cups were illustrated by the author (Figures 4.20-4.21), and these illustrations were traced within a computer program made for this purpose. The computer program then calculated the volume.<sup>63</sup>

The volume of the shallow bowls was not assessed. The sample of bowls was less robust than the sample of single-handled cups. Few bowls were known, and of these, the dimensions of

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<sup>62</sup> per <http://www.hurriyetdailynews.com/traces-from-millennia-ago-sought-in-central-anatolias-alacahoyuk.aspx?pageID=238&nID=48542&NewsCatID=375>. Hurriyet Daily News, 11th June 2013 (no author). Last accessed 2nd May 2014. According to the above report, the excavations at Alaca Höyük will focus upon pre-Hittite occupation at the site.

<sup>63</sup> The computer software that was used for these calculations was developed by Jean-Paul Thalmann. Permission to use Thalmann's computer program was attained through personal communication with the assistance of Diane Bolger, University of Edinburgh, 15th June 2012. Within the program, the user traces the vessel profile by adding a series of points to an uploaded illustration of each vessel. The program takes into account the scale of the image. In this analysis, the profile of each cup was traced eight times. The average of these trials was taken to be the best measure of the volume.

only two could be reconstructed.<sup>64</sup> The volume of the bowls also does little to indicate the nature of drinking practices. Any interpretation of the use of the bowls depends upon the rate at which they are believed to have been drunk from. The bowls would seem to have been drunk from slowly. This is demonstrated upon reliefs of later periods (Figures 4.22-4.23; see Müller-Karpe 1988, 26, Fig. 1.8; Gorny 1996, Fig. 11.11; Stronach 1996, Figs. 12.1-2, 12.7-8). In this case, the bowls emphasise drinking procedure, while the single-handed cups illustrate a single drinking act. It is also possible that drinking from the bowls was done quickly. Yet in this case, what may be drawn from their use varies according to how much liquid was placed within the bowls. This was not possible to reconstruct.

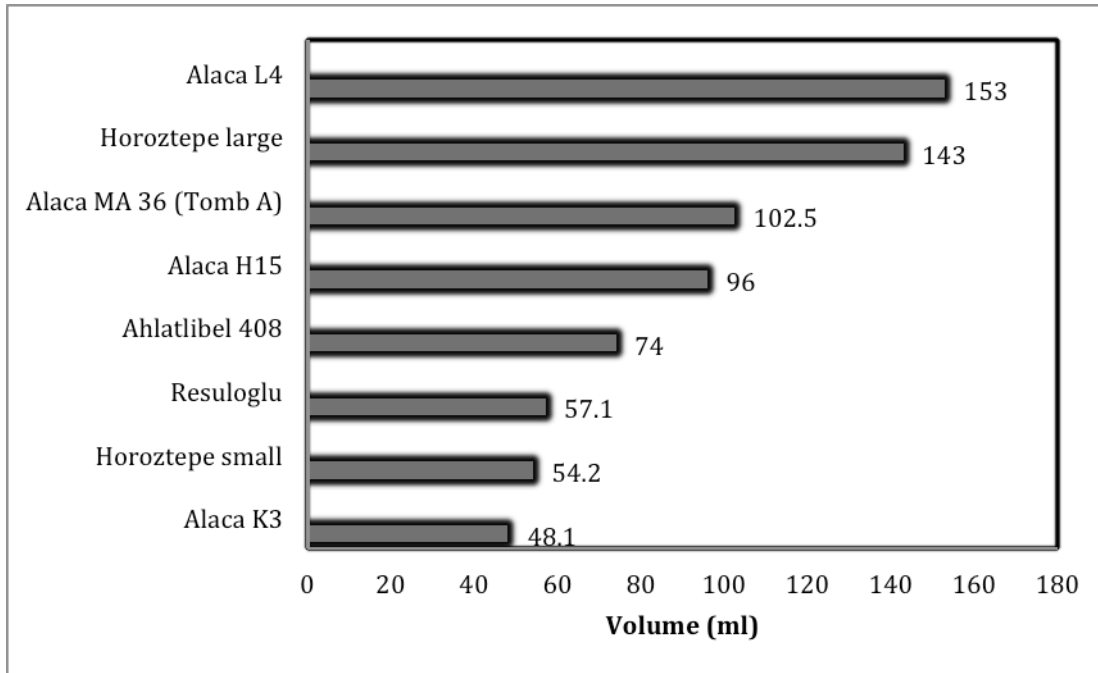
The results of the computer calculations are shown in Tables 4.6-4.7 and in Graph 4.4. The average volume across all of the cups was 90.98 ml.<sup>65</sup> The average volume of the seven metal cups was 93.41 ml. The cup L4 from Alaca Höyük Tomb L and one cup from Horoztepe Trench A were larger than the others. Excluding these cups from the calculations, the average volume of all cups (metal and ceramic) was 71.98 ml. The average volume of all metal cups, excluding the two outliers, was 71.58 ml (Table 4.8).

<b>Single-handed cup</b>	<b>Volume (ml)</b>
Resuloğlu Burial M141 (Intact)	57.10
Horoztepe smaller cup	54.20
Horoztepe larger cup	143.00
Ahlatlıbel No. 408	74.00
Alaca Höyük Tomb K: vessel K3	48.10
Alaca Höyük Tomb L: vessel L4	153.00
Alaca Höyük Tomb A: vessel MA36	102.50
Alaca Höyük Tomb H: vessel H15	96.00

Table 4.6. Volume of single-handed cups from Resuloğlu, Horoztepe, Ahlatlıbel, and Alaca Höyük.

<sup>64</sup> The depth of the omphalos upon one of the bowls from Horoztepe was not provided, and this made the calculation uncertain. The depth of the bowl from Alaca Höyük Tomb A1 was also not available.

<sup>65</sup> The volume of cup No. 408 from Ahlatlıbel is sure to be less than that calculated here. This is because there was no way to estimate the thickness of the ceramic. No measurement for this was available within the publications.



Graph 4.4. Volume of metal and ceramic single-handed cups.

<b>Single-handed cups- all considered</b>	<b>Volume (ml)</b>
Mean	90.98
Median	85
Range	104.9 (153 - 48.1)

Table 4.7. Descriptive statistics of single-handed cups, considering all cups.

<b>Single-handed cups, eliminating outliers</b>	<b>Volume (ml)</b>
Mean	71.98
Median	65.55
Range	54.4 (102.5 - 48.1)

Table 4.8. Descriptive statistics of single-handed cups, eliminating the two outliers from Alaca Höyük Tomb L and Horoztepe Trench A.

After eliminating the two outliers, the range of the volume of the cups is reduced by one-half (Table 4.8). When not considering the larger cup from Horoztepe and Alaca Höyük Cup L4, the volume ranges by no more than fifty-five ml. This is only slightly more than a double measure of alcohol in the UK (fifty ml). This difference is slight. Across western countries, a measure of alcoholic spirit typically varies between at least ten ml, and sometimes twenty or more. Again, the volume of these cups does not need to be identical; a standardisation in cup sizes is not to be expected for the period. Instead, all of the cups seem to have been intended to hold a restricted volume. This suggests that the volume was related to the function of the cups, and that this

function was known between sites. It is possible that the cups were used for specific drinking acts, and it is these acts that were common to sites in the region.

Of course, the sample size of the cups is especially small. It is unknown what percentage these cups represent within the overall assemblage at each site. These cups were also selected from different sites because of their unique characteristics, rather than their being represented in significant numbers. The dimensions and volume of the cups may be related to a very specific, special way of drinking. Yet it is possible that not all of these cups were used for this purpose. It is also unclear to what extent this practice was popular between sites. If the assemblages of these sites become published in full, the cups may turn out to have been relatively rare at each site. On the other hand, they may have been common, but with larger dimensions than the sample discussed here. In either case, the sample that is considered would have distorted the impression of drinking practices. This analysis will continue to discuss specific drinking behaviours that can be inferred from the cups. Yet it is important to remember that the sample considered may have introduced a significant amount of bias. Because of this issue, the information that is gleaned from the cups is anecdotal rather than fully representative.

### iii. Drinking acts

Reducing the volume of liquid is an effective way to encourage drinking in a single, specific act. For example, modern alcohol measures are sometimes used for drinking in short toasts or shots. This is specifically for strong spirits, and is associated with either drinking slowly or quickly. Drinking a shot of alcohol is typically done quickly, in one act together with others. Small volumes may also be slowly sipped, as with Scotch whisky. Strong spirits could have been produced during the Early Bronze Age. The act of reducing substances by boiling down, a precursor to distillation, would have been known at the time. The process is first documented during the first century A.D., but is also involved in the making of bitumen (Forbes 1970, 15-17), which was produced during the EBA.

The act of drinking together has important social implications, regardless of whether the beverage is alcoholic or inebriating. As with the smashed goblets at Alaca Höyük Building E, the act of drinking together with others, at the same time, connects participants. It allows them to experience consumption together, even while the sensation of drink can only be felt individually. Toasts or shots are one of the most obvious ways to achieve this: they reduce the sensation of drinking to a specific point in time. The small volume of the cups seems ideal for this practice. The single-handled cups from Horoztepe may have been designed with this purpose in mind.

Their bases are pointed (Figure 4.5; Özgüç and Akok 1958, Figs. 15-16), and so were meant to be continually held whilst they were filled. They would have had to be refilled while they were already elevated, and could not be placed down unless they were empty. These qualities are appropriate for filling, holding upright, and drinking together with others.

Small quantities ensure that everyone present consumes the same amount, in the same manner, *at the same time*. Beyond experiencing drink together, this also regulates the individual physiological response to drink. Again, this is significant even if the beverage does not cause inebriation. But the process can be vividly illustrated by examples involving alcohol. Slowing or accelerating the rate of alcohol consumption has the potential to slow or to accelerate drunkenness. In social terms, this has the potential to hasten or to deny access to a setting that offers numerous social benefits. Intoxication from special beverages often results in a situation in which social barriers are relaxed, and in which individuals are more approachable. In these settings, social ties are likely to be formed more quickly. This process is efficient and effective; it is also potentially dangerous, and in certain settings, it is controlled. At a social reception, controlling the amount of drink that is offered also regulates the amount of social mixing. The number of bottles on the table or the amount of drink that is poured within glasses may be limited. Wait staff may top up glasses only occasionally. This keeps the event more formal, and staves off the forming of social ties.<sup>66</sup>

Other drinking events work to ensure that everyone participates so that all individuals may equally benefit. At Georgian *Supra*, or feasts, guests are encouraged to drink to excess by numerous toasts, prompted throughout the evening in long speeches and demonstrations. Guests are challenged into reciting passages or songs, which demonstrate drinking skill by testing if one may manage to perform complex tasks whilst inebriated. It is during the latter stages of the *Supra* when guests become more intimately bound. It is not enough, however, to be physically present. Guests may only reach this latter stage of the feast if they have partaken in the appropriate amount of drinking throughout the evening. Mars and Altman (1987) describe the setting:

"The bonhomie of cooperative fellowship asserts itself in the latter phase of the feast. It is then that elaborate personal valuations are made, friendships are sworn, addresses

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<sup>66</sup> This can also be demonstrated by comparing how drinking behaviour in formal settings changes according to the type of drink that is being consumed. Thornton (1987) identifies differences in drinking *sekt* versus *schnapps* in her study of drinking practices in modern Austria. *Sekt* is store-bought, while *schnapps* is always brewed or altered at home, and is often served there. *Sekt* is associated with public gatherings, for instance state holidays; these are often impersonal events. By contrast, it is always *schnapps* that is used in more personal, intimate settings. *Schnapps* is brought out for special guests, or used to mark a new friendship or social association. *Schnapps* is missing from large, city- or country-wide celebrations (such as New Years Eve) where participants will probably interact only superficially. Yet *schnapps* is a necessary component in settings where personal relationships are being formed.

exchanged, and [when]... men might well be found eating from the same plate and drinking from the same cup. The term for this practice is *megobarebi* which can be translated as 'close friends'... The feast also serves a wider purpose and one well-recognized by its participants. It links and binds together people who possess different affiliations, who represent different places, institutions, occupations and kinship linkages. And it is in understanding this role of the feast and the latency inherent in the links it encourages, that we can appreciate why the feast is so important in Soviet Georgia and perhaps too why it should be officially discouraged by the Soviet authorities" (Mars and Altman 1987, 276, emphasis in the original).

At the end of the *Supra*, there is a sense that one has emerged, together with the other guests, from a common challenge. The event is a collective endurance test, where each phase is experienced by participants *at the same time*. This creates a common setting or landscape through which participants can manoeuvre. The setting is different enough from the regular, mundane world that the usual rules no longer apply. Guests are able to bond with an intensity that would normally require days, months, or possibly years in day-to-day, mundane interactions. This can hold real implications for the social standing or mobility of participants in the days and years to come, after the feast has finished.

In Soviet Georgia, the *Supra* functioned as an alternative economy (Mars and Altman 1987). Through feasting, individuals could gain access to goods, services, or other products that were strictly controlled by the authorities. The *Supra* was used to obtain resources, including rare products and access to important officials, licences and permits, and job and school placements (Mars and Altman 1987, 277-78). This network persisted even while it was at odds with the political organisation of the country. This demonstrates that the act of drinking together, of experiencing drink coincidentally with others, is a powerful and effective way to establish social relationships. It may provide access to individuals who are normally socially off-limits, or connect individuals who are far removed in the social hierarchy. As Mars and Altman (1987, 277) describe, "the feast... binds together people into a powerful ego-focussed resource-gathering core which... exploit(s) its environment by capturing significant people on its periphery." The single-handled cups investigated here may have facilitated a similar process. Their small volumes speak to a measured consumption, a parcelling out of drink in order to maintain a similar rate of ingestion. They may have been used for drinking acts that join participants together within their own, independent, alternative economic system. At the same time, the handling of these cups seems to have required the performance of specific drinking gestures. These may have acted as a further test of drinking ability, built directly into the design of the vessel.

#### iv. Holding and drinking from single-handled cups and shallow bowls



The characteristics of the single-handled cups suggest that their use involved difficult handling. Their thin handles and small size would seem to have required balance and careful manoeuvring. This is explicitly demonstrated within Grave M141 at Resuloğlu, in which a single-handled cup was placed upon the smallest finger of the skeleton (Figure 4.1; Zimmermann and Yıldırım 2007, Fig. 4). Shallow bowls also imply special handling. These were often associated with the cups, and are likely to have been used for drinking. The use of bowls for drinking in later periods is characterised by specific hand positions, bodily movements, and drinking postures. It is possible that the shallow bowls found at EBA sites were also handled in this way.

This section of Chapter four will attempt to illustrate how single-handled cups and bowls were held and drank from. It presents the results of an experiment that tested how single-handled cups and shallow bowls may have been manipulated. Replica objects were used to model the handling of cups and bowls. These found replica objects are of a similar size and shape to the cups and bowls that were described above. These objects were filled with liquid, held, and manoeuvred in a manner similar to that demonstrated at Resuloğlu and in later reliefs. The cup was held by the smallest finger. The bowls were balanced upon fingertips, as is illustrated upon a relief from Hittite levels at Alaca Höyük, and Neo-Assyrian reliefs from Nimrud (Figures 4.22-4.23; see Müller-Karpe 1988, 26, Fig. 1.8; Gorny 1996, Fig. 11.11; Stronach 1996, Figs. 12.1-2, 12.7-8). The author observed the level of difficulty that was involved in handling and drinking from these objects, using these hand positions. Modelling these practices allowed a closer examination of the skill required in manipulating cups and bowls from Anatolian sites. It also provided insight into the reality of using these vessels at drinking events.

#### a. The found replica objects

Objects of a similar size and shape to the single-handled cups and bowls were sourced from various charity shops. They include a metal votive candle holder and two small rounded dishes, all of brass. A small ceramic plate and a small plastic lid with an inner lip were also used. The dimensions and weight of these objects is provided in Table 4.8. The objects are photographed in Figures 4.24-4.32. The brass votive candle holder was used to represent the single-handled cups. It was of an ideal size, measuring 2.5 cm in height and 5.5 cm in diameter. The candle holder was given a handle by threading a single piece of baling wire, .15 mm diameter

and fifty cm in length, through a hole at the side of the object.<sup>67</sup> The wire was threaded through this hole five times, creating a handle that was four cm in height and three cm in width. The metal rounded dishes had curved bases, which made them suitable imitations of the EBA shallow bowls. One of the dishes featured a large omphalos at its centre, approximately 1.8 cm in depth. The dishes were seven cm shorter in diameter than the bowls from Alaca Höyük and Horoztepe. They measured from 10 to 10.5 cm in diameter, while the bowls from Alaca Höyük and Horoztepe measured between 17 and 19.15 cm in diameter. Yet drinking bowls with a diameter similar to that of the replica dishes were known from early periods. As was mentioned above, an omphalos bowl measuring eleven cm in diameter was found within the Eskiypar treasure (Özgüç and Temizer 1993, 617, Pl. 116:2). The Eskiypar treasure is dated to the period transitional to the Middle Bronze Age (Özgüç and Temizer 1993, 628; Zimmermann 2005, 161-63).

<b>Object</b>	<b>Height (cm)</b>	<b>Diameter (cm)</b>	<b>Weight (g)</b>
Metal votive candle holder	2.5	5.5	23; 25 g with baling wire handle
Metal dish 1	2.0	10.5	30
Metal dish 2 with omphalos	2.0	10	25
Ceramic plate	2.5	17	350
Plastic lid with inner lip	1.4	14	30

Table 4.9. Dimensions and weight of found metal and ceramic objects that were used to infer the handling of small cups and bowls. The weight of the metal candle holder is provided before and after adding the handle of baling wire.

The small metal dishes were similar in shape to the metal drinking bowls, but they were not of ideal dimensions. Therefore a few additional objects were used to mimic the use of the EBA drinking bowls. They include a small ceramic plate and a small, flat plastic lid, which are more broad than the brass vessels. These objects measured 17 cm and 15.2 cm in diameter, respectively. The plate, while of an ideal dimension, was between twelve to fourteen times heavier than the metal rounded dishes, as it is made of ceramic. The plastic lid, at thirty grams, was much more representative of the metal dishes, though it was flat rather than rounded. The use of the drinking bowls was replicated by combining an impression of how all four of the metal, ceramic, and plastic objects were handled.

The weight of the ancient drinking vessels is uncertain. This information was not recorded by the excavators at Resuloğlu, Horoztepe, and Alaca Höyük. Yet the weight of brass is similar to the weight of copper and bronze. This suggests that the brass dishes and votive candle

<sup>67</sup> The metal votive candle holder featured seven decorative holes along its sides. So that the cup could hold liquid, the inside was given a thin layer of aluminium foil. The effect of the foil on the weight of the vessel was insignificant.

holder were appropriate objects for replicating the original vessels. Heavier vessels would have required a greater amount of effort in their handling. The difficulty experienced in cup and bowl handling would have been intensified if the vessels were heavier. Yet strain would have been felt in identical areas of the wrists and hands.

#### b. Modelling the use of single-handled cups

Handling the makeshift cup of brass confirmed that the single-handled cups would have been difficult to manoeuvre. A second finger was often required to make the cup more stable. When the cup was filled with liquid, this also required concentration in order to keep the liquid from spilling. Holding the makeshift cup by the forefinger required the use of two additional fingers. This included the thumb, pressed against the top of the handle, and the middle finger, pressed at the base of the handle (Figure 4.33). The wrist remained flexible even when the object was filled.

Handling the cup by the smallest finger required considerably more effort and concentration (Figures 4.34-4.35). The ring finger had to be pressed against the smallest finger. The rest of the fist was strained behind it, in order to counterbalance the weight of the cup. The wrist was restricted in movement. In order to drink from the cup without spilling liquid, the forearm had to be raised together with the wrist. Tilting the vessel towards the mouth required a carefully controlled, deliberate action (Figure 4.36). The motion had to be repeated several times before it was possible to use the cup by the smallest finger without spilling.

Again, the weight of the intact cup from Resuloğlu Grave M141 is unknown. Yet the weight of the makeshift cup, with its handle, amounted to only twenty-five grams. If the cup within Grave M141 was heavier, its use would have required more effort and skill in order to drink from it. This would be significantly increased in handling the vessel by the smallest finger.

The cups from Horoztepe had pointed bases, and therefore would have had to be filled whilst they were already elevated. The pointed bases bring to mind the act of toasting, and they also suggest that using the cups involved display. Thus manoeuvring the cups, which would have been made more intense if perched upon a specific finger, seems intended to have been demonstrated before others. It is possible that the larger cup from Horoztepe functioned as a dipper or ladle, though this also would have involved difficult handling. The open handle of the cup may have been hung along the outside of a larger vessel, in the manner of Neo-Assyrian side-spouted vessels (Stronach 1996, Fig. 12.6). The vessel may also have been used to fill the smaller cup. It has a similar shape to wine server vessels depicted upon Neo-Assyrian reliefs from

Nimrud (Stronach 1996, Figs. 2.1-2). According to Stronach (1996), these vessels would have been "tilted in a controlled movement of the wrist" (179).

### c. Modelling the use of shallow bowls

The bowls required difficult handling just as did the single-handled cups. As explained above, the use of the bowls was imitated by handling four objects: two metal dishes, one small ceramic plate, and one plastic lid. One of the metal dishes featured an omphalos base.

The small rounded dishes were not difficult to balance when they were held still, but were difficult to manoeuvre in attempting to drink from them. The small metal rounded dish without an omphalos could be easily held by the fingertips in the manner depicted in later reliefs (Figure 4.37; Müller-Karpe 1988, Fig. 1.8; Stronach 1996, Fig. 12.7). The vessel required a concentrated supination of the wrist, or counter-clockwise, lateral twisting, when attempting to draw the bowl towards the mouth. Upon tilting the bowl and its contents, the fingers and wrist were flexed. Drinking in such a manner would require coordination of the eyes, lips, fingers, and wrist. The possibility of error was greatly increased if attempting the manoeuvre the vessel quickly. The bowl with an omphalos base was significantly easier to drink from. It was not difficult to balance the vessel with the use of the thumb and middle finger (Figure 4.38). In manoeuvring the vessel, strain was felt in different areas of the wrist than when using the other bowl. Here the muscles around the phalanges, or finger bones, were stressed, as were the tendons at the top of the wrist.

Use of a more broad object, such as the ceramic plate or plastic lid, was more strenuous upon the wrist (Figures 4.39-4.40). A greater amount of concentration was also required to balance the vessel and to keep it upright and filled, especially when it was being tilted. More strain was felt upon the muscles around the metacarpal bones, or the intermediate hand bones. The first metacarpal, or thumb bone, and the tendons at the top of the wrist were especially strained. This strain was increased when using the heavier ceramic plate, though more weight also provided more control over the object. Of course, this control would be compromised if the vessel was well-polished and smooth, and if condensation was present. Both of these issues are likely to have characterised the use of the broad metal drinking bowls.

Drinking bowls were created in ceramic during the Early Bronze Age. As was noted above, shallow ceramic bowls were recovered from three graves at Demircihöyük-Sarıket necropolis (Figure 4.12; Seeher 2000, Figs. 24, 26, 38). All of the bowls from Sarıket necropolis are of polished, blacktopped ware. This blacktopped ware is not described for its weight or

thickness. It would be interesting to note whether or not these vessels were made to be more thin, and therefore less heavy, than other ceramic bowls. A significant difference in weight may have been related to the use of the bowls for raising, tilting, and drinking from them.

It was explained above that metal drinking bowls are found farther west, at Troy and also in the Aegean. It was also explained that drinking from bowls may have been a novel practice for the period, which was transmitted beyond areas of direct contact. Drinking practices may have been associated with a specific product or beverage. It may be both the product and the method of drinking that was transmitted in a down-the-line manner between sites. The novelty and prominence or *salience* of this practice may also explain its survival into later periods.

### **C. Conclusion**

At sites across the north-central Anatolian plateau, small, single-handled cups and shallow bowls seem to have been used for drinking. Their association with graves at Resuloğlu, Kalinkaya, and Alaca Höyük suggest that drinking was a part of mortuary ritual. Resuloğlu provides the clearest indication that small, single-handled cups are intended for 'one last drink' on the part of the deceased. Drinking vessels and animal bone between the graves also point to graveside drinking (Yıldırım 2006, 7). At Horoztepe, drinking vessels were deposited in a context that may or may not have been mortuary in character. Drinking vessels were associated with ritual equipment, and may have been used in procession. This suggests that drinking acts were performed, as was investigated at Alaca Höyük (Chapter three).

The similar dimensions of the single-handled cups suggests that they fulfilled a specific purpose, and that this purpose was recognised across the plateau. Again, a standardisation in cup sizes would be out of place considering what is known of settlement organisation during the period. From this perspective, the similar size of the cups seems even more deliberate. It speaks to the shared acknowledgement of the uses of a particular tool. This tool seems to have been related to drinking in short, measured volumes. Such acts are intended to draw individuals together by causing them to experience drinking at the same time. Yet who are the individuals who were drinking together? Was drinking an activity restricted to the élite, or was drinking a community-wide activity to mark social solidarity? What role did drinking events play within these communities?

Some of the drinking vessels would seem to have been élite status objects. Most of the cups and bowls are made of precious metal, and constructed through fine metalworking techniques. They were created not for practical uses, but in order to be displayed. They are

appropriate objects for demonstrating prestige through conspicuous consumption. The special handling and manoeuvring that was required for drinking from the cups and bowls may have become a symbol of *élite* status. It communicated special knowledge, which would have been difficult to learn. We may imagine that such practices may have been passed down or taught, as are special 'table manners' today. If the special handling of vessels communicated social class membership, then failing to use the cups appropriately may have acted as a barrier to participation.

On the other hand, ceramic drinking vessels indicate that drinking was not an activity that was restricted to *élites*. Drinking did not need to be done using rare metal vessels. This has already been demonstrated at Alaca Höyük, where ceramic vessels within non-*élite* graves were identical in shape to metal versions within the 'Royal' tombs (Gürsan-Salzmann 1992, 114). Special beverages, then, were not inaccessible to certain segments of the population. Yet beyond the characteristics of the vessels, there is very little evidence to indicate the social class of participants or the hosts of drinking events. Even if metal vessels signal *élite* status, it is unclear if these practices were exclusive. At these sites it is not possible to determine if drinking events were *élite* and reserved, or open and participatory.

It may be overly simplistic to associate the different materials of drinking vessels with different classes of drinkers. Such an argument relies upon very general associations about the properties of metal versus ceramic. It also ignores indications of how the vessels were used. Decoration upon the ceramic single-handled cups from Ahlatlıbel and the ceramic bowls from Demircihöyük-Sarıket indicate that these vessels were exceptional and significant. They seem to be as symbolically charged as the versions of metal. They also seem to have been used in the same way, from their similar dimensions and volume capacities. Thus ceramic cups and bowls alike may have been used to communicate special drinking knowledge. Elaborate metal vessels would have been appropriate objects to facilitate *élite* status competition. But this does not mean that ceramic vessels were used by the non-*élite* to imitate these practices. If metal and ceramic do not neatly correspond to different social categories, then they cannot be taken as an indication of social status. And the material of different drinking vessels alone cannot indicate if a drinking event or setting was *élite* or non-*élite*.

Metal vessels also do not provide enough evidence that there was an established, *élite* hierarchy at these sites. Impressive metal vessels are appropriate objects for *élite* status competition. But they do not indicate that there was one central administration or ruling group. Schoop (2011, 36) has recently suggested that metal objects are more likely to be the consequence of social changes during the EBA rather than their cause. In other words, *élites* may

have used metalwork to display their higher status. But this is not enough evidence to argue that metal was *controlled* by them. It is possible that élites were still negotiating their status within the community. In this scenario, different groups may display wealth and special knowledge in an attempt to attract supporters and gain influence within the community. As was explained in Chapter one, Brumfiel (1989, 1994) terms this process *factional competition*. It involves different factions, or groups, competing against one another for influence; no one group is fully established and in control of settlement resources. The community may play an important role in distinguishing between potential leaders, whose position is never fully secure. Because there is no one established authority, this may be considered an incipient, still-developing form of social organisation. Yet factional competition would still involve the use of expensive metal vessels, and thus metal craftsmen, and a division of labour within communities. It also involves a hierarchy between faction leaders, their members, and the rest of the community. There is not enough information on these sites to clarify the issue. Settlement features such as architecture, cultivation strategies, craft production, and other aspects continue to await further research.

Drinking practices provide some insight into how sites functioned. They focus attention on the social processes that are occurring within settlements, beyond simply the characteristics of vessels. Rather than identifying whether vessels are metal or ceramic, they examine what messages are conveyed by drinking, for instance how it is done, and where. A number of observations can be made about the EBA communities of north-central Anatolia by examining how cups and bowls were used. These observations are based upon how the vessels are held and drank from, and also how they were deposited within various settings.

The cups examined in this chapter share a limited size and volume. These characteristics are common to both metal and ceramic varieties, and were thus central to the concept of the vessel. The limited volume of the cups suggests that they were intended for drinking acts, in which drinking is experienced together with others. The special handling of the vessels reiterates that drinking was a social activity. Balancing the cups upon a single finger or the bowls on fingertips required skill; the vessels were designed to be a challenge. Handling may have had to be learnt or passed down, and communicated special knowledge. This would have demonstrated group membership, and it may have also acted as a barrier to participation in some circles. However, the size of drinking events is unclear, as is whether they were exclusive or open to the community. It is also uncertain which social groups would have participated. Yet already, drinking has drawn the conversation away from a focus upon the value of objects and towards a discussion of their social use.

The smashing and destroying of vessels may have served different purposes. It may have reinforced the positions of leaders or the élite by creating scarcity (Reinach 1906; Wiesner 1938, 170, 180; Fossey 1985, 23; Soles 1999) or demonstrating access to important resources (Neiman 1997, 269-70). This may be used to communicate that an individual is an effective candidate for leadership (Plourde 2008, 376-77). Destroying objects may also facilitate cooperative social relationships. As J. Chapman (1994, 1996, 2000; with Gaydarska 2007) explains, destroying or fragmenting objects establishes an enchained relationship between participants. Twisting, crushing, or smashing vessels together with others creates a shared experience. As the object is permanently destroyed, so are the relationships between the participants made more enduring. It was explained in Chapter two that to the individual participants, this is a cooperative practice, and a competitive display to those who are excluded. For instance, vessel smashing at a community-wide event may communicate solidarity. Practiced amongst a small group of élite, vessel smashing may have demonstrated solidarity and group membership. To others within the community, it may demonstrate prestige and social distance. Guests at a Georgian *Supra* connect with one another by consuming drink at the same time (Mars and Altman 1987). Participants may use drink to connect with individuals who are otherwise socially unattainable. To those who are excluded, the *Supra* marks a class of individuals as distinct, exclusive, and as having more wealth and influence.

Details of the settings in which drinking is done may tell us more about the social relationships that were present at drinking events. These details are assessed together with what is known about the vessels and how they were handled and deposited. At Resuloğlu necropolis, drinking vessels and other objects were broken and left in-between the graves. They include both offerings to the dead, and the remains of graveside feasting practices. 'One last drink' is mirrored inside the graves as outwith them, from crushed metal cups between the burials (Yıldırım 2006, 7). This suggests that participants drank together; the dead may have figuratively participated. These practices are also seen at Alaca Höyük, from animal bone within, atop, and between the 'Royal' graves, and the collection of vessels in non-élite Grave FIII (Chapter three). The drinking vessels within Trench A at Horoztepe were associated with procession equipment, including sistra, statuettes, and standards (Özgüç and Akok 1958, 44-45, 48, Fig. 20, Pls. VII:2-3, XII: Ia-Id). These objects were intended to be displayed before others; they have a similar purpose to the difficult handling of the metal drinking cups and bowls. Standards and statuettes have also been reported from Alaca Höyük and Kalınkaya (Arık 1937, Pl. CXCI, CXCIV-CXCV; Koşay 1944, Pl. LXXXI; Koşay 1951, Pl. CXXVI; Özgüç and Akok 1958, 49; Yıldırım and Zimmermann 2006, Figs. 5, 10-11; Zimmermann 2006b, Figs. 2-4). The association between these objects



suggest that drinking sometimes accompanied ritual, and may have been a feature of procession. This is observed at different sites, though it probably occurs to a different extent between them.

Ritual elements help to characterise drinking events. At ritual events, drinking would have helped to facilitate social and political objectives. As was explained in Chapter two, food and drink carry meaning (Douglas 1975, 1984). They may embody beliefs (Barthes 1973, 1979) and social standing (Goody 1982; Bourdieu 2010). This includes concepts promoted by groups at feasting events, and the social relationships that are facilitated by them. As drink is incorporated into the body, so do participants internalise the social relationships and even the messages that are communicated at these events (Hamilakis 1998, 1999; with Sherratt 2012, 194). These relationships may even be embodied in the way that food and drink is distributed (J. Chapman 2000, 40-41). Food and drink reiterate the social relationships between participants, no matter if they are collectively-oriented or hierarchical. They demonstrate these relationships through a highly memorable and effective medium, and in so doing make them more permanent.

It is unclear who was present at drinking events, and this limits what can be drawn about the social complexity of these sites. The procession equipment within Horoztepe Trench A would seem to indicate that the vessels and other objects were publicly displayed. Yet Trench A as a context is poorly understood. It is uncertain how this equipment was deposited, or the nature and size of ritual events for which it was used. At Resuloğlu, the drinking vessels and animal bones between graves suggest that drinking at the necropolis served to connect individuals. Yet the meaning of these events depends upon who was participating. Drinking may have been between a small group of élite, or it may have involved large groups from the community. The ritual equipment from these sites cannot be used to determine how sites were organised. It is impossible to know, from the symbols themselves, whether a community was organised around a single, centralised group, or if it involved competing factions. The ritual objects associated with drinking may have reiterated the status of one established group, for instance a religious cult. Yet ritual iconography may also be used by different, competing groups. As was explained in Chapter two, competing factions also use a single iconography. They vie against one another on the basis of legitimacy rather than political platforms, and use identical symbols and rituals in order to do so.

Drinking activity needs to be assessed together with evidence from settlements in order to determine how drinking reflected and impacted community organisation. Without more information about who was drinking, it is difficult to assess whether these activities facilitated community solidarity, or if they served more political objectives. It is important to remember these limitations, and to reserve any determinations of the social complexity of these sites until more research has been completed. Despite these limitations, a focus upon drinking greatly

improves the approach to settlements of the north-central plateau. Drinking draws attention to the social processes that affect settlement organisation. Because these social processes are varied, they outline different possibilities for the uses of drink, and for how sites may have been organised. Thus even when data from settlements is lacking, evidence may be compared against the different social uses for objects. This acknowledges the range of social relationships, which provides a way to anticipate, or at least to leave room for, the different ways that sites may be organised.

The observation that drinking was displayed before others is not enough to determine that drinking served to demonstrate the superiority of one central leader or group. There is the possibility of factional competition. Also, these practices may have varied between sites. Drinking may have emphasised the position of high-status groups at one site, while it may have been used for competition, or to demonstrate solidarity, at another. These differences are important, and they are recognised by a framework that considers the different social uses of drink, and how objects (or material culture) may be consumed. This approach acknowledges that drink may be used by different social actors. It may not have performed the same role at different sites. This approach also focuses attention away from the physical properties of objects, to how they are used between individuals. On the north-central plateau, this approach recognises that metal drinking vessels are not always elite objects, used to maintain unequal status relationships. Ritual objects such as bull statuettes and *sistra* may have reiterated the chief status of one central group. Or, they may have been used by different groups in order to compete against one another. The conspicuous consumption of crushed and smashed metal drinking vessels may have reinforced conditions of inequality. They may also have served the objectives of other, less established would-be leaders. These differences are important for better defining the political structure of north-central communities. They acknowledge that a slight difference in how objects are used may signal a significant difference in social relationships. On the north-central plateau, it is the limitations of the data that provide a more accurate picture of site organisation. Recognising different explanations for the handling and smashing of drinking vessels brings forward other organisational possibilities. This is made possible by focusing upon objects and social activities. In the process, it advances how drinking practices in particular may be used to gauge social complexity.

The following chapters will investigate the nature of drinking practices at areas farther west. Chapter five investigates Demircihöyük-Sarıket necropolis. Chapter six examines drinking practices in western Anatolia, including the coast as well as inland. As was done in this chapter, the evidence will be compared against a framework that considers the different social uses of

drink. These practices will be evaluated for how they reveal social relationships, and how this relates to social organisation. They will also be compared across sites in order to determine if there are significant regional differences in drinking practices, and thus complexity.

## Chapter Five: Jugs for pouring at the EB II necropolises of Demircihöyük-Sarıket and Küçükhöyük

Graves of the Eskişehir region provide a robust source for investigating drinking practices in regions between central Anatolia and areas farther west. The necropolis of Demircihöyük-Sarıket features a large number of graves dating to the EB IIa period (Seeher 2000). The necropolis is well-known for the predominance of a single ceramic jug within many of its graves. Jugs were also deposited within graves at Küçükhöyük cemetery, in nearby Bilecik Province (Gürkan and Seeher 1991). These burials are known to follow a similar pattern: a single jug, deposited within a large number of graves. The jugs have been taken to indicate that drinking was a central feature of mortuary practices. Both necropolises are well published, and the contents of just over seven hundred graves have been detailed between them (Gürkan and Seeher 1991; Seeher 2000). Yet to date, the prevalence of the jugs has never been examined in detail.

This chapter will analyse the incidence of the jugs across the graves at Demircihöyük Sarıket and Küçükhöyük necropolises. It will use statistical methods to test whether jug deposition varied according to a number of factors. Were the jugs provided to only certain inhabitants? Were they distributed on the basis of the wealth or social status of the interred, or some other factor? To answer these questions, the presence of jugs will be compared to that of metal and other objects, as well as the type of grave. This may indicate whether the jugs were restricted to those individuals having more resources than others within the community. These methods may also clarify to what extent the detection of the jugs depended upon preservation. If jugs were only recovered from certain types of graves, then preservation may be affecting how drinking practices are detected across both necropolises. This may also confound the relationship between jugs and the presence of other objects, the wealth or status of the interred, and the type of grave.

The results of these tests may indicate the role of drinking and special beverages in burial practices. They may also provide insight into the social organisation of Demircihöyük and Küçükhöyük settlements. Only Demircihöyük has been excavated, and the finds from the graves will be compared against the results of those investigations. This information will be assessed for how it relates to settlements of the north-central plateau (Chapters three and four) and in western Anatolia (Chapter six). Taken together, this may provide insight into Early Bronze Age drinking practices, and the different ways that drinking may be used within communities. If drinking

relates to organisation, then it may also indicate how the organisation of settlements varied across central and western regions.

### **A. Necropolises of the west-central plateau and Eskişehir Plain**

Demircihöyük-Sarıket and Küçükhöyük are situated in-between the western coastal region of Anatolia and that of Ankara and the north-central plateau. For a millennia the area has served as a crossroads, as a major exchange thoroughfare between west and centre (Korfmann 1983, 189). Together, the necropolises provide a robust data set for examining burial practices of the EB II. Demircihöyük-Sarıket (here termed 'Sarıket') features 498 graves across three main types of burial. Küçükhöyük necropolis, through its 204 graves, also of three types, provides an invaluable check on trends at contemporary Sarıket. It may also indicate whether these trends were regional in scale. Details of the settlement at Demircihöyük may be used to help interpret the provision of jugs and other grave goods at both necropolises.

The date of the necropolises is well-suited to the objectives of this thesis. From ceramic typologies, Seeher (2000, 32, 222) aligns the graves at Sarıket with the Demircihöyük settlement layers K/L to P, and a few graves to layer Q. This is coincident with the Early Bronze Age IIA period (Efe 1988, Fig. 98; Sarı 2009, 91). Thus the graves provide the opportunity to evaluate drinking in the region before the EB III. The date makes sense considering the presence, at both necropolises, of tankards and beaked spouts, and the absence of two-handled tankards, or *depas amphikypellai* (Chapter six). Küçükhöyük is considered to have been contemporary with Sarıket on the basis of ceramic typologies (Efe 1988, Fig. 98; Gürkan and Seeher 1991, 78, 80-86).

Absolute dates for Demircihöyük K/L to Q are available. Calibrated 14C dating yielded a range of 2650-2500/2450 BC for settlement layers K/L to Q (Weninger in Korfmann 1987, 4-13; Seeher 2000, 222). This is corroborated by ceramics from Küllüoba, a site located thirty-five km southeast of Eskişehir (Sarı 2009, 89). The pottery from Complex II at Küllüoba demonstrates a number of similarities to that from Sarıket (Sarı 2009, 98). Complex II yielded similar 14C calibrated dates of 2603-2487 BC (Efe and Fidan 2008, Fig. 8). This places Sarıket and Küçükhöyük roughly contemporary with middle Troy I-early Troy II, which dates to between 2900-2400 BC (Easton 2002, 340). The very latest EBA occupation at Demircihöyük, prior to its hiatus, would have been coincident with the beginning of Troy IIA (see Efe 1988, Fig. 98). This is just prior to the introduction of new ceramic drinking vessels in the west such as the *depas amphikypellon* (Chapter six).

## i. Demircihöyük settlement

The settlement of Demircihöyük is located approximately twenty-five km west of the city of Eskisehir in the inland northwest of Anatolia (Map 1). It lies on the border of the adjacent Bilecik Province to the west.<sup>68</sup> The Early Bronze Age settlement has been published in detail by Korfmann (1983, 1987), and the Early Bronze Age pottery extensively documented by Seeher (1987) and Efe (1988). Details of the architecture at the settlement provide some indication of the organisation of the site. They introduce a number of points to consider in the assessment of the graves.

Demircihöyük was a small village of less than two hundred farmers (Korfmann 1983, 194, 218, 242-44). Its architecture does not show any clear signs of hierarchical organisation. The settlement comprised a series of houses, in a radial arrangement, all facing an interior courtyard (Figure 5.1). Each house was trapezoidal in shape, with abutting individual walls (Düring 2011a, 268). Korfmann (1983, 222-29) termed this arrangement *Anatolisches Siedlungsschema*. The stone wall surrounding the settlement was interpreted as a defensive wall by the excavators. However, the structure could also have been a terrace wall constructed in response to the marsh-like conditions of the surrounding land (Düring 2011a, 267-68). Courtyard storage bins located in front of the houses suggest that inhabitants were not concerned with securing or protecting material from others. As Düring (2011a, 268) explains, this "reinforces the idea that we are dealing with a society in which the communal component was at least as important as the household." It is possible that Demircihöyük featured a non-hierarchical, unranked form of social organisation. Yet the architecture at the settlement points to some degree of settlement planning and the organisation of labour. Therefore it is also possible that some individuals at the settlement were able to elicit or command labour from others. They may have been able to accumulate more resources than others. This would imply that some degree of ranking or social inequality may have been present within the population.

The necropolis may help to clarify these issues. As part of assessing the provision of jugs, this study will examine the extent to which graves at either necropolis demonstrate wealth or social status. Some burials were provided more grave goods than others, though this is mostly ceramic vessels or small amounts of metal. As Seeher (2000, 28) explains, "it is only in exceptional cases that one gets the impression of being in front of a significant personality."<sup>69</sup>

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<sup>68</sup> Per TAY settlement database: [http://www.tayproject.org/TAYages.fn\\$Retrieve?CagNo=796&html=ages\\_detail\\_e.html&layout=web](http://www.tayproject.org/TAYages.fn$Retrieve?CagNo=796&html=ages_detail_e.html&layout=web), last accessed 11th January 2014.

<sup>69</sup> Translated by the author from the original text, which is written in German.

Other graves contained one or two unique or extraordinary objects, but were not accompanied by a higher number of vessels. Overall, only a small number of graves contained a higher than average number of goods.<sup>70</sup>

Yet assessing the wealth and social status of individuals from their graves is problematic for several reasons. Firstly, grave goods may not be an accurate reflection of the personality or status of the deceased. As was explained in Chapter one, objects may be placed in graves for a variety of reasons (see Parker-Pearson 1999, 7-10). These motives are not always related to the deceased, or concerned with reflecting their social position. It is also problematic to use burials as an indication of the social structure of a settlement (see Alekshin 1983, 141; Fahlander and Oestigaard 2008, 10). This study is tasked with investigating whether the presence of jugs was related to a number of different factors. This includes the wealth and social status of the deceased, amongst other issues. The following section presents the methods that will be used to investigate the graves at Demircihöyük and Küçükhöyük necropolises. That section will explain the approach to wealth and status that is taken by this study, and how these issues will be assessed within the graves. Because the structure of settlements cannot be determined from burial data alone, this study will examine this information together with other data from the settlement. This includes the architecture and other aspects of the settlement. Together, this information may indicate whether or not these settlements were characterised by some degree of inequality, or the concentration of resources or wealth.

## ii. Demircihöyük-Sarıket necropolis

Demircihöyük-Sarıket necropolis ('Sarıket') provides the most extensive data set for Anatolian Early Bronze Age funerary assemblages. It is therefore the best opportunity to analyse the role of drinking in mortuary practice. Sarıket was an extramural cemetery located 250 metres west of Demircihöyük settlement.<sup>71</sup> When excavated, it yielded 498 graves, ranging in grave type and preservation.<sup>72</sup> Of these, 264 contained grave goods, and 234 did not (Graph 5.1). The graves had been placed in neat rows, suggesting that grave markers had been used (Seeher 2000, 17). Most of the deceased had been positioned facing the southeast.

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<sup>70</sup> Some graves may have never been intended to contain a larger amount of objects. For example, of the eight bowls that are found within G 243, only two were intact or mostly intact. The other six rim fragments may have been tomb backfill or originally part of Grave 151 (Seeher 2000, 84).

<sup>71</sup> Per TAY settlement database: [http://www.tayproject.org/TAYages.fn\\$Retrieve?CagNo=796&html=ages\\_detail\\_e.html&layout=web](http://www.tayproject.org/TAYages.fn$Retrieve?CagNo=796&html=ages_detail_e.html&layout=web), last accessed 11th January 2014.

<sup>72</sup> Possibly 499 if one includes G 221-222, a collection of two jugs between G 221 and 222 (Seeher 2000, 92). In this analysis, G 221-222 is not considered a grave. Thus the total number of burials remains 498.

The data set is not without limitations. Many burials were lost from the top seventy to ninety centimetres due to erosion and ploughing. Also, of the lengthy occupation at Demircihöyük, burials at Sarıket only represent a portion of the population during the EB IIa period.<sup>73</sup> It was not the only necropolis in use at the site, and it is possible that some of the EB IIa population was buried elsewhere.

Graves at Sarıket necropolis are of three main types: pithos, stone cist, or simple earth graves (Graph 5.2).<sup>74</sup> One burial (G 100) upon a burnt clay 'platform' ('Lehmwannengrab') is unique. Of the recovered burials, most were within pithoi (357 burials, seventy-two percent), followed by simple earth graves (116 burials, twenty-three percent) and those using stone (twenty-one burials, four percent).<sup>75</sup> Three graves (G 4, 100, 297, 361) were not categorised. Graves using stone were of two types. The category includes those that used stone slabs to construct a rectangular cist, as well as those that piled stones atop the deceased (Seeher 2000, Fig. 9, 22-23). An additional twenty-three collections of bone may have been pit graves (Seeher 2000, 21). Many of the pithos burials (127) were *Doppelpithosgräber*, in which two pithoi are arranged with their openings adjacent to one other, at times ringed by stone (Seeher 2000, 18, Fig. 9). A combination of grave types within cemeteries is in-keeping with western Anatolian mortuary tradition in general (Lamb 1937, 54ff; Bittel 1939; Gürkan and Seeher 1991, 74). Simple earthen pit graves sometimes featured a stone circle around the deceased, as with Grave 54, or incorporated stone platforms, as with Grave 274 (Seeher 2000, 18, 97). Some earth graves may have been covered with timber (Seeher 2000, 21). Vessel fragments were sometimes incorporated into the burial, such as in Grave 151, which covered the body with large tripod vessel sherds. Earthen pit burials sometimes contained sherds in the grave fill, as with Graves 45 and 49. This practice may explain numerous bowl sherds within Grave 143.

The choice of grave type was most likely affected by seasonal variables (Seeher 2000, 23). In winter months it would have been difficult to dig pits and to transport stones. Stone cist graves would have been especially problematic at Sarıket due to the considerable distance

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<sup>73</sup> The population of Demircihöyük was estimated to be 2080-2860 across four hundred to five hundred years, or across sixteen to twenty generations of twenty-five years each (Seeher 2000, 17).

<sup>74</sup> Grave 255 uses an amphora as burial container. It is the only grave of its kind in the necropolis. Grave 255 does not differ significantly from depositions using pithoi. Therefore In this study, it is classed together with pithos graves.

<sup>75</sup> The amount of burials in each category differed from that provided by Seeher (2000). He reports: 361 pithos burials, or seventy-two percent; ninety-two earth graves, or eighteen percent; and twenty stone cist burials, or four percent.



between the settlement and the necropolis. Otherwise, the number of cist graves would likely have been more abundant, as at nearby Küçükhöyük.<sup>76</sup>

There was no pattern in the provisioning of grave goods by grave type. Of 357 pithos graves, 177 contained grave goods (fifty percent), and 180 did not (fifty percent). Of 116 earthen pit graves, sixty-eight contained grave goods (fifty-nine percent), and forty-eight did not (forty-one percent). Of twenty-one stone graves, seventeen contained grave goods (eighty-one percent), and four contained no grave goods (nineteen percent). Objects may have been more likely to be deposited within stone graves, or the use of stone may have better facilitated their preservation. It may not necessarily be a function of wealth, especially if stone was more likely to be used at Sariket during the warmer months. These factors may be better understood by comparing the distribution of grave goods across graves at Küçükhöyük (below).

Lead bottles were exotic additions to the graves. Thirty-two were found between both necropolises; like the jugs, they were mostly placed as a single vessel within each grave. The vessels are related to ceramic flasks or 'Syrian' bottles (Figure 5.2; Gürkan and Seeher 1991, 88; Zimmermann 2005, 2006a) that are known from various contexts across the Anatolian plateau. The shape is rare, Syrian in origin as the name implies, or perhaps from southeastern Turkey (Zimmermann 2005, 161). It is at first globular, then ovoid in shape, from stratigraphic sequences at Kültepe (Özgüç 1986, Figs. 34-37). The shape is not represented at Demircihöyük settlement in ceramic (Baykal-Seeher and Seeher 1998, 116), and therefore the import was not adopted into the local repertoire. The unfamiliarity or impracticality of the shape to the local Eskisehir culture is vividly demonstrated by the lead vessel within Grave 295 (Figure 5.3). The neck of the bottle was cut in order to fashion a beaked spout, and a handle was added (Seeher 2000, 152, Fig. 36, Pl. 18:9). According to Seeher,<sup>77</sup> this was in order to adapt the vessel to local preferences or uses.

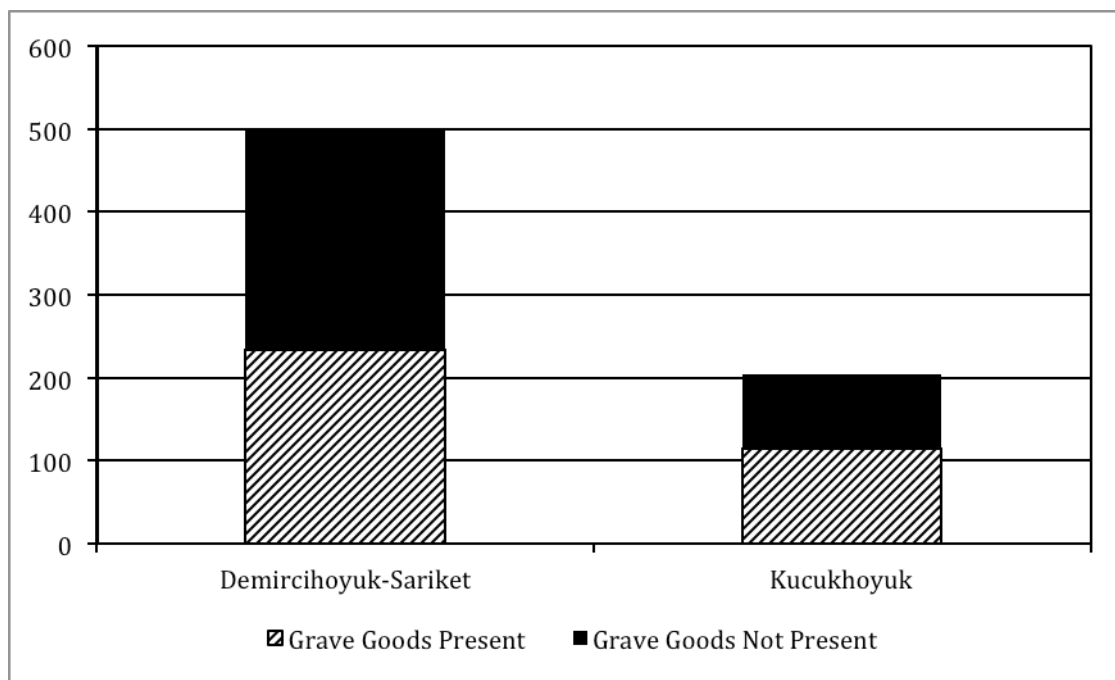
Cattle were associated with seven burials at Sariket (G 117, 125, 316, 321, 335, 367b, 376; Seeher 2000, 30, Fig.10). Complete skeletons were placed in pairs, side-by-side before the grave. All pairs faced the same direction. In four instances the pairs were placed one to two metres from the grave (G 117, 125, 335, 367B; Seeher 2000, 30). The cattle may have been intended to represent a funerary cart or hearse. Yet it is equally possible that they signified, figuratively or in reality, the transport of stones (Seeher 2000, 30-31). The burials are mostly earthen pit graves. In some cases they are associated with stone: Grave 321 is a stone cist grave, while Grave 335 incorporates stone into an earthen pit construction.

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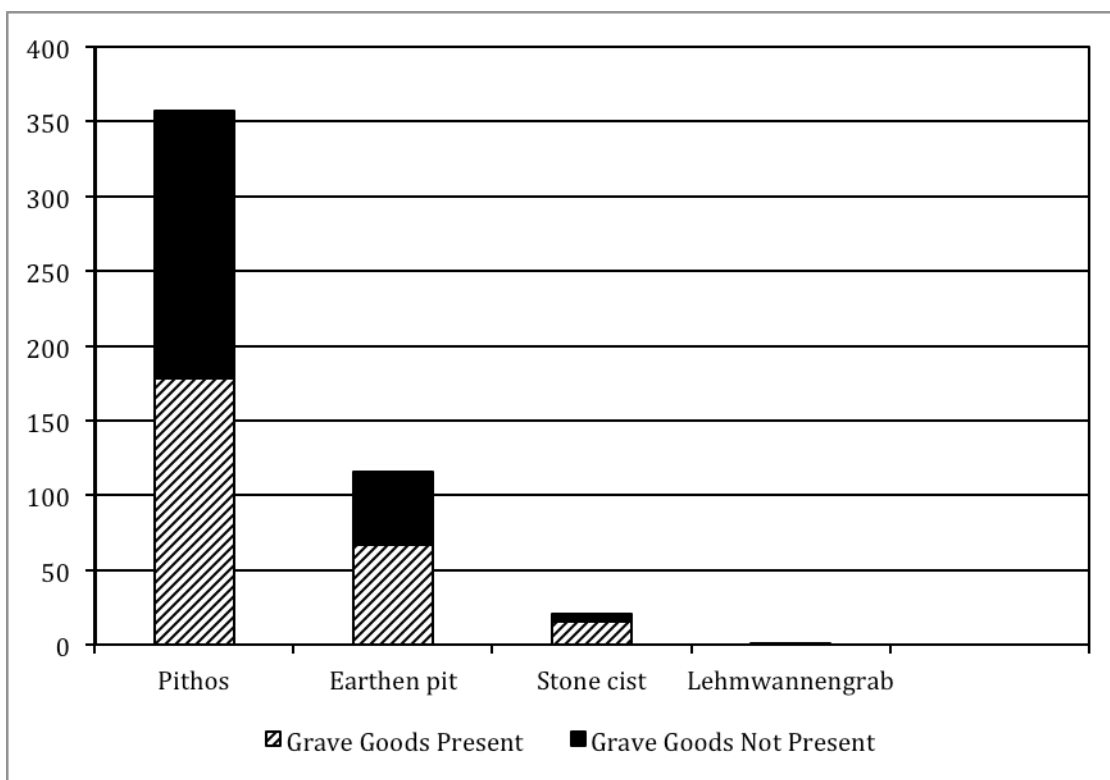
<sup>76</sup> At Küçükhöyük a higher proportion of graves were of stone cist (36 percent versus 4 percent at Sariket). This was likely due to the closer proximity between the necropolis and the area where stones were quarried (Seeher 2000, 22; see also Gürkan and Seeher 1991, 74-76).

<sup>77</sup> Jürgen Seeher, personal communication, 4th October 2011.

Cattle skeletons insinuate, from their use at Alaca Höyük, animals provisioned for the graves of an élite. This includes animal sacrifice as well as graveside feasts. Yet the cattle skeletons at Sariket were not disarticulated, and therefore they were not used for graveside feasting. In a few instances, the cattle are associated with wealthier graves (G 117, 335). However, this is not the case for all of the graves with cattle pairs. Many other graves featuring cattle contained very little: Grave 376 held only a ceramic spout fragment. Grave 321 contained two jugs, whilst Grave 367 held a jug and a thin gold sheet or strip. Grave 125 was lacking in any ceramic vessels but did contain one gold sheet/strip with buckle ornament. Grave 316 seems to be in-between either extreme. It contained a copper/bronze macehead and a stone axe fragment, but was lacking in ceramic vessels. There was no consistent association between the cattle pairs and the presence of specific goods, or a certain number of goods. Seeher (2000, 23) suggests that cattle sacrificed within graves may have been as sporadic and seasonal as was the choice of grave construction.



Graph 5.1. Amount of graves containing and lacking grave goods by necropolis.



Graph 5.2. Sariket necropolis. Stacked bar graph showing presence of grave goods by grave type.

### iii. Küçükhöyük necropolis

Küçükhöyük necropolis lies approximately twenty km west of Demircihöyük settlement (Gürkan and Seeher 1991, 40), within neighbouring Bilecik province. The site is five km east of the town of Bozüyük. It is an extramural cemetery that was excavated under salvage conditions; its associated settlement has never been dug. The necropolis is contemporary with Sariket, and from the large number of graves that were recovered (204 in total), provides a robust sampling of contemporary burial practices.

The contents of the graves were similar between the two necropolises. One of the most telling are metal strips, possibly diadems, which were sometimes placed at the forehead of the deceased (Gürkan and Seeher 1991, 90; Seeher 2000, 61). These items are also seen in Treasure A at Troy (Tolstikov and Treister 1996, 46). At both Küçükhöyük and Sariket, weapons were ceremonial rather than functional (Gürkan and Seeher 1991, 92-95; Seeher 2000, 53-55). Lead bottles are also known to both sites, though a significantly fewer number were recovered from

graves at Küçükhöyük.<sup>78</sup> Similarities in grave goods indicate that the two settlements were part of the same culture complex. Their production of metallurgy and ceramics is similar. Both sites appear to have had access to similar exchange partners, such as that bringing lead bottles across the Anatolian plateau. Both sites may have acted together within this exchange. This is appropriate considering the short distance between them.

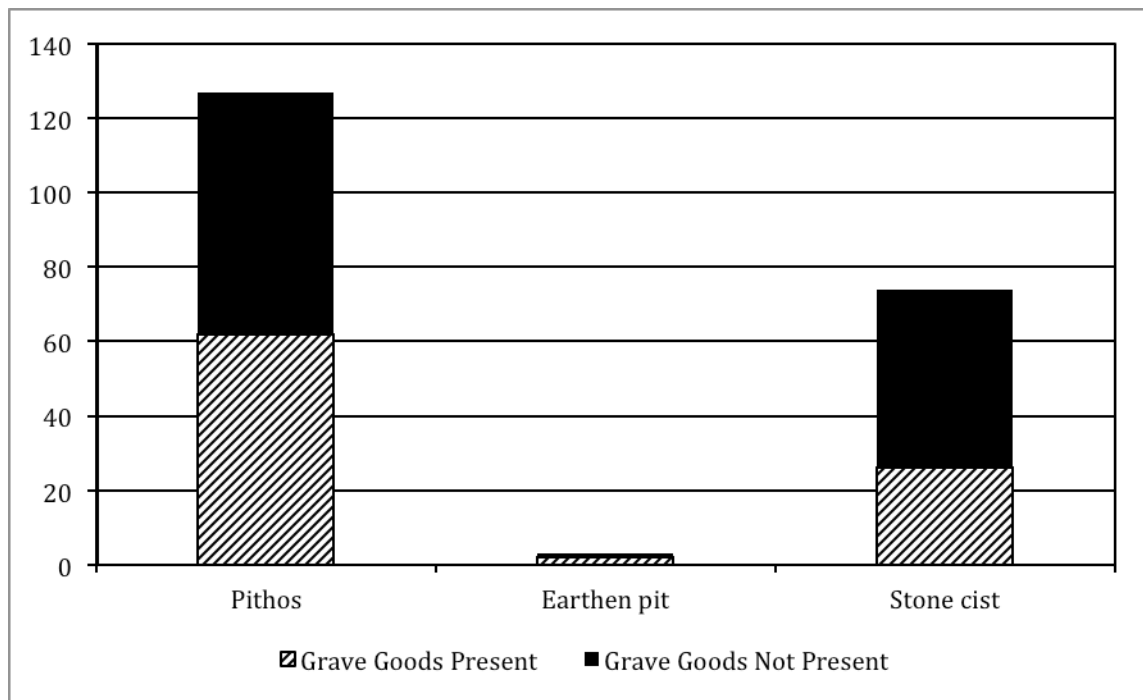
As at Sariket, three main types of graves are seen at Küçükhöyük: pithoi, earthen pit, and stone cist (Graph 5.3). Yet Küçükhöyük featured a much higher percentage of graves constructed of stone, and a much smaller percentage of earthen pit graves. Of the 204 graves that were recovered by the excavations at Küçükhöyük (Gürkan and Seeher 1991), 127 were pithos (sixty-two percent), three were earthen pit (one percent), and seventy-four were of stone (thirty-six percent). Seeher (2000, 22) suggests that this is due to the closer proximity, at Küçükhöyük, between the necropolis and the area from which stone was quarried (Gürkan and Seeher 1991, 74-76). At Sariket, the use of stone for graves was more reserved. In some cases, this may have been because of its higher expense. Yet the use of stone may also have been partly affected by situational factors. Again, stone may also have been used more often during the warmer seasons. The use of stone may also have been related to coincident building projects, when the material was on-hand. In such cases, the use of stone for burials may have very little to do with its higher expense.

The percentage of graves containing grave goods was similar to that at Sariket (Graph 5.1): ninety graves contained grave goods (forty-four percent), and 114 did not (fifty-six percent). The percentage of pithos and earth graves containing grave goods was also similar to that at Sariket. However, at Küçükhöyük, a much higher percentage of stone graves were lacking in grave goods. Of 127 pithos graves, sixty-two contained grave goods (forty-nine percent), and sixty-five did not (fifty-one percent). Of three earthen pit graves, two contained grave goods (sixty-seven percent), and one did not (thirty-three percent). Of seventy-four stone graves, twenty-six contained grave goods (thirty-five percent), and forty-eight did not (sixty-five percent). This reiterates that at Küçükhöyük, the use of stone did not involve a significant increase in expense, as it did at Sariket. It is likely that both settlements buried their dead in earthen pits or pithoi during the winter months. And when stone was used, at Sariket it was more likely to be accompanied by grave goods. A more detailed investigation of this practice may reveal whether or not the use of stone at Sariket was related to wealth. This would require

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<sup>78</sup> At Sariket, twenty-eight graves contained a total of twenty-nine lead bottles. At Küçükhöyük three lead bottles were recovered from three graves (G 85, 155, 195). At Sariket, fifteen maceheads were recovered, across as many tombs. At Küçükhöyük, four were recovered in four graves (G 4, 37, 124, 150), and a fifth macehead was a stray find (Gürkan and Seeher 1991, 92).

separating which stone graves contained substantial objects of metal or other, unique objects, rather than vessels or small pins. A distinction would need to be made over which graves used stone slabs to construct a rectangular cist, and which piled stones atop the deceased. A more reliable pattern may emerge after distinguishing between these traits. A detailed investigation of stone cist graves is beyond the objectives of this study. However these questions are addressed as concerns the ceramic beak-spouted jug.



Graph 5.3. Küçükhöyük necropolis. Stacked bar graph showing presence of grave goods by grave type.

## B. The single beak-spouted jug

Beak-spouted jugs were the most consistently deposited item within graves at both Sariket and Küçükhöyük necropolises. Of 354 graves containing grave goods across both necropolises, 227 contained at least one beak-spouted jug; of these, the vast majority (208 graves) contained a single jug each.<sup>79</sup> Charts of the distribution of jugs and other implements within the graves is provided in Appendix II.

<sup>79</sup> Of 264 graves with grave goods at Sariket, 166 contained beak-spouted jugs. Of ninety graves with grave goods at Küçükhöyük, sixty-one contained beak-spouted jugs. This yields the total ratio 227 graves with jugs to 354 total graves with grave goods, or sixty-four percent. This ratio may be increased if the ceramic contents of eleven graves were able to be reconstructed. Sariket Graves 122, 146, 266, 294, 376, 398, 422, 458, and 524, and Küçükhöyük Graves 125 and 155 contained ceramic vessels that were unable to be identified as jugs or non-jugs.

The predominance of jugs may indicate that drinking and pouring was a central feature of mortuary practices in the region. In order to answer this question, it is necessary to determine whether or not the deposition of jugs was related to other factors. Wealth and preservation are two issues that could have affected the presence of jugs within graves. Wealth may be conveyed by the presence of metal within the graves, or by a greater number of additional grave goods. It may also be indicated by the use of stone cist construction, which would have been costly to obtain and to construct (cf. Saxe 1971; Binford 1972; Tainter 1978, 125-28). Of course, inferring wealth or status from the graves may be problematic, and involves a number of considerations. These are explained below. As for preservation, this may have been a function of grave type. It is possible that certain vessels were better preserved within pithos graves or those using stone.

This chapter will investigate whether the choice to deposit a jug may be predicted by the presence of metal or other items. It will also investigate whether the presence of jugs varied according to grave type. If the presence of jugs may be predicted by either of these factors, then the vessel was likely deposited for reasons other than drinking. For instance, if beak-spouted jugs appeared only in graves lacking in metal, then they may have stood as a replacement for metal. If metal was connected to status or wealth, then the jugs would also be a replacement for wealth. In this case they could have reflected the non-élite status of the interred, rather than ideas about or acts of drinking and pouring. Alternatively, if the jug only appeared in graves containing many objects or containing metal, then they may have been used to mark élite status. They may have been a tool for drinking that was restricted to certain individuals. Jugs may also have related to other practices entirely, which were also restricted. If the presence of jugs was unrelated to 'wealth' (metal or tomb type) or to preservation (tomb type), then they were likely deposited because of the function of the vessel. This includes the use of the jug as a drinking vessel, i.e. for drinking or pouring special beverages. The jug, then, may have been related to the practice of 'one last drink'.

Of course, mortuary practices may not be an accurate reflection of the social processes that were occurring within settlements. This issue was introduced within the first chapter of this thesis. Objects may be placed in graves for a variety of reasons, not always reflecting the social standing of the deceased. They may be mourner's gifts to the dead, or meant to appease or pacify the deceased (Parker-Pearson 1999, 7-8). Burial itself may involve a number of social processes, which affect how the grave is structured, what it contains, and what it signals. They may be a function of ritual beliefs (Pader 1982; Parker-Pearson 1982, 100-101). Burial may also involve a restructuring of the status of the deceased, along with their resources, social relationships, and sexual rights (Fahlander and Oestigaard 2008, 10-11). It is equally problematic to infer the

structure of the community from graves. A large number of burials may provide a large, representative sample of the population. Yet this is limited by the extent to which social status is expressed through burial in the first place.

Most relevant for this analysis is whether a higher number of objects or metal within the graves indicates wealth or high status. Some graves at Sarıket and Küçükhöyük necropolises contained a higher number of items than other graves, or they contained more unique items. Yet it is not known whether the population at Demircihöyük or Küçükhöyük ascribed a higher status to some individuals. Even if they did, it is unknown whether or not they used grave goods to distinguish these personalities. As above, Seeher (2000, 29) remarked that only some graves at Sarıket necropolis gave the impression of being for people of high wealth or status. He was discussing graves that held a significantly higher number of items, as this may indicate the presence of a small group of central figures within the settlement. He concluded that grave goods reflected the objectives of mourners, rather than were used to indicate status or gender (Seeher 2000, 29). Thus it is difficult to infer social status from the amount or quality of grave goods.

Yet if jugs were provisioned according to the presence of other items, then the practice for which they were used was restricted to some individuals. This study is interested in whether or not jugs, and possibly drinking, was only accessed by certain individuals, or only co-occurred with certain products. Even though Seeher (2000, 29) concluded that grave goods were not provided on the basis of status, it is possible that drinking and pouring were somewhat limited. Consumption practices may be one area where social divisions within the population become more easy or straightforward to detect. For this reason, this analysis uses the amount of grave goods and the presence of metal as a broad means of identifying social status. The term, 'wealth' will be used in discussing the number of objects within graves, and how the graves were constructed. The phrase, 'wealth or status' will be used when examining whether there was a difference in the amount of grave goods between graves.

These terms are useful for discussing the concept of social status amongst the graves. But they are also misleading. The number of objects within the graves or the type of grave is not a reliable indicator of 'wealth' because of the considerations listed above, and also in Chapter one. Yet the large number of graves at both necropolises provides a robust data set for examining wealth and status in a general sense. The Demircihöyük-Sarıket and Küçükhöyük graves are an excellent opportunity to compare burials across the greater part of two communities. They provide a means to study community members in relation to one another. Because it is problematic to infer wealth and social status from graves alone, this study will also incorporate what is known of the settlement itself. The architecture and other features of the settlement will

be assessed alongside the contents of the burials when all of the data are collected. In the meantime, the phrases 'wealth' and 'status' should be understood to be placeholders for a greater discussion of settlement practices that will occur at the end of the chapter.

## 1. Choice of statistical test and data limitations

The analysis focused upon the incidence of beak-spouted jugs. One objective was to determine if the presence of jugs could be explained by the presence of metal or other ceramic forms. Another was to determine if jugs were deposited more often within a certain type of grave. This may also have been a function of preservation: perhaps jugs were more likely to be preserved if burial was of a certain type. It is possible that other vessels occasionally stood in for the jug. Capturing these cases was important for accurately assessing the role of drinking in burial practices. Therefore the prevalence of other ceramic vessels was also explored. Lead vessels were investigated for the same reason.

Statistics provided a way to investigate these issues. The Chi-squared test for independence was the most suitable test. It allowed items such as jugs or metal to be compared for their presence or absence, rather than for their amount.<sup>80</sup> Each grave was binomially coded for the presence or absence of various items (0/1). These were compared in bivariate contingency tables (crosstabulations). These tables provided the frequency distribution of cases and the descriptive statistics from which Chi-squared was able to calculate the degree of independence between variables (Argyrous 2000, 394). Where Chi-squared was unable to comment upon the strength of the relationship, it was assisted by two measures of association: Phi and Cramér's V. Lambda, the most commonly used measure of association for nominal variables (Argyrous 2000, 157), was not used because it consistently resulted in zero across all tabulations. This indicated that the data was loaded upon the dependent variable, jug presence.

Some calculations of Chi-squared and, thus, of Cramér's V may have been flawed. One of the requirements of Chi-squared is that all values in the crosstabulation amount to at least 5.0 (Argyrous 2000, 410). This was not met in three instances: in testing for the presence of jugs, metal, or ceramic by grave type, in testing for a relationship between lead vessels and ceramic and jugs, and in testing for jugs by grave type. This is because of two issues. The first is the low

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<sup>80</sup> A multivariate analysis was not appropriate to this study. Such methods test whether and how the value of one dependent variable is changed when the effect of other, independent variables are added or removed (Argyrous 2000, 477-478). They measure the degree or frequency of a certain feature, and may range from zero to multiple values. Chi-squared, by contrast, examines the presence or absence of objects or features. This measure is captured by the value of a binomial: 0/1.



number of graves containing lead vessels across both sites. The second issue is the single incidence of 'Lehmwannengrab' G 100 at Sariket, the only 'clay tub' grave (Seeher 2000, 20-21). For the tests involving lead vessels, Chi-squared was supplemented by Fisher's Exact probability test. This test adjusts for the error that is caused by low sample sizes (Argyrous 2000, 410). As concerns grave type, it was not possible to limit the effect of the low value of the single Lehmwannengrab. Thus Grave 100 was eliminated from the analyses altogether. For all crosstabulations involving grave type, this study considered all graves except for the single G 100.

Only graves containing grave goods were included in the analyses. The objective of this study was the incidence of one particular type of grave good. Therefore the 234 graves at Sariket and the 114 graves at Küçükhöyük without grave goods were of interest only for their total number. Eliminating these graves meant that the study assessed the choice of mourners to deposit specific items, rather than their choice to deposit grave goods altogether. Graves without grave goods were, however, integral for assessing wider issues, such as the role of grave goods and the 'wealth' of inhabitants. For evaluating the incidence of objects within graves, the total number of graves is reduced from 498 to 264 (at Sariket) and from 204 to ninety (at Küçükhöyük). Eliminating graves without grave goods improved the power of the test, and this is reflected in strength calculations. For instance, in comparing the incidence of metal and ceramic, the value of Cramér's V increased from .248 to .265. This is an indication not of improved strength calculations, but of the improved accuracy of the test. It also reflects that the test was made more appropriate for the research question, and for the data set.

The graves as a data set were limited in some respects. This in turn limited the information that was able to be gleaned. Again, the graves were not a representative sample of either settlement population. For Demircihöyük, Seeher (2000, 3, 17) points out that an earlier cemetery is likely to have existed elsewhere. In addition, a percentage of the Sariket graves had already been lost due to ploughing. Also, graves did not consistently feature grave goods: at Sariket, forty-seven percent of graves contained no grave goods (234 of a total 498 graves); this is similar to that seen at Küçükhöyük, where fifty-six percent of graves contained no grave goods (114 of a total 204 graves). At both necropolises, depositing grave goods was not compulsory (Seeher 2000, 28), and therefore the choice to deposit specific goods cannot have been incredibly compelling. This point will need to be remembered in evaluating the meaning of specific goods.

Gender may have influenced the deposition of grave goods, yet this effect could not be determined. It was not possible to establish the sex of each skeleton; at Sariket this information was available for only one-third of all burials (Seeher 2000, 29). The condition of the bones was

also less than ideal. Where skeletons were able to be sexed, the information was often uncertain: many are marked with a question mark (Wittwer-Backofen in Seeher 2000, 247-52, 282-89). Skeletons at Küçükhöyük necropolis were not analysed for their sex and other anthropological characteristics. Even if this information had been available and robust, it would likely say little about the gender of the individuals interred. At Sariket, excavators note the mixing of characteristically male and female grave goods within graves holding skeletons of the opposite sex. Sariket Grave 494 provides an excellent example. In this grave, a female aged between fifteen to twenty years of age was interred with a jug, a copper/bronze needle, a spindle whorl, and a copper/bronze axe. This axe was the only example of its kind across the necropolis (Seeher 2000, 29). Similarly, Grave 335 was a female burial, yet contained a copper/bronze needle, lead bottle, and copper/bronze macehead. Maceheads were also found within Graves 434 and 564, though the skeletons in both graves were tentatively identified as female. Seeher (2000, 29) suggests that at Sariket, grave goods did not reflect the identity of the deceased, but the individual choices of mourners. At the same time, items were not completely lacking in gender differentiation. Enough spindle whorls occurred in the graves of females and stone axes in the graves of males to uphold gender divisions in general. Yet the measure could never be robust. Sex was ascertained for only a proportion of the graves, and gender determinations would be highly speculative. The issue is not pursued in this study. Thus the presence of jugs was not compared against the sex of the deceased, nor the gender identification of their grave goods.

Similarly, it was not possible to compare the presence of grave goods against the state of grave preservation. Data on preservation, or lack of preservation, was not provided within either of the original catalogues. It may, however, be partly controlled for. If different types of graves were more effective at preserving specific items, then these goods would cluster within a certain type of grave. Of course, this could be complicated by 'wealth'. If earthen pit graves were less wealthy, it makes sense that they would already contain less metal or other goods. If no associations were detected, then this would indicate that preservation did not affect the recovery of the jugs. The coincidence of metal and jugs should thus indicate whether or not wealth was a factor in the choice to deposit jugs.

It would have been ideal to compare graves containing specific goods against their location within the cemetery. This undertaking was too time-consuming for the confines of this project. At Sariket, mapping the location of each grave would have required the design of a database that considered an additional twenty-eight indices.<sup>81</sup> In some cases, this had already been

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<sup>81</sup> At Sariket, graves were mapped in twenty-eight squares along a grid consisting of eight quadrants north to south (C, B, A, ZZ, YY, XX, WW, VV), and five quadrants east to west (B3, B4, B5, B6, and B7).

investigated by the excavators, and found to be non-predictive. At Sariket, the presence of pithoi, earthen pit, or stone cist graves did not vary by their location within the necropolis (Seeher 2000, 23, Fig. 8). Also at Sariket, the location of lead vessels was reported to be dispersed rather than clustered (Seeher 2000, 51).

## 2. Results

### i. General characteristics of the single beak-spouted jug: typology and decoration

The typology of jug types from Demircihöyük settlement (Efe 1988, 55-59) was adopted for Sariket necropolis (Seeher 2000, 37-43, Fig. 11). Efe's classifications identified sixteen shape categories (A1, A1/2, A2, A3, A4, A5, B1, B2, B3, B4, B5, B6, B7, C1, C2, C3). Only the jugs from Sariket were described according to this classification system, and most jugs fell into one of the above categories. These categories are not distinct from one another; instead they comprise a continuous range of décor. In five instances, jugs were placed into intermediate categories (A1/A2, A2/3, A4 or B4/5, B4/5). In another eight graves, jugs were described as being 'similar' ("ähnlich") to existing categories (G 83, 121, 144, 145, 220, 263, 321) or 'mostly like' them ("vor allem wie": G 208), while thirty-seven fell into a 'No Type' category. In addition, four jugs were described only as having a wide neck, with no overall shape classification (G 211, 354, 362 and 405). One jug from Grave 477 had a 'cup-like' mouth, yet was also not classed into a category.

Decoration includes incision and cross-hatching upon the body, neck, or handle, as well as lugs, upraised beads, and cogwheel handles. The spout from vessel 376a was provided a face (Figure 5.4; Seeher 2000, Fig. 43). At times the spout itself is raised dramatically, and the tip can be pointed (G 243) or kept squared (Figure 5.5; Seeher 2000, Fig. 38; cf. G 250). The elongated, elegant beaked spout upon the jug from Grave 243 seems to have been constructed specifically with a mind as to how liquid would pour.

There was no recognisable pattern between jug types and their incidence within graves. Relatively simple jug shapes like B1 or A3 (Figure 5.6; G 85, 31, 34, 66, etc.) contrast greatly with other complex forms such as that upon jugs from Graves 37, 45, 145, 243, 250, 263, 315, 319, or 436 (Figure 5.7). Variation or elaboration in jug design did not correspond to the number of objects within graves. Jugs constituting the only grave good could be complex in form; single jugs from Sariket G 8, 145, 167, 190, 210, 220, 263, 370, 491, 513, 546, or 578 (Figures 5.8-5.9) illustrate this concept well. Likewise, jugs in tombs with a higher number of grave goods could be

relatively simple, such as within Graves 26, 305, or 350 (Figure 5.10). Thus the shape and type of jugs was not provided on the basis of the apparent 'wealth' within graves.

Grave	Jug type
G 26	A4 and No Type
G 95	A1 and B3
G 117	A4 and A5
G 144	A4, B4, two jugs of No Type, one jug 'similar' to A3
G 149	C2 and No Type
G 231	B7 and No Type
G 235	C1 and No Type
G 320	B4 and two jugs of No Type
G 321	B6 and 'similar' to C3
G 352	A2 and C1
G 361	A3 and No Type
G 362	A3 and No Type with wide neck
G 418	A2 and B4
G 420	A3 and No Type
G 479	A1/A2 and B7
G 569	B1 and No Type

Table 5.1. Jug types within graves at Sariket necropolis containing more than one jug.

There was also no pattern in the pairing of jugs within graves. At Sariket, sixteen graves contained more than one jug (Table 5.1). No grave contained two of the same type of jug, and there was no consistency in the type of jugs that were paired. It is possible that this was a function of preservation: ten of these sixteen graves contained at least one jug of 'no type' (G 26, 144, 149, 231, 235, 320 [two jugs of no type], 361, 362, 420, and 569). They may have been too fragmentary or ill-preserved to be categorised.

At times jug characteristics seem to reference flora. Vertical incision upon the jug within Grave 552 is reminiscent of ribbing upon the opium poppy, or *papaver somniferum* (Figure 5.11). A one-handled tankard from Troy features similar fluting (Schmidt 1902, 105-106, No. 2263). The jug within Grave 361b (Figure 5.12) is also decorated with vertical incision, though in short, stabbing cuts in lines curving down along the jug body (Seeher 2000, Fig. 42). It is tempting to see in this decoration a reference to the scoring of opium poppy seed capsules for extracting opium. Pavol Hnila (2002) has already drawn attention to depictions of the opium poppy upon Middle and Late Bronze Age Anatolian metal pins. He also explains that the poppy may have been a prominent motif upon Iron Age stele. To this may be added Early Bronze Age pins from the Resuloğlu necropolis (Yıldırım 2006, Fig. 16:a-i). These pins feature a separated crown and also possibly a discoid ringlet in a collar that is placed just below the pin head. The discoid ringlet, as Hnila (2002, 317) points out, may be a reference to the *torus* of the opium plant. This

argument follows from that made by Merrillees in 1962 concerning base-ring juglets of the Late Bronze Age in Egypt and the Levant. The jugs from Sarıket and pins from Resuloğlu extend evidence for the poppy back the Early Bronze Age. It is difficult to suggest that opium was deposited with the interred at Sarıket; jugs do not seem to have been chosen specifically for burial. Many vessels show signs of use (Seeher 2000, 32), and therefore residents may have made use of any jugs within the settlement. But the poppy-like jugs add another element to the sumptuary activities that were occurring within EBA settlements. Future research may provide more evidence for the use of the poppy at this and other communities of the period.

## ii. Jugs and metal

The placement of jugs within graves was not determined by the presence of metal. At Sarıket (Tables 5.2-5.4) there was a relationship between these factors (Chi-squared = 10.441 at a significance of .001), but the strength of this relationship was not strong. Cramér's V calculated the strength of the relationship to be .199 at a significance of .001. In consulting the power tables provided by J. Cohen (1988, 228-48), the strength of this relationship is determined to be weak. At Küçükhöyük (Tables 5.5-5.7) there was little effect detected; the analysis yielded a Chi-squared result of 5.29, though at a significance of .021. This indicated that the result was not significant, and that the incidence of jugs were independent to that of metal.

Focusing upon the number of graves within each category allows the relationship between jugs and metal to be more clearly understood. At both necropolises, there was a similar distribution of graves that contained metal or jugs, or that contained both items. At Küçükhöyük (Table 5.5) the amount of graves with metal and containing or lacking in jugs was the same (thirteen graves), and most graves contained jugs but no metal (forty-eight graves versus sixteen graves). This situation is identical to that at Sarıket (Table 5.2): a similar amount of graves with metal held jugs (fifty-three graves) as did not (fifty-one graves), and most graves contained jugs but no metal (113 graves versus forty-seven graves). This indicates that the choice to deposit a jug was similarly disinterested in whether the grave contained or did not contain metal. It is more fully grasped by examining the values within the crosstabulation along with the statistical scores. Both should be consulted in assessing the relationships between variables.

			Presence of Jugs		Total
			No Jugs Present	Jugs Present	
<b>Metal</b>	No Metal	Count	47	113	160
	Present	Expected	59.4	100.6	160.0
	Metal Present	Count	51	53	104
		Expected	38.6	65.4	104.0
<b>Total</b>		Count	98	166	264
		Expected	98.0	166.0	264.0

Table 5.2. Sariket necropolis. Crosstabulation comparing the incidence of jugs to that of metal.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.441(b)	1	.001		
Continuity Correction(a)	9.616	1	.002		
Likelihood Ratio	10.379	1	.001		
Fisher's Exact Test				.002	.001
Linear-by-Linear Association	10.401	1	.001		
N of Valid Cases	264				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 38.61.

Table 5.3. Sariket necropolis. Results of Chi-squared tests for independence comparing jugs to metal, 264 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by	Phi	-.199	.001
Nominal	Cramér's V	.199	.001
N of Valid Cases		264	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 5.4. Sariket necropolis. Measures of association used to assess strength for Chi-squared results between jugs and metal, from a total 264 graves containing grave goods.

			Presence of Jugs		Total
			No Jugs Present	Jugs Present	
<b>Metal</b>	No Metal Present	Count	16	48	64
		Expected Count	20.6	43.4	64.0
	Metal Present	Count	13	13	26
		Expected Count	8.4	17.6	26.0
		Count	29	61	90
<b>Total</b>		Expected Count	29.0	61.0	90.0

Table 5.5. Küçükhöyük necropolis. Crosstabulation comparing the incidence of jugs to that of metal.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.291(b)	1	.021		
Continuity Correction(a)	4.208	1	.040		
Likelihood Ratio	5.113	1	.024		
Fisher's Exact Test				.027	.021
Linear-by-Linear Association	5.232	1	.022		
N of Valid Cases	90				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.38.

Table 5.6. Küçükhöyük necropolis. Results of Chi-squared tests for independence comparing jugs to metal, 90 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.242	.021
	Cramér's V	.242	.021
N of Valid Cases		90	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 5.7. Küçükhöyük necropolis. Measures of association used to assess strength for Chi-squared results between jugs and metal, from a total 90 graves containing grave goods. Generated using SPSS.

### iii. Ceramic and metal

Testing whether the presence of metal was related to the presence of any ceramic vessels allowed a way to check the independence of metal and jugs. If the relationship between metal and

all ceramic was different from that between metal and jugs, then jugs were deposited differently from other ceramic vessels. This would seem to imply that they were used differently, or that they fulfilled a different purpose.

The analysis detected a slight difference in the relationship between metal and jugs and that between metal and all ceramic vessels. This was not the case at Küçükhöyük (Tables 5.8-5.10). At that necropolis, results were insignificant, and the relationship of metal to ceramic was independent, as it had been for metal and jugs. At Sariket (Tables 5.11-5.13), there was a relationship between metal and ceramic, as there had been between metal and jugs. The strength of this relationship was moderate rather than weak (cf. J. Cohen 1988, 228-48). In other words, Chi-squared was better able to detect a relationship between metal and ceramic than it was between metal and jugs. At Sariket the strength of the relationship between metal and ceramic was also greater than that between metal and jugs.

For Sariket necropolis, this strengthens the argument that jugs were not deposited on the basis of metal. The relationship between metal and jugs was more independent than the relationship between metal and all ceramic vessels. Thus jugs seem to have been deposited in a different manner than that of other vessels. This is not to say that the deposition of jugs was specifically avoidant of metal. Instead, it is interpreted to mean that jugs were more consistently deposited than other ceramic vessels. They may also have been more regularly deposited than metal. Metal and ceramic co-occurred within (or were both absent from) a higher number of graves than metal and jugs. In other words, in comparison to jugs, it was more likely that metal and ceramic occurred within, and were missing from, the same graves. The test is probably measuring the coincidence of different kinds of grave goods, rather than a true relationship between metal and ceramic. It may also be measuring preservation. In other words, it may be that when grave goods were recovered, both metal and ceramic were able to be detected. Yet they would be recorded as metal and various ceramic, rather than as metal and jugs.



			Presence of Ceramic		Total
			No Ceramic Present	Ceramic Present	
<b>Metal</b>	No Metal Present	Count	10	54	64
		Expected Count	14.9	49.1	64.0
	Metal Present	Count	11	15	26
		Expected Count	6.1	19.9	26.0
<b>Total</b>		Count	21	69	90
		Expected Count	21.0	69.0	90.0

Table 5.8. Küçükhöyük necropolis. Crosstabulation comparing the incidence of metal to ceramic.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.358(b)	1	.007		
Continuity Correction(a)	5.942	1	.015		
Likelihood Ratio	6.888	1	.009		
Fisher's Exact Test				.012	.009
Linear-by-Linear Association	7.277	1	.007		
N of Valid Cases	90				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.07.

Table 5.9. Küçükhöyük necropolis. Results of Chi-squared tests for independence comparing metal to ceramic, 90 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.286	.007
	Cramér's V	.286	.007
N of Valid Cases		90	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 5.10. Küçükhöyük necropolis. Measures of association used to assess strength for Chi-squared results between metal and ceramic, from a total 90 graves containing grave goods. Generated using SPSS.

			Presence of Ceramic		Total
			No Ceramics Present	Ceramics Present	
<b>Metal</b>	No Metal Present	Count	21	139	160
		Expected Count	35.2	124.8	160.0
	Metal Present	Count	37	67	104
		Expected Count	22.8	81.2	104.0
<b>Total</b>		Count	58	206	264
		Expected Count	58.0	206.0	264.0

Table 5.11. Sariket necropolis. Crosstabulation comparing the incidence of metal to ceramic.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	18.534(b)	1	.000		
Continuity Correction(a)	17.247	1	.000		
Likelihood Ratio	18.206	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	18.464	1	.000		
N of Valid Cases	264				

Table 5.12. Sariket necropolis. Results of Chi-squared tests for independence comparing metal to ceramic, 264 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.265	.000
	Cramér's V	.265	.000
N of Valid Cases		264	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 5.13. Sariket necropolis. Measures of association used to assess strength for Chi-squared results between metal and ceramic, from a total 264 graves containing grave goods. Generated using SPSS.

The results are more intuitive when the actual values within each crosstabulation are considered. These are reproduced in Tables 5.14-5.17, which are merely a different illustration of the information that appears in the crosstabulation tables prepared by SPSS. Here it can be more easily understood that the relationship between metal and jugs was slight at best. At both sites, it

was more likely for a grave to contain jugs but no metal than to contain goods other than metal or jugs.

	<b>Jugs</b>	<b>No Jugs</b>	<b>Total</b>
<b>Metal</b>	53 (20%)	51 (19%)	104
<b>No Metal</b>	113 (43%)	47 (18%)	160
<b>Total</b>	164 (62%)	100 (38%)	264

Table 5.14. Sarıket necropolis. Crosstabulation comparing the incidence of metal and jugs across graves.

	<b>Ceramic</b>	<b>No Ceramic</b>	<b>Total</b>
<b>Metal</b>	67 (25%)	37 (14%)	104
<b>No Metal</b>	139 (53%)	21 (8%)	160
<b>Total</b>	206 (78%)	58 (22%)	264

Table 5.15. Sarıket necropolis. Crosstabulation comparing the incidence of metal and ceramic across graves.

	<b>Jugs</b>	<b>No Jugs</b>	<b>Total</b>
<b>Metal</b>	13 (14%)	13 (14%)	26
<b>No Metal</b>	48 (53%)	16 (18%)	64
<b>Total</b>	61 (68%)	29 (32%)	90

Table 5.16. Küçükhöyük necropolis. Crosstabulation comparing the incidence of metal and jugs across graves.

	<b>Ceramic</b>	<b>No Ceramic</b>	<b>Total</b>
<b>Metal</b>	15 (17%)	11 (12%)	26
<b>No Metal</b>	54 (60%)	10 (11%)	64
<b>Total</b>	69 (77%)	21 (23%)	90

Table 5.17. Küçükhöyük necropolis. Crosstabulation comparing the incidence of metal and ceramic across graves.

At Sarıket, the percentage of graves with jugs but no metal (Table 5.14) was nearly forty-three percent of graves with grave goods (113 graves). Nineteen percent of graves contained metal but no jugs (fifty-one graves), while eighteen percent of graves contained goods other than metal or jugs (forty-seven graves). In other words, the choice to deposit a jug was made more often than was the choice to deposit a jug and metal. It was also made more often than was the choice to deposit a different item entirely.

At Küçükhöyük, these figures were almost identical (Table 5.16). Fifty-three percent of graves with grave goods (forty-eight graves) contained jugs but no metal, while only fourteen percent (thirteen graves) contained metal but no jugs. Eighteen percent (sixteen graves) contained goods other than jugs or metal. Across both necropolises, the choice to deposit a metal item (Metal/No Jug) was made just as often as was the choice to deposit an item that was neither metal nor jug (No Metal/No Jug). Similarly, in contrast to the large amount of graves containing jugs,

only between fourteen to twenty percent at either necropolis held metal. Viewed in another way, the choice to deposit a jug was made as often for graves containing metal, as for those lacking in it. When all ceramic forms are considered, it was found to be only slightly more likely that ceramic would be deposited in a grave containing metal. This increase was probably due to the effects of preservation rather than to the choices of mourners.

The choice to deposit a jug was also unaffected by the presence of other items. Additional jugs were not provided to graves that contained the most objects, or that contained metal. Similarly, graves that contained a large number of any type of vessel did not contain more metal or a higher number of grave goods. At Sariket, the graves that contained the highest number of vessels (G 26, 117, 320, 362) were not more 'wealthy' in terms of metal or other objects. None held metal, and they were not, on the whole, more expensive to construct.<sup>82</sup> Grave 144 provides the most clear demonstration of this. It contained seven vessels: five jugs and two bowls, of which six were intact (Figure 5.13).<sup>83</sup> Grave 144 does not overlay, and is not overlain by, another grave, and its boundary is well-marked by a (fragmentary) circle of stones (Seeher 2000, Appendix II, YY/84). Therefore its contents are relatively secure.<sup>84</sup> Grave 144 contained no metal, and its method of construction (earthen pit) was not more expensive to construct. It demonstrates that vessels were not deposited within graves as a mark of high status. Instead they were related to other issues, such as ideas surrounding death and burial, or mortuary ritual.

#### iv. Jugs and grave type

The relationship between metal and jugs may have been complicated by preservation. If jugs were only found in graves of a certain kind, then it is possible that only certain types of graves facilitated their preservation. To control for this issue, the presence of jugs was compared against grave type.

Three main types of graves (pithos, earthen pit, stone cist) necessitated the use of 2 x 3 bivariate tables, as opposed to the 2 x 2 tables that were used for all other calculations. At Küçükhöyük necropolis the graves were mostly split between pithos and stone cist type. Of 204 total graves, 127 were enclosed in pithoi and seventy-four within a stone cist. This leaves only three to be buried within an earthen pit (Graph 5.3; Gürkan and Seeher 1991, 72). This differed

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<sup>82</sup> G 117, 144, and 362 were earthen pit graves. G 26 was a stone cist grave, and G 320 was a pithos burial.

<sup>83</sup> Excluding jug 144d, which was only a sherd (Seeher 2000, Fig. 26).

<sup>84</sup> Sariket Grave 143 contained even more vessels, but was less secure. The grave featured eight bowls, of which only two were intact (Seeher 2000, Fig. 26). The other six rim fragments may have been tomb backfill or originally part of nearby Grave 151 (Seeher 2000, 84).

significantly from the practices at Sariket. There, of 495 graves with an identifiable grave type, 357 were enclosed within pithoi, 116 within earthen pit, and only twenty-one within stone cist (Graph 5.2; Wittwer-Backofen in Seeher 2000, 282-289). Again, according to Seeher (2000, 22), the dramatically higher proportion of stone cist graves at Küçükhöyük reflects the closer proximity of the cemetery to the stone quarry (Gürkan and Seeher 1991, 74-76).

It is counterintuitive to test the independence of the presence of grave goods and grave type from a data set that includes graves lacking in grave goods. On the other hand, restricting the data set to graves that contained grave goods would eliminate the effect of preservation. For this reason analyses made use of two data sets: one considering total graves, and one limited to graves containing grave goods. Because of its significantly larger collection of graves, it was only Sariket that was examined through both data sets (Tables 5.18-5.23). The relationship between the presence of grave goods and grave type was examined at Küçükhöyük only through graves containing grave goods (Tables 5.24-5.26). A few cases were excluded from calculations: at Sariket three graves were eliminated because their grave type could not be determined (Graves 4, 297, and 361). The single Lehmwannengrab ('clay tub' Grave 100) at Sariket was also eliminated. Though it contained several items, its representation in the tables was problematic because it would have involved values of 0 and 1.0 (for containing or not containing grave goods). This violated a basic condition of Chi-squared that values within the table amount to at least 5.0 (Argyrous 2000, 410). The total number of graves investigated was thus 494 and 261 for Sariket. This reflected total graves, and graves containing grave goods, respectively. The number of graves investigated at Küçükhöyük was ninety.

There was no relationship between jugs and grave type. The presence of jugs was similar no matter if all graves were considered, or only those with grave goods. For both necropolises, the results were insignificant: they upheld the null hypothesis that the values were independent of each other. Thus jug deposition was not related to the type of grave in which the items were (or were not) recovered. Also, jugs were no more likely to be preserved within certain types of graves. The strength of this independence was weak in each instance. Yet it seems, overall, that goods were present in graves because of the intentions of mourners or other objectives, rather than site formation processes. This means that the provenance of goods, in particular jugs, may be reliably attributed to specific graves.

		Presence of Jugs		Total	
		No Jugs Present	Jugs Present		
Type of Grave	Pithos	Count	239	118	357
		Expected Count	237.8	119.2	357.0
Earthen Grave		Count	80	36	116
		Expected Count	77.3	38.7	116.0
Stone Cist		Count	10	11	21
		Expected Count	14.0	7.0	21.0
Total		Count	329	165	494
		Expected Count	329.0	165.0	494.0

Table 5.18. Sarıket necropolis. Crosstabulation comparing the incidence of jugs to grave type, from a total 494 graves.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.712 <sup>a</sup>	2	.156
Likelihood Ratio	3.505	2	.173
Linear-by-Linear Association	.820	1	.365
N of Valid Cases	494		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.01.

Table 5.19. Sarıket necropolis. Results of Chi-squared tests for independence comparing jugs to grave type, 494 graves total (eliminating G 4, 297, 361, and Lehmwannengrab 100). Generated using SPSS.

	Value	Approx. Sig.
Nominal by Nominal Phi	.087	.156
Cramér's V	.087	.156
N of Valid Cases	494	

Table 5.20. Sarıket necropolis. Measures of association used to assess strength for Chi-squared results between jugs and grave type, from a total 494 graves. Generated using SPSS.

			Presence of Jugs		Total
			No Jugs Present	Jugs Present	
<b>Type of Grave</b>	Pithos	Count	60	118	178
		Expected Count	65.5	112.5	178.0
	Earthen Grave	Count	31	36	67
		Expected Count	24.6	42.4	67.0
	Stone Cist Grave	Count	5	11	16
		Expected Count	5.9	10.1	16.0
<b>Total</b>	Count	96	165	261	
	Expected Count	96.0	165.0	261.0	

Table 5.21. Sarıket necropolis. Crosstabulation comparing the incidence of jugs to grave type, from a total 261 graves.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.527 <sup>a</sup>	2	.171
Likelihood Ratio	3.468	2	.177
Linear-by-Linear Association	.964	1	.326
N of Valid Cases	261		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.89.

Table 5.22. Sarıket necropolis. Results of Chi-squared tests for independence comparing jugs to grave type, 261 graves total (eliminating G 4, 297, 361, and Lehmwannengrab 100, and all graves without grave goods). Generated using SPSS.

	Value	Approx. Sig.
Nominal by Nominal Phi	.116	.171
Cramér's V	.116	.171
N of Valid Cases	261	

Table 5.23. Sarıket necropolis. Measures of association used to assess strength for Chi-squared results between jugs and grave type, from a total 261 graves containing grave goods. Generated using SPSS.

			Presence of Jugs		Total
			No Jugs Present	Jugs Present	
<b>Type of Grave</b>	Pithos	Count	21	41	62
		Expected Count	20.0	42.0	62.0
	Earthen Grave	Count	1	1	2
		Expected Count	.6	1.4	2.0
	Stone Cist Grave	Count	7	19	26
		Expected Count	8.4	17.6	26.0
<b>Total</b>	Count	29	61	90	
	Expected Count	29.0	61.0	90.0	

Table 5.24. Küçükhöyük necropolis. Crosstabulation comparing the incidence of jugs to grave type. Total graves: 90.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.701 <sup>a</sup>	2	.704
Likelihood Ratio	.692	2	.708
Linear-by-Linear Association	.354	1	.552
N of Valid Cases	90		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .64.

Table 5.25. Küçükhöyük necropolis. Results of Chi-squared tests for independence comparing presence of jugs to grave type, 90 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by Nominal	Phi	.088	.704
	Cramér's V	.088	.704
N of Valid Cases		90	

Table 5.26. Küçükhöyük necropolis. Measures of association used to assess strength for Chi-squared results between jugs and grave type, from a total 90 graves. Generated using SPSS.

It is not the shape of the jug that references drinking, but its singular placement in graves. Unlike other objects at the necropolises, the jugs were distributed in an ordered, piecemeal fashion that suggests they were related to greater beliefs or practices. The custom was not required for burial: forty-seven percent of graves at Sariket (234 out of 498 graves) and fifty-six percent of graves at Küçükhöyük (114 out of 204 graves) contained no grave goods. The practice may not have been open to all individuals. This may mean that the community at Demircihöyük featured some degree of social ranking, and that certain burial practices were only available to



around half of the population. This could be because the materials were too expensive or time-consuming to obtain or to devote to the dead. It could be because some individuals were separate from the community, and did not practice the same beliefs. That grave goods were not provided to nearly half of the graves may also mean that these practices were not absolutely necessary for death. They may have been optional. They may also have been seasonal: most of the graves without grave goods at Sariket were of pithos type (181 graves out of a total 234, or seventy-seven percent).<sup>85</sup> Only four were of stone cist construction (two percent), though this is similar to the small percentage of stone cist graves at Sariket overall (twenty-one out of 498, or four percent). Pithos graves are more likely to have been used during the winter, when it would have been more difficult to dig pits and transport stones (Seeher 2000, 23). It is possible that, in cold seasons, burial rituals were performed indoors, and no objects were deposited in the outdoor graves.

However the lack of grave goods is explained, jugs were an extremely common aspect of burial when goods were provided. From their singular manner, this would seem to relate to 'one last drink'. They may have referenced specific drinking acts, performed in the settlement or reserved for the individual to perform in death. These acts may have been discrete, single, and specific, a pointed activity involving mourners and which was perhaps also meant to symbolically include the deceased. Just as the jugs summarise the act of drinking, so too is this idea distilled into various decorative features. These are replicated upon the vessels themselves. Omphalos bases and grooved décor, which echo practices occurring to the east (Chapter four), are applied to cups and jugs in Graves 37, 213, 418, and 452 (Figure 5.14).<sup>86</sup> These vessels did not occur within graves that contained more metal or a greater number of grave goods. Like the jugs themselves, they were not provided according to the status or 'wealth' of the interred.

#### v. Jugs and other ceramics

In thirty-seven graves, jugs were accompanied by other ceramic vessels. This introduces the question of whether some vessels were used in conjunction with the jug. This section will compare the shapes that are involved, and how they relate to jugs versus other items. This may indicate whether or not drinking 'sets' occurred. Other vessel shapes may also have been used as

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<sup>85</sup> Including G 255, which used an amphorae but is counted as a pithos grave in this analysis.

<sup>86</sup> It is possible that the omphalos base upon jugs in G 213 and G 418 was due to a specific step in jug production. It may be related to how the jug was formed rather than an intentional feature referencing drink. Yet the feature is noteworthy upon the cup in G 37 and the teapot in G 452. These shapes are related to drinking, or are unique across the site.

drinking vessels. This section will compare the characteristics of these vessels, and how they were deposited within graves. The number of these vessels is fewer than that of jugs, and they occur within fewer burials. It was not possible to test their incidence between graves using the same statistical methods as were used for jugs. Yet examining the vessels individually may provide at least anecdotal evidence for the prevalence of drinking vessels within the graves.

#### a. Cups and bowls

Cups and bowls were the most common vessel to occur in graves together with the jug. They were paired with jugs in thirteen graves at Sariket: G 19, 25,<sup>87</sup> 26, 37, 45, 83, 117, 119, 275, 296, 315, 448, 468,<sup>88</sup> and in three graves at Küçükhöyük: G 46A, 163, 167. The jug and cup or bowl are appropriate shapes to be paired. Drink may have been poured from the jug, and drunk from the cup or bowl; the shapes may have functioned as a drinking 'set'. Decoration further associates the cup and bowl with drinking and pouring. At Küçükhöyük, jugs seem to be paired specifically with S-Profile cups and bowls (Figure 5.15). Indeed, pairings at Sariket include S-Profile forms in seven graves (Figure 5.16; G 26, 45, 119, 275, 315, 448, 468). Grave 83 may tentatively be added from its finely decorated fragment (Seeher 2000, Fig. 21). The association of S-Profile vessels with drinking was seen previously: upon metal bowls from Horoztepe, and also upon ceramic cups from Ahlatlıbel (Figures 4.7-4.8, 4.20; Koşay 1934, 45, 44, 47, Nos. 88, 140). The cup paired with a jug within Grave 37 does not feature an S-Profile, but was provided a rare omphalos base instead (Figure 5.17. Seeher 2000, Fig. 18:37b). The association of the omphalos with drinking was discussed in Chapter four. It is possible that the S-Profile referenced drinking practices in the same way as the omphalos base. Like vessel No. 408 from Ahlatlıbel (Figure 4.17; Koşay 1934, 53), the cup within Grave 34 featured an omphalos. It was not illustrated by Seeher (2000, Fig. 18). The cup occurred in the grave together with a ceramic jug.

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<sup>87</sup> The size of the 'cup shaped bowl' from Grave 25 was exceedingly large. Though it was characterised as a bowl by the excavators, this item must be assessed with caution.

<sup>88</sup> Most of the pairings of ceramic vessels at Sariket (ten graves) held one jug and one bowl. There are a few exceptions. These include Grave 468, which held one jug, one bowl, and one cup; stone cist Grave 26 which held two jugs, one bowl, and one tripod vessel; and earthen Grave 117 which held two jugs, one bowl, and a spout fragment. Double pithos Grave 468 from Sariket contained one of each: one jug, one cup, and one bowl. It is tempting to suggest that all three vessels were used in conjunction, though in only two other instances (G 26, 117) was a jug and bowl accompanied by a third vessel. Grave 26 contained two jugs, a bowl, and a tripod vessel, while Grave 117 contained two jugs, a bowl fragment, and a tubular spout fragment (Seeher 2000, 140), which may have constituted a third jug.

Some bowls are perfectly suited to a drinking function. Amongst the S-Profile bowls, which occur mostly at Sarıket,<sup>89</sup> four are shallow, with unique incised decoration (Figure 5.18; G 106a, 144c, 144i, and 315b; Seeher 2000, Figs. 24, 26, and 38). These bowls would easily have facilitated drinking, from their relatively shallow dimensions and archetypal S-Profile. They were also polished, and their incised decoration seems to indicate that they were used for a special purpose. The bowl in Grave 315 was accompanied by a jug. Again, the blacktopped, incised sherd within Grave 83 may have been a shallow bowl, and it was also paired with a jug (Figure 5.19; Seeher 2000, 83d, Fig. 21). Their shape and polishing is reminiscent of metal drinking bowls from Horoztepe and Alaca Höyük (Chapter four). One of the metal bowls from Horoztepe also features an S-Profile (Figure 4.7; Özgüç and Akok 1958, Fig. 18). Incised hanging semicircles upon Sarıket Bowls 106a and 144i are similar to circles and semicircles upon heavily polished and black-slipped cups from Ahlatlıbel (Figures 4.16-4.19; Koşay 1934, 52-53, Pl. 1, 4; Seeher 2000, 79, 83, 103). They seem to reference metalwork. This may indicate that more metal drinking bowls existed, but have not been recovered.

Yet jug-cup and jug-bowl pairings did not occur more often than the pairing of jugs with other vessels. The most common vessel to be paired with the jug, after cups and bowls, was the necked vessel. This pair occurred within eight graves at Sarıket (G 82, 181, 305, 320, 350, 456, 498, and 511) and four graves at Küçükhöyük (G 15, 81, 83, 171). At Sarıket an additional five graves contained jugs and 'other' ceramic vessels: two closed vessels (G 161), one tripod vessel (G 151), one miniature vessel (G 243), and the rim of a Neolithic or Chalcolithic pot (G 89). Grave 362 contained two jugs and a small pot or pan. The placement of a bowl sherd atop the jug within Grave 19 suggested to Seeher (2000, 33) that bowls may have been used as a lid to close jugs and necked vessels. The exceptionally large bowl within Grave 25 is hardly suggestive of a drinking function (Figure 5.20). For these reasons it is not possible to argue that drinking 'sets' were a feature of the graves. Yet from their decoration and shape, it seems that cups and bowls were sometimes related to drinking and pouring. When they were occasionally paired with jugs, they may have been used for drinking and pouring acts.

It is uncertain if cups and bowls referenced drinking and pouring in the same manner as the beak-spouted jug. Seventeen graves across both necropolises featured cups or bowls unaccompanied by jugs or other ceramic vessels.<sup>90</sup> The number of graves that contained cups or

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<sup>89</sup> S-Profile bowls are found at Küçükhöyük, but are mostly provided loop handles (Gürkan and Seeher 1991, Fig. 8), and are thus classed in this analysis as cups. One bowl from Grave 167 is a true S-Profile (82, Fig. 9:3). But the shape is deep, and features lugs, and so it was probably not intended for drinking.

<sup>90</sup> Sarıket: G 75, 106, 124, 143, 239, 274, 309, 327, 395, 426, 455, 540, 568; Küçükhöyük: G 10, 32, 89, 113A. However, Sarıket Grave 309 also contained a lead bottle.

bowls and no jugs (seventeen) is similar to the number of graves that contained cups or bowls and jugs (sixteen).<sup>91</sup> Therefore it is not possible to argue that either was the predominate practice. However, in the majority of cases where cups and bowls appear on their own, they occur as the only vessel. They were also not accompanied by any other type of grave good.<sup>92</sup> It is possible that, in some of these cases, they stood in for jugs as a drinking form. The recovery of bowls and cups was not affected by preservation: neither shape was more likely to occur within a specific type of grave. They were also not provided in graves on the basis of status or 'wealth'. The graves in which bowls and cups occurred did not feature a greater or lesser amount of objects. Grave 309, which contained a bowl along with a lead bottle, silver ring, and copper/bronze needle, was of pithos type. The elaborate, blacktopped, polished and incised, shallow S-profile bowl in pithos Grave 106 (Figure 5.18) was not accompanied by any other items. Stone cist versions could feature metal, or they could be relatively empty: Grave 455 contained an S-profile bowl and two metal items. In Grave 124, the S-Profile bowl was the only object.

#### b. Tankards and other vessels

Other vessels may also have signified the act of drinking. Tankards and basket-handled teapots were rare. Only four of these vessels were found, and only at Sariket. They were placed within four graves. In three of these four graves, they appeared as the only vessel, similar to the jug. Grave 317 held one tankard, along with a thin copper/bronze needle. Grave 294 held a tankard and an unidentified vessel fragment, which may have been a jug from its shape (Figure 5.21). Graves 247 and 452 each held one tubular-spouted, basket-handled teapot (Figure 5.22; Seeher 2000, Figs. 33, 47). The tankard is a drinking shape. In the EB III it will be part of a series of vessels for eating and drinking that appear across western Anatolia. The significance of the shape will be discussed in more detail in Chapter six. The basket-handled teapot is ideal for pouring: in both instances the spout is placed in-line with the vessel handle (Seeher 2000, Figs. 33, 47). The basket-handled teapot within Grave 247 is shallow, and its spout, while broken, is horizontal instead of upwardly curved (Seeher 2000, Fig. 33, Pl. 18:4). Judging from its illustration (Figure 5.22), as soon as the vessel was filled halfway, it would release its contents through the nearly level, horizontal spout. It thus seems ineffective for any use other than pouring. Seeher (2000, 29) suggests that the vessel was used for feeding a small child. The

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<sup>91</sup> Sariket: G 19, 25, 26, 37, 45, 83, 117, 119, 275, 296, 315, 448, 468; Küçükhöyük: G 46A, 163, 167.

<sup>92</sup> Demircihöyük-Sariket: G 75, 106, 124, 143, 239, 274, 327, 395, 426, 540, 568; Küçükhöyük: G 10, 32, 89, 113A.

individual interred within Grave 247 was estimated to be between two to seven years of age (Seeher 2000, 95). Similarly, the individual within Grave 370, which also held a tubular-spouted vessel (a jug: Figure 5.23), was between one to three years of age (Seeher 2000, 110, Fig. 43). The tubular spout may have been a drinking vessel that was reserved for children. The tubular-spouted jug was also the only object within the grave.

Three additional non-jug vessels appeared on their own within graves at Sariket, or as the only type of vessel within graves. They include one miniature vessel (G 1) and two tripod vessels with handle (G 368; Figure 5.24; Seeher 2000, Figs. 17, 43). The tripod vessels are not pouring shapes. They do not seem to have been used for drinking, though this is conceivable as a handle has been applied to each. It is possible that the practice of placing a single vessel within the grave was a reference to drinking in general. It could involve any vessel that was marginally considered a drinking shape. It is possible that all of these vessels- cups, bowls, tankards, and teapots- could have been used to express the concept of 'one last drink'.

### c. Necked vessels

The necked vessel does not occur in graves in a similar manner to jugs. At Sariket it is as likely to occur alongside jugs (eight graves: G 82, 181, 305, 320, 350 [with small 'kettle'], 456, 498, 511)<sup>93</sup> as on its own (thirteen graves: (G 57, 62, 72, 100, 118, 141, 197, 373, 433, 492, 509, 517, 527). It is paired together with lead vessels in three instances (G 100, 141, 350; see below).<sup>94</sup> There seems to be little appreciable difference in the appearance of necked vessels that occur together with jugs (Figure 5.25) or on their own (Figure 5.26). At Küçükhöyük necked vessels accompany jugs in four tombs (G 15, 81, 83, 171), and possibly also in Grave 71 (Gürkan and Seeher 1991, 50, Fig. 21:4), but appear in no grave as the only vessel. Of course, this pattern may be complicated by the far greater number of jugs than necked vessels (250 jugs versus twenty-eight necked vessels).<sup>95</sup> Yet when they do occur, necked vessels are never paired with cups or bowls; at both necropolises, these forms never appeared in conjunction. Necked vessels also did

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<sup>93</sup> There is no illustration or image provided in the catalogue of this 'kettle': Seeher 2000, 107-108, 157.

<sup>94</sup> Both necropolises featured graves whose ceramic contents were not able to be reconstructed. These eleven graves were not able to be classed as containing or not containing jugs (Sariket: G 122, 146, 266, 294, 376, 398, 422, 458, 524; Küçükhöyük: G 125, 155). It is possible that some of these graves contained necked vessels, and the effect of sole necked vessels deposited in tombs could increase, at the expense of the effect of beak-spouted jugs. Yet from the available intact bases (Seeher 2000, Figs. 25, 34, 36, 43-44, 46-47; Gürkan and Seeher 1991, Figs. 21:1, 21:3), and the spout upon vessel 376a (Seeher 2000, Fig. 43), most of these fragmentary vessels were more likely to be jugs than necked vessels.

<sup>95</sup> At Sariket necropolis, a total of 186 jugs were recovered, and twenty-four necked vessels. At Küçükhöyük, a total of sixty-four jugs were recovered, and four necked vessels.

not tend towards singularity: they were as likely to appear with jugs as on their own, just like cups and bowls. Necked vessels are also not a drinking shape. For these reasons, the necked vessel cannot be added to the list of potential drinking and pouring forms.

The lidded necked vessel in Sariket Grave 305 (Figure 5.27; Seeher 2000, Fig. 37) may indicate that necked vessels were used for food, while jugs were used for liquid. This makes sense considering the shape of necked vessels and the common addition of string mounts (57a, 57e, 62a, 100a, 141c, 305i, 373a, 456c, 492b, 498a, 509a).<sup>96</sup> Yet in Sariket Grave 19, a bowl sherd is placed over the top of the jug. If there was a division in the use of these vessels, it was not strict.

### C. Lead bottles

Thirty-one graves contained vessels of lead. Twenty-eight of these were from Sariket necropolis, and three were from Küçükhöyük.<sup>97</sup> Most are shaped like a bottle, with a globular body and an elongated neck (Figure 5.28). As above, they are foreign in origin (Zimmermann 2005, 161), and related to ceramic 'Syrian' bottles (Baykal-Seeher and Seeher, 1998). Both ceramic and lead versions were part of a greater exchange network occurring across the Anatolian plateau. They were probably carried in netbags (Zimmermann 2006a) and contained oil or perfume (Goldman 1956, 302; Zimmermann 2005, 164). Bottle shapes are only rarely represented within pottery from the coincident settlement layers at Demircihöyük (Baykal-Seeher and Seeher 1998, 117; Seeher 2000, 35), and globular forms with a narrow neck are not represented.<sup>98</sup> The shape was not adopted into the local repertoire at the settlement. It was associated with foreign exchange, and probably always perceived as exotic and foreign.

The term 'lead vessel', *Bleigefäß*, is used when the vessel does not take the bottle shape. This occurs in three instances: within Sariket Graves 295, 485, and 583.<sup>99</sup> In the latter two graves this is because only fragments were recovered. One of these (583d) gave no indication of the original size and shape of the vessel (Seeher 2000, 128). The other fragment (485c) may have been used as a bowl (Seeher 2000, 121). In the third grave, the neck of the vessel had been cut in

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<sup>96</sup> This list may not be exhaustive. It is derived from illustrations within the catalogue rather than written descriptions, as is the rest of the data within this chapter.

<sup>97</sup> Thirty-two lead bottles were recovered from Sariket. Three vessels were stray finds unassociated with any grave (Seeher 2000, 131, Fig. 55:28-30). The remaining twenty-nine were found within twenty-eight graves: G 21, 69, 92, 100, 141, 150, 160, 166, 169, 277, 284, 288, 295, 309, 323, 326, 335, 350, 377, 378, 401, 429, 430, 485, 493, 504, 582, 583. Grave 326 contained two lead bottles. Three lead bottles were recovered from Küçükhöyük. They had been placed within three graves: G 85, 155, and 195.

<sup>98</sup> Jürgen Seeher, personal communication, 4th October 2011.

<sup>99</sup> Of the three *Bleigefäßen*, only one (G 295) was illustrated in the catalogue by Seeher (2000, Figs. 36, 48, and 53).

order to make a beaked spout, and a handle was added (Figure 5.3; Seeher 2000, 152, Fig. 36, Pl. 18:9). This alteration was to make the vessel conform to local preferences and uses.<sup>100</sup> It is a clear demonstration that the shape had a foreign connotation. This may have related to its use within the settlement, and it also may have motivated its deposition within graves.

At Küçükhöyük necropolis, lead bottles were found within three graves (G 85, 155, and 195). In two of these graves the lead bottle comprised the only item found (G 85 and 195). In Grave 155, the only other item was a grooved ceramic vessel (Gürkan and Seeher 1991, 64, Fig. 21:3). This vessel is unlikely to have been a jug because its grooved décor is of a pattern other than a zigzag motif (Gürkan and Seeher 1991, Fig. 21:3). Grooved decoration is only rarely applied to jugs at either site; the few instances that are known feature zigzag motifs (Gürkan and Seeher 1991, 86; Seeher 2000, 36, 44). At Küçükhöyük the number of graves that contained lead bottles was too few to statistically compare the incidence of lead bottles against jugs. For this reason, the discussion of lead bottles is restricted to graves from Sariket.

Far more lead bottles were found at Sariket necropolis. Here twenty-nine vessels of lead were found within twenty-eight tombs. Graves containing lead bottles comprised six percent of all graves (out of a total 498), and eleven percent of graves containing grave goods (out of a total 264). Nearly all of the graves that contained lead bottles featured only one (twenty-seven graves). The one exception is Grave 326, which contained two bottles: one large, and one small (Figure 5.29; Seeher 2000, 105, Fig. 40). In nine of the Sariket graves containing lead bottles, the vessel was the only grave good that had been deposited (Seeher 2000, 51).<sup>101</sup> Amongst the remaining nineteen graves, seventeen held metal,<sup>102</sup> and four contained other ceramic vessels.<sup>103</sup> All four graves containing ceramic also featured metal.

Graves containing lead vessels were not united by their position within the Sariket cemetery (Seeher 2000, 51). Lead vessels were also not associated with any particular type of grave. They were found within pithos (seventeen graves),<sup>104</sup> earthen pit (seven graves), and stone cist graves (two graves), and one lead bottle occurred within the single clay tub grave (G 100).<sup>105</sup> Therefore the presence of the vessel does not seem to have been affected by any differences in preservation between the different types of graves.

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<sup>100</sup> Jürgen Seeher, personal communication, 4th October 2011. There was little practical application to the modifications: "The alteration of the bottle into a handled beak spouted jug was not because of handling- it is easier to hold a bottle in your hand than to hold such a jug at the handle."

<sup>101</sup> Graves 150, 166, 277, 284, 288, 378, 401, 429, and 430.

<sup>102</sup> Graves 21, 69, 92, 100, 141, 169, 295, 309, 323, 326, 335, 350, 377, 485, 504, 582, and 583.

<sup>103</sup> Sariket G 100, 141, 309 and 350.

<sup>104</sup> Eight of these graves were double pithos graves.

<sup>105</sup> Grave 92 was of indeterminable type.

Lead bottles were not distributed on the basis of 'wealth'. They were not accompanied in graves by more valuable items, and they did not always appear in graves that contain a higher number of items. This is appropriate to other objects at the necropolis. Again, within nine graves, lead bottles were the only item deposited. In twelve additional tombs, lead bottles were accompanied by only one or two other items.<sup>106</sup> This leaves only seven graves in which the vessel was joined by more than three items: G 21, 100, 141, 295, 326, 350, and 583. Some of these graves contained several grave goods, and could be classed as some of the most 'wealthy' across the necropolis (G 100, 295, 350, 583). Grave 326 contained two lead bottles (Seeher 2000, 105, Fig. 40), yet these were accompanied by only two needles and a spindle whorl. This is hardly a wealthy collection fit for a grave with two lead bottles, if such items were provided on the basis of affluence.

Lead vessels were not a consistent feature of graves containing a higher number of grave goods. This indicates that they were not a necessary addition within rich graves. Thirty-four graves at Sariket held at least four grave items of any type;<sup>107</sup> only nine of these graves featured lead bottles,<sup>108</sup> or twenty-six percent. This effect is not altered when the number of ceramic vessels is controlled. Of twenty-five tombs containing at least three grave items *other than* ceramic,<sup>109</sup> lead bottles occurred in only eight graves,<sup>110</sup> or thirty-two percent. Thus the vessel was not a necessary item to be included in graves that were distinguished from others within the necropolis.

Ceramic vessels only rarely co-occurred with lead. Of twenty-eight graves at Sariket containing lead bottles, only four held ceramic. Within three of these four graves, the ceramic form was a single necked vessel (G 100, 141, 350). Grave 350 contained both a necked vessel and a jug, though the B6 type jug was very large (Seeher 2000, 108, 157, Fig. 41:g) and may have been unique altogether. This grave also contained a ceramic cauldron or kettle. G 309 contained no necked vessel but rather a single unique "dome-shaped" ('Kalottenförmige') bowl, which was not illustrated (Seeher 2000, 102, 154, Fig. 38). It is curious that ceramic jugs, one of the most commonly-deposited item within graves, was absent in all but one of the twenty-eight graves

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<sup>106</sup> G 69, 92, 160, 169, 309, 323, 335, 377, 485, 493, 504, 582.

<sup>107</sup> Sariket G 21, 26, 37, 38, 57, 83, 89, 95, 100, 117, 141, 143, 144, 161, 213, 230, 231, 243, 259, 295, 305, 309, 320, 326, 345, 350, 419, 441, 448, 485, 494, 509, 517, 583. Excluding Grave 579, whose twenty-one spindle whorls were likely one necklace, joined by one small jug of no type. In this analysis, Grave 579 is considered to contain a total of two items.

<sup>108</sup> Sariket G 21, 100, 141, 295, 309, 326, 350, 485, and 583.

<sup>109</sup> Sariket G 21, 37, 38, 79, 83, 89, 100, 107, 213, 230, 231, 243, 259, 295, 305, 326, 335, 345, 350, 419, 441, 485, 494, 517, and 583.

<sup>110</sup> Sariket G 21, 100, 295, 326, 335, 350, 485, and 583.



containing lead bottles. It is possible that their absence was deliberate. It is possible that the lead bottle did not occur with the jug because the two vessels fulfilled the same purpose.

#### i. Lead bottles as jug replacement

The lead bottle may have functioned as a drinking or pouring vessel, which was deposited in graves as a metal replacement to the ceramic jug. This is supported by several points that relate to their incidence within graves, and their association or avoidance with specific ceramic forms. Of course, the number of lead bottles was significantly fewer than that of jugs. They also occur within a relatively small number of graves, in relation to all of Sariket necropolis. Any conclusions drawn from this small sample must be treated with caution. Yet when lead bottles did occur, they were almost always placed on their own. They seem to have been placed within graves in a similar manner to ceramic jugs. Thus it is possible that the vessels performed the same function. This may include 'one last drink' in death.

Lead bottles are negatively associated with ceramic vessels, especially jugs. Again, ceramic vessels were present in only four of the twenty-eight graves in which lead bottles were deposited. When they did occur, they were mostly necked vessels. As above, the necked vessel may have performed a function different from that of the jug. Necked vessels did not tend towards singularity, and were never paired with cups or bowls. Of course, this is complicated by the much smaller number of necked vessels, bowls, and cups than jugs. Yet lead bottles were strongly avoidant of jugs. That lead bottles were occasionally paired with necked vessels would seem to indicate that they shared the same relationship with necked vessels as did jugs. This places lead bottles in the same category as jugs, and differentiates both forms from necked vessels. It seems, then, that lead bottles and jugs performed the same function, and that one could be substituted for the other.

The relationship between lead bottles and jugs, as well as lead bottles and ceramic, was confirmed using Chi-squared test for independence. For both ceramic and jugs, the relationship was amongst the strongest compared (Tables 5.30-5.31 and 5.33-5.34). Between lead bottles and jugs, Cramér's V indicated that the strength of the relationship was .423 at less than .0001 significance. Between lead bottles and ceramic, this measure was .530 at less than .0001 significance. Charts provided in J. Cohen (1988, 228-48) characterise the strength of these relationships as very strong. Crosstabulations comparing lead bottles to jugs and ceramic vessels involved two values of 1.0 and 4.0, respectively (one in each table: Tables 5.27-5.28, 5.29, and 5.32). This violates a basic condition of Chi squared that values in the crosstabulation amount to

at least 5.0. It could compromise the strength calculations provided by Cramér's V. To correct for this, Fisher's Exact probability test was undertaken, which is specifically designed for tables with small sample sizes. Fisher's Exact test provides the likelihood that the observed pattern of cases did not occur by chance (Argyrous 2000, 410). In this case, the results upheld the relationship that was detected by Chi-squared and confirmed the strength determinations of Cramér's V. In comparing the incidence of lead bottles with jugs and the incidence of lead bottles with ceramic, both Fisher's Exact tests returned a one-tailed significance value of less than .0001 (Tables 5.30 and 5.33). Thus it is appropriate to reject the null hypothesis that each set of values are independent. This confirms that both jugs and ceramic vessels are (negatively) related to the incidence of lead bottles.

The significance of the relationship between lead vessels and jugs, however, is contingent upon a fundamental decision about graves at the necropolis. The twenty-eight graves in which lead bottles were found may not comprise a large enough percentage (eleven percent) of the total graves examined (264 Sarıket graves with grave goods) to deduce any relationship. This is clear at Küçükhöyük, where three graves out of a total ninety with grave goods (three percent) is considered too few from which to infer any pattern. It is argued here that the deposition of lead vessels was deliberate, as well as their avoidance of jugs. This depends upon the decision that eleven percent of graves is a sufficient proportion of cases from which to detect a pattern in the first place. This is an issue that each reader must decide upon independently. No matter how many times the data is revisited, the small percentage of graves containing lead bottles will always remain a potential flaw in the sample itself, and thus also in the analysis.

	<b>Jugs</b>	<b>No Jugs</b>	<b>Total</b>
<b>Lead bottles</b>	1 (.003 %)	27 (10%)	28
<b>No Lead bottles</b>	165 (63%)	71 (27%)	236
<b>Total</b>	166 (63%)	98 (37%)	264

Table 5.27. Sarıket necropolis. Crosstabulation comparing the incidence of lead bottles and jugs across graves.

	<b>Ceramic</b>	<b>No Ceramic</b>	<b>Total</b>
<b>Lead bottles</b>	24 (9%)	4 (2%)	28
<b>No Lead bottles</b>	202 (77%)	34 (13%)	236
<b>Total</b>	226 (86%)	38 (15%)	264

Table 5.28. Sarıket necropolis. Crosstabulation comparing the incidence of lead bottles and ceramic across graves.

			Presence of Jugs		Total
			No Jugs Present	Jugs Present	
<b>Lead</b>	No Lead Vessels Present	Count	71	165	236
		Expected Count	87.6	148.4	236.0
	Lead Vessels Present	Count	27	1	28
		Expected Count	10.4	17.6	28.0
<b>Total</b>		Count	98	166	264
		Expected Count	98.0	166.0	264.0

Table 5.29. Sarıket necropolis. Crosstabulation comparing the incidence of lead vessels to that of jugs.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	47.200(b)	1	.000		
Continuity Correction(a)	44.400	1	.000		
Likelihood Ratio	50.973	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	47.021	1	.000		
N of Valid Cases	264				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.39.

Table 5.30. Sarıket necropolis. Results of Chi-squared tests for independence comparing lead vessels to jugs, 264 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.423	.000
	Cramer's V	.423	.000
N of Valid Cases		264	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 5.31. Sarıket necropolis. Measures of association used to assess strength for Chi-squared results between lead vessels and jugs, from a total 264 graves containing grave goods.

			Presence of Ceramic		Total
			No Ceramics Present	Ceramics Present	
<b>Lead</b>	No Lead Vessels Present	Count	34	202	236
		Expected Count	51.8	184.2	236.0
	Lead Vessels Present	Count	24	4	28
		Expected Count	6.2	21.8	28.0
<b>Total</b>		Count	58	206	264
		Expected Count	58.0	206.0	264.0

Table 5.32. Sarıket necropolis. Crosstabulation comparing the incidence of lead vessels to that of ceramic vessels.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	74.242(b)	1	.000		
Continuity Correction(a)	70.141	1	.000		
Likelihood Ratio	60.442	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	73.961	1	.000		
N of Valid Cases	264				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.15.

Table 5.33. Sarıket necropolis. Results of Chi-squared tests for independence comparing lead vessels to ceramic vessels, 264 graves total. Generated using SPSS.

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.530	.000
	Cramer's V	.530	.000
N of Valid Cases		264	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 5.34. Sarıket necropolis. Measures of association used to assess strength for Chi-squared results between lead vessels and ceramic vessels, from a total 264 graves containing grave goods.

The lead bottle was exotic, special. Across Anatolia, the vessel connotes distance. Ceramic versions of the shape occasionally feature a rhomboidal net bag design, which would be appropriate for its use in long-distance exchange (Zimmermann 2005, 164). The lead bottle

within Grave 335 references distance in another form: a plastic ring around the neck of the vessel features an incised rope pattern (Figure 5.30; Seeher 2000, Fig. 40). Considering its foreign associations, the contents of the lead bottle must have been unique, precious, acquired from elsewhere. They could have held any exotic substance, for instance perfume (Goldman 1956, 302; Zimmermann 2005, 164). The lead bottle within Grave 295 was specifically altered to make the vessel appeal to local preferences.<sup>111112</sup> That the vessel was given a beaked spout suggests that this local purpose involved pouring. Perhaps the exotic vessel was associated with special beverages, which were also distinctive and reserved. This would suit the physical properties of beverages such as wine, beer, or other substances, and the physiological response that they elicit. In some cases it would also suit the care, attention, and time that is required for their cultivation, harvest, and production.

Some of the features of lead bottles further associate the vessel with special beverages. The physical characteristics of the bottle would have made it a suitable container for special drinks. The elongated neck would have prevented or reduced evaporation, while a rounded bottom would have ensured that the contents maintain a similar temperature. This would be appropriate for use upon the high Anatolian plateau. The vessel is also related to special beverages through an iconographic association with one of its related shapes. Upon two glyptics from Syria that feature thematic banquet scenes (Dentzer 1982, 25; Pinnock 1994, 91), the typical cup has been replaced by vessels of alabastron shape (Pinnock 1994, 22, Pls. IVc, Va). As above, the ceramic 'Syrian' bottle or flask is related to the lead bottle (Gürkan and Seeher 1991, 88; Zimmermann 2005, 163-64). In later periods, the Syrian bottle takes an alabastron shape (Özgüç 1986, 34-37). That the alabastron is depicted as a drinking vessel connects the Syrian flask, and thus the lead bottle, with drinking. The association of the vessel with drinking may have begun earlier, during the Early Bronze Age, when the bottle took a globular shape. It was probably long associated with exchange and special substances, arriving at Demircihöyük as a flask for various materials from across the Anatolian plateau. These associations continued as the bottle was adapted for the use of local drinking practices. From its singular deposition within graves, the lead bottle would even come to be used interchangeably with the beak-spouted jug. By the EB IIa, it could substitute for the jug in facilitating a popular aspect of mortuary ritual.

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<sup>111</sup> Jürgen Seeher, personal communication, 4th October 2011.

<sup>112</sup> The same alteration is detected upon a small lead beak-spouted pitcher from Oymaağaç (Toker and Öztürk 1992, 21, Pl. 6). It is possible that this vessel was altered for the same reason. This would seem to indicate that the vessel was also unfamiliar in the Samsun region, at the northern limit of the north-central Anatolian plateau.

## D. Conclusion

The significance of the beak-spouted jug lies in its singularity. It was by far the most common item interred within the tombs across both necropolises, and yet only rarely were more than two specimens placed together.<sup>113</sup> This was a fairly robust pattern, and did not vary by the amount or type of other items within the tomb, or by grave construction or preservation. Even amongst graves containing a greater number of objects (and thus possibly greater 'wealth'), the amount of jugs deposited continued to hover around one. The few outliers- graves containing three or even five jugs- were not unique in their contents or construction, nor were the fourteen graves containing two jugs each.<sup>114</sup>

No pattern predicted jug deposition. Their predominance was unrelated to the presence of other grave goods or to grave type. Jugs were as likely to appear in graves with more grave goods as within graves containing fewer goods. They were also no more likely to appear in graves containing metal, or in graves that were more time-consuming to construct. The fourteen graves with two jugs did not consistently feature specific contents, or a certain number of goods. Graves with three or more jugs, while rare, did not always contain a large amount of metal. Likewise, graves with a large amount of metal items were not likely to contain more jugs.

Jugs referenced a central belief about burial, or key burial practices. They either contained special substances or were used for key acts of ritual, or both. These practices were not restricted to individuals on the basis of status or wealth. Jugs were not concentrated within graves that featured metal or larger quantities of grave goods, and rich graves did not contain a higher number of jugs. The jugs or their contents were not a resource to be collected in greater quantities. They were related to a rite or single act, or a single provision that was apportioned between individuals. If the jugs were used for drinking, it seems likely that they were used for 'one last drink'.

Lead bottles were a metal counterpart to the jugs. They were avoidant of jugs, and like them, also tended towards a singular deposition. Lead bottles were also not deposited in graves on the basis of status or wealth. Graves containing lead bottles were no more likely to contain metal, maceheads, or other items. 'Wealthier' graves were not likely to contain lead vessels rather than ceramic jugs. Other vessels may also have also performed a similar role to the jugs. At times,

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<sup>113</sup> At Sarıket, of 166 graves with at least one jug, 150 contained a single jug. Only forty graves contained ceramic vessels other than jugs. At Küçükhöyük necropolis, of 61 graves containing jugs, fifty-eight contained only one.

<sup>114</sup> Sarıket Graves 26, 95, 117, 149, 231, 235, 321, 352, 361, 362, 418, 420, 479, and 569.

vessels with a drinking shape were placed on their own within graves. While these shapes are not more likely to occur on their own, when they did it is possible that they stood in for the jug.

Taking these graves into consideration, the number of burials that may have referenced 'one last drink' increases significantly. Of 354 graves containing grave goods across both necropolises, 227 contained at least one beak-spouted jug.<sup>115</sup> All of the thirty-one graves featuring lead bottles may be added to this figure, because the bottle could have stood in for the jug. This yields 258 graves in which a single act of drinking or pouring is referenced. Fifteen graves at Sariket and Küçükhöyük contained a cup or bowl as the only vessel. Tankards and teapots are also drinking shapes, and they appear on their own within three graves at Sariket. This increases the number of graves referencing a single drink to 276, or seventy-eight percent of graves with grave goods. Miniature vessels, tripod vessels, and necked vessels are not typical drinking shapes. The fourteen<sup>116</sup> graves in which they appear on their own will not be counted, though some of them may have functioned as a jug equivalent. Yet even without including them, it is clear that drinking and pouring was a central feature of burials. Residents at Demircihöyük and Küçükhöyük used any number of vessels for these practices. Jugs were the most common shape, but this also included lead bottles, and at least some bowls and cups. They may have been used to perform graveside drinking acts, or they may have equipped the dead for these acts in the afterlife.

However, neither jugs nor grave goods were compulsory additions to the graves. Fifty percent of graves across both Sariket and Küçükhöyük contained no grave goods at all. Drinking and pouring may have been central to the idea of burial, but they were not practiced by all residents. Jugs or special beverages may have been too expensive or inaccessible. It is possible that they were restricted to a specific segment of the population.

Differences in wealth are not readily detected at the necropolis. Some graves contained a higher number of grave goods, but these were not always the most rare or expensive objects. Metal or other seemingly high-value objects were sometimes the only item that had been deposited. There is no clear evidence for a small group of élite who may have directed activities at the settlement, or comprised its administration. Demircihöyük was a small community of farmers; its architecture would seem to point to a collectively-oriented form of organisation. Houses were arranged facing a common courtyard. Storage bins in this area suggest that

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<sup>115</sup> Of these 227 graves, 207 contained a single beak-spouted jug each. All graves containing jugs are counted as referencing 'one last drink'. This is because the beak-spouted jug is the predominate vessel by which this act or idea was referenced.

<sup>116</sup> This number is fourteen rather than sixteen because two graves (G 100 and G 141) contained lead bottles and are already being counted.

resources did not need to be protected from other residents. Yet the arrangement itself would have required some degree of settlement planning. The stone terrace wall surrounding the settlement, as well as the individual houses, may have involved collective labour. It is possible that this labour was directed by individuals who possessed some degree of influence within the community.

This is appropriate to a situation where nearly half of all graves were not provisioned. Grave goods reflected some degree of social ranking, for instance on the basis of sex, gender, age, or experience. Ranking may be identified even within egalitarian societies (Mann 1986, 37; Flanagan 1989), as was explained in Chapter two. Demircihöyük and Küçükhöyük were probably not egalitarian, judging from the large number of graves without grave goods. Had the settlement been organised in that way, we might expect that goods would have been provided to every single grave. It is possible that graves lacking in grave goods were dug during the winter, or that they are related to deaths that occurred during winter. Yet the presence of stone cist graves without any grave goods makes a seasonal explanation for these graves difficult to support. Thus the necropolis seems to reliably indicate some degree of social ranking.

Again, it is not possible to take grave goods as a direct indication of status. Seeher (2000, 29, Fig. 49) points to Grave 494, the grave of a young woman between fifteen to twenty years old, which contained the only bronze axe at the necropolis. The item was probably not deposited within her grave on the basis of her age or gender, or achieved status. However several graves containing maceheads and other objects also feature expensive construction methods. In some graves, the provision of grave goods can be taken as an indication of status in general (Seeher 2000, 29). The population was differentiated to some extent, though there does not appear to have been one clearly-identifiable ruling personality. Of course, these personalities may have been undetected. Even though Sariket and Küçükhöyük provided a large number of graves, they do not represent all of the EB IIa population. Seeher (2000, 17) estimated that the population of Demircihöyük to have been 2080-2860 individuals over the course of four to five hundred years. The 498 graves at Sariket is only a fraction of this number. It is possible that there were members of the community who possessed a very significant amount of wealth, yet were not represented at the necropolis. It is possible that some of the Sariket graves containing more metal or a few unique items held the heads of important families. They may also have contained individuals who had more influence than others within the population, for any number of reasons. Likewise, the large amount of graves without grave goods suggests that some individuals had only a limited access to resources. Demircihöyük appears to have featured some amount of ranking, yet which was not centralised or divided into several different hierarchical levels. Again, there were no great



differences in wealth between the graves containing grave goods at either site. It is possible that some individuals were emerging within the population who were able to command labour or direct craft production. They may have helped facilitate the long-distance exchange that had long crossed their doorstep at the Eskişehir Plain. These individuals may have used consumptive social strategies for promoting status, such as the display of weapons and other items. Yet it is uncertain if they competed with other individuals to achieve more influence and resources. Overall, the settlement remained small, and there was no indication that any ranking was accompanied by a significant concentration of wealth.

For much of the population at these settlements, drinking and pouring were central aspects of death and burial. This suggests that they were also popular practices within the settlement. Communal eating and drinking may be practiced in different ways, and used for a number of purposes. All of these may facilitate settlement organisation. Communal drinking and feasting may be used to connect individuals. Drinking and eating together emphasise participation and sharing a common resource. These practices may also function as a political platform for establishing influence and social prestige.

There is no evidence for collective drinking at either necropolis; there is no cache of vessels deposited together, or smashed and discarded in one area. The eight bowls within Sarıket G 143 may have been tomb backfill, or related to nearby Grave 151 (Seeher 2000, 84). There is no evidence that food or drink was consumed within G 144, despite its five vessels. Yet special beverages were probably known within the settlement, judging from the extensive familiarity with the beak-spouted jug, and its importance in being placed within the graves. If special beverages were known, then it is likely that communal consumption was also practiced by some within the community. It may have been a well-known and popular activity.

At Demircihöyük and Küçükhöyük, individuals may have used drinking and feasting as a way to establish their social position. Perhaps this was on the part of a few ambitious personalities or the heads of important families. Communal eating and drinking may have also been used as a reward for labour. For instance, feasts may be held in exchange for individuals performing some task, such as the construction of a stone terrace wall. This is the *work-party feast* described by Dietler (1996, 93; with Herbich 2001). This labour may have been organised by a single individual or group. Participants would be rewarded with a feast when the work was completed.

If special beverages had been known for some time, then celebratory feasting was likely a popular part of the culture. It would have been a longstanding and well-recognised practice within settlements, and drawn individuals together through its emphasis upon community identity and

collectivism. These would seem to be popular themes, because they are still evident in the architecture and arrangement of Demircihöyük site features (Düring 2011a, 268). Yet feasts are also an effective venue for competition. In drawing together large groups, they create situations that are ripe for manipulation by enterprising members of the population. The ranked population that is evident from the Sarıket graves may have used drinking and feasting events to promote themselves. If so, they would have relied upon the cooperative elements of feasts in order to attract the community. By provisioning feasts, these individuals are able to indebt participants, compete with other élite groups, or elicit support from the community. In this way, communal, collective feasts may have facilitated more competitive objectives. The ubiquity of the jugs seems to allude to drinking for group-oriented and collective purposes. The jug clearly relates to a central feature of mortuary practice, which is well-known and popular across the settlement. At the very least, it alludes to activities that may have been community-wide in the past. Jugs were not deposited in graves on the basis of wealth and status. But the object may have been involved in processes at the settlement that could eventually result in a greater concentration of wealth.

## Chapter Six: The EB II-III 'Complex': a 'new way of eating and drinking' in western Anatolia

Drinking practices in western Anatolia are identified through drinking vessels. During the EB II-III, this region is well-known for the introduction of a series of new drinking and pouring shapes. The new shapes were popular: they were adopted across a number of sites, and in significant numbers. These three to four vessels emphasise drinking and foodsharing, and were often finished in a red slip. The group of shapes have been termed a 'complex' by Mellink (1989, 325) and also by Eslick (2009, 233-34) when they appear at sites in the southwest of Anatolia.

From their characteristics, in past research this 'EB II-III Complex' has been interpreted as a "new way of eating and drinking" (Mellink 1989, 325). From their popularity across western Anatolia, the Aegean, central Anatolia, and elsewhere (Mellink 1986, 145-49; 1992, 216-17; 1998), the 'Complex' is often considered to mark broader trends. These may be related to developments in metallurgy (Spanos 1972, 45-46, 70), or involve a reorganisation of pottery production (Spanos 1972, 49-51; Eslick 2012, 232). Şahoğlu (2005, 341, 350) characterises the 'Complex' vessels from the coastal sites of Liman Tepe and Bakla Tepe as burnished finewares. From other developments occurring on the central western coast, he suggests that the vessels indicate the development of an administrative élite, and even a hierarchical society (Şahoğlu 2005, 341, 345, 353). This chapter will assess the extent to which the EB II-III 'Complex' signals greater social changes at sites in the west. Do these vessels mark the introduction of new social practices? Was drinking newly popular at the time? Who was participating, where and with whom, and may this information comment upon how settlements were organised? If these new vessels accompany wider changes, do these changes relate to the social complexity of western sites?

This chapter will analyse the characteristics of the EB II-III 'Complex' in detail, and the settings in which they were used. First, it will assess whether or not vessels were similar between sites, and how they differ from those of earlier periods. This is in order to determine the development and chronology of the 'Complex', and whether or not it represents a change in consumption practices. This chapter will then examine the situations or events in which 'Complex' vessels were used and deposited. Who was drinking from these vessels, and where? Did these settings or practices relate to broader changes within settlements, and did they signal changes in how these settlements were structured? The evidence will be compared across western

sites in order to better assess their chronology, and to determine how prevalent any changes may have been.

The sites that will be examined span several areas of the west. The northwest is represented by the coastal Troad, as well as the inland Upper Sakarya plain. The latter is not far from the site of Demircihöyük (Chapter five). Along the central western coast are the sites of Liman Tepe and Bakla Tepe. They offer information on vessel shapes and finishing, though the architecture at these sites is incompletely known. The area of the southwest is represented by Aphrodisias and Karataş. A great deal of information is available for Karataş, which is located on the Elmalı Plain in inland Lycia. The number of sites that are investigated is small, but they provide a range of settings for investigating drinking. This includes the inland and coastal northwest, the central western coast, and Lycia in the southwest. Although the detail at some of these sites is lacking, a wide geographical range provides a way to observe drinking practices across the region.

## **A. The EB II-III 'Complex'**

### **1. Definition and shapes**

The main shapes of the EB II-III 'Complex' include the one-handed tankard, the wheelmade plate, and the *depas amphikypellon*, or *depas*, a double-handed tankard. A fourth shape is also sometimes associated: a large platter, known as 'A1' within Blegen's pottery typology at Troy (Blegen et al. 1950, 224). This shape often survives only in fragments; this may be why only one specimen was reported from Beycesultan (Lloyd and Mellaart 1962, Fig. P. 47.1). That intact versions are rare may also be why the shape is not usually associated with *depata* and wheelmade plates. For these reasons, the A1 platter is not included in the definition of the EB II-III 'Complex'. Yet the shape will be noted when it appears in conjunction with the 'Complex'. All of the shapes will retain their numerical labelling from the Troy excavations, where the vessels were first identified (Blegen et al. 1950, 1951).

The *depas* and the A2 wheelmade plate are the most common and iconic forms of the EB II-III 'Complex'. These shapes imply that the 'Complex' was intended for drinking and eating. Shape, however, is only part of the definition of this ware. It is also identified by a red-coated finishing, which is sometimes highly polished. Early site reports and surveys describe these shapes in conjunction with red finishing. Since these early reports, either characteristic has been used to identify the 'Complex' at different western sites.

The term, 'Complex' is used because it references the original observations about the vessels, and it encapsulates what this chapter will investigate about them. Mellink (1989, 325) saw "the EB III complex" as indicating a sudden, significant change in settlement customs. Eslick (2009, 233-34) points out that the "tankard/plate/depas complex" was manufactured using a different tradition than the rest of the assemblage at Karataş, which continues from previous periods. Potters are usually consistent in the tradition in which they work, including their tools and techniques, shapes, and finishing (see Rice 2005, 461-66). Thus the 'Complex' seems to be a separate pottery tradition, which may have been produced by different potters, possibly at different centres (Eslick 2009, 232). Some shapes may have even been produced at specific sites (Spanos 1972, 49-51). This is consistent with how the vessels were described when the pottery of the region was first treated in detail by French (1969a, 123-24; 1969b, 66). They were grouped together and treated as a separate package, which is adopted across different areas of the west. Their adoption at different sites suggests that western Anatolian settlements were in close contact during the period (Eslick 2009, 234).

However, French (1969a, 124, 135) is careful to specify that the vessels appear over two different chronological phases. They first appear in the period corresponding to Troy II. Later, the vessels are adopted at different sites in the west during the period aligning with Troy III-V. The question remains, then, whether the 'Complex' is adopted at the same time at different sites, and what greater developments it may correspond with. Establishing the chronology of the vessels may clarify these issues. When did the vessels first appear, and over how long a period were they adopted? Was the 'Complex' accompanied by changes in architecture, craft production, writing or sealing, or any indications of a new, administrative élite? Şahoğlu (2005, 345) suggests as much for sites on the central western coast. At Liman Tepe, was the 'Complex' newly introduced at this time? This may indicate whether the changes that Şahoğlu notes correspond to earlier or later in the EB II-III. This may relate whether the introduction of the 'Complex' was met with wider social changes, including the organisation of western sites. It may also indicate whether the 'Complex' marked a new way of eating and drinking in relation to any changes.

This first section of Chapter six will assess the definition of the EB II-III 'Complex' and how it has been identified. It will examine how shapes and finishes have been described by researchers, and how the 'Complex' has been identified at different sites. This is intended to clarify the definition of the ware, and the chronology of when it appears in different areas of the west. The second section of this chapter will assess settings or events where EB II-III drinking vessels were used. It will try to understand how drinking was done, and what characterised drinking events. Understanding both the vessels and the settings in which they were used may

indicate whether the 'Complex' accompanied broader developments within western communities. This includes their connection to new drinking practices, and whether the 'Complex' signals the emergence of a new, wealthy class of inhabitants or group of élite. In this way it is possible to assess the social complexity of western settlements through drink.

#### i. Tankards, including the *depas amphikypellon*

The tankard is the earliest of the EB II-III 'Complex' shapes to appear in the Troy II assemblage. The shape includes A38, A39, and A43 in Blegen's typology. It is recognised as early as Troy IIa, though may have derived from the earlier form A42 from late Troy I (Blegen et al. 1950, 64). The basic shape is a bulging body, with flattened base and a high neck, with one (A39) or two (A43) vertical handles running the length of the vessel. The tankard is usually wheelmade, and at Troy is amongst the most common shapes to be slipped in red and burnished (Blegen et al. 1950, 221). The shape was, however, also common in Plain Ware and with a grey or black slip (Blegen et al. 1950, 229). Shape A45, the *depas amphikypellon*, is a variation of the double-handled tankard shape that appears as early as Troy IIc. It is usually wheelmade and is made in all of the different ware types at Troy (Blegen et al. 1950, 230). The *depas* is the most clear indication that social drinking was becoming popular in western Anatolia. Focusing upon this shape rather than the tankard will likely provide a more exact understanding of how the 'Complex' was used.

The *depas amphikypellon*, or *depas* (Figure 6.1) seems to have been designed for drinking special beverages, in a situation in which drinking does not stop. It seems intended for social drinking. The double handles of the *depas* are ideal for passing between individuals. This motion is also encouraged by the base of the vessel, which is often unstable (below). These characteristics have made the *depas* the most iconic symbol of drinking for the period.

The origins of the *depas* are centred at Troy. It is from this site that the greatest number of *depatas* have been recovered (Spanos 1972, 48).<sup>117</sup> Troy is also the site of the earliest *depas* (Bittel 1942, 132-35), as well as one of two known metal versions of the form (Figure 6.2; Renfrew 1967, Pl. 10c).<sup>118</sup> More metal versions are sure to have existed. A gold double-handled

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<sup>117</sup> In an unpublished conference paper, Peter Z. Spanos (1977, 54) estimated that around 260 *depas* vessels were presently known. Of these, he claimed that nearly 150 had been found at Troy.

<sup>118</sup> One silver *depas*, reportedly from Troy, is kept on permanent display at the British Museum, London: Item ME 132150, [http://www.britishmuseum.org/explore/highlights/highlight\\_objects/me/s/silver\\_two-handled\\_cup.aspx](http://www.britishmuseum.org/explore/highlights/highlight_objects/me/s/silver_two-handled_cup.aspx), last accessed 17th June 2014. A second silver two-handled cup, reportedly of silver, was traded at Christie's auction house in London on the 25th October, 2012. <http://www.christie>

sauceboat from Treasure A at Troy is similar to the depas in concept (Figure 6.3; Schliemann 1880, No. 772; Tolstikov and Treister 1996, 32). Ceramic depata often feature decoration that reference metalworking, for instance scratched fluting and striping across the vessel body (Figures 6.4-6.5).<sup>119</sup> Some vessels may have been ceramic imitations of metal depata (Spanos 1972, 47, 50). Though no gold versions are known, Çalış-Sazcı (2007, 150-51) suggests that the red- or black-slip that is sometimes applied to the vessel may reference original versions of gold or silver.

Yet the depas was also a common, everyday item. At Troy, the depas becomes popular soon after its introduction in the IIc period. By IIg, the last period of Troy II, the form is common to nearly all houses and street deposits within the central citadel (Blegen et al. 1950, 307, 311, 314, 317, 319, 327-28, 333, 339, 345, 354, 360, 364, 370-71, 376). Even in this period, handmade versions can still be clumsy in their overall form. One handmade specimen from Troy IIg is especially asymmetrical and rough (Figure 6.6; Blegen et al. 1950, Pl. 382: 35.425). The form continues through the third, fourth, and fifth settlements at Troy (Blegen et al. 1950, 209). The depas is also present in large numbers at other sites. At Karataş, the depas is common to nearly all households by the EB III (Eslick 2009, 233-34). This pattern was likely repeated at other sites, from the popularity of the shape throughout the region. Spanos (1972, 49-51) suggests that depata "production centres" were located across the west, for instance at Poliochni on the island of Lemnos, or Pisidia in the southwest. Thus the form may have had its genesis in areas beyond the northwestern Troad. Eslick (2009, 232, footnote 12) also suggests that some workshops may have served to copy these ceramic vessels in metal form.

It is important to keep in mind that these observations are limited. Only a handful of EB II-III sites have been investigated in the west. At these sites, the settings in which depata and 'Complex' shapes were used are not often described in detail. Even the settlement at Troy, where the highest number of depata have been found, is not fully understood. The lower city that extended below the citadel (Jablonka 2001; Jablonka and Rose 2004, 619) remains largely unexplored. This area is where most domestic contexts would have been located. It is unknown whether the depas was common to domestic settings, or if it was only prevalent at the citadel. A difference in the popularity of the vessel between these areas of the settlement would imply that it was used differently in either setting. It would change how the vessel is interpreted. This

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[s.com/lotfinder/ancient-art-antiquities/a-trojan-silver-depas-cup-troy-early-5609593-details.aspx](http://s.com/lotfinder/ancient-art-antiquities/a-trojan-silver-depas-cup-troy-early-5609593-details.aspx), last accessed 17th June 2014

<sup>119</sup> Troy vessels 36.601, 35.841, and 35.842. Blegen et al. 1950, 327, 364, Pl. 382; Aphrodisias and a vessel from the Antalya museum: Mellink 1968, Pl. 54:3-4; Beycesultan periods VIII-IX: Lloyd and Mellaart 1962, P. 52:21, P.55:46.

information is unknown, and therefore space must be left for this possibility within any assessment of the form.

The shape of the depas exaggerates and theatricises drinking. Its use requires one to lean back and dramatically raise the vessel, perhaps placing both hands on the high vessel handles. Like the drinking bowls and single-handled cups in the central region (Chapter four), the depas was not designed for comfort or for ease of use. Rather, the act of drinking from the vessel required some degree of familiarity and skill. It demonstrated special knowledge. This may have been connected to ritual and religious beliefs, which were accessed through the act of drinking. In later periods, during the Middle and Late Bronze Ages, anthropomorphic drinking vessels of the Hittites (*Bibru*) feature upside-down animal figures or a human fist. These images are displayed only when the cup is raised, and thus only in the act of drinking (Akurgal 1962; Muscarella 1974, Nos. 123-24; Güterbock and Kendall 1995, 50-51).

The depas is designed to stay in motion. This suggests that participation was a key objective in western drinking events. Its two handles emphasise passing between individuals. Also, depata were often designed to be unstable when set upright on a flat surface. Some have flattened bases, as with two examples from Protesilas-Karaağaçtepe (Figure 6.7; Demangel 1926, Figs. 2-3, 78, p. 60; Spanos 1972, 93, 97, Nos. DIII/33, DVI/79) and one example from Bakla Tepe (Şahoğlu 2005, Fig. 5). Other depata have decidedly rounded bases (Figures 6.8-6.9). This includes a depas from Bakla Tepe necropolis (Şahoğlu 2005, Fig. 4) and a depas from Kusura (Lamb 1937, Fig. 14:18). To this may be added a depas from Troy kept at the Museum für Vor- und Frühgeschichte in Berlin (Schmidt 1902, 90, No. 2032; Spanos 1972, 92, No. D1 1/31).<sup>120</sup> Several of the depata characterised by Spanos as having flattened bases actually have rounded bases (Spanos 1972, DIII/42, DIII/43, DIV/56, DIV/57, DV/59; Schmidt 1902, 90, No. 2032; Lamb 1937, Fig. 14:18; Blegen et al. 1950, Pl. 381: 35.580; Lloyd and Mellaart 1962, Pl. 47:61; Carpenter 1974, 91). This includes rough, handmade versions as well as those more carefully constructed. A clumsy, handmade depas from Troy IIg has a rounded base (Figure 6.6; Blegen et al. 1950, Pl. 382: No. 35.425), as does a depas in lustrous Urfinis ware from Orchomenos (Kunze 1934, 56, Pl. XXIII:1). Many of the vessels kept in the Schliemann collection in Charlottenburg at the Museum für Vor- und Frühgeschichte have slightly flat bases. Yet these do not manage to

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<sup>120</sup> The location of the depas is provided because the item is not illustrated or photographed by Schmidt (1902) or Spanos (1972). The author was able to observe the rounded base of this depas while visiting the collection at the Museum für Vor- und Frühgeschichte, Berlin in July of 2010. Some vessels of the Schliemann collection are on permanent display at Berlin's Neues Museum. These were unable to be handled.



keep the vessels stable when they are set upright.<sup>121</sup> The flat portion of the base is not large enough to balance the vessel, and would be even less effective if the vessel were filled.

Judging from these examples, the depas could only have been placed down after its contents had been emptied. Perhaps the flaring rim invites one to do just this, in order to demonstrate that the drink within had been fully consumed. The vessel was meant to be used for drinking, and in a situation in which drinking did not stop. From its base and handles, the depas was passed continually between people until it was empty. One can imagine that no participant was able to rest or otherwise slow or stop their becoming inebriated. Düring (2011a, 273) likens the depas to an Early Bronze Age "joint". In this case the design of the vessel regulated the interaction: it caused participants to experience becoming inebriated together. It also determined how long this experience was to last.

A similar drinking practice is witnessed in the central region of Anatolia. Small, plain, wheelmade conical cups from Bögazköy-Hattuša (Orthmann 1963, 44) demonstrate affinities, "at least in spirit", with the western depas (Schoop 2009b, 149). Their bases are sometimes shaved to a point (Figure 6.10), making the vessel unable to be placed down. The base was shaved before the vessel was fired, and therefore the pointed base is intentional and related to how the vessel was used. The cups were also set apart from the rest of the assemblage: they are among a very small number of vessels to have been made on the wheel (Schoop 2009b, 149-50). The conical cups are made from a local clay. Thus while they are related to the depas in concept, they do not appear to have been inspired by them. In both central and western Anatolia, then, there was an emphasis upon drinking cups that could not be put down. The conical cups would have held a limited volume, like the single-handled cups discussed in Chapter four. They are also likely to have been used by one person, for drinking together with others, at the same time. Interestingly, similar cups were deposited in a heap within Alaca Höyük non-élite Grave FIII (Gürsan-Salzmann 1992, 266, Fig. 2.2), possibly after a graveside drinking event.

## ii. The A2 wheelmade plate

The A2 wheelmade plate is a distinctive form, new to the EB II-III. Like the depas, it is first encountered from the excavations at Troy, and is also best described within the reports from

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<sup>121</sup> Of the depata kept in storage in Berlin, No. 2019 (Schmidt 1902) was the only vessel of several that could be balanced upright, but only temporarily. It would not have remained upright if left unattended, and certainly not if it were filled with liquid.

that site (Blegen et al. 1950, 225-26). Throughout the west, the wheelmade plate is the earliest and most clear indication that vessels were being made on the wheel.

At Troy, the A2 wheelmade plate first appears early in the Troy II sequence, assigned to layers I Ib and I Ic (Figure 6.11; Blegen et al. 1950, 225). At that site, early forms are thick and heavy, with stepped sides so that their production on the wheel is obvious. Later phases at Troy (I Id-I Ig) see the shape become smaller and more thin (Blegen et al. 1950, 226). A thick, red wash is more often applied, and a tan wash is also observed. Yet these wares occur relatively less often. Across all levels at Troy the vessel was most commonly finished in unslipped Plain Ware. The plates are clearly produced en masse. Blegen et al. (1950, 225) describe the plates as being made with very little care, their bases roughly cut and uneven, "carelessly cut off." Schmidt (1902, 44) notes that some bases seem to have been altered with a "knife-like" instrument. But it is evident in handling the vessel that this was to provide more of a base, not less of one.<sup>122</sup>

Eslick's (2009) examination of the wares at Karataş provides another brief discussion of the wheelmade plate. She describes the vessel as falling into two groups: one that is made in a finer fabric, and slipped in red, orange, or pale brown (Eslick 2009, 160). Another is made in a heavy, gritty fabric, often slipped in red and sometimes burnished. This seems to mirror the different ways that the shape was manufactured at Troy. Also akin to Troy, the standardisation of the vessels is apparent. They are meant to be made quickly, in large numbers, and in an identical fashion (Eslick 2009, 233).

At both sites, these methods are different from how other vessels are produced. At Karataş, the wheelmade plate, the tankard, and the depas are described as being clearly set apart from the main pottery tradition (Eslick 2009, 231-33). This is because of the fine temper and new orange ware that is sometimes used, as well as the use of the wheel. Mellink (1992, 216-17) also describes the 'Complex' in these terms. This is less clearly expressed at Troy, though at that site the use of the wheel is introduced with the A2 plate. The depas is also a new shape of the period (Blegen et al. 1950, 230). To Eslick (2009, 232), these production techniques indicate that a new pottery tradition had been introduced (cf. Rice 2005, 461-66). This new tradition is probably being made by different potters, possibly at different sites (Eslick 2009, 232).

It is difficult to determine the purpose of the A2 plate. Because the form is often unburnished and commonly unslipped, the ware can be highly porous; it is also rough to the touch. The plate seems unsuitable for food. Placing cheese, meat, or any other food aside from

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<sup>122</sup> As personally observed by handling the material of Troy II-V. This material was accessed at the Museum für Vor- und Frühgeschichte in Berlin in July 2010 and at the site of Troy in July and August 2010.

bread and fruit would have resulted in food staining and seeping into the fabric of the plate. Of course, it is possible that food was served wrapped in another material, or that the plate was meant to be disposable. Yet it is noteworthy that residents often chose not to burnish the plates, despite the versatility this would provide. Perhaps the plates were not used for food; Blegen et al. (1950, 222) note the use of similar plates for pottery production in Oaxaca, Mexico. The use of the vessel may become more clear from examining the circumstances in which it was used.

The quality of the A2 wheelmade plate does not improve over the course of the EB II-III period. At Troy, the wheelmade plate is increasingly made in Plain Ware, and becomes more careless and shoddy in production (Blegen et al. 1951, 24, Pls. 62-63). This occurs coincident with a general decline in quality amongst vessels of the period. This is most extensively discussed by Lloyd and Mellaart (1962, 199-200) in their review of the excavations at Beycesultan. According to Lloyd and Mellaart, while the production quality declines during the period, a red slip becomes increasingly popular. It is applied to all shapes including the A2 plate, as well as tankards, depata, and large platters and bowls.

## **2. Red-washed finishing**

A red slip or wash finishing is associated with EB II-III 'Complex' shapes. This finishing is used to identify the ware at different sites, though its definition has not always been clear or consistent. In the literature, this red slip or wash is used as a chronological indicator, and an indication of the relationships between western sites. This section of the chapter will compare the descriptions of this finishing, before addressing how it is identified at different sites in the west.

The red slip that is associated with the EB II-III was first described by David French (1967, 1969a, 1969b). His surveys of western Anatolia in the 1960s traced the location of different wares throughout the region during the EB II-III period. French's surveys were undertaken not long after the final excavation reports for Troy I-V were published by the University of Cincinnati (Blegen et al. 1950, 1951). These reports described both a Red Coated ware and a Red Washed ware in conjunction with new drinking vessel shapes. They also described that these wares decline in quality over the course of Troy III-V.

These definitions, however have never been clear or consistent, especially when comparing material between sites. In 1962, the final excavation reports for Beycesultan in inland southwest Anatolia identified two types of red finishing, both of which are assigned to the EBA. The first is a red-slipped ware that emerges during a period the excavators termed the 'EBA 2' (Lloyd and Mellaart 1962, Map VII). The excavators also identify a wheelmade ware with a red

and brown wash, a Red-Washed ware. According to them, this ware closely resembles vessels of Troy III-V (Lloyd and Mellaart 1962, 199-200). Beyond this, Red-Washed ware is only partially described. Also at Beycesultan, the excavators identify a "West Anatolian EB III culture" (Lloyd and Mellaart 1962, 237, 243, 249, Maps VIII-X). It is characterised by vessels that have been finely burnished (a "fine-bone burnish": Lloyd and Mellaart 1962, 237), and are of a higher quality than the earlier Red Washed ware. Yet the excavators are not clear as to when this culture emerges in relation to the earlier Red-Washed ware.

'Complex' shapes have continued to be identified at sites in the west and elsewhere, yet without reference to more specific details of their finishing. Mellink (1965) has drawn attention to drinking vessels recovered from Tarsus EB IIIb in Cilicia. These vessels were slipped in red. Their shapes were similar to those recovered from Troy II, including the *depas amphikypellon*, the tankard, and the A2 wheelmade plate (Goldman 1956, 137ff, nos. 412-29). Since that time, researchers have continued to note the presence of 'Complex' shapes and red finishing throughout the Aegean and Anatolia (see Spanos 1972; Podzuweit 1979, 151-53; Mellink 1986, 145-49; 1992, 216-17; also Şahoğlu 2005, 340).

French's surveys in the 1960s had worked to clarify the different ware types and finishes. French assigns the 'Red-Washed' ware that was described at Beycesultan to Troy III-V. He also clarifies that it is this ware that is found at Tarsus:

"This type of pottery includes all the variations of red-wash ware found at Troy III-V and Beycesultan XII-VI. Without great variation, it is found all over Western Anatolia and Cilicia" (French 1967, 61).

French includes a red-crossed bowl under Red-Washed ware (French 1967, 61, Fig. 6:3). This means that the red-slipped finishing extends over a very long period of the EBA, because red-crossed bowls are assigned to Troy V (Blegen et al. 1951, 138, 228). According to recent radiocarbon dates for Troy, Period V dates to between 1950-1750 BC (Kromer, Korfmann, and Jablonka 2003, 48, Fig. 5), a period transitional to the Middle Bronze Age. By 1969, French begins using the term, 'West Anatolian EB III' ware, after Mellaart (1957) and Lloyd and Mellaart (1962, 243). He equates this with his earlier Red Washed ware (French 1967, 61; 1969b, 66), and later only uses the term, 'West Anatolian EB III' (1969a, 147, 149; 1997, 579-83). In this thesis, 'West Anatolian EB III' is taken to mean all of the pottery with red slip that is generally dated to Troy III-V, including red-crossed bowls.

#### i. EB II-III 'coalescence'

It is West Anatolian EB III pottery that is shared across western Anatolian sites. French (1969a, 124, 147) describes this ware as appearing during a period of coalescence across western regions. He designates the EB I and the EB III as periods in which many regions in the west were in contact with one another. The EB II, in-between the two, was by contrast relatively insular, characterised by small pottery zones. French assigns Troy II to the EB II, and Troy III to the EB III (French 1969a, 124-25, 146-50). Easton (2002, 322-23) agrees, though he clarifies that it is from late Troy II that a coalescence begins to be seen across western regions.<sup>123</sup> Thus it is late Troy II that marks the beginning of the EB III. This pattern is also seen in the inland northwest. Turan Efe, through his surveys around Eskişehir (Efe 1994, 7-9; Efe 2000, 121, Figs. 4-6; Efe and Ay Efe 2007, 252-53, Figs. 1-3), recognises a uniform adoption of new ceramic forms precisely in the EB III (Efe and Ay Efe 2007, 257).

It is difficult to differentiate between the red-slipped wares of Troy II, and the West Anatolian EB III wares of the EB III (French 1969a, 135, 173, footnote 14). The wares of the EB III also span a very long period, from Troy III to V. Because of these issues, it is difficult to determine in which period 'Complex' shapes were in use at other sites. Are these vessels being used during a period corresponding with Troy II, or with Troy III, or at the end of Troy V? Mid-Troy II, at the start of the EB III, has been estimated to date to around 2400 BC (Easton 2002, 340).<sup>124</sup> The end of Troy III has been estimated to date to around 2000 BC. Troy IV-V, by contrast, may extend to as late as 1700 BC, into the Middle Bronze Age (Easton 2002, 340; Kromer, Korfmann, and Jablonka 2003, 48-50). The 'coalescence' between western sites may have occurred over a long period of time, spanning Troy III-V. Or, it may have occurred over a short period of time, for example during the end of Troy V.

Some points still need to be clarified. According to the current state of research, red-crossed bowls are aligned with the end of the period (Troy V). This has been criticised by Easton (2002, 338, footnote 427). However, there is insufficient evidence to support that these bowls be reassigned to Troy III, as he suggests.<sup>125</sup> Further, he aligns this material with Beycesultan VIII-

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<sup>123</sup> Easton is drawing partly from Schliemann, who in 1882 revised which contexts and finds should be assigned to Troy III and Troy II. In particular, Schliemann (1884b, 175-94) reassigns objects Nos. 190-983 in his 1880 text *Ilios* to the Trojan second settlement. Nos. 986-1219 remain assigned to the fourth settlement. According to Easton (2000a, 2002, 2012), later analyses by Blegen et al. (1950, 1951) failed to completely understand these changes. Therefore much of the material assigned by them to Troy IIf-IIg should instead be assigned to Troy III.

<sup>124</sup> A start date of 2400 BC for mid-Troy II is not incompatible with dates by Kromer, Korfmann, and Jablonka (2003, 48-49), who date the beginning of Troy II to a minimum calibrated age of 2300-2200.

<sup>125</sup> Easton (2002, 338, footnote 427) claims that the decoration of red-crossed bowls distinguishes earlier forms from those of the Middle Bronze Age Troy V. He argues that late forms only include paint on their exteriors. He assigns all red-crossed bowls to Troy III-V, though this contradicts Blegen et al. (1951), who place the bowls only in Troy V. Easton appears to be classing red-crossed bowls from Beycesultan levels

VI, which is characterised by the disappearance of the A2 wheelmade plate (Lloyd and Mellaart 1962, 215)! This must date to a period after Troy III. Therefore the material from Tarsus EB IIIb, which Easton (2002, 338) includes, cannot be considered. French (1969a, 149) argues that the Tarsus EB III pottery is West Anatolian EB III, and corresponds with Troy III-V, rather than with Troy II. He makes this decision based upon ware characteristics, though Tarsus EB III also features red-crossed bowls (Orthmann 1963, 94-95). The same issue excludes material from Kültepe. Depata from Level 12 are decorated with vertical red stripes (N. Özgüç 1957, 77-80; T. Özgüç 1986, 39-41, Fig. 3-27), a local tradition (Spanos 1972, 83).<sup>126</sup> They are associated with wheelmade ovoid or alabastron-shaped 'Syrian' bottles (Özgüç 1986, 34, 41, Fig. 3.3) and other material associated with Tarsus EB III (Mellink 1965, 115). Both Tarsus and Kültepe adopted the EB II-III 'Complex' late in the period, coincident with Troy V or at least after the close of Troy III.

Thus the 'coalescence' of EB II-III 'Complex' shapes might not have occurred over the same, short period of time. Different sites may have adopted these shapes at different points over the course of Troy III-V, some only at the end of the period. This is not resolved by examining their shape. 'Complex' shapes are first identified in early Troy II, but continue to be popular to the end of Troy V. Blegen et al. (1950, 208-209) even warn of the tendency to ascribe vessels to Troy II based upon their shape, especially curious-shaped drinking vessels. As for finishing, it is difficult to distinguish between the wares of Troy II and Troy III-V even in handling the material. The distinction between different red-washed finishing has never been revisited. Easton (2002, 2012) does not discuss red-slipped wares versus West Anatolian EB III ware in his reassessment of the material from Troy. Meanwhile, 'Complex' shapes continue to be unearthed at sites along the western coast (Şahoğlu 2002, 2004, 2005, 2008, 2011a; Erkanal 2008; Erkanal and Günel 1997), though their finishing is not described. French (1997, 579) has recently called for a reassessment of the evidence, especially in light of this new material.

### **3. EB II-III 'coalescence' in recent research**

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VII-VI as Troy III. In level VIa at Beycesultan, there are bowls painted on the exterior, with a cross on the inside (Lloyd and Mellaart 1962, 233, Fig. P. 66:17a). The profile and decoration of these bowls seem too late to align with Troy III. Further, Easton would seem to be disregarding French's (1969a, 147) distinctions in finishing. To date, no in-depth study of these issues has been carried out. In this thesis, red-crossed bowls, shape A18 in Blegen's typology, are understood to date to Troy V (Blegen et al. 1951, 138, 228; also Mellaart 1957, 75). Clearly, this material needs to be reassessed in future research.

<sup>126</sup> Spanos' decision that the striped cup is local to the Kültepe region is upheld by Jean Carpenter in her 1974 review of his book.

A handful of publications take a close look at the adoption of vessels in different areas of the west. They may clarify where and when the 'Complex' was adopted, and over how long a period. In turn, this information may help to specify the relationships between western sites.

Three questions provide a way to address these issues. The first asks whether the 'Complex' was adopted in a similar manner at different sites. The second focuses upon regional differences in the 'Complex', for instance the popularity of specific shapes. A third question asks whether the 'Complex' was preceded by earlier drinking forms. Did the vessels introduce drinking and gathering to the region, or were they new shapes for an activity that was already popular?

These questions supplement information on finishing and shapes. Taken together, they may serve to better characterise the EB II-III, and specify the role that the 'Complex' might have played. Was the 'Complex' adopted suddenly, and across all regions of the west? If so, was this because it accompanied broader changes in settlement organisation? Was drinking a symbol of élite status that accompanied developing wealth during the later stages of the EBA? The second section of this chapter will combine what is known about the shapes, wares, and adoption across sites with how the vessels were used. It will assess the settings where drinking was done using data from settlements. Together, information on shapes, finishing, and drinking settings will be used to evaluate the significance of drinking, and how sites may have been organised.

### i. The adoption of the EB II-III 'Complex' at different sites

A small number of site publications make it possible to construct a general outline of how the 'Complex' was adopted at different western sites. This is by comparing the shape and finishing of vessels between sites. The outline remains tentative because the pottery has not been published in full at any sites other than Troy and Karataş. It will have to be adjusted as material continues to be reported. For clarity, the material from each site or region will be discussed within its own, distinct paragraph.

The general sequence for the adoption of EB II-III 'Complex' shapes is established from Troy, where these vessels are first observed. As was explained above, the A2 plate, the A39 tankard, and the A45 depas amphikypellon are innovations of Troy II. The A2 plate and the A39 tankard first appear in Troy IIb, while the depas appears slightly later, in Troy IIc (Blegen et al. 1950, 64-65). This sequence is unchanged in Easton's reassessment of the site: he also finds that

large bowls, wheelmade plates, and one-handled tankards appear earlier than depata (Easton 2002, 321-23; 2012, 22, 24, Figs. 9-10).<sup>127</sup>

In southwestern Anatolia, Mellink (1986, 145-49, Pl. 16) observes that the depas also appears slightly later than other EB II-III 'Complex' shapes. She notes the same shape sequence within Early Helladic assemblages. At Karataş on the inland Elmalı Plain in Lycia, the tankard and A2 wheelmade plate first appear during Period V:3 (Eslick 2009, 149). During the next period, VI:1, the depas and lentoid flask are added. Again, Eslick (2009, 233) describes the tankard, plate, and depas as a separate tradition at the site. She aligns Period VI:1 at Karataş with the Late EB II, and the beginning of Troy II (IIa: Eslick 2009, 223). This is probably without reference to Easton's (2002, 2012) revisions, and should be corrected to late-Troy II or to Troy III.

Vessel finishing aligns the material from Karataş to that from Troy. Eslick (2009, 218) describes the pottery from Karataş Period V:3 and Period VI as similar to that from Beycesultan Level XVI. This would correspond to a period earlier than West Anatolian EB III ware. According to French (1969a, 147), the pottery from Beycesultan levels XVI-XIII is succeeded by West Anatolian EB III ware,<sup>128</sup> which again is associated with red-crossed bowls that align with Troy V (Blegen et al. 1951, 138, 228). Therefore Period V:3 and Period VI at Karataş correspond best to mid-Troy II and Troy III, respectively.

Liman Tepe and Bakla Tepe are located near to Izmir on the central western coast. At these sites, depata and tankards have been recovered, as well as bell-shaped cups and wheelmade plates (Erkanal and Özkan 1999; Erkanal and Şahoğlu 2000; Şahoğlu 2002, 2004, 2005, 2008, 2011a, 2011b). In his examination of the wares from Liman Tepe, Şahoğlu (2002) identified two phases of adoption. The first phase is characterised by bell-shaped cups, one-handled cups, and tankards. In the second phase, they are joined by EB II-III 'Complex' shapes. Vessels of the first phase are those of the Lefkandi I-Kastri Group (Şahoğlu 2002, 115-16; 2004; Kouka 2009, 135). The core shapes of this group are cutaway-spouted jugs, lentoid flasks, single-handled tankards,

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<sup>127</sup> Easton does not assess the A1 platter. According to Blegen et al. (1950, 224), this shape may continue from Troy I. Yet it is extremely popular in early Troy II, especially in red Luster Ware and in Red Coated ware, just like A2 plates and depata.

<sup>128</sup> In an early article, French (1969b, 66) aligns West Anatolian EB III ware to Red Washed ware. He names that 'Red Washed ware' as corresponding to Beycesultan levels XII-XVI, though this should read levels XII-VI. Using the numeral for sixteen rather than for six is probably a typo. First, settlement levels at Beycesultan are always cited by ordering the earliest level first, followed by the most recent. Second, it is level six, rather than level sixteen, which corresponds to a significant shift in the appearance of wares (Lloyd and Mellaart 1962). This also suits vessel characteristics. Red-crossed bowls are associated with Beycesultan levels VII-VI (Mellaart 1957, 74), at the end of the Red Washed ware period. Similarly, red-crossed bowls do not make their appearance until the end of the West Anatolian EB III period, during Troy V (Blegen et al. 1951, 138, 228; also Mellaart 1957, 75).



and bell-shaped cups. These are Aegean shapes (Renfrew 1972, 99-116, 103-105), and reflect that in this period, Liman Tepe maintained a strong Aegean connection (Kouka 2002, 299-301). Also at this time, a more intensive exchange developed between the Aegean and other regions, which Renfrew (1972, 451) characterises as an, "international spirit".

In a second period of adoption at Liman Tepe, the Lefkandi I-Kastri Group vessels are joined by shapes of the EB II-III 'Complex'. Şahoğlu (2005) terms material from this second phase of adoption the 'Anatolian Trade Network'. It is characterised by depata, tankards, and wheelmade plates, as well as two-handled cups, cutaway-spouted jugs, and pyxides (below). According to Şahoğlu (2005, 340, 350), the vessels are finely burnished. He also associates the Anatolian Trade Network with foreign shapes, including 'Syrian' bottles (Zimmermann 2005, 2006a) and basket-handled teapots (Erkanal and Özkan 1999, Fig. 17; Yaylalı 2002). At Liman Tepe, Şahoğlu (2005, 350-51) points to a large building complex, developments in metallurgy, and a single greenstone stamp seal. From these features Şahoğlu argues that the fine burnished 'Complex' shapes should be associated with an élite at the site. He aligns this period with Troy II from the presence of 'Complex' shapes. To him, this indicates that the leaders at Liman Tepe were élite contemporaries to a group of central rulers at Troy II.

However, the pottery of the Anatolian Trade Network is Troy III-V in date, rather than Troy II (French 1997, 579). Indeed, fine finishing and foreign shapes are more appropriate to West Anatolian EB III ware than to material from Troy II-III. From the association of West Anatolian EB III ware with red-crossed bowls, the Anatolian Trade Network may align with a period as late as Troy V. This means that we may only be seeing the end of a period of coalescence, rather than its introduction. To date, Şahoğlu's (2004, 2008, 2011a) discussion of the pottery at Liman Tepe has only been published in brief summaries. A more complete report of material from the ongoing excavations would allow vessel shapes and finishes to be compared to that from Troy, Beycesultan, Karataş, and other sites. This may clarify the chronology of developments across the western coast, including any organisational features. It may indicate when central complexes were developed, how they functioned, and better identify any settlement élite who may have operated within it.

## ii. Regional preferences in the adoption of EB II-III 'Complex' shapes

Regional shape preferences may reveal further information about the late EB II-early EB III 'coalescence'. It may indicate the relationships between different areas of the west, and the role

played by the northwestern Troad. This is assessed by comparing the characteristics of vessels in different areas, and which shapes are popular where.

Sites along the central western coast demonstrate a strong connection to the Aegean. This is clear from periods prior to the EB II-III 'Complex', and continues to be evident during the late EB II-early EB III. At Liman Tepe, shapes of the Lefkandi I-Kastri Group are well-represented (Şahoğlu 2002; Kouka 2009). These shapes align with the Anatolian EB IIIA, or the EB II in wider chronological schemes (Manning 2008, 59; Kouka 2009, 146-47). Single-handled tankards and bell-shaped cups are found at Liman Tepe and Bakla Tepe near to Izmir (Şahoğlu 2004, 101-103, Figs. 4a, 4c, 13; 2005, 347-50). These shapes are also preferred farther southwest, at Aphrodisias and Karataş (Kadish 1971, 137, Pls. 25:4, 30:39; Joukowsky 1986, 389-92; Mellink 1986, 146-47; 1992, 216; Eslick 2009, 223-24). Yet they do not seem to be as prevalent in the northwest at the Troad. The bell-shaped cup is rare at Troy, appearing only in the later Troy II period (Blegen et al. 1950, 228, No. A29, Pl. 129).

Cutaway-spouted jugs and lentoid flasks also indicate regional differences. Cutaway jugs from Bakla Tepe necropolis (Figure 6.12; Şahoğlu 2005, Fig 8) have a similar shape to one miniature lentoid flask from Karataş (Figure 6.13; Mellink 1964, Pl. 82: 29). They are also similar to forms from Yortan (Kâmil 1982, 93-94, Figs. 80:9, 82:14). At Troy, a few spouts of a comparable shape are reported by Schmidt (1902, 58, Nos. 1316, 1360-62), but these are probably later in date.<sup>129</sup> At Troy it is more common to see cutaway-spouted jugs that are backward-leaning and constructed from two parts (Figures 6.14-6.15; Schliemann 1880, 387, No. 364; Dörpfeld 1894, TL.270, Fig. 157; Schmidt 1902, Nos. 603-36; Podzuweit 1979, 179, Fig. 10 L:II). These are wholly unlike the cutaway-spouted jugs from Karataş and Bakla Tepe (Mellink 1964, Pl. 82:29; 1986, 147; Şahoğlu 2005, 347, Fig. 8). So far, in the southwest no jugs have been reported that are similar in form to those from Troy. This may change as sites in this region continue to be investigated.

This evidence clarifies that 'Complex' vessels were not adopted as an intact package from the northwest. Instead they emerged gradually, one form before another. Different regions preferred different shapes, or variations of one particular shape. These preferences reflect the unique culture history of these areas. The EB II-III seems to have been a period of generalised sharing. Along the central western coast, 'Complex' shapes are adopted alongside vessels from the neighbouring Aegean. The new depata, tankards, and wheelmade plates differ from existing

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<sup>129</sup> The spouts that Schmidt (1902, 58) discusses are similar to spouts upon jugs that Schliemann attributes to the fourth city (Schliemann 1880, 551). As Spanos makes no distinction in wares between Troy II-V, it is likely that the spouts are later in date.

traditions. They stand out from the regular assemblage at sites, representing a distinct pottery tradition (Eslick 2009, 232). This is why they have often been used as a chronological marker. But they are not the only vessels and traditions being circulated at this time.

The adoption of the EB II-III 'Complex' was facilitated by existing contacts between centres. These routes had their own, regional culture preferences, due to their proximity with adjacent areas, such as the Cyclades to Liman Tepe. The Cyclades likely facilitated contact between western Anatolia and the Aegean, as French (1969a, 132-35) initially theorised. The large site of Liman Tepe, with its protected harbour and bastions (Erkanal 1996, 1999, 2008), may have been influential in disseminating Aegean influence to different areas of western Anatolia (Şahoğlu 2004, 104). The northwest may have been in contact with the Aegean through different centres, perhaps in response to ocean currents and other factors. For instance, settlements at opposite ends of the island of Lemnos may have facilitated exchange in different directions (Doumas 1997, 676).

Along the central western coast, EB II-III 'Complex' shapes emerge during a second period of coalescence. There is probably also a difference between when the 'Complex' first appears, and when it becomes associated with fine finishing and foreign shapes. The Anatolian Trade Network (Şahoğlu 2005) has been described as following immediately from the first period of coalescence (Kouka 2009, 135; see also Şahoğlu 2002), characterised by Lefkandi I-Kastri Group shapes from the Aegean. One may suggest that there was a period in-between the two, when 'Complex' shapes were first introduced. French (1969a, 14, 123-24, 135, 151) has already identified that the EB II in the west is relatively insular, while the EB III is a period of coalescence. During the EB II, corresponding with Troy II and Beycesultan XVI-XIII, pottery groups in the west form distinct regional units. The EB II is often overshadowed by the EB III, which is characterised by a coalescence across the region (French 1969a, 124). The EB III includes the pottery of Troy III-V and Beycesultan XII-VI. Fine finishing and foreign shapes are also included, though it is unknown if these features appear early in the sequence, or as late as Troy V. It may be that fine burnishing and foreign shapes, such as the alabastron-shaped 'Syrian' bottle (see Özgüç 1986, 36; Zimmermann 2005, 161), belong to later stages of the EB III. Yet the presence of depata and wheelmade plates often leads researchers to align all EB III developments with Troy II (e.g. Şahoğlu 2005, 345-46; Eslick 2009, 223, Table 13.1).

Failing to acknowledge this earlier, insular period risks associating all depata and 'Complex' shapes with developments that might occur later in the EB III. Thus Şahoğlu (2005, 345-46) aligns the architecture and craft production at Liman Tepe with Troy II from the presence of depata and wheelmade plates. This has consequences for how settlements of the period are

characterised. Şahoğlu (2005, 350-51) associates the 'Complex' with evidence that he interprets as pointing to a central authority at Liman Tepe. Noting these developments at other sites in the west, he uses the 'Complex' to suggest that they were occurring at the same time (Şahoğlu 2005, 341, 344-45, 353). But he may be comparing material from two different periods of the EB II-III. Focusing only upon the shapes of the 'Complex' leads to the view that settlements were changing instantaneously, across all regions of the west. In actuality, differences in finishing and regional preferences suggest that these developments took place over a longer period. Future research will need to distinguish between different finishes and shape preferences. Isolating these details will provide a more accurate understanding of when the shapes were introduced, versus when they were shared across the region. In turn this will provide a more accurate understanding of the developments that were occurring within EBA western Anatolian settlements.

These details redefine the 'Complex' as one part of a larger and more extensive period of interaction. During the EB II-III, material was circulated from the Aegean and the central region, as well as from the northwest. This included pottery as well as the products of other industries. Metallurgy was also developing at this time, and French (1969a, 125) suggests that there was also an extensive trade in metal vessels. These vessels may have been used differently than ceramic 'Complex' shapes; for instance, they may have been used by different individuals. The issue cannot be resolved in this thesis; only a handful of metal vessels are presently known (Goldman 1956, 302, Pl. 453; Renfrew 1967, Pl. 17:c; Tolstikov and Treister 1996, 32; Baykal-Seeher and Seeher 1998). Yet metal vessels do well to illustrate that the EB II-III 'Complex' is one small part in a series of wider developments. For this reason it is necessary to consider the extent to which they signalled new trends or behaviours, or were a continuation from earlier practices.

#### **4. Existing shapes related to drinking**

The vessels of the EB II-III 'Complex', especially the *depas amphikypellon*, are usually taken to indicate the introduction of drinking to the west. They may have been related to a popular new beverage, or to a new way of drinking. From the popularity of 'Complex' vessels, drinking seems to have been relatively unrestricted. This will be more fully investigated in the second part of this chapter. If drinking was known from earlier periods, then its popularity in the EB II-III might be due to drink becoming more widely available. This could be the result of better production or preservation. It could also be due to a new social significance in the act of drinking, or to popular new drinking practices or drinking venues. A survey of the evidence for drinking in the region will be used to help answer these questions.

## i. Askoi, pyxides, and Urfinis sauceboats

Urfinis sauceboats are a drinking shape that precedes the EB II-III. A vessel of the earlier Keros-Syros culture (Renfrew 1972, 284), the shape emphasises drinking from its exaggerated, rising spout (Figure 6.16). A version of gold from Treasure A at Troy IIg seems to reference the *depas amphikypellon* in its symmetrical double handles (Figure 6.3; Tolstikov and Treister 1996, 32-33). It is interpreted as a drinking vessel by both Schliemann (1880, 464-65) and Renfrew (1972, 284). At Liman Tepe, Şahoğlu (2004, 100; 2011a, 137-38) considers Urfinis sauceboats to be imports from the Greek mainland, and in wares that imitate metal. At that site, the shape is known from periods prior to the EB II-III 'Complex' (Erkanal and Günel 1997, Fig. 12; Kouka 2002, 300; 2009, 146). The vessel also predates the EB II-III 'Complex' in the northwest. Urfinis sauceboats are known to early levels at Poliochni verde, in Troy Ik, and at Thermi V (Lamb 1936, Fig. 32, No. 521; Blegen et al. 1950, 40, 54, 186, 193: EH 448, 578; Bernabò-Brea 1964, Pl. CXXIX:c; Podzuweit 1979, 231, Table 22). French (1969a, 106) considers the shape to be a hybrid, with a Helladic body and Anatolian handles.

Askoi and kernoi are pouring vessels in zoomorphic shapes (Figures 6.17-6.18). Like the Urfinis sauceboats, they are also known from periods prior to the EB II-III, and demonstrate early connections between Anatolia and the Aegean. Podzuweit (1979, 229-30, Table 24,1) provides a thorough catalogue of askoi. Like pyxides and sauceboats, they occur early in the northwest region at Troy II-III, Thermi I, and Poliochni azzurro (Schliemann 1880, 294, Nos. 160, 333-39; 1884a, 68; Schmidt 1902, 164a, 607-608, 1481; Lamb 1936, Pl. XXIX:4; Bernabò-Brea 1964, Pl. XLIII:a-b), amongst others. Şahoğlu (2011a, 141, Fig. 4) briefly mentions two askoi from Bakla Tepe. He does not mention askoi in his very general, interim publications of the pottery from Liman Tepe (Şahoğlu 2008, 2011b). Yet it is likely that askoi would have been recovered from that site, from the presence of pyxides and sauceboats (Şahoğlu 2004, 100; 2005, 340, 347; 2011a, 137-38).

Askoi continue into later periods. They are known from Troy VI and Beycesultan levels VI-X (Blegen et al. 1951, Pl. 170:13, 256:41; Lloyd and Mellaart 1962, Figs. 53:1, 2, 56:1, 7, 67:12, 15). In the Middle and Late Bronze Ages, pouring continues to play a prominent role in ritual. Zoomorphic rhyta are important libation vessels during the Assyrian Colonies Period and the Hittite Periods (Muscarella 1974, No. 123; Koehl 1995; Güterbock and Kendall 1995, 50-51). A recent examination of Hittite texts relating to the practice may explain why. Heffron focused upon Hittite texts relating to pouring from Bibru, zoomorphic rhyta where liquid is made to pour

through the mouth or nostrils of the animal.<sup>130</sup> She found that the Hittites described drinking from such vessels to be an act of consuming the deities themselves. Perhaps the askoi in Early Bronze Age assemblages also embodied deities or other beliefs. Like the later Hittite vessels, consuming from them may have held a ritual significance.

## ii. Multiple vessels and ring vessels

Multiple vessels, which are sometimes called composite vessels, also precede the EB II-III 'Complex'. These vessels may have been involved in beverage production. They are two or more shapes, attached to one another. This includes vessels that are attached through a handle, or through a central ring (ring vessels). Multiple vessels provide insight into the popularity of drinking, as well as to how drinks might have been produced. This may further indicate how the EB II-III 'Complex' was used within communities.

Multiple vessels span a considerable period. They are noted as early as Troy II, and continue into Middle Bronze Age periods and later.<sup>131</sup> Two beaked jugs, attached to each other at the body and by a basket handle, are assigned to Troy II (Figure 6.19; Schliemann 1880, 294, No. 161). Jugs with double spouts are also found in Troy II (Figure 6.20; Schliemann 1880, 384-85, Nos. 358-59, and persist into Troy III (Figure 6.21; Schliemann 1880, 553-54, Nos. 1174-76). Also assigned to the second city (Schliemann 1884b, 182) is a tripod vessel, composed of three individual cups, united at the body and elevated by three curved feet (Figure 6.22; Schliemann 1880, 384, No. 356). These forms continue into subsequent periods. They include tripod ring vessels, which attach one or multiple vessels by a ceramic ring, standing upon small feet (Figures 6.23-6.25). Two of the most notable feature three attached cups (Figure 6.23; Schliemann 1880, 540, Nos. 1110-1111). These are reassigned to Troy III (Schliemann 1884b, 186). A tripod ring vessel with a single, cutaway spout was recovered from a Troy IIg street deposit (Figure 6.24; Blegen et al. 1950, 331, Pl. 406, No. 35.441), which is also reassigned to Troy III. Double-cups and tankards continue into Troy V (Schliemann 1880, 582, Nos. 1331-1332). Tripod ring vessels also continue; one is reported from Troy VI, in the form of a bugle (Figure 6.25; Schliemann 1880, 596, No. 1392; Podzuweit 1979, 230, Pl. 24,1:C1).

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<sup>130</sup> Yağmur Heffron, talk given at 8ICAANE, Warsaw, Poland, 2nd May 2012.

<sup>131</sup> This reflects Schliemann's (1884b, 175-94) reassignment of material from Troy II to Troy III. As was explained above, in 1882 Schliemann revised his definition of the 'Burnt City', and which material should be assigned to it. These changes are supported in recent research at the site (Easton 2000a, 2002; Ünlüsöy 2006).

Multiple vessels and ring vessels may have been used for mixing ingredients. This would suit how special beverages are likely to have been produced during the period. As was explained in Chapter one, there is little evidence for domesticated grape vine in this area of Anatolia during the EBA. Yet wine could have been made from undomesticated grapes (Singleton 1996, 73; Rivera-Nuñez and Walker 1989, 220). The product would have been considerably less sweet (J.M. Renfrew 1995, 259; Zohary 1996, 26-27), though it could have been improved by adding other fruits. There is evidence for the practice of processing grapes together with other fruits in areas near to western Anatolia as early as the Late Neolithic. At Dikili Tash in eastern Macedonia, undomesticated grapes were crushed together with a collection of figs (Valamoti et al. 2007, 55-56, 58, Fig. 3). Turkish pekmez or Greek petimezi are syrups made from grape must. The consumption of pekmez is deeply entrenched in modern Turkish culture; it is considered to be essential nutrition for energy and blood flow (see Kutlutaş 2011). A substance similar to pekmez may have been used. Honey may have also been added, at the risk of causing re-fermentation (Singleton 1996, 75). Both pekmez and honey are highly viscous, and would have required rigorous mixing.

Ring vessels are especially suited for mixing liquids of different viscosities. They are an enclosed shape, which would minimise the amount of liquid lost by vigorously shaking the vessel. Until recently, it was not documented in the literature whether or not rings communicated with the vessel that was attached to it. Three ring vessels are pictured in the Schmidt catalogue of material from Troy (Schmidt 1902, 32, 40, Nos. 609, 610, 823). The relationship between the ring and the vessel is described for one of these (No. 609), and only briefly. In revisiting the vessels, Priessnitz (In-preparation) clarifies that the rings are hollow. Illustrations of the vessels by the Museum für Vor- und Frühgeschichte, Berlin (Figures 6.26-6.28) clearly show holes at the base of the cups and tankards. These connect to the inner cavity of the rings. The drawings also include vessel No. 1747, which was not illustrated in the original catalogue by Schmidt (1902, 75). The ring vessel must have been effective, as it continues into the later, Lydian settlement of Troy VI, from which it was recovered "several times" (Schliemann 1880, 596, No. 1392; Podzuweit 1979, 230, Pl. 24,1:C1). Thus the ring vessel appears to have become more firmly adapted to the purpose of mixing and pouring over the course of the EB II-III.

The shape of double-spouted jugs seems to reference multiple ingredients. These might have been mixed if the vessels are connected by a common chamber. Vessels with two individual chambers might have been used to keep ingredients separate before pouring, as with a double jug from Troy II (Figure 6.19; Schliemann 1880, 294, No. 161). One chamber might have held wine, the other water. Other jugs featured spouts arranged one behind the other (Figure 6.20;

Schliemann 1880, 384, 554, Nos. 358, 1176; Schliemann 1884b, 183, No. 91). Liquid would almost never have passed through the second spout. Instead, the second spout might have marked the vessel as being used for mixing. Multiple spouts may also have accommodated multiple drinkers. A large jar from Karataş with multiple spouts (Figure 6.29) was probably for drinking beer through tubes or straws (Mellink 1969a), as is depicted upon Mesopotamian cylinder seals (Amiet 1980, 1186-87, Pl. 90:1183; Pinnock 1994, 19; Schmandt-Besserat 2001, 394-96; Pollock 2003, 22). Similar vessels are known from other western sites, including Aphrodisias EB IIIA in the southwest (Figure 6.30; Kadish 1971, 135, Pl. 29, Fig. 31; Joukowsky 1986, Pl. 79) as well as Yortan and Thrace in the north (Kâmil 1982, Fig. 95; Özdoğan 1987, 5-39; Eslick 2009, 236). Vessels with multiple spouts from Troy would have been appropriate to this purpose, especially those formed of joined cups or tankards (Schliemann 1880, 384, 582, 597, Nos. 356, 1331-32, 1396).

### iii. Serving shapes: ladles and dipper cups

Some vessels, from their shape, seem to have been used for serving. The most obvious of these are ladles and dipper cups. These vessels appear at the same time as the EB II-III 'Complex'. They may have been developed for a similar purpose, or have been related to similar activities. These vessels may provide insight into the use of the 'Complex', or about how drinking was done during the period.

Dipper cups have inverted handles (Figure 6.31). This is a unique feature, which deliberately economises space. The most obvious reason is for the vessel to function as a scoop, to retrieve items kept within a larger, closed vessel.<sup>132</sup> At Troy, the shape is known as A27 in the typology by Blegen et al. (1950, 228). It is new to the second settlement, and appears at the same time as the 'Complex'. A handmade, highly polished version in red luster ware was found at Troy IIf, though fine treatment is rare for the vessel (Blegen et al. 1950, 228, 306, Pl. 379, No. 36.855). The A27 dipper cup is also known from other sites in the west, including Beycesultan Figure 6.32; Lloyd and Mellaart 1962, 240, Fig. P.66:20) and also Has Höyük in the central region (Figure 6.33; Bossert 1942, 60: 285). The shape is also observed at Tarsus in the EB II (Figures 6.34-6.35; Goldman 1956, 15, 129, Pl. 329).

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<sup>132</sup> The A27 dipper cup is essentially a variation of the single-handled cup with looped handle, in which the handle is located outside of the cup. Loop-handled cups are abundant at EBA sites in western and central Anatolia, and likely performed many functions. Their use can hardly be associated with drinking special beverages. The A27 cup is a deliberate adjustment of the loop-handled cup to suit purposes of scooping.



The D32 dipper vessel (Figures 6.36-6.37) would have been used for a similar purpose to the A27 dipper cup. The vessel is also well-suited for drawing liquid. According to Schliemann (1880, 380-81, 554-55), they are weighted at their bottom, and they feature rope marks on the interior of their handles. From this, he argued that the vessel was designed to be lowered and raised without tilting. This motion is appropriate for drawing liquid out of a closed vessel. Dipper vessels may have been used to draw water from larger pithoi, or possibly wine or other special beverages.

The dipper vessel is associated with at least one setting in which gathering took place. At Troy Period IId, two D32 dipper vessels were associated with drinking vessels and animal bone, deposited within a pit (Pit 1: Blegen et al. 1950, 289, Pl. 406). This context will be analysed in more detail in the second section of this chapter. This pit featured a pithos storage vessel, as did several other pits from this level. As above, the D32 dipper vessel might have been used to draw liquid out of a closed shape, such as a pithos. Level IId at Troy is especially associated with the shape. Schliemann (1880, 379) claims to have recovered more than six hundred pithoi from levels that best correspond to IId (Blegen et al. 1950, 278). He interprets them as having been used to store wine. Of course, pithoi may be used to store a number of products. Yet it is interesting that Schliemann reported a substantial increase in pithoi from levels immediately following the introduction of the depas in Period IIc (Blegen et al. 1950, 224). Perhaps an increase in storage is associated with new ways of eating and drinking, which also prompted the development of the depas and EB II-III 'Complex'. The dipper continues to be associated with drink in later periods: in Troy IIc, one D32 vessel was found together with one A27 dipper cup. At this area of the site, sherds of depas drinking vessels were "common" (Blegen et al. 1950, 306-308, Fig. 460).

The ladle is the metal counterpart of the dipper cup and dipper vessel. It is found in more explicit drinking situations, and at different sites. Three metal ladles are known from EB II-III contexts at Troy, Alaca Höyük, and Eskiyaşar. At Troy, a silver ladle with repoussé décor occurred within Treasure J in the second settlement (Figure 6.38; Schliemann 1880, 503, No. 923). The base of the ladle featured, like that of the Horoztepe bowls (Chapter four), an omphalos base. Again, omphalos bases might have referenced the act of drinking, and functioned as a highly recognisable symbol for drink. At Alaca Höyük, the ladle within Tomb L is silver with gold adornment (Figure 3.16; Koşay 1951, Pl. CXCIV). A miniature gold pendant of ladle shape with pierced handle from Tomb H may hint at another type of ladle (Toker and Öztürk 1992, 61). Though often cited as a ladle, the copper vessel from Tomb H is spouted; it seems to be more of a cup than a scoop (Figure 3.28; Koşay 1951, Pl. CXXXIII). Ceramic bowls with pierced ladle handles are known from Külliöba (Sarı 2009, Fig. 4:9) and Demircihöyük (Efe 1988, Pl. 60:8).

At Eskiyapar, a small and shallow pan of electrum seems similar to metal single-handled cups from the central region (Chapter four; Özgüç and Temizer 1993, 619, Fig. 50, Pl. 117). Also from the central region, two bronze ladles from Merzifon-Göller and Oymaağaç are displayed in the Ankara museum (Toker and Öztürk 1992, 59-60). They are likely later in date, because of their metal composition. Like the D32 dipper vessel, ladles continue to be popular in later periods. A sieved handle from Hittite Boğazkale (Toker and Öztürk 1992, 68) provides a vivid illustration of the use of ladles for drink.

The EB II-III 'Complex' did not introduce drinking to the west. Urfinis sauceboats, askoi, kernoi, and pyxides date earlier than the 'Complex'. They are associated with the Aegean; this is appropriate to the first phase of EB II interaction described by Şahoğlu (2002). Other drinking shapes first appear around the same time as 'Complex' shapes. Multiple vessels, including ring vessels, may have been used in drinks production. Dipper cups and vessels may have been used for serving. This may reflect changes in how drinks are stored, which may in turn explain how 'Complex' shapes came to be developed.

Drinking was not introduced during the EB II-III, but the new shapes of the 'Complex' seem to be related to new drinking practices. Their shape is significantly different from earlier drinking vessels. They were transmitted between sites during a period of generalised sharing, not as a complete package but probably because they relate to popular acts. Is this because special beverages had become more widely available or affordable? The next section of this chapter investigates the settings in which drinking was done. It will take a closer look at who was drinking, as well as how and where. This information may help to better explain the role of drinking within western communities during the EB II-III.

## **B. The settings in which EB II-III 'Complex' shapes were used**

The settings in which EB II-III 'Complex' shapes were deposited may provide more information as to how they were used. At three sites in western Anatolia, these settings are described in detail by their excavators. They will be presented in the following sections. The relationship of these settings to the site, and the number and type of objects that are associated with them, will also be described. Together, they span the length of western Anatolia: Troy, Külliüoba, and Karataş represent portions of the northwestern Troad, the inland northwest, and the inland southwest.

These settings, however, are also limited. They are not comprehensive for the period or for the region, and thus they offer only a limited view of the use of 'Complex' vessels. They also

offer a limited view of EB II-III drinking practices. The settlements of Troy, Küllüoba, and Karataş are very different from one another. They are located in disparate regions, and were investigated by different research teams, in different eras. Their analysis and publications stress different areas of research. It is also difficult to infer drinking behaviour across the region from this limited number of sites.

Troy and Karataş are the most well-documented sites, but at both there are significant gaps in information. At Troy, all information derives from excavations at the citadel. Only a limited amount of information is available for the lower city (Sazcı 2005); the Bronze Age layers are heavily disturbed by past occupations at the site (Jablonka and Rose 2004, 619). At Karataş, a final analysis of the central citadel has yet to be published (Warner 1994, 123-24, footnotes 8-9, 11). And even though the site is located amongst modern vineyards, archaeobotanical samples, if they were taken, have never been analysed.<sup>133</sup> Also in the southwest, the EBA levels at Aphrodisias are now sufficiently published (Joukowsky 1986). One area may have been used for communal dining. At this site, a great number of A1 platters, perhaps as many as forty, were stacked upside-down within rooms of the BA 3-4 period (Joukowsky 1986, 89, Figs. 322, 423.2). Yet there is no further information on these rooms, or of other contexts dating to the Early Bronze Age at the site.

Information from the remaining sites is also limited. Material from Küllüoba has only been published in short reports. This makes it difficult to relate information from these contexts to the wider site. This same issue characterises sites along the central coast. This thesis would be much improved if more material from Liman Tepe and Bakla Tepe was available. Of the list of western sites that remain insufficiently published,<sup>134</sup> Liman Tepe has the greatest potential for illuminating western drinking practices. The site seems to have held a commanding position along the central coast. According to periodic reports, it featured a harbour and projecting bastions (Erkanal 1999; 2008, 182), and therefore probably played a significant role in maritime exchange. Excavations at the central citadel have revealed some storerooms (Şahoğlu 2008, 488, Fig. 6), which according to short reports, contained drinking vessels (Şahoğlu 2004, 99; 2005, 350). One storeroom, which was only partially described by the excavators, featured a single bell-shaped seal of green stone (Erkanal-Öktü 2004, 656, 660; Şahoğlu 2004, 99; 2005, 350). This seal would seem to point to some form of administrative activity, however it is the only such item so far reported from the site. The seal would need to be supported by other evidence. No

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<sup>133</sup> James C. Wright and Jayne L. Warner, personal communication, 11th August 2010.

<sup>134</sup> Along with Liman Tepe, Bakla Tepe, and Küllüoba, these include, amongst others: Panaz Tepe, Seyitömer Höyük, Bademağacı, Harmanören, and Kanlıgeçit in Thrace.

architectural plans are available for much of the central complex, or the site as a whole (see Şahoğlu 2004, Fig. 1; Erkanal 2008, Fig. 3). Plans are integral for weighing the claims made by excavators against the relatively small size of the site (six hectares: Çevik 2007, 135). Therefore it is not possible to assess the overall layout of the site, or its features. And while 'Complex' shapes are reported (Şahoğlu 2004, 2005, 2008, 2011a, 2011b), none of these short reports discuss the context in which the vessels were found. Thus Liman Tepe offers no specific settings or other details that may be used to better understand drinking practices of the period.

Despite these limitations, the situations in which EB II-III 'Complex' shapes were used are an important component to understanding drinking practices in the west. They provide the opportunity to investigate who was drinking, as well as how it was done, and where. They may also test any assumptions about the significance of 'Complex' vessels, detailed in the previous section. Recognising the above limitations also improves how the settings for drink are interpreted because they point out areas where the data is insufficient. This ensures that no one site or setting is given undue importance. The following section of this chapter assesses the settings where drinking took place along with information of pottery assemblages and site architecture. This information will be used to assess how drinking relates to site organisation, and across various regions of the west.

## **1. Troy on the Dardanelles**

Troy provides two contexts for examining the use of EB II-III 'Complex' shapes. Both date to the second settlement (Troy II). Both were extensively recorded; researchers detailed how many of which shapes were recovered, according to the shape typology established by Blegen et al. (1950, 225, Table 12, Figs. 370a-b). The location and character of the areas was also discussed in-depth, as well as the material that was deposited with the drinking vessels. This makes it possible to assess how the vessels were used, and the role of these settings or events in relation to the wider settlement. This information may also be compared against material from similar contexts at other sites.

### **i. The site**

Troy is positioned near to the entrance of the Dardanelles, or Hellespont, a narrow sea channel famed for its position separating Europe from Asia (Map 1). It is located just over thirty km from the modern coastal city of Çanakkale, and immediately adjacent to the modern village of

Tevfikiye. The site is also known as Hisarlık. The second and third occupations at the site correspond to the EB II-III periods (Kromer, Korfmann, and Jablonka 2003). At this time, Troy featured a central citadel with a lower city extending below it (Figure 6.39; Jablonka 2001; Jablonka and Rose 2004, 619). Only the citadel has been investigated and published in detail. The architecture at the citadel is impressive: fortification walls and a series of gates and propyla surrounded a number of central structures (Figures 6.40-6.41). These are three-roomed, hall-and-porch longhouses, or *megara*. Different gates led up to the citadel. Gate FM, to the southwest, was steep, well-paved, and monumental in scale. Entering through Gate FO to the southeast led afterwards to Propylon IIC, after which one would immediately encounter the large Megaron IIA (Blegen et al. 1950, Figs. 417, 451, 453-55). A colonnade aligned with and to the west of Propylon IIC was erected in Period IIC, constructed at the same time as the paved Gate FM.

From its architecture, the citadel seems to have housed a central élite or administration (Blegen et al. 1950, 203-207; 1951, 3-5; 1963, 67). The monumental fortifications, ramps, and other structures would have demonstrated the power and authority of a specific individual or group. The impressive Gates FM and FO would have distanced such rulers from the populace and from the approaching visitor, and protected them from would-be assaults. This view is supported by the 1873 discovery of a series of treasure deposits across the citadel (Schliemann 1874; Tolstikov and Treister 1996). This collection of vessels, jewellery, figurines, and ceremonial weapons would seem to have been élite status symbols, personal effects of citadel rulers. They imply the presence of attached specialists. Along with the architecture, these objects would have facilitated élite aggrandisement before a subaltern populace.

It is also possible to interpret this evidence in a different direction. Düring (2011a, 284) points out that the Troy II citadel is relatively small, at 125 metres in diameter. He suggests that its structures could have functioned as workshops or entertainment spaces, rather than housed an élite. The impressive Gate FM led directly to structures at the northwest corner of the citadel. It may have been ceremonial in purpose (Bachhuber 2009, 4-5), though the ramp may also have carried goods directly to storerooms or workshops. There is also no evidence that site resources were centrally controlled. Writing is not apparent at the site until the thirteenth century BC (Korfmann 1998, 378-79). This suggests that, at the time, it was either impossible or unnecessary to record the production and exchange of goods. As for the treasures, there is nothing to suggest that they were the personal possessions of a single élite personality, family, or group. Bachhuber (2009, 11-15) suggests that they may have been deposited as part of public ceremonies. In this scenario, the treasures were deposited as a conspicuous consumption of goods, or the vicarious or wasteful consumption of goods (Veblen 1970, 60). The purpose of their deposition was to

advertise that an individual possesses or has access to wealth and resources. The act is competitive, and serves as a means to negotiate social position in relation to others. Any number of individuals may participate. This includes individuals or groups occupying a high social position. It may also include those groups or individuals who are trying to establish a greater degree of influence.

## ii. The Ilc Ledge

The 'Ledge' is a large collection of debris, which was found "far down the western slope" (Figure 6.42; Blegen et al. 1950, 270, Figs. 290-91, 416-17), west of Tower FH, beyond the Troy Ilc citadel. The area drew attention from researchers because of its construction, its contents, and its location, which may have been difficult to approach. Within the debris were several intact and fragmented vessels, including EB II-III 'Complex' shapes. These vessels, and a number of other objects, were recovered from within a large deposit of carbonised matter. The stone beneath the deposit had been levelled to a large area, forming a floor approximately sixteen metres by six metres (Figure 6.43). A cavity had also been dug into the limestone, and filled with debris as had the floor (Figure 6.44). From this platform, the area was termed the 'Ledge'.

Debris at the ledge included a wide variety of material. Broken pottery was accompanied by terracotta whorls, items of stone and obsidian, and faunal remains, including shells and a large amount of animal bone. The deposit reached 3.50 metres in depth, and did not appear to be stratified (Blegen et al. 1950, 270). Pottery at the ledge was mostly Troy Ilc in date, with some Ila forms. Earlier material was found at the bottom of the fill; accumulation, then, was over a period of time. As no material was dated later than Troy Ilc, the deposit was determined to be Ilc in date, with some earlier, sporadic use.

According to the excavators, the Ledge was likely used for gathering. As Blegen et al. (1950, 270) describe, the material deposited at the Ledge was similar to domestic deposits. Yet it was not associated with a house. The Ledge could be characterised as a dump or rubbish heap, were it not for the pre-prepared limestone floor or cavity. The area may have been the result of quarrying activity. Yet even if it had been quarried, care had been taken afterwards to make the area level, and to prepare the cavity. The area was deliberately prepared, and for a purpose related to the settlement, rather than to an individual household.

Of the pottery that was deposited at the Ledge, most shapes were related to eating, drinking, and the presentation of food (Blegen et al. 1950, 270). The most common EB II-III 'Complex' forms were represented, including A38/39/43 tankards, A2 wheelmade plates, and

large A1 platters. Depata were not recovered. The deposit dates to a period before the depas becomes popular (Troy IId), though it is also possible that depas sherds were mistaken for those of tankards. Aside from 'Complex' shapes, A12, A16, and A21 large bowls were found throughout the deposit (see Figure 6.45 for example). They were joined by the A24 deep cup, the A26 goblet, as well as the A17 three-footed bowl. This last shape seems appropriate for serving or receiving libations, or for holding food. It may also have been used as a brazier or lamp.

In general, the terms used by the excavators do not permit any in-depth analysis of the frequency of various shapes and finishes.<sup>135</sup> Yet they do note a difference in the frequency of large A1 platters. While the shape is "exceedingly numerous" at the site (Blegen et al. 1950, 274), it was difficult to reconstruct more than one-half of a single plate at the Ledge. Blegen's excavations struggled to reconstruct more than one-half of a single plate from the abundance of sherds found (Blegen et al. 1950, 274). This suggested to the excavators that the platters may have been smashed at the Ledge, perhaps at the culmination or apex of drinking events. The Ledge was a gathering space that may have also seen dramatic ritual acts. As was described in Chapters three and four, the ritual smashing of vessels would have drawn participants together into a shared experience. The act would also have made the event more memorable, and social relationships at the Ledge more permanent.

Coarse ware storage vessels were also found at the Ledge. The deposit featured large C10 jars, including varieties with wide-mouth rims (C11 or C12). Also found were C21 "broad, deep, basin-like jar(s)" (Blegen et al. 1950, 235). These jars are relatively large vessels to find discarded so far down the western slope. Their presence seems to be a further indication that the Ledge was a refuse pit. These jars might have been discarded, empty and broken, among with other household waste. It is also possible that they were carried to the Ledge intact, as containers for food and drink. They may have been discarded here because they were too cumbersome to carry back to the settlement.

The location of the Ledge would have been especially suited to ceremonial occasions. Its position "far down the western slope below the citadel" (Blegen et al. 1950, 270) would, in the EB II-III, have overlooked the harbour and lowlands (Figure 6.46; Kayan et al. 2003, Fig. 7; Kraft et al. 2003, Figs. 9-10). Kayan et al. (2003, 401) have argued that in this period, the delta

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<sup>135</sup> The excavators first divided the deposit at the Ledge into seven arbitrary layers (Blegen et al. 1950, 270). For each layer, various shapes were described as, "numerous", "common", or "very common", amongst other phrases. These phrases allow an assessment of how frequent each shape was in relation to another. Yet without absolute numbers, it is not possible to use these descriptions for a more detailed analysis of shapes and finishes. An analysis of vessel frequencies is also of little analytical value, considering that the Ledge deposit may have accumulated over a single period at the site.

plain would have made problematic waters for resting a ship. The coastline was more likely a shallow marshland suitable for small fishing boats: an area of local subsistence. It may have been an area where a proportion of important resources at the site were obtained. The area may have reflected the identity of the settlement, and thereby functioned as a place for public gathering.

### iii. The IId 'Pit Period'

Period IId at Troy is characterised by the appearance of numerous pits or *bothroi*. They are sunk between, and sometimes dug into, the monumental constructions and open spaces at the citadel (Figures 6.47-6.48). Blegen et al. (1950, 206) term this the 'Pit Period'. They described a total of twenty-two pits, containing vessels, bone, and carbonised material, as well as other objects. Some pits are filled with rubbish. Others are more structured; they are plastered, feature pithos fragments around the rim, or are located under covered spaces. These pits may have originally served a purpose other than rubbish disposal. Nearly all of the pits contain vessels for eating and drinking. This includes EB II-III 'Complex' shapes.

The location of the pits form several clusters at and outwith the citadel (Blegen et al. 1950, Figs. 456-57, 462, 467). This is a function of sampling error. Pits were found in every area in which Blegen's excavations were carried out, and these areas of excavation were limited because of previous investigations. Therefore the pits did not originally form clusters, but rather these clusters reflect the areas that were investigated by Blegen and his team.

Also in period IId, the open court before the Great Megaron IIA is expanded. The colonnade is replaced by walls that are set farther back, yet still aligned with Propylon IIc (Blegen et al. 1950, 206). Period IId was not simply an invasion of the citadel by lower-city inhabitants, whose pits denigrate the once-wealthy fortress (Blegen 1963, 68-69). Instead, the pits were a new feature. They may have been related to a new popular practice. This may have been accompanied by new pottery shapes: period IId at Troy sees the introduction of the *depas amphikypellon*. The vessel quickly becomes popular, and joins the tankard and A2 wheelmade plate to form the third shape of the EB II-III 'Complex'.

#### a. Function of the IId pits

The pits of Period IId may be analysed more closely than the IIc 'Ledge'. Unlike material from the Ledge, the excavators provide absolute numbers for the contents of each of the IId pits. Appendix III provides an inventory of the vessels and material that were found within each pit.



This allows the pits to be compared against one another, and analysed for how they may have been used.

Vessels for eating and drinking were the most commonly-deposited item within the pits. Of eighteen pits containing artefacts, all but one held vessels for food and drink.<sup>136</sup> The most common shapes were those of the EB II-III 'Complex': the A45 depas, the A38/39/43 tankard, and the A2 wheelmade bowl. They comprised forty out of a total of seventy vessels,<sup>137</sup> and were found within fourteen of a total eighteen pits containing artefacts. Only two pits featured ceramic vessels that were not 'Complex' shapes (Pits 15 and 18), and their contents were identical (one A16 bowl and one decorated C39 pithos).

The IId pits may have been initially dug for storage. Blegen et al. (1950, 278) suggest that the pits originally contained pithoi. Pithoi fragments are found around the rims of Pits 6, 11, and 19. Some pits contained bits of slate, which may have been pithoi lids. Other pits appear too large to have held pithoi alone (Figures 6.49-6.51; Pits 6, 18, 21: Blegen et al. 1950, Figs. 294, 297, 299). These might have held various storage vessels and other items, similar to a small cellar. Indeed, six pits contained storage vessels instead of pithoi (Pits 1, 5, 14, 16, 21, 22), though three of these may have been rubbish pits rather than used for storage (Pits 1, 5, and 22).

It is not easy to divide the pits between those used for storage, and those used for rubbish. Many pits that contained pithos fragments or storage vessels also contained bone, carbonised matter, or other débris (Pits 1, 5, 14, 16, 18, 21, 22). Likewise, pits characterised as rubbish heaps often contained vessels and other artefacts (Pits 1, 5, 10, 22). A silver bowl in Pit 12 (Figure 6.52; Blegen et al. 1950, 281, Pl. 359, No. 36.449) suggests that objects were sometimes deposited for more complex social purposes. Bachhuber (2009, 4) has already pointed out that the bowl may have been deposited as part of a 'structural deposition' (cf. J. Chapman 1994, 1996, 2000) that was intended to connect people, objects, and places. If the area were used for periodic gathering, then we can expect that the purpose of each pit was not always fixed or discrete. At gathering events, food remains may have been deposited into the pits, and later, empty storage vessels. This may include pits that had earlier been used to store food. Thus rather than the pits fulfilling one role within these activities, they were involved in, and reflect, all aspects of social events. This includes food preparation, storage, consumption, sacrifice, and discard.

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<sup>136</sup> Pit 19 contained only one very large pithos of C39 type, and some potsherds dated to Period IId (Blegen et al. 1950, 295, 297, Pl. 44, No. 37.998). It is possible that the sherds were of vessels for eating and drinking, though this cannot be determined.

<sup>137</sup> Of these forty vessels, eleven were drinking tankards and depata, while twenty-nine were A2 wheelmade bowls.

The area outside of the citadel wall may have been used for food preparation. Pits 1-5 would have been accessed from outside of the citadel. They were rubbish piles heaped against the citadel wall or "cut raggedly" into nearby wall remnants (Blegen et al. 1950, 280, Pl. 456). Pit 1 contained "a considerable quantity of animal bones" (Figure 6.53; Blegen et al. 1950, 279-80). It also featured vessels suitable for cooking, mixing, and serving. This includes two A16 bowls, one medium B3 jug, one large B22 jug, and four coarse ware storage vessels. Utensils were also associated: two D32 dipper vessels and one flat-ended lead fragment (Blegen et al. 1950, 281, Pl. 358, No. 36.433), perhaps a knife. Similarly, nearby Pits 2, 4, and 5 featured bone, flint blades, and bowls. Pit 1 contained a large number of 'Complex' shapes: eleven A2 wheelmade bowls and three tankards. This is appropriate for serving a large group.

Pits inside the IId citadel contain a similar mixture of EB II-III 'Complex' forms with animal bone and rubbish. In the southwest corner of the citadel, Pits 6-13, dug under covered rooms,<sup>138</sup> contained an abundance of vessels for eating and drinking (Blegen et al. 1950, 206, 285-87, 297, Pl. 457). A1 plates littered the area, as did fragments of depata, tankards, and hundreds of A2 wheelmade bowls. The presence of animal bone in nearly every pit, as well as shells in Pit 10, indicate that meat was consumed here. The celebrations likely continued over the entire southwestern corner. Pit 21, close to the southwest anta of Megaron IIA, contained a depas, a jug, two jars, shells and animal bone.

A third concentration of pits in squares F 4-5 (Figure 6.54) also featured drinking shapes paired with animal bone. The floor associated with Pits 14-17 contained a great amount of bone and shells, as well as the remains of a hearth (Blegen et al. 1950, 290-93). On the opposite side of the wall to Pits 14-16, Pit 17 contained no less than seven A2 wheelmade bowls. Pit 17 also held two lids, one of which is the earliest D13 face lid at the site. In this area, excavators also recovered a significant number of A2 wheelmade bowl fragments. Twenty-three of these bowls could be reconstructed to a near-complete shape, and another fifty-four bases were also identified (Blegen et al. 1950, 293). The bowls might have been deliberately smashed. The abundance of bowls suggests multiple participants: they may have been used for drinking, along with depata drinking vessels, fragments of which were common to the area. To this can be added the D13 face lid, whose decoration would have appeared only when the vessel was raised and drunk from. This is similar to rhyta of later, Hittite periods whose decoration is only displayed in the act of drinking (Muscarella 1974; Güterbock and Kendall 1995).

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<sup>138</sup> Postholes suggest that these areas were covered. The holes were located a few metres from the wall and between the wall and Propylon IIC (see Blegen et al. 1950, Pl. 457).

Depositing vessels within the pits held significant meaning for IId inhabitants. They served a more complex purpose than merely a place to discard food and drink remains. This is made clear by the silver bowl with ring base in Pit 12 (Figure 6.52; Blegen et al. 1950, 281, Pl. 359, No. 36.449). Depositing such items may have generated a great deal of prestige. It may have constituted a form of conspicuous consumption, and thereby allowed individuals to accumulate cultural capital. This could be used to attract supporters, or to confirm membership within elite groups. The area around Pit 17 featured a large number of smashed vessels: at least twenty-three, and as many as seventy-seven (Blegen et al. 1950, 293). Communal dining was being practiced here. However, it is not possible to know if this area saw repeated drinking activity amongst a small number of individuals, or many large drinking events. Thus it is not possible to know if events at the citadel were reserved for an elite, or if they were open to a larger audience.

The architecture at the citadel suggests that these events may not have been open and inclusive. Period IId saw a great deal of building activity at the citadel (Blegen et al. 1950, 206, 278). It was not a period in which lower-class inhabitants "invaded" an area previously reserved for elites (Blegen 1963, 68-69). Citadel structures were still being used to communicate wealth and power. The settlement has a violent history throughout Troy II, and the central megaron complex is destroyed at the end of Period IId. But after its destruction, sumptuous activities do not cease; instead they are transferred to Schliemann's 'House of the City King' (Bachhuber 2009, 6), where several 'Treasures' would be deposited in Period IId (Easton 1997). Thus the IId pits may have been a venue for negotiating elite status. From citadel architecture, this was most likely between established elite groups, or between competing elite houses. Perhaps this ostentatious activity attracted outside aggressors, especially considering that Troy was involved in a significant amount of foreign exchange. The violent destructions at the citadel may also have resulted from internal conflict. In either scenario, the pits seem to have been at the centre of increasing ostentation, which used drinking and communal dining to facilitate competition.

#### **b. The IId pits as evidence for wider changes at the site**

The storage function of some of the pits may be related to the introduction of new products. Again, Period IId at Troy seems to have become newly concerned with storage. Schliemann (1880, 379) claims to have recovered more than six hundred pithoi from the 'Burnt City', which Blegen et al. (1950, 278) assign to IId. Bothroi, or storage pits, are not seen at Troy in earlier periods. The IId period may have been characterised by a new way of storing food and drink, or the introduction of new products that were stored differently.

Underground storage is an effective way of protecting products from heat and sunlight or to control humidity. Perhaps the pits were used to store new, temperature-sensitive products. This is appropriate to special beverages. Beer, wine, and mead may have to have been kept cool between production and consumption. It may also have been important to limit their exposure to air. A similar method of drinks production is practiced in modern Georgia. There, traditional *Kakhetian* wine is fermented in *kvevri*, large clay pithoi that are sunk into the earth or in subterranean wine cellars, or *manari* (Feiring 2011). This method offers an advantage in processing: the *kvevri* is tapered at its base, which limits contact between the wine and grape pips, skin, and stalks. This helps to control the concentration of phenolic compounds (tannin) that affect taste, colour, and other wine characteristics (Marais and Rapp 1988, 24). The *kvevri* separates this material without its having to be physically removed. Thus the wine can be stored and left to ferment without having to be opened and exposed to air. The IId pits might have functioned in a similar way. Again, Blegen et al. (1950, 278) suggest that the pits could have originally contained pithoi. If so, the tapered base of the pithoi would have functioned similar to *kvevri*. Sunk into the ground, they would have provided an effective and cool way to store products.

The IId pits appear at Troy at the same time that new eating and drinking shapes are introduced. They may have been developed in relation to new food and drink products, which were stored underground and drunk from the new vessel shapes. On the other hand, the IId pits and 'Complex' shapes may have been used for consuming existing products in a new way. As the above section clarified, askoi, pyxides, and Urfinis sauceboats indicate that drinking was popular before the EB II-III. The drinks might not have been new, but the practice of storing drink within the citadel may have been. Perhaps special beverages were brought from outside of the city. Pithoi would allow large quantities to be kept, before being served and drunk from using popular new vessels. Pit 1 contained two D32 dipper vessels (Figure 6.37). These vessels were used for drawing liquid (Schliemann 1880, 380-81, 554-55). Yet according to Blegen et al. (1950, 289, Pl. 406), they are too small for drawing water from a well. They were probably used in conjunction with closed vessels, such as pithoi. Beverages kept within closed vessels are those whose exposure to air must be limited. Beer, wine, mead, and other spirits fit this description. The new drinking shapes may be related to a change in the frequency or availability of drink. It is possible, from this evidence, that a greater amount of special beverages were being consumed, and more often.

## **2. Küllüoba on the Upper Sakarya Plain, Eskişehir province**

Küllüoba is located thirty-five km southeast of the city of Eskişehir, at the "western extremity" of the Upper Sakarya Plain (Map 1; Sarı 2009, 89). Within this thesis, the site will be used to investigate drinking practices of the inland northwest. Various intermediary reports discuss the shape and finishes of the wares of this area during the EB II-III (Efe and İlaslı 1997; Efe 2003; Efe and Ay Efe 2007, 257-58; Sarı 2009). These reports also provide some information on the settings in which the vessels were used. Some provide evidence for drinking. It is not possible to determine the significance of these activities in terms of the wider site. Yet they provide the opportunity to trace the distribution of EB II-III 'Complex' ware, and to compare drinking practices with those of the northwestern Troad.

### i. The site

Excavations at Küllüoba are ongoing, and the results have yet to be published in full. A series of intermediary reports and small articles give some indication of the size of the site and its architecture.<sup>139</sup> The site is comprised of two sectors: western and eastern (Figure 6.55). During the EB II-III period, the eastern sector was divided into an upper town and a lower settlement (Efe and Ay Efe 2007, 254).<sup>140</sup> According to Efe (2003, 274), the upper town was fortified, and a series of megara adjoined one another and connected to the fortification wall. Three complexes are identified (I-III). Complexes I and II are shown in Figure 6.56.

Complex I has been interpreted as a "palace" (Efe 2000, 121, Figs. 4-6; Efe and Ay Efe 2001, 48-50, Figs. 2-3; Efe 2002, 59; Efe and Fidan 2008, 79), the seat of a ruler or administrative élite (Efe 2002, 59; Efe and Ay Efe 2007, 255). This explanation has recently been called into question (Düring 2011a, 282). To date, there has been no detailed analysis of the contents or features of complex I. It is also problematic to assume that any structure larger than domestic houses must have housed a central élite. It is possible that complex I functioned as workshops or storage, which would still imply some form of leadership or organisation.

Complex II probably began as a series of domestic residences; by the EB II, the excavators interpret the structure as having an administrative function (Efe and Fidan 2008, 68,

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<sup>139</sup> Three reports are available online at [kulluobakazisi.bilecik.edu.tr](http://kulluobakazisi.bilecik.edu.tr) for excavation seasons 2005, 2006, and 2007. These were last accessed 17th June 2014. In 2012, these reports were available at [kulluoba.org](http://kulluoba.org). At that site, the reports were last accessed by the author in May of 2012. There are slight discrepancies between the reports that were accessed in 2012, and the seemingly identical reports that were accessed in 2014.

<sup>140</sup> There are no images or plans, besides the topographical plan in Figure 6.55, that show the division between the Küllüoba upper and lower city.

70). However, no traces of writing, sealing, or recordkeeping have been recovered at the site. It is unlikely that these administrative activities were being practiced within the walls of complex II. Yet there is a space devoted to ritual or entertainment spaces within complex II over Phases IVC and IVB. While writing or recordkeeping may not have been amongst the activities that were performed, complex II may have been an area where leadership was asserted in other ways.

The architectural plans of Küllüoba settlement have changed as the site has continued to be excavated. This is documented in a series of small publications, and also in the reports that are available online (Efe 2000, 2003; Efe and Ay-Efe 2001, 2007; Efe and Fidan 2008; Efe and Türkteki 2005).<sup>141</sup> At this stage, it is difficult to determine how these structures of complexes I and II were related, and what purpose they may have served. Both complex III and the area of the lower city continue to await publication. Düring (2011a, 282) points out that the fortification walls "now appear to be local terraces rather than continuous features." More extensive and detailed information is needed before the function of these structures, and the nature of organisation at the site, may be determined.

## ii. The EB II ceremonial rooms of complex II

The opportunity to examine drinking vessels of the EB II at Küllüoba is provided by complex II. A large collection of material from this complex was recently published and examined in detail by Deniz Sarı (2009).<sup>142</sup> This includes vessels for drinking and pouring, and which predate the EB II-III 'Complex'. Sarı treats the inventory of each room of the complex in detail, though she does not analyse these rooms for their function. Also recently published, Efe and Fidan (2008) discuss the architecture of complex II across Phases IVC and IVB, which corresponds to the EB II (Efe and Fidan 2008, Fig. 8; Efe 2007, Fig. 18).<sup>143</sup> The analyses by Sarı and by Efe and Fidan, used in conjunction, allow a tentative reconstruction of the function of each room at complex II.

Both Phases IVC and IVB of complex II feature an upscale ceremonial room. This is first located within the southern Megaron (Phase IVC: room A2), and then at the centre (Phase IVB: room C2) of the complex (Figure 6.57). In either phase these spaces were related to a number of

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<sup>141</sup> Various intermediary reports are available online at [kulluobakazisi.bilecik.edu.tr](http://kulluobakazisi.bilecik.edu.tr), and have previously been available at [Kulluoba.org](http://Kulluoba.org).

<sup>142</sup> The material described in that publication may not be comprehensive for all vessels found within complex II and for the time period discussed.

<sup>143</sup> Radiocarbon testing assigns Periods IVC and IVB to a date range of 2603-2487 BC (Efe and Fidan 2008, Fig. 8). Efe (2007, Fig. 18) aligns these with middle Troy I, or the EB II. This is earlier than previous periodisations (Düring 2011a, 272), but similar to that recently proposed by Easton (2012, 24).

smaller rooms. They probably functioned as kitchen or storage areas, from the abundance of vessels that were found within them. A large proportion of these vessels were for drinking and eating. Therefore it seems that in each phase, food and special beverages were consumed within these rooms.

During Period IV, room A2 seems to have been used for social gathering. This was the central and largest room of Megaron IIA, which formed the southernmost unit of complex II (Efe and Fidan 2008, Figs. 2-4). Room A2 featured a central hearth, and probably also an elevated wooden floor that was approached using a wooden staircase in room A1. Room A3 may have been an associated kitchen. Adjacent rooms C1 and C2 were for storage. They likely served room A2, judging from the open doorway between C1 and A1. Room A2 contained only a pot and miniature beak-spouted jug (Sarı 2009, 106, Figs. 3:3 and 3:7); the vessels used within this room were stored in C1.

Room C1 contained twenty-one vessels. This was the largest cache across both Periods IVC and IVB at the complex (Sarı 2009, 104). Most of these vessels were for drinking and eating, and were suitable for serving food and drink. Of twenty-one vessels, nineteen are bowls, of which twelve are of a size that would have suited drinking.<sup>144</sup> S-Profile cups with loop handles are common to the set. One of the S-Profile bowls is incised (Figure 6.58; Sarı 2009, 104, Fig. 2:18, No. Z 22.174), similar to bowls from Demircihöyük-Sarıket necropolis that may have been used for drinking (Chapter four). Another bowl (Figure 6.59; Sarı 2009, 97, 104, Fig. 2:13, No. Z 22.168) features an omphalos base. As was introduced in Chapter four, the omphalos base may specifically reference special beverages. The feature is meant to assist the drinker in bringing the bowl to the mouth. In later periods, it will become an iconic symbol for drinking (Toker and Öztürk 1992, 23).

In Phase IVB, the ceremonial hub of complex II shifted to Room C2, with its large central hearth (Efe and Fidan 2008, 79). The large room A2 of Megaron IIA was given storage bins and interior walls. All of the units of complex II became autonomous: each had a separate, single entrance, and all interior corridors and access points were removed. Like Room A2 of the previous period, Room C2 contained only a few vessels. These were, however, of high quality: a shallow, flaring S-Profile bowl in blacktopped ware (Figure 6.60; Sarı 2009, 93, 110, Fig. 5:11, No. AA 21.137) was unique to the assemblage at Küllüoba. It could be an import from the nearby Demircihöyük Pottery Zone (Sarı 2007, Fig. 1; 2009, 92). The bowl was grooved on its interior,

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<sup>144</sup> From the list within Sarı 2009, page 104: bowls listed as numbers 2, 3, 4, 7, 9, 10, 11, 12, 13, 14, 15, and 18. Bowls 5, 8, 16 19, and 21 were large in size, as was the second vessel listed on page 106 (Bowl No. Z 22.168). They were probably not used for drinking.

in a manner identical to blacktopped drinking bowls from Sariket necropolis (Figures 4.12 and 5.18; Seeher 2000, Figs. 24, 26, 38: G106a, 144c, 144i, 315b). The bowl within Room C2, then, may very explicitly mark this area as used for drinking.

As in the previous period, during IVB drinking vessels were not stored in the main ceremonial room of the complex. Room C1, adjacent to C2, seems to have fulfilled this purpose. Room C1 contained five vessels, three of which were bowls. Two of these bowls would have been especially suited for drinking. Both are shallow and feature the characteristic S-Profile (Figures 6.61-6.62; Sarı 2009, 110, Fig. 5, Nos. Z 22.157 and Z 22.133) that is seen upon the shallow bowls from Demircihöyük-Sariket. Unit D, which would have been accessed from the outside, is a possible area of food preparation. Room D2 may have been a kitchen; it contained a corner oven and plastered floor (Efe and Fidan 2008, 77). If storeroom D1c remained unchanged from Period IVC, as the excavators suggest, its seven in-situ pithoi could have also played a role. These pithoi may have stored a large amount of food, or possibly also liquid, including special beverages. Unit B is a collection of three rooms at the back of the complex. It held the largest collection of vessels: ten jugs and two necked vessels,<sup>145</sup> as well as a pot with a strainer spout in the smaller Room B1 (Sarı 2009 Fig. 5:17). Clay-lined sockets for pithoi were found in storage area B2a; Efe and Fidan (2008, 76) suggest that the whole unit served as workshops. It is not difficult to imagine that drink could have been processed here. These objects would have been suitable for processing and storing liquid that needed to be filtered. Beer or wine are obvious candidates, and it would have been only a short distance between their processing and use for activities within Unit C.

In both Phases IVC and IVB, Küllüoba complex II featured a ceremonial hub. Storage rooms were associated with each; these contained an abundance of drinking vessels. These vessels date to periods prior to the EB II-III 'Complex', yet they may also have been used for special beverages. Black-burnishing and incision marks some vessels as intended for special purposes. Omphalos bases reference drinking. Bowls with these characteristics are associated with drinking activities at Alaca Höyük, Horoztepe, and Ahlatlıbel (Chapters three and four), and also perhaps Demircihöyük-Sariket (Chapters four and five).

From complex II, drinking was popular in inland western Anatolia in periods prior to the EB II-III 'Complex'. Like askoi, pyxides, and Urfinis sauceboats farther west, the vessels and settings within complex II indicate that drinking was an existing practice. Drinking was also associated with special vessels, and with upscale contexts; it may have accompanied ritual and

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<sup>145</sup> Sarı 2009, Fig. 6:1, 6:2, 6:4, 6:5, 6:6, 6:8, 7:1, 7:2, 7:5, 7:6, 8:1, and an eighth jug Plate 6:14 "not illustrated", which was listed within Plate 5.2 as having been recovered from Room B2.



ceremony. The following section demonstrates that the EB II-III 'Complex' would be adopted at Külliüoba in the following period. From complex II, these vessels do not mark the introduction of special beverages. Yet they may indicate a change in beverages, or in the way that drinking was done.

### iii. An EB III votive pit

At Külliüoba, the use of EB II-III 'Complex' shapes is demonstrated by a single context. At the eastern sector of the site, several drinking and pouring shapes were found deposited within a votive pit (Figure 6.63; Türkteki 2010). Like complex II, a great deal of information about the pit is unavailable. No plans of the trench or votive pit are available in the Külliüoba publications. Yet material within the pit may be compared to that from other sites. Similarities in how the vessels were deposited may indicate wider trends in drinking practices. This may reveal more about communication between sites, and whether drinking marked wider social changes at different sites.

Very little information is available on the votive pit itself. The pit has been provenanced within Period IIIA, dated to between 2314-2197 BC at the site (Sarı 2009, Fig. 2). According to Türkteki (2010), this is equivalent to the final phase of the early Anatolian EB III. The location of the pit is described as within Trench AA 19 (Türkteki 2010, 23, Fig. 1), and no further detail is provided. According to grid plans, this corresponds to a court in-between complexes I and II of the Upper City in the Eastern sector of the mound (Efe and Türkteki 2005, Fig. 1; Efe 2007, Fig. 3). During the EB II-III, this is "just south of the (mound) summit... (that) remained open- free of structures and the resulting build-up of rubble" (Efe and Türkteki 2005, 120). The adjacent complex II had, by this time, fallen out of use (Efe and Fidan 2008, 70, Fig. 8).

The pit contained material representing nine vessels, many of which were shapes of the EB II-III 'Complex'. They are described and illustrated by Türkteki (2010, 23-24, 29, Figs. 2a-b, 3; Figures 6.64-6.65). The vessels are not uniformly wheelmade, nor are they similarly finished. Wheelmade vessels include a Plain Ware A2 plate, a beak-spouted jug with a thin pinkish-red slip (Wash Ware), a Red-Coated Ware, burnished flask, a Plain Ware S-Profile bowl with horizontal handles, and a red-slipped, burnished and fluted vessel of unknown shape. Handmade vessels consist of a depas in Red-Coated Ware, a black-slipped and burnished necked vessel, a red-slipped, burnished and fluted vessel of unknown shape, and an unslipped tripod cooking pot. It is

possible that not all of these vessels were intentionally deposited; at least five of the nine vessels are represented only by sherds.<sup>146</sup>

Yet the vessels are united in function, and this lends credibility to the idea that they had been used and deposited together. Of the vessels that can be mostly reconstructed, several are known drinking forms. This includes the necked vessel, beak-spouted jug, wheelmade Trojan A2 plate, and handled S-Profile bowl (Türkteki 2010, Figs. 2b, 3:1, 3:2, and 3:6). Of the five remaining vessels that are more fragmented, as many as four may be associated with drinking. The flask and depas are drinking shapes. The two unidentified sherds were finely finished: they were burnished, red-slipped, and fluted. They are likely to have also been fine tableware shapes. Two non-drinking shapes remain: they are tripod necked vessels, one decorated, the other in plain Cooking-pot Ware. The decorated pot was mostly intact, while the plain ware pot was represented by a single sherd (Türkteki 2010, 24, 29). The majority of the pit vessels, then, are typical shapes for drinking and eating. They emphasise drinking and pouring, especially if the beaked jug and flask featured a cutaway spout, as reconstructed by Türkteki (2010, Figs. 3:6-7). The depas suggests communal drinking, and is the most archetypal drinking vessel of the period. These vessels may have been used together, and then deposited to mark the end of a drinking event. The A2 plate and bowl may have been used to eat from; perhaps these ceremonies involved food.

This pit may have been one of several at the site. Additional pits are mentioned in various intermediary reports. All are purported to have contained drinking and pouring vessels, though none are described in detail. Another pit from the same Trench AA 19 is documented in an article by Efe and Türkteki (2005, 127). From it, they recovered a wheelmade depas in Pasty Red-Slipped Ware. The depas referred to (Figure 6.66) is compact and short, more a conical cup with two handles. Similarly, a pit is mentioned by Sarı (2009, 120, Fig. 10:7) in her report of the pottery from complex II. The pit is designated, 'Unit A1' of Phase IVA, though Sarı does not provide any architectural plans. According to the periodisations of complex II presented by Efe and Fidan (2008, Fig. 8), Phase IVA coincides with the terminal EB II. An earlier report by Efe and İlaslı (1997, 603, 605, Pl. III) mentions two pits, which contained material of Troy II type. The provenience is, again, undescribed:

"This quite homogenous material is at present recorded from two findspots, a small area under early Second Millennium strata in Trench AC 19, and a pit dug into earlier Early Bronze 2 deposit in Trench AE 19. Among the finds here, both the Trojan plate [Pl. III, 1-3; Trojan shapes A 1 and A 2] and the depas [Pl. III, 6-9; shape A 45] are not only abundant, but reflect the same characteristics as the Trojan examples" (Efe and İlaslı 1997, 603).

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<sup>146</sup> Six shapes are represented by sherds that make up no more than a small percentage of the vessel. These include the depas, fluted sherds, flask, and tripod cooking pot (see Türkteki 2010, Fig. 3).

The depas is described as handmade. Horizontal fluting upon one sherd led the authors to draw a comparison with the fluted depas sherd from Troy IId (Blegen et al. 1950, Pl. 407, No. II-143; Efe and İlaslı 1997, 605, footnote 41). Efe does not mention if the fabric of his depas is rare, fine grey burnished like the sherd from the Troy 'Pit Period'.<sup>147</sup> Yet it is noteworthy that the sherds exhibit similar décor, and were both deposited within pits, associated with other drinking forms.

The evidence from Küllüoba, while limited, provides key observations about drinking practices in the region. First, it establishes that drinking was practiced in periods prior to the EB II-III 'Complex'. At the complex II structure, drinking vessels were associated with large rooms that may have fulfilled a ceremonial purpose. This means that the EB II-III 'Complex' was not adopted because of the novelty of drinking as a new practice. Depata, tankards, and wheelmade plates were more likely related to a change in the use of special beverages, or to new ways of drinking. This could include drinking from vessels that are passed around (i.e. the depas), or eating and drinking at large feasts.

From the evidence, it is not possible to determine what role drinking played at the site during the EB II-III. The structure of complex II is difficult to assess. From the lack of writing or sealings, there is little to support the idea that it served as a "palace or an administrative building" (Efe and Fidan 2008, 79-80). Many of the rooms could have functioned as workshops or storage. It may have fulfilled a ritual purpose. Likewise, there is little information available for the EB III votive pit. It is not possible to determine who was drinking, why, and the social relationships between the individuals who were present.

Yet the EB III votive pit establishes that Küllüoba adopted the same drinking equipment as other western sites. This means that the inland northwest witnessed the same changes in drinking behaviour as were occurring along the western coast. If drinking practices were connected to new food and drink products, then they seem to have been widely available across the region. It is not possible to know what these changes meant for the settlement of Küllüoba. But the similar treatment of 'Complex' shapes indicates that these wider changes stretched as far as the Upper Sakarya Plain, and possibly further.

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<sup>147</sup> The fine light-grey burnished depas sherd with horizontal fluting from Troy IId was found in Square F 4-5 (Blegen et al. 1950, 292). It was associated with fragments of a B17 jug II-139 and jar II-137. The fabric is "sharply" (Blegen et al. 1950, 314) unique to the assemblage at Troy. It is described as being "very fine, light gray, micaceous clay, with hard, compact biscuit and lustrous slip... usually decorated with incised lines or grooves" (Blegen et al. 1950, 220). This fabric is also noted upon a Pilgrim's flask 36.665 from House E, and a neck or lid fragment II-186 from area F 5-6, both in level IIf (Blegen et al. 1950, 318-19).

### 3. Karataş on the Elmalı Plain, Lycia

The use of EB II-III 'Complex' shapes is also detected at Karataş, far to the southwest of Anatolia, on the Elmalı plain. These contexts date to the EB II as well as the EB III, and therefore prior to, and after, the appearance of the EB II-III 'Complex'. 'Complex' vessels were found at the central citadel; they may be able to relate drinking to site leadership or organisation. Drinking is also detected within domestic settings. This is an opportunity to look at drinking from the perspective of individuals within the community, and is unique amongst the sites discussed in this chapter.

#### i. The site

Karataş-Semayük is located in the Elmalı Plain in northern Lycia (Map 1). It was excavated beginning in the early 1960s by a team from Bryn Mawr College, headed by Prof. Machteld Mellink. The site comprised a fortified central structure and courtyards, surrounded by domestic houses and an extramural cemetery (Figures 6.67; Warner 1994, 5). At its most dense, the population of Karataş during the EB II was around 128 houses, with an estimated population of 640 people (Warner 1994, 177).

The central mound at Karataş was around one hundred metres in diameter (Figure 6.68; Warner 1994, 5) and around three to four metres in height (Mellink 1964, 271). At its centre was a rectangular structure. This was ringed by courtyards, walls, embankments, and a double palisade of wattle-and-daub (Mellink 1973, 295). The central structure comprised two stories, and measured 10.75 x 7.2 metres (Eslick 1988, 33-34). Twelve clay-lined pits were located inside the ground level of the structure. In Period IV, a series of 'fence houses' were built along the palisade (Figure 6.69; Mellink 1973, 294-95). They were also of wattle-and-daub, and incorporated the palisade as a structural wall.

Eslick (1988, 33-37) argues that the central structure housed a ruling élite. To her, the 10.75 x 7.2 metre building is an appropriate counterpart to Grave AQ. This burial had been constructed with a greater amount of care than others at the cemetery (Mellink 1969b, 324-27). Though it contained very few grave goods, Eslick (1988, 34-35) interprets Grave AQ as evidence for an élite at the site. In Period IV, the population at the citadel may have expanded. Eslick (1988, 35) interprets the 'fence-houses' along the palisade to have accommodated élite family members or other dependents. Of twelve stamp seals found at the site, five were unearthed at the

central mound (Warner 1994, 204). Eslick (1988, 25) argues that this is further indication that the residents of the mound controlled production and exchange at the settlement.

Another interpretation is that the central mound served as community storage. The clay-lined pits of the ground level of the central citadel would seem to support this. The mound was protected by a fortification wall, while the domestic area of the settlement was not. Perhaps the central structure was protected because it held objects of value to the community. This is not incompatible with Mellink's (1973, 295) suggestion that the fence houses housed specific workers or livestock. Yet Warner (1994, 178) points out that the central structure was small; not all of the community's goods could have been stored here. The situation may be similar to that suggested by Weingarten (1997) in her reinterpretation of the House of Tiles at Lerna. Like Karataş, Lerna's House of the Tiles was a central, two-story structure, and far from monumental, judging from its size (Caskey 1968, 314; Weingarten 1997, 149). Unlike Karataş, the House of the Tiles featured more than one hundred sealings, applied to a variety of materials.

Weingarten's (1997) reexamination of the sealings at the House of the Tiles at Lerna does not support a system in which goods were centrally managed. She notes that the most commonly-used seals did not mark the majority of items. This intensive system of seal use would be appropriate to a situation in which these goods were overseen by a central authority. There was also no further evidence for accounting practices at the site. Weingarten's (1997, 150) analysis found that the most commonly-used seals were used to make only twenty percent of the sealings at the House of the Tiles. By contrast, over sixty percent of the sealings were made by seals that were used only one or two times. This does not suit a situation in which a small number of seal owners controlled the majority of goods at the site. It seems more akin to a situation where seals were used to mark personal property. There was some amount of hierarchy between the use of different seals. But it was related to the sealing of doors and chests, rather than jars, boxes, and other containers. From this, Weingarten interprets the House of the Tiles as a place to store goods for occasional or seasonal exchange. She suggests that the least-active seal owners were community specialists, and that storeroom 'managers' may have been an emerging- but not all-controlling- group.

Other researchers have warned that centralised control cannot be concluded from the small number of sealings in western Anatolia and the Aegean (French 1969a, 120; Pullen 1994, 44; Çevik 2007, 136). Only one seal is reported from Liman Tepe (Erkanal 1998, 387; Erkanal-Öktü 2004, 656, 600, No. 457), in a storeroom associated with idols (Erkanal 1998, Fig. 2). It is tempting to suggest that this provides evidence for a religious authority at the site (cf. Şahoğlu 2002, 146). However there is no evidence that this authority monitored or controlled the different

industries or exchange at the site. Of the twelve seals from EBA levels at Karataş (Warner 1994, 204), just over half were found in domestic areas of the settlement, including a seal of lead (Warner 1994, Pl. 186:g). Perhaps the seals at Karataş were also used to mark personal property, and the central mound fulfilled a community purpose, rather than housed a central élite. In this case, organisation at the site would not be centralised. It may have been more incipient, "greater than household management... but less than a bureaucratic structure" (Weingarten 1997, 149). Weingarten points out that seal owners at Lerna may have been the heads of different households. These individuals could have been powerful, and held a significant amount of prestige. Therefore even if the central citadel does not feature evidence of administration, a hierarchical organisation may still have been present. Decision-making at the site may have involved collaboration on the part of different, powerful individuals, though not effected through a central administration.

## ii. Gathering at the EB II citadel

During Period IV at Karataş, the outer slopes of the central mound appear to have been used for public gatherings (Warner 1994, 171). Upon both the eastern (MEE: Mound Extension East) and southern (MS: Mound South) slopes were built raised open hearths or fireplaces (Figures 6.70-6.71). These were regularly revisited and refurbished; they were cleaned, and the areas around the fireplaces resurfaced in clay (Warner 1994, 122, 185, Pl. 57 and 145-150). The area was not associated with specific buildings, or with production areas; there was, however, an abundance of animal bone. Pottery was deposited throughout the area. Near to the fireplaces were several pitchers, jugs, bowls, and cups; most were red- or black-polished. This suggested to Warner (1994, 122, 181) that the area had been used for food preparation, and the site of public gatherings or festivities. That the fireplaces were located below the citadel suggests that this gathering was related to community identity. There were no walls enclosing the space; the area appears to have been open and accessible.

Also during Period IV, coincident with the fireplaces, the strainer spout appears. It is one of three new spout forms, which Eslick (2009, 101, 235, 244) suggests may be associated with the production of special beverages. Special beverages were likely made from fruit or cereal crops, and therefore would have needed to be strained. For instance, in Mesopotamia, early beer production resulted in barley husks floating atop the brew. Beer was drunk through straws as a way to avoid ingesting these particles (Curtis 2001, 217-18). In that region, metal strainer tips were sometimes applied to straw ends (Homan 2004, 86). In modern wine production, the juice, skin, stalk, and seeds of grapes are made to steep for an extended period. These pieces are then

removed. Thus wine production may have also involved straining. Strainer vessels may have been essential equipment for many special beverages.

One jug with a strainer spout was associated with the fireplaces (Figure 6.72; Warner 1994, 119, No. KA 744; Eslick 2009, 112-13, Pls. 38, 79). The spout on this jug, however, is located next to the vessel handle, rather than across from it. Pouring from the jug could not have been done in the usual manner, tilting the jug in one direction. To Eslick (2009, 235), this is not incompatible with drinking; she suggests that the jug could have been a personal drinking vessel. The jug may also give clues as to how beverages were produced. Jugs with strainer spouts adjacent to their handles were found at Senirce and Pinarbaşı-Göl, near to İsparta in northern Pisidia (Ormerod 1911-1912, 84, Pls. VI:3 and VII:3). There, the excavators suggested that such jug had been used for collecting liquid. The jug would be immersed in liquid, and the spout used to strain large particles while it was being filled. For example, the excavators note that the jug would keep out leeches when filling water from local springs. The jug from Karataş might have been used to collect water. It might also have been used to collect drink made from fruit or cereal crops. In this case the strainer would have kept out fruit or husk fragments. It might then have been used to drink from, as Eslick (2009, 235) suggests.

### iii. Drinking and gathering in Karataş neighbourhoods

During Periods V-VI at Karataş, the EB II-III 'Complex' is introduced. These shapes become popular over the course of the period. By Period VI, they are common, everyday objects, and depata, tankards, and wheelmade plates become a feature of "almost every household" (Eslick 2009, 233). This mirrors developments at Troy: by the EB III, the depas is an everyday vessel (Spanos 1972, 48). Fragments of the vessel are common to street deposits in Troy IIg (Blegen et al. 1950, 307-76). Based upon this parallel, Eslick (2009, 227, Table 13.1) aligns Period VI at Karataş with the EB III.<sup>148</sup>

Amongst the domestic deposits at Karataş, one area provides extensive detail on neighbourhood drinking practices. At the southeast portion of the settlement, in Trench 63 (Figure 6.73), a large four-spouted, pedestalled krater was recovered from a small storage shed or 'kiosk' (Figure 6.29; Mellink 1969a; Warner 1994, 70, KA 954, Pl. 171:a-b; Eslick 2009, Pls. 68, 95:a-b). The kiosk measured 1.50 x 2.10 m (Mellink 1969a, 69). It may have been associated with

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<sup>148</sup> At Karataş, tankards and A2 wheelmade plates first appear during Period V:3, and are followed by depata in Period VI:1-2 (Eslick 2009, 159, 173). This is similar to the material from Troy Period II. At that site, the depas does not appear until IIc, after the introduction of the tankard and plate (Blegen et al. 1950, 64-65; Easton 2002, 321-23; 2012, 22, 24, Figs. 9-10).

nearby House 63, though the two structures could not be related for certain. Also within the kiosk was a one-handled cup (Warner 1994, Pl. 169:d; Eslick 2009, Pl. 61, No. KA 562).

The krater was interpreted as a drinking vessel (Mellink 1969a, 71). It featured four tubular spouts interspersed around its flat, incurved shoulder, though these were not meant for pouring. The vessel was heavy and was "clearly not meant to be moved frequently" (Mellink 1969a, 70); the spouts, then, were not meant to be poured from. This is reiterated by two grooved loop-handles placed on opposite sides of the vessel, adjacent to the spouts. The spouts are appropriate for holding drinking straws, as is typical of early beer-making and depicted upon cylinder seals from Ur (Frankfort 1939, 77; Porada 1948, 16). At forty cm in height, participants would have been seated around the vessel (Mellink 1969a, 71). Because of its weight, the vessel was likely reserved for special occasions (Eslick 2009, 236). The only vessel of its kind at the site, it was probably uncommon to drink in this manner. While the practice was rare, it was not confined to the southwest. A similar vessel was recovered from EB IIIA levels at Aphrodisias (Figure 6.30; Kadish 1971, 135, Pl. 29, Fig. 31; Joukowsky 1986, Pl. 79). Vessels with spouts have been found farther north, at Yortan and also in Thrace (Kâmil 1982, Fig. 95; Özdoğan 1987, 5-39). Multiple vessels, described earlier, may also have been used in this way (Figures 6.22-6.28; Schliemann 1880, 384, 582, 597, Nos. 356, 1331-32, 1396). The practice is also noted outside of Anatolia: Mellink (1969a, 75) lists possible parallels from Lerna IV (Early Helladic III; Caskey 1956, 162, Pl. 43f) and Naxos (Zervos 1957, 58, Fig. 13). Eslick (2009, 236) also notes a seven-spouted jar from Mari (Parrot 1956, Pl. LXX No. 674).

The krater from Trench 63 may have been rare because it was associated with a different product. For instance, it may have been used for beer while the *depas* and tankard of the EB II-III 'Complex' were used for wine. Again, strainer vessels decline at Karataş after Period V:3 in favour of new 'Complex' vessels. The 'Complex' may have signaled the appearance of a new drink, for instance wine or mead. The date of the krater is narrowed to Periods V-VI (Warner 1994, 72), which is coincident with the appearance of new EB II-III vessels (Eslick 2009, 149-52, 233-34). Perhaps the krater was used for beer, as the strainer spouts may have been. These vessels may have been rare (the krater) or become less common (strainer spouts) because they were associated with a beverage that had become less commonly used.

Drinking vessel changes may indicate that from Periods V-VI there was now a different way to produce the same beverage. The EB II-III 'Complex' may also have been used for a new way of drinking. For instance, the *depas* is meant for passing between people. Its purpose was for sharing drink together with others. The krater from Trench 63 was also meant for this purpose. Its height would have encouraged participants to sit within a drinking circle and experience drink



together. From this perspective, the krater and depas fulfilled a similar purpose. They both may have moved away from an earlier method of drinks preparation, which made use of the jug with strainer spout. It may also have reflected a new way to produce the same beverage, or a new way to consume it.

However it was used, the krater from Trench 63 illustrates that drinking and gathering were not solely public activities, practiced at the central mound. Drinking was also done within domestic areas, and within individual houses. Again, the 'Complex' was common domestic equipment by the EB III at both Troy and Karataş. From the presence of tankards, A2 plates, and red-slipped finishing at other sites, the 'Complex' was becoming popular across the west. It is likely that as 'Complex' shapes became widespread across settlements, so too did they become more widely adopted within them. This may have been due to a growing popularity in related practices, such as holding large feasts. During the EB III, drinking would seem to have been practiced by more people, and to have occurred more often.

The popularity of these activities, however, does not clarify their meaning within the community. Drinking might have been done for different reasons. The central slope of Period IV would seem to have been used for community-wide celebrations. By contrast, drinking in individual neighbourhoods may have been more exclusive. From the architecture and street plans of the Karataş houses (Warner 1994, Pl. 39), the area of Trench 63 was difficult to find. These gatherings may only have been accessed by those familiar with the neighbourhood. Drinking using the heavy spouted krater from the kiosk or household depata may have carried a different meaning from drinking at the central mound. Gathering in either setting may have promoted or involved different kinds of social relationships. This situation is similar to that described by Thornton (1987) in her study of drinking within a modern, rural farming community near to Vienna. She notes that two popular drinks, *sekt* and *schnapps*, are consumed in very different ways. *Sekt* is consumed at large, citywide gatherings, for instance for state or national holidays. It is associated with superficial, brief, formal interactions with others. It is always store-bought. *Schnapps*, by contrast, is appropriate to more intimate meetings. It is associated with a breakdown of formality, and used for establishing group camaraderie. Appropriately, *schnapps* is often brewed or altered at home, from a range of ingredients, to suit the preferences of individual households. The two drinks are used to mark very different social activities. Similarly, at Karataş, drinking may have performed one function when used for drinking at the central mound, and another for drinking within individual houses. An increase in the popularity of drinking during periods V-VI may mean that either type of event, or both, was occurring more often.

This points out that some drinking settings, and reasons for drinking, may be obscured at some sites, which may affect how drinking activity is assessed. For example, at Troy, drinking at the Ledge and IId pits may have been elite and reserved. Yet drinking within domestic contexts (and perhaps communal structures) of the lower city has yet to be investigated. Drinking in these areas of the settlement may have been as competitive as at the central citadel. An analysis that draws from only one of these settings is only partly able to assess the significance of drinking at the site. Understanding these limitations ensures that no one context is given undue importance. Each should be understood as one possible setting for drinks, amongst many. These settings may be related to different drinks production and drinking behaviours, and to different social relationships. This point is important for assessing the evidence for drink across the sites that are discussed in this chapter. It also encourages a more balanced perspective in assessing how drink was used across the regions of Anatolia investigated by this thesis.

### **C. Conclusion**

EB II-III 'Complex' shapes indicate that drinking was popular in the west, as it was in other areas of Anatolia during the Early Bronze Age. The shape and finish of these vessels has been detected at sites throughout western Anatolia, as well as in central Anatolia and the Aegean (French 1967; 1969a; 1969b; Mellink 1965, 116; 1986, 145-49; 1989; 1992, 216-17; 1998; Özgüç 1986, Fig. 3.3). A closer look at the finishes of this ware, however, reveals the need for more research. A red slip was originally described in the literature as a chronological marker. Yet this feature has been ignored in recent research, probably due to a lack of final site publications. Because of this, it is possible that many drinking forms and red-slipped vessel fragments have been incorrectly dated. At some sites, these vessels may have only been adopted at the end of the EBA. Therefore it is important to exercise caution in characterising drinking practices from the movement of 'Complex' forms between sites. Forthcoming research will need to better characterise the slips and finishes of depata, tankards, A1 platters, and small plates. The term, 'Complex' is appropriate to these vessels because when they are adopted at sites, they are always different from the existing traditions. Yet a well-polished, red finishing seems to only be applied to the vessels during a specific point in their chronology. As was concluded above, the issue cannot be resolved by examining the shape or finishing of vessels as they are currently published. More studies of the wares will need to be undertaken at different western sites before the issue may be resolved.

Regional preferences clarify a number of assumptions. First, drinking vessels were popular in periods prior to the appearance of the depata, plates, and tankards of the EB II-III 'Complex'. Askoi, pyxides, and Urfinis sauceboats are unique drinking and pouring shapes that are present in earlier assemblages. They originate in the Aegean, and are popular at Anatolian sites that had contact with this region. There are also differences in the shape and construction of vessels between the different areas of western Anatolia. Jugs and flasks feature different characteristics in the south than in the north. In addition, shapes of the EB II-III 'Complex' are not adopted at sites as a complete set. The depas often appears after the tankard and the wheelmade plate. These clarifications indicate that the EB II-III was a period of generalised sharing, involving contacts across Anatolia and in neighbouring regions. EB II-III 'Complex' vessels are one group of a number of materials that had been exchanged between Anatolia and the Aegean for some time. By the time that they emerge, there had already been a significant transfer of materials between them. This earlier period of sharing included vessels for eating and drinking. From sauceboats to zoomorphic vessels, drinking and communal dining were popular activities, the methods of which were shared along with metallurgy, architecture, and other craftsmanship.

The later period of sharing, in which EB II-III 'Complex' vessels emerge, may have occurred over a longer timeframe than is typically described. Şahoğlu's (2005) 'Anatolian Trade Network' seems to describe a period later than that in which the depas, tankard, and A2 plate are introduced. It may date to later in the EB III, after a period in which the shapes first become popular. The ongoing excavations at Liman Tepe and Bakla Tepe show great potential for discerning which vessel shapes occur before others in the EB II-III. These excavations may also provide information on finishing. It would be advantageous to revisit the *supposed* differences between red-coated, Red-Washed, and West Anatolian EB III ware. Identifying these differences, if they exist, would clarify over how long a period 'Complex' shapes were adopted at different sites. In particular, it would clarify whether the red ware that is known from Tarsus EB IIIb is found at sites along the western coast. This ware aligns with Troy V from the presence of red-crossed bowls (Mellaart 1957, 71; Orthmann 1963, 94). This would help to determine whether coalescence occurs soon after Troy II, or over a longer period, or later, and over how extensive an area.

Revisiting vessel finishing would also clarify the relationship between the 'Complex', the 'Anatolian Trade Network', and shapes such as Syrian bottles and basket-handled teapots. Syrian bottles and teapots indicate that at some point, coalescence involved regions farther afield (Zimmermann 2005, 2006a). Bone tubes (Genz 2002, 2003) are also an indication that exchange was occurring across the Anatolian plateau. Yet it remains to be seen in what period of the EB III

this occurs. For the 'Syrian' bottle, this may be indicated by vessel morphology. Globular forms of the bottle precede ovoid or alabastron shapes (Zimmermann 2005, 161). Alabastron shaped bottles are known from Kültepe level 12 and are associated with vessels of Tarsus EB III (Özgüç 1986, Fig. 3.3). A silver alabastron bottle was found within the Eskiypar treasure (Özgüç and Temizer 1993, 617, Pl. 116,1). A globular version in gold is known from Treasure A at Troy IIg (Tolstikov and Treister 1996, 32). As was explained above, Troy IIg is dated earlier than Tarsus EB III. Lead bottles from Demircihöyük-Sarıket are basically globular in form, but with an elongated neck; this may be a local inspiration (Baykal-Seeher and Seeher 1998, 118-21, Figs. 1:1-9). The bottles that Şahoğlu (2005) associates with burnished finewares in his Anatolian Trade Network may be alabastron examples. If so, they may date finewares, and a more intense and expansive exchange, to later in the EB III.

The EB II-III 'Complex' did not introduce drinking to the west. But it may have been associated with new drinking acts, or with new social practices. Western Anatolians were already familiar with preparing and serving drink using strainer vessels, ladles, jugs, and zoomorphic and composite vessels. Sharing drink through a *depas* might have been novel, and transmitted quickly between sites. The 'Complex' may also have been associated with new products. At Troy, the IIId Pit Period coincides with an abundance of pithoi (Schliemann 1880, 379; Blegen et al. 1950, 278). Perhaps drink was now being stored or prepared within the settlement, in greater quantities, and retrieved using dipper vessels. From the popularity of 'Complex' shapes, perhaps more people were drinking, at larger events, and more often. Yet what purpose did drinking events serve? Considering different options may provide insight into the relationships between settlement inhabitants, and thus the nature of organisation at various sites in the west.

First, the EB II-III 'Complex' is likely to have been used for different purposes at different sites. Drinking and eating from these vessels could have been a means to connect individuals, or to separate them by demonstrating social distance. The *depas* seems to have been passed between individuals continually, until it was emptied. The shape insisted on participation. Whether this participation was for bonding or for competition depends upon the relationships between participants and the nature of the drinking event. It may have connected individuals by causing them to experience drink together with others. This was observed in drinking practices of the north-central plateau (Chapters three and four). Smashing vessels may also have achieved this purpose. On the other hand, shared drinking may have invited competitive drinking, and the opportunity to demonstrate social distance. Drinking greater quantities may have brought more prestige. This would have been publicly demonstrated at drinking circles.

The settings where drinking was practiced reiterate that the 'Complex' may have been used for a number of purposes. During Troy IId, feasting events were popular at the central mound. At EB II Karataş, the centre of the settlement was also a popular site for drinking and feasting. From their setting at the citadel, it is possible that these events involved the entire community. Hosts may have intended to attract large numbers of community participants, and thus held events at the settlement centre. This area is often associated with community identity. It may also be associated with specific aggrandising personalities, groups, or lineages. In this scenario, feasting events would have served to reinforce existing social hierarchies. By provisioning the feast, hosts indebted participants to them and establish a system of obligations that will need to be repaid in the future.

It is also possible that feasting events held at the centre of settlements were exclusive, open only to select, élite individuals. This would seem to be supported by treasure deposits at the Troy citadel (Schliemann 1874; Tolstikov and Treister 1996) and Eslick's (1988, 33-37) interpretation of the central structure at Karataş. As introduced in Chapter two, Dietler (1996, 98-99) terms these, 'diacritical feasts'. Diacritical feasts use distinctions in cuisine, materials, and consumption methods to reify differences in social status (see also Goody 1982; Bourdieu 2010). They naturalise unequal social relationships, but they do not use reciprocal obligation to do so. Rather, diacritical feasts involve symbols that are communicated between élites; amongst this élite audience they "channel social competition within clearly defined boundaries" (Dietler 1996, 98). In this case, feasting events serve as a platform for the negotiation of power. In using specific tableware, or rare or costly foods, drinks, or other implements, participants communicate fine differences in élite social standing.

Feasting events may also have served as a platform for élite groups to compete for support from the community. In this scenario, élites use food and drink to attract community members to participate in feasts. They hope to obtain political support, or at least more support than their rivals. The treasure deposits at the Troy citadel may be interpreted in this way. Bachhuber (2009, 11-12) has suggested that the jewellery, weapons, vessels, and other objects in the 'treasures' at the citadel were *publicly deposited*. The intentional, public sacrifice of these objects is a form of conspicuous consumption that would have generated individual prestige, or cultural capital (Bourdieu 1977, 1986). It would have attracted supporters (Kipp and Schortman 1989) or have been used to promote individual status (Dietler 1990). According to costly-signaling theory, this is because it communicates that individuals have access to resources (Bliege Bird and Smith 2005; Plourde 2008). Ultimately, Bachhuber (2009, 12) interprets the treasures as serving to reify status differences. He sees the 'treasures' as a diacritical symbolic device serving

to establish the rising authority of a single, individual group or ruler. This "new kind of social power (is) based on the self-aggrandisement of a ruler personage" (Bachhuber 2009, 12). But a public deposition of the treasures is also appropriate to situations in which many individuals are competing, and social positions are still being negotiated. In other words, it is appropriate to systems of factional competition (Bujra 1973; Brumfiel 1994; Brumfiel and Fox 1994), in which would-be leaders compete against one another to win a greater number of supporters. This system is just as likely to result in inequality, though it may be unintended (Clark and Blake 1994). There is little in the treasure deposits at Troy, or materials of the IId pits, to indicate that they were controlled by a central authority. Yet monumental architecture and high craftsmanship indicate that Troy may have been experiencing élite competition that resulted in at least a tenuous control over resources (Bachhuber 2009, 8). At other settlements, groups of competing élite may have used drinking vessels and metalwork to establish their political position. Drinking would have been as effective for this purpose as it would mark an established, separate élite class.

These situations, however, provide only a limited amount of information as to who was drinking. Assessing the significance of drink at western sites is a matter of appreciating the different uses for drink, and where evidence is lacking. 'Complex' shapes cannot always be associated with fine finishing and foreign materials. To assume so is to ignore the evidence coming from the vessels themselves. It also ignores key lacunae in the drinking settings and drinking events that are available for study. From the issues related to shapes and finishing, the period over which 'Complex' shapes were popular was probably longer than is usually acknowledged. From regional preferences, it took on a different character in different areas of the west. Thus the use of 'Complex' shapes, and how shared drinking affected or facilitated social relationships, may have manifested differently at various sites.

Alternatively, the central mound at Karataş could be interpreted as a structure for communal storage rather than for housing a central élite. In this situation, the central structure reflects the role of Karataş in greater regional exchange networks. These had been developing throughout the Aegean and western Anatolia for some time. From at least the EB II, drinking materials and ideas about drinking had been exchanged alongside metallurgy, architecture, building methods, and other craft production. This exchange may have been facilitated by intermediaries, trade "colonies" as envisioned by Şahoğlu (2005, 352), and operated differently at different sites. Thus the exchange was characterised differently in different parts of the west. For instance, the material culture at Liman Tepe reflects its close relationship with the Aegean, which was probably facilitated through the Cyclades (French 1969a, 132-35). Likewise, the material

culture at Troy reflects its close relationship to Poliochni on Lemnos, and possibly also to Samos. These islands were its connection to the Aegean.

Weingarten's (1997) reinterpretation of the House of the Tiles at Lerna places regional exchange at the centre of the issue of how sites were organised. In doing so, it introduces an important point. Sites may have operated even more differently than is captured by the debate over whether central citadels featured administration. Weingarten (1997, 161) suggests that the inhabitants at Lerna used the upper story of the House of the Tiles as a communal "strongroom". Here the leaders of community households may have stored their goods for exchange taking place at a later date. At Karataş, the small central structure at the citadel is a poor indication of any central authority at the site. Yet this does not mean that organisation at the site had been less complex, or was unranked or non-hierarchical. As at Lerna, the central structure may have been used by the leaders of community households or groups to store goods for later exchange. We may imagine that these households, ritual groups, or factions may have enjoyed an unequal relationship with others within the community. The social relationships at the site may have been no less competitive than those within a more formal, hierarchical structure. A number of other scenarios are also possible. Drinking is a promising avenue by which to detect these processes. Drinking acts are an effective and swift means of establishing and altering a number of social relationships. They may do so regardless of whether the setting is within, or very far away from, central complexes.

The drinking settings that are available may misguide how these processes are believed to have occurred. Interpretation is assisted by recognising these gaps, rather than sidestepping them. At central citadels, the evidence certainly points to the use of drink amongst elite members of the community. Yet there may be other, significant activities that remain undetected. At Karataş, the large drinking krater from Trench 63 illustrates that significant drinking practices were occurring away from the citadel. Even if these practices cannot be described, space must be left for them in the interpretation of drinking acts at the site. Otherwise, information from the other settings, such as the fireplaces at the Karataş central mound, may be unduly emphasised. This is sure to exaggerate the authority of the most visible groups.

As Douglas and Isherwood (1979, 101-103) point out, objects are usually adopted because others possess them. This point has also been argued by Renfrew (1986, 145-46). Thus tankards, depata, and A2 plates of the EB II-III 'Complex' were probably taken up because friends and neighbours used them. Individual households were probably motivated as much by their neighbour's ceramic depas as they were by metal prototypes. Ceramic vessels are also able to convey complex information about social class and participation as are more expensive metal

versions. The most striking demonstration of this point is thousands of plain, undecorated kylikes used for drinking at the grand Palace of Nestor at Mycenaean Pylos (Knappett 2001). These vessels were used at the palace, though they are of plain, undecorated ceramic rather than elaborate versions of metal.

This chapter has discussed a number of dramatic and impressive settings for drinking. Each of these settings feature mostly ceramic vessels. If the *depas* was an everyday vessel by the early EB III (Spanos 1972, 48), as is suggested at Troy and Karataş (Blegen et al. 1950, 307-76; Eslick 2009, 233), then there is likely to be a number of drinking settings in domestic areas that remain unexplored. This is especially true for Troy, whose lower city remains unexcavated. From reports of 'Complex' vessels at other sites, they were probably also common material there, though this depends upon the chronology of red-slip finishing. This means that a significant amount of information has yet to be assessed. And if the 'Complex' was adopted largely because of its social use, as Douglas and Isherwood (1979, 101-103) suggest, then these settings could be highly significant for navigating social relationships within the community. Within these communities, drinking may have affected social relationships in highly complex ways. Without the information from domestic areas of settlements, our understanding of the implications of drinking at western Anatolian sites is incomplete. This is amended by constructing a thorough and representative view of drinking practices, at large and small sites, and in exclusive and everyday settings. Aiming for a more representative sample paves the way for a more accurate assessment of social relationships to be developed. As sites in the west continue to be investigated, attention should be paid to drinking evidence from both central and domestic areas of settlements. So that we know what we are comparing, this should include detailed information about the shape and finishing of the vessels that were being used.



## Chapter Seven: Conclusion

Drinking and feasting practices provide a unique opportunity to assess the social complexity of central and western Anatolia during the Early Bronze Age. Feasting and drinking signal a wide spectrum of social relationships. In central and western Anatolia, these practices are identified, but remain largely undiscussed in current research. The topic is thus an open arena by which to examine the problem of how settlements were organised. In anthropological literature, food sharing has long been understood to reflect the intricate and complex relationships between individuals. Feasting and drinking condense these realities into discrete events. Who participates, what food and drink is consumed, and where events are held are a pointed commentary on the nature of social interaction, including social ranking. In Anatolia, these methods help identify structural elements that would remain undetected by examining only exchange, craft production, architecture, or other indices.

This study set out to identify drinking and feasting practices at Early Bronze Age sites across central and western Anatolia. It sought to understand how these activities reflected and may have impacted the complexity of settlements. This study reassessed drinking and feasting evidence from several sites. It identified the new drinking behaviours that were introduced in this period, including how vessels were handled and drunk from. At some sites, drinking vessel characteristics were used to clarify difficult chronology. Feasting events help to place drinking into a specific social context. In some cases, it was possible to determine whether feasting events were inclusive or exclusive, large or small, and intended to draw individuals together, or distinguish them. This information helped to explain the significance of drinking practices. It was also used to qualify the social interactions that are likely to have taken place.

This study was able to make a number of observations about EBA Anatolian communities through drinking and feasting evidence. Social relationships may be both competitive and cooperative, and drinking and feasting provide a setting where these features can often be distinguished. Material culture studies detail how the consumption of objects, including food and drink, are used to facilitate social relationships. Research in this area describes the different ways that individuals relate to one another. These concepts were used to construct a framework against which the drinking and feasting evidence from Anatolian settlements was compared. This framework described a range of different social relationships and objectives. These were assessed alongside settlement details such as architecture, craft production, and other features to assess how different Anatolian communities were organised during the period.

## i. Empirical findings

This study found that drinking vessels were a regular part of grave equipment in communities of the north-central region. Cups, bowls, and pitchers were deposited in most of the 'Royal' tombs at Alaca Höyük (Tables 3.1 and 3.2). They were deposited in graves at Resuloğlu and Kalinkaya necropolises in the form of small jugs or single-handled metal cups. Ceramic jugs were also placed in most of the graves containing grave goods at both Sariket and Küçükhöyük necropolises. This study confirmed that at Sariket and Küçükhöyük, jugs tended to be deposited singularly, one to each grave. Similarly, a single vessel was often associated with the deceased in the Alaca Höyük 'Royal' tombs (Chapter three). By identifying where in the 'Royal' tombs vessels were deposited, this analysis separated which were associated with the deceased, and which may have been used for other practices (see Table 3.3). This information was used to assess the significance of drinking practices, and the activities of mourners at graveside drinking and feasting events. Further, it was used to determine, at each site, whether drinking and feasting events could have served as a platform for establishing social and political influence.

At the sites examined, it was clear that access to special beverages was not exclusive to wealth. At Alaca Höyük, drinking vessels were placed within non-élite graves as they were within the 'Royal' tombs. In western Anatolia, EB II-III 'Complex' shapes were popular at settlements across the region. This study also found that at Sariket and Küçükhöyük necropolises, jugs were deposited in burials regardless of the presence of metal or other items, or the type of grave (Chapter five). Around half of the Sariket and Küçükhöyük graves contained no grave goods, suggesting that drink, like other objects, was not available to everyone. But drink was not exclusive to the most wealthy, because jugs were the object that was most likely to be deposited when goods were present. Jugs also were not correlated with features that could have been associated with wealth, such as the presence of metal or more costly tomb construction.

Instead, wealth differences are reflected in drinking vessel materials. The 'Royal' graves at Alaca Höyük contained drinking vessels of metal, while non-élite graves contained vessels of ceramic. Lead vessels at Sariket were not exclusive to the most wealthy graves, but they may have been used to distinguish some personalities. A suite of metal drinking vessels were probably in circulation in western Anatolia, judging from the few that are known (Schmidt 1902, 230-31, Nos. 5863, 5868; Renfrew 1967, 16, Pl. 10:a, 10:c; Muscarella 1974; Tolstikov and Treister 1996, 32-33).<sup>149</sup> To this may be added the lead bottles from Sariket (Baykal-Seeher and Seeher 1998),

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<sup>149</sup> Two additional metal two-handled cups may be added to this list. A silver *depas* is on-display at the British Museum in London, Item ME 132150, [http://www.britishmuseum.org/explore/highlights/highlight\\_objects/me/s/silver\\_two-handled\\_cup.aspx](http://www.britishmuseum.org/explore/highlights/highlight_objects/me/s/silver_two-handled_cup.aspx), last accessed 17th June 2014. A second metal two-

which were part of a wider exchange occurring across the Anatolian plateau (Zimmermann 2005, 2006a). Thus in each region, there were individuals and groups who used drink and drinking materials to advertise their higher status. They were not controlling access to these activities. Rather, they were referencing practices that were popular to individuals across the community.

Special beverages were not newly introduced in the EB II-III. Drinking was known from earlier periods, from the continuation of a number of drinking vessel shapes. In the west, askoi, pyxides, and Urfinis sauceboats precede the EB II-III and demonstrate early connections between Anatolia and the Aegean (Chapter six). On the north-central plateau, depositing a single vessel near to the deceased in graves, whether or not for 'one last drink', was an existing practice. At Alaca Höyük, Kalınkaya, Sarıket, and Küçükhöyük, it is demonstrated from at least the start of the EB II (Chapters three, four, and five). This explains why drinking vessels were not exclusive in the EB II-III, though wealth is reflected in the materials that were used to produce them. Drinking special beverages was already known to Anatolian community members. It was a longstanding practice, which was elaborated in the use of different materials but had long been a familiar and well-regarded act within settlements.

New drinking shapes appear from the EB II-III across both of the regions investigated in this thesis. In both western Anatolia and the north-central plateau, these new practices are distinctive, but independently developed. Double-handled tankards are a new form that emerges in western Anatolia from the EB II, and are adopted at sites across the region (Chapter six). This study found that they remained popular for a very long period, only at the end of which saw the vessels finely burnished and polished. The north-central region does not need to look to the west for its drinking practices. Small, single-handled cups and bowls far overshadow the two or three ceramic double-handled cups that are known from Resuloğlu (Yıldırım 2006, Fig. 11) and atop Alaca Höyük Tomb L (Koşay, Ünal, and Çızgen 1967, 171, 212; Chapters three and four). These and other vessels are uniquely north-central in their shape. The tulip-shaped wheelmade goblets that are smashed at Alaca Höyük Building E are not found in the west. The wheelmade flaring cups from Alaca Höyük non-élite Grave FIII are paralleled locally at Böğazköy NW-slope 9 (Orthmann 1963, Pl. 61; Gürsan-Salzman 1992, 266, Pl. 2.2), where their bases are sometimes shaved to a point (Schoop 2009b, Fig. 3B). Across Anatolia, it is popular to drink from vessels that cannot be placed down. But it is the sentiment that travels, not the shapes, which are specific to each region and not commonly shared between them.

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handled cup, reportedly of silver, was also traded at Christie's auction house in London on the 25th October, 2012. <http://www.christies.com/lotfinder/ancient-art-antiquities/a-trojan-silver-depas-cup-troy-early-5609593-details.aspx>, last accessed 17th June 2014. There is no provenance or contextual information available for either of these vessels.

These new drinking shapes do not mark the introduction of new beverages. But they may reflect new ways of drinking, or changes to how special beverages are produced. Perhaps drink had become more affordable, palatable, or widespread. Drinking now involved special handling and physical gestures. Metal drinking bowls from Horoztepe and Alaca Höyük seem to have been balanced upon fingertips, like the single-handled cup from Resuloğlu Grave M141 (Zimmermann and Yıldırım 2007, Fig. 4; Chapter four). This analysis identified several versions of these shapes in ceramic, from Ahlatlıbel and from graves at Sariket. By sampling both metal and ceramic drinking materials, this study gained a more representative view of drinking practices. It established that metal and ceramic single-handled cups had a similar volume capacity (Chapter four). Thus drinking from metal and ceramic vessels was done in a similar way, and possibly at a similar rate. Yet graves did not consistently feature both a vessel for pouring and a vessel for drinking. Thus pouring or other drinking acts were not a standard grave practice. Cups, bowls, and other implements were also not standardised. Though the same shapes were found at different sites, and were of very similar dimensions, they were not exactly identical. Instead they were similar instruments, intended for practices that were well-recognised across the region.

These new vessels are also designed for sharing drink together with others. In the west, the *depas amphikypellon* is a communal drinking vessel. From its symmetrical handles and pointed base, the vessel is intended for passing, a reciprocity that would have been difficult to slow or to cease. On the north-central plateau, single-handled cups and shallow bowls might have been used for short 'toasts' or 'shots'. This transforms consumption into a pointed, finite, temporally-specific act to be experienced together with others. It joins participants to one another, across the physical limitations of their bodies to a realm that is accessed by the special properties of drink. This *synchronised consumption* (c.f. Douglas and Isherwood 1979, 124-27) connects individuals in a cooperative manner, as they consume the same products, at the same time. This objective is also recognised in drinking from the *depas* in the west. Both vessels structure the experience of drinking so that each participant is included, and so that the experience progresses at the same rate. As participants share food and drink, they internalise the social relationships that are present, and also the meaning of the event. These processes may be used to establish a range of different social relationships and objectives.

New drinking shapes may thus reflect a change in the social use of drinking. It was now popular to share food and drink at feasting events. In western Anatolia, the EB II-III 'Complex' of *depatas*, tankards, and wheelmade plates were choice equipment for a new, popular practice. On the north-central plateau, the Alaca Höyük 'Royal' tombs give ample evidence of graveside feasting upon cattle and other species. The significance of these activities would have been

different at each site. This is because of the range of functions that drinking and feasting together may serve, met by the different social relationships in each setting. Identifying the different uses for food and drink at each site provides a way to reconstruct these different social relationships. This illustrates a range of options for how Anatolian communities were organised.

At some sites, drinking and feasting were used to demonstrate social distance. This is observed in both central and western Anatolia. Both the 'Royal' tombs at Alaca Höyük and the 'Treasures' of Troy IIg contained a substantial amount of objects of precious metal. This indicates that at both settlements, some individuals had significantly more wealth than others within the community. The precocious metalworking advances (Yalçın 2011) and complex décor of these pieces are appropriate to diacritical expressions of wealth, or displays of wealth between affluent peers (Dietler 1996, 98-99). Depositing these objects within the 'Royal' Alaca Höyük graves or at the Troy II citadel would have been a visible, advertised, and conspicuous consumption in order to accumulate cultural capital. The special handling of cups, bowls, and other drinking vessels may also have communicated membership within élite circles. By demonstrating special knowledge, this handling would have distinguished some individuals as having more influence and status than others. These acts, together with monumental architecture at the Troy citadel and the 'theatre-like' display of tombs at Alaca Höyük, would have served to legitimate a central élite.

Neither of these settings was exclusive. At Alaca Höyük, feasting events at the 'Royal' tombs involved a large number of people. This study found that the number of cattle butchered at the tombs would have yielded enough meat to feed the entire community. Even distributing this meat afterwards would have advertised that 'Royal' hosts were spending resources on a grand scale. Drinking events at Troy II were also large in scale. Pit 17 at the Troy IIc citadel featured the fragments of as many as seventy-seven wheelmade plates (Blegen et al. 1950, 293). Even if the plates were deposited over several events, an additional twenty-one pits at the citadel regularly contained animal bone and drinking vessels (Chapter six). More pits are sure to have existed at the site (Blegen et al. 1950, 279). The entire citadel seems to have been used for feasting, over a wide area, and regularly over the course of Period IId.

Yet feasts that are open and participatory need not be less competitive. An open participation may mask more exclusive, conflict-oriented objectives (Hayden 1996, 130). Feasts may also attract a large audience in order to advertise the status of hosts, or provide a platform for competing individuals and groups. At Troy, Bachhuber (2009, 10, 12) suggests that the 'Treasures' of IIg were not hoarded, but were publicly deposited. This does well to move the discussion of the Treasures beyond a dramatic invasion narrative. It also demonstrates how public events may be reframed as potentially competitive. This observation may be extrapolated to other

settings in which precious metal vessels were deposited, such as at Alaca Höyük, Horoztepe, Resuloğlu, and possibly the votive pit at Külliüoba. At each of these settings, objects may have been used up and consumed before an audience, and for similar, competitive purposes.

This competition may be viewed in functional terms, especially if it was done before the wider community. Rather than regarding conspicuous consumption as enforcing an unequal relationship by one all-powerful group, the practice may be a means of selecting community leaders. Costly-signaling theory (Neiman 1997; Plourde 2008) interprets the use, display, and destruction of objects as demonstrating that individuals have access to resources, and may therefore serve as effective rulers. This signaling allows them to centralised resources, including exchange networks. This is a much simpler explanation than that which interprets wealth deposition as serving to interrupt gift-exchange and making indebted relationships permanent (Voutsaki 1997; Bachhuber 2009, 10). It also attributes a greater role to the wider community. Demonstrations of wealth at the Troy II citadel or the Alaca Höyük 'Royal' tombs thus involve the community because they play a key role in selecting leaders. Wider support may also be necessary for these individuals to maintain power. The community is not a captive audience being compelled to provide tribute or to accept a lower status position. Rather, they are an integral part of the process by which individuals and groups compete for and attain power and influence within settlements.

This study also recognises that consumption may be used by groups aspiring for power. In theory, any group with wealth to spend may use feasting events as a setting in which to publicly consume it, and thereby generate social capital. This includes groups competing against one another, engaged in factional competition (Brumfiel 1989, 1994). Factions may be competing elite groups. They may also be more emergent groups, for instance ambitious families or kin-groups. The only requiring factor is that these groups are first able to generate surplus, which allows them to conspicuously spend resources. In this scenario, the Alaca Höyük 'Royal' tombs or the Troy II citadel would have been venues for different groups to appeal for support from the community. The slaughter of large numbers of cattle and other species would have demonstrated the legitimacy of groups to compete. Feasting activities may even have occurred within the tombs themselves. This study found that in a few of the Alaca 'Royal' tombs, butchered animal bone was deposited alongside drinking vessels, before the tomb was closed (Chapter three). Again, depositing metal drinking vessels and provisioning meat and drink are an effective way to demonstrate status and access to resources. Brought into the tomb, these acts are connected to the lineage of specific families, groups, or clans. This may have provided the basis for groups to differentiate themselves and accrue supporters.

Amongst the settlements that were examined, factional competition is not better supported than other forms of organisation. There is no clear indication of different, competing groups at any site. Gürsan-Salzman (1992, 136) detects two different 'levels' of élite at Alaca Höyük. Yet this distinction is based upon the number of objects within the tombs, and is neither clear nor reliable. At no other site examined in this thesis did excavators comment upon whether or not different groups used feasts to compete with one another. This is not to say that factions could not have existed. They are often difficult to identify owing to their catch-all recruitment strategies, similar organisational structure, and their use of common iconography (Bujra 1973, 136-38). On the north-central plateau, bull and stag iconography is prevalent at many sites, including Alaca Höyük, Horoztepe, Kalınkaya, and Resuloğlu. Different groups may have demonstrated their legitimacy by repeating these symbols, in an attempt to align themselves with the ritual beliefs of the community. Yet it is not possible to detect the presence of different groups from the use of this iconography alone.

Factional competition also does not change the reasons for which feasting events would have been held. However, opening competition to different groups offers an alternative explanation for feasting at sites where centralisation is less certain. In either scenario, feasting may have been competitive in nature. Factions draw attention to different *forms* of competition, between different élite groups rather than different élite members. Factions also emphasise the role of the community. A strong, centralised and all-encompassing ruling group may host feasts to reward or secure community loyalty through gifts. This reifies status differences. Factions also pander to the community, and are concerned with rewarding and securing loyalty. Yet the role of factions is more dependent upon the community, who would otherwise switch their support to other competitors. Factions remind us that competitive feasting may involve different élite groups, rather than one central group. Factions also illustrate that social complexity is not wholly measured by political centralisation.

From the evidence, some settlements were more centralised than others. In more than a few cases, drinking and feasting practices helped to clarify the nature of these differences. Troy and Alaca Höyük provide the best case for centralisation from their architecture and specialised craft production. There is little direct evidence of administration, though personal aggrandisement points to the presence of influential personalities or groups. Küllüoba would seem to have featured an administrative centre from the extensive complex II (Efe and Fidan 2008). A lack of direct evidence for administration in the form of seals or writing is matched by the ceremonial rooms at complex II. These rooms and the drinking equipment associated with them suggest that feasting events at the complex served to legitimate some élite personalities. Liman Tepe would

seem to have featured a central authority, judging from the intermediary reports of its architectural features (Erkanal 1999; 2008, 182). Yet a lack of extensive architectural plans for the site mean that these claims must await further research. At six hectares, Liman Tepe is the same size as Karataş (Çevik 2007, 135), which is described as a village by Warner (1994). Karataş housed less than seven hundred people (Warner 1994, 177). Its central structure points to some degree of centralisation. However, in Chapter six, this analysis argued that the citadel is more likely to have functioned for storage than for housing a central élite.

It is unclear if élite aggrandisement at other EBA Anatolian sites reached the height that it did at Troy and Alaca Höyük. No elaborate metal vessels have been reported from Küllüoba, Liman Tepe, or Karataş. Yet metal products were familiar throughout the region. Small finds from Küllüoba and Karataş indicate that craftsmanship was advanced, and that a market existed for these products (Warner 1994, Pl. 187: KA 445, Pl. 189: KA 754; Efe 2006; see also Efe and Fidan 2006).<sup>150</sup> Yet the presence of metal is not enough to indicate that communities were characterised by social ranking or wealth inequality. The use of objects might not have been the same at all sites. For instance, lead bottles (Baykal-Seeher and Seeher 1998) were iconic containers for oils or other products that were being traded across the plateau (Goldman 1956, 302; Zimmermann 2005, 164). At Demircihöyük settlement, one lead bottle was physically altered in order to make the vessel conform to local preferences and uses.<sup>151</sup> Regardless of its role in a wider exchange, at Demircihöyük the vessel was adapted to the uses of the local community.

Similarly, the adoption and use of drinking equipment and drinking and feasting practices is sure to have varied across different sites. In the west, the use of depata and large A1 platters was popular. Within some communities, these practices demonstrated prestige and social distance. In others, these shapes may have been used for drinking in different settings, or within a wider range of settings. At Karataş, EB II-III 'Complex' shapes were used for drinking at the centre of the settlement, and also in domestic settings (Chapter six). This study pointed out that drinking could be done in different ways between these areas. Presumably it was also being done for different reasons. Drinking in domestic settings might have involved competition within kin-groups, or have been communal in nature. Domestic contexts have yet to be explored at Troy, Küllüoba, Liman Tepe, and other sites. It is therefore difficult to assess the significance or the availability of drink across each entire site. To account for different possibilities, space was left within the interpretation for drink at these sites to have been used in different ways.

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<sup>150</sup> A bronze flat axe was found embedded in one of the EB II mudbrick walls at Küllüoba. The excavators interpreted the axe as a votive offering. Per the report of the 2005 excavations at the site, page 29 and Figure 38: <http://www.kulluobakazisi.bilecik.edu.tr>. Last accessed 17th February 2014.

<sup>151</sup> Jürgen Seeher, personal communication, 4th October 2011.



This study also emphasises that the extent to which settlements were centralised probably changed over time. The citadel at Troy was destroyed and rebuilt on several occasions throughout the second settlement. While this has been attributed to outside forces (Schliemann 1880, 454; Blegen et al. 1950, 366-67; Bittel 1959, 19; Bryce 2006, 51-52), it may also be the result of internal developments. Bachhuber (2009) has already reframed the 'Treasures' of Period IIg within the context of a changing political system, which is now characterised by an intensifying personal aggrandisement. We can expand upon this point and suggest that the destructions at the citadel may correspond to the rule of different leaders. As with Edmund Leach's (1970) *gumsa* societies of highland Burma, the settlement may have alternated between rule by different groups or individuals. From the emphasis upon personal aggrandisement at Troy, it is likely that most of these leaders would have advocated a hierarchical form of governance. Some of these different groups may have been more centralised than others. This may explain why EBA Anatolian settlements give no evidence for a central administration. There may be a central élite at these sites, but no single group that consistently holds power. In this scenario, there may have been little use in developing a system of central goods storage. Such a system would need to be replaced or reconfigured each time a new group came into power.

Perhaps it is the question that needs adjusting. Social complexity continues to be measured by the presence of writing, and the intensive use of seals, which point to political centralisation. From the evidence that is available, there is little support for a central administration at these sites. Yet complexity is evident through craft specialisation, monumental architecture, and various other forms of élite aggrandisement. Specialised craftsmen catered to a demand for high-quality metal vessels, jewellery, ceremonial weapons, and other implements. This also encouraged an exchange for foreign materials. In Chapter six, this study detailed that exchange between the Aegean and western Anatolia was already taking place prior to the EB II-III. This was probably through the neighbouring Cyclades, and possibly the island of Lemnos to the northwest. As today, different areas of the islands probably facilitated exchange in different directions. Even before the EB II, this exchange featured materials for drinking and feasting. These activities had long been a means of advertising status and prestige. Their use intensified over the course of the EB II-III alongside other materials for personal aggrandisement. Together with craftsmanship and exchange, these developments demonstrate sociocultural transformations and intricacy in social organisation through the presence of a range of different social relationships. Ultimately, they do not result in communities that were centralised or that featured an all-encompassing central entity. Yet this does not mean that these societies were any less complex in their operation.

In the end, centralisation may not be what we should expect for Anatolia during the later stages of the Early Bronze Age. The unique landscape, resources, cultural beliefs, and settlement history of central and western Anatolia may not have suited the large, centralised administrative complexes of cities farther east. This is supported by research in the Aegean. Kouka (2002) has identified that a complex social organisation was present in the northeast Aegean during the same period. She points to public buildings, monumental architecture, intensifying exchange, and other developments. She does not cite any evidence for writing or the intensive use of seals. It seems that communities in both areas were becoming more complex, but in a way that did not require the centralised control of resources and recorded inventories. This does not need to indicate that complexity was incipient or underdeveloped. It may simply mean that complexity should be characterised in a different way. The term, 'chiefdom' is problematic because it implies that organisation within these communities was still emerging. Use of the term is now too broad to be of much analytical value (Yoffee 1993). Organisation in central and western Anatolia may also have involved a different unit of analysis altogether. As Lewthwaite (1981, 14) suggests, the organisational component in the Aegean may have been "clans, not classes... even in the presence of ards, polyculture, irrigation, and seagoing boats." To this we may add metallurgy, monumental architecture, and aggrandisement displays at drinking and feasting events.

Central complexes may have functioned for purposes other than housing a central élite or administrative centre. This helps to envision different possibilities for how communities may have been organised. At some sites, they may have served a primarily economic or storage function. At the House of the Tiles at Lerna, Weingarten (1997, 61) suggests that it was a small group of community members that contributed goods to the storeroom. They could have been the heads of local families, based either within or outwith Lerna settlement proper. Similarly, the central citadel at Karataş featured several clay-lined pits for storage within its lower courses (Eslick 1988, 33-34). The structure may have been used for occasional or seasonal exchange. Goods held at the central complex may still have been centrally managed. But this organisation may have taken a form other than that of one foremost or primary figure or group.

The monumental architecture at Troy provides some of the best evidence for a central authority in the west. The citadel features several large buildings, which Düring (2011a, 284) suggests served a number of purposes besides that of an élite residence. This includes workshops and storage for goods exchange, as well as entertainment spaces. Aside from a storage function, these spaces may have served as a platform for élite competition. The citadel would have provided a dramatic setting for drinking and feasting events such as at the Ilc Ledge and the 'Pits' of IId. If leadership shifted over the course of the second settlement, feasting and drinking may

have been central to the process of establishing and authenticating influence. This could have been on the part of one group, or many groups. Again, the citadel served an economic function. But instead of a monument for maintaining permanent authority, its role may have included the process of vying for and negotiating status.

Complex II at Küllüoba also comprises facilities for storage along with spaces for ceremonial or entertainment purposes. The complex includes storerooms with in-situ pithoi as well as, in both phases examined here, a large megaron with central hearth (Efe and Fidan 2008). Here, an administrative function seems more apparent because these functions were combined in a single, central structure. Again, there is no direct evidence that resources were managed or controlled. Yet ritual and exchange activities provide any number of ways for individuals to achieve status. This includes gift exchange between influential élites, and displaying goods in order to demonstrate social distance. Resources could be strategically allocated to supporters, or flaunted as wealth at diacritical feasts. As at Troy, the problem may be that these activities are assumed to be permanent and stable. Exchange activities may be seasonal. Ritual and ceremonial events may become more frequent during times of stress, including climatic or agricultural fluctuations. Complex II probably fulfilled each of these roles at different times. These roles may also have been more or less effective at different points.

## ii. Theoretical implications

This study is the first to investigate EBA feasting and drinking activities in Anatolia across different sites of the period. It uses feasting and drinking to address the issue of how central and western Anatolian communities were organised. While the evidence for these practices is limited, approaching Anatolian communities through food and drink may advance scholarship within several areas of research. This includes the social organisation of these regions, as well as how social complexity is investigated in research. This thesis is innovative in its focus upon social practices. Both food and drink and social theory have been under-theorised in discussions of Anatolian social development. They present a promising avenue for future research, including how social complexity is investigated in societies where only a limited amount of information is available. This thesis also contributes to a more detailed understanding of EBA Anatolia, along with a growing number of other studies (Kouka 2002, 2011; Genz 2002, 2003; Çalış-Sazci 2007; Çevik 2007; Efe 2002, 2007; Bachhuber 2009, 2011; Yılmaz 2009; Rahmstorf 2010; Ünlüsoy 2006, 2011; Düring 2011b; Schoop 2011). Together, this research emphasises the unique history and culture of the region, and the position of Anatolia in relation to the Near East and Aegean. It may be used to develop an explanation of Anatolian social

development that is specific to the region. By doing so, this process also identifies areas where social complexity research can be improved.

This work introduces a focus upon the consumption of goods. It considers food and drink for the reasons that individuals would use them, in addition to how they are produced and exchanged. As a result it avoids explaining Anatolian social organisation by only referencing whether products were rare or difficult to produce. This leaves room for evidence to be interpreted in a number of different ways, and ensures that this interpretation may be adjusted as research continues. The benefits of this approach are most clearly seen with metal. Schoop (2011, 35-36) recently argued that the role of metal is overemphasised in EBA Anatolian social organisation. He points out that while élites are likely to attain or possess metal objects, there is little evidence that they controlled metal production. Metal signals élite consumption, but not political control within settlements.

Applied to food and drink, a consumption perspective focuses upon why individuals drink and eat together, rather than which special beverages are consumed. Individuals share food and drink, and take up drinking vessels, for a variety of reasons. These choices impact how individuals perceive and interact in the world, which is a main tenet of material culture studies (Chapter two). This approach recognises the different forms of social interaction that characterise human social relationships. It avoids equating certain drinks or materials with specific social relationships. Consumption also impacts, and is affected by, production and exchange. It should therefore be considered alongside these processes, rather than directed by them. This helps to assess how material from prehistoric communities was used, and leads to a better understanding of how communities operated. It is not limited to feasts, drinking, and metal, but may also be applied to prestige goods, stamp seals, pottery production, and other indices.

This study evaluated drinking and feasting evidence in a way that was open to different perspectives. The 'open models' allowed different approaches to social complexity to be compared. They also acknowledged that objects could be used in different ways. This meant that evidence could be interpreted according to the explanation that best fit the data. A range of approaches also meant that the way that complexity or feasting was interpreted could draw from different perspectives. For instance, this study found very little evidence to support that sites were controlled by a central élite and administration. Yet it does not discount that the organisation of sites could be top-down or hierarchical, or that certain activities could be motivated as such. Sites may be hierarchical but operate differently, or involve different processes.

Interpretation could also vary between settlements. The open models drew attention to the different ways that communities could be organised. This provided a way to evaluate and

discuss them together, within either region and also across Anatolia. Within communities, social relationships vary considerably. A material culture perspective took this into account, and allowed it to be applied on a finer scale, for instance at individual feasting events. This left room for social relationships to be explained in different ways, and for these perspectives to be adjusted as new research is presented. In Anatolia, a number of sites have yet to be fully excavated and published. This includes Küllüoba and Liman Tepe, and the lower city at Troy, amongst others. The EBA settlement at Alaca Höyük has recently become the focus of renewed excavations.<sup>152</sup> Other sites such as Seyitömer Höyük, Bademağacı, Harmanören, Bakla Tepe, and Panaz Tepe have also yet to be published in detail. As research continues in these regions, attention should be paid to collecting data about the size and character of different groups. This thesis drew attention to the role of individual social relationships and group membership in impacting community social organisation. Ultimately, it is detail about these aspects of communities that may better explain the organisation and operation of sites.

This work could not be a comprehensive catalogue of all drinking vessels of the period and also provide a complete analysis of drinking and feasting contexts. Instead it focused upon specific sites and vessels where feasting and drinking had already been reported. As a result it examined material from several sites across two vast regions. This is only able to achieve a broad overview of drinking and feasting practices of the period. Yet this study treated the evidence from these sites in great depth. Troy, Alaca Höyük, and Demircihöyük-Sarıket provide a great deal of information about drinking acts. These sites yielded a great amount of quantitative data, such as how much meat and drink might have been deposited and how many vessels in different contexts. These sites also provided much material that could be qualitatively assessed, for instance drinking shapes and decoration, and how vessels were manoeuvred. These observations could be checked against the evidence from other, smaller sites such as Resuloğlu, Karataş, and Küçükhöyük necropolis. Finally, this study sampled material from both mortuary and living contexts. As above, it also examined material composed of ceramic as well as metal. By including evidence from different settings and across different materials, this study obtained a more representative view of drinking practices. This is in addition to its sampling evidence from a number of regional sites.

It would have been ideal to investigate EBA drinking and feasting alongside archaeobotanical and archaeochemical evidence for beer, wine, or other beverages. Considering

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<sup>152</sup> Per <http://www.hurriyetdailynews.com/traces-from-millennia-ago-sought-in-central-anatolias-alacahoyuk.aspx?pageID=238&nID=48542&NewsCatID=375>. Hurriyet Daily News, 11th June 2013 (no author). last accessed 2nd May 2014.

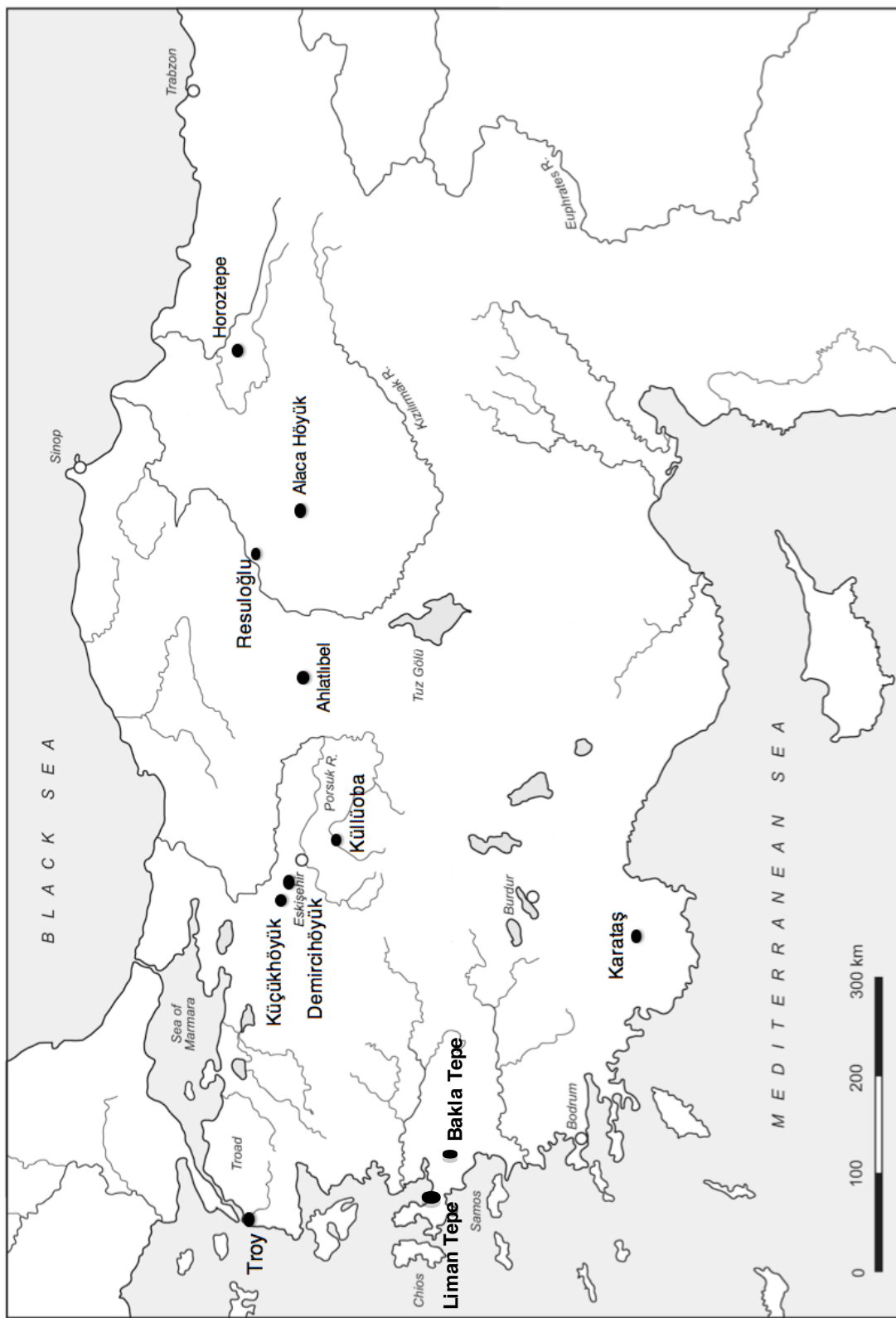
this evidence together would have resulted in a much more informed analysis of drinking practices. To date, there has been no extensive study of the production of special beverages in EBA Anatolia. There has also been no investigation of the chemical identification of special beverages within period drinking vessels. This information would reveal which drinks were known at the time, and also how they were being produced and stored. It may also indicate how far special beverages could be transported, if any detail about their ingredients may be discerned. This could reveal whether an exchange or distribution of special beverages was possible. It also has the potential to reveal a great deal more about the social relationships within Anatolian communities. More information on drinks production would specify whether different drinks were being produced at different sites, or in different areas of sites. It may reveal whether certain drinks were consumed using specific vessels. This may help determine whether different members of the population had access to the same drinks, or if certain groups displayed different drinking habits.

As research continues at EBA Anatolian settlements, an effort should be made to detect and analyse evidence for drinking and feasting. This includes detecting where feasting events may have been held, and whether drinking was practiced in different settings. One of the most important issues is documenting the finishing characteristics of EB II-III 'Complex' shapes in the west, such as fabric and slip. Understanding how this ware develops over the course of the EB II-III may reveal over how long a period drinking shapes were in use. As explained in Chapter six, this has important chronological implications for when western communities become more complex. It is also of interest whether drinking vessels are a regular part of household assemblages, as they were at EB III Karataş (Eslick 2009). This may indicate to what extent drinking was known and available in settlements, and thus whether or not it was exclusive.

Future research at Anatolian settlements should also examine how feasting and drinking activities relate to food production, storage, and exchange. This includes which crops were used for special beverages, and whether feasting and drinking was provisioned outside of regular food production. Were specific foods reserved for feasts, or for feasting on particular occasions? When were feasts held? Were they associated with special events such as hunting activities, or did they more regularly occur, possibly in relation to the agricultural and ritual calendar? As with drinking vessels and residue analysis, this information may identify the different social groups within a community. It may also provide a better understanding of the competitive and cooperative relationships between them. Additional research will also result in greater insight into the process of interpreting the significance of social interactions using anthropological and sociological theory.

In central and western EBA Anatolia, drinking and feasting were practices that had long been popular within communities. These practices are as likely to be associated with community and celebration as with distinction and personal aggrandisement. This work uses the mutability of drinking and feasting as a tool for investigating the social complexity of both regions. This approach cannot hope to solve all of the issues in characterising Anatolian social organisation. Yet like polyculture in the Aegean (Renfrew 1972), it may further the discussion of this topic by presenting new ways of investigating how settlements functioned.

This work considers that understanding more about social relationships provides insight into the organisational structure of a society. It incorporates the issue of how individuals interact with one another to a discussion of the economic processes that are occurring within settlements. Schoop (2011, 37-38) has recently called for "an enlargement of our stock of economic data" in EBA Anatolia, and a "targeted search for structural changes therein." It is hoped that this thesis contributes to such objectives. Consumption was used as a means to better understand these economic processes. Viewing consumption as a measure of social participation allows more information to be drawn from the material culture of these communities. It allows objects and products to be considered for how they are used and moved within the community, in addition to their physical properties. Future research will clarify whether these methods are able to detect different forms of social interaction, as more evidence is brought to the table. If so, they may be applied to other prehistoric communities as a way to identify a wider array of social relationships. These relationships may then be assessed using a vast literature in social theory. For Anatolia, this may lead to a model of social development that is specific to the region, its culture, and its settlement history. Identifying new ways of understanding social participation is also sure to result in a better understanding of how social complexity develops altogether.



Map 1. Location of sites discussed in the text



# Appendix I. Figures

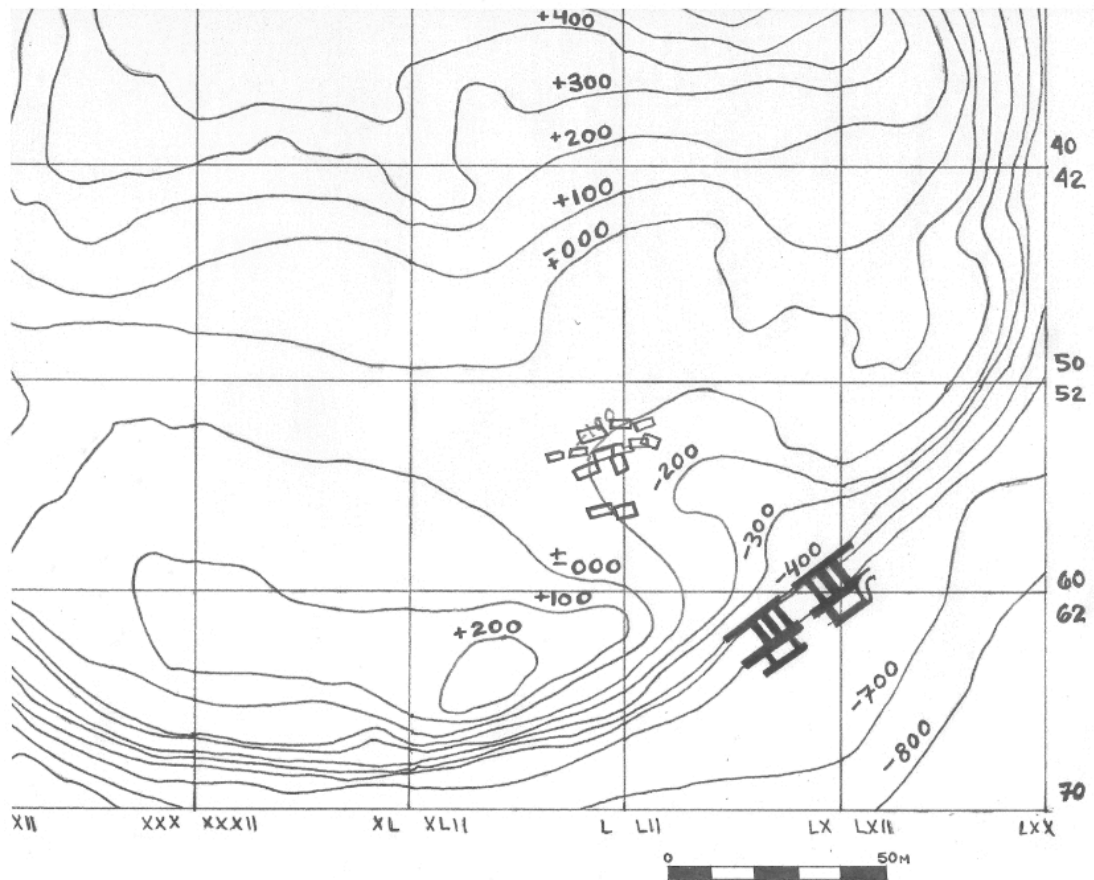


Figure 3.1. Location of the 'Royal' tombs superimposed on contours map of the Alaca Höyük site. Drawn by the author after Özyar 1999, Fig. 2.

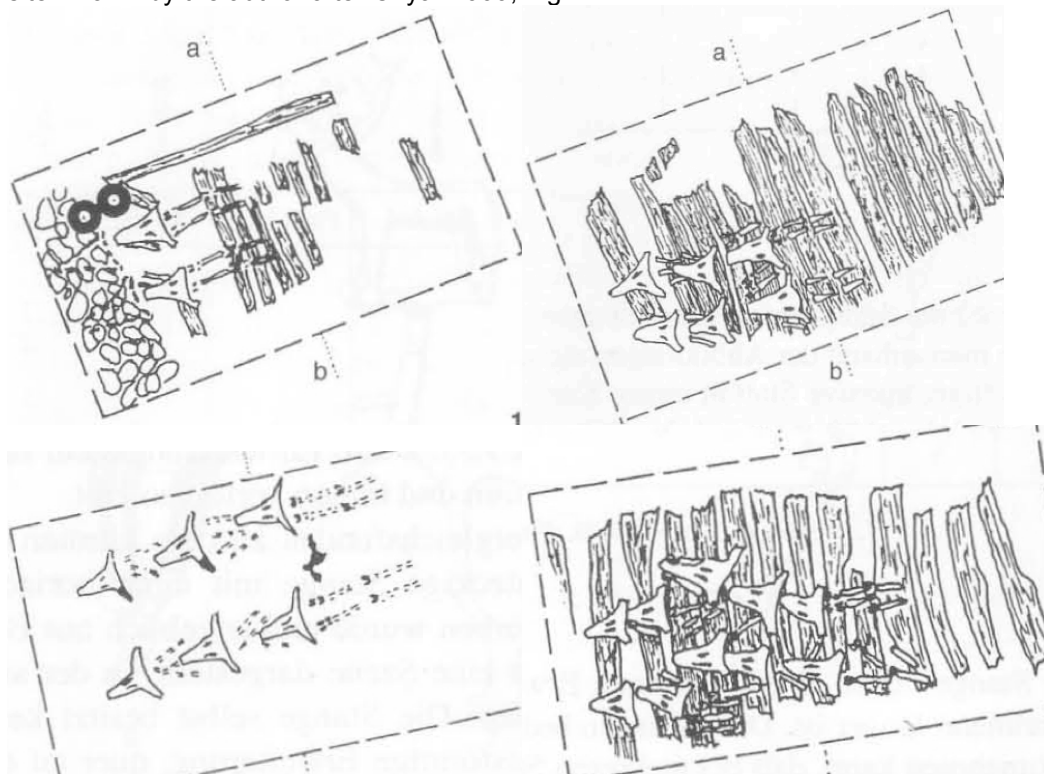




Figure 3.2. Pairs of cattle skulls and hooves arranged atop the roof or on the floor of six 'Royal' tombs. Left to right, top row: Tombs A and E. Middle: Tombs B and L. Bottom: Tombs R and L. Not to scale. Tombs A, E, B, L, R After Mansfeld 2001, Fig. 5. Tomb F: Koşay 1951, Pl. CLXVIII.

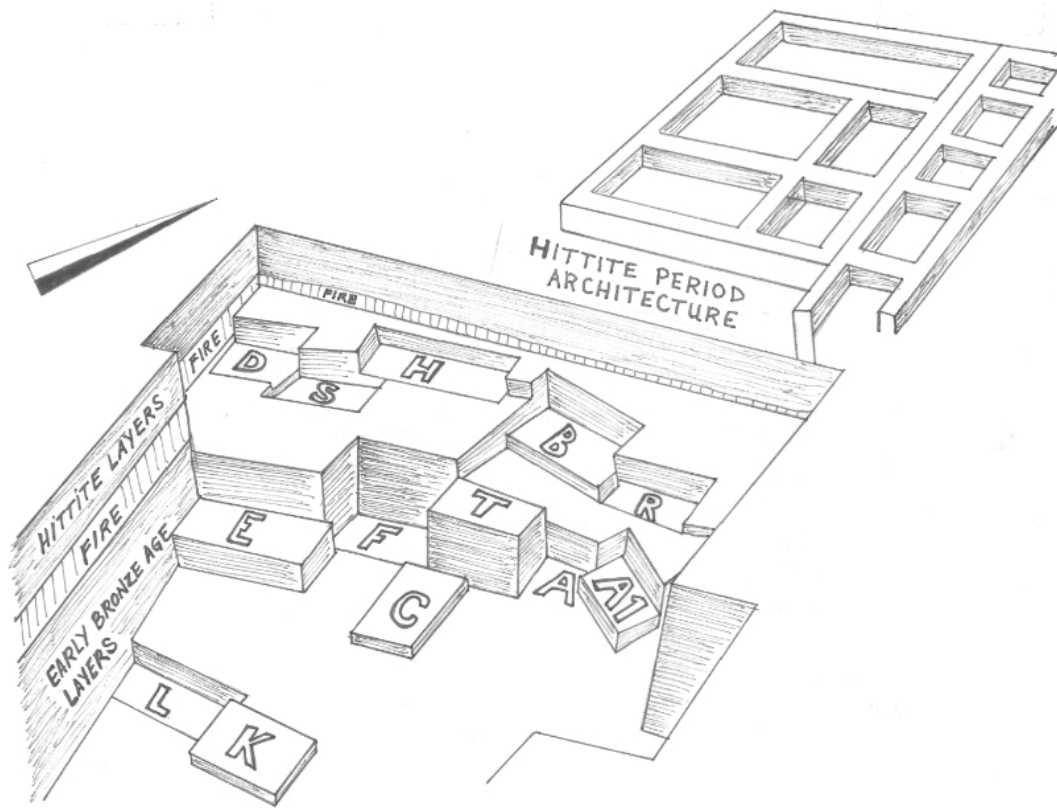


Figure 3.3. The 'Royal' tombs, dug into a hillside at the southeastern corner of the settlement. Drawn by the author after Koşay and Akok 1966, Pl. 137.

	<u>Building Level</u>	<u>Royal Tombs</u>	<u>Non-Royal Burials</u>
MB I	4	H	
	fire-----		
Transition	5	B,D,R,S	F III, FI, FII
	destr.-----		
EB III	(earthquake)		
	6	AA <sup>1</sup> ,C,E,T,T <sup>1</sup>	Sk. 18
	destr.-----	F,K,L, (dug from above destr. level into level 7	P1,P2
	7		
EB II	8		
ER I/Late	9		G1,G3
Chalco.	10		
	11		
	12		G2,G4
	15		

Figure 3.4. From Gürsan-Salzman 1992, 71. Alaca Höyük, stratigraphic relationship of tombs to building levels.

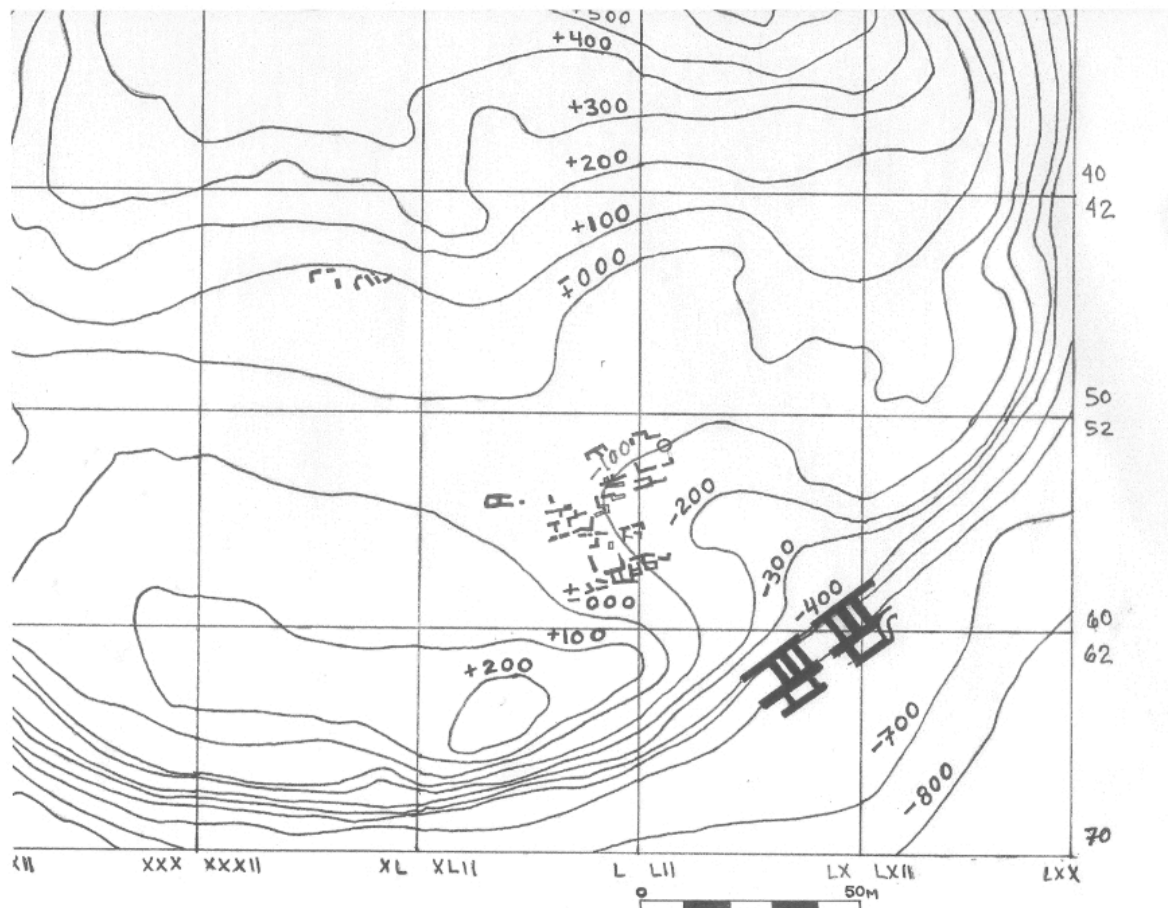


Figure 3.5. Reconstructed plan of architectural remains of Alaca Höyük Level 6. Drawn by the author after Gürsan-Salzman 1992, Plan IIIc, 386 and Özyar 1999, Fig. 2.

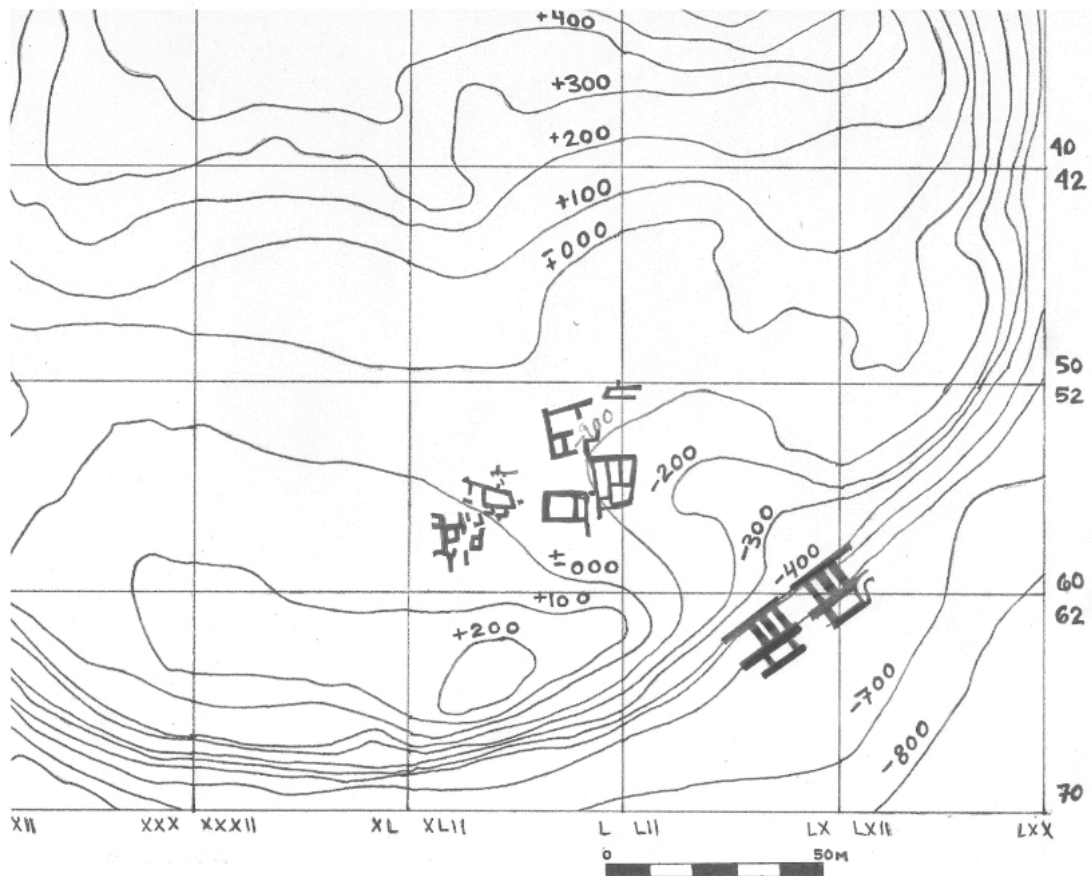


Figure 3.6. Reconstructed plan of architectural remains of Alaca Höyük Level 5. Drawn by the author after Gürsan-Salzmann 1992, Plan IIIb, 385 and Özyar 1999, Fig. 2.

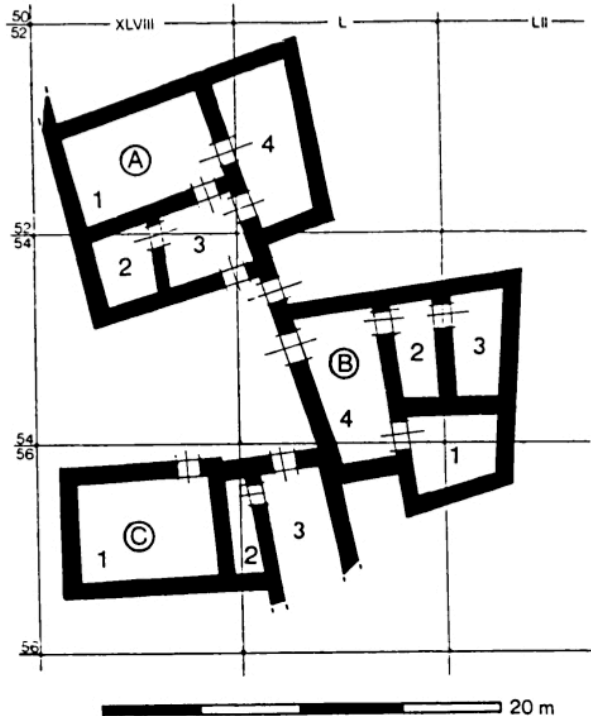


Figure 3.7. Complex ABC of Level 5, a non-domestic structure within the grounds of the 'Royal' necropolis. Koşay and Akok 1966, Pl. 137.

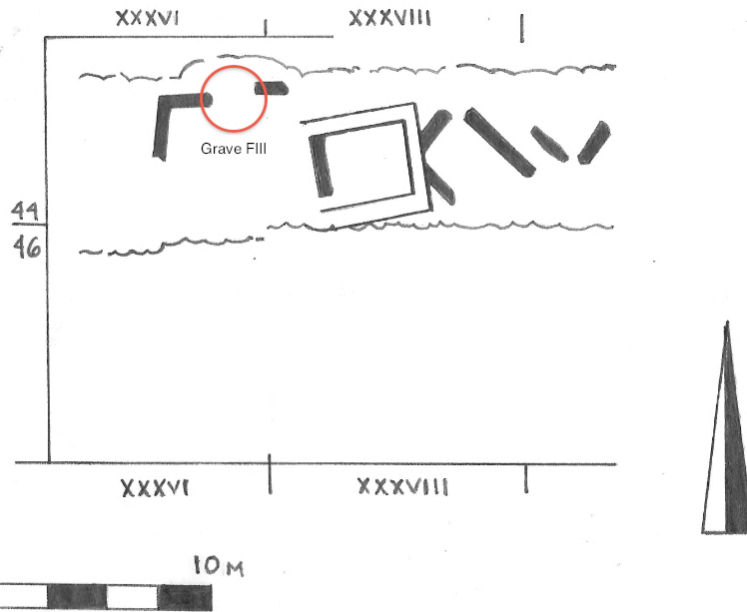


Figure 3.8. Building E of Level 5. The location of Grave FIII is marked in red and annotated. Drawn by the author after Koşay and Akok 1966, Fig. 146.

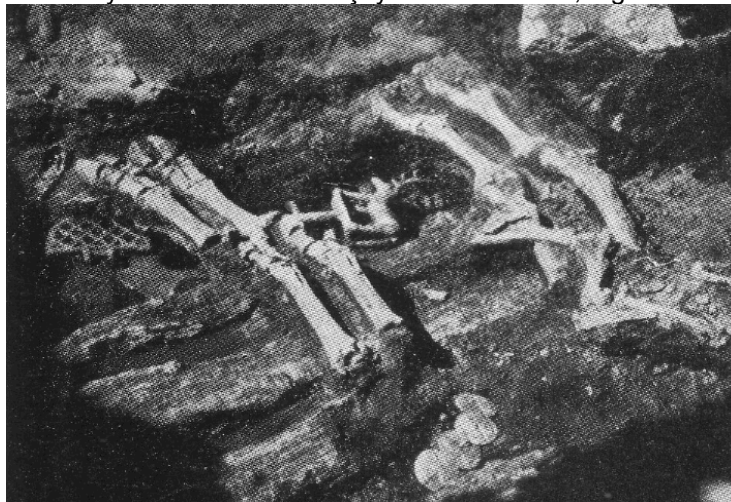


Figure 3.9. Cattle and goat bones atop Tomb A. Koşay 1944, Pl. LXII.

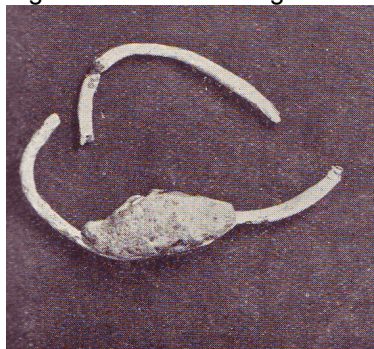


Figure 3.10. Ring found attached to the cattle skull within Tomb T. Arık 1937, Pl. CCLXXVII, No. 1106.



Figure 3.11. Standard Al. 656 from Tomb B featuring yoke-like implements around the necks of two bulls. Drawn by the author after the photograph in Arık 1937, Pl. CXC VII.

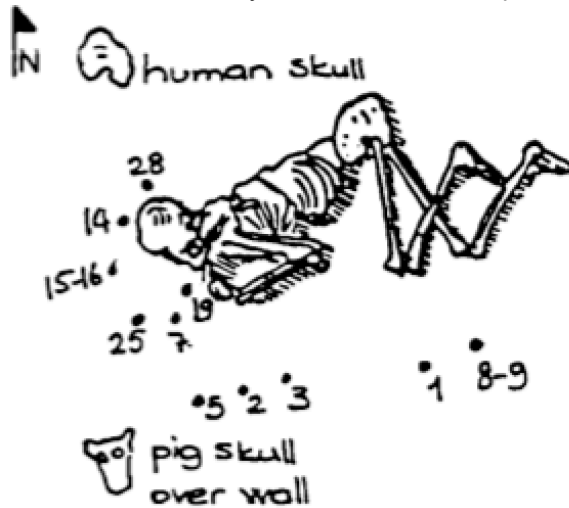


Figure 3.12. Tomb E, featuring "pig skull over wall". Not to scale. Gürsan-Salzman 1992, 85.

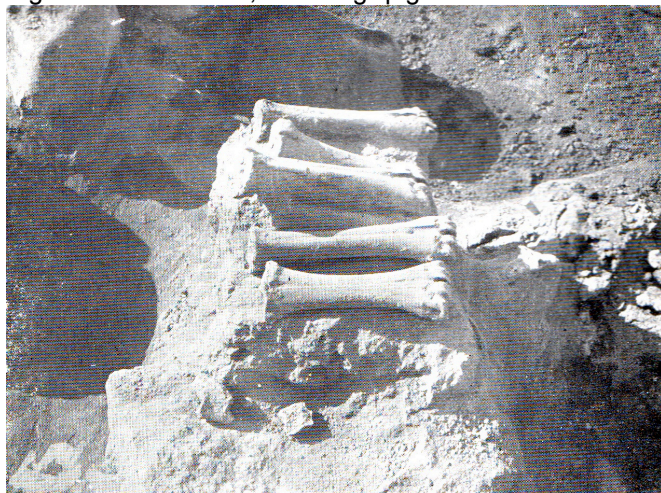


Figure 3.13. Bones of sacrificed animal, arranged in a row "in proximity to" Tomb D. Koşay 1951, Pl. CXLV.

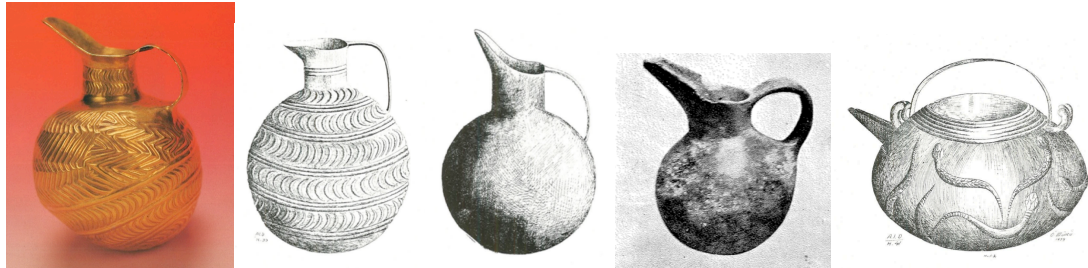


Figure 3.14. Jugs from Tomb K. Left to right: K1, K39, K40, K48, and K41. K48 is of ceramic, whilst K39, K40, and K41 are of silver. Koşay 1951, Pls. CLXXVI, CLXXVIII, CLXXIX; Toker and Öztürk 1992, 32, 183.



Figure 3.15. Goblets and bowls from Tomb K. Left to right: K4, K5, K3, K6, and K2. Koşay 1951, Pls. CLXXV, CLXXVII; Toker and Öztürk 1992, 42, 44, 50, 186, 189.



Figure 3.16. Bird-shaped rhyton L13, spoon L9, and cup L4 from Tomb L. An unnumbered plate was also found, and is pictured below. Koşay 1951, Pls. CXCVI, CXCVII; Toker and Öztürk 1992, 46, 60, 187, 192; Çınaroğlu 1989, Figs. 4-5.

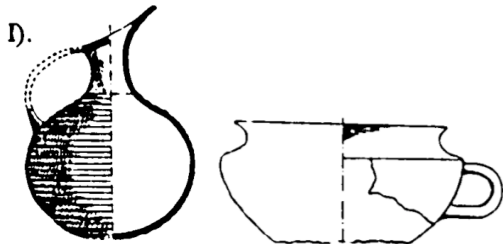


Figure 3.17. Jug MA75 and cup MA65 from Tomb A. Koşay 1938, Pl. LXXXVIII; Gürsan-Salzman 1992, 80.

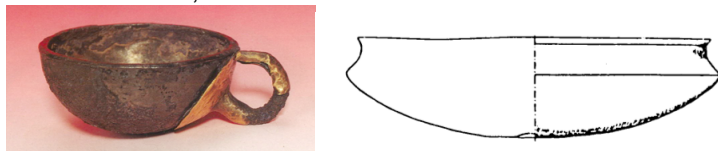


Figure 3.18. Cup MA36 and bowl MA8 from Tomb A1. Koşay 1938, Pls. XCII, XCIV; Gürsan-Salzman 1992, 82; Toker and Öztürk 1992, 47, 187.

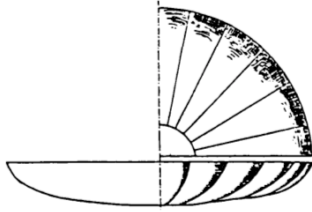


Figure 3.19. Bowl MC61 from Tomb C. Koşay 1938, Pl. CIV; Gürsan-Salzmann 1992, 84.

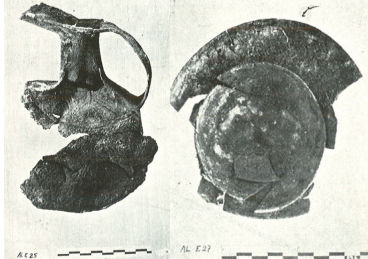


Figure 3.20. Jug E25, plate E27, and 'jar' E26 from Tomb E. Koşay 1951, Pls. CV, CLXV; Orthmann 1963, 143, Pl. 50: 11/114.



Figure 3.21. Five vessels are attributed to Tomb T. Metal cup T1745 was not photographed or drawn. At the far left is the possible shape of ceramic cup T1764, according to Gürsan-Salzmann (1992, 88) a carinated mug with strap handle. Additional fragments, from left, of T1829, T1828, and T1746 may have comprised additional vessels; T1829 is the most likely, but from its position in the tomb cannot be counted as such. In addition are jars T 1074 and T 1073. Arık 1937, Pls. CCLIV, CCLXVII, CCLXIX, CCLXXXVII, CCLXXXIX; Gürsan-Salzmann 1992, 88, 268, Pl. 7.9.



Figure 3.22. 'Bowl' Al.1085 from Tomb T1. Arık 1937, Pl. CCLVII.



Figure 3.23. Jug D8 from Tomb D. Koşay 1951, Pl. CXLVII; Toker and Öztürk 1992, 35, 184.



Figure 3.24. Jug S1 from Tomb S. Koşay 1951, Pl. CCIV; Toker and Öztürk 1992, 34, 184.





Figure 3.25. Vessels from Tomb B. From left: Al.242, Al.241, goblet stem (unnumbered), ceramic mugs Al.727 and Al.738, and ceramic bowl Al.726. Arık 1937, Pls. CLXIX, CLXXI, CCXI, CCXIII; Toker and Öztürk 30, 41, 45, 183, 185, 186.

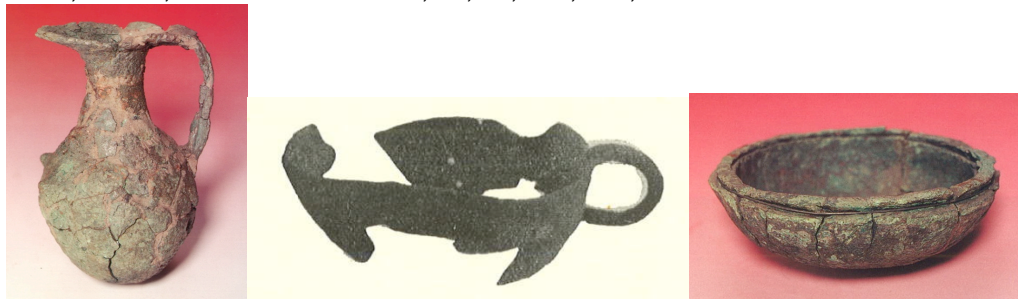


Figure 3.26. Jug Al.1082, metal cup Al.1083, and metal bowl Al.1084 from Tomb R. Arık 1937, Pls. CCXXXI, CCXXXIV, CCXXXV; Toker and Öztürk 1992, 37, 55, 184, 190.



Figure 3.27. Metal jugs from Tomb H. From left: H119, H120. Koşay 1951, Pl. CXXXII.

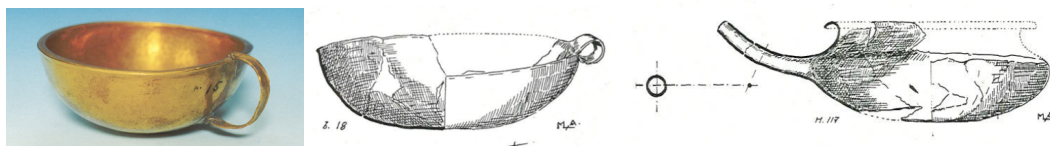


Figure 3.28. Cups from Tomb H. From left: H15, H18, and spouted cup, or 'ladle' H117. Koşay 1951, 157, CXXXI, CXXXIII; Toker and Öztürk 1992, 46, 187.

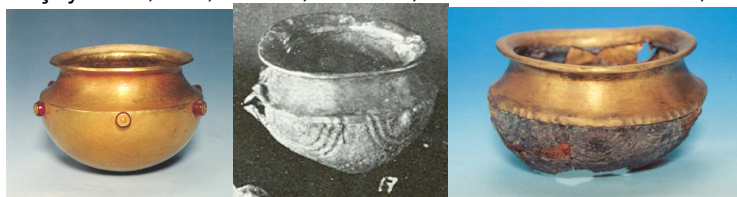


Figure 3.29. Necked vessels from Tomb H. From left: H16, and two images of H17, as it appeared within the original catalogue, and more recently. Koşay 1951, Pl. CXXXI; Toker and Öztürk 1992, 49, 51, 188-89.

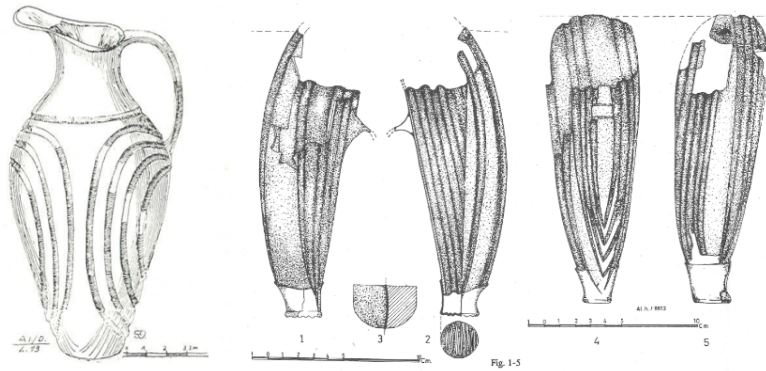


Figure 3.30. Vessel L13 from Tomb L was originally thought to be a beak-spouted jug (left). Its restoration revealed the object to be a bird-shaped convex vessel, or rhyton (right). Koşay 1951, Pl. CXCVI; Çınaroğlu 1989, Figs. 1-5.

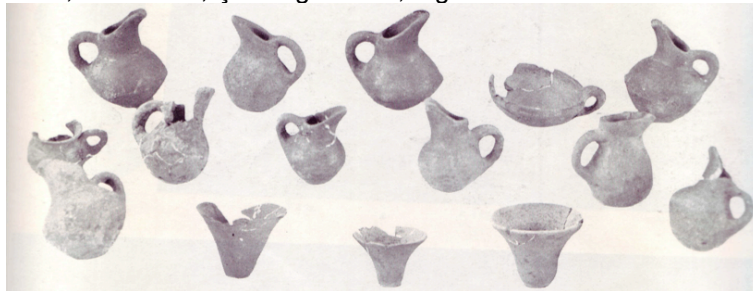


Figure 3.31. Vessels deposited within Non-élite Grave FIII. Includes ten beaked-spouted jugs, three wheelmade flaring cups, and two handled cups. Koşay and Akok 1966, Fig. 55. Not pictured is an anthropomorphic vessel and a buff wheelmade teapot.

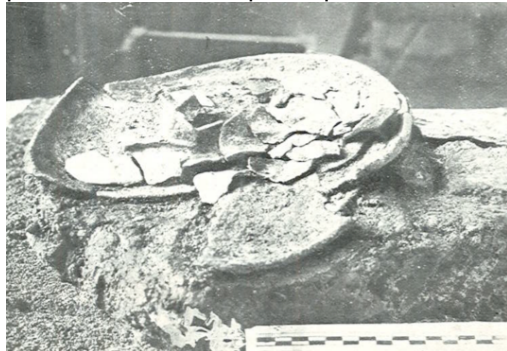


Figure 3.32. Unnumbered plate from Tomb L. Koşay 1951, Pl. CXCVI.

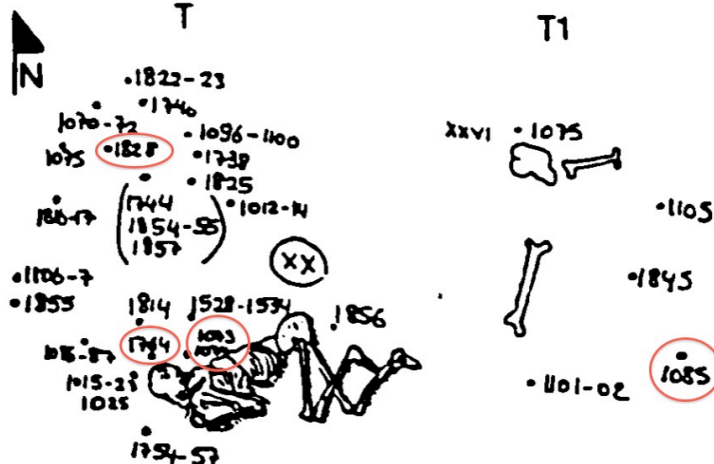


Figure 3.33. Tomb T (left), with location of ceramic cup 1764, ceramic vessels 1073 and 1074, and fragments 1828, circled in red. Tomb T1 is shown to the right, with the location of silver bowl 1085 circled in red. Gürsan-Salzman 1992, 86, with annotation by the author.

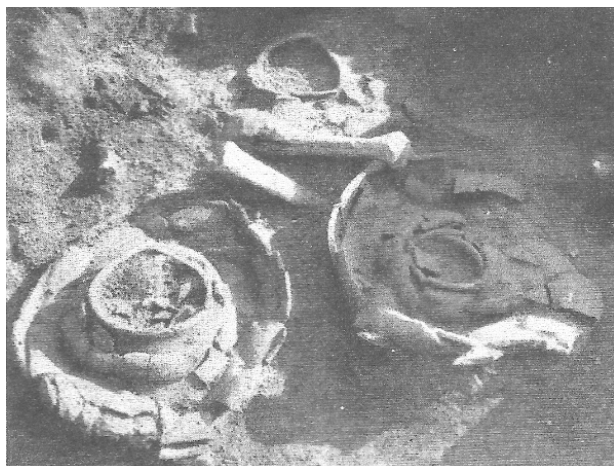


Figure 3.34. Jars H128-H130 from Tomb H appear to have been associated with animal bone within the tomb. Koşay 1951, CXXVII.



Figure 3.35. Tomb A, with jug A75 and storage vessels A3 and A4 circled in red. The location of cup MA 65 is not known. Koşay 1944 (unnumbered plates), annotated by the author.



Figure 3.36. Tomb L, with location of jug L13 and what is possibly cup L4 circled in red. Gürsan-Salzman 1992, 75, with annotation by the author.

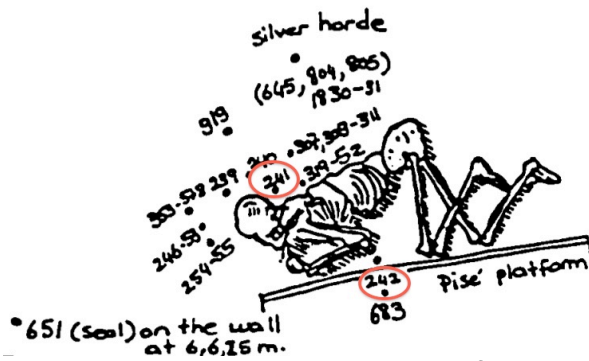


Figure 3.37. Tomb B, with the location of jug AI.242 and goblet AI.241 circled in red. Gürsan-Salzman 1992, 93, with annotations by the author.



Figure 3.38. Placement of vessels around the body within Tomb K. Jugs, cups, and bowls are circled in red, with the exception of Bowl K3, whose location was not certain. Gürsan-Salzman 1992, 73.

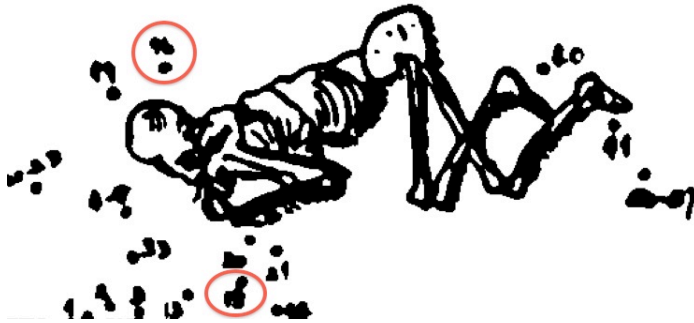


Figure 3.39. Tomb H, with the location of gold bowl H16 and cup H18 circled in red. Gürsan-Salzman 1992, 99, with annotations by the author.

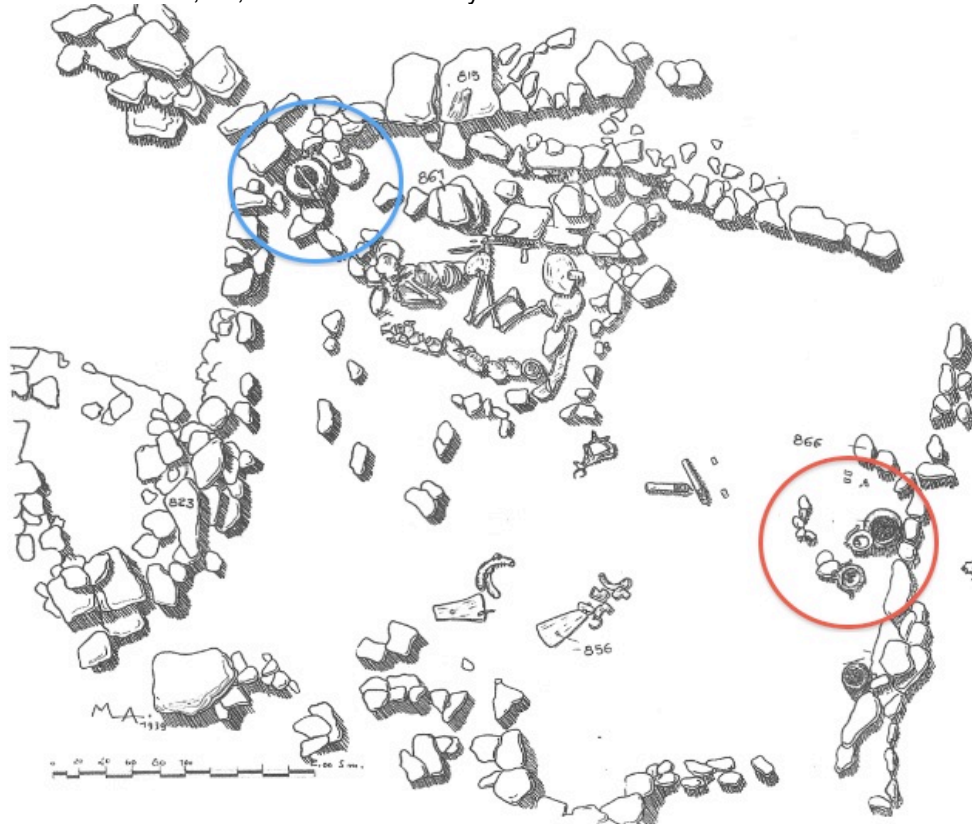


Figure 3.40. A second collection of objects within Tomb K, circled in red. Position of the silver snake 'teapot' circled in blue. Koşay 1951, Pl. CLXX with annotations by the author.

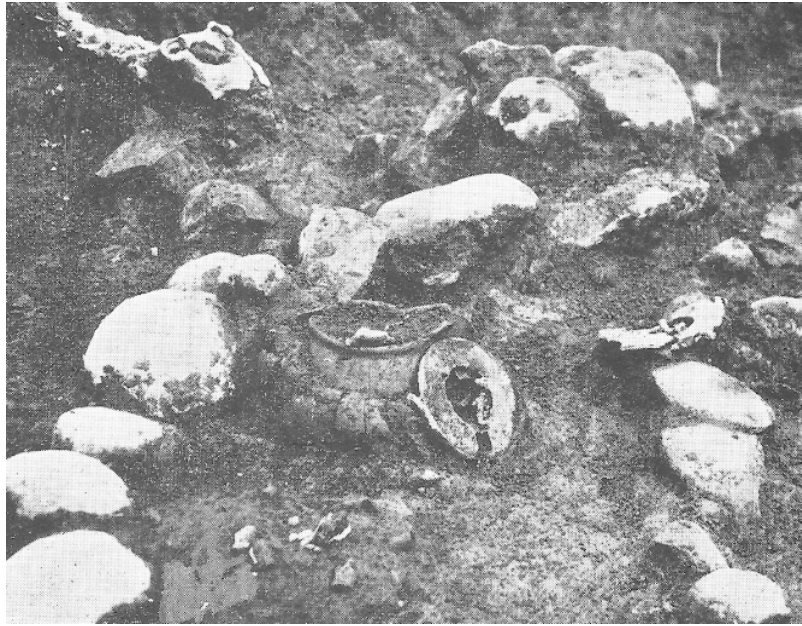


Figure 3.41. Photograph of the second collection of objects within Tomb K. Koşay 1951, Pl. CLXXIV.



Figure 3.42. Tomb H. Position of jars H128, H129, H130 in centre. Cattle skulls and hooves atop earthen platform, and empty area of tomb beyond. Koşay 1951, Pl. CXVII.

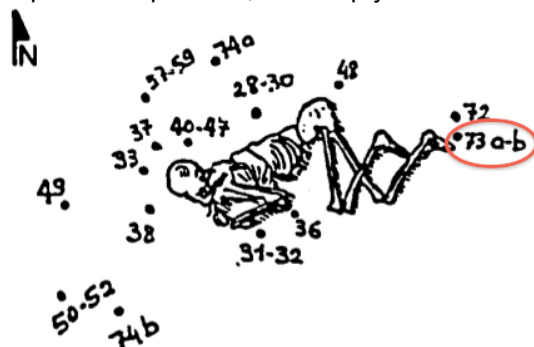


Figure 3.43. Tomb A. Location of wooden bowl A73a-b circled in red. Gürsan-Salzman 1992, 78 with annotations by the author.



Figure 3.44. A collection of objects within Tomb K. Koşay 1951, Pl. CLXXV.



Figure 3.45. From excavation photographs, the placement of jug AI.242, goblet AI.241, and the unnumbered goblet stem were placed together as a collection within Tomb B. Arık 1937, Fig 80.

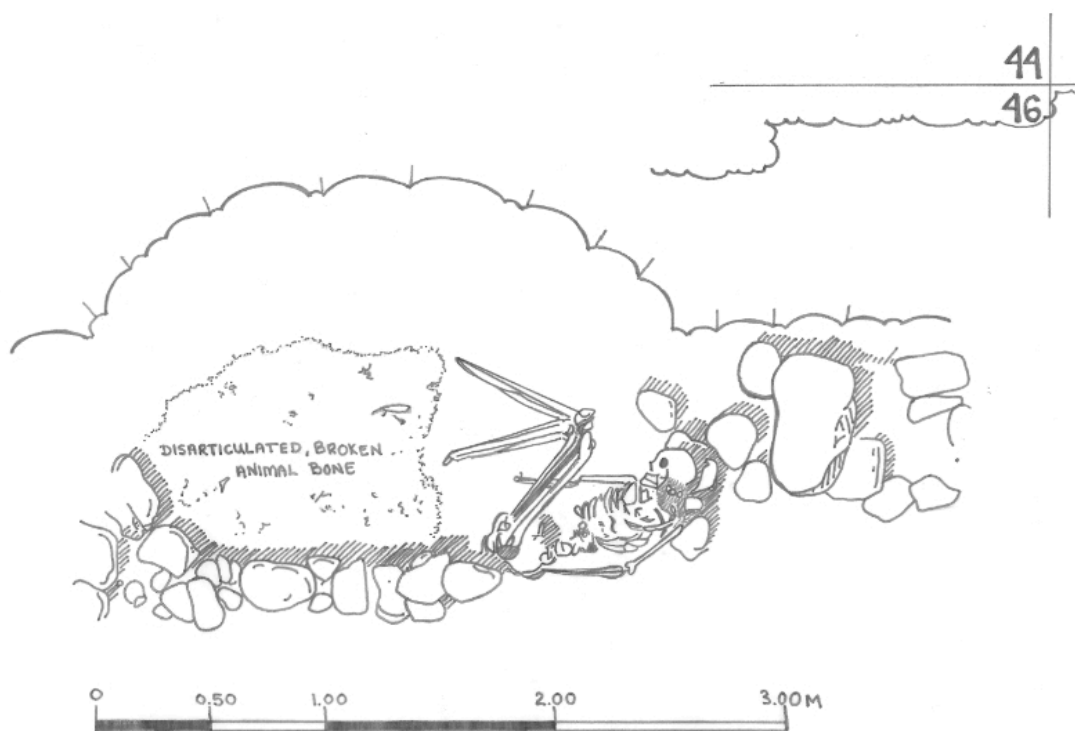


Figure. 3.46. Plan of non-élite Grave FIII. Drawn by the author after Koşay 1966, Fig. 146.

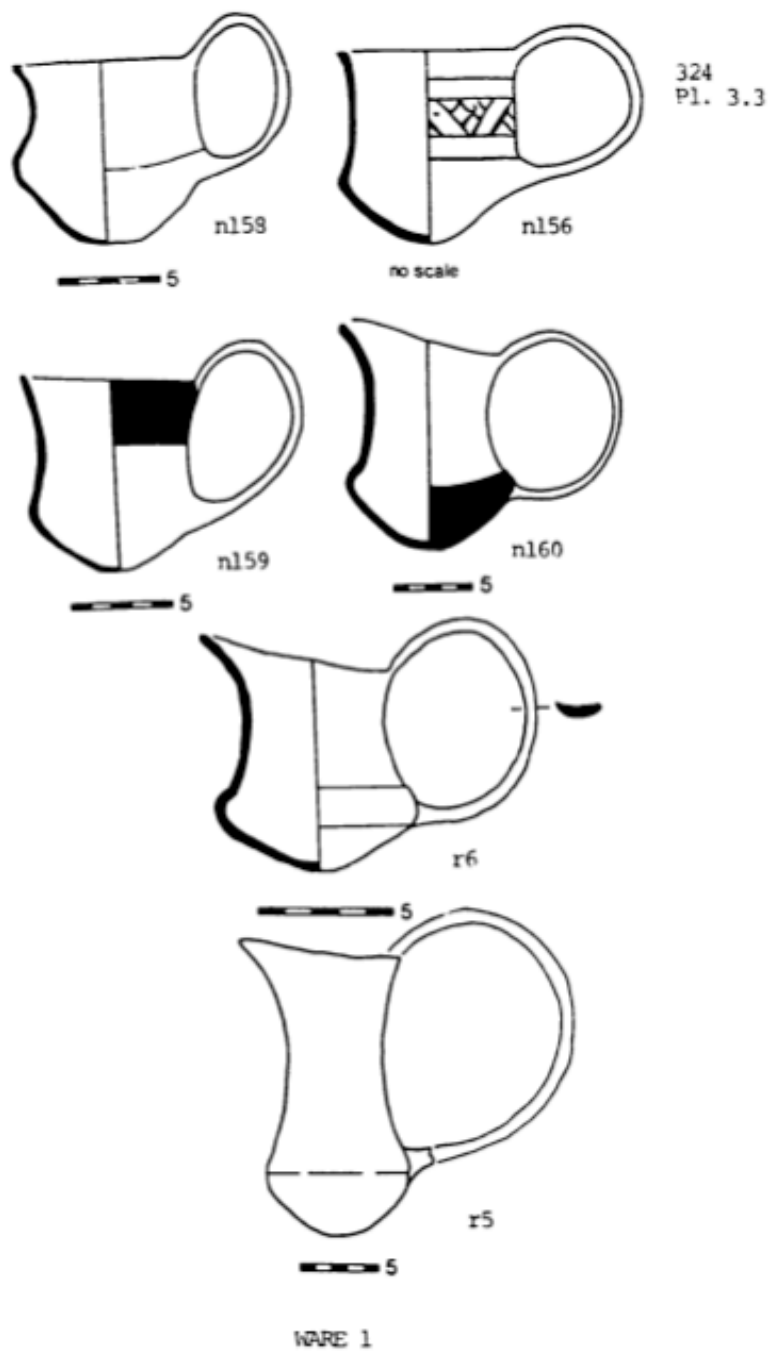


Figure 3.47. Tulip-shaped goblets, Alaca Höyük. Goblets of Type r5, bottom image, were deposited near to Building E. Gürsan-Salzman 1992, Pl. 3.3.



Figure 4.1. Resuloğlu Burial M141. Burial M141 contained a dagger and two small metal cups. The intact cup, pictured, was still attached to littlest finger of one hand of the skeleton. Zimmermann and Yıldırım 2007, Fig. 4.



Figure 4.2. The intact single-handled cup from Resuloğlu Burial M141. Zimmermann and Yıldırım 2007, Fig. 4.



Figure 4.3. Single-handled cup from Resuloğlu Burial M107. Zimmermann and Yıldırım 2007, Fig. 3.





Figure 4.4. Metal vessels from Resuloğlu necropolis (Yıldırım 2006, Fig. 13).

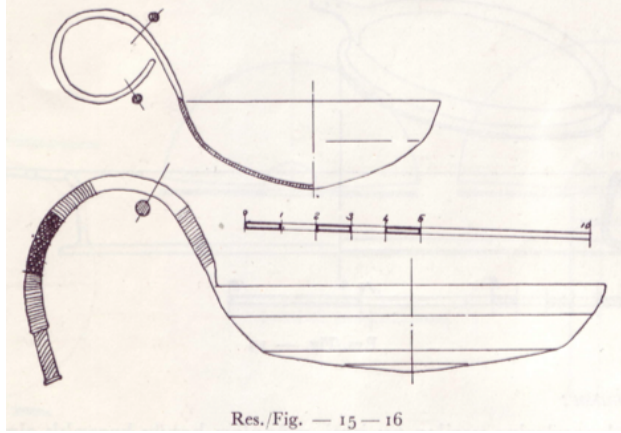


Figure 4.5. Metal single-handled cups from Horoztepe Trench A. Özgüç and Akok 1958, 13.

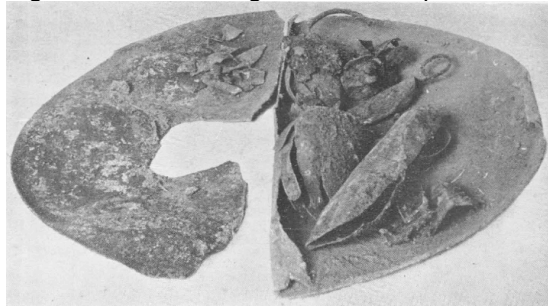


Figure 4.6. Platter from Horoztepe Trench A, containing drinking cups and bowls. Özgüç and Akok 1958, Pl. V.

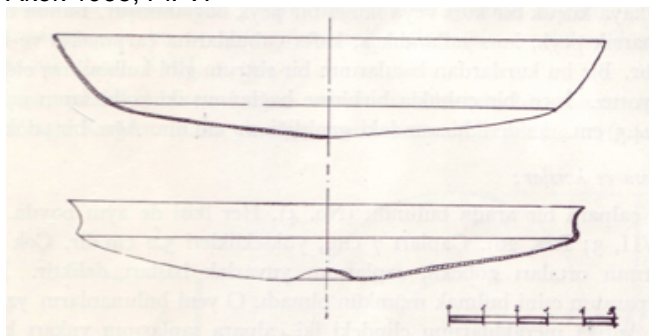


Figure 4.7. Metal bowls from Trench A at Horoztepe. Özgüç and Akok 1958, 13, 44, Figs. 17-18.

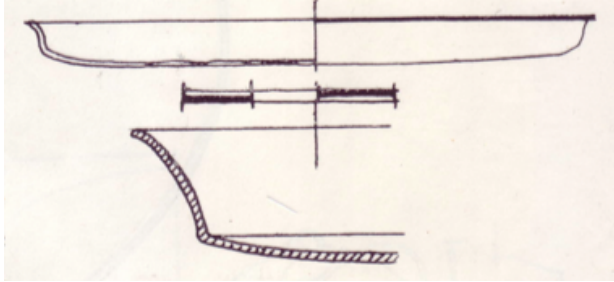


Figure 4.8. The excavators report that additional carinated and convex-based bowls were recovered from Trench A. Özgüç and Akok 1958, Figs. 12-13.

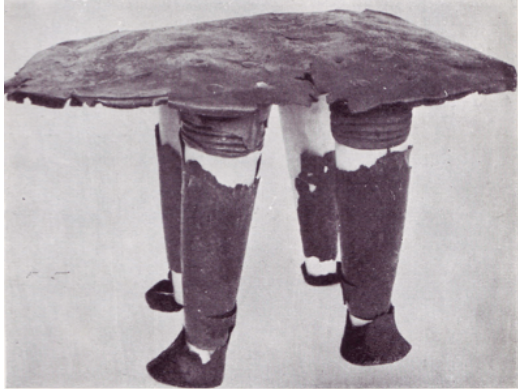


Figure 4.9. One of two anthropomorphic tables from Horoztepe Trench A. Özgüç and Akok 1958, Pl. III:2.



Figure 4.10. Bowl with anthropomorphic legs from Yortan cemetery. Kâmil 1982, Pl. XV:18.



Figure 4.11. Miniature clay 'altar' or table with anthropomorphic legs, kept in the Janus Pannonius Museum in Pécs, Hungary. Kiss 2007, 120, Pl. XXIII:k.

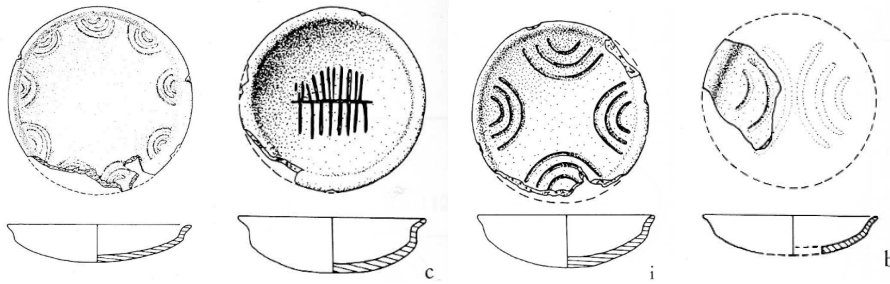


Figure 4.12. Polished and incised blacktopped bowls from Demircihöyük-Sarıket Graves 106, 144, and 315. Not to scale. Clockwise, from left: 106a, 144c, 144i, and 315b. From Seeher 2000, 140, 142, 154.

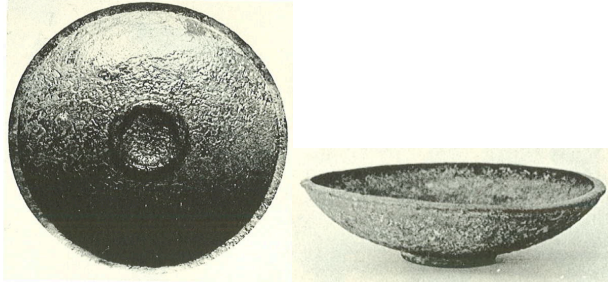


Figure 4.13. Bowl 36-449 found within Pit 12 at the Troy IId citadel, also known as the 'Pit Period' (see Chapter six). Blegen 1950, Fig. 359.

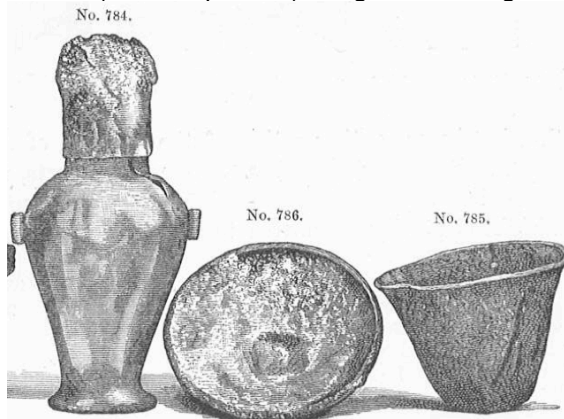


Figure 4.14. Bowl No. 786 with omphalos base from 'Treasure' A at Troy. Shown in centre. Schliemann 1880, *Ilios* 469.

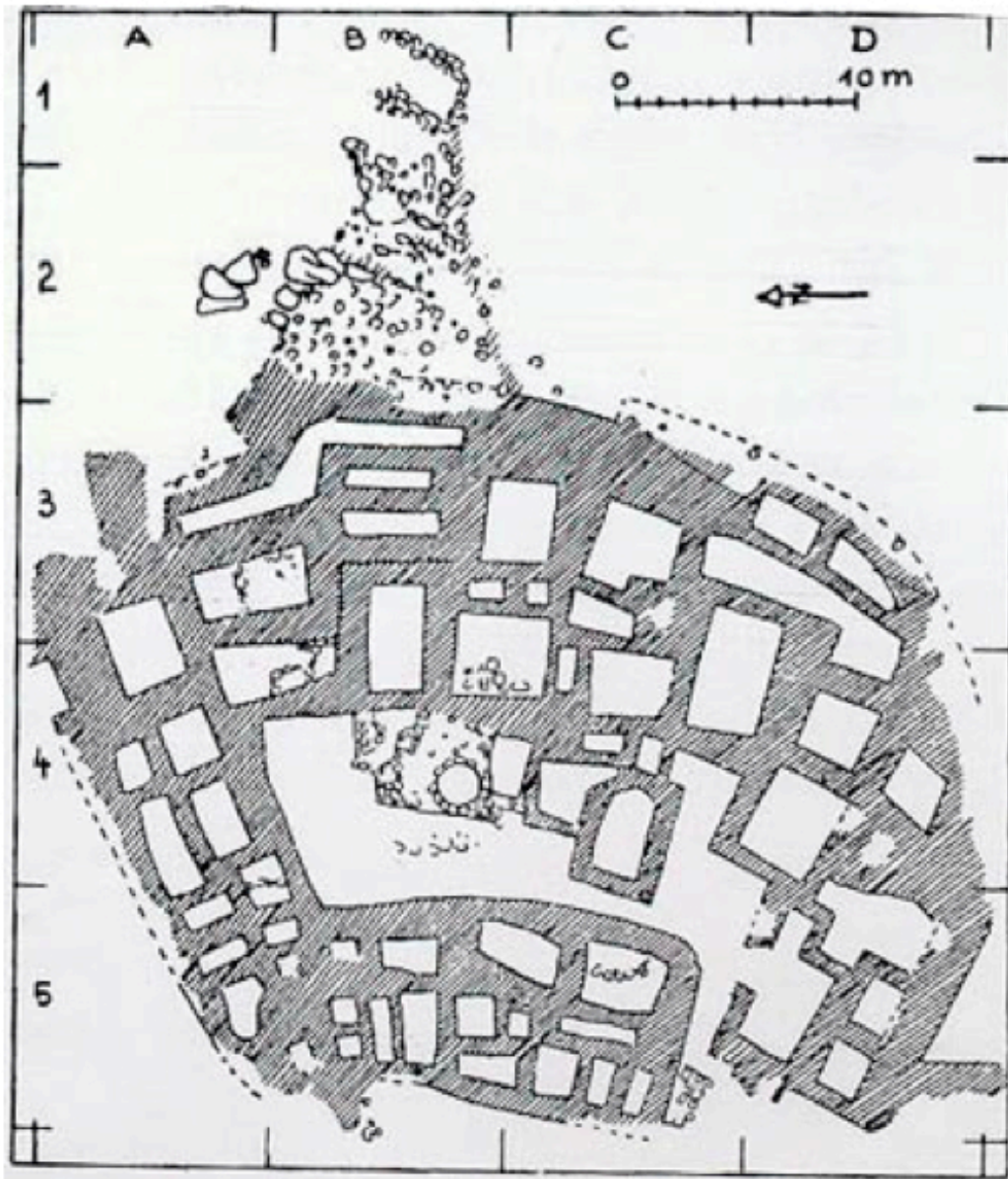


Figure 4.15. Plan of the excavations at Ahlatlıbel. Koşay 1934, 7.



Figure 4.16. Cups and juglets from Ahlatlıbel, black burnished and polished and incised. Bittel 1934, Taf. VI.

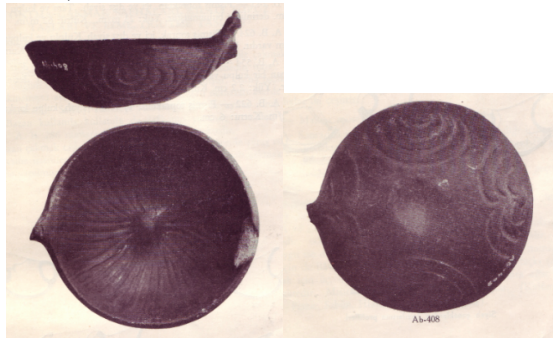


Figure 4.17. Black-burnished single-handed cup No. 408 from Ahlatlıbel, black burnished and polished, with incision in the form of fluting and hanging semi-circles and an omphalos base. Koşay 1934, 53.

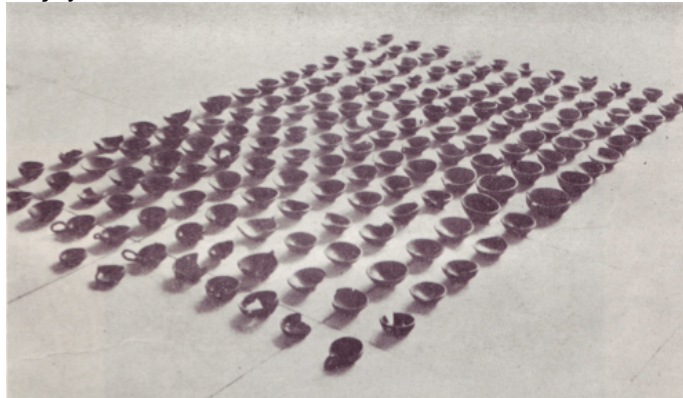


Figure 4.18. Excavation photographs from Ahlatlıbel, showing the large amount of small cups and bowls found at the site. Koşay 1934, 13.



Figure 4.19. Juglets from Resuloğlu necropolis, black burnished and polished and reminiscent of cups and juglets from Ahlatlıbel. Yıldırım 2006, Fig. 12.

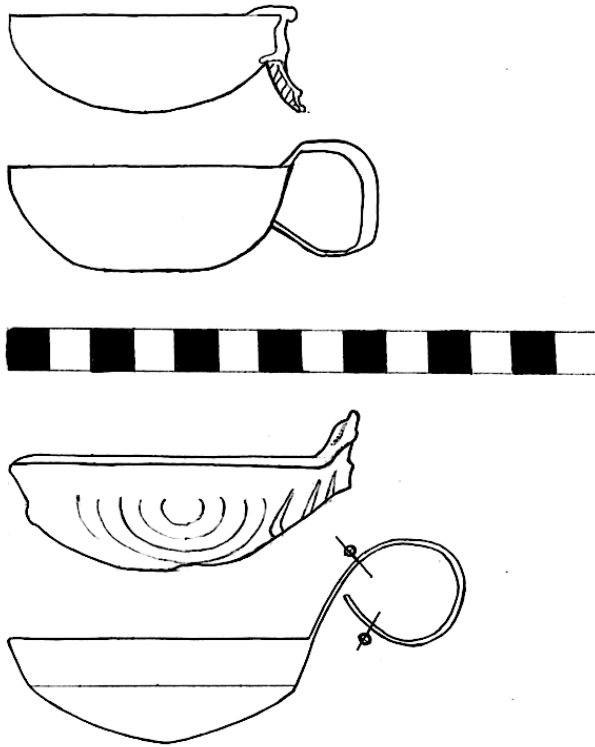


Figure 4.20. Single-handled cups, from top, from Alaca Höyük 'Royal' Tomb K, Resuloğlu Burial M141, Ahlatlıbel No. 408, and Horoztepe, compared on the same scale. Drawn by the author.

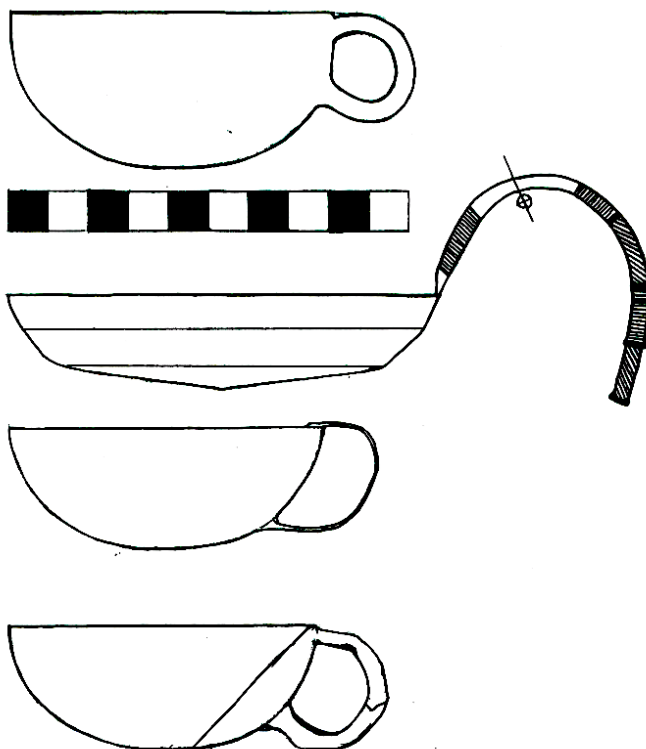


Figure 4.21. Single-handled cups, from top, from Alaca Höyük 'Royal' Tomb L, the larger cup from Horoztepe, Alaca Höyük 'Royal' Tomb H, and Tomb A1. Compared on the same scale. Drawn by the author.



Figure 4.22. Hittite orthostat relief from Alaca Höyük depicting the use of a drinking bowl. Gorny 1996, 166, Fig. 11.11, after Müller-Karpe 1988, 26, Fig. 1.8.



Figure 4.23. Neo-Assyrian King Ashurbanipal and his queen recline in the garden and drink from drinking bowls following the Battle of Susa. The larger image is cropped to focus upon the drinking bowls. Image taken from the Garden Party relief, ME 124920, courtesy of the British Museum 17th April 2014.



Figure 4.24. Metal votive candle holder with baling wire handle threaded through hole at the side of the vessel. Image by the author. See Figure 4.25 for scaled photograph of the object.



Figure 4.25. Metal votive candle holder with scale. Image by the author.



Figure 4.26. Rounded brass dish. Image by the author.



Figure 4.27. Rounded brass dish, profile view. Image by the author.

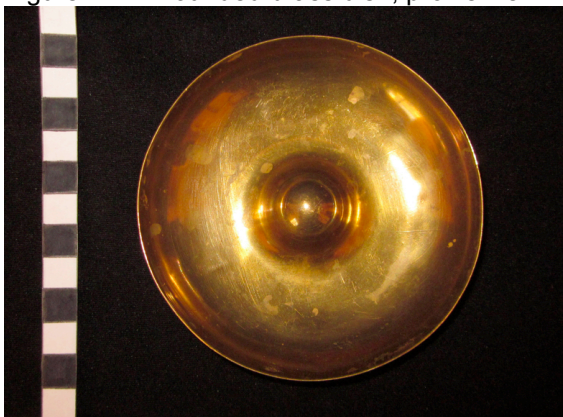


Figure 4.28. Rounded brass dish with omphalos. Image by the author.



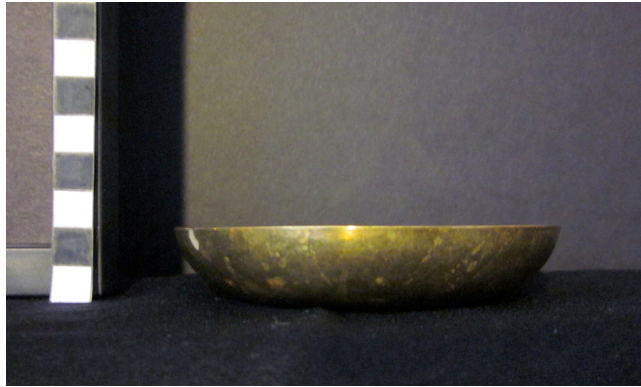


Figure 4.29. Rounded brass dish with omphalos, profile view. Image by the author.



Figure 4.30. Small ceramic plate. Image by the author.



Figure 4.31. Small ceramic plate, profile view. Image by the author.

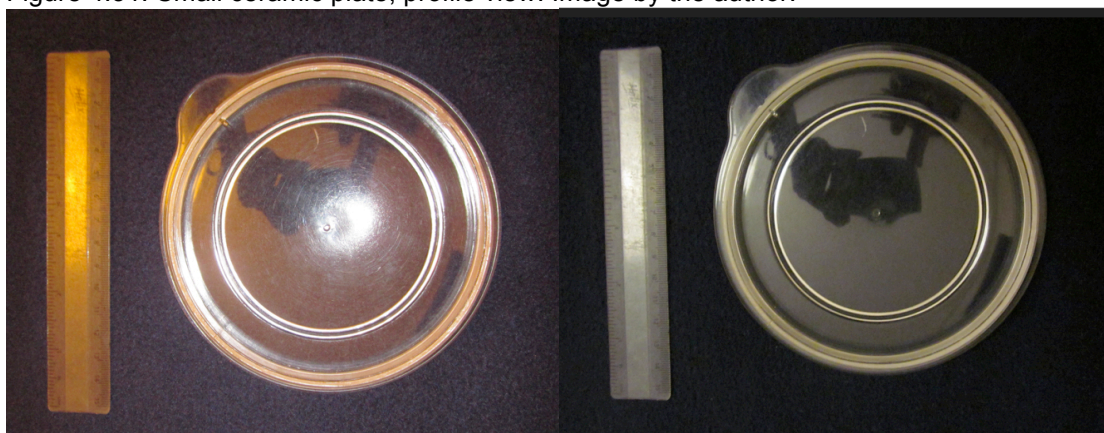


Figure 4.32. Plastic lid with inner lip. Image by the author, taken with flash (left) and without (right).

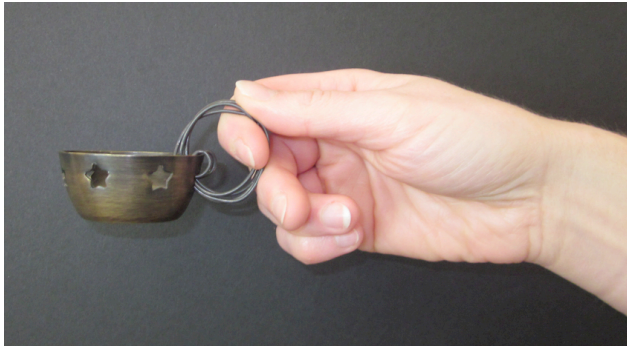


Figure 4.33. Handling the metal votive candle holder with baling wire. Image by the author.

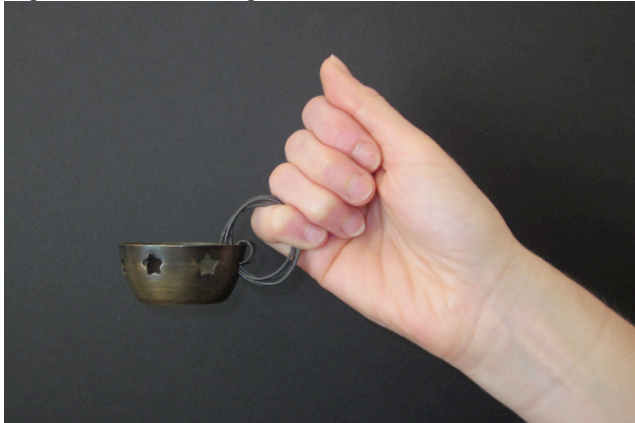


Figure 4.34. Handling the metal votive candle holder with baling wire by the smallest finger. Image by the author.



Figure 4.35. Handling the metal votive candle holder, filled with water. Image by the author.



Figure 4.36. Turning the metal votive candle holder in order to drink from the vessel. Image by the author.



Figure 4.37. Modelling the use of the small metal rounded dish. Images by the author.



Figure 4.38. Modelling the use of the metal bowl with omphalos. Image by the author.



Figure 4.39. Modelling the use of the ceramic plate. Image by the author.



Figure 4.40. Modelling the use of the plastic lid. Images by the author.

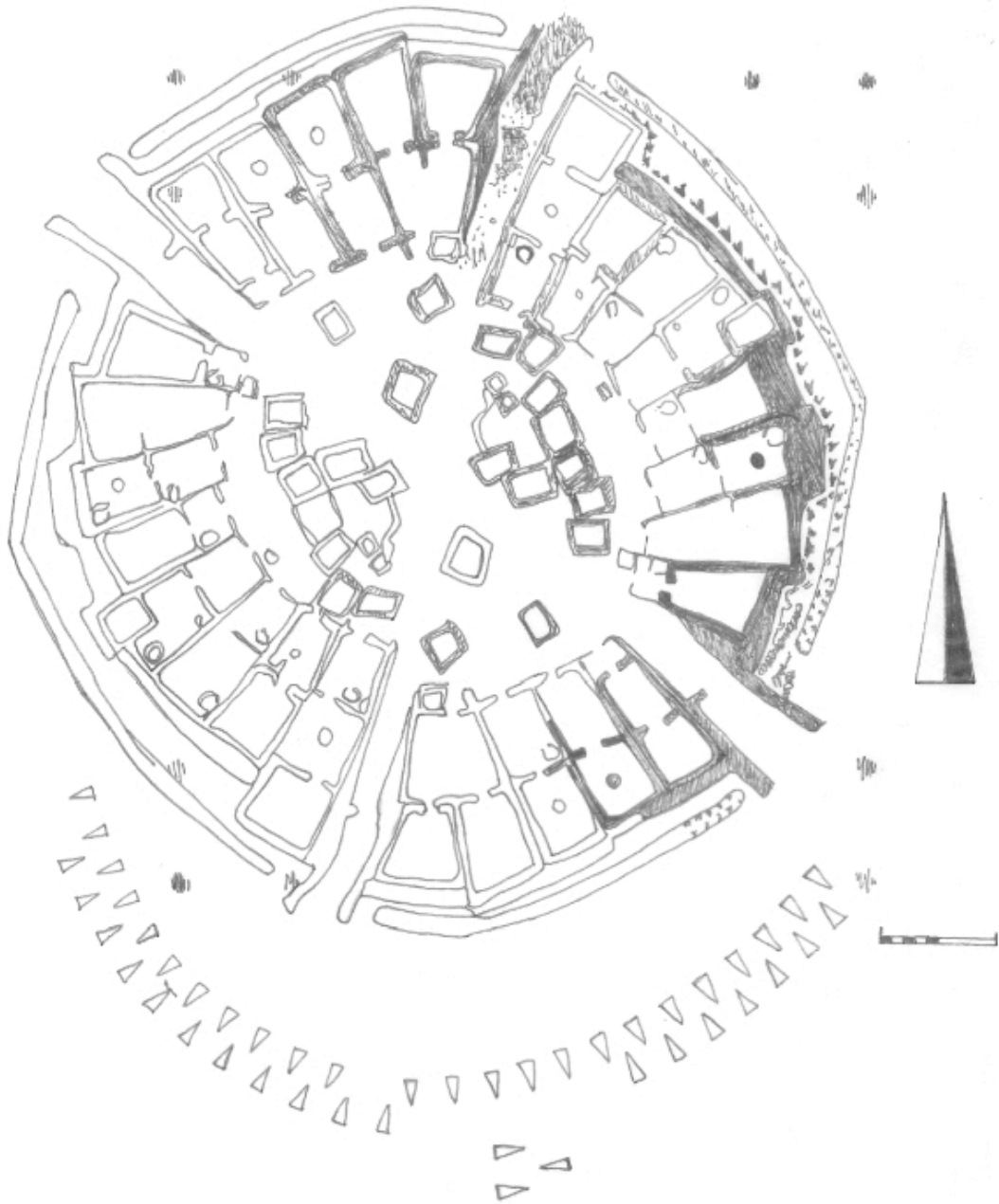


Figure 5.1. Demircihöyük settlement. Houses arranged in a radial pattern, facing an interior courtyard. Drawn by the author after Korfmann (Ed). 1983, 343.

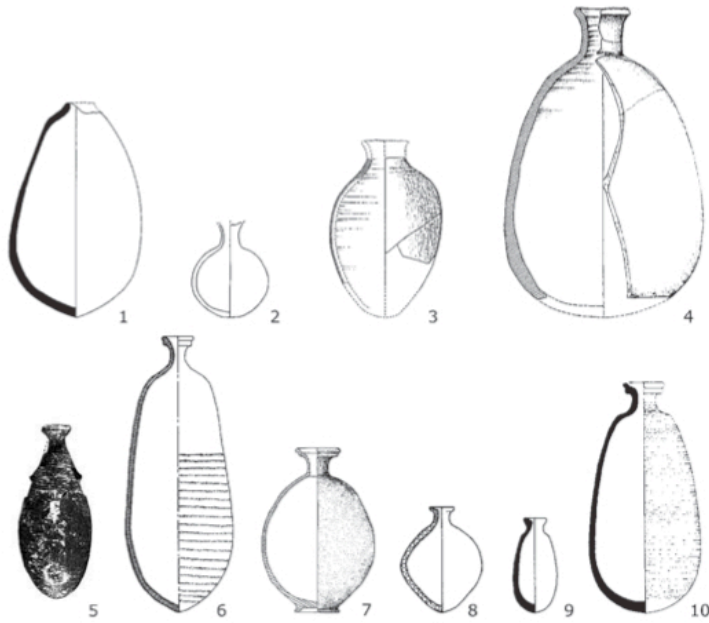


Figure 5.2. Syrian bottles from the Aegean, Anatolia, and southeastern Europe. 1: Palamari; 2: Tell Galabovo; 3: Troy 4: Küllüoba; 5: Eskiyapar; 6: Kültepe; 7-8: Oylum Höyük; 9: Tell Bi'a; 10: Masstab. Zimmermann 2009, Fig. 8, after Rahmstorf 2006, Fig. 4.

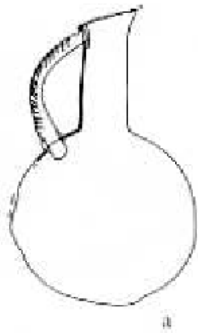


Figure 5.3. Altered lead vessel ('Bleigefäß') within Grave 295. Seeher 2000, Fig. 36.

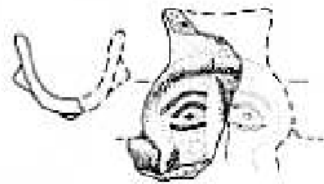


Figure 5.4. Spout fragment from Grave 376, which was provided a face. Seeher 2000 Fig. 43.

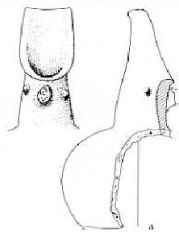


Figure 5.5. B4 jug from G 319 with square spout. See also the square spout upon the jug from G 250, Figure 4.2 Seeher 2000 Fig. 38.

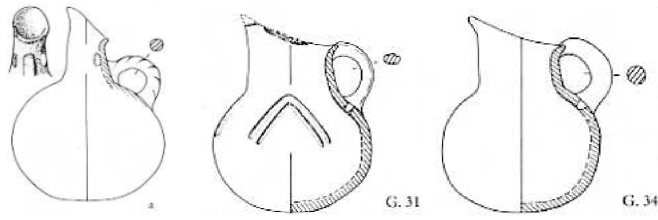


Figure 5.6. From left: B1 jug from G 85, A3 jug from G 31, A3 jug from G 34. Not to scale. Seeher 2000, Figs. 18, 21.

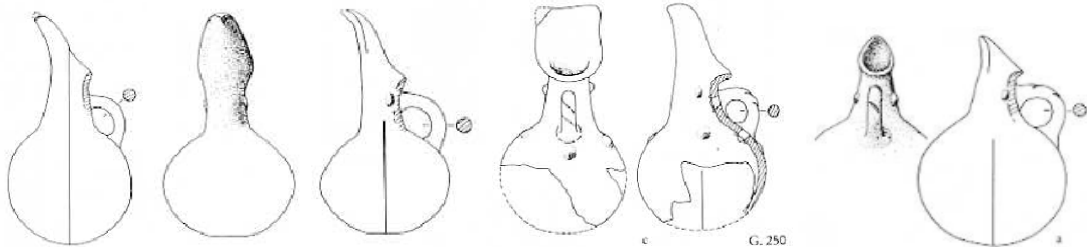


Figure 5.7. From left: Jug 'similar to type A4' from G 145, 'No Type' jug from G 243, B4 jug from G 250, and A5 jug from G 315. Not to scale. Seeher 2000, Figs. 26, 33, 38.

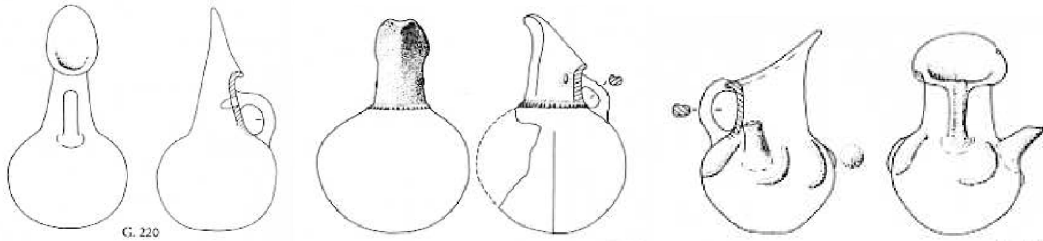


Figure 5.8. From left: jug 'similar' to A5 type from G 220, jug 'similar' to B4/5 type from G 263, and jug with Tüllenausguß (tubular spout) from Grave 370, the only jug with such a spout across both necropolises. Not to scale. Seeher 2000, Figs. 30, 34, 43.

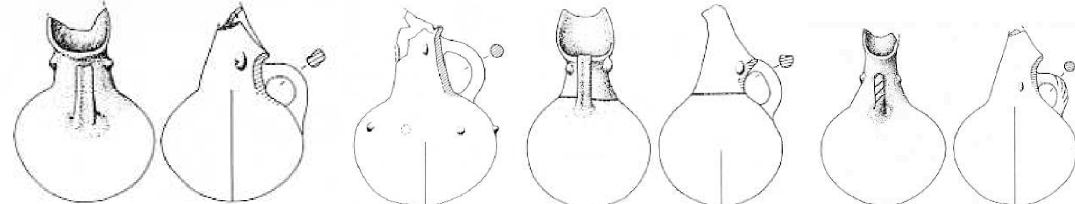


Figure 5.9. From left: B4 jug from G 491, B4 jug from G 513, B2 jug from G 546, and B4 jug from G 578. Not to scale. Seeher 2000, Figs. 49, 51, 52.

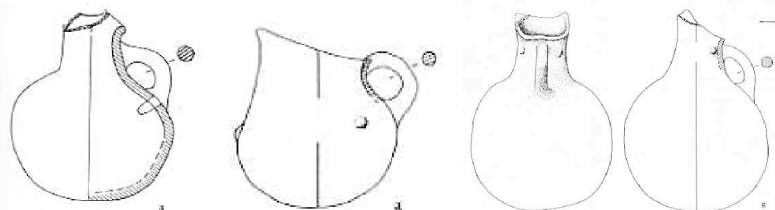


Figure 5.10. From left: A4 jug from G 26, A1 jug from G 305, and B6 jug from G 350. Not to scale. Seeher 2000, Figs. 17, 37, 41.

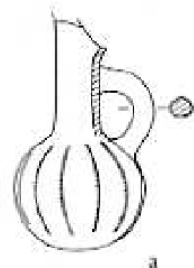


Figure 5.11. Jug 552a of C3 type from Grave 552. Seeher 2000 Fig. 52.

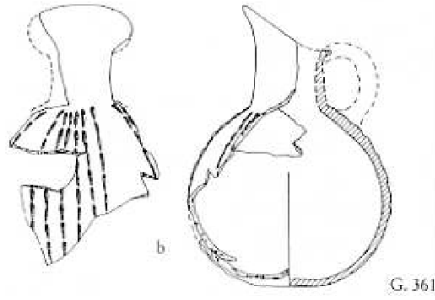


Figure 5.12. Jug 361b of A3 type from Grave 361. Seeher 2000 Fig. 42.

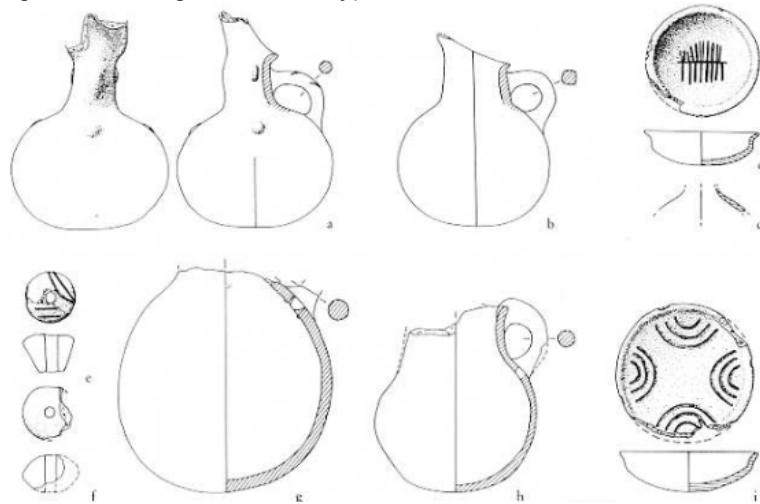


Figure 5.13. Contents of Grave 144, including four intact jugs and two intact bowls. Scaled to each other within original reports by Seeher (2000, Fig. 26).

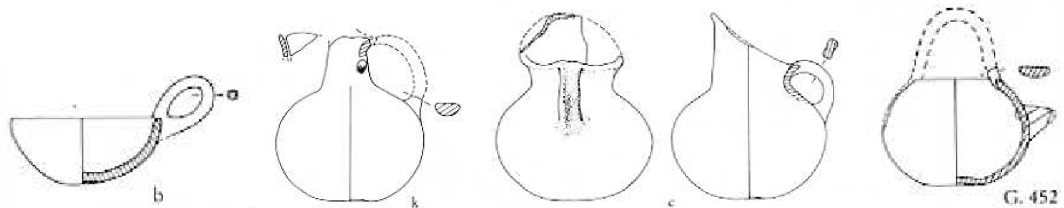


Figure 5.14. Vessels with omphalos bases. Top, from left: G 37, G 213, G418. Bottom: G 452. Not to scale. Seeher 2000, Figs. 18, 30, 45, 47.

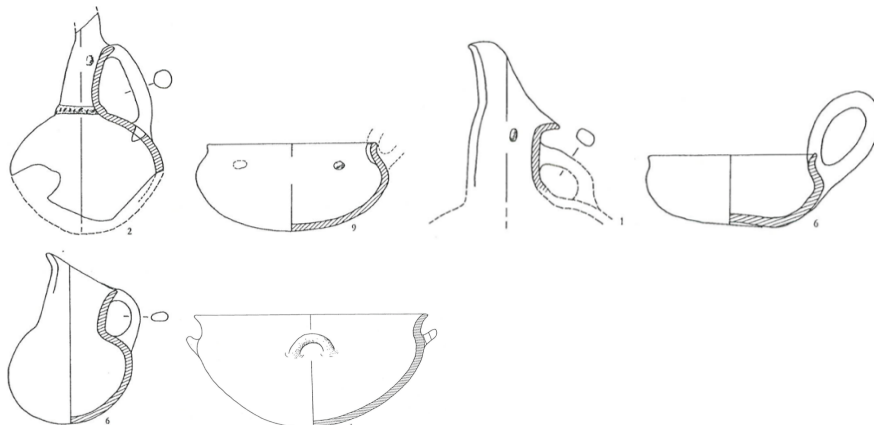


Figure 5.15. Combinations of jug and S-Profile bowls or cups within Küçükhöyük Graves. Top, from left: G 46A, G 163. Bottom: G 167. Not to scale. Gürkan and Seeher 1991, Figs. 8:6, 8:9, 9:3, 10:6, 13:1, 15:1.

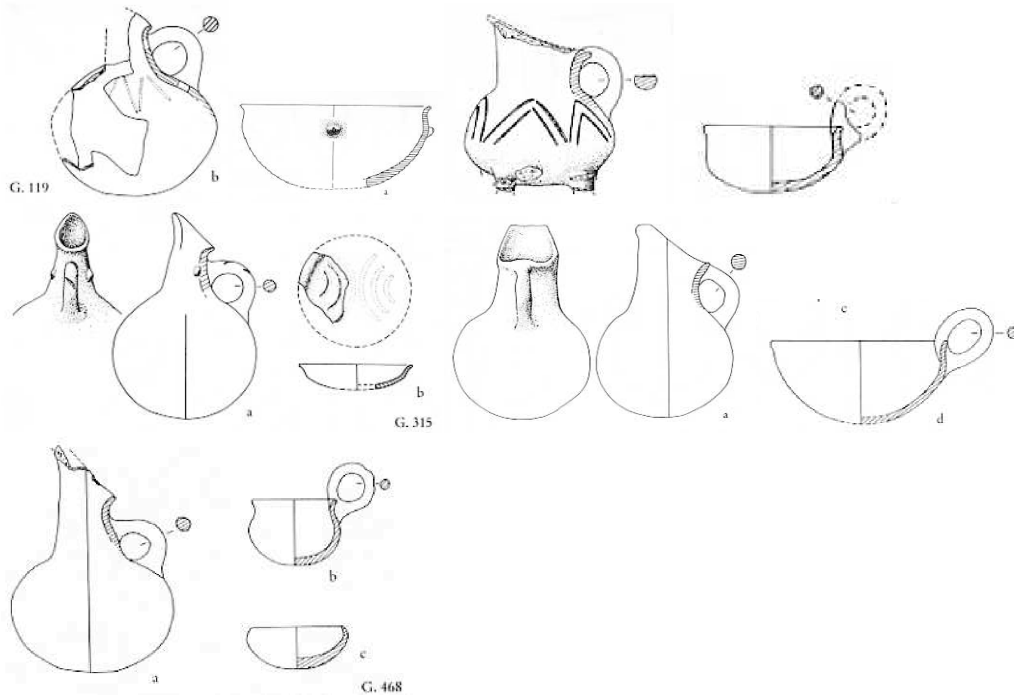


Figure 5.16. Pairings of jugs with S-Profile cups or bowls from Sarket necropolis. Top row, from left: G 119 and G 275. Middle row, from left: G 315 and G 448. Bottom row: G 468. Additional pairings appear in G 26 and 45. Not to scale. Seeher 2000, Figs. 25, 35, 38, 47, 48.

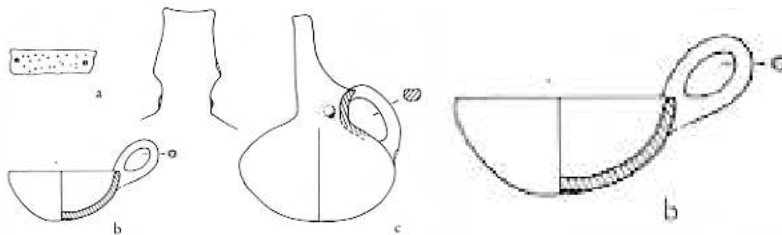


Figure 5.17. Jug of B3 type and cup with omphalos bottom from Grave 37, and a flat strip of gold. Scaled to each other, left, and cup enlarged, right. The cup is enlarged in order to show the omphalos base and the lack of an S-Profile. Seeher 2000, Fig. 18.

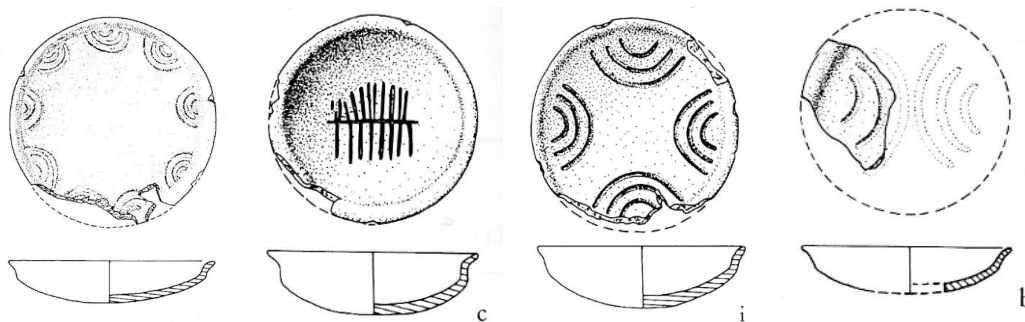


Figure 5.18. Shallow bowls from Graves 106, 144, and 315. Not to scale. Seeher 2000, Fig. 24, 26, and 38.

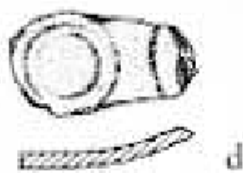


Figure 5.19. Body sherd of a bowl (No Type) from Grave 83. Seeher 2000, Fig. 21.



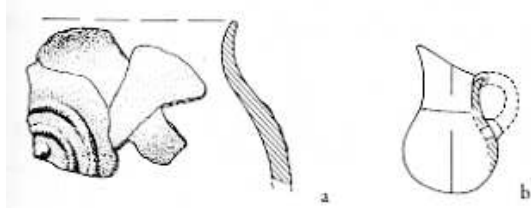


Figure 5.20. Jug of No Type, and fragment of deep, cup-like bowl from Grave 25. Scaled to each other within original reports by Seeher (2000, Fig. 17).

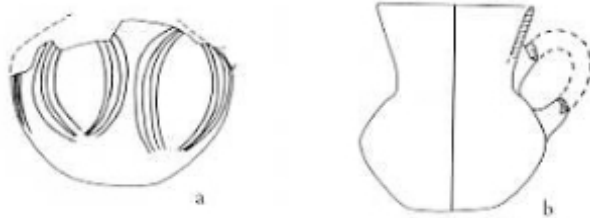


Figure 5.21. Unidentified vessel and tankard from Grave 294. Scaled to each other within original reports by Seeher (2000, Fig. 36).

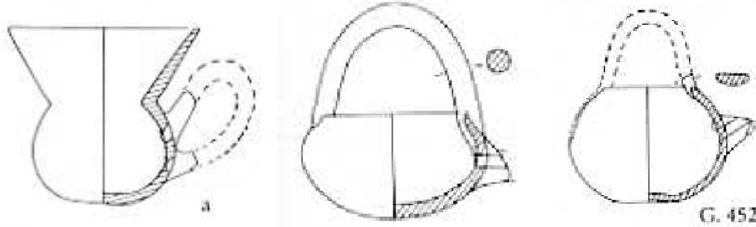


Figure 5.22. Alternative drinking vessels occurring on their own within Graves (from left) 317, 247, and 452. Not to scale. Seeher 2000, Figs. 33, 38, 47.

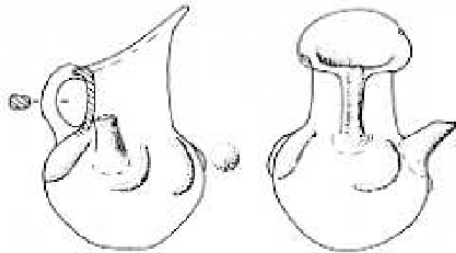


Figure 5.23. Jug of A2 type with tubular spout from Grave 370. Seeher 2000, Fig. 43.

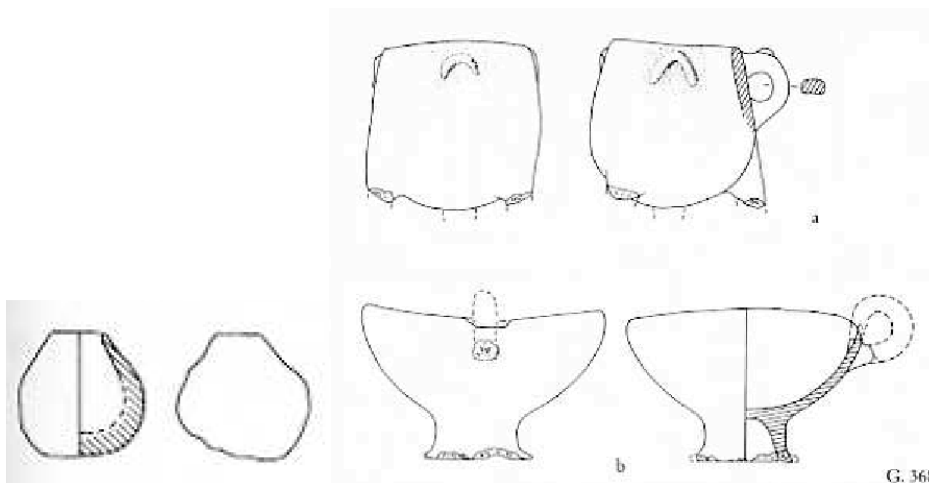


Figure 5.24. Additional vessels appearing on their own in graves. From left: a miniature vessel in G 1, and two tripod handled vessel within G 368. Not to scale. Seeher 2000, Figs. 17, 43.

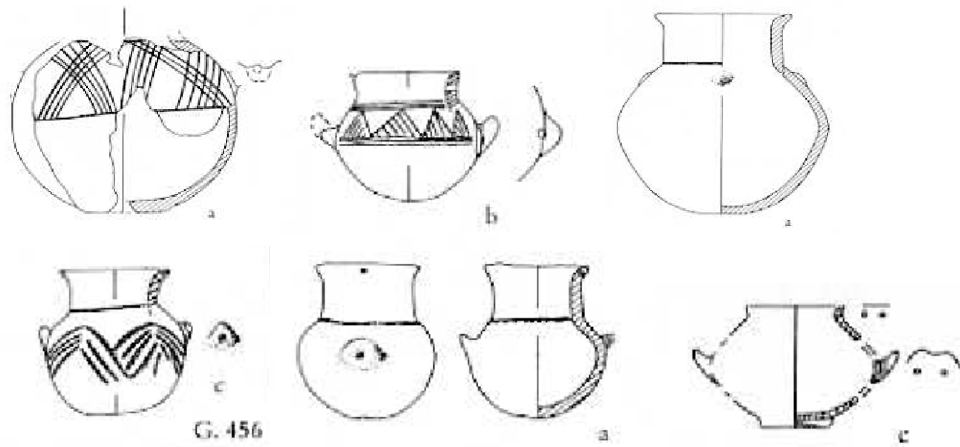


Figure 5.25. Necked vessels that appear in graves together with jugs. Top, from left: G 82, 181, 350. Bottom, from left: G 456, 498, 511. Not to scale. Seeher 2000, Figs. 20, 28, 41, 47, 50, 51.

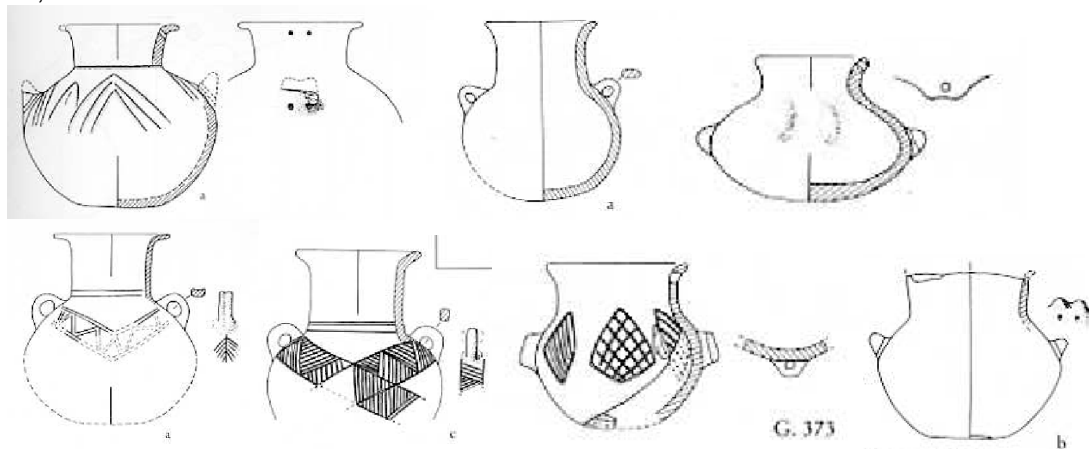


Figure 5.26. Necked vessels occurring on their own within graves. Top, from left: G 57, 62, 72. Bottom, from left: G 100, 141, 373, 492. Not to scale. Seeher 2000, Figs. 19, 20, 23, 25, 43, 49.



Figure 5.27. Necked vessel with lid from Grave 305. Seeher 2000, Fig. 37.

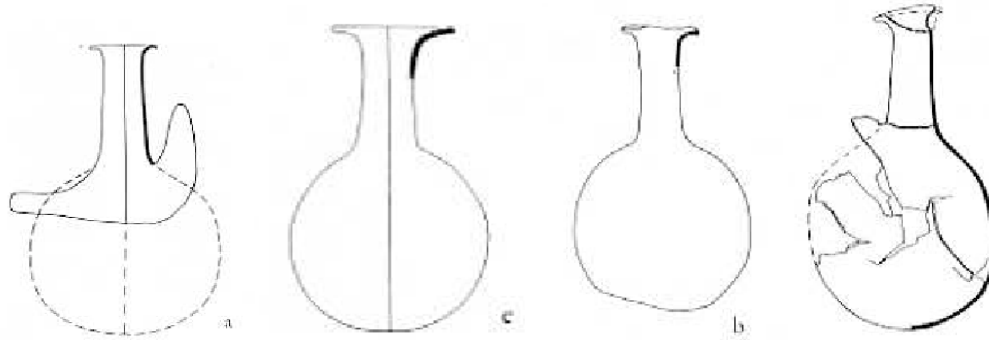


Figure 5.28. Lead bottles within four graves. From left: G 92, 100, 141, 284. Not to scale. Seeher 2000, Figs. 22, 23, 25, 35.

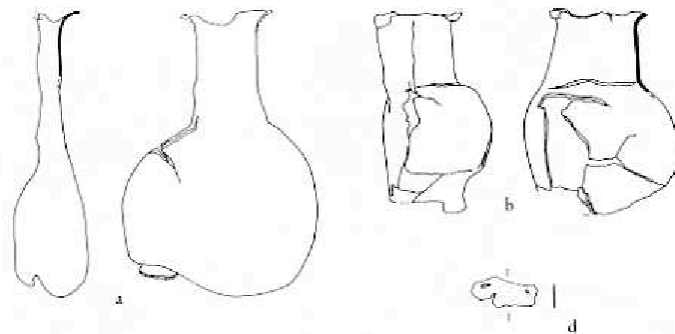


Figure 5.29. Two lead bottles from Grave 326. Scaled to each other within original reports by Seeher (2000, Fig. 40).



Figure 5.30. Lead bottle within Grave 335, featuring rope pattern at neck. Seeher 2000, Fig. 40.

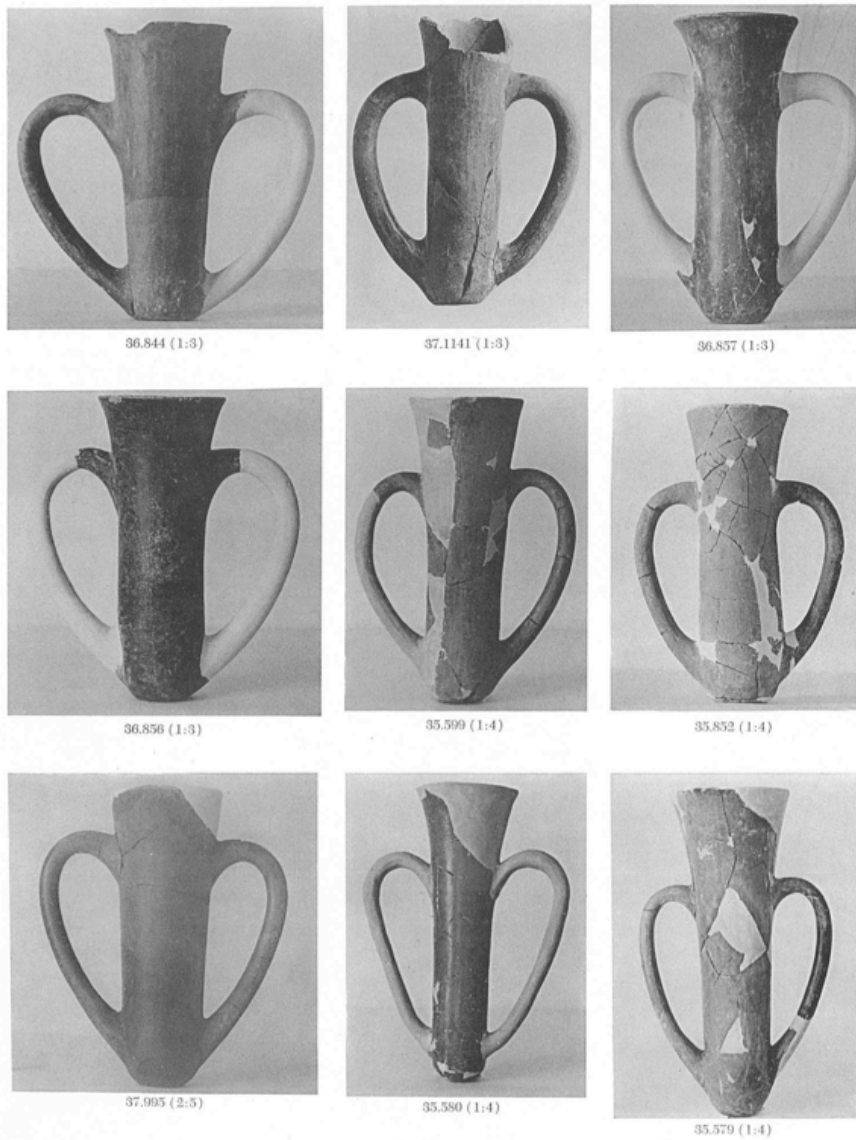


Figure 6.1. The two-handled tankard, or *Depas amphikypellon* (pl. *depata*). These examples from Troy phases II<sub>d</sub> and II<sub>g</sub>. Blegen et al. 1950, Pl. 381.



Figure 6.2. Silver *depas amphikypellon* on display in the British Museum. Renfrew 1967, Pl. 10c.

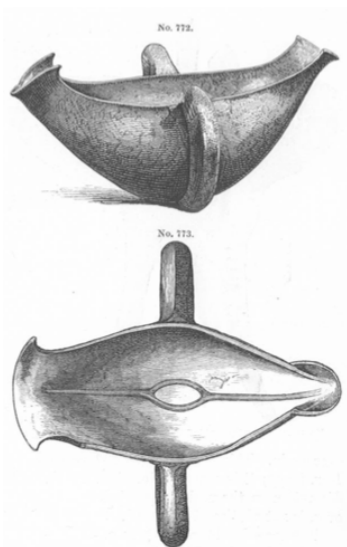


Figure 6.3. Gold sauceboat from Troy 'Treasure' A. Schliemann 1880, *Ilios* 465, No. 772; see also Tolstikov and Treister 1996, 32-33.

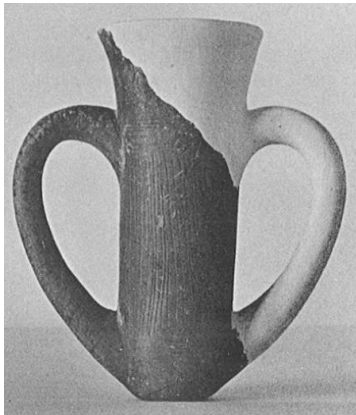


Figure 6.4. Depas 35.842 from Troy IIg with vertical incision. Blegen et al. 1950, 364, Pl. 382.

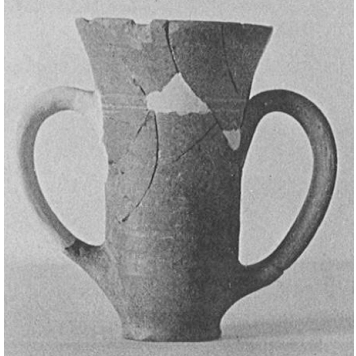


Figure 6.5. Depas 35.841 from Troy IIg with incised parallel lines. Blegen et al. 1950, 364, Pl. 382.



Figure 6.6. Depas 35.425 with asymmetrical, rough shape from Troy IIg. Blegen et al. 1950, Pl. 382.

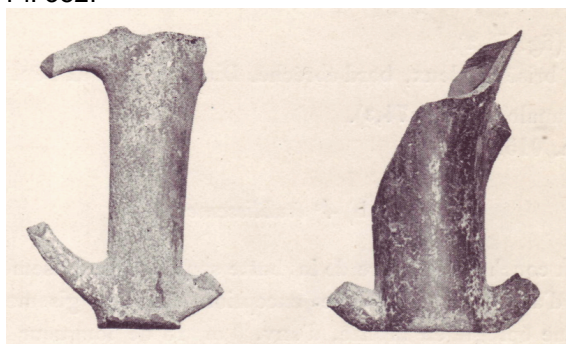


Figure 6.7. Depata from Protesilas-Karaağaçtepe, whose handles reach to their bases. Demangel 1926, Figs. 2 and 3, p. 60.



Figure 6.8 Depas from Bakla Tepe necropolis with rounded base. Şahoğlu 2005, Fig. 4.

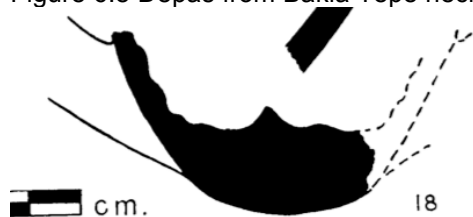


Figure 6.9. Depas from Kusura Phase B with rounded base. Lamb 1937, 237, 250, Fig. 14:18.

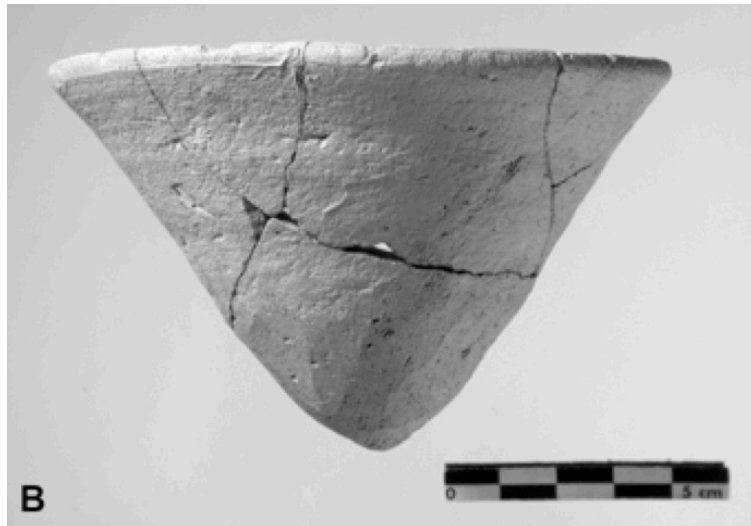


Figure 6.10. Plain conical cup from the late Early Bronze Age occupation at Büyükkaya, whose base has been trimmed in order to make the vessel more pointed. Schoop 2009a, 149, Fig. 3:B.

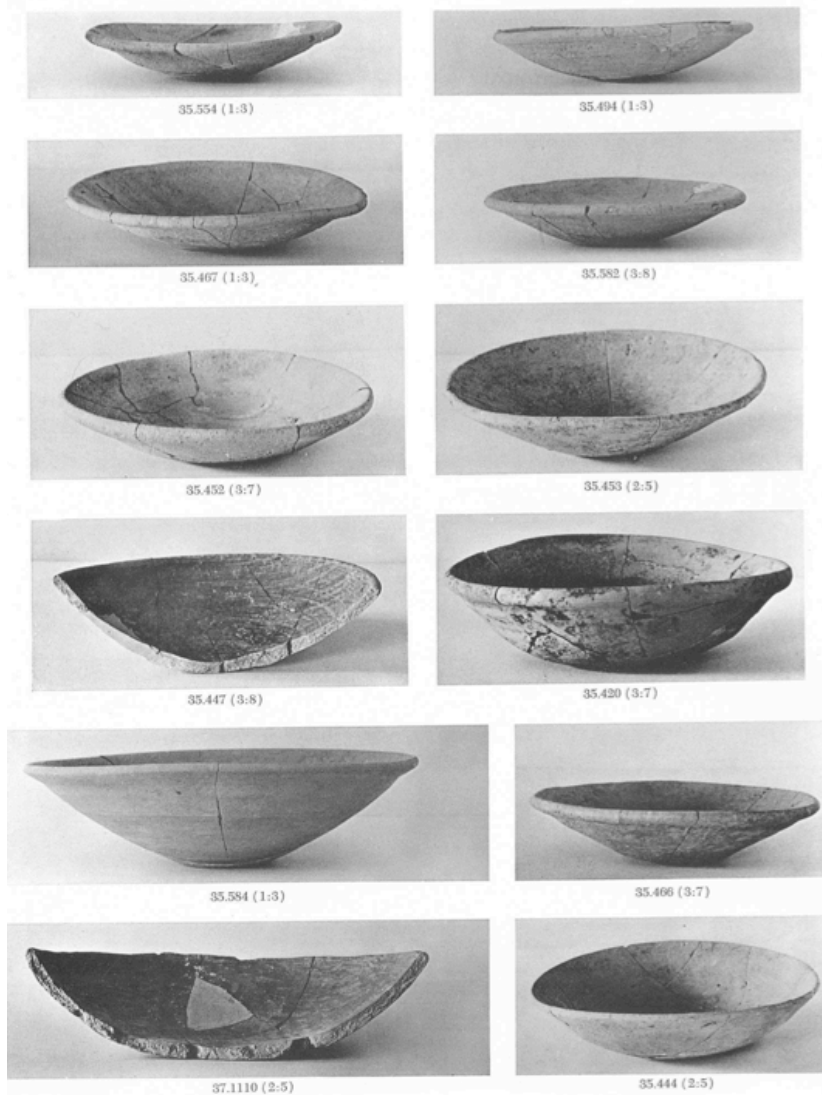


Figure 6.11. A2 wheelmade bowls from Troy, period IIg. Blegen et al. 1950, Pl. 374.



Figure 6.12. Two cutaway-spouted jugs from Bakla Tepe necropolis. Şahoğlu 2005, Fig. 8.



Figure 6.13. Miniature lentoid flask from Karataş. Mellink 1964, Pl. 82:29.



Figure 6.14. Cutaway-spouted jug from Troy, backward-leaning and constructed from two parts. Schliemann 1880, *Ilios* 387, No. 364.



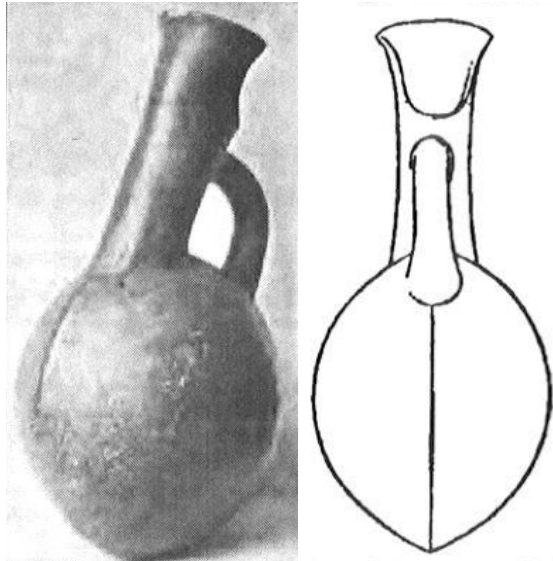


Figure 6.15. Backward-leaning cutaway-spouted jug from Troy, No. 636, photographed and drawn by H. Schmidt, 1902, 34. Here the construction in two parts is clearly shown.



Figure 6.16. Urfinis sauceboat from Chalandriani. Renfrew 1967, Pl. 10:b.



Figure 6.17. Tripod askos from Troy "in the shape of a Sow" (Schliemann 1880, *Ilios* 294, No. 160).



Figure 6.18. Tripod askoi from Troy. Schliemann 1880, *Ilios* 375, Nos. 333 and 334.

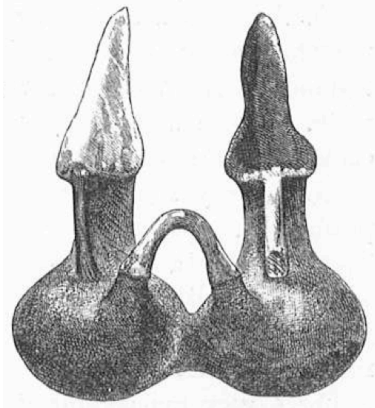


Figure 6.19. Two beaked jugs, attached via a basket handle, from Troy II. Schliemann 1880, *Ilios* 294, No. 161.

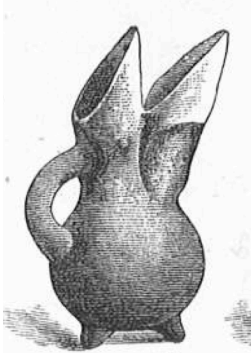


Figure 6.20. Jug with double spout from Troy II. Schliemann 1880, *Ilios* 384, No. 358.

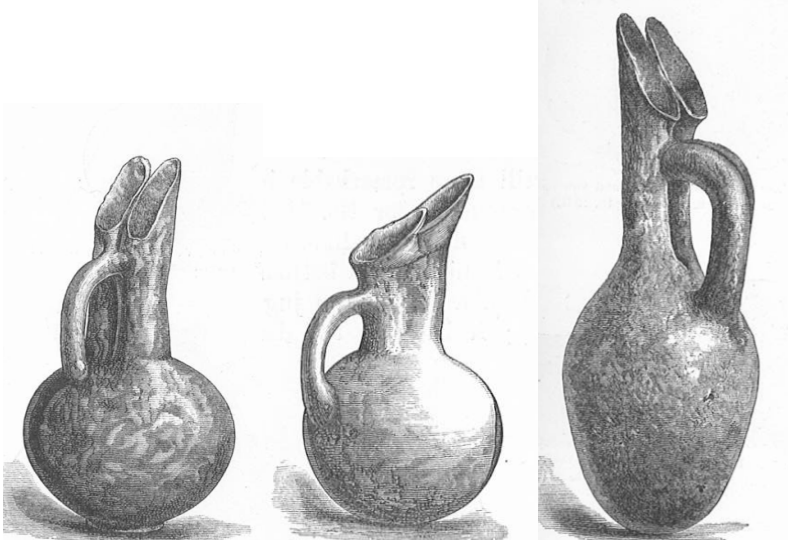


Figure 6.21. Jugs with multiple spouts from Troy III. Schliemann 1880, *Ilios* 553-54, Nos. 1174, 1175, and 1176. All images not to scale.



Figure 6.22. Tripod vessel composed of three cups from Troy II. Schliemann 1880, *Ilios* 384 No. 356.

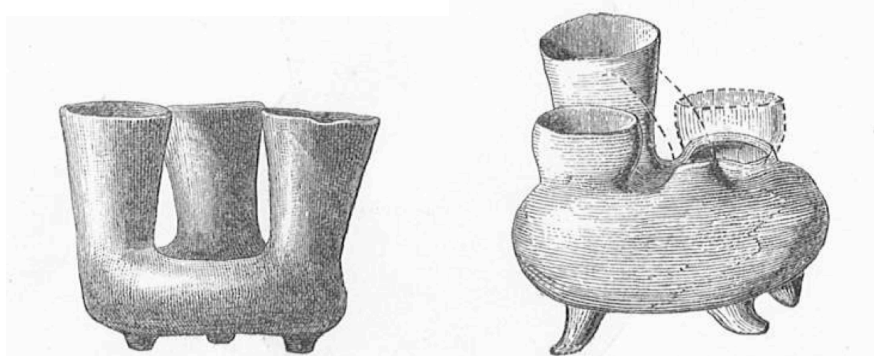


Figure 6.23. Multiple vessels from Troy III. Schliemann 1880, *Ilios* 540, Nos. 1110 and 1111.

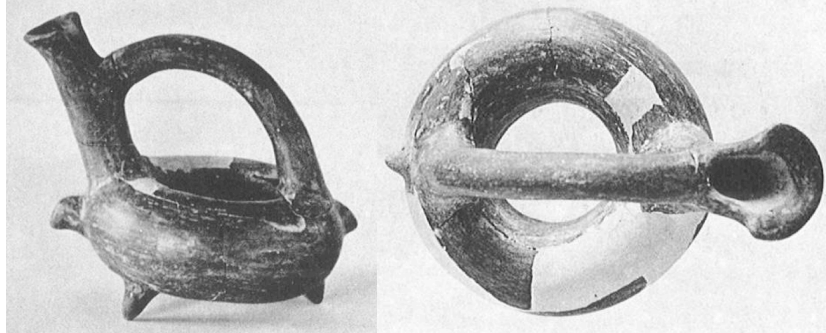


Figure 6.24. Tripod ring vessel with single, cutaway spout, from Troy III. Blegen et al. 1950, Pl. 406, No. 35.441.



Figure 6.25. Ring vessel in the form of a bugle assigned by Schliemann to Troy VI (1880, *Ilios* 596, No. 1392).

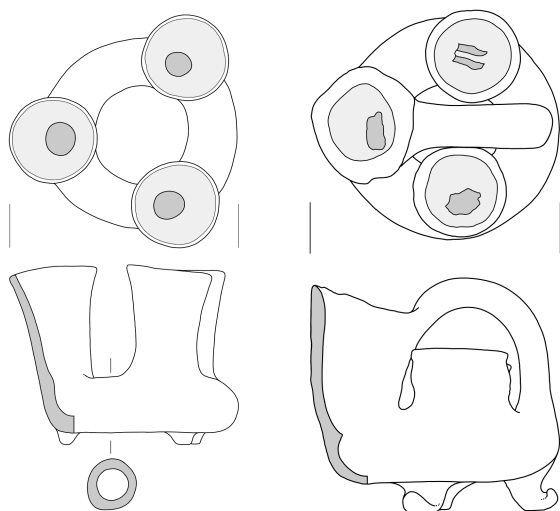


Figure 6.26. Drawing of tripod ring vessels from Troy, Nos. 1110 and 1111 in Schliemann's catalogue (1880, *Ilios* 540), and Nos. 610 and 823 according to Schmidt (1902, 32, 40). Dark patches within each cup indicate holes through which the vessel communicated with the hollow ring (Priessnitz, In-preparation). Drawn by the Museum für Vor- und Frühgeschichte for the forthcoming publication edited by Wemhoff, Hertel, and Hänsel. Provided by Dr. Alix Hänsel, personal communication 21st November 2012.

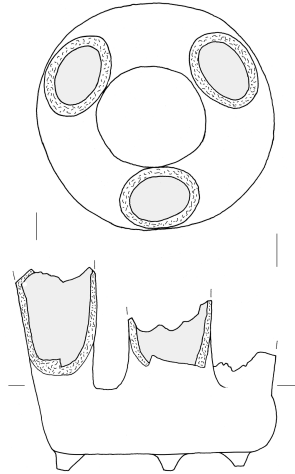


Figure 6.27. Ring vessel from Troy, No. 1747 within Schmidt's catalogue (1902, 75). Drawn by the Museum für Vor- und Frühgeschichte for the forthcoming publication edited by Wemhoff, Hertel, and Hänsel. Provided by Dr. Alix Hänsel, personal communication 21st November 2012.

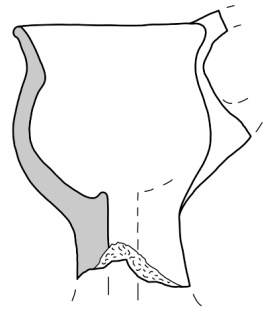


Figure 6.28. Vessel No. 609, photographed prior to the Second World War, and a drawing of the remaining piece. Photograph from the Bildarchiv Foto Marburg im Kunstgeschichtlichen Institut der Philipps-Universität, Marburg. Archino. 1.110.904. Illustration drawn by the Museum für Vor- und Frühgeschichte for the forthcoming publication edited by Wemhoff, Hertel, and Hänsel. Provided by Dr. Alix Hänsel, personal communication 21st November 2012.



Figure 6.29. Multiple-spouted krater KA 954 from the 'Kiosk' in Trench 63. Eslick 2009, Pl. 95.



Figure 6.30. Spouted krater from Aphrodisias, Complex I, dated by excavators to the EB IIIA (Kadish 1971, Pl. 29, Fig. 31; Joukowsky 1982, Figs. 79).

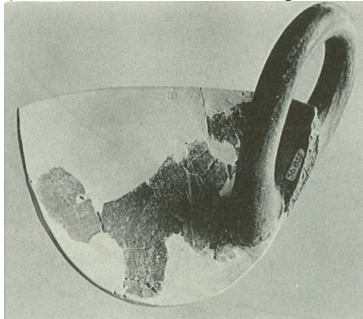


Figure 6.31. Cup with inverted handle, Type A27 in Blegen's typology, from Troy II. Blegen et al. 1950, Pl. 379, No. 36.855.

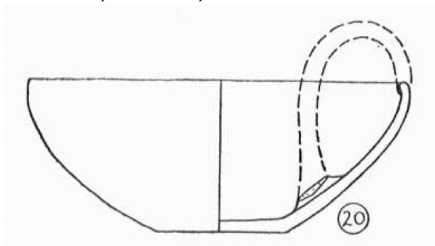


Figure 6.32. Cup with inverted handle from Beycesultan. Lloyd and Mellaart 1962, Pl. 66:20.

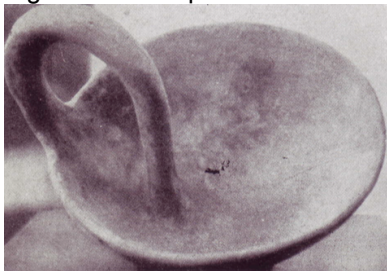


Figure 6.33. Cup with inverted handle from Has Höyük. Bossert 1942, 60:285.

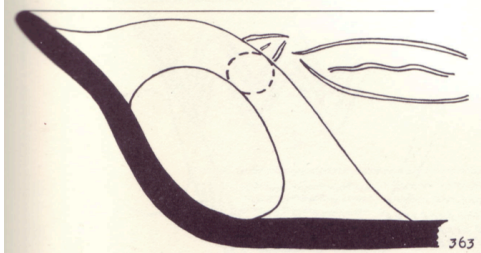


Figure 6.34. Cup with inverted handle from Tarsus EB II. Goldman 1956, Pl. 349.



Figure 6.35. Cup with inverted handle from Tarsus EB II. Goldman 1956, Pl. 255.



Figure 6.36. Dipper vessel, shape D32 in Blegen's typology (Blegen et al. 1950, 241), from Troy. Schliemann 1880, *Ilios* 555, No. 1184.

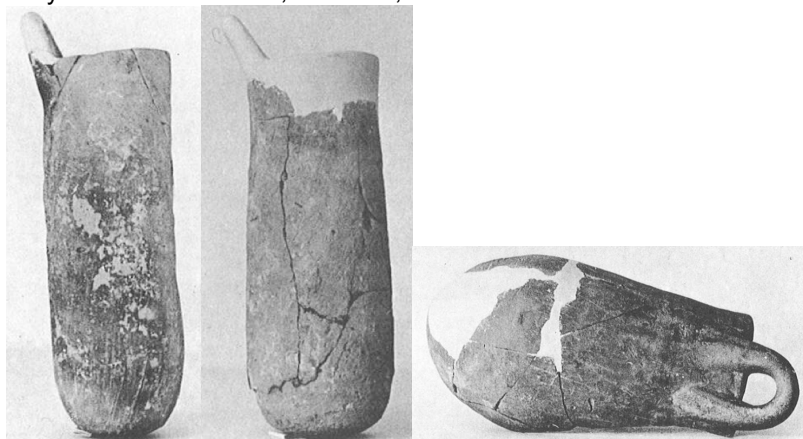


Figure 6.37. D32 dipper vessels from Troy phases IId and IIc. From left: Nos. 36.675, 36.744, and 36.861. Not to scale. Both 36.675 and 36.744 were found within Pit 1 of the Troy IId Pit Period.

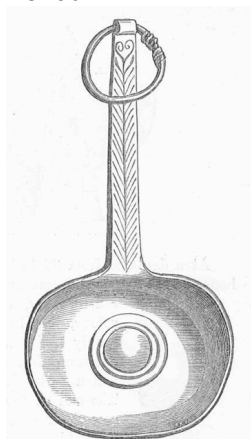


Figure 6.38. Silver ladle from 'Treasure' J from Troy II. Schliemann 1880, *Ilios* 503, No. 923.



Figure 6.39. Reconstruction drawing of the Troy II citadel with lower city. While the presence of a lower city is apparent from recent research (Jablonka 2001; Jablonka and Rose 2004, 619), the structures of the lower city within this drawing are hypothetical. Christoph Haussner, Munich.

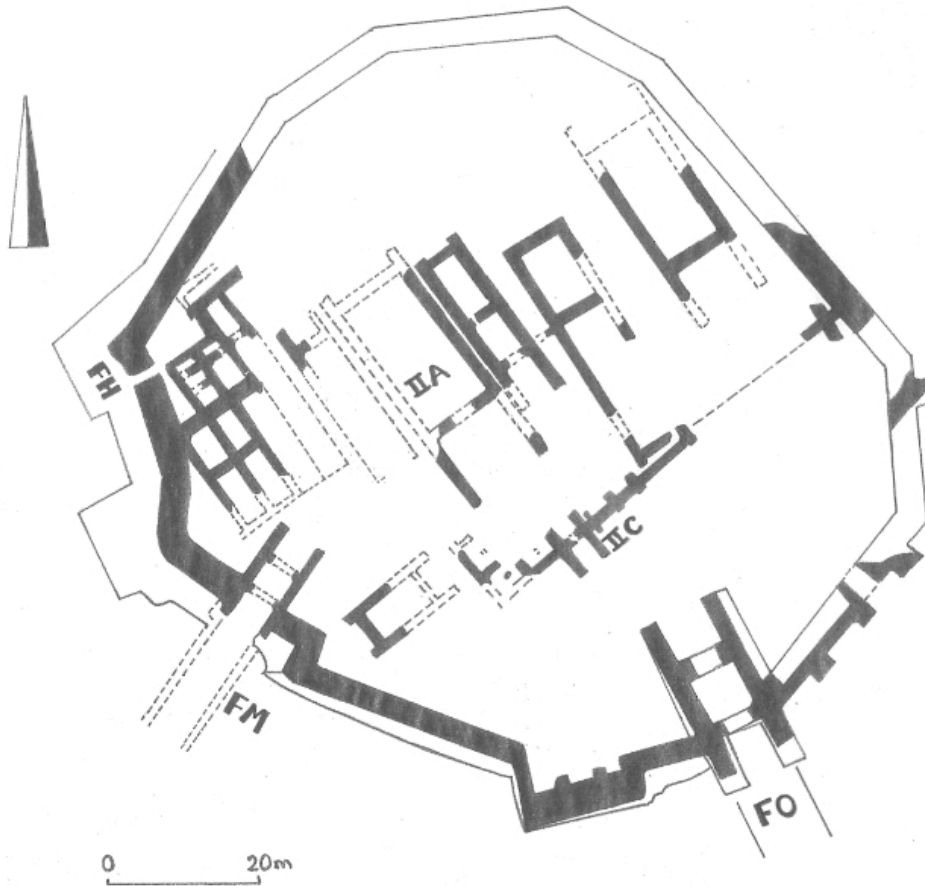


Figure 6.40. Troy II citadel, with central Megaron IIA, Gates FM and FO, and Propylon IIC. Drawn by the author after Schirmer 1971, Fig. 10.

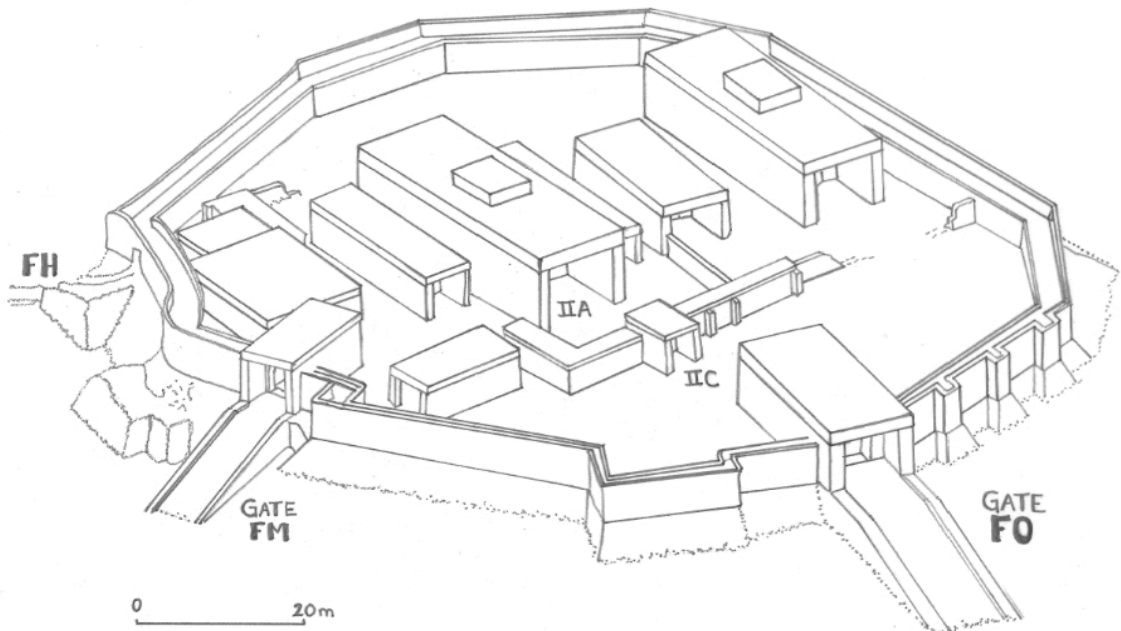


Figure 6.41. Troy II citadel, isometric view. Drawn by the author after Schirmer 1971, Fig. 41.



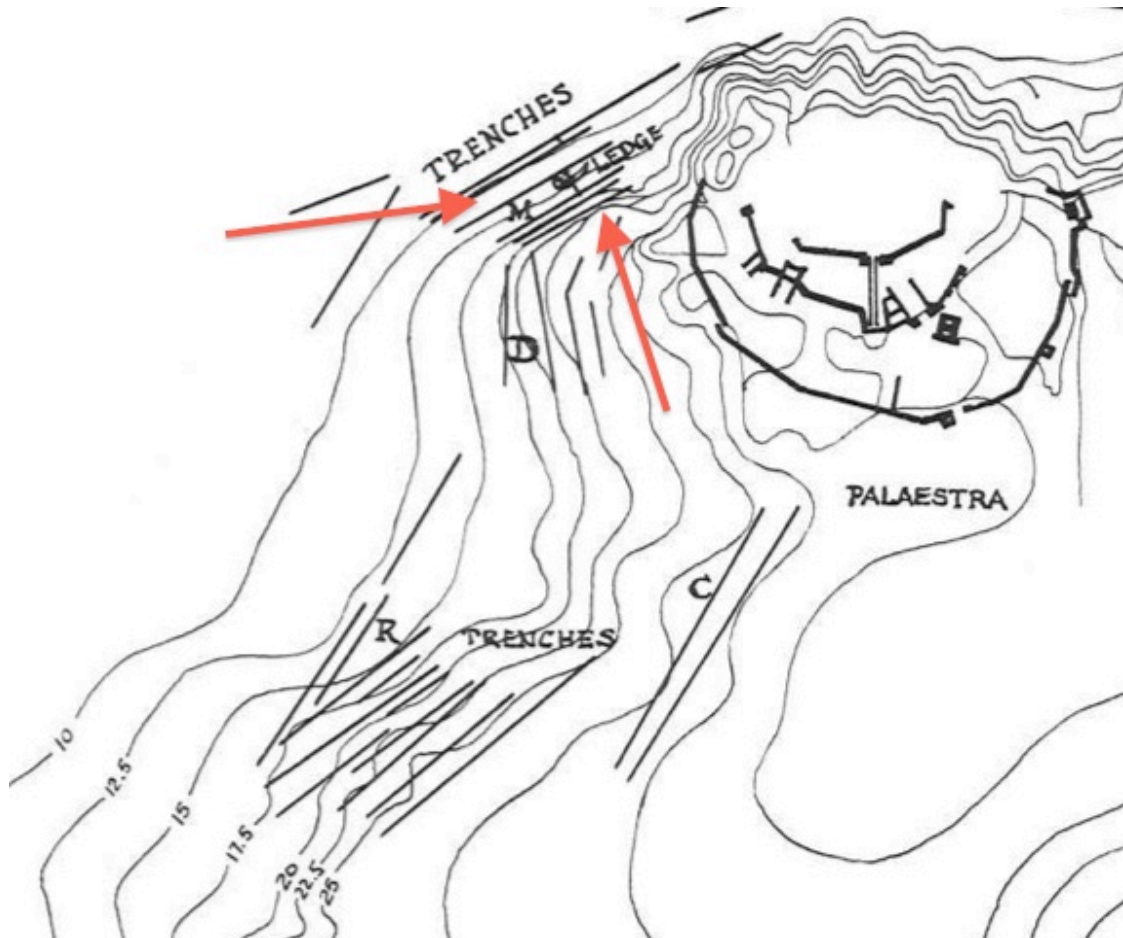


Figure 6.42. Location of the Ilc 'Ledge', annotated with two red arrows, in relation to the Troy citadel (walls from all periods), with escarpment gradation. From Plate 416, Blegen et al. 1950. Annotation by the author.

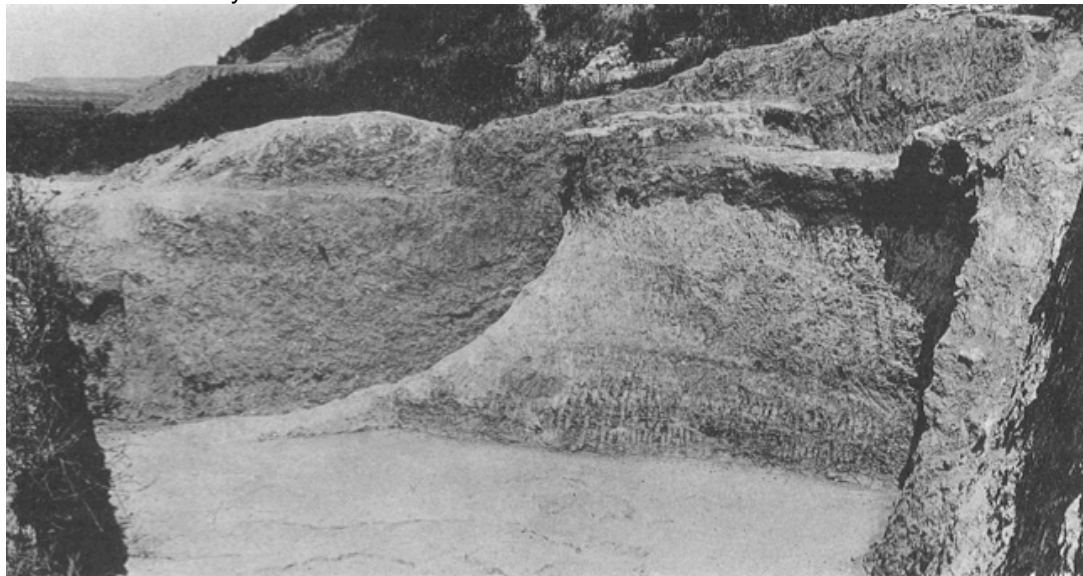


Figure 6.43. The Troy Ilc Ledge, "General View Looking Northeastward". Blegen et al. 1950, Pl. 291.

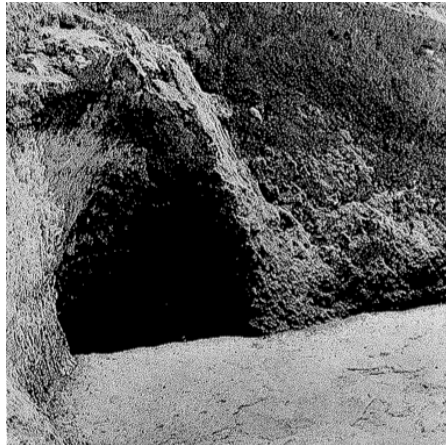


Figure 6.44. Cavity associated with the Troy IIc Ledge. "View towards the Southwest". Blegen et al. 1950, Pl. 290.



Figure 6.45. A16 bowl from Troy II. Blegen et al. 1950, Pl. 375.

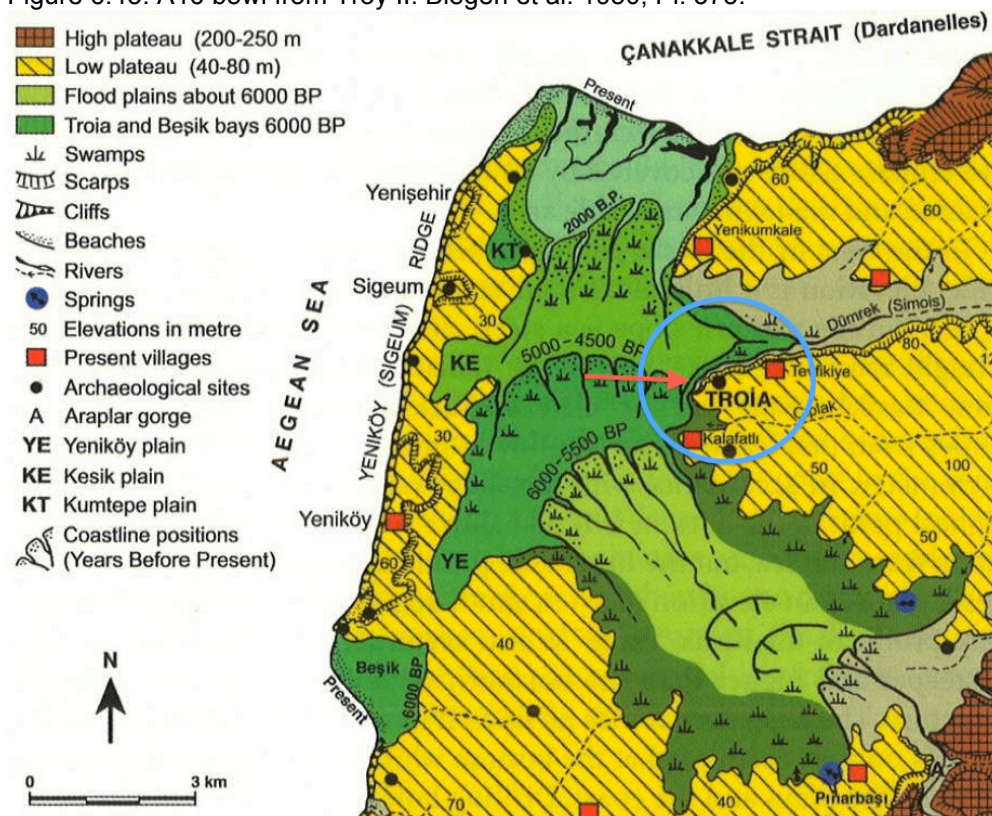


Figure 6.46. Geomorphology of the Karamenderes Plain over time, showing the position of escarpments to the northwest, north, and northeast of the citadel. Location of the Troy citadel circled in blue, and the Ilc 'Ledge' indicated by red arrow. Kayan et al. 2003, Fig. 7. Annotations by the author.

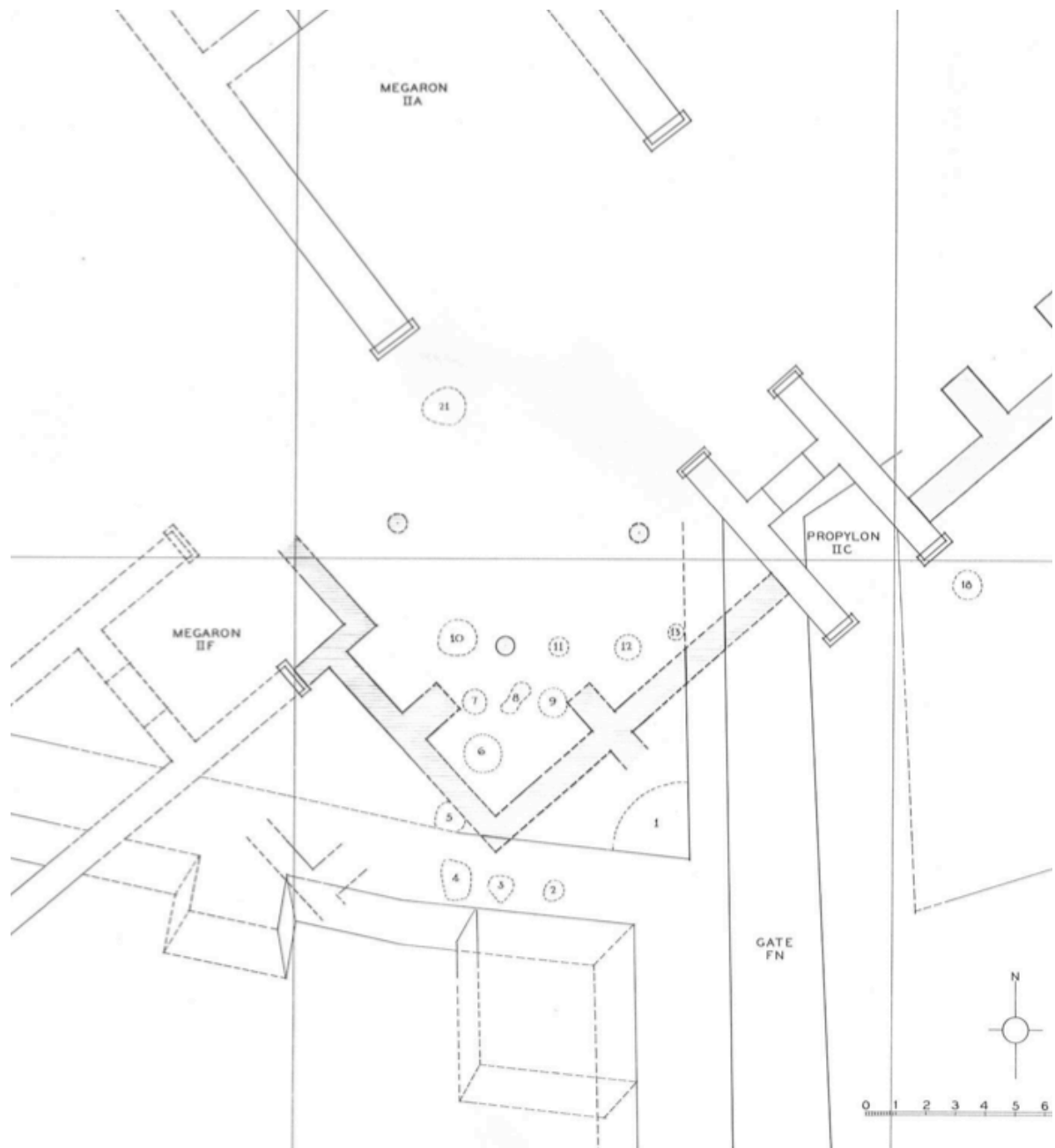


Figure 6.47. Location of Pits 1-13, 18, and 21, in relation to the citadel walls, megarons, and Propylon IIC. Shaded area indicates walls in-use during the IId period. Indicated here is large Pit 1 against a surviving corner of Gate FN, and Pits 2, 3, and 4 dug into surviving walls of earlier Period IIA. Blegen et al. Pl. 457. Scale in metres.

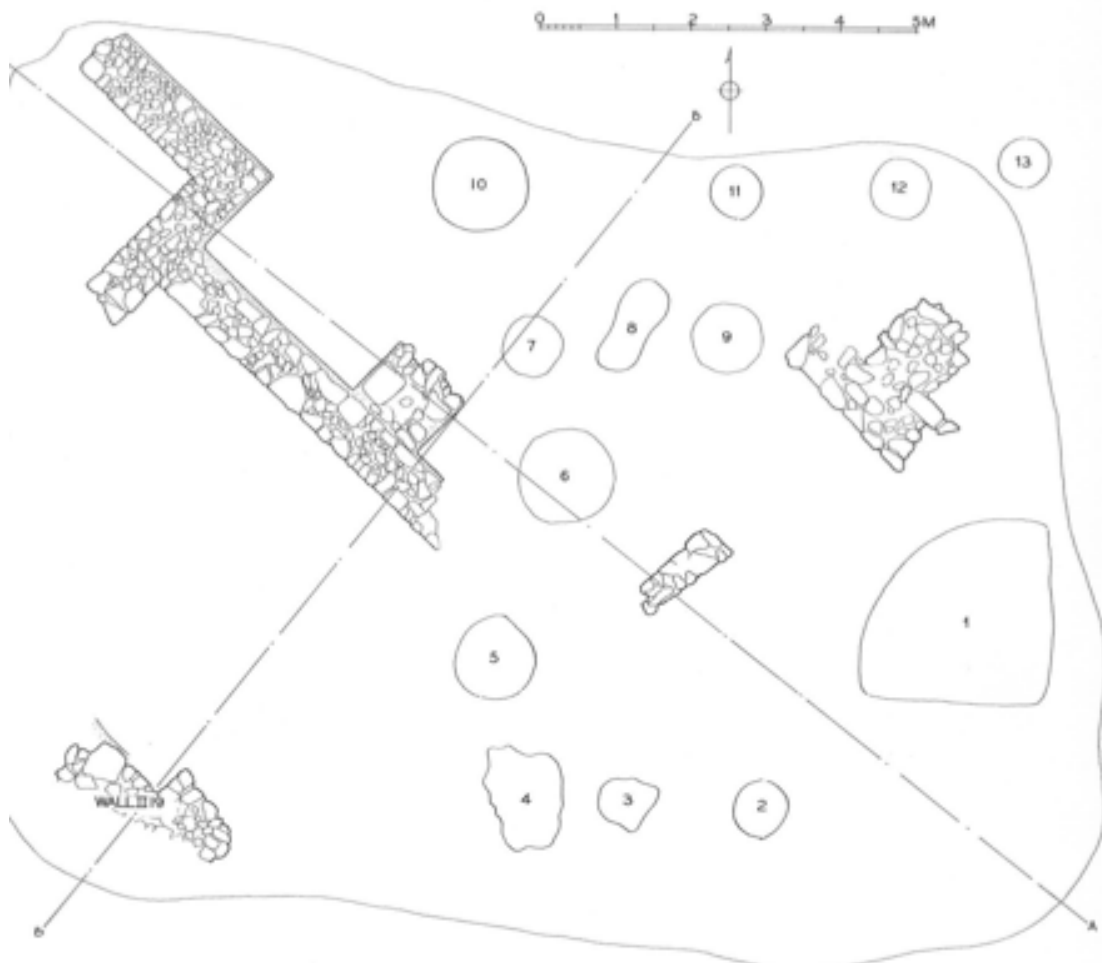


Figure 6.48. Location of Pits 1-13 in relation to wall remains in Square E6. This image shows the location of Pit 1 in more detail, heaped against a surviving corner of Gate FN. Blegen et al. Pl. 456. Scale in metres.



Figure 6.49. Excavation photograph showing Pit 6, "neatly shaped" (Blegen et al. 1950, 280), which contained animal bone, burnt clay with reed impressions, and numerous pithoi fragments. The pit also contained two jugs, one tankard, and one *depas amphikypellon*. Blegen et al. 1950, Pl. 294.



Figure 6.50. Excavation photograph showing Pit 18, located within a house and outside of Propylon Iic. Blegen et al. 1950, Pl. 299.



Figure 6.51. Excavation photograph showing Pit 21, which contained animal bone and two millstones, as well as one depas, one jug, and two storage vessels.

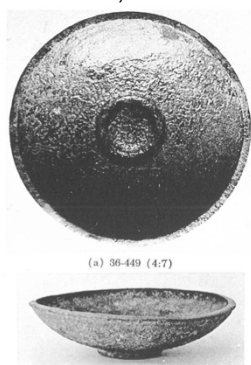


Figure 6.52. Silver bowl recovered from Pit 12 at Troy IId. Blegen et al. 1950, Pl. 359, No. 36.449.

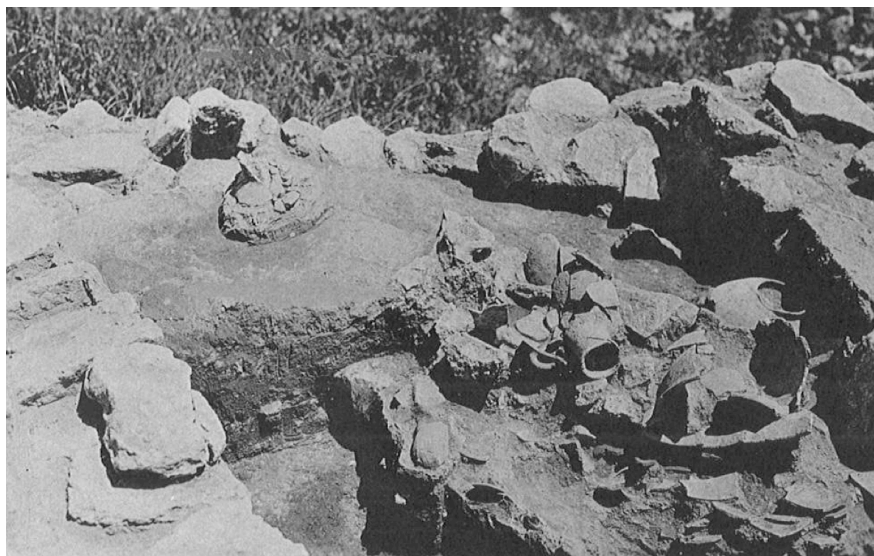


Figure 6.53. Excavation photograph showing Pit 1 ("rubbish heap"), view looking west, thus looking towards the vessels heaped against the corner of Gate FN and the fortification wall, both of earlier periods. In this pit was recovered a great deal of animal bone, vessels, and other items, including eleven wheelmade plates, two A16 bowls, three tankards, and two D32 dipper vessels 36.675 and 36.744. Blegen et al. 1950, Pl. 292.

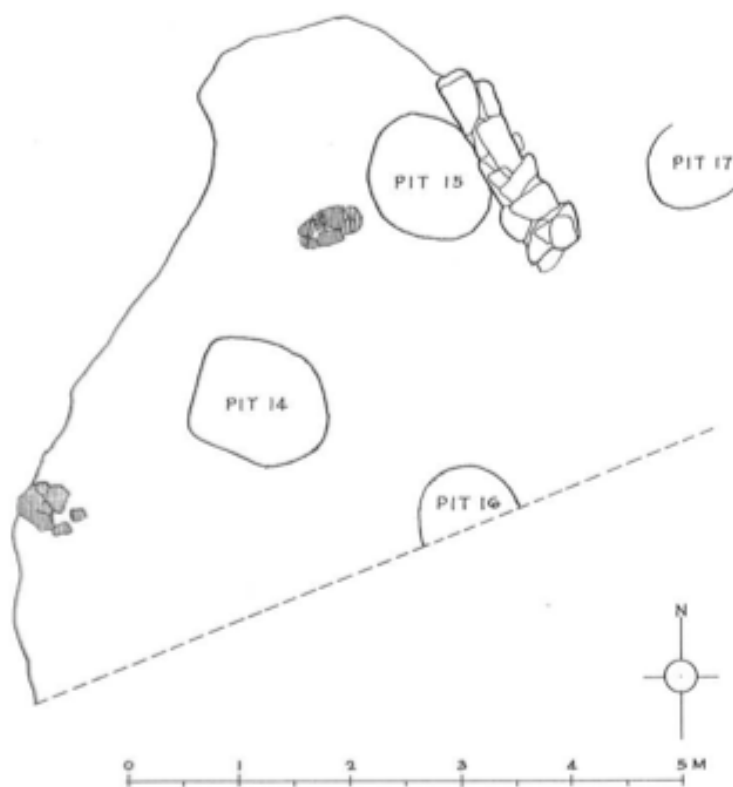


Figure 6.54. Location of Pits 14-17 in Squares F 4-5. Blegen et al. 1950 Pl. 467. Scale in metres.

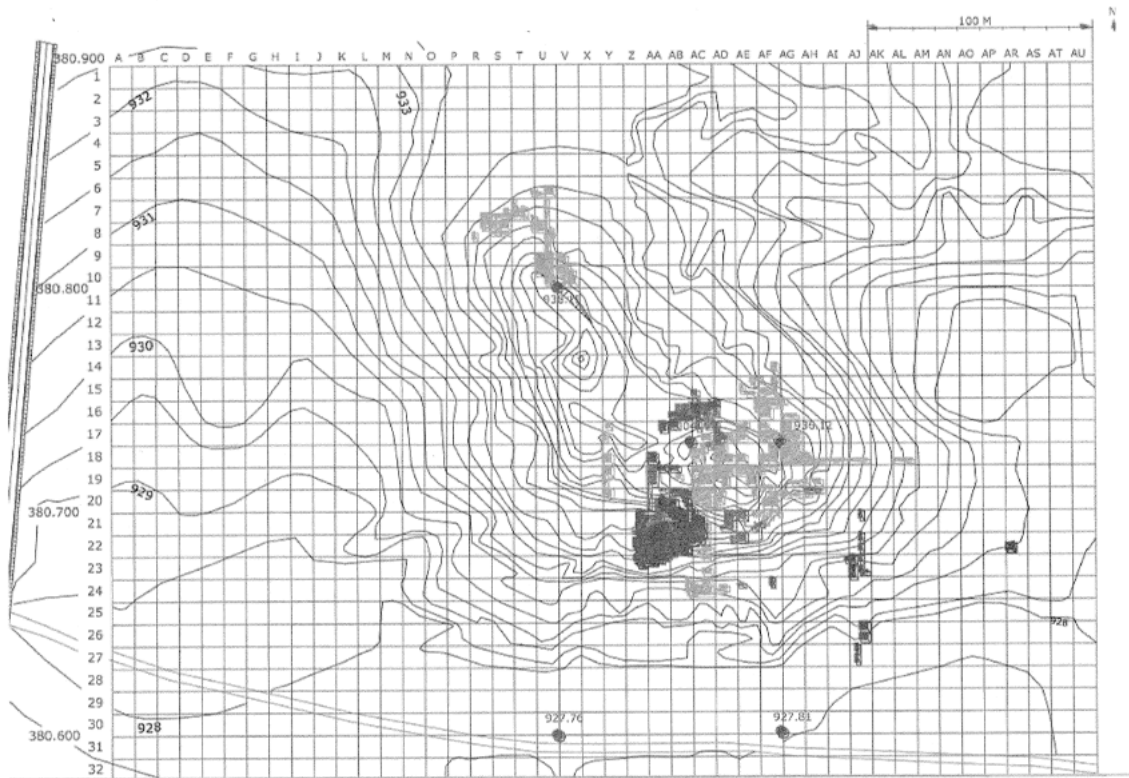


Figure 6.55. Küllüoba topographical plan showing the eastern and western mounds, and the areas that have been excavated as of 2009. Plans of the excavations are available at [kulluobakazisi.bilecik.edu.tr](http://kulluobakazisi.bilecik.edu.tr), last accessed 17th June 2014.



Figure 6.56. Complexes I and II of the upper town of the eastern sector of the EB II settlement at Kulluoba. Houses from the lower town are shown to the right. Efe and Fidan 2008, Fig. 1.



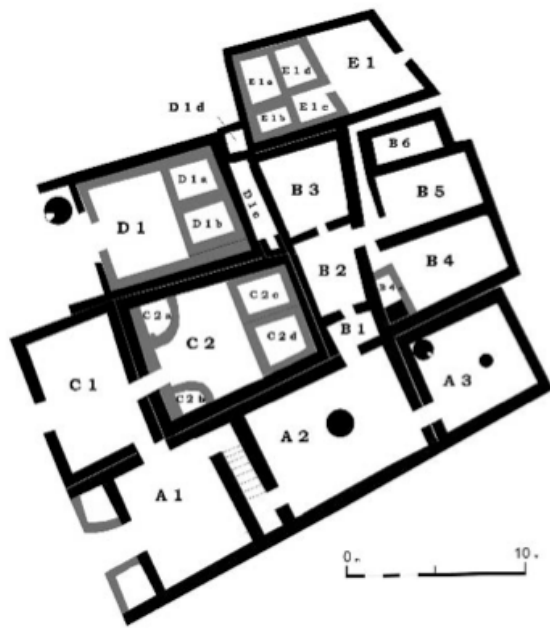


Figure 6.57. Küllüoba Complex II. From left: Phase IVC; right: Phase IVB. Efe and Fidan 2008, Figs. 3, 7.



Figure 6.58. Shallow carinated S-profile bowl Z 22.174 from Room C1, Phase IVC, Küllüoba Complex II. Sari 2009, 104, Fig. 2:18.



Figure 6.59. Bowl Z 22.168 with sharply inturning rim from Room C1, Phase IVC, Küllüoba Complex II. Sari 2009, 104, Fig. 2:13.

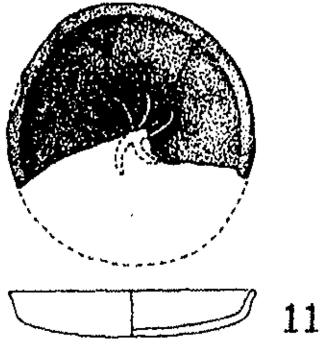


Figure 6.60. Shallow bowl AA 21.137, Type D, with S-Profile from Room C2, Phase IVB, Küllüoba Complex II. Sarı 2009, 93, 110, Fig. 5:11. Note groove decoration on interior. This bowl type, which was always executed in black topped ware, first appears in Phase IVB and is likely an import from the neighbouring Demircihöyük Pottery Zone (Sarı 2009, 92-93). The above parallel bowls from Sarıket Graves 106, 144, and 315 (Figure 4.18; Seeher 2000, Figs. 24: 106a, 26:144c, 144i).

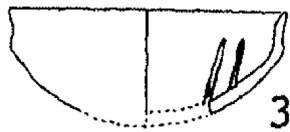


Figure 6.61. Shallow carinated bowl Z 22.157, Type E2, with S-Profile from Room C1, Phase IVB, Küllüoba Complex II. Black slip and groove decoration on interior. Sarı 2009, 110, Fig. 5:3.

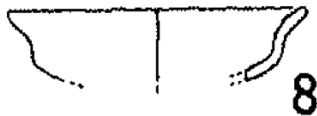


Figure 6.62. Shallow carinated bowl Z 22.133, Type E2, with S-Profile from Room C1, Phase IVB, Küllüoba Complex II. Sarı 2009, 110, Fig. 5:8.

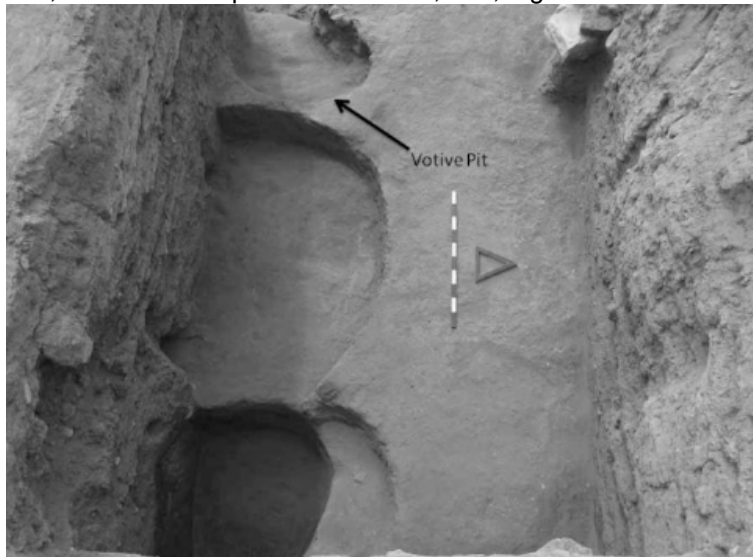


Figure 6.63. Votive Pit within Trench AA 19, Küllüoba period IIIA. Türkteki 2010, Fig. 1.

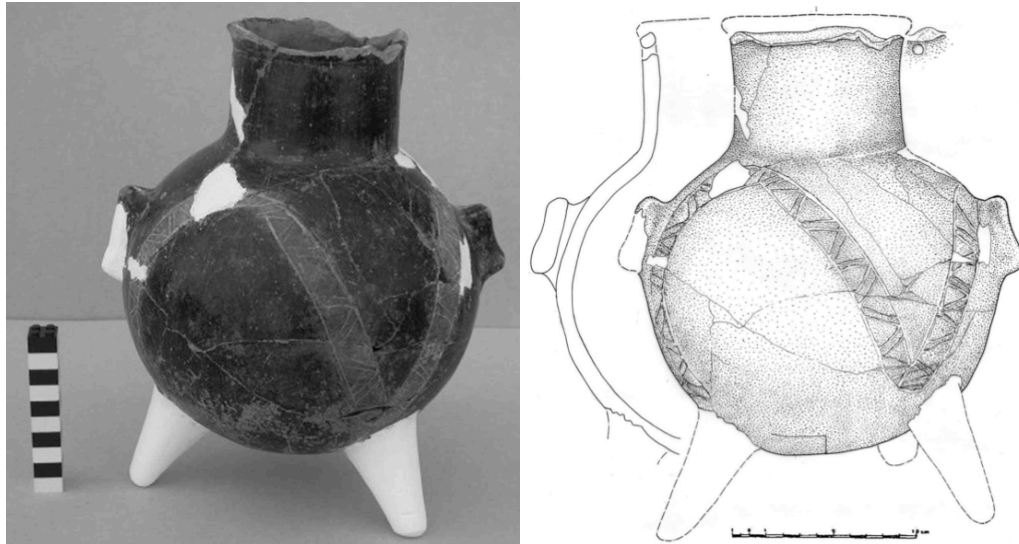


Figure 6.64. Necked pot from Küllüoba Trench AA 19. Türkteki 2010, Fig. 2b.

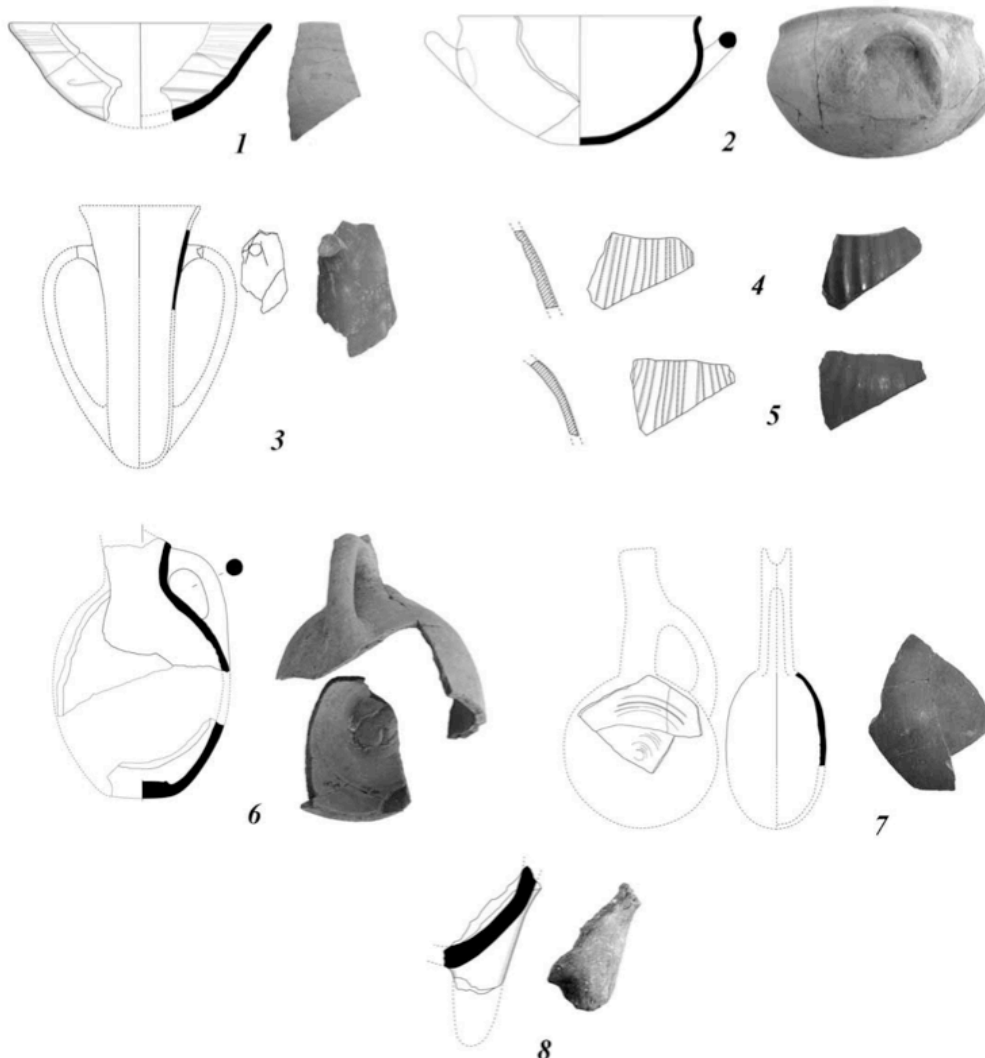


Figure 6.65. Contents of votive pit in Trench AA 19 in addition to the necked pot, above. Türkteki 2010, Fig. 3. 1: Trojan A2 plate, wheelmade. 2: Deep bowl with horizontal handles and S-profile, wheelmade. 3: Depas sherd, handmade. 4: Fluted sherd, wheelmade. 5: Fluted sherd, wheelmade. 6: Beak-spouted jug, wheelmade. 7: Flask, wheelmade. 8: Fragment of a tripod cooking pot, wheelmade.

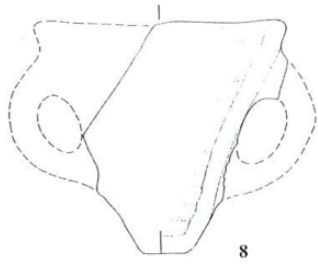


Figure 6.66. Depas from Küllioba, recovered from a pit dating to the period transitional to the EB III (Efe and Türkteki 2005, 127, Fig. 9b:8). Pronounced wheelmarks on interior and finished with Pasty Red-Slipped Ware.

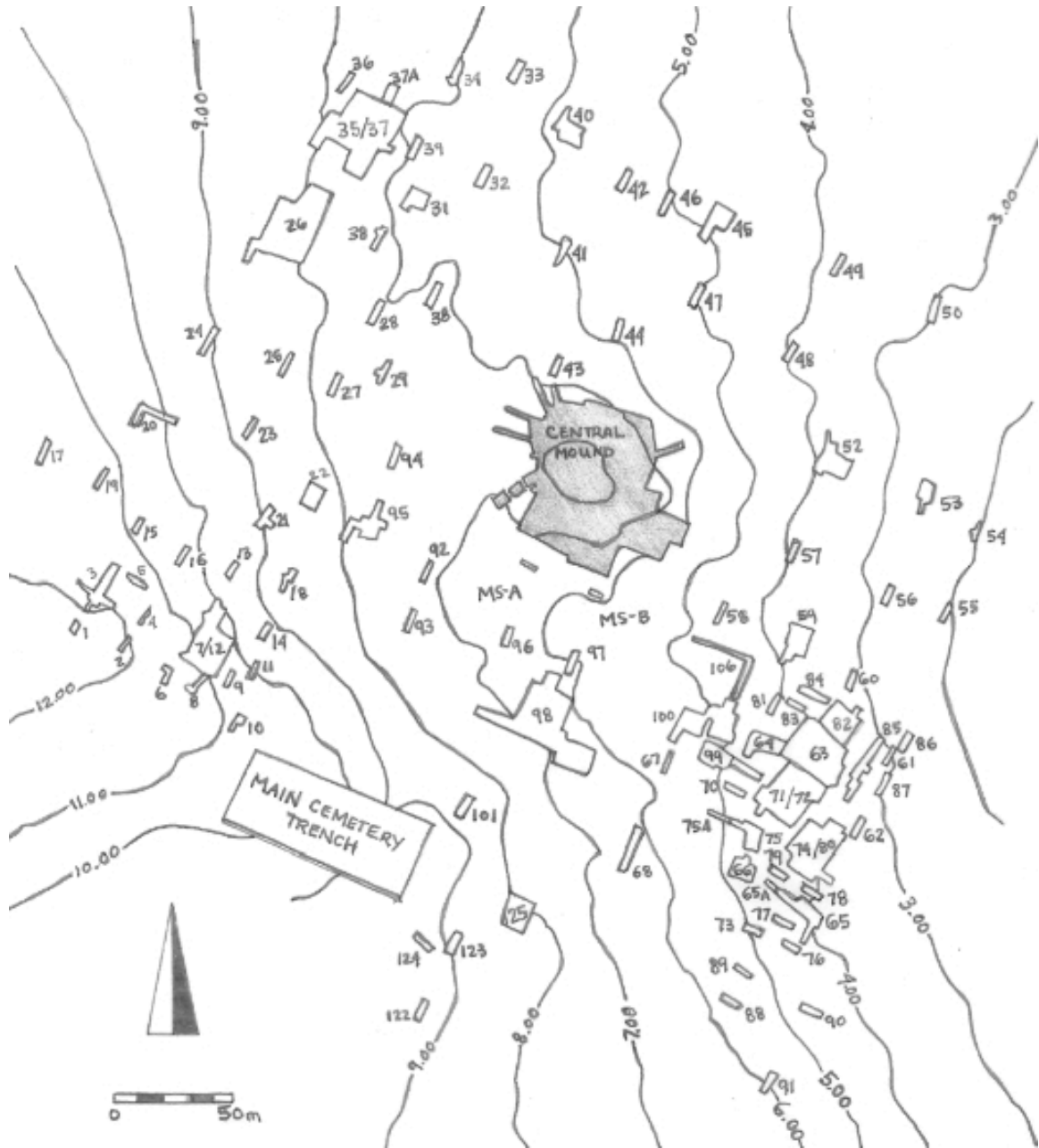


Figure 6.67. Karataş site plan. Drawn by the author after Eslick 2009, Pl. 2.

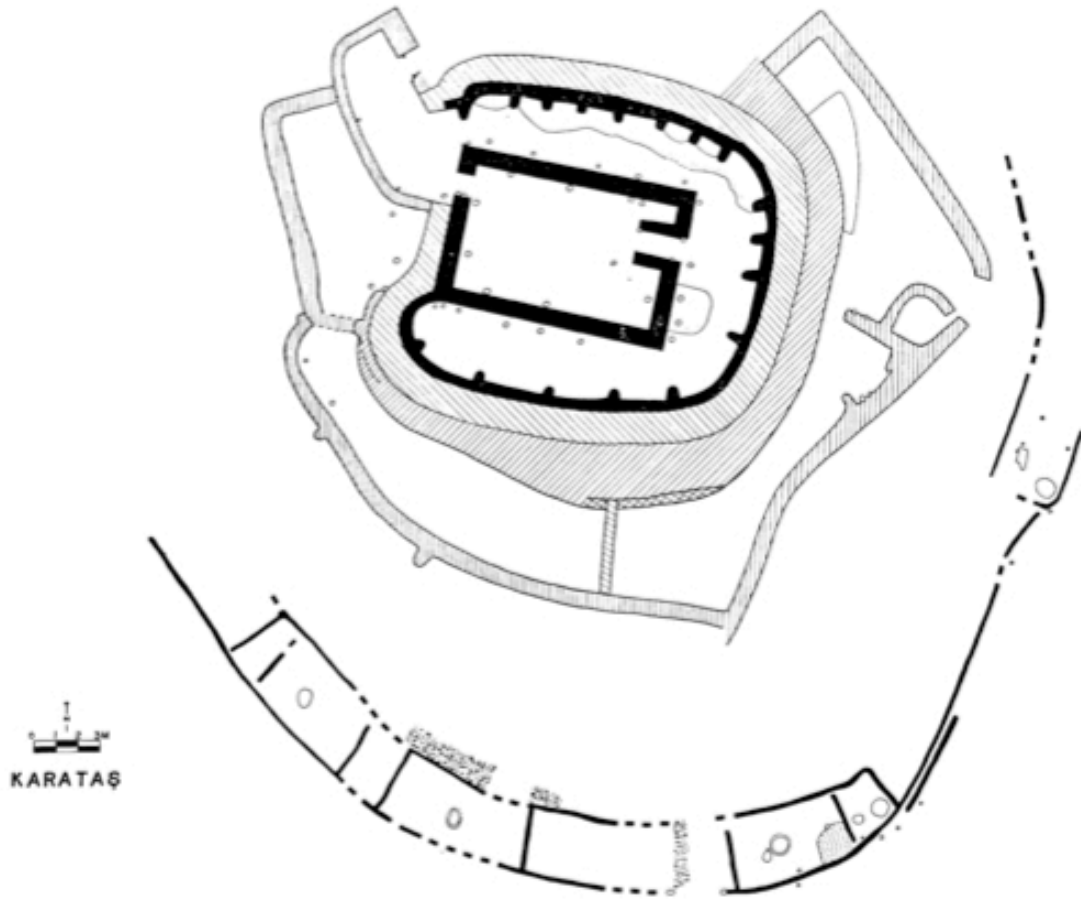


Figure 6.68. Karataş central mound. The central citadel was ringed by courtyards, walls, embankments, and a double palisade wall of wattle-and-daub. Along the palisade can be seen the 'fence houses', which incorporated the palisade as a structural wall. Mellink 1974, 352, III. 1.

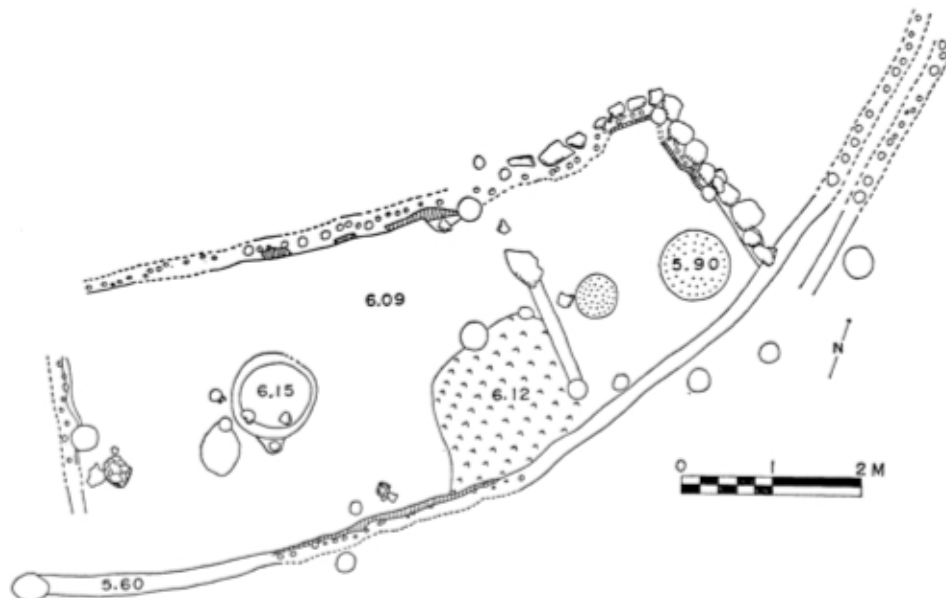


Figure 6.69. 'Fence houses' at the Karatas central citadel. Mellink 1973, 295, III. 2.

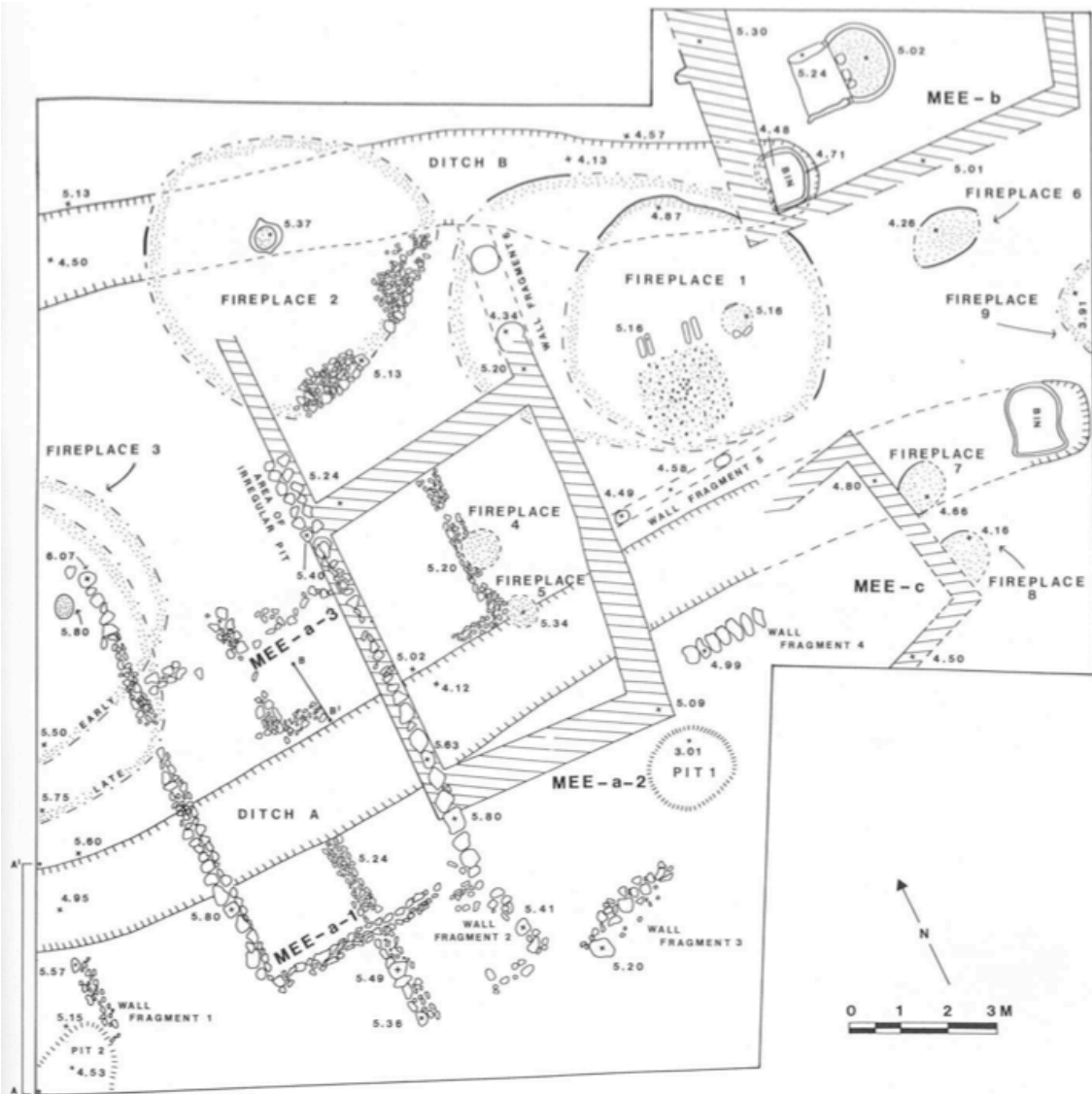


Figure 6.70. Karataş Trench MEE in Periods III-IV. Raised open fireplaces date to Period IV. At this time, the ditches are also filled in. During Period V:1/2, a paved area with ovens was added. Warner 1994, Pl. 57.

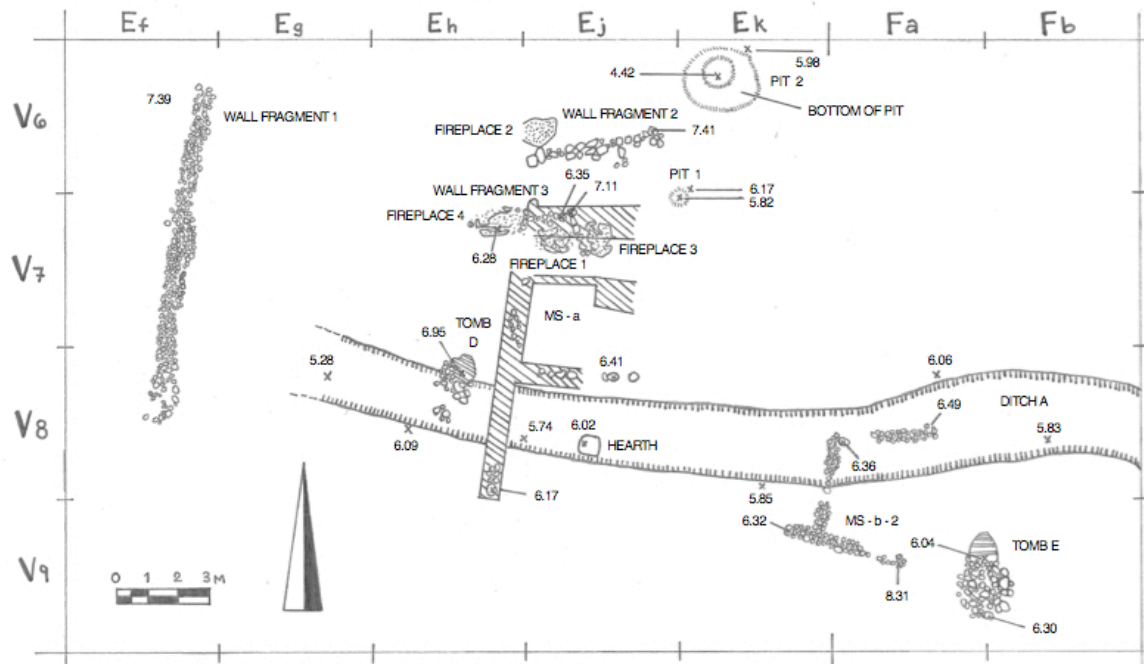


Figure 6.71. Karataş Trench MS in Periods I-V:1/2. Raised open fireplaces and house MS-a date to Period IV. At this time, the ditches are also filled in. The wall fragments and houses MS-b-1 and MS-b-2 are added in Period V:1/2. Drawn by the author after Warner 1994, Pl. 64.



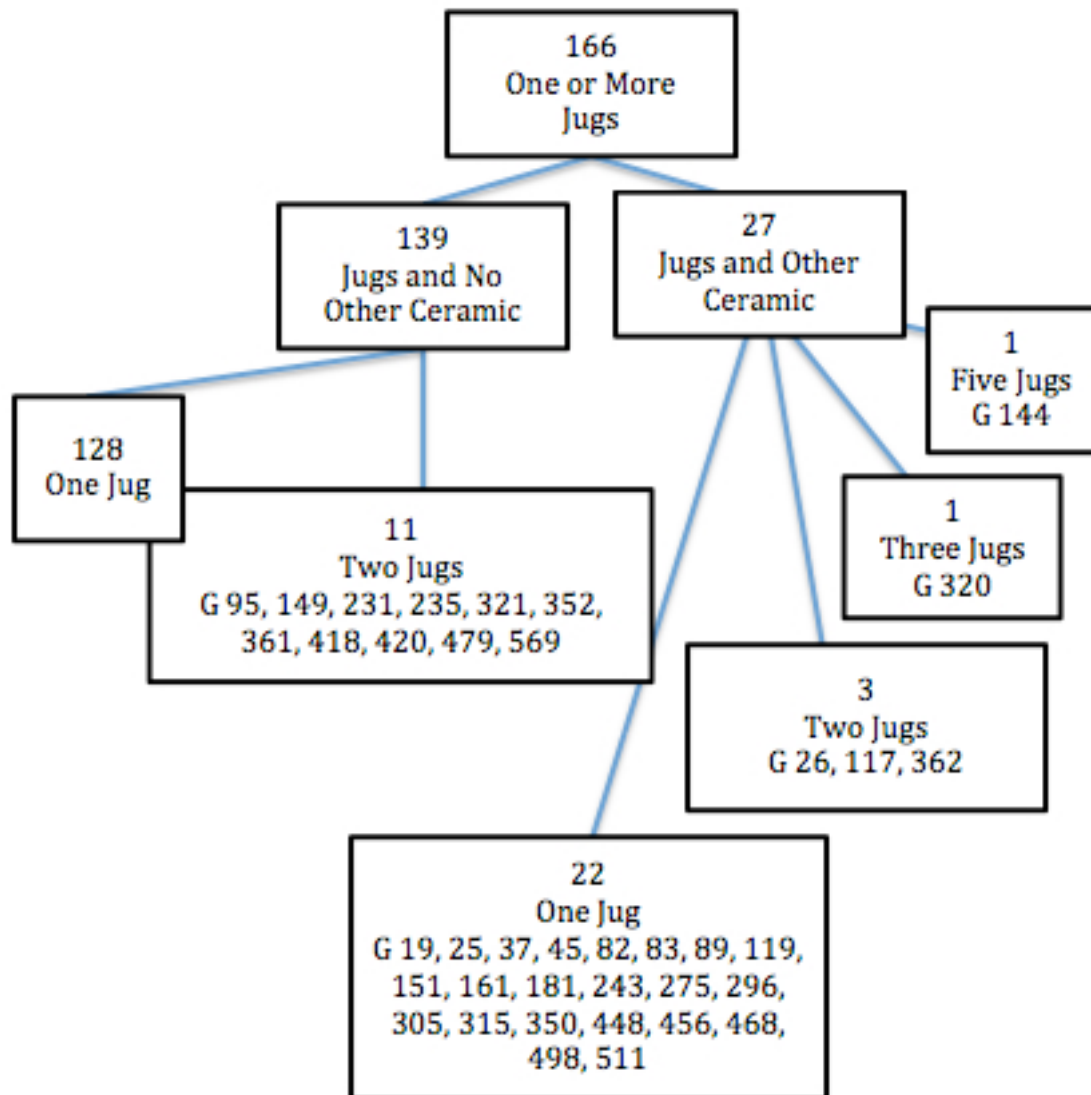
Figure 6.72. Jug KA 744 with strainer side spout from Karataş Period IV. Eslick 2009, Pl. 79.



Figure 6.73. Karataş Trench 63, Periods V-VI. A small storage shed or 'kiosk' in the centre of the trench is marked in red. Drawn by the author after Warner 1994, Pl. 39.



Appendix II. Sarıket and Küçükhöyük grave goods by category



128 Graves with one Jug and No Other Ceramic:

G 7, 8, 13, 31, 34, 35, 38, 40, 53, 54, 58, 59, 66, 67, 70, 85, 88, 90, 93, 95, 97, 101, 103, 105, 108, 110, 112, 121, 131, 145, 148, 149, 154, 162, 164, 167, 183, 186, 189, 190, 202, 203, 205, 208, 210, 211, 213, 216, 219, 220, 222, 226, 227, 229, 230, 231, 233, 235, 250, 259, 263, 271, 278, 280, 286, 289, 290, 298, 299, 300, 307, 310, 313, 319, 321, 325, 329, 336, 339, 340, 345, 352, 354, 356, 357, 361, 365, 367, 370, 371, 372, 379, 380, 381, 386, 388, 391, 392, 394, 399, 400, 403, 405, 418, 419, 420, 421, 427, 435, 436, 441, 444, 445, 463, 465, 469, 477, 479, 483, 491, 494, 496, 497, 499, 513, 515, 521, 529, 530, 545, 546, 552, 564, 565, 569, 578, 579, 586 and 587.

Chart 4.1. Demircihöyük-Sarıket Necropolis. Breakdown of grave contents.

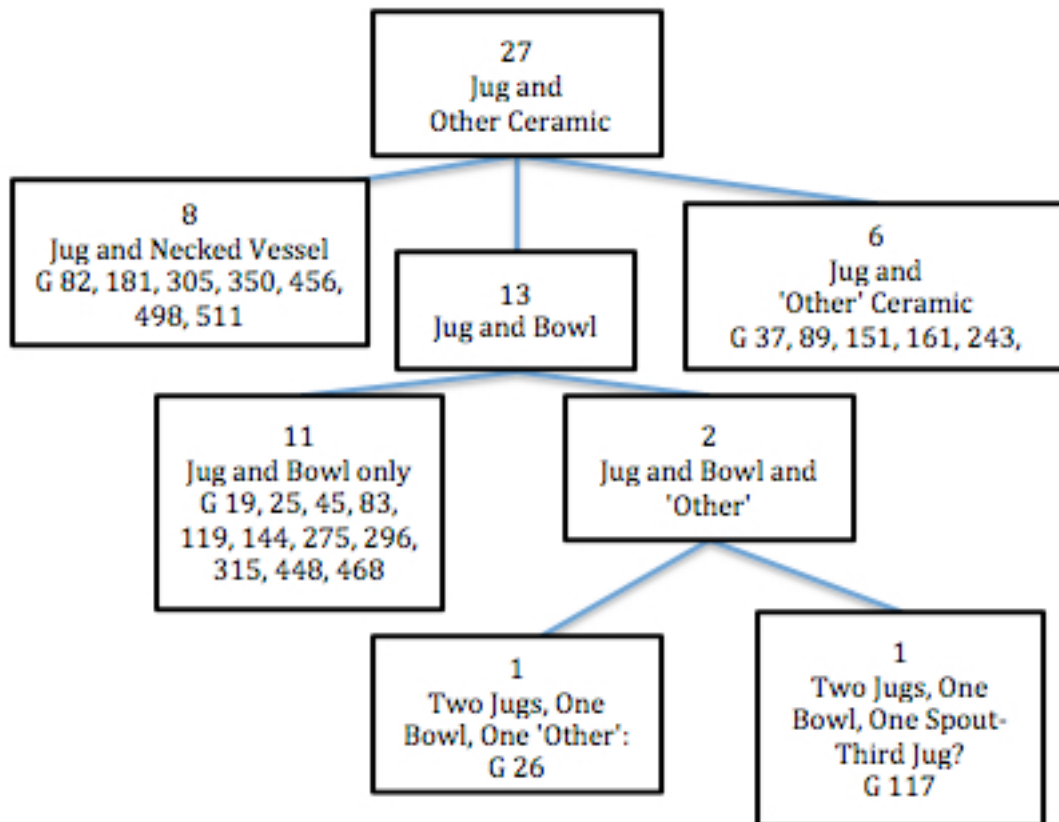


Chart 4.2. Demircihöyük-Sarıket necropolis. Ceramic contents of graves.

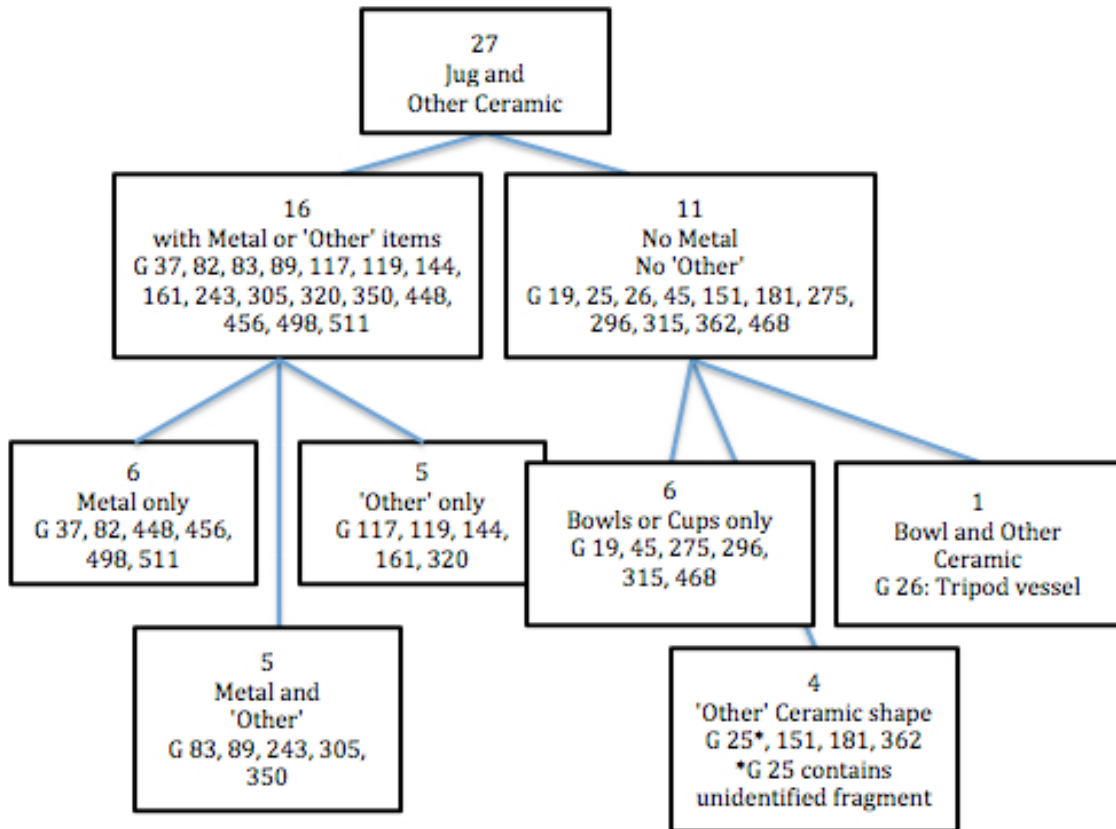


Chart 4.3. Demircihöyük-Sarıket necropolis. Ceramic contents of graves.

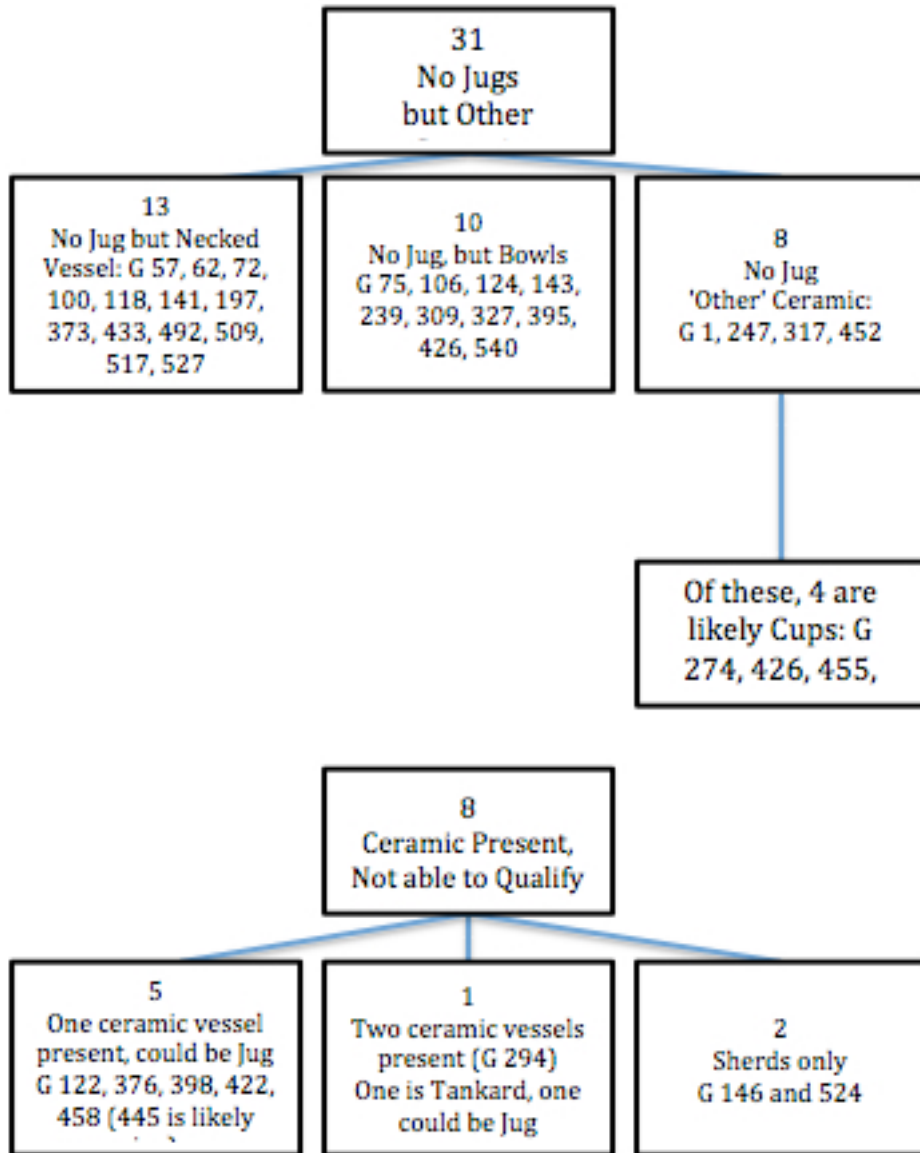


Chart 4.4. Demircihöyük-Sarıket necropolis. Number of graves containing various quantities of ceramic.

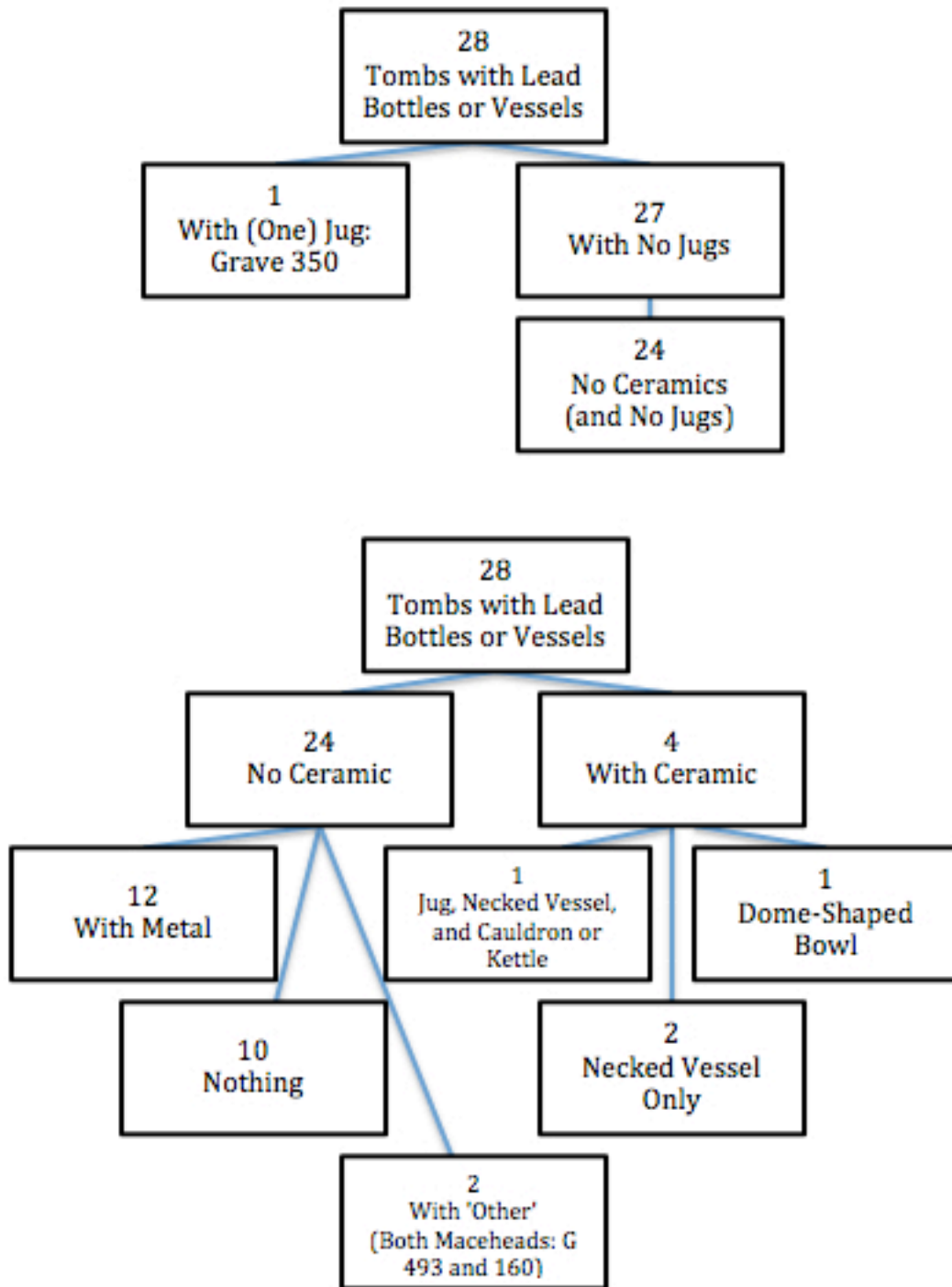


Chart 4.5. Demircihöyük-Sariket necropolis. Tombs with lead vessels.

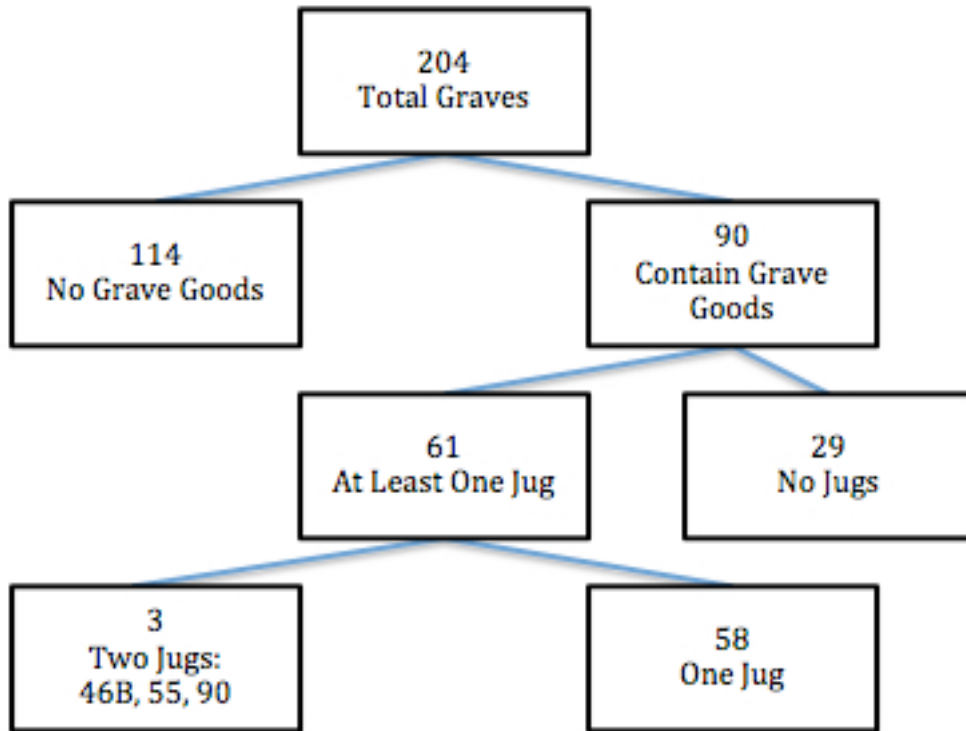


Chart 4.6. Küçükhöyük necropolis. Breakdown of jugs in graves.

## Appendix III. Vessels and notable items found within pits at the Troy IId citadel. After Blegen et al. 1950, 279-300.

### **Abbreviations:**

PW: Plain Ware

RCW: Red-Coated Ware

EAW: Early Aegean Ware

GBP: Gray/Black Polished Ware

CW: Coarse Ware

### **Pit 1**

"Considerable quantity" of animal bone (Blegen et al. 1950, 280).

Lead fragment 36-433 Pl. 358.

Crystal pendant 36-298 Pl. 359.

Rock crystal 36-320 Pl. 359.

Bone idol 36-84 Pl. 360.

Bone tube 36-235 Pl. 365.

Six terracotta whorls

Twenty-five vessels:

Ten A2 plates in Plain Ware:

36.755, Pl. 372.

36.659, 36.670-672, 36.745-749

A2 RCW 36.755 Pl. 372.

A16 PW 36.726 Pl. 375

A16 RCW 36.753.

A38 RCW 36.1146 Pl. 378.

A43 PW 36.750 Pl. 380.

A43 PW 36.743 Pl. 380.

B3 EAW (local) 36.1147 Pl. 383.

B22 EAW 36.756 Pl. 386.

C13 CW 36.757 Pl. 398.

C13 RCW 36.731 Pl. 398.

C21 CW 36.741 Pl. 400.

C35 CW 36.742 Pl. 403.

D14 RCW 36.661 Pl. 405.

D32 EAW 36.675 Pl. 406.

D32 EAW 36.744 Pl. 406.

### **Pit 2**

A handful of bones

### **Pit 3**

### **Pit 4**

Animal bone

Filled with damp earth

Terracotta mould 37-127 Pl. 369.

One terracotta whorl

### **Pit 5**

Animal bone

Carbonised wood

Bone comb 36-293 Pl. 365.

Six flint blades 36-326 to 36-331 Pl. 362.  
Whetstone 36-323 Pl. 361.  
Three terracotta whorls

Four vessels:

A2 PW 36.674.  
A18 CW 36.853 Pl. 376.  
C32 RCW 36.848 Pl. 402.  
C35 GBP 36.849 Pl. 403.

### **Pit 6**

Animal bone  
"Rather neatly shaped" (Blegen et al. 1950, 280).  
Chunks of burnt clay with reed impressions.  
Numerous fragments of pithoi around periphery  
Two terracotta brush handles

Four vessels:

A39 RCW 36.845 Pl. 378.  
A45 RCW 36.844 Pl. 381.  
B4 CW 36.730 Pl. 485.  
B6 RCW 36.846 Pl. 385.

### **Pit 7**

Sticky burnt earth  
Roughly circular  
Coating of white clay on interior

### **Pit 8**

Loose rubbish and a few sherds  
Shallow, irregular

### **Pit 9**

Some animal bone  
Flint blade 36-316 Pl. 362.  
One terracotta whorl

Two vessels:

A2 PW 36.673.  
A2 PW 36.673.

### **Pit 10**

Animal bone  
Carbonised matter  
Shells  
Sticky green-yellow deposit typical of streets  
One terracotta whorl

One vessel:

A2 PW 36.823.

### **Pit 11**

Animal bone  
Awl/pin 36-373 Pl. 364.



Two vessels:  
A2 PW 36.826.  
A45 GBP 36-856 Pl. 381.

### **Pit 12**

Animal bone "a good many" (Blegen et al. 1950, 280-81).  
Carbonised matter  
Silver bowl 36-449 Pl. 359.  
"Filled with a general collection of rubbish" (Blegen et al. 1950, 280).

Three vessels (not including silver bowl):  
A2 PW 36.828.  
A2 PW 36.832.  
A18 CW 36.851 Pl. 376.

### **Pit 13**

One vessel:  
A45 RCW 36.857 Pl. 381.

### **Pit 14**

Some animal bones  
Two copper pins 37-742, 37-747 Pl. 358.  
Bone idol 37-628 Pl. 360.  
One terracotta whorl

Two vessels:  
A2 PW 37.1107.  
C19 CW 37.1116 Pl. 399.

### **Pit 15**

Two vessels:  
A16 PW 37.1034 Pl. 375.  
C39 CW 37.1187 Pl. 411.

### **Pit 16**

Animal bones  
Shallow  
Bone awl/pin 37-560 Pl. 364.

Three vessels:  
A2 PW 37.1030.  
A2 PW 37.986. Pl. 372.  
C28 GBP 37.1117 Pl. 401.

### **Pit 17**

"Numerous" animal bones (Blegen et al. 1950, 290).  
Bone awl/pin 37-368 Pl. 364.  
Bone idol 37-627 Pl. 360.  
Polisher 37.326 Pl. 363.  
Three terracotta whorls  
Twenty-three further A2 plates were recovered, but not reconstructed. In addition to these, "parts of 54 bases were counted among the numerous other fragments" (Blegen et al. 1950, 293).

Nine vessels:

Seven A2 plates in Plain Ware:

37.984 Pl. 372.

37.985, 37.1029, 37.1031

37.1032 Pl. 372.

37.1105-1106

D5 RCW 37.996 Pl. 405.

D13 RCW 37.1033 Pl. 405.

### **Pit 18**

Probably contained animal bone<sup>1</sup>

large chunks of carbonised wood

Copper pin 37-738 Pl. 358.

Flint blade 37.119 Pl. 362.

Two vessels:

A16 RCW 37.1132 Pl. 375.

C39 CW. 37.998-37.999 (two sherds representing one vessel). Pl. 411.

### **Pit 19**

No bone reported

"Many" pithos fragments (Blegen et al. 1950, 295).

One vessel:

C39 CW 37.998 Pl. 411.

### **Pit 20**

No bone reported

Stone button 37-493 Pl. 363.

One terracotta whorl

Three vessels:

A2 PW 37.1109.

A39 PW 37.1142.

A45 RCW 37.1141 Pl. 381.

### **Pit 21**

Animal bones

Two millstones

Four vessels:

A45 RCW 37.1139 Pl. 379.

B18 RCW 37.1136.

C9 EAW 37.997 Pl. 389.

C12 CW 37.1188.

### **Pit 22**

Much loose rubbish

Two vessels:

A39 GBP 37.969 Pl. 378.

C35 GBP 37.967 Pl. 403.

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<sup>1</sup> "the same kind of debris that covered the floor" (Blegen et al. 1950, 294).

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