SOCIAL ORGANIZATION IN THE EARLY BRONZE AGE DEMİRCİHÖYÜK: A RE-EVALUATION

By

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To *My Family*

PAGE OF APPROVAL

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ABSTRACT

For a long time the social, political and economic changes of the urbanizing or pre-urban societies in Early Bronze Age Anatolia have been tried to be explained by social organizational models that were established for other regions and cultures. Although the excavated settlements and cemeteries especially in the western Anatolian EBA showed internal differences, the social organization of these societies have been usually referred to as being at the "chiefdom" level, which resulted in the identification of political, social and economic similarities between these sites, rather than their distinct characteristics. Although a regional perspective is undeniably useful, a bottom-up and site- specific approach can provide new insights to the question of social organization.

It is clear that a combined evaluation of the settlement and cemetery is necessary to understand the social dynamics, daily practices, production and consumption habits and symbolic behaviors of a society. However studies that combine the outcomes of the analyses of these two spheres with an approach other than trying to pinpoint social hierarchy are almost absent. Demircihöyük in northwestern Anatolia as one of the very few sites with an excavated contemporary EBA settlement and cemetery makes such an approach possible. The aim of this thesis is to look at the archaeological remains from the settlement and cemetery of Demircihöyük and try to re-evaluate the social organization of the inhabitants with different perspectives that are beyond the framework of social and economic differentiation models.

Keywords: Social organization, social dynamics of prehistoric societies, EBA, western Anatolia, Demircihöyük, settlement, cemetery.

ÖZET

Tam olarak şehirleşme sürecine girmemiş veya girmekte olan Erken Tunç Çağı Anadolu topluluklarının bu süreçte uğradıkları sosyal, politik ve ekonomik değişimler uzunca bir süre başka coğrafya ve kültürler için oluşturulan sosyal organizasyon modelleri kullanılarak açıklanmaya çalışılmıştır. Özellikle Batı Anadolu'da kazısı yapılmış Erken Tunç Çağı yerleşme ve mezarlıkları her ne kadar kendi içlerinde farklılıklar gösterse de, burada yaşayan (ve ölen) toplumların sosyal organizasyonu çoğunlukla "beylik" olarak adlandırılmış ve bu toplumların farklılıklarından çok ortak yönleri üzerinde yoğunlaşılmıştır. Bölgesel bir bakış açısı şüphesiz ki faydalıdır fakat tümevarımsal ve yerleşim-merkezli bir yaklaşım da bu tartışmaya yeni boyutlarla kazandırabilir.

Bir yerleşmede yaşayanların sosyal dinamiklerini, üretim-tüketim alışkanlıklarını ve sembolik davranışlarını anlamak için sadece yerleşimin veya sadece mezarlığın değil her ikisinin de incelenmesi gerektiği açıktır. Fakat bu iki alanın analizi sonucu ortaya çıkan çıkarımları birleştirerek sunan ve bu çıkarımlara sosyal sınıflanma dışında bir bakış açısıyla yaklaşan çalışmalar neredeyse yoktur. Kuzeybatı Anadolu'da bulunan Demircihöyük hem yerleşmesinin, hem de bu yerleşmeye ait mezarlığın kazısı yapılmış nadir Erken Tunç yerleşimlerinden biri olması sebebiyle bu tür çok yönlü bir yaklaşımı mümkün kılar. Bu tezin amacı Demircihöyük'ün yerleşmesinde ve mezarlığında ortaya çıkarılmış arkeolojik buluntulara bakarak, burada yaşayanların sosyal organizasyonlarını, sosyal ve ekonomik farklılık modelleri çerçevesinden çıkarak farklı bakış açılarıyla yeniden incelemek ve yorumlamaktır.

Anahtar Sözcükler: Sosyal organizasyon, tarihöncesi toplumların sosyal dinamikleri, ETÇ, Batı Anadolu, Demircihöyük, yerleşme, mezarlık.

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1.0 CHAPTER I

INTRODUCTION

The social organization of prehistoric societies has a long research history and it is still one of the major questions in social archaeology. Despite its long history there is no consensus on how to approach this question theoretically or methodologically. Although today archaeological questions are concerned with social problems more than functional, economic and social evolutionary models, the deep roots of the traditional approaches and terminologies has resulted in their long use in archaeological interpretation.

The social evolutionary models had been influencing archaeological trends and these trends were reflected in the interpretations some of the earliest discovered EBA sites in Anatolia such as Troy and Alacahöyük where material remains that fit the traditional descriptions of social organizations where hierarchies were found. Later newly discovered EBA sites were pigeonholed into these models, despite the fact that the models were only based on a few sites mostly from different regions in Anatolia. One of the attempts to build regional social organization models was C.Eslick's "Hacılar to Karataş: Social Organization in southwestern Anatolia." article (1988) where she examined the social organization of sites from the Late Neolithic to the EBA and argued that the chiefdoms in the EBA southwestern Anatolia developed from the emerging social stratifications in the Late Chalcolithic. Her article demonstrates a top-down approach: how the social organizational models were applied to archaeological interpretation and how this phenomenon was seen as an evolutionary development in those years. Demircihöyük an Early Bronze Age settlement in northwestern Anatolia had been excavated between 1975 and 1978 and

was published in 1983, around the same period as Eslick's article. This site was also referred by its excavators as a "chiefdom." (Korfmann 1983).

In this thesis the top-down approach has been reversed to a bottom-up one: Demircihöyük has been chosen as a case study to understand the internal dynamics of how a western Anatolian EBA society worked rather than to simply categorize the society to determine its level of complexity. As it was done with Demircihöyük, there are certain elements that were analyzed to pigeonhole sites into a social organizational model: monumental architecture, an organized site plan usually with a defensive system, eccentric finds and materials usually surfaced from burials and burials with "rich" finds or with a special construction, were associated with pre-urban societies that had social differentiation. Here the issue of differentiation in Demircihöyük is reconsidered by looking at those elements to try to understand how the community at Demircihöyük was socially organized. The primary objective is not to support or dispute the suggestion that Demircihöyük was a chiefdom or try to see whether or not it fits into similar predetermined categories, rather it is more about understanding how the daily life was organized, how and where the production and consumption activities were taking place and what social inferences could be made by looking at these phenomena. Instead of discussing the typological differences of the materials found at other EBA sites or comparing the material remains from Demircihöyük with those sites, here Demircihöyük is the main focus.

To be able to do such a reconsideration and re-evaluation it is important not to examine only the architectural and material remains from the settlement, since there are materials from the cemetery that were not found in the settlement. Moreover the cemetery provides different dimensions to the study of social

organization that may not be attested in the settlement. Therefore the cemetery is going to be evaluated with its material distribution, but also with its spatial organization. As houses are compared architecturally and materially to understand the social dynamics in the settlement, the burials are compared to try to understand if there were certain customs or patterns that were applied to certain age/gender groups or to individuals in certain burial types. Another concern is going to be to define the differences and similarities in the burials and to try to see how these could be interpreted in ways other than simply trying to find evidence for social hierarchy.

Demircihöyük is one of the very few EBA settlements in western Anatolia that has an excavated contemporary settlement and cemetery,[1] and it is still the only site in the region with an extensive and detailed final publication of both its settlement and cemetery making it ideal for this study. Considering that the settlement and the cemetery are complementary, studying the finds and the outcomes from these two spheres could give more fruitful results than just studying one of them. My argument is that since "the dead do not bury themselves" (Parker Pearson 2006: 84), a one-sided evaluation would not be enough to understand the social dynamics of the Demircihöyük inhabitants, be it among the living or between the living and dead. The approach here is to interweave the outcomes of the cemetery and settlement in a way that not only compares and contrasts the material remains but also combines them to have a multi-dimensional vision about social organization and to demonstrate how these two could complement the study of economic activities such as production and use, but also the study of mortuary customs.

[1] Baklatepe, Karataş-Semayük, Ulucak, Kaklık-Mevkii, Kusura are the other ones.

1.1 THE "CHIEFDOM" PROBLEM

Social organization and culture change in the form of social evolution has been a major concern of scholars since the 18th century (Chapman 2003) and became an essential question with the spread of Darwinian and later Marxist ideologies, which transferred also to archaeology with Childe's *Man Makes Himself* (1936). Especially in the 60s and 70s it was a crucial concept for archaeology, since the "Middle-Range Theory" by Binford led archaeologists to compare the past social organizations with the present ethnographical examples (Binford 1971). This theory grew mostly from the roots of Service's work (1962, 1971) in which ethnographic data, material and non-material criteria were built up to divide societies into successive types of social organization such as bands, tribes, chiefdoms and states. Until recently it was the general trend to put sites under these categories according to the scale of production, organization, economical activities, wealth, population and site size, which obscures the internal dynamics and the distinctive characteristics of sites. It seemed an obligation for the excavators to assign a predetermined social organizational form to their site and the more "complex" political organization the better.

Early Bronze Age Anatolia was no exception to these research trends. The EBA is considered a period of great transition among Anatolian communities (Yener 2000: 67) when organized urban societies developed (Çevik 2007: 131, Steadman 2011: 231) and "life became more complex" (Joukowsky 1996: 143). For a long time the discussion about these developments circled around the issue of social hierarchy and political organization rather than questioning the social dynamics of these EBA communities. Scholars have insisted for a long time on interpreting these

developments in a way that implied strong social stratification. For instance Renfrew stated that the differentiation in building sizes indicated "almost certainly a differentiation in status" in the Aegean EBA sites including Troy (1972: 402). Eslick argued that this time period was when "the transition from egalitarian to stratified societies" occurred (1988: 10).

In spite of this lack of material evidence for such strong hierarchies in all the EBA sites, many excavated sites in western Anatolia were pigeonholed into the "chiefdom" category. Since the existence of social hierarchies in these sites was considered almost definite, the term "chiefdom" was regarded as "a convenient way of describing" these "inegalitarian societies" (Eslick 1988: 12). For instance considering the small site sizes Özdoğan argued that there were no administrative, military or religious classes but he maintained that "chiefs" did in EBA Anatolia (2006: 573). Furthermore Eslick referred to the late 3rd mill. settlement of Troy as "a fully developed chiefdom" (1988: 39). Efe preferred the term "feudal landlords", which is conceptually similar to the chiefs (Efe 2003a:88).

I believe the reason why the term "chiefdom" has been broadly used for EBA Anatolia is not only due to the lack of a better term. There are several additional reasons: Firstly some of the earliest discovered EBA sites in Anatolia such as Troy and Alacahöyük revealed great amounts of quality metals that were assumed to indicate not only craft specialization or trade relations, but also the need to show off wealth indicating the presence of people with the wealth. The production of bronze required interregional trade connections (especially for its rare component tin) and more importantly people demanding and organizing the acquisition, exchange and production of the tin, copper and other metals as well as people with the knowledge

to produce these metals. All these are considered as some of the developments that led to a more heterogeneous social organization in the EBA. The second reason is that some sites in western and southwestern Anatolia revealed differences between the domestic architecture and larger buildings that could be (and have been) interpreted as administrative/public structures or dwellings of the rulers. EBA western Anatolian sites like Karataş-Semayük, Troy, and Külloba with larger or different structures contributed to the notion that there was a social difference represented also architecturally. The third reason is that there is no clear consensus on the terminology for the EBA sites and their social organization (Çevik 2007), and therefore it is assumed that since urbanism started to develop at the end of the EBA, the incipient phases of EBA were naturally chiefdoms according to the expected evolutionary model.

Service defined societies that were more dense, complex and economically more productive than tribes and that had social inequality as "chiefdoms" (1962). Later, other scholars came up with alternative characteristics and terms that attempted to diversify types of chiefdoms such as "individualizing" or "group-oriented" chiefdoms (Renfrew 1974). However, the problem with using such terms (even in alternative subcategories) is that they are based on certain check-lists consisting of given developments some of which were listed by Renfrew.[2] However as Service noted, the form of organization (or the characteristics of chiefdoms for instance) is not usually visible archaeologically and therefore "can only be inferred or conjured." (Service 1962: 144). In other words, what the check-lists recite is what has been inferred from certain sites. What is deficient about such social evolutionary

[2] For the list see Renfrew 1974: 73

categories and models is that these assume single trajectories of development, but in reality there is a whole spectrum of different social organizational forms. These forms differ from one another by their political, cultural, economic and social histories. Therefore this thesis is going to focus on a single site in western Anatolia, which is a region that exemplifies that even sites in the same region do not always show a similar pattern in terms of their social organization.

1.2 WESTERN ANATOLIA IN THE EBA: APPROACHES TO ITS SOCIAL ORGANIZATION

The transition from Late Chalcolithic to the EBI period in Anatolia is usually considered as "culturally artificial" (Yakar 2011: 69) because the material assemblages are very similar (Düring 2011a: 263). Although this material similarity continues throughout the transition from EBI to EBII (Düring 2011a: 270), cultural changes start to appear with the later stages of the EBII period. Pottery started to show regional characteristics for different EBI western Anatolian sites at least in three different cultural regions: (1) Troy I/Yortan-İznik, (2) Beycesultan EBI and (3) Demircihöyük and the region of the upper Sakarya (2003a: 89)[3]. And although some of the EBI cultures continued into the EBII such as the Troy-Yortan culture, new cultural zones such as Pisidian-Lycian and Phrygian-Bithynia appeared in the EBII (Efe 2003a: 91). The different pottery traditions of these cultural regions show that western Anatolia in the EBA was not a unified region in terms of cultural traditions or cultural developments.

The date for the shift from the EBI to the EBII has not yet reached a consensus, however generally the tripartite division of the western Anatolian EBA

[3] See Fig.1 for the map

has been accepted which more or less correlates with the early settlement phases of Troy:

EBI: Troy I: 3000-2500 BC.

EBII: Troy II: 2500-2200 BC.

EBIII: Troy III-IV-V: 2200-1800 BC. (Blegen 1963: 174).

Not only for western Anatolia, but for the EBA Anatolia in general there are lots of different suggestions for the chronological divisions.[4] In this thesis I preferred to follow the chronological charts of Yakar (2011)[5] and Efe and Türkteki (2011)[6] since these are based on the most recent chronologies. According to these chronologies Demircihöyük fits to the EBI and EBII dated around 3100/3000 to 2500 BC.

Yakar defined the EBI in Anatolia as being "proto-urban" and as "chiefdom systems", whereas the EBII was "early urban" which marks one of the differences between these periods (1985, 2011). However, urbanizing or pre-urban sites with evidence for social inequality are assumed to appear in southeastern Anatolia already in the Late Chalcolithic. Arslantepe in Malatya exemplifies an urbanizing site where Level VII indicated an established social complexity, with monumental structures, ceramic mass production, handicraft specialization and material evidence for personal property such as seals and sealings (Frangipane 1993: 135). These are considered to appear after the "rise of social and political inequalities in the region" (Balossi-Restelli 2008: 1). Although inequality could have been part of the social and political life at urbanizing sites such as the Late Chalcolithic Arslantepe where there are actually architectural and material remains that might indicate difference between

[4] See Harmankaya 2002, Manning 1995, Mellink 1992, Uhri 2006
[5] Fig. 2
[6] Fig. 3

the inhabitants, social inequality has been suggested to exist in other EBA Anatolian sites, most of which did not have features that may indicate such an inequality.

As it is seen, Anatolia in the EBA cannot be discussed as a single entity (Özdoğan 2011, Çevik 2007, Algaze 1999). Firstly, the number and scale of investigated sites in different regions differ considerably in the EBA. Some areas are represented only by several excavated sites; such as Cilicia or the Black Sea Region, whereas in southeastern Anatolia more sites with EBA strata were excavated.[7] Moreover, as noted by Düring only some EBA Anatolian sites have "well-published" and "well-excavated" sequences (2011a: 258), which makes a comprehensive regional understanding of the period even harder. Another reason is the span of the research questions. In Central Anatolia the research questions concentrate mostly around the metallurgical developments and on the analysis on the metal objects found generally in burials, since not many excavated EBA settlements are known from the region. For western and southeastern Anatolia the interregional contacts and long-distance trade is the main focus of investigation, perhaps due to the intention to connect these areas to archaeologically and chronologically more defined regions such as the Aegean and Mesopotamia. Thirdly, not all the regions or sites showed the same pattern of developments in the EBA in their social organization. It has been suggested that western and central Anatolia was becoming more centralized, whereas eastern Anatolia showed a decline of the Late Chalcolithic large sites. On the other hand in southeastern Anatolia, which was culturally part of Greater Mesopotamia, was in the process of urbanization (Çevik 2007). Lastly, the EBA Anatolian regions are defined on modern terms or on the basis of the excavated sites. In other words, it

[7] see Harmankaya 2002

is not clear which site defined itself part of which political or cultural zone, if there were such defined regions in the EBA. The studies that tried to define the above-mentioned cultural regions are based on the pottery (Efe 2004, 2003a),[8] which may partly answer the question of cultural zones; however cultural zones may not necessarily be the same as the political zones.

What most of the excavated sites dated to the EBA seem to have in common is that their investigation and interpretation aimed to identify the level of political organization. The question of political organization is mostly concentrated on the EBII period for western Anatolian sites since it is assumed that the urbanization and administrative classes first emerged in western Anatolia in this period (Efe 2011, Erarslan 2008, Çevik 2007, Özdoğan 2006, Cosmopoulos 1995, Renfrew 1972). It has been stated that in the beginning of this period societies with "better social and political structures" emerged and sites became larger and more populated (Efe 2003b: 271). However it should also be noted that already in EBI there were sites with evidence for larger structures, with an assumed non-domestic nature such as the central complex at Karataş-Semayük I-III (Mellink 1974, Eslick 1988, Warner 1994). This was a single rectangular structure with an enclosure wall and ramp leading into the complex, which continued to exist throughout the EBI levels of the site. This structure was located in the center of the mound marked by its different plan and "superior building techniques" and was also larger than the other structures found in this level (Warner 1994: 178). This led to the conclusion that the occupants of the dwellings around this central structure had a different status from the other village inhabitants (Warner 1994: 177-178). Recent material analyses showed that this

[8] see Efe 2002 for the map: 55, fig. 4

complex could be a production or storage area (Cannon 2010) and therefore it could have been shared by all the villagers, rather than being a facility that was reserved for a certain number of people.

The existence of differentiation in architecture has also been observed in western Anatolian sites such as Troy and Külloba in the EBII. In Troy architectural remains of the second settlement (usually referred as the "citadel") included a massive fortification wall, a large stone-paved ramp, a monumental megaron (Megaron IIA) which were interpreted as a ruling seat or a public or symbolic structure of an important city (Korfmann 2011b: 238). Recent studies also yielded evidence for a contemporary lower town (Jablonka 2011). In Külloba's late EBII levels a fortification wall was found that was enclosing the "upper town" where "administrative (?)" complexes were located (Efe 2003b: 274, 2007: 49). These complexes are assumed to function also as the residence of the ruler, due to its careful planning, monumentality and its location on the upper town. The cemeteries of both of these sites have not been discovered. Another EBII site; Demircihöyük located close to Eskişehir on the other hand, is a smaller site with similarly sized and identically planned structures. The settlement consists of houses comprising a back room and a front room, and forming a radial site plan. There is only one structure with three rooms located next to one of the gates of the settlement, which led the excavators to the conclusion that this was perhaps the residence of a person with the higher rank (Korfmann 1983: 243).

In addition to these examples where architecture was used as evidence for social organization, burials and burial finds were also considered to define a society's organization, especially to define social differentiation. As Parker Pearson criticizes

it was assumed that there was a parallelism between the degree of elaborateness of the mortuary treatments and the status of the deceased when they were alive (1982: 99). According to this assumption it would be possible to compare the burials and find out if there was a hierarchy between the deceased, which would answer whether there was also such a hierarchy in the settlement between the living. Despite the critics arguing that social organization should not be searched in ritual spheres (Brown 1995, Hodder 1982, Parker Pearson 1982), such assumptions continued to be applied to many excavated cemeteries in Anatolia. For instance one of the reasons why Karataş was considered as having "enough factors to be regarded as a chiefdom" (Eslick 1988: 38), was the existence of a "special" burial[9] filled with stones to form a gable shape and with a graveled floor that yielded a gold disc, some silver strips, a stemmed bronze razor and a jug as its burial finds (Mellink 1969: 324-327, Eslick 1988: 35). This burial was seen as a clear indication that "one member of the community was deemed worthy of special treatment." (Eslick 1988: 35). Since the cemetery of Demircihöyük had not been excavated when the final publication of the architecture was published,[10] it was not possible to integrate the mortuary data to the discussion of social organization. However even if the cemetery was known by the time of the final publication, perhaps the differences in burial finds and burial types would have been used as evidence for social differentiation. In this thesis I try to see how the differences between burials were interpreted in the final publication of the cemetery (Seeher 2000) and in which other ways it could contribute to the interpretation of the social dynamics at Demircihöyük.

[9] Grave AQ
[10] Settlement's publication: Korfmann 1983, cemetery's publication: Seeher 2000

Although the number of excavated EBI burials across Anatolia is low, the EBII period witnessed the rise of the extra-mural cemeteries and of the "rich" burials. The finds from the burials not only revealed the advances in metallurgy or changes in the symbolic expressions and beliefs of the EBA societies, but also contributed to the theories arguing for the development of craft-specialization and organized inter-regional trade in relation with the emergence of social hierarchy in this period. Burials in Alacahöyük and Arslantepe represent the extreme cases where the burials did not only reveal a great number of valuable objects but also special mortusry tretments.

Dated to the second phase of the EBI a stone cist burial was found at Arslantepe in a period of reestablishment of the power of the former elites (Frangipane 2011: 981). This so-called "royal burial" contained arsenical copper, copper-silver alloy, silver and gold weapons, tools and ornaments, vessels, ornaments made of carnelian, rock-crystal, silver and gold. Moreover there were four adolescent burials lying on top of the cist and had similar metal burial goods to the main burial. These individuals were assumed to be of royalty, whereas the two other individuals lying outside the cist close to the feet of the main burial were assumed to be sacrificed servants (Frangipane 2011: 982). The existence of this unusual burial and the fortification wall on top of the mound of Arslantepe's settlement led the excavators to the conclusion that a new type of power, consisting of chiefs with political and military roles was rising (Frangipane 2011: 982).

The 14 "elite burials" of Alacahöyük's EBIII levels revealed over 700 items (Gürsan-Salzman 1992) including various metal weapons, statuettes, standards, personal ornaments, diadems made of copper, bronze, silver, gold, lead, iron and

electrum and vessels, tools, figurines some made of other precious materials such as lapis lazuli or carnelian. It was not only these extraordinary materials that marked them as "elite burials", but also the fact that there were animal bones (mostly oxen) found in relation with these burials some of which were assumed to be attached to a yoke of carts (Orthman 1967). This richness of the burials made scholars to assume that Alacahöyük was a center of a powerful and rich kingdom or chiefdom (Lloyd 1967). The excavated parts of the EBA settlement of Alacahöyük are not extensive enough to understand the site plan (Özyar 2011: 233) and there are only five "non-elite" burials (Gürsan-Salzman 1992), which makes it difficult -if not impossible- to comment on the social dynamics in the site. However the limited number of such rich burials may imply a given group of people who were receiving such special treatments.

Other than these exceptional cases in eastern and Central Anatolia, in western Anatolia there were no burials with such abundant precious materials and objects found in the excavated EBA extra-mural cemeteries. Instead there are burials with a smaller number of burial finds some of which were metal and other precious objects, and also burials with special treatments. The main type of burials are the ceramic container (pithos and jar) burials, however there are also simple inhumation/earthen pit and cist burials. It has been assumed that there was a correlation not only between the number of finds and the status or wealth of the deceased but also between the burial type and the status or wealth of the deceased or his/her family. This approach was suggesting that burials with fewer or no burial finds or without special treatments were for "poorer" people. Moreover the simple inhumation burials that were the easiest to build (compared to cist or pithos burials) were again of "poorer"

people (Wheeler 1974: 417). As Parker Pearson points out this simplistic approach was ignoring that:

1) ritual communication does not refer to the actual relations between individuals but to idealized expressions of the living,
2) relations between the living are relations of influence and inequality, and the burials could have been manipulated according to those influences or inequalities. In other words the dead could symbolize things that the living wanted them to, not what they were in their living life (1982: 112).

The study of the cemeteries of Karataş-Semayük, Baklatepe, Yortan, Babaköy, Iasos, Harmanören, Ahlatlı-Tepecik and Demircihöyük shows that also in the western Anatolian EBA there might not be a direct correlation between the burial types and the quality or quantity of burial finds.[11] This outcome brings about the question how to integrate mortuary data into the discussion of the social organization in the settlements. As Parker Pearson rightfully states "Status is not so much a role to be reflected in mode of burial and associated grave goods but a panoply of practices which are historically situated and open to manipulation" (2006: 84). Since mortuary materials could not give direct or complete inferences about the social organization of the living, it is important to study the mortuary materials within the context of the settlement.

Even recent studies on the social and political organization of western Anatolia focus on the site architecturally looking for monumental architecture, evidence for fortification, organized settlement plans with reserved areas for certain

[11] For a comprehensive description of the Western Anatolian EBA burials and cemeteries see Uhri 2006

activities; and then look at the materials to find evidence for long-distance trade, standardization and craft specialization, which are assumed to exist in a pre-urban or urbanizing hierarchical society. Since burials can provide objects made of materials that are not found in the settlements (such as rare metals), cemeteries have been used to demonstrate the presence or absence of differentiation. This thesis aims to attempt an evaluation that would integrate the architecture, site plan and material remains both from the cemetery and settlement to understand the social dynamics of a site *per se,* because even western Anatolia does not show a homogenous picture in terms of settlements or burials.

The cemetery of Demircihöyük had not been excavated when the settlement was published. The final publication of the settlement's architecture argued for the presence of a social differentiation,[12] however when the cemetery was published its excavator stated that burials did not reveal evidence for a social differentiation, and such differentiation could only be expected in a more centralized or larger settlement (Seeher 2000: 229). By looking at the settlement and cemetery the existing picture of Demircihöyük does not seem to fit any of the social organization models suggested for western Anatolia. For this reason Demircihöyük has been chosen to re-evaluate the site plan, architecture and materials both from the cemetery and settlement since now we have the final publication of both spheres.

1.3 RESEARCH QUESTIONS

Recent studies that integrate the outcomes from the settlement and the cemetery of a single western Anatolian EBA site are almost non-existent. It seems that one of these spheres is considered sufficient to understand a site's social

[12] see Korfmann 1983: 233-246

circumstances. Since some of the western Anatolian sites that have a contemporary cemetery and settlement such as Karataş-Semayük do not have a final publication of both spheres (yet),[13] and since some other sites had only small numbers or poorly preserved burials such as Ulucak or Baklatepe, Demircihöyük with a large corpus of preserved burials[14] and a contemporary settlement consisting of comparable houses, was a perfect case for a combined settlement and cemetery evaluation. This thesis looks at the material remains of the EBII burials in Demircihöyük-Sarıket cemetery and the material remains of the five best-preserved rooms for the EBII levels of the settlement by concentrating on answering three major research questions:

1. What does the material distribution in the settlement and cemetery suggest about the social organization and daily life in Demircihöyük?
2. How can we interpret the architectural and material remains at the site with approaches that are not necessarily focused on economic differentiation?
3. What inferences can be made by interweaving the archaeological outcomes of the settlement and cemetery regarding the mortuary and daily practices at Demircihöyük?

The aim here is not to contribute to the existing models or to come up with an alternative social organizational type for Demircihöyük, but to re-analyze the data to evaluate approaches to social organization with a different perspective. By using a bottom-up approach I will study Demircihöyük's material *per se*, avoiding generalizations and not looking for evidence that fits a specific model, which might give more fruitful results than starting with a model that does not seem to apply to all

[13] Karataş-Semayük EBA Cemetery Volume is in press.
[14] To compare the scale of the excavated western Anatolian cemeteries see Fig. 26

western Anatolian sites in this period. The material outcomes are going to be used to build a picture about the daily life at the site, since daily practices could help us to understand how the society was working and eventually how the inhabitants were socially organized. One of the intentions is to present the difficulties of reconstructing the social hierarchy between individuals or groups/households by looking only at material remains, even if the materials from a contemporary cemetery and the settlement are considered together. It is also important to demonstrate that social organization is not all about the status differences between individuals, but it is more about how the society worked.

The architectural features of Demircihöyük have already been discussed with their social inferences by C. Chabot Aslan (2000). She looked at several EBA sites in western Anatolia and analyzed the architecture of the structures and of the site plan to see how the spatial arrangements could reflect the social boundaries between households or individuals. This thesis tries to complement the architectural discussion about Demircihöyük with the material analysis. In addition to the architecture here the material distribution in the settlement, the mortuary aspects such as the burial types and burial finds are integrated to the discussion of the social dynamics of an EBA society.

At the end readers should not expect to find a new model that could be applied to other sites, neither a conclusion that could be applicable to the rest of western Anatolian EBA sites. I believe that trying to create regional models for social organization is as difficult as trying to establish a unified picture of EBA Anatolia. Moreover creating models only highlights the similarities between sites,

however the differences in the internal social dynamics may have played more important roles in the social organization of these sites.

1.4 METHODOLOGY

Since a bottom-up approach will be used, the discussion will start with presenting the results of the material analysis and from there it will come to an interpretation. To be able to do such an analysis and re-evaluation, two separate databases were created using Microsoft Access database program to document the distribution of the materials: one for the settlement and one for the cemetery.

A database was created for the five rooms of the EBII settlement of Demircihöyük that could be compared. Efe states that the strata later than Phase H showed disturbance due to erosion and the eastern part of the settlement was disturbed by the MBA and later occupancies (1988: 1). He analyzed the pottery from the best preserved rooms that revealed material in the later phases, which are the five rooms chosen for this study. These rooms could be compared architecturally and materially from Phase H to Phase P/Q. These are Room 108, Room 109, Room 110 – front rooms of two-roomed houses- and the front and the middle room of the three-roomed house; Room 111 and Room 999, which hereafter are referred together as the "subject rooms" (Fig. 4). Korfmann suggests that the houses between the gates formed a "residential block" (1983: 243), and since the subject rooms are also in the same block that would provide more consistency. Since the houses expanded towards the inner yard, it was difficult for the excavators to distinguish the architecture of different phases. For this reason and for the fact that the area in the middle of the settlement continued to be used over time, the courtyard (Room 200) is not one of

the subject areas, however the materials from the subject rooms are compared to the ones from the courtyard.

For each room fields consisting of pottery, metal, clay, stone and bone finds were created for all the EBII phases. What makes an architectural comparison between houses difficult is the fact that the final publication of the settlement by Korfmann (1983) documents the architectural elements of each trench/area phase by phase. In other words instead of the analysis of separate rooms or houses, there is the description of areas/trenches. The problem here is that the same trench included parts of different rooms/houses. Since the aim here is to try to compare houses/rooms, only the materials that can be assigned to specific subject rooms/phases are analyzed in detail. By comparing these houses we will be able to see if architecturally similar houses showed differences or similarities in their material assemblages.

Both in the settlement and cemetery the pottery forms the major group of finds. The distribution of the shapes and wares between these two spheres therefore might contribute new insights. For this purpose the pottery is evaluated like all the other finds have been evaluated (i.e in relation with the rooms or burial types, age/gender relationship and association with other finds), especially with remarks on the shape/ware and distribution. The evaluation on pottery is going to be based on Efe's analysis, statistical information and charts (1988). For the cemetery the typology provided by Seeher is used which was based on the typology by Efe (Seeher 2000: 37-42). However here the typology will not be discussed in detail, instead differences in shape and ware will be the main concern regarding the classification, although in some instances it is necessary to note the typology of

pottery to question if not the number but the quality, ware or type of the vases showed a pattern in their distribution.

Finds made of stone, clay, bone and metal are categorized under "small finds". The small finds were analyzed by Seeher-Baykal and Obladen-Kauder (1996) whose work will be used as the primary source for the small finds. In this study tables are provided to show where the materials were found which helped me to have a room- by- room comparison.

The cemetery database consists of the location, the orientation, the preservation state of the burials, total number of individuals and finds, the find types/materials, the gender and the age of the individuals and special treatments. Each of these fields was filled for the 498 burials in the EBA cemetery.[15] These are going to be discussed in detail (in Appendix A) to see if the materials, their appearance with each other, the number of finds or the type of burials point to any pattern that may suggest any kind of difference or similarity between genders, between ages or between certain individuals/groups, and to see what such patterns might suggest about the society. Only the materials that were found in the burials (not the scattered finds in the cemetery) are analyzed.

The material analysis is based on the documentation of the finds in the final publication volumes of Demircihöyük. These publications presented the data as tables, whereas for this thesis they are transformed into charts to make the data more visual and the comparison easier to understand. Basing arguments on statistical information and the correlation of burial finds with the gender and age groups is

[15] There is a discrepancy in the burial number, in the publications it is mostly 497 (Seeher 2000, Wittwer-Backofen 2000), but in the catalog there are in total 498 (Seeher 2000). This is due to the fact that there G221 and G222 have a shared group of finds called G221/222.

perhaps the most common methodology used in mortuary analyses. However here instead of percentages the actual total numbers were used to present the data more accurately, in other words to avoid the statistical biases as much as possible. Since this thesis aims to make a comparison, actual numbers are preferred to make the comparison clearer, although percentages and statistical information are also given whenever necessary. Charts are created to present the number of finds, according to their phase and area they are found. For the cemetery there are also object/ material groups that have charts depicting their appearance with other objects.

Since the relative chronology of the cemetery was assigned to the Phases K/L to Q, the materials from these EBII phases are going to be analyzed in detail, to make a contemporary evaluation between the materials from the cemetery and from the settlement.

All the detailed material analyses are presented in Appendix A and the outcomes of the large body of data such as the notable occurrences, patterns, social, economic, political and symbolic implications are discussed in Chapter 2, Chapter3 and Chapter 4.

2.0 CHAPTER II

DEMİRCİHÖYÜK: THE SETTLEMENT

The first exploratory excavations at the site were directed by Kurt Bittel under the DAI, which started in 1937, and after a long break, the site continued to be excavated under the directorship of Manfred Korfmann between 1975 and 1978 again under the DAI (Korfmann 1983: 1). The mound is located to the north of the road from Eskişehir to Bozüyük near the edge of the plain about 855 m. above sea level (Fig. 5). It was 4-5 m. higher than the plain and was eroded mostly on its western side. The site was the first systematically excavated site in northwestern Anatolia for the early metal ages of the region (Korfmann 1983: 243).

The mound was made up of EBI and EBII layers dating to the first half of the third millennium B.C. Four radiocarbon dates from the EBA levels indicated that the settlement was established around 3000 BC. (Korfmann and Kromer 1993: 139-140). The other radiocarbon dates (Korfmann 1978) and the dendrochronological cross-datings (Yakar 2002, Korfmann and Kromer 1993) support that that the settlement should have lasted about 500 years (Korfmann 1983).

The earliest phase was built on the virgin soil about 8 m. below the present level (Korfmann 1983: 243). Neolithic ceramic fragments were found in the EBA layers, especially in the mudbricks suggesting the nearby existence of the Neolithic settlement (Korfmann 1983: 242). There were 17 building phases that were dated to the EBI and EBII.[16] The phases in the settlement are divided into three sections: the earliest phases (Phases D-F2) are Section I, the middle phases (Phases F3-K2) are

[16] A: The earliest, Q:The latest, C-K: EBI and L-P: EBII

Section II and the latest phases (Phases L-P) are Section III (Baykal-Seeher & Obladen-Kauder 1996: 326).[17] Phase L showed traces of a sudden catastrophe (Korfmann 1983: 242), however, the site continued to be occupied until the abandonment of the EBA settlement (Phase Q). After a hiatus the site was reoccupied in the MBA, which is a period also represented in the cemetery.

2.1 ARCHITECTURE

2.1.1 The Settlement Plan

In Demircihöyük, trapezoidal houses shared walls and roofs creating a circular arrangement 70 m. in diameter, with an open space in the center (Fig. 7). The settlement is enclosed by a fortification wall that appeared from Phase D onwards (Korfmann 1983: 242). From Phase F1 onwards the fortification is described as a "mighty fortress" made of stone and mudbrick, which had projections and bastions. There are two excavated gates leading to the settlement and two other gates are assumed to exist in the unexcavated section of the settlement. The excavated northern and southeastern gates were partially paved. Compared to the monumental stone bastions found at Limantepe which are dated to the EBII (Erkanal 1996, 2011), the "mighty fortress" of Demircihöyük might not be considered as a very strong defensive system. Therefore it might have had other functions (see below).

Korfmann suggested that the settlement plan[18] of Demircihöyük continued for 17 building phases without interruption. He also sees the absence of valuable objects and human remains in the settlement as an indication of continuity without a

[17] However here the phases in the settlement that were contemporary with the cemetery (Phase K1- P) were referred as the later phases.
[18] Which has been mostly based on the settlement plan in Phase H (burned phase)

disruption (1983: 242). This long-term continuity has received skepticism (see Chabot Aslan 2000: 243), since the continuity in the house plans would not allow adding rooms for the new family members. The possibility that the architectural traditions, the placement of houses and interior features (i.e the ovens) remained almost the same over these phases might indicate a transmission of traditions if it not a "stable organization" (Korfmann 1983: 243). In fact there is a difference between the building materials of the earlier and later phases; in the earliest phases the building materials were lighter, i.e wood and wattle and daub (Korfmann 1983: 243) which shows that the continuity might not be as undisturbed as it has been suggested by Korfmann.

Korfmann argued that the reason why there was a fixed form for the settlement was because the plan was "imposed upon the community" and therefore assumes a "seat of ruling power" that controlled small farming communities in the region including Demircihöyük (1983: 244). Recently Korfmann has suggested that Şarhöyük could have been that "seat of ruling power" for the Eskişehir region for the EBA (2011a: 215). However the excavators of Şarhöyük dated most of their EBA pottery to the EBIII, moreover the finds were not found in an EBA architectural setting but rather on the surface or mixed with other cultural depositions (Darga 1994: 484-487). It should be noted that Demircihöyük was abandoned after the EBII. To determine whether Demircihöyük was part of a larger system or an independent farming community, one has to have a regional comparison of sites, their organization, site sizes and their materials; unfortunately the surveys are not adequate enough to be able to do such a comparison. Moreover it has not been proven that Western Anatolia had a united political structure in the EBA or a

structure with powers controlling the territories other than themselves. On the other hand the existence of sites with strong fortification walls such as Troy or Limantepe indicates that there was conflict in the region, either to control/protect resources, land or to maintain or gain power.

By looking at the site plan only, what can be inferred is that the settlement was not planned to grow and it was in a way compressed within the enclosure wall. The wall might or might not have a defensive function, since if there were 4 gates the access into the settlement was probably not that difficult. Düring argues that such an enclosure could have functioned as a protection against floods or as a way to keep the animals in the center of the settlement (2011b: 75). On the other hand Chabot Aslan suggests that the wall itself marks the concept of enclosure and since also the house entrances were oriented towards the interior of the settlement the access into the houses was more controlled (2000: 249). However this control was probably not necessarily by a person, but by all the other members of the community. The "panopticon" model suggested by J. Bentham exemplifies that power could be obtained by the creating cognition of being watched (Bentham 1995). This panoticon plan was actually designed for hospitals, schools and especially prisons where the purpose was to keep the observed under control. In this plan the observed units would be in a circular arrangement where the observer would see all the units from the center. The center in the case of Demircihöyük is the courtyard, which was shared by the inhabitants for storage and also for many other open door activities. Such a spatial arrangement would not only create a stronger communal bond where everyone was aware of the others, but it might also be a way of maintaining the order and control of the inhabitants over their neighbors. This kind of a political

organization would not necessitate a leader or a single person to decide, manipulate or control the settlement since the control would be maintained by the inhabitants themselves.

Not only the control but also the decision-making had to be done communally due to the settlement's plan, which would not enable people to modify the houses easily. For instance the architectural renovations would require a communal effort and decision since the walls of the houses were constructed in a way that they were holding up the roofs of two houses, so a renovation in one house would necessitate the rebuilding of some parts of the neighboring house (Korfmann 1983: 243).[19] This shows that not only the social bonding between households would have been stronger than in scattered settlements where each household was architecturally independent, but also that there was a continuous agreement between households. Perhaps the reason why there were "residential blocks" (Korfmann 1983: 243) that is the group of houses between two gates, was due to a practical reason: The separation of blocks could prevent the renovation of the entire settlement. Another possibility is that these group of houses had also other motivations creating a group identity, however, even if there were such motivation these do not seem to conflict with the communal decisions. Because if decisions were not taken communally or if there were no social rules everyone could expand or change the plan of the house as they wished, or we would find different house plans for different "residential blocks". In that scenario finding continuity in a settlement plan that did not allow individual

[19] Although the unchanging nature of the settlement plan could also imply the presence ofa central authority, I believe that the small scale of the settlement and the architectural layout do not support the existence of such an authority.

modifications or expansions would be unlikely. This means that whatever connotation the settlement plan had, it was more important than expanding the houses, expressing difference or modifying the overall plan.

Sites placed on an acropolis that had such a pre-planned organization have been suggested to have a "stratified social structure" (Eraslan 2008: 117). Since in the settlement of Demircihöyük there was no evidence for a division such as a lower or upper town, the hierarchical differences in the settlement organization –if there was one- is neither visible in the architecture, location nor in the site plan. In contrast the pre-planned site plan that has a more homogenous character with similar houses may suggests that the emphasis on being a community or being "similar" was stronger than the emphasis on being "different". If the long continuity of the settlement is true, this means that the concept of being a closely attached community continued to be important.

The radial plan of Demircihöyük (Fig. 6) has also been referred as the "*Anatolisches Siedlungsschema*", a term that was first used by M. Korfmann (Korfmann 1979: 46, Korfmann 1983: 222). This plan has been subject to recent comparative studies (Çevik 2007, Erarslan 2008). The plan has been attested in sites from eastern to western Anatolia, from the Aegean to the Balkans dated from the Chalcolithic to the Bronze Age (Korfmann 1983: 222-241). However, usually what these sites seem to have in common is the fact that they were pre-planned radial or rectangular settlements with an enclosure wall where the structures were located around a central building or courtyard. Although the plan has been referred as a "normative" (Özdoğan 2011: 24), the scale of these sites differ considerably, besides the settlement organization of these sites also show variabilities, which means that

the social organizational form of these sites or the way the activity areas were organized might not be necessarily similar either.

In western Anatolia Külloba is one of the sites that are considered to have this Anatolian Settlement Plan. As discussed in Chapter 1, the buildings on the "upper town" of Külloba's Level V form complexes that were assumed to be used with administrative purposes (Efe 2003, 2004). These hall and porch structures[20] structures show a more rectangular arrangement surrounded by a defensive wall.[21] This type of a settlement arrangement is reflecting a completely different social structure than Demircihöyük's radial houses, where we do not seem to have evidence for an "upper/lower town" division. The 3rd Phase of the EBII settlement of Bademağacı on the other hand, is more or less parallel to Demircihöyük's village-like arrangement (Duru 2001). Although the central courtyard in Bademağacı is larger than Demircihöyük's and therefore there were presumably more houses, there is no evidence for an "upper/lower town" division.[22] As Düring notes, the house plans in Bademağacı were also similar to the ones in Demircihöyük which were opening towards the central courtyard (2011a: 281). Duru called Bademağacı to be an "acropolis" with an assumed palace in the center (2001: 207-208), however as Düring points out there is no material evidence for the existence of structures with a function other than domestic (2011a: 282). Even if the settlement plan and house plans are similar in Bademağacı and Demircihöyük, the fact that there was a difference in the site sizes[23] may have created different social organizations, too.

[20] Sometimes referred as the "megara complexes" (Eraslan 2008)
[21] see Fig. 24
[22] see Fig. 25
[23] which presumably resulted in a difference in the population sizes

2.1.2 The Houses

The settlement of Demircihöyük is not fully excavated: There are in total 14 excavated houses[24] which form a semi- circle (Fig. 8)[25] and only 8 of these were fully excavated and/or well preserved. In the later phases only a few rooms were comparable in terms of their preservation state and find situation which are discussed here. The comparison of these rooms' material assemblages, architectural elements and storage mediums may help us to comprehend the social dynamics between households and compare these rooms/houses with a multi-dimensional perspective.

All the houses presumably had one-storey and they consisted of two rooms with rooms that were more or less the same size (Korfmann 1983: 216-217), except House 11 with three-rooms located near the northern gate. The houses had approximately 50 m^2 floor space and they were all made of the same building materials. As Chabot Aslan discusses, the fact that the houses in Demircihöyük were almost identical and had the equal arrangement of house sizes was perhaps one of the reasons why the settlement plan continued over different phases discouraging vertical differences (Chabot Aslan 2000: 243). Although not all houses preserved in the same level in every phase, some standard architectural features continued over time, which even led the excavators to establish a standard house plan (Fig. 9).

Almost every room had at least one domed oven at the northeastern corner of the room and some rooms also had hearths in the center of the rooms (Korfmann 1983: 243). Some housess even had a second oven in the front room. In addition to the ovens and hearths, there were also portable andirons which surfaced both in the

[24] 8 of these were completely excavated and well-preserved, Chabot Aslan 2000: 246
[25] The rest of the plan is the reconstruction is the mirrored picture of the excavated parts, see Fig.7.

back and front rooms as in situ finds (see Appendix A-Andirons). The fact that almost every house had individual ovens, hearths and andirons may suggest that in addition to heating, perhaps food preparation was also taking place inside the houses, which means daily food consumption was perhaps not a communal activity. There were also andirons from the courtyard however andirons may have been used for multi-functional purposes, not only for food preparation.

There are several houses that had sleeping platforms made of stones and beams covered with mudbricks; however usually there were no other interior architectural elements such as furniture. Korfmann argues that this was due to the limited space and the fact that furniture would limit the space for multiple activities (1983: 243). It should be noted that the presumed flat roof-tops provided additional space, which was probably used also for production/consumption activities or for sleeping in the summer months.

The fact that all the houses shared some features such as the fixed location of the ovens on the northeastern corner or the sleeping platforms located in the front rooms behind the entrances might mean that not only the exterior architectural features, but also the interior design of houses was done according to a certain set of customs.

Korfmann argued that the three-roomed house might have had a special function or might have had belonged to a family with a higher rank (Korfmann 1983: 233-246). Moreover Eraslan stated that the three-roomed house may have belonged to the ruler (2008: 178). As it has been already pointed out by Chabot Aslan this three-roomed house did not yield a notable difference in its architecture than the

other houses, except the fact it had three rooms (Chabot Aslan 2000: 243). Since the settlement was not fully excavated it is possible that this was not the only three-roomed house; the other houses located next to the unexcavated gates may also have three rooms.

Özdoğan argues that there is no monumental architecture in Troy I or Demircihöyük that could point to the presence of a social class, although he refers to these sites as having chiefs (2006: 573) As the architecture of Demircihöyük has shown monumentality of the enclosure wall or difference in the size of houses may not necessarily indicate a social differentiation between the inhabitants. It should be noted that before urbanization, even before settled life, organized societies were already responsible for monumental architecture. One example for this is the monumental stone pillars at Göbeklitepe, which are assumed to be built by hunter-gatherers (Schmidt 2007, 2011).

The three-roomed house was obviously different than the other houses because of its additional room. However there is little evidence for difference between this three-roomed house and the rest of the houses in terms of their finds. In other words their interior spatial organization, the building materials and features were more or less homogenous. It is possible that the three-roomed house marked the main entrance to the gate, or it could have been built this way to reinforce the enclosure wall creating a buttress (Fig. 10). The construction of a three-roomed house therefore could have been answering a functional/practical or symbolic need rather than having a social motivation.

As C. Crumley's "heterarchy" concept demonstrates, differentiation is not always visible or pronounced in a single way (1995, 2000). Heterarchical occurances

"(…) call attention to the potential of the system for organizational diversity and change. In general heterarchical relationships are implicated in the dynamic effect of *difference*, be it be spatial, temporal or cognitive" (Crumley 2005: 40). Although there is not a pronounced difference in the architecture of Demircihöyük except the three-roomed house, there might have been other features reflecting a social differentiation such as the degree of intimacy and/or the dimensions of relationships between the households. For instance inhabitants of neighboring houses could be more connected, or the households with related members[26] could have built stronger relationships than with other households. This could eventually cause a heterarchical relationship between households which might be based on the way they shared or used the resources or materials. This does not necessarily indicate a hierarchy in power relations, but could carry the potential for it.

2.2 STORAGE AND PRODUCTION

To be able to see if a material differentiation existed in the location of certain activities in the settlement of Demircihöyük, the material distribution has been analyzed. The result of this material distribution analysis was that throughout different phases the courtyard yielded the highest number of clay finds, whereas metal and bone objects mostly surfaced in the front rooms. Back rooms had in all cases the least number of small finds. Obladen lists two main reasons for this: the first is that the main activity areas were the front rooms and the courtyard, and the back rooms were reserved for storage (Fig. 11). The second reason is because the back rooms were not as well preserved as they were in the earlier phases, front rooms

[26] considering the small size of the settlement one could assume that there would be relative individuals living in different houses

yielded more materials (Baykal-Seeher & Obladen-Kauder 1996: 328-329). Room 108, Room 109 and Room 110 had more small finds than other front rooms since the excavations were concentrated in this area. However considering that the front rooms that were in the same trenches with these rooms (namely Room 107 and Room 111) yielded less than the rooms 108, 109 and 110 might indicate an intense production or use in these three rooms.

As it is seen this pure material-based analysis was not sufficient to complement the understanding of the social organization or differentiation at the site. Therefore a new question stemmed: What can this material distribution tell us about the daily activities at Demircihöyük? Although social organization is not exclusively about economic modes of a society, one can also not deny the role of it in the daily life and in the relationships between the members of a community. Therefore the way how, and the location where the storage and production activities took place could are should be discussed to have insights about the economic activities at the site.

2.2.1 STORAGE:

The main storage medium in the settlement was the mudbrick bins sunken in the ground in the courtyard. As Fig. 12 clearly shows these bins were not in the same shape or size, nor all of them existed in the same phase.

These storage bins, interpreted as “individual stores” which are likely to be used for storing grains, were built in front of the houses and in most cases they were in alignment with the house entrances (Korfmann 1983: 243). However considering

that the bins were not exactly aligned in every phase,[27] it is not always possible to assign a bin to a certain house. For instance in Phase K1 there was only one storage bin in front of Room 108 and 109, which might point to two households with "shared stockpiling" (Korfmann 1983: 135). Therefore it is also not possible to claim which house had more storage capacity or more to store.

The storage volume per house has been estimated to be 5 m^3, which meant that the storage bins contained about 3800 kg of grain (Korfmann 1983: 218). Since the calculations showed that the capacity of the storage bins is assumed to be more than a household's consumption, it is possible that the settlement was in economic stability. However this does not have to mean the inhabitants were necessarily "rich" (Korfmann 1983: 218-219), because as the modifications on the bins show, perhaps they were not completely filled in every phase or were not used in every phase.

In addition to the bins, large storage jars –pithoi- were also found at Demircihöyük. The reason why there are 349 pithos and double pithos burials in the cemetery, whereas the pithoi in the settlement are comparatively less in number is perhaps due to the fact that the main grain storage medium in the settlement was the mudbrick bins in the courtyard. Most of the pithoi in the settlement come from the rooms, not from the courtyard although pithoi were not completely absent in the courtyard (Efe 1988: 71). It is possible that pithoi were used for more private storing whereas the bins were more of a communal storage medium. This may also mean that other products than grain could be stored inside the houses. The possibility that certain goods were stored inside the houses raises the question of which goods were considered as personal property and which were shared with others.

[27] See Fig. 9

Although there is no room-by-room or front room/back room comparison of the number of pithoi in the settlement, it has been noted that Room 999 yielded 6 large neck pithoi and an open-mouthed pithos in the burned level of Phase H (Efe 1988: 74). The same context also yielded many bowls and cups. The presence of a high number of storage and serving vessels in this room may indicate more goods to store or to serve or more people to feed, however since this was an especially well preserved context and since there is no note in the final publication on how many pithoi the other rooms yielded, it is not possible to make further comment on differentiation. In addition, the number of bowls in Room 999 was less than all the other subject rooms in the later phases, which may or may not indicate that there was a change in the number of members or in the private resources of this household. Furthermore the presence or absence of the pithoi might also be related with the fact that these vessels were probably used over different phases (Efe 1988: 74).

Pithoi found in the cemetery had use marks, and therefore the excavators concluded that the pithoi were not especially produced for the burials (Seeher 2000: 18).[28] What is enigmatic is that the major form of storage at Demircihöyük was the bins in the courtyard of the settlement, not the pithos containers (Chabot Aslan 2000: 248). Since considering the size of the pithoi, the production of the pithoi must have been more difficult than clay bins, therefore it is possible that the inhabitants preferred not to produce them in large quantities. If the pithoi were not produced in large quantities for storage in the settlement, then they should have been produced for burial purposes, which do not explain the use marks found on the pithoi in the cemetery. It is possible that the use-marks were due to the fact the pithoi had to be

[28] for the settlement pithoi see Efe 1988: 65-79

transported from the place they were produced, perhaps from the settlement and were worn during this transportation process.

Since houses were entered from the center of the settlement where the main storage facilities were situated, everyone was aware of the others' outdoor activities and also of the accumulated grain supplies. This should have made it difficult for a household to accumulate or consume excessively more than its neighbor. It is possible that houses had also private storage mediums such as the pithoi, however the lack of seals and sealings in Demircihöyük[29] implies that perhaps the personal property concept was not as emphasized as it would be in a scattered settlement or in a larger and more densely populated settlement. The shared storage facilities may underline the bonds between the inhabitants and it might partly answer the question what happens to the adult children of a family starting a new family (Chabot Aslan 2000: 242-243); they could have moved next-door. But then the question where the inhabitants of the neighboring house would go rises. As stated before, the site plan does not allow adding new rooms or houses, and therefore required constant emigration.

Düring believes that the presence of two ovens in two different rooms implies that "each room was inhabited by a separate household presumable linked to each other by kinship" (2011a: 268) which might mean that the houses contained more individuals than assumed by Korfmann. This could explain the additional grain capacity or the above-mentioned problem of what happened to the adult children. However if there were two different households in a house, it would be difficult for the household living in the back room to go out without passing the household in the

[29] Except one clay lump found in the courtyard, in Phase F2.

front room, because there is only one entrance. This would not only decrease the privacy level within the houses, but I assume that it would also not be practical. Besides, sleeping platforms were not found in the back rooms which indicate that perhaps a house was belonging to a single household, but it is possible that this household was not a nuclear family.

2.2.2 PRODUCTION

Flad and Hruby define specialization with its broadest definition as "production that leads to exchange, thereby integrating the society in which it occurs. The more restricted type of definition highlights the division of labor." (2007: 2). The small scale of the society at Demircihöyük would probably not necessitate a division of labor. As the material distribution in the site has shown there are no workshop areas, and most of the production activities took place in the courtyard. It is important to look at what kind of crafts were present at the site and how these were organized, to understand what social implications can be made by looking at the production activities at Demirichöyük. As Flad and Hruby note that specialization "emphasizes the social aspect of productive behavior and the importance of specialized production in the creation and perpetuation of social ties." (Flad and Hruby 2007: 3). Even if craft specialization in Demircihöyük was not at a level that required division of labor, still the organization of production activities could give us information about the production activities themselves but also about the "social ties" between the inhabitants.

2.2.2.1 Metal Production:

In the EBA settlement there were only 28 metal artifacts including tools (awls, needles), weapons (arrowheads), daily used objects (blades, spoon?) and personal adornments (pins, buckle) (Baykal-Seeher & Obladen-Kauder 1996:313). These were mostly made of copper. Due to the fact that there are known copper sources in the region from the 3rd millennium BC.[30] copper was probably a readily available raw material. This is reflected in the number of copper objects both from the cemetery and the settlement. Despite the complexities of the metal production stages (Yener 2000: 2-3, Yalçın 2011) and of the labor and time investment, copper should be regarded as more accessible than rarer silver, tin or gold for instance. The exact copper providing source for Demircihöyük is unknown.It should be noted that the excavators claim that there are tin sources near the Sakarya Valley (Korfmann 1983: 244, Bachman & Weiner in Korfmann 1983: 40); however these were probably not used in antiquity (Baykal-Seeher & Obladen-Kauder 1996: 316).

Most of the information about metallurgy at Demircihöyük comes from the cemetery in the form of finished objects. Metal objects discovered in the burials were usually made of copper. Copper objects in the cemetery consist of personal adornments such as pins, diadems, bracelets; weapons such as axes, daggers, maceheads and razors. There are also several copper sheets and studs that could be part of composite objects. Copper objects appeared in all types of burials regardless of the age/gender of the deceased, which may or may not be related with the material's availability. The fact that weapons and personal adornments form an important portion of copper objects in the cemetery may indicate that copper was

[30] See maps in Yalçın 2011: 189 and Korfmann 2011b: 238.

preferred for objects with mortuary connotations, but in the settlement it was used also as a material for daily use tools. The most common metal object in the cemetery was the copper pin and even the existence of the few samples found in the settlement is enough to state that the pins were not only reserved for the mortuary sphere but that they were probably part of daily life, too.

The single slag found in the courtyard in Phase MN was a lead slag (Baykal-Seeher & Obladen-Kauder 1996: 314) which showed that metals were being processed/produced and used in/around the settlement. Lead and silver sources are known from northwestern Anatolia (Pernicka et al 2003). However lead is not a very common material in the settlement or in the cemetery. This may underline its rarity and perhaps also its symbolic/economic value. The cemetery yielded only two types of lead objects: lead bottles and lead strips. Since no lead bottles were found in the settlement and since lead seems to be reserved for such funerary objects, this might imply a special connotation. Pernicka raises the question whether the lead samples from Demircihöyük yielded any silver in their composition since it is known that lead was a byproduct of silver cupellation (2000: 234). However the two analyzed samples did not show evidence for this process in Demircihöyük, which raises the possibility that the silver objects in the cemetery were exotic.

Another object that confirms the metal production at Demircihöyük is the single basalt mould which showed traces of tin, a metal that was rare at Demircihöyük, appearing only in several bronze objects. In addition to the mould, there are also several antler hitting tools and bone burins that might be used also in the shaping of metal objects. The rarity of metallurgical tools in the settlement is not unexpected since it would not be practical to have the smelting/melting activities

taking place in the settlement. The Late Chalcolithic and EBA metal mining and processing site Göltepe which yielded a "workshop" that had a metallurgical tool kit consisting of mortars, crucibles, braziers and storage jars (Yener 2008: 59), is a good example showing that such activities were actually away from the settlements closer to the sources.

In addition to copper and lead; gold, silver and bronze objects surfaced from the burials. However these metals were rare in the cemetery and gold and silver were absent in the settlement. Other than the several bronzes and the single lead fragment, all the other objects in the settlement and most of the copper objects in the cemetery were composed of copper mixed with arsenic (Baykal-Seeher & Obladen-Kauder 1996: 313). Arsenic is a material that might have been added intentionally, but it is known that arsenic could also alloy naturally with copper (Özbal 2005: 10). The arsenic and copper alloyed objects had a silvery color (Yener 2000: 68) and if arsenic was added intentionally, the reason might have been to achieve this silver-like look. There are only 8 burials with limited variation of silver objects such as a single bead, a single silver sheet, pins and rings. Since silver is a rare material in the cemetery the intention to create a look-alike to a rare material might indicate that silver was actually a material with high symbolic importance, if not with an high economic value. In fact the rarity of silver itself adds to its significance and perhaps also economic value. It should also be noted that silver objects were only found in burials with high number of burial finds and burials with silver finds had always other metal objects[31] (see Appendix A-Cemetery:Silver finds).

[31] except the pithos burial G372 of an adult which had a jug and a stone bead besides the silver ring

Gold finds are absent in the settlement but they are the second most common metal in the Demircihöyük cemetery, however compared to copper objects they still appear to be exotic or reserved for only a small portion of the burials. The gold objects in the cemetery are personal adornments such as beads, diadems, rings, earplugs and a spiral. There are also golden sheets that could again be part of other objects used as attachments. Although there are gold mines in the region of Bilecik,[32] the small size of the gold finds and the small number of burials with gold objects might indicate that gold objects were not easily accessible or gold sources were limited.

The 4 analyzed gold sheet fragments contained silver in their composition, which might be labeled as Electrum (Pernicka 2000: 234-235) Interestingly the silver objects also included gold which was not visible in color. The inclusion could also be more for a practical reason. In either scenario the question whether the inclusion was intended, and if so why such compositions were preferred remain unanswered.

Only 3 metal objects from the settlement contained tin in their composition (Baykal-Seeher & Obladen-Kauder 1996: 313). However there are more authentic bronze objects from the cemetery including the single fenestrated axe, the single spear head and bracelets. The presence of bronze objects both in the settlement and in the cemetery shows that tin was intentionally alloyed with copper to make bronze which is also confirmed by the mould (see above). The controversial problem of Anatolian tin sources is not repeated here,[33] however it seems that the known or suggested tin sources are not in the vicinity of Demircihöyük. This might mean that tin was brought from other regions. It is possible that the bronze objects were traded

[32] http://www.mta.gov.tr/mta_web/myatak.asp
[33] See Yener et al. 1989, Yener and Vandiver 1993, Pernicka et al.1992, Muhly 1993

as finished goods; however the tin traces in the basalt mould may suggest that bronze objects were produced locally.

Metal objects were probably not traded as finished goods as the slag fragment and mould have proven. The metal production and processing should have taken place outside the settlement, close to a source of a material that was more common in the settlement, perhaps a copper source. This may imply that not everybody was involved in this craft. Metallurgy was probably not yet an industry at Demircihöyük but also not a household activity. The quality and quantity of the metals found in the cemetery, and the level of alloying techniques at the site shows that the metal production was probably a specialized craft.

Zimmermann and Yıldırım's study on the Central Anatolian EBA alloying tradition showed the "three best to have in plenty" materials in the period's metallurgical technologies were copper, arsenic and tin (2008). Since all these materials were found in Demircihöyük's metal objects, it is possible to argue that metallurgy was an important part of production activities at the site.

Due to the small number of metal finds it is difficult to see if there was a difference in the distribution of metal objects in different houses, a difference between people or households involved in metallurgy or an increase/decrease throughout different phases. In terms of distribution of metal objects among the subject rooms, there is only one spherical headed ornamental pin found in Room 108,[34] and one needle found in Room 109.[35] The courtyard, the area outside the enclosure wall and back rooms also yielded metal objects. Although this small

[34] In Phase M
[35] In Phase K2

number of metal does not enable us to comment on the distribution, most of the metal objects were discovered in the courtyard. Compared to the cemetery the settlement had a very small number and variety of metals. This obviously due to the fact that burials are sealed contexts where the finds were not usually taken out and reused, whereas in the settlement metals were probably reused over time transforming into other objects in different phases and were taken with when the site was abandoned.

2.2.2.2 Textile Production:

Compared to metal production, textile production and related crafts seem to be more common in Demircihöyük or a production activity that took place in the settlement. To start with, there are 183 spindle whorls from the settlement and the burials also yielded 96 additional spindle whorls. Besides spindle whorls there are loom weights, drilled sherds -that may worked as spindle whorls, awls and needles from the settlement that were probably used in textile production.

Textile production might have been an important economic activity in Demircihöyük, as it was probably the case for most of the pastoralist farming societies in the EBA if we look at even only at the number of sheep bones and spindle whorls found in the settlement (see Appendix A-Settlement: Spindle whorls). In his study on the spindle whorls and social organization in the EBA site Karataş-Semayük, Cannon has suggested that the absence of luxury items in Karataş was due to the fact that "live-stock was the predominant form of wealth" (Cannon 2010: 56). This study also revealed that in Karataş the textile production showed differences in scale throughout different phases (Cannon 2010: 52), in other words there was no

linear progressive increase in the scale of production over time. In Demircihöyük there is also no regular development of textile production scale if one assumes there is a direct proportion between the number of spindle whorls and the scale of the textile production.

In Phase H there are more rooms with spindle whorls and also more spindle whorls than any other phase. In this phase Room 999 and Room 6 had the highest number of spindle whorls among all the other rooms in all phases.[36] The fact that the courtyard did not reveal any spindle whorls in Phase H raises the question whether in this period the textile production was moved from outdoors to indoors. However the presence of 2 loom weights in this period in the courtyard may also suggest otherwise, if the loom weights themselves were not produced in the courtyard. If we look at the entire EBA settlement the number of the spindle whorls in the courtyard, in the back rooms and in the front rooms is close to each other.

There are more loom weights than spindle whorls found in the settlement. The earliest in situ loom weight group of 28 loom weights was found in Room 6,[37] (Baykal-Seeher & Obladen-Kauder 1996: 239, Abb.170). Another in situ group consisting of 35 loom weights was found in Phase H in Room 999. These two rooms -which were both not front rooms- had the highest number of loom weights among the rooms throughout different phases, even higher than the courtyard (Baykal-Seeher & Obladen-Kauder 1996: 240) which might be related with the fact that they were stored rather than being used in these rooms. Interestingly whenever the rooms

[36] Except Room 200 in Phase O: all had 6 spindle whorls each
[37] In Phase E1

had more loom weights in a certain phase the courtyard had less loom weights and vice versa, which may suggest a shift in production areas.

The distribution and number of loom weights support that Phase H has a different scale of textile production (see Appendix A-Settlement: Spindle Whorls and Loom Weights). It is also possible that the reason why there are more objects in Phase H might be due to the fact that Phase H (together with Phase E1 and L) was disturbed by catastrophic events (Baykal-Seeher & Obladen-Kauder 1996: 245) and probably loom weights were not the most important possessions to take.

As it was also the case for the spindle whorls in the early phases (earlier than Phase H) there are more loom weights in the houses/rooms on the south of Room 108, whereas in later phases the subject rooms yielded more loom weights and spindle whorls. It is possible that certain building blocks were used for certain production activities or not all houses had or stored the weaving looms. It has also been noted that in terms of in-situ loom weights, in the early phases the back rooms had more loom weights whereas for later phases the front rooms and the courtyard had more loom weights. This again is perhaps due to the fact that in the later phases front rooms were preserved better than the back rooms, rather than a change in activity areas. If it was not related with preservation it might be related to where the loom weights were stored.

In Phase K2, Room 108 yielded the only clay comb found among the subject rooms. Since the clay combs are assumed to be used for teasing wool (Baykal-Seeher & Obladen-Kauder 1996: 245) textile production probably took place in Room 108

in this phase. The copper needle found in Room 109 in the same phase may also suggest that textiles were processed or modified in this room.

Awls are the tools with a sharp end which may had been used for various/multiple functions including textile production. Bone and flint awls were found in comparatively high numbers, whereas bone needles were absent in the settlement. None of the rooms of the three-roomed house (Room 111 and Room 999) yielded flint awls in the later phases. The small number of obsidian awls may suggest that obsidian was perhaps not the best material for this purpose and bone awls seem to be used more than flint or obsidian awls. The constant move from indoors to outdoors is also traceable with the bone awls. It is important to note that whenever a room in a certain phase has more than two bone awls, the courtyard seems to reveal less awls in that period. This might mean that when the activity that involved the use awls was higher indoors, the courtyard was not used for the same activity and vice versa.

It has been suggested that the drilled sherds were used in textile production, especially as spindle whorls (Baykal-Seeher & Obladen-Kauder 1996: 224-226) and experimental spinning attempts with these sherds showed that in fact these could be used for spinning wool. The fact they were found in the open courtyard area and in the front rooms of the houses supports this theory.

Room 6, Room 108, Room 999 and the courtyard might have had a different scale or nature of textile production in certain phases if the number of and variety of textile production tools are taken as the primary factor for determining the production scale. However none of these areas seem to provide enough evidence that

they were the only area reserved for textile production. In other words, the shift of the accumulation of textile production tools shows that there were no workshops at the site related to textiles and textile production activities took place both indoors and outdoors.

The major raw material for the textiles in Demircihöyük was wool, and there was no evidence for the production of flax or cotton (Baykal-Seeher & Obladen-Kauder 1996: 319). The abundance of sheep bones and spindle whorls provide evidence for wool processing. In addition to wool, the animal bones and objects found in the settlement suggest that leather was perhaps another material that was processed. Obladen suggests that one of the functions of the bone spatulas might be related with scraping leather (Baykal-Seeher & Obladen-Kauder 1996: 304). Awls were probably used for drilling leather. Although it is possible that scrapers were multi-functional tools, they were probably especially used for working on materials like animal skin/leather. However the tools that were used for leather working were probably flint/obsidian or metal blades, knives or scrapers since it would be difficult to do the cutting with bone tools.

The distribution of these tools show that the metal tools mostly surfaced in the front rooms, whereas the flint/obsidian tools were coming from both the courtyard and in many phases especially from Room 109. In fact in Phase K1 Room 109 had higher numbers of flint scrapers than other areas suggesting that probably this room was especially used for activities involving scrapers, perhaps leather working. The fact that the courtyard did not reveal scrapers in this phase might indicate that Room 109 was heavily used for the activity involving the use of scrapers and perhaps also other tools since this room yielded a parallel pattern in the

appearance of other flint and obsidian tools. Although this may not directly mean that Room 109 was a workshop, it is possible that this household was highly involved in the activities where flint cutting tools were used.

2.2.2.3 Flint and Obsidian Production:

The stone tool industry at Demircihöyük shows intense production with very high numbers of flint and obsidian artifacts compared to other EBA sites (Baykal-Seeher & Obladen-Kauder 1996: 132). Flint and obsidian artifacts form the largest body of small finds since in addition to flint and obsidian objects, by-products of production such as flakes, cores and debris are all counted under this category.

The flint and obsidian artifacts in the settlement consist of primary products such as cores, flakes and debris, and also of secondary products like tools such as blades, scrapers, awls, burins, sickle blades and arrowheads. The primary products of flint and obsidian tools are important to pinpoint the major flint and obsidian tool production areas. The appearance of cores implies a limited distribution both throughout phases and throughout rooms/areas. Both the primary and by-products of stone tool production are usually found in higher numbers in the courtyard, but Room 108, Room110 and especially Room 109 showed also high numbers of primary products in certain phases. Moreover, the back rooms yielded only a small number of primary products over the settlement history (see Appendix A-Settlement: Flint Finds).

An interesting pattern occurs with the distribution of several primary flint products such as the flint debris, un-retouched flint flakes and flint un-retouched blades: rooms on the south of Room 106 and on the west of Room 111 did not reveal

any of these artifacts in the later phases. This pattern might indicate that the production of flint was taking place in a certain area only in the later phases, whereas in the early phases the area of production was much more scattered. However as usual this might again be related with the preservation state of the rooms.

The numbers of the retouched artifacts is notably less than the primary products, however the distribution of retouched artifacts among rooms but also among phases is similar to the primary products'. One would expect to find differences between the distribution of the primary product and the secondary products since production areas and the areas where the finished products were used might have taken place in different areas. However at Demiricihöyük it seems like primary production and use of flint tools was usually taking in the same places.

In the settlement one finds more flint artifacts than obsidian artifacts. This may be due to the fact that flint was available in the area, whereas a nearby source for the volcanic stone obsidian was not found (except the volcanic areas in the Eskişehir region [Baykal-Seeher & Obladen-Kauder 1996: 316, 320]) which probably enhances the value of obsidian compared to the more available material flint. It is also possible that an obsidian source was in the region which has not been discovered yet, since obsidian artifacts are not very rare in the settlement either. On the other obsidian was not found in the burials, which again might be due to its unavailability. The fact that there was only one flint blade in the cemetery might also indicate that flint or obsidian were not preferred materials to put in burials.

Compared to other flint artifacts, the small number of flint cores in the settlement may suggest that the primary products were prepared outside the

settlement, perhaps somewhere closer to the material source, since the higher numbers of items of debris suggest a larger scale of flint production than represented by the cores. The difference in the number can also be due to the fact that out of one core many artifacts could be produced. Presumably the artifacts were brought to the site half-finished. It should also be noted that although obsidian cores exist, obsidian debris was not found in the settlement (Baykal-Seeher & Obladen-Kauder 1996: 25) which might mean that obsidian cores were brought to the site from the source and tools were prepared outside the settlement. The fact that there are more obsidian blades than flakes might also support that obsidian blades were prepared outside the settlement, perhaps at the source.

Obladen underlines the differences between the flint and obsidian production and therefore suggests that these were two different industries (Baykal-Seeher & Obladen-Kauder 1996: 80). Even if their difference was due to the availability of the raw material, the consistency in the distribution of the artifacts in two different materials shows that if not the production, the use of these two materials was taking place in the same areas.

The limited shapes and primary products of obsidian may actually be evidence for the presence of an interregional obsidian trade network. Interestingly there is no object/artifact made of obsidian that was not made of flint; there were no obsidian personal adornments for instance. Another important point to note is the fact that none of the burials revealed obsidian objects. This may raise the question whether obsidian was actually considered different, more valuable or exotic than flint for mortuary practices.

The reason for the abundance of flint artifacts may suggest that stone tools were not yet replaced by metal ones. Since, as noted before, metal tools are neither common in the settlement nor in the cemetery. It has been stated that stone tools were just as useful as the metal tools and therefore continued to be used throughout the Bronze Age and were even still in use in the Iron Age (Baykal-Seeher & Obladen-Kauder 1996: 332). Furthermore the beginning of the Bronze Age has been claimed to yield a narrower repertoire of flint tools with more sophistication (Baykal-Seeher & Obladen-Kauder 1996: 332). This has been attested at Demircihöyük with the "specialized artifacts" made of flint such as sickle blades and scrapers (Baykal-Seeher & Obladen-Kauder 1996: 331). The uneven distribution of flint and obsidian in the settlement points to a craft that was part of a daily household activity rather than a "standardized production technology" (Baykal-Seeher & Obladen-Kauder 1996: 330). This assumption has been made by looking at the similarity in the striking techniques on the cores, however since the activities were mostly taking place in the courtyard of the settlement and since the inhabitants were probably very much aware of each other; knowledge, techniques and technologies might also have been shared, which does not directly indicate to an industry, but to set rules.

2.2.2.4 Pottery Production:

The social aspects of the pottery are usually concentrated around the questions of production and distribution. It has been suggested that "social organization can be identified through examining features of socio-economic institutions, such as specialization in craft production and supra-local interaction and integration" (Cannon 2010: 3). Although most of the studies regarding pottery in the EBA Aanatolia focus on the typological differences which could give information

about chronology or cultural interactions, for western Anatolia attempts have been made to identify "cultural groups" by looking at the distribution of the EBA pottery.[38] However there is currently neither a study that focuses on the scale or type of production of the EBA pottery, nor on the internal distribution of it (i.e how pottery is distributed within a site). Such studies form an important portion of New World Archaeology, as well as Mesopotamian Archaeology, however for Anatolia such an anthropological viewpoint has been missing.

For Demircihöyük there is information regarding the findspots of the vessels shapes that is whether they were found in the rooms or in the courtyard. However room by room comparison has only been done for the bowls. This enables us to see the activity areas in which pottery is involved; however it does not provide insights into the differences between houses, that is, if a specific household was more involved in the production or use of a specific vessel type.

The distribution of bowls found in the settlement follows a similar pattern to the small finds. Room 108, Room 109 and Room 110 had more bowls than the rooms of the three-roomed house. It was not possible to compare the subject rooms and the courtyard for their number of bowls, since these two areas did not reveal bowls in the same phases. However the total number of bowls found in the subject rooms is more than the ones found in the courtyard. This is also valid for the other vessel shapes. This might indicate that the courtyard was perhaps the major activity area for production; however consumption activities were probably taking place indoors.

Both in the EBA settlement and cemetery of Demircihöyük all vessels were handmade. Although in the preliminary publications of the cemetery the presence of

[38] See Efe 2003a, 2002

a wheel-made vessel had been announced, it turned out to belong to the MBA burials (Seeher 1991b: 104 and Seeher 2000: 32). The fact that pottery was not produced with a potter's wheel might imply that there was no necessity for producing great amounts of vessels in a shorter time. In fact the small scale of the settlement and the fact that all kinds of vessels were found both indoors and outdoors might indicate that pottery production was still a household activity rather than a more specialized activity like the metal production.

It is not possible to discuss which room had the highest number of vessels in which phase since such a comparison has not been made in the final publication. If there was a comparison of the pottery shapes, wares and sizes between rooms it could give us an idea whether a room/house was reserved for specific activities or had for instance more storage jars or more fine wares that could indicate a differentiation.

2.3 CONCLUSION

The architectural comparison of the excavated houses at Demircihöyük shows that although they are not identical; the general plan, the division of space and the total space of the houses are very similar to each other. The three-roomed house resembled the other houses in these features except the fact that it had three rooms. On the other hand, throughout the settlement the spatial arrangement of the interior features the building techniques and materials showed consistency in the houses. This continuity raises the question how the site was arranged for the residency of the new generations or population changes, which has neither been answered in the final publication nor here.

It is possible that the unchanging nature of the architecture in Demircihöyük was not due to the "stable organization" (Korfmann 1983: 243), or due to the possibility that the plan was "imposed upon community" (Korfmann 1983: 244), but rather due to the fact that certain conventions continued to be practiced. Even the renovations and modifications of the storage bins in the courtyard show that the daily practice of how and where to store grain become a convention that remained the same in different phases.

The material comparison between the subject rooms yielded almost no evidence for a certain house/room with better access to the resources or excessively more materials than the other houses. Certainly the subject rooms have more finds than other rooms mostly due to preservation and the fact that the excavation focused in that area. Moreover, usually the room with the highest number of finds changes from period to period. This brings about the possibility of an increase or a decrease in the number of occupants in a house. Households with more children might have had more people that could work on activities such as spinning or weaving, and also may have needed more or larger vessels for consumption. However as it has been noted above the house plans do not allow for an expansion, so the number of family members (if a nuclear family resided in a house) could not be excessively more than in any other house, which point to the possibility that differentiation was not encouraged even with the number of the family (or resident) members.

One of the most important outcomes from the comparison of the rooms is that the three-roomed house almost never had more finds or different finds than the other subject rooms, which one would expect to find if this was -as suggested by Korfmann- the residency of a family with higher rank. The courtyard which was the

communal production/storage and activity area had usually the highest number of finds strengthening the possibility that there was no sharp architectural and material differentiation in the EBA settlement of Demircihöyük and production was a more communal activity. However it should also be noted that in some phases production shifts from outdoors to indoors which might or might not be related to external factors such as environmental conditions.

The storage facilities at the site demonstrate that in certain phases the inhabitants were able to store more than their (assumed) need for grain. The location of the storage bins in the courtyard highlights their communal nature. Although the excavators suggested that the alignment of the storage bins with the houses pointed to individual stores, the fact that they were in an area where everyone had the possibility to see everyone else's, shows that these might have been used by neighbors too whenever necessary, if not communally used all the time. Moreover there are individual storage mediums inside the houses which are the pithoi that suggests that there was a different storage place for more private goods and more communal goods.

As noted in Chapter 1 recent material analyses in Karataş central complex showed that it could be a production or storage area (Cannon 2010) shared by the villagers. This complex could have had a similar function with the courtyard in Demircihöyük, perhaps with a different scale. Considering the distribution of the finds related with the production activities at Demircihöyük, it is possible to say that production was taking place both indoors and outdoors, but mostly in the courtyard. This implies that production was still a household activity or was done communally

rather than reserved for a specific household or specific people. As Baykal-Seeher and Obladen-Kauder note:

> "The spatial distribution provides no clues –except for the fact that most small finds tend to come from the inner courtyard and the front rooms- as to the possible presence of a craft specialization within the settlement. In this respect, the uniform architecture throughout the whole settlement period suggests a social community with the same rights and duties for all." (1996: 338).

The in-situ finds are not numerous enough to pinpoint "workshops" (Baykal-Seeher & Obladen-Kauder 1996: 329), in fact the overall distribution of the small finds do not indicate a presence of such workshops. However the variety and high quality of flint/obsidian and metal artifacts show that perhaps the production of these was more a work of people with the knowledge and experience. What distinguishes these two production activities from each other is that flint production and processing could be done within the settlement, whereas metal production was perhaps taking place outside the settlement.

By looking at the production and storage activities one can make use of Feinman's "dual-processual theory" (1995, 2000) to explain the socio-political and socio-economic organization of Demircihöyük. According to this theory, there are two political-economic strategies: network and corporate. In the network mode there is emphasis on the individual power and wealth, whereas in the corporate mode the society tends to have even wealth distribution and balanced accumulation with shared power and labor tasks (2000). These modes do not suggest new social organizational types, because societies with any kind of social organization could have either of these political-economic strategies.[39] What Feinman argues is that societies with a more corporate economic strategy had "suppressed economic

[39] See Feinman 2000

differentiation." (2000: 214). The communal nature Demircihöyük may have caused the formation of a corporate political and/or economic mode where the architecture, site plan, material distribution, production and storage activities were organized in a way that would suppress or mollify the economic differences, putting emphasis on the communal homogeneity.

The existence of exotic materials such as obsidian, carnelian or silver may indicate that Demircihöyük either participated in an inter-regional trade network or was benefiting from it via other participants. Such relations could have included hostile encounters too, if we accept thar the enclosure wall was built with a defensive purpose.

The settlement plan with its circular arrangement of adjacent houses and its enclosure wall to which the houses were attached may indicate a need for protection, but it also may imply a need for enclosure since the house entrances were looking towards the courtyard which was an enclosed area (Aslan 2000). Moreover, the interdependent constructions and renovations of houses could not have been done without the consent of the neighboring houses. This suggests that certain architectural conventions were acknowledged by the inhabitants which may be a reflection of a common interest or a collective decision making. The enclosed and organized plan therefore would not only send a message to an outsider that the site was protected, but also that the inhabitants were a unity held together by a communal bond. This communal bond might have played an important role in the material homogeneity and collectivity in the economic activities such as storage and production as well as in the political organization and control of the settlement, creating a "corporate" society.

3.0 CHAPTER III

DEMİRCİHÖYÜK-SARIKET CEMETERY

Although the settlement was known since the 1930s, the extramural cemetery of Demircihöyük was noticed by T. Efe only in the early 80s (Seeher 1991a: 163), due to the fact that the cemetery was not easily visible from the surface as the höyük was. The excavations in the cemetery were held in 1990 and 1991 by J. Seeher by the DAI. The cemetery is on a terrace located 250 m. on the southwest of the höyük in the Sarıket Mevkii (Fig. 5), which had traces of sherds and stones on the surface that made it urgent to excavate (Seeher 1991b: 98). To identify the extensions of the cemetery a geomagnetic investigation was held[40] which yielded that the Early Bronze Age cemetery was c. 60 x 50 m.[41] in the squares WW-C 83-87 (Seeher 1992a: 366). In addition to the 79 Middle Bronze Age and 26 Hellenistic burials, the largest number of burials -i.e 498 burials- were dated to the EBII (Seeher 1992a: 365) which belong to the Phases K/L-P and Q in the settlement (Seeher 1992b: 6). For the earlier phases (C-K) the excavators suggest that there must have been another cemetery (Seeher 1992b: 6, 2000: 17) which was not found. Seeher claims that the population estimate support that there needs to be another cemetery: It is assumed that in the Demircihöyük settlement there were about 130-143 people living, and in 400-500 years (16-20 generations) in total there should have been 2080-2860 people (Seeher 2000:17). However in the cemetery the burials are about the ¼ of the estimated total population. Therefore only the phases for which there is a cemetery are analyzed in the settlement section, which are the phases from Phase K1 to Phase PQ.

[40] By Hans Günter Jansen in Seeher 2000
[41] Baykal-Seeher gives the dimensions as 70x60m. (in Seeher 2000: 229)

Demircihöyük is one of the several cemeteries that have an anthropological analysis in its final publication. The bio-anthropological analysis outcomes of the skeletal remains have been analyzed and published by Witter-Backofen in detail.[42] Here rather than being too specific with the ages, certain age groups were used. These consisted of adults (minimum 18), adolescents (11/12-18), children (5-11/12) and infants (0-5). These age groups are subcategorized as "unknown" and "uncertain" in the databases I built for the cemetery. In the final publication catalog there are some individuals which were assumed to be male or female but were not identified with certainty; in the databases these are called "uncertain" where as the ones left with a question mark are called "unknown".

The theory that mortuary practices could directly or indirectly reflect individuals' status in their lifetime which is referred by Brown as "representationism" (2007: 303) has been used for a long time by archaeologists such as Binford (1971) and Saxe (1970). As the studies criticizing this approach has shown[43] to try to understand social dynamics such a social status or hierarchy there are many factors that one should consider and one cannot even realize to consider. Traditionally burial finds are taken as one of the primary factors, together with their economic value and distribution among the burials. Another important factor has been considered is the burial itself; how it was prepared or what kind of rituals were surrounding the funeral, in other words the energy and time investment put to make that burial.[44]

[42] See Wittwer-Backofen 2000
[43] See Ucko 1969
[44] See Peebles and Kus 1977

Here burials are compared with each other by looking at their burial type, the availability and time investment put in producing the burial and burial finds not to identify the “richer” or “poorer” burials, but to try to identify different burials and what causes them to be different. The preservation, the orientation, the location, the burial types, the number and materials of the burial finds, their occurrence with each other, the age/gender and the unusual treatments have been analyzed (see Appendix A-Cemetery). The aim is to look at as many variables as possible to see what kind of inferences could be made from the burials, which were not necessarily always about the social organization or economic/social differentiation between the burials, but about symbolic choices and/or traditions.

3.1 PRESERVATION

The northern part of the cemetery is eroded and the southern part is terraced for field preparation which might also have been a natural border (Seeher 1992a: 366). Since the cemetery was close to the surface, much of the destruction is due to the agricultural activities, especially due to plowing (Seeher 2000: 3) which destroyed the top parts of the burials and the stone markers or covering stone heaps. The destruction of the burials depends also on the depth at which they were buried. Seeher underlines that different climatic conditions could have affected the soil and therefore also the depth the burial (Seeher 2000: 23-24).

For the preservation criteria the most important inference is that the best preserved areas that had the richest amount of data are the ones located in the middle of the cemetery, marked with black boxes on the topographical plan (Fig. 13). This area was also where the better soil for burials was located (Seeher 2000: 25),

therefore it was heavily used. Because of the good character of the soil, burials continued to be dug in this same area, resulting in a large number of burials affected by later burials (Seeher 2000: 25). It is worth noting that areas YY-ZZ/86 and YY/86-87 have comparatively higher number of finds with fewer individuals, which might be due to the small size of the area.

The best preserved burial type is the cist burials; obviously due to the less-easily damageable stone plate covers and stone framework.[45] The simple inhumations appear to have survived better than the pithoi; this is because the pithoi were usually placed in an incline with the openings closer to the surface.[46] In most cases the opening part was damaged due to plowing, especially when there are stones used as a cover.[47] And since the simple inhumations were much below the plow zone than the pithoi in most of the cases, they are less damaged or disturbed.[48]

The preservation state is one of the important variables to look at while making further interpretations, because the presence or absence of a feature might basically be due to the taphonomic processes one of which is the preservation state.

3.2 ORIENTATION

The burials are more or less parallel to the sloping contour lines towards the northeast and a larger part of the burials are oriented with their openings or heads facing towards the southeast regardless of the difference in the burial type (Seeher 2000: 24). The fact that about 70% of the burials are oriented towards the east or the

[45] See Fig. 23
[46] See Seeher 2000: 7, Abb .4a-c
[47] Seeher 2000: 7, Abb.4-c
[48] What is referred here is not the preservation of the content of the burial (skeleton, burial finds etc.) but the burial itself.

southeast is not a phenomenon that occurs only in Demircihöyük, but many Western Anatolian cemeteries in the EBA have showed this pattern.

Seeher explains this phenomenon with the possibility that the burials were oriented towards the sunrise and he adds that the sun in Anatolia does not directly rise from the east in the summer solstice (2000: 24). The variability of the orientation towards east, southeast or northeast might depend also on the season, since the direction of the sunrise –if it is the reason- may slightly differ.

By looking at this high percentage of burials oriented towards the east, the southeast or the northeast Uhri tries to connect this to a symbolic behavior and to a regionally shared tradition. By stating that the inner Western Anatolian sites have an agricultural based economy, Uhri thinks that the orientation towards the sun rise is related to agricultural fertility and continuity (2006: 282-283). According to Uhri the reason why for instance the burials in Iasos are oriented towards west is because the fertility of this settlement comes from the Aegean Sea on the West since the region is not very fertile for agriculture (2006: 283-284). However it should be noted that the cist cemetery of Iasos is also different in the burial type than most of the other Western Anatolian sites. Therefore it is possible that what we refer today as "western Anatolia" might not had a unity in the EBA. The symbolic explanation can unfortunately not go further than being an interpretation since it does not explain the reason of burials oriented towards south or west.

The only burial that is oriented towards the north in Demircihöyük was the amphora burial which might or might not be a burial type since there is only a single amphora burial in the cemetery. This amphora did not yield any finds or bones. A

simple inhumation burial had an amphora as a burial find; therefore this so-called amphora burial might be a burial find of a nearby burial than being a burial on its own. There are also burials oriented towards northeast and northwest, and these burials were either pithos (including double pithos) or simple inhumation burials. They contained individuals from all age groups; however none of the skeletons' gender could be identified. The northwards oriented burials do not show a pattern in their burial finds, however none of them included a metal object other than copper, a clay object or a stone object.[49]

There seems to be no correlation between the gender of the individuals and the burial orientation. Uhri suggests that not the orientation but the side the body was laid on may reflect a differentiation between genders (2006: 285). In Demircihöyük, Ahlatlı Tepecik, Aphrodisias, Baklatepe, Çavdarlıhöyük, Harmanören/Göndürle, Hisarlık/Troia, Ilıpınar, Kıyıkıslacık/Iasos, Kumtepe, Kusura and Küçükhöyük out of 134 skeletons that had an identifiable laying position 83 were laid on their right and 51 were on their left (Uhri 2006: 285). It is supposed that the ones on their left were female and the ones on their right were males. The problem with further evaluation on this issue is that most of the times the skeletons' gender was identified according to the burial finds; not as a result of bio- anthropological investigations (Uhri 2006: 285-286). The evaluation of the burial finds in Appendix A shows how difficult (if not impossible) it is to group finds according to gender. The skeletons that have an anthropological identification are not even the half of the total, therefore there is for now not enough evidence to come up with an all-applying rule for the gender and burial finds relationship. In the Demircihöyük cemetery most of the identified males

[49] except one stone axe in one of the only two simple inhumations oriented northwards

were laid on their right and most of the females were laid on their left, but there are also exceptions (Wittwer-Backofen 2000: 245). There seems also no specific side the children were laid on. The discussion about the side on which the deceased were laid has also gone to different directions such as ethnicity (Indo-European practice?),[50] which will not be a concern of this paper.

If we consider the orientation of the cemetery in relation with the settlement, it is interesting that the settlement is on the northeastern side of the cemetery. There is no way to tell if this was an intentional practical or symbolic choice for the location of the cemetery. However since the location of burials "is generally not a matter of functional expediency" (Parker Pearson 2006: 141), the eastwards orientation might imply that it was perhaps not random.

No one has suggested a practical reason for the choice of the orientation yet, so the question "why" will remain unanswered here. The reason why this specific direction was chosen is in fact not as important as the fact that these settlements were not isolated, but they were somehow in contact or aware of each others' mortuary customs which might explain why most of the Western Anatolian EBA cemeteries have such shared features.

3.3 BURIAL TYPES

In Western Anatolia the most common extramural burial type in the EBA sites is the ceramic container burials with several exceptions (i.e Iasos: cist burials). However there are also cemeteries with a variation of burial types such as Karataş-Semayük and Baklatepe. In Demircihöyük there are basically three types of burials for the EBA: ceramic containers, cist and simple inhumation burials. Seeher

[50] Mallory 2002 and Haesler 1996, 1999, 2002 in Uhri 2006: 287

preferred to add the "mudsink" as a separate burial type although there is only a single example in the EBA cemetery (Seeher 2000: 20). The main burial types show variation within themselves: Ceramic container burials consist of jars, an amphora (?), single pithoi and double pithoi; simple inhumations consist of pit burials, sherds covering simple inhumation and simple inhumations without additional treatments.[51]

The most common type of burial in Demircihöyük-Sarıket is the pithos burial, followed by simple inhumations and cist burials. The distribution of these different burial types within the cemetery does not seem to show a regular pattern. The center of the cemetery was the most heavily used part of the cemetery. However there is no certain area that is reserved only for a specific type of burial, only the outer edges of the cemetery do not seem to reveal cist burials. Mostly what we have on the outer circles of the cemetery are pithos burials.

One exceptional case is the mudsink burial, which is the only burial and burial type that is in isolation from other burials (Fig.14). The cemetery seems to end on the north of this burial where only 4-5 pithos burials were found and on the northwestern part of this burial. The burial is in the shape of a pithos burial and it was probably burned or heated with fire in situ (Seeher 2000: 20),[52] which might or might not be the reason of its isolation.

Although pithos burials yielded individuals from all gender and age groups, there are certain burial types that contained certain genders/age groups: For instance individuals younger than 10 years were mostly buried in ceramic containers and were not found in cist burials. The simple inhumations yielded more adults than infants,

[51] see Fig. 23
[52] see Fig. 15

children or adolescents. In fact children and infants appear very rarely in simple inhumations and when they do they are mostly in burials with adults.

Pithos burials form the largest number of burials without skeleton or bone remains. It is possible that this was due to their preservation state. Another possibility is that the burials without bones or the ones that had only small fragments of bones were infant or child burials and therefore did not survive as other skeletons did. There is always the possibility that these were symbolic burials where the actual skeleton was missing and the burial was a commemorative one. Pithos and double pithos burials are also the most common burial types with no burial finds. On the other hand simple inhumations without burial finds are comparatively less in number and cist burials rarely did not reveal any finds.

Simple inhumation burials form the largest portion of the burials that had multiple burials. Most of the simple inhumations did not reveal any burial finds. However interestingly several simple inhumation burials have the highest number of finds in the cemetery. This might support that simple inhumations "were not reserved for poor people" (Seeher 2000: 21), if one takes the number of burial finds as the main criteria for such a social differentiation.

Seeher states that cist is also the most expensive burial type in the cemetery because the lime stones and limestone plates that were used in the cemetery and in the settlement could have been brought from the slopes that are several hundred meters away. However the crystalloid limestones that were used for the "real" cist burials were 5 km away on the north of settlement (Seeher 2000: 22) which is a long way to transport stone plates. Considering the distance between the settlement and

the source it is clear that only special occasions would make it worth the effort and the time. This explains the smaller number of cist burials in Demircihöyük, comparing with the other Western Anatolian sites, also with the nearby EBA cemetery of Küçükhöyük. In Küçükhöyük the cist burials form 36% of the total burials, where the lime stones are directly next to the cemetery (Seeher 2000: 22). The cist burials then might reflect more time and effort put in the preparation of these burials compared to pithoi for instance that were available at the site. However it is also possible that for instance if a person was very old and was expecting her/his death, s/he might have had initiated the preparation of the burial. In such a scenario there would be time to prepare the cist burial. This theory might explain the existence of the older adults in the cist burials but not the several infants.

It has been claimed that the cist burials at Demircihöyük were robbed (Seeher 1992a: 366). The reason why Seeher thinks that the cist burials were robbed might be because these were assumed to be burials of "privileged people" (Seeher 1993: 13). However it should be noted that cist burials were relatively well preserved. This discrepancy might be due to the fact that it is expected that cist burials would reveal more burial finds, and here they did not.

Demircihöyük's cemetery does not show much differentiation in location, orientation, age, gender and burial types; although there are several exceptions with the material distribution.[53] This is consistent with the fact that houses also show little evidence for differentiation (Chabot Aslan 2000: 244). It is not possible to find out if the choice of the burial type was related with the social positions of the individuals; therefore it is not possible to claim which burial type was more important or valuable

[53] which are listed as "different burials", see below

than others. As Seeher states, we might not have strong evidence for a social differentiation between burial types (Seeher 1992a: 367, 2000: 17). He underlines the possibility that in the fall when the harvest was filling the storage jars, people would bury their dead in simple inhumation or cist burials (Seeher 2000: 23). Another possibility is that when the deceased needed to be buried immediately, a quicker form of burial type would be chosen or when s/he was "worth the investment" than a well-built burial form would be chosen (Seeher 2000: 23).

It is also difficult to claim a parallelism between the burial type and the burial finds. For Demircihöyük there is no burial type that has always rare or special finds, or a certain type of find or material, or a special burial treatment. The same burial type can reveal both special finds but also no finds, different types of objects made of different materials.

Considering the fact that in the settlement, houses are attached to each other in a very organized plan where every house was almost the same size, it is surprising that the cemetery does not have such an organized plan or visible divisions between burial grounds for specific households or for specific burial types. The "rule-bound use of space" (Chabot Aslan 2000: 243) of the settlement does not seem to apply to the mortuary space of Demircihöyük. Moreover the continuity in the settlement from the earliest phases to the abandonment is not seen in the cemetery, where the EBI burials are not found in the EBII cemetery.

3.4 BURIAL FINDS

Alekshin listed the most common methods that are used to determine the wealth of burials:

> "The first of these considers the number of objects found in a grave: the more objects found in a burial, the richer it is. A second method considers the number of types of objects in a burial: the more types of objects are represented in a grave, the richer it is. A third method considers the frequency of the objects in assemblages of grave goods: the more rarely an assemblage of grave goods is encountered, the richer it is. All of these methods have one significant shortcoming: they do not take into account the materials of which the objects are made." (1983: 141)

Here, however neither the number of finds, nor the variability or material itself is taken as the major or as the only criteria for determining the "difference" of the burial. It is necessary to evaluate the materials of finds, the type of finds, the number and variability of finds together and then try to integrate the symbolic value into this evaluation to have a more comprehensive picture for both the similarity and difference between burials. This evaluation does not have to give inferences about the social ranking between burials. The aim of such an approach is not to find such inferences, instead to show which burials are different than the others and what may have caused this difference.

3.4.1 Pottery: One of the most important inferences that can be made by looking at the pottery is the relative chronology. For the Demircihöyük cemetery, the excavators concluded that the pottery from the burials were contemporary with the Phases K/L to Q which were all handmade (Seeher 2000: 32). Seeher states that there is no specific shape or ware reserved for the cemetery that was not known from the settlement and that the repertoire for the cemetery is much more limited than the settlement (Seeher 2000: 32). This alone shows that there was probably an intentional choice of the pottery shapes for mortuary reasons. Seeher adds that the potteries from the cemetery were usually used and sometimes the parts of the vessels were missing (Seeher 2000: 32) which overlaps with the re-use of the pithoi.

Although pottery is the most common burial find in the cemetery, more than half of the burials revealed no vessels. In almost half of the burials the pottery finds were the only find. Most of the burials with pottery were pithos and double pithos burials. The fact that most of the vessels found in the burials were fine wares and were carefully produced (Efe 1988: 53), might indicate a "special" use or again a specific choice, rather than simply putting a vessel that was used in the settlement. The use marks on the vessels on the other hand also suggests that the vessels were not especially produced for the burials (Seeher 2000: 37). Another possibility is that the marks on the pithoi occurred during the transportation from the production area to the cemetery.

There is no specific pattern that shows that certain vessel shapes appeared only with certain gender/age groups. The decorated vessels also appear in a variety of burial types and gender/age groups. The largest number of vessels in the cemetery is in the form of jugs. Seeher states that the reason for having such an amount of liquid serving vessels might be related to the fact that that a liquid was offered for the deceased (Seeher 2000: 37). Besides being fine wares, the jugs from the cemetery were about 20 cm high, whereas the jugs found in the settlement were usually between 35-45 cm high (Seeher 2000: 37), which means that probably the smaller size of the pouring vessel was related with a mortuary practice that necessitated less liquid than the ordinary use.

As it is with the small finds, pottery also shows small scale patterns that are applicable for only a limited number of burials. This again supports the idea of separate households with certain preferences, but as noted before might also be related with the chronological phase differences. In terms of value or rarity, it is

possible to say that the vessels found in the cemetery show a limited shape assemblage than the settlement. This might suggests that there were special mortuary practices in which certain shapes of pottery were used and then were placed in the burials or the shape/ware itself might have had a symbolic meaning which is unknown to us.

3.4.2 Metal Finds: In Demircihöyük's EBA cemetery we have 377 burials with no metal finds which means that only ¼ of the burials received metal objects. There are burials from all the gender and age groups with or without metals; therefore it is not easy to present a pattern for the metal objects and their appearance in certain gender and age groups. However if one takes the metals as the primary variable that presents the difference in wealth or status, there are certainly burials with more or distinct metal objects. Burials that have metal objects that were rare throughout the cemetery such as the fenestrated bronze axe might have been also different than the burials with only one metal bead for instance. In other words not only the material but the object type should be considered when it comes to evaluate the value of an object. The fact that certain metal objects did not appear in female/male burials might point to a choice, but the pattern might also be due to the small number of gender-identified burials. There are several patterns that occur in the burials with metal burial finds:

- Metal finds appeared mostly in adult burials
- Lead bottles were not placed in female burials[54]
- Silver objects appear in burials with high number of burial finds

[54] except in multiple burials

- Two copper weapons or two copper sheets never appeared in the same burial[55]
- Copper personal adornments never appeared in male burials
- Double pithoi had the highest number of gold and copper objects
- Male adult burials had more gold objects than female adult burials

These patterns might not necessarily have a social or symbolic meaning, and there are certainly more unique occurrences than patterns of the metal finds in the cemetery.

3.4.3 Stone and Clay Finds: The clay objects found in the cemetery are not as variable as the ones found in the settlement. The most common clay object in the cemetery is the spindle whorl. Except the spindle whorls, the clay small objects such as the rattles and figurines seem to appear either in infant burials, or in burials with no bone remains. Perhaps this is due to the function or meaning of the objects which as Seeher underlined might be related to children or infants (Seeher 2000: 64-65). However one has to consider the small number of these finds and therefore avoid drawing generalizing conclusions.

The most common stone objects in the cemetery are the stone weapons and all of these appeared either in unknown/uncertain adult or male adult burials. The highest number of burials with stone objects is the simple inhumations followed by pithos and double burials. Cist and jar burials did not reveal any stone objects. Considering the fact that stone was presumably more available than metal, it is surprising that there are more than a hundred burials with metals but only over 30

[55] even in multiple burials

burials with stone objects. This might be due to the fact that stone is easily available as a material but perhaps the working of it was not as easy as for instance clay. It is possible that the symbolic connotation of the material played an important role, rather than the value of the material, the effort to produce it or availability of the material.

Spindle whorls form one of the most common clay objects found both in the cemetery and in the settlement. Although there is no correlation between gender and the appearance of spindle whorls, adult burials have the highest number of spindle whorls. Adult burials also yielded the highest number of clay small finds. Other than the spindle whorls there are rattles and figurines in the clay objects category and these only appeared in burials with no or several bone remains or in infant burials. It seems like there was no rule for specific genders to have specific objects, however age group might be actually be a criteria for the choice of burial objects. It is also worth noting that clay figurines were also found in the settlement, whereas stone idols were absent. This might also imply that certain materials were used only for certain object types that were put in the burials. However one has to consider the small number of these finds and therefore avoid drawing generalizing conclusions.

Although flint is abundant in the settlement, the uniqueness of the flint blade and the unusual appearance of the grinding stone in the burials might indicate a special meaning and/or value. The fact that the rare clay objects such as the figurines or stone idols found in burials with high number of finds may also underline their importance.

The fact that all the burials in the EBII cemetery were unique in their composition of the materials/objects with the selection of burial type may imply an

"organizational diversity" (Crumley 2005: 40) within the mortuary sphere. This diversity might be due to cognitive differences and/or due to difference in choices. On the other hand the fixed orientation also suggests shared customs.

3.5 "DIFFERENT" BURIALS ACCORDING TO THEIR GENDER/AGE GROUPS

Gender and age groups are one of the most important variables to look at if one wants to see whether the finds are chosen according to the age or to the gender of the individual. In cases where burials are in a relatively good preservation state as they were in Demircihöyük, it is possible to look for differentiation in the material assemblages of certain genders or age groups. To categorize burials as "different" not only the number of objects and the rarity of the materials, but also the number of the individuals, the age/gender groups of these individuals and unusual occurrences of certain objects were considered to question their relevance to symbolic expressions of the inhabitants of Demircihöyük.

3.5.1 Adults: (Appendix A-Cemetery: Adults, Table 13)

Adults appear mostly in simple inhumation burials; however when we look at the burials with identified genders, females appear more in pithos and double pithos burials, whereas males appear again in simple inhumation burials. Male burials yielded more finds than the female burials in cases where the identified female/male was the only individual in that burial.

Some adult burials are "different" in terms of the presence of a special treatment, namely the pair of cattle skeletons. Unfortunately all the 8 burials with associated cattle skeletons are of adults with no identified gender.

Other than burials with cattle skeletons, there are burials with distinct elements that not all burials had: The single example of the special burial type "mudsink." This is certainly different than other burials not only with the variety of its metal finds, but also with the difference in its construction. As discussed before its location isolated from other burials may also mark its difference. It is unfortunate that the gender is not certain for this burial, which was assumed by the excavators to belong to a male adult (Seeher 2000: 78). There are not many markedly different female adult burials except the ones with high number or high variety of burial finds.

3.5.2 Adolescents: (Appendix A-Cemetery: Adolescents, Table 14)

Unfortunately there is only one adolescent with an identified gender, which is a male.[56] Although double pithoi contained most of the adolescents, the number of pithos and simple inhumation burials is close to the double pithoi of adolescents.

Adolescent burials did not reveal any gold or stone objects. The total number of burial finds in adolescent burials is the lowest among all other gender/age groups. The different adolescent burials are different due to the unusual composition of the burial finds that did not appear in other adolescent burials or due to the rarity of the burial object that was found in the adolescent burial. For instance the pithos burial with a tripod jar and the only footed bowl in the cemetery could have been a "different" burial, if we consider the rarity of these objects in the cemetery.

[56] The rest of the adolescents are under the category "adolescent-unknown" in the database.

3.5.3 Children and Infants: (Appendix A-Cemetery: Children and Infants, Table 15 & Table 16)

Almost all of the children and infant burials were pithos and double pithos burials. The most common burial find in children burials is fine ware jugs and copper pins. There are no children burials with stone or silver objects. Children burials did not have as many burial finds as the infant or adult burials. Moreover the fact that the simple inhumation burials had the highest number of burial finds and children were not commonly found in simple inhumations may indicate that either children were not given a lot of finds for their burials.

On the other hand when we look at the rare finds in the children burials, there is a child burial with a bronze dagger, another one with a lead bottle and a child burial with one of the two tankards in the cemetery. These are different from other children burials in the cemetery. It should be noted that all these three child burials with unique finds were pithos burials.

There is no simple inhumation burial with an infant except the double burial with a female adult and infant combination. Another female and infant combination appears in a pit burial. Interestingly both of these burials contained two burial finds; in both instances one was a jug. Except these burials there are no other multiple burials with infants.

Although most of the infant burials either did not reveal any finds or had one or two, there are several exceptional infant burials with not only high number of finds but also with a high variety. All of these exceptional burials were either pithos

or double pithos burials. Compared to the “different children burials”, the “different infant burials” stand out.

3.5.4 Burials with No Bone Remains: (Appendix A-Cemetery: Burials with no bone remains, Table 17)

Most of the burials without bone remains were pithos or double pithos burials. There is one double pithos burial without skeletal remains that had the highest number of spindle whorls and also the highest number of finds in the EBA burial which was obviously different than other burials. Another double pithos burial with no bone remains might be different than other burials with the single flint blade in the cemetery, the high variety and number of metal finds and the fact that there was a pair of complete cattle skeletons associated with this burial. As it is seen the difference in these burials is due to the uniqueness of the materials found in the burial, not always due to the number of burial finds.

3.5.6 Burials Associated with Cattle Pair Skeletons: (Appendix A-Cemetery: Burials Associated with Cattle Pair Skeletons, Table 8)

There are seven burials that yielded pairs of cattle skeletons buried nearby. Of course it is not very clear which burial the cattle skeletons should be associated with when there are overlapping. The excavators concluded that most of the burials associated with cattle skeletons were covered with large stone plates (Seeher 2000: 30).

All the burials associated with cattle skeletons contained single individuals except one burial which is also the only burial associated with cattle pair that is

oriented towards NE[57]. An aspect that shows consistency in all the burials associated with a cattle pair is that they all had burial finds. Among these finds are rare burial finds such as a whetstone, stone axe, and a mushroom copper macehead, a flint blade, a face-jug fragment and copper studs. These burials accumulate in the SW center and NE parts of the cemetery. It is possible that these burials or the burials around these cattle pairs were receiving a different kind of treatment than the other burials. It is also possible that cattle were sacrificed for several burials in the same area, especially if these burials were of the same family/household.

The gender is not certain for the individuals in these burials; however the identified ones are all adults older than 20 years. Interestingly these are not the burials with the highest number of burial finds, but with the presence of rare burial finds, a special importance might had been given to these burials, if the cattle were only related with the associated burials.

The fact that only some burials were associated with cattle skeletons may indicate that the cattle had a special importance. It should be noted that cattle were perhaps an expensive gift because the animals could provide a lot of meat. On the other hand, it is also possible that since cattle were one of the most common domesticated animals in the settlement, it was also used for mortuary purposes. Although this does not explain why sheep skeletons were not found in the cemetery as well, one cannot go any further than these two assumptions about the relationship between the cattle skeletons in the cemetery and the daily consumption of cattle.

[57] Others were oriented towards south-east

3.6 CONCLUSION

Demircihöyük cemetery is one of the largest EBA cemeteries in western and northwestern Anatolia and had a large number of burials that could have enabled us to see patterns if there were any. The analysis above shows that the existing patterns apply only to a limited number of burials. The great variability in burial types, in the combination of materials and objects stress the fact that there were no strict rules for the choice of the materials put with the deceased, although the choice probably was not random either as several patterns have shown. It seems like it was more a matter of choice of the household of the deceased, rather than a tradition all the habitants were practicing. As stressed before the typological differences of the objects that appeared in the burials might also be related with the chronological phases, but even this does not explain the great variety in the composition of materials and objects.

The organized site plan of the settlement, the long continuity of the architectural features and similarity between the houses and their material assemblages, show that certain decisions were taken communally and certain customs passed from generation to generation. Compared to the level of organization in the settlement, it is surprising that the cemetery did not show such a spatial organization. It has been argued that houses and burials may have "corresponding relations" (Hodder 1984: 55-56, in Chabot Aslan 2000: 239), however it seems like the houses and the burials at Demircihöyük did not show evidence for such a relation. On the other hand, continuity within the EBII levels can be traced both in the cemetery and in the settlement. The cemetery was used from Phases K/L to Q (Seeher 2000: 32) and although there are overlapping burials, the same cemetery was used over several generations by expanding outwards in time. However it should be

noted that the settlement continued from EBI to EBII, whereas in the cemetery the burials were all dated to the EBII only. The materials found throughout the cemetery do not change considerably, except for a few exceptional cases, which might again be due to "choice" or the change in phase. Although the burials are dated relatively according to the pottery, the final publication does not present the differences in phases within the EBII burials.[58] It is for certain that the cemetery was used for several generations,[59] therefore the differences between the burials might have been due to the chronological/phase changes, if not due to choices.

It should be noted that although there is continuity in the architectural plans of the houses, there are differences in the building materials between the early and later phases. However since the reconstruction of a house necessitated the modifications in the neighboring houses, in a certain phase houses were built the same way in the same materials.[60] The material difference between the earliest and later houses might have been due to the availability of the materials or the weather conditions; however the matter of "choice" may well had played a role in the selection of building materials. If we consider this, then the difference in burial types might not be that unusual; as Seeher suggests it might be due to availability of the material the burials were made of or due to the seasonal conditions (2000: 23),[61] or again due to individual preferences.

Although individuals are very difficult to pinpoint in the settlement where we have homogenous architectural features and similar material remains, there is a great

[58] The relative chronology based on the burial finds also lefts out the burials with no burial finds, especially when they are not pithos or double pithos burials.
[59] if one compares the capacity of houses and the number of the burials
[60] This may only apply to the later phases, since the earlier phases are not as completely excvated as the later phases.
[61] See pg. 61

variety in the burials in terms of material compositions set for different gender/age groups, which may point to individual choices. Considering that the interior division of the houses did not show much space for individual privacy[62] we may argue that this would perhaps reduce the individualism and enhance the household identity in the settlement. I believe it is possible that the reason why people were reducing individualism in the settlement was due to the necessity of maintaining the order of a communal settlement. Therefore the cemetery could be a place where people expressed their individual choices. It is possible that the similar features in the cemetery such as the burial types and orientation could have symbolic or practical connotations and therefore could have continued as shared traditions. On the other hand, variability appears mostly in features that were not as visible to an observer as the burial type or orientation, such as the contents of the burial (i.e the combination of burial finds and the gender/age of the deceased). Therefore the burial contents might have reflected the households' choices, which would not affect the visible homogeneity.

The assumed difference of status presented by "richer" or "poorer" burials are lacking in the Demircihöyük cemetery if we accept that the number of materials in the burials or the burial types can reflect differences in status. For instance, there were some cist burials in the cemetery that were assumed to be expensive burial types with no burial finds, on the other hand some simple inhumations which are considered to be the simplest and perhaps quickest burial types had a high number and variety of objects. This shows that there does not have to be a correlation

[62] See Aslan 2006

between the burial type, its economic value and the type and value of the objects placed in that burial.

It can be safely argued that there appears to be no evidence for -what is usually called- "royal burials" in the EBII cemetery; that is only a limited number of burials with extra-ordinary objects or with extensively more materials than the other burials. Instead there are "different" burials, but their difference is not necessarily based on the assumed value of the materials or the number of finds. The mudsink burial (G100) as a unique burial type and the burials with unique finds or with cattle skeletons are examples showing that there is not a straightforward or a single set of mortuary practices that make a burial "different". Common objects (such as spindle whorls) or materials that are more available in the settlement but rarer in the cemetery (such as flint) could also mark a burial's difference.

The primary conclusion for the cemetery is that there is more evidence for variability which might also be considered as a form of differentiation which does not necessarily point to differentiation in economic or social status. Crumley suggests that heterarchy is "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, depending on systemic requirements" (2005: 39). This difference -according to the heterarchy concept- may have the potential to be ranked, however this rank does not have to be an economic one; there could be many other ways of being different. The variety in the cemetery might be due to the different choices of the people who buried the deceased.

4.0 CHAPTER IV

THE MATERIAL COMPARISON BETWEEN THE SETTLEMENT AND CEMETERY: OUTCOMES

> "Studies of assemblages from contrasting contexts can provide a more valid assessment of artifact value than the potentially circular argument of calculating values of grave goods types according to their rarity in funerary contexts or the calculation of value from labor investment. Such cross-contextual analyses assess more accurately the symbolic value of different artifact types and expose the selection processes for grave goods."(Braun 1977, in Parker Pearson 1993: 207).

One of the objectives of this thesis is to do such a cross-contextual analysis of the objects that appear both in the cemetery and settlement. The comparison between the objects found both in the settlement and cemetery enables us to see whether the location of these objects in the settlement may indicate a special use of a room or house, or whether the selection of burial finds is due to their daily-use connotations. The differences or similarities in the objects that appear both in the cemetery and settlement give new insights to the symbolic and practical choices of the Demircihöyük inhabitants.

4.1 Small Finds

Spindle Whorls: Spindle whorls are one of the three clay object categories that appear both in the cemetery and in the settlement.[63]

Uhri categorizes the spindle whorls under the "gender determinative objects" representing females (2010, 2006), however Demirichöyük defies this assumption since burials all genders and age groups in the cemetery yielded spindle whorls. It should be noticed that there are more decorated spindle whorls in female burials than

[63] The second one is anthropomorphic figurines, the third is rattles (see below)

male burials. Moreover, the spindle whorls can also not be profession determinatives since if they were, there should have been other tools found in the burials that could point to a profession, if professions existed at Demircihöyük. Spindle whorls were found all over the settlement, none of the areas showed a high concentration. The fact that spindle whorls were also commonly found in the cemetery, but loom weights or clay combs were absent might mean that spindle whorls had also a symbolic meaning in addition to their common use that loom weights, combs or other clay tools probably did not.

Out of 183 spindle whorls found in the settlement 71 were decorated (Baykal-Seeher & Obladen-Kauder 1996: 228), whereas in the cemetery there were 42 decorated spindle whorls out of 96 spindle whorls, almost half of the total. This means that decorated spindle whorls were also in use and they were not only decorated for mortuary purposes. It should be noted that the settlement yielded a greater variety of decorative types than the cemetery.

Rattles: The rattles are categorized under "toys", however, it has been suggested that these might have been used as sistrums with a cultic or symbolic function (Baykal-Seeher & Obladen-Kauder 1996: 255). For the two rattles found in the EBA burials, Seeher has already suggested the possibility that the rattles might have had a symbolic function (Seeher 2000: 65). In fact there is one rattle with anthropomorphic features found in Room 12 in Phase F1F3 (Baykal-Seeher & Obladen-Kauder 1996: 370),[64] which might support Seeher's suggestion.

[64] Tafel: 128-1

There are examples of rattles or rattle fragments from front and backrooms, but also from the courtyard (Baykal-Seeher & Obladen-Kauder 1996: 255).[65] A back room had two in situ rattles (Baykal-Seeher & Obladen-Kauder 1996: 255).[66] These in situ rattles suggest that perhaps the back room was the place where the infant was kept if the rattles were actually used as toys. Infants could have been taken with when leaving the house; therefore it is not surprising that objects related with infants/children were found in any part of the settlement.[67]The fact that both of the burials with rattles did not contain bone fragments may support the idea that these were infant burials, however since there is no certainly identified burial with a rattle, this question remains unanswered.

Figurines: The clay figurines in the settlement consist of female figurines and animal figurines. Although bone figurines were also found, stone or metal figurines were not discovered in the settlement. Not all the figurines were found complete; in fact most are fragments.

The excavators suggest that the minimum 96 female figurines found in the settlement outnumber most of the other EBA Anatolian sites (Baykal-Seeher & Obladen-Kauder 1996: 257). Although a larger part of the human figurines had female features, there are also examples with no indication of the gender. Interestingly, no figurines were found with male features.

The function of the female figurines has been usually connected to cult/religion; however there are a great variety of different theories concerning their

[65] Abb.184
[66] Room 2: in phase E1

[67] if these objects were related with infants/children

use one of which is toys.[68] For the settlement of Demircihöyük cultic and toy functions were assigned to the female figurines. Obladen suggests that it is possible that these two functions could be reflecting the artistic trends of different producers or of different periods rather than a typological difference (Baykal-Seeher & Obladen-Kauder 1996: 258).

Two in situ female figurines were found in a storage bin in the courtyard (Baykal-Seeher & Obladen-Kauder 1996: 273). This may seem to support the "fertility" theories associated with figurines; however the fact that figurines were also found scattered in the houses and in the courtyard does not completely explain their function. There are also in-situ animal figurines from the courtyard, which were found in the storage bins and Obladen thinks that these are "*pars pro toto"* for the livestock of the settlement (Baykal-Seeher & Obladen-Kauder 1996: 283). The "fertility" aspect then –if there was such an aspect- is perhaps not reserved only for female figurines, but animal figurines were also used in the same way.

The typology of the anthropomorphic figurines found in the settlement is not very comparable to the ones found in the cemetery. Only the body of a stone figurine fragment from burial G107 is similar to the Body/Type IC figurines in the settlement (Fig. 17). However it should be noted that the one from the cemetery is made of stone whereas the settlement typology is based on the clay figurines. The clay figurine from burial G295 is not comparable to any figurine found in the settlement although stylistically some features are traceable in the typology of the settlement (Fig. 18). It seems like this figurine from the cemetery is stylistically in between the stone idols and clay figurines. In the settlement there are no comparable stone idols

[68] See Ucko 1969, Kamp 2001

or figurines that resemble the stone idols in G213 (Fig. 19) or stone figurines from G107 which makes the stone idols/figurines one of the objects reserved for the cemetery. Other than stone, there are also no metal figurines. In the cemetery however there is one silver object from G481 that could be an "idol" (Seeher 2000: 121).[69]

If the figurines were toys then one would expect to find animal figurines in child or infant burials since female figurines were found in such burials. However in the cemetery there are no animal figurines. This may point out that the female figurines had a different meaning than the animal figurines. The female figurines might not be considered toys or their presence in infant and child burials had another function or meaning than the ones found in the settlement.

Copper Pins: Metal objects appeared rarely in the settlement. There are few pin/needle examples that appeared both in front and back rooms and also in the courtyard. Although they are not preserved completely to make a typological comparison, even the existence of these few samples is enough to know that the pins were not only reserved for the mortuary sphere and their find spot indicates that they were probably part of the daily use.

Stone Beads: In the settlement 15 and in the cemetery 14 stone beads were unearthed. Although the ones in the settlement were mostly made of limestone, in the cemetery the stone beads were made of limestone and marble but also of various semi-precious stones like rock crystal, serpentine and carnelian. Beads could be part of an ornament or they could be parts of personal adornments.

[69] see Fig. 20

Bone Bead: Since there is only one bone object from the burials which is the bone bead, it is not possible to make a comparison between the bone objects from the cemetery and from the settlement.

Flint Blade: The only flint object from the named burials is the flint blade fragment from burial G583, which was one of the metal-rich burials in the cemetery and which also had an associated cattle pair. Although there were no human remains left in the burial, the fact that the flint blade was only found in a single burial might suggest that flint blade which is a tool, had also a symbolic meaning or mortuary value as the spindle whorls. In the settlement flint blades were mostly found in the courtyard, however for the later phases Room 109 also yielded relatively higher number of retouched flint blades than the other rooms. This might mean that these blades were both used in outdoor and indoor activities.

Grinding Stone: The grinding stones in the settlement were usually found in the wall foundations of the houses, between the bricks and the foundation stones or found in a secondary use as a door threshold stone (Baykal-Seeher & Obladen-Kauder 1996: 171). It is surprising that a production object was found in the mortuary sphere. Only a single basalt grinding stone was found in the cemetery in a simple inhumation burial close to one of the individuals' pelvis (Seeher 2000: 93). This burial was identified as one of the "different burials" which is partly due to this unique grinding stone. Although the grinding stone is usually complemented by a handstone/pestle, a handstone/pestle was not found in this burial. The difference between the grinding stones in the settlement and the cemetery was that the one from the burial was unused.

Stone Maceheads: Baykal-Seeher concluded that the maceheads were not daily-use object; they were instead weapons or symbolic objects (Baykal-Seeher & Obladen-Kauder 1996: 178). The small number of maceheads might support that they were not daily-use objects. It is also important to underline that stone and metal maceheads were only found in adult burials. Two of these burials had an associated cattle pair skeleton. By considering all these features it is possible to say that maceheads had a symbolic function, however whether these were symbolizing age, prestige, wealth or power remains uncertain.

Stone Axes: The stone axes found in the settlement were so small in size that they could only be used for fine woodwork (Baykal-Seeher & Obladen-Kauder 1996: 176), or perhaps in smithy activities. Seeher-Baykal states that these were probably not used as artifacts but had symbolic significance (Baykal-Seeher & Obladen-Kauder 1996: 324). On the other hand it should be noted that the individual in burial G21 had a deathly skull injury which was probably caused by a stone axe (Seeher 2000: 53) showing that they could also be used as weapons.

Considering that not all the stone maceheads and the stone axes were produced carefully (Seeher 2000: 53), it is possible that they had a double function like the spindle whorls: symbolic and practical.

It is interesting that two stone weapons never appeared in the same burial, however there are burials where copper and stone weapons do occur together, which might carry a symbolic meaning.

Stone Hammer: Stone hammers were similar in shape to the stone axes, in a cruder form. It has been suggested that these hammers were used either in wood or metal

processing and again the ones without use marks could be symbolic objects. In the cemetery there is only one burial with a stone hammer found in a pithos burial which had a more rounded form than the stone axes. The limited number of hammers both in the settlement and in the cemetery implies a limited function or a limited use.

Whetstones: In the settlement there were 40 sandstone whetstones. Use/scratch marks were not visible on all these whetstones on macro level (Baykal-Seeher & Obladen-Kauder 1996: 175). The whetstones were probably used in the production of ground stone and bone objects (Baykal-Seeher & Obladen-Kauder 1996: 176). In the cemetery there is only one object that was called a whetstone found in a simple inhumation burial of an adult (G117). However the "whetstone" in this burial had a hole which puts it more under the category of "pendants".

"Earplugs": Although the cemetery yielded a double pithos burial of an infant with three golden earplugs (G295), there were no gold or other metal earplugs in the settlement. In the settlement there were only two greenstone earplugs (Baykal-Seeher & Obladen-Kauder 1996: 180) and clay earplugs[70] (Baykal-Seeher & Obladen 1996: 256). In terms of form the golden, stone and clay earplugs are very similar, although only the golden ones had decoration. The clay earplugs from the settlement actually do not look very much like the metal earplugs found in the cemetery or like the stone examples from the settlement which brings about the possibility that these could be tokens or objects that have an unknown function.

These objects were called "earplugs" since there is a pitcher from the settlement that had ear-like lugs and on these lugs there were clay applications that

[70] from Room 108

looked like these earplugs (Baykal-Seeher & Obladen-Kauder 1996: 180). As Baykal-Seeher & Obladen-Kauder underline it is not possible to understand from the limited examples whether these objects were daily-use jewellery or were reserved for the symbolic activities.

4.2 Pottery:

Bowls: Both the settlement and the cemetery yielded small numbers of black ware bowls. Red ware bowls are common, but they were usually not decorated, whereas black ware bowls had decorations or finishing applications. Both the settlement and the cemetery had not only deep bowls but also other types. Although the s-profile bowls were rare in the settlement and appeared only after Phase L, in the cemetery there are more s-profile bowls than ordinary bowls (Seeher 2000: 33). This is true if the bowls that are found outside of the named burials are included; if not, the number of s-profile bowls and non-s-profile bowls are close to each other. The limited number of s-profile bowls in the settlement may be explained by the possibility that this type was preferred for specific activities one of which was the mortuary sphere. However it could also be related with the phase the s-profile bowls started to appear.

In total the houses/rooms yielded more bowls than the courtyard, suggesting they were used more for indoor activities, perhaps due to the fact that they were related to consumption rather than production.

The total number of the other shapes that were found in the settlement was less than the total number of bowls. This was probably due to the fact that bowls could be used for food as well as liquid preparation and consumption. On the other hand in the cemetery shapes that were related to liquids appear more frequently.

Jugs: The most common shape in the cemetery is the jug, whereas in the settlement bowls form the largest group of pottery. Again the houses had more jugs than the courtyard.

The jugs in the cemetery were mostly red wares as in the settlement. The ones found in the settlement in the later phases were usually red-slipped or burnished wares. Although in the earlier phases the jugs are cruder, in the later phases they become elongated with a "beak spout" (Efe 1988: 121). The black ware jugs in the settlement were usually small, decorated and of higher quality and were less in number than red ware jugs (Efe 1988: 58) indicating a special use. Since about 171 burials had at least one jug it is possible to assume that one of the special uses of these fine ware jugs was related to mortuary practices or other symbolic functions.

Jars: Seeher noted that jars appear in two ware types in the cemetery: "Type a" which are the black wares with upright handles, and "Type b" which are the red and brown wares with vertically pierced knobs. "Type a" was much more common in the settlement whereas "Type b" was only represented by fragments in the settlement (Seeher 2000: 35).[71] The rooms yielded more Type a jars than the courtyard suggesting that this type was used more in indoor activities. Jars were found in small numbers in the settlement, continuing the form and style in all the phases (Efe 1988: 53). Moreover only a limited number of burials had jars and a large portion of these jars were fine wares. Efe states that the careful production and decoration of the jars indicates that jars had a "special meaning" at Demircihöyük (Efe 1988: 53). The jars were also found in the "different burials".

[71] See Fig. 16

Pithoi: In the cemetery the pithoi were divided in to 3 types according to their body shapes: the wide-mouthed, the s-profile and the necked pithoi. The same types were also found in the settlement. The wide-mouthed pithoi were cruder red wares as the cooking pots, whereas the necked pithoi were usually red-slipped and burnished (Efe 1988: 122). The neck-pithoi were found after Phase H in the settlement which also confirmed that the later phases of the settlement were contemporary with the cemetery. There were more wide-mouthed pithoi in the subject rooms than in the courtyard throughout the phases, whereas necked pithoi were usually found in the courtyard.

The sizes of the pithoi were not large enough to contain adults and especially the necked pithoi were not the most practical shape to place burials in. Indeed most of the necks of these pithoi in the cemetery were broken. Moreover the pithoi found in the cemetery had use marks, and therefore the excavators concluded that the pithoi were not especially produced for the burials (Seeher 2000: 18).[72]

Miniature Vessels: In the cemetery the miniature vessels appeared only in a limited number of burials and in the settlement the subject rooms had several miniature vessels in the later phases. Most of the miniature vessels found in the settlement were bowls and cups. In the cemetery miniature cups, jugs and jars were found but miniature bowls were absent. This is perhaps due to the fact that bowls were usually used as lids for the pithos burials, not as burial finds.

[72]for the settlement pithoi see Efe 1988: 65-79

Shapes that were not found in the Cemetery/Settlement: Plates and cooking pots were not found in the burials, whereas tankards and tripods are only known from the cemetery.

Plates were mostly surfaced from the subject rooms in Phase HI and Phase K1 (Efe 1988: 77)[73] perhaps the reason why these do not appear in the cemetery is due to their chronological appearance, since the phases after Phase K1 yielded only a limited number of plates. Since the shapes found in the cemetery were usually related to liquid serving and drinking, plates might not be used for mortuary activities.

Most of the cooking pots were found in the subject rooms; however the courtyard had also a considerable number of cooking pots. Cooking pots had a similar form to the wide-mouthed pithoi; their difference was that cooking pots had traces of exposure to heat and were usually smaller than pithoi. Both wide-mouthed pithoi and cooking pots were coarse wares and in the later phases they were mostly red- slipped and burnished. Cooking pots were not preferred vessels for the mortuary sphere.

Tankards are absent in the settlement and are also were very rare in the cemetery represented by only two fine wares; one black, one red ware. The rare appearance of the tankards might be due to their special function, but also due to their chronological appearance. Seeher suggested that tankards might have been part of the pottery assemblage of the youngest phases of the cemetery (Seeher 2000: 47). Tripod jars were also not found in the settlement in a stratified context and in the cemetery only 3 tripod jars were surfaced.

[73] Abb.93

4.3 CONCLUSION

The material comparison between the settlement and cemetery not only gave clues about what objects may symbolic functions in addition to their practical function, and which objects were and were not preferred in the mortuary sphere, but also enlightened us to what objects were only found in the settlement or only in the cemetery.

The vessel shapes that appear in the cemetery are usually the shapes that were not produced as coarse wares; cooking pots, plates that were mostly coarse wares were not found in the cemetery. The only exception to this is the pithos that could not be produced as fine ware. The fact that the most common vessels in the cemetery are the jugs, whereas in the settlement bowls outnumber other vessel shapes might mean that bowls which could be used for multiple purposes (both for liquids and solid substances) were not considered funerary objects in the same way that jugs were.

The fact that specialized shapes for drinking such as tankards or depas cups that were commonly found in other EBA sites such as Troy were not common or absent in Demircihöyük may suggest that symbolic consumption or feasting was also not very common or that it did not involve eccentric vessel shapes. On the other hand the smaller beak spouted jugs found in the cemetery may also imply a symbolic consumption that was taking place as a part of a mortuary ceremony, unless the vessels were exclusively placed for afterlife.

Metals were almost absent in the settlement therefore it was not possible to conclude whether the metal objects in the cemetery were only symbolic or they were also part of the daily use. Exceptional were the copper pins/needles which surfaced

both in the settlement and cemetery, showing that they were not used exclusively as part of a mortuary garment.

Interestingly although other materials were not as rare as the metals in the settlement, only a limited number of objects were placed in the burials. It should be noted that the objects that were found in the burials never appeared in a context in the settlement that may point to a cultic or symbolic use. In other words they were daily-use objects, tools or as in the case of figurines they were found in all parts of the settlement. For instance the stone maceheads which are assumed to be symbolic objects revealed traces of use. Unfortunately there is no note in which houses or rooms these were found and therefore it was not possible to comment on their distribution further, as it was also with the other ground stone objects in the settlement.

The reason why clay or bone jewellery was not found or was very rare in the burials, although they were present in the settlement, may be due to the material's symbolic quality rather than its economic value. If there was an economic difference between individuals then one would expect to find the "cheaper" jewellery made of clay or bone in the burials of "poorer" people imitating the "richer" objects in a "cheaper" material. Since there is no clay or bone jewellery –except one bead- in the burials the reason cannot be explained by economic differentiation or by a demand on showing off. The materials may have had symbolic values rather than economic values. Another probability is that these materials were those worn daily, whereas metals or the exotic stones were worn during special occasions and ceremonies such as funerals.

The mortuary practices at Demircihöyük certainly included animal sacrifice or consumption and perhaps an activity involving either the consumption or libation of liquids. These practices were confirmed by the cattle skeletons and the liquid serving vessels. The fact that not all burials were receiving these might actually indicate a difference. However this difference does not necessarily represent status, but may be due to the resources or due to the choices of the family of the deceased. Moreover a few of the cattle skeletons could have been dedicated to several burials instead of being associated with a single burial as a communal commemorative act which would make it difficult to assign it to a single burial.

In terms of symbolic outcomes the material comparison could not suggest more than it has already been suggested. Figurines are always assumed to have such a meaning or function; however their rare occurrence in the cemetery disabled us to see distribution patterns if there were any. The typological differences between the anthropomorphic figurines found in the settlement and cemetery may suggest that there was a certain way the figurines for the daily use and for the mortuary practices were produced. However the difference might also be due to the chronological differences or the way the producer preferred to make them. The absence of animal figurines in the burials could be explained by the possibility that they were toys and toys were not put in the burials. This would hence suggest that rattles found in the cemetery were cultic rather than toys. If not, the simplest explanation is that animal figurines were not preferred as a burial gift.

5.0 CHAPTER V

CONCLUSION

With this MA thesis I tried to demonstrate how the archaeological -especially architectural and material- outcomes of Demircihöyük could be reinterpreted with an intention to make inferences about social phenomena that are not only focused on the power relations or economic differentiation in the site, but more on the social organization and social dynamics between the inhabitants.

In the first chapter I presented the existing studies and approaches to the social organization of EBA Anatolian sites, especially in western Anatolia which were mostly based on the social evolutionary models. One of the problems with such organizational models was the limited framework of interpretations that were based on dichotomies such as “rich and poor”, “equal and unequal” or “ranked and unranked,” which are mostly concerned about the economic differences between individuals or groups. I tried to apply a different approach where I avoided looking for evidence for an existing social organizational model. Instead I set out with research questions that were about trying to understand the daily practices of the Demircihöyük inhabitants which could inform us about their social dynamics and social organization. To answer these questions, I started with the analysis of the materials from the settlement and cemetery with reference to their production, use, spatial and chronological distribution. This bottom-up re-evaluation yielded that there is no straightforward or a single way to explain the social phenomena that occurred in Demircihöyük.

5.1 The Settlement

To understand the daily life at Demircihöyük not only the overall settlement plan, but also the architectural features of selected areas (i.e the subject rooms and the courtyard) were examined by considering the material distribution in these areas.

The three-roomed house was clearly different based on its architectural plan than the other two-roomed houses because of its additional room. Although a practical function of the construction of a three-roomed house next to the gate is not completely unreasonable, the difference of this house could also have a symbolic connotation which is not clear to us. However the analysis of the archaeological remains suggests that there was little difference between the three-roomed house and the rest of the houses in terms of other architectural elements such as the building material or interior features. Moreover, the material comparison between the rooms of the three-roomed house and the other subject rooms also shows that the material assemblages of these rooms/houses were not very different from each other. If the three-roomed house indicated "the higher rank of the resident" (Korfmann 1983:243) this questionable rank was not reflected in the material culture, be it the building materials, non-portable features or the objects.

Although the subject rooms did not show much difference in their material distribution, the courtyard located in the center of the settlement usually yielded more materials than the front and back rooms of the houses. Especially tools related to production such as spindle whorls, or artifacts that imply production such as flint debris were mostly found in the courtyard. The grain storage depots at the site which were the mudbrick bins were also located here. This suggests that daily activities

such as storage and production were mostly taking place in the courtyard, which was accessible to all inhabitants due to its central location. Production was, therefore, most likely done collectively/communally in the courtyard. This may suggest that it was practiced at the household level rather than being a specialized craft. Metal production might be an exception to this, since there were few artifacts from the settlement proper suggesting that metals were actually produced within the walls of the settlement. However the quantity and quality of the metal finds from the cemetery showed that metal production was an important manufacturing activity. Therefore I assume that the production of metals took place beyond the residential quarter of the settlement. However, even this cannot be interpreted as evidence for a "class" of people who only produced metals. In other words craft specialization with its implications such as division of labor might not be strongly developed in Demircihöyük.

As discussed in detail in Chapter 2 the choice for a central location for the main production and storage activities indicates that the inhabitants were aware of each other's daily outdoor activities as well as the grain resources. This would perhaps not only contribute to the homogenous character of the produced goods, but also reduce the differences between the accumulation of resources (such as grain) and between the scale of production and consumption activities of different households. Moreover the fact that people were constantly aware of each other, could have created a stronger communal bond, but could also have created a control mechanism. This phenomenon has been tried to be explained by the "panopticon" concept by Bentham (1995), where the control was maintained from a central location by observing others that were in a circular arrangement. The circular

arrangement of the settlement and the central location of the courtyard at Demircihöyük might have made it unnecessary to have a person or a group of people of a different status and more power controlling and maintaining order. The architectural plan suggests that power was retained by the inhabitants themselves. Therefore I do not agree with the assumption that the residents of three-roomed house were politically or economically different than others. Moreover, we lack the material evidence to argue for such a differentiation.

In addition to the control of the settlement, the decision-making was perhaps also a collective act. Houses in the same "residential block" were built in a way that their walls and roofs were attached to each other and therefore house renovations would require the consent of the neighboring household. Due to the continuity of the settlement and house plans, one could argue that such decisions were taken with the agreement of inhabitants. Another important outcome of this settlement plan is that the attached house walls prevented houses from expanding or to become markedly different from one another, again emphasizing homogeneity over difference.

I have underlined that social organization is not exclusively about the political or economic modes of a society; but one cannot deny the role of these in the relationships between the members of a community. As discussed in Chaper 2, according to Feinman's "dual-processual theory" there are two economic/political dimensions that could occur in societies with any kind of social organization; "network" and "corporate". Societies with collective labor tasks might have had a "corporate" economic mode where economic differences were suppressed (1995, 2000). The daily activities at Demircihöyük such as production, storage and architectural renovations/constructions showed that such activities were done

collectively and differences were not as visible or as important as communal homogeneity, which might exemplify a corporate economic organization.

Interestingly despite the communal nature and the corporate economic mode, the back rooms of houses in Demircihöyük were used as private storing areas that were secluded from the courtyard. Although individual privacy was not very emphasized architecturally within the houses (Chabot Aslan 2000), it is possible that household privacy was attested. In other words the presence of back rooms and of private storage mediums show that each house had an interior private area. The best way to describe the relationships between the households therefore is perhaps to state that they were externally interconnected but internally more private. However considering that the households were architecturally, economically and socially inter-dependent, the private actions or choices of households (or individuals) could perhaps not conflict much with the choices or the overall organization of the community. Compromise may have been one of the key factors that held the community together.

In spite of the similar nature of the houses and the collective/corporate nature of the social organization, the presence of a different house and the privacy factor in the settlement may imply that Demircihöyük was neither fully homogenous nor heterogeneous; it could have been "heterarchical". As I have presented in Chapter 2 and Chapter 3, Crumley suggests that in societies with heterarchical organization differences do not necessarily have to be based on economic or social motivations, they could be "spatial, temporal or cognitive" (2005: 40) and therefore might not be fully visible archeologically or completely clear to us.

Previous interpretations of Demircihöyük have focused on the overall site plan and the architectural similarities and differences between the three-roomed house and other houses to understand the social organization. However here it has been demonstrated that to be able to understand social organization, we should also try to understand the organization of daily activities which could give us insights about the dynamics between the inhabitants. By considering this issue we are able to see that the central importance of the courtyard where most of the daily activities were concentrated, resulted in the communal/corporate nature of the economic, political and social organization of the Demircihöyük inhabitants.

5.2 Cemetery

Unlike the settlement the cemetery does not demonstrate a careful spatial organization; however the presence of a communal extramural cemetery shows that the inhabitants agreed on a specific location for their burials. Except this agreed location, almost all other mortuary features in Demircihöyük's cemetery showed notable variety.

Despite the fact that most of the burials in the Demircihöyük cemetery were oriented towards the southeast (which is parallel to the orientation of many other burials in EBA western Anatolian cemeteries), there are also a number of burials that were oriented towards other directions. Indeed such variability is attested in almost all the other features in the cemetery. First of all, in addition to the ceramic containers, which were the most common burial types, there are simple inhumations and cist burials in the cemetery; and these categories have also shown variety within

themselves.[74] The finds in these burials were made of different materials such as copper, bronze, silver, gold, lead, clay, bone, ground stone and other types of stone. Burial finds consist usually of personal adornments, weapons, vessels and items with possible symbolic connotations such as figurines or spindle whorls. However there are also unique burial finds such as the grinding stone or the flint blade. None of these finds could be assigned to a certain gender/age group, although such assignments have been suggested.[75] In other words, out of 498 burials in the EBII cemetery no two burials had the same composition of the burial type, burial finds/materials and the gender/age group of the individual placed in it; all burials were unique in their composition of different burial features. It was possible to define several patterns; however these were only applicable at a very small-scale.

The reason why I listed the "different" burials in the cemetery according to their gender/age groups was to demonstrate that certain burials showed exceptional features (such as having unique finds, an accumulation of a find type, an exceptional number of individuals or an unusual burial installation), however such features could be found in burials of any gender/age group. Therefore the types of differences in the cemetery were perhaps not based on gender or age. Moreover the differences between burials might also indicate that there was no single way of preparing a burial or expressing differentiation (if it was expressed at all). Therefore I preferred to explain the variability in the cemetery by the "heterarchy" concept (Crumley 1995, 2005). According to this concept there does not have to be a constant or a single form of differentiation or homogeneity; these could show variability from time to time and there is always a potential for these to intermingle. Another possible explanation for

[74] See Figures 18, 19, 20
[75] Such as Uhri 2006, 2010

the variability is that due to the communal nature of the settlement where individualism was perhaps not particularly emphasized, the cemetery was a place where people could express their individual choices which resulted in such a high variability in the burial content compositions. And since the burial contents were not visible, the variability in these would not affect the visible homogeneity. However as I underlined before, the fact that most of the burials were oriented towards southeast and most of the burials were ceramic containers shows that there were certain customs that were practiced by the majority of the inhabitants which either had a symbolic or practical function, were acknowledged as traditions or were again a way of underlining homogeneity.

As Parker Pearson rightfully criticizes it is not possible to assume a correlation between the materials given to the deceased, the burial type, the location the deceased were buried and their status when they were alive (1982). Yet, the differences in mortuary elements have been tried to be explained by status differences.[76] Throughout the thesis I tried to emphasize that the mortuary sphere does not necessarily reflect the social dynamics among the living, although they should not be considered completely irrelevant either.

5.3 Settlement and Cemetery

The reevaluation of the settlement and cemetery showed that there might not be a consistent outcome from these two spheres; the settlement shows more homogeneity whereas the cemetery shows more variability. However the material

[76] For instance Seeher suggested that the cist burials could have been built for the "privileged members of the society" (1993: 13).

comparison of these two spheres complements each other and provides different perspectives about certain economic and symbolic activities.

The comparison of the materials from the settlement and cemetery yielded certain differences in the style or size of the objects that were found both in the cemetery and settlement. For instance the figurines and idols found in the cemetery were not stylistically very comparable to the ones from the settlement. Moreover the liquid serving vessels such as the jugs from the cemetery were smaller than the ones found in the settlement. Besides, vessels in the cemetery consisted mostly of fine wares, and shapes that were usually produced as coarse wares such as plates and pots were absent in the cemetery. On the other hand some objects found in the cemetery such as spindle whorls were not different than those found in the settlement.

It should be noted that not all the materials found in the settlement were put in the burials (such as obsidian or bone). This is also valid for the selection of the type of objects placed in the burials. There are lots of objects known from the settlement that do not appear in the cemetery which suggests that in spite of the variability of burial find compositions, the selection of the burial finds were probably not random. I have stated that differences or similarities of styles could be due to the change of phase when these objects were produced. However considering the fact that there was probably a certain cognition behind the selection of objects or preferences of materials put in the burials, the differences might also be products of intentional symbolic expressions.

Although special ceremonial vessels that were found in other EBA sites were not commonly found either in the settlement or cemetery of Demircihöyük, this does

not necessarily indicate that such ceremonies were not taking place. The common appearance of jugs in the burials and the cattle pair skeletons in the cemetery may imply the existence of ceremonial (or symbolic?) consumption.

Combining the results of two different contexts –the settlement and the cemetery- also expanded our understanding of the use and production of materials and objects. For instance the variety of metals and metal objects from the cemetery enabled us to see the level of knowledge and technology the Demircihöyük inhabitants had in metal manufacture, which we could not infer from the settlement. The social outcome from this cross-contextual analysis is that both the settlement and the cemetery of Demircihöyük showed material evidence for differentiations that were based on various factors; there was evidence for architectural, spatial, temporal, cognitive and material differentiations. However if economic, social or political status differences existed at Demircihöyük they are not visible materially.

There are unquestionably more possible scenarios about how the society at Demircihöyük might have functioned and how social dynamics might have stimulated or altered social, political or economic phenomena. Here I have discussed the material outcomes of Demircihöyük by providing different perspectives about daily practices that could contribute to the understanding of the social organization of the site. My conclusion is that Demircihöyük was a communal settlement where material differences were not emphasized and where economic activities were done corporately. However the validity of these outcomes for other EBA sites in Anatolia is questionable. As it has been tried to be demonstrated with this thesis, the material evaluation of a site's social organization might not always give us clues about political, economic or social differences between individuals. There are lots of

material and non-material factors one should consider before trying to explain the reasons behind homogeneity or differentiation and unfortunately such factors are not always clear to us.

5.4 Demircihöyük in a Regional Context

It is not completely irrelevant to categorize sites with similar plans under a single settlement scheme as it has been done by Korfmann, despite the fact that these sites are dated to different periods or were located in different regions. For, such categorizations help us to notice similarities in the architectural traditions of prehistoric Anatolia. However, it is important to note that sites with similar plans do not have to have similar social organizations. As I demonstaretd in Chapter 1, almost all the sites under the *Anatolisches Siedlungsschema* have different settlement organizations (that is where the buildings with different functions were located), or have different settlement and population sizes. For instance sites like Külloba or Troy with an upper and lower town obviously reflect a different political system than village-like sites such as Bademağacı or Demircihöyük, where all structures are located around a courtyard and where no spatial differentiation for an upper or lower town existed. Moreover, it would have required a different kind of social and political organization to organize small sites like Demircihöyük with about 130 people (Seeher 2000: 17) and sites like Karataş with ca. 740 people (Warner 1994: 177). Even the enclosure walls of these settlements seem to answer a different problem: The monumental bastions at Limantepe or the strong wall with a monumental gate and rampart at Troy might indicate a defensive purpose, whereas lighter enclosure walls such as the ones at Demircihöyük and Bademağacı were perhaps against flood or to enclose the animals within the site. Therefore in contrast

to Çevik (2007), I find the use of the *Anatolisches Siedlungsschema* to define a settlement's social system/organization questionable.

Çevik reduces the settlement layouts in the EBA Anatolia to two types; sites with the Anatolisches Siedlungsschema and sites with a fortified settlement (2007:135-136). However I believe that there are more variability in the settlement layouts throughout Anatolia, and this variability is a result of the different social and political organizations of these sites. The differences in the western Anatolian EBII sites raise the possibility that there were also settlement hierarchies in the region, i.e different sites with different scales, functions and different political organizations. Demircihöyük is a small village that seems to be self-sufficient; however it is also possible that it was part of larger cultural or political region. The existence of such regions is not improbable, because with the developments towards urbanization in certain sites and with the growing interest in interregional trade, sites might have been at least in contact, if not in continous relations. However to understand where exactly Demircihöyük fits into these settlement hierarchies or the political regions, one needs to have more information on site-based evaluations of the distinct political and social organizational features of the sites in the vicinity, rather than simply categorizing them according to their similarities which is counter productive.

5.5 Future Directions

What has been referred as the "chiefdom problem" at the beginning of this thesis is that the term "chiefdom" or any other fixed social organizational terms, and the implications they carry, might not be sufficient to describe complex social phenomena such as social organization that occur in different parts of the world. As

noted before Anatolia itself was not a unified cultural, political, social or economic entity in the EBA and even if western Anatolian EBA sites had shared features such as differentiation in architecture, similar settlement plans, similar mortuary practices or similar material cultures, this does not necessarily imply that they had similar social organizations. Since there are not many excavated sites in EBA western Anatolia, it is difficult to fully understand the social, political, cultural or economic dynamics between the sites in this region. It is certainly a necessity to have more survey projects and more excavated sites in the region that have Bronze Age levels, to understand the internal developments of sites, but also to understand the above-mentioned dynamics between different sites.

The validity and applicability of social organizational models that root from social evolutionary and functionalist theories which have been used to define EBA sites in Anatolia require a re-evaluation and re-consideration. Recently there is a trend towards using more political organizational terms such as village, town, city, citadel, lower town or as centralization, urbanization instead of labeling sites with the evolutionary social organization terms. More importantly as Hodder and Cessford note "Recent debate in archaeology and social sciences has tended to move still further from power/knowledge wielded by dominant groups toward a consideration of daily practices." (2004: 18).

Although here only the EBII levels or limited number of houses were analyzed, Demircihöyük with its MBA level settlement and cemetery carries the potential to be studied with a focus on the comparison of the EBA and MBA site. Such a study could provide insights to the continuation or changes in daily practices and to the question of social memory. It is possible that certain practices of the EBA

Demircihöyük were continued in the MBA settlement and cemetery. To understand which practices were remembered, forgotten or continued over time we need to have a chronological comparison of the EBA and MBA daily and mortuary practices at Demircihöyük which could be a future research direction.

5.6 Concluding Remarks

What has become clear in this thesis is that the outcomes of any study depend on how the questions are formulated. In this thesis the questions were not "either-or", but they were more about trying to understand "how" and "why". The bottom-up approach enabled me to build interpretations based on the material analysis, rather than trying to find material evidence that supported or disputed a specific model. Not having predetermined concerns and models, and instead considering different perspectives and more recent approaches to the study of social organization resulted in fresh insights complementing our understanding of the life (and death) in Demircihöyük. This small-scale study will hopefully not only raise awareness on the deficient models set for the EBA sites in any region in Anatolia, but will also encourage to re-evaluate the social dynamics of the sites with more recent approaches.

APPENDIX A: DATA

This section represents the results of the data analysis of Demircihöyük' EBII settlement and cemetery. Readers may refer to this section for the detailed description of the outcomes the data provides. These outcomes have been used to interpret the site and to build the conclusions about social dynamics presented in Chapter 2, Chapter 3, Chapter 4 and Chapter 5. Appendix A starts with the cemetery due to the fact that the database for the cemetery was created first. The charts that are in this section are created by using the Microsoft Access databases created for the settlement and cemetery.

1.1 DEMİRCİHÖYÜK-SARIKET CEMETERY

1.1.1 PRESERVATION

In the final publication catalog the preservation state is indicated for each burial, especially when they are damaged. The ones referred to as "damaged" indicate that they are damaged by plowing, or did not preserve due to natural, agricultural or any other human activity (i.e robbing in several instances). The ones referred as "disturbed" are the burials that are either cut by another burial, or were affected by later burials in some way. There are some burials that do not have a note on the preservation state in the catalog that are comparatively in better condition. These are going to be called "good" in the database. In total there are 219 (%44) damaged, 137 (%28) disturbed and 142 (%29) burials were in good preservation state. This means that almost half of the burials were damaged. This does not mean that in all instances the grave goods contained were also damaged or disturbed. Table 1 and Chart 1 show the total number and percentage of each burial type in these three different preservation states. What we can infer from Chart 1 is that the best

preserved burial type in percentages is the cist burials; obviously due to the less-easily damageable stone plate covers and stone framework. The simple inhumations appear to have survived better than the pithoi; this is because the pithoi were usually placed in an incline with the openings closer to the surface (Seeher 2000:7).[77] In most cases the opening part was damaged due to plowing, especially when there were stones used as a cover. And since the simple inhumations were much below the plow zone in most of the cases, they are less damaged or disturbed than the pithoi[78].

Chart 2 shows the distribution of the damaged, disturbed and good burials in the 58 different areas in the EBII cemetery. It is seen that trenches A/85, XX/86, YY/86, ZZ/85 and ZZ/86 have the highest number of burials that are in the "good" preservation state. As a result the evaluation of the materials from these trenches will be the most secure ones. These trenches with more burial numbers yielded more burial finds (Chart 3 & 4), and also the burials with the highest number of individuals (Chart 5).

YY-ZZ/86 and YY/86-87 have comparatively higher number of finds with less number of individuals. In YY-ZZ/86 there are only two burials; one simple inhumation that belongs to an adult male, one pithos burial of a female adult. These burials have a close number of finds and their age range is also the same (Table 2). This is a good example of a differentiation if we take the total number of finds as the main criteria for differentiation. The area, orientation, preservation state and number of individuals are the same, but we have differentiation in gender and burial type. These two examples may indicate also a differentiation in age groups since they are

[77] See Seeher 2000:7 Abb.4a-c
[78] What is referred here is not the preservation of the content of the burial (skeleton, burial finds etc.) but the burial itself.

both adults with higher number of burial finds than other adults. The number of burial finds may not be as important as the value of the finds, which is an issue that needs to be discussed further (below). There are other instances in the cemetery where small number of burials appear with very high or very low number of finds. For instance in YY/86-87 had again only two burials. One of them (G579) had the highest number of finds in the entire cemetery with 22 finds.[79] The other one in the same trench, on the other hand had only a single burial find and no bones. As it is seen before making a generalization one has to consider different variables, which is one of the aims of this research.

As Chart 5 clearly depicts the percentage of the number of individuals in the burials is more or less close to each other, in cases of damaged or disturbed burials. In other words, while evaluating the number of individuals, the preservation states will not affect the evaluation markedly. The best preserved areas that had the richest amount of data are the ones located in the middle of the cemetery. This area was heavily used. Because of the good character of the soil, burials continued to be dug in this same area, therefore a large number of burials were affected by later burials (Seeher 2000: 25).[80] This has presumably affected the number of individuals found in relation with a burial. Bone fragments that were not belonging to the main individual might have been part of a second burial or a scattered piece of an earlier burial that was disturbed by the later (better preserved burial).

[79] although it has been damaged
[80] under the category of "disturbed"

1.1.2 ORIENTATION

The burials are more or less parallel to the sloping contour lines towards the north-east (Seeher 2000: 24) and a larger part of the burials are oriented with their openings or heads facing towards the south-east (Chart 6) regardless of the difference in the burial type (Chart 7).

Many Western Anatolian cemeteries in the EBA have showed an eastwards orientation including Demircihöyük. Table 4 depicts the results of the analysis of the Western Anatolian EBA cemeteries and their orientation.

However in Demircihöyük there seems to be no correlation between the gender of the individuals[81] and the burial orientation (Chart 8).

1.1.3 BURIAL TYPES

In Demircihöyük there are basically three types of burials for the EBA: pithos, cist and simple inhumation burials. In the database I preferred to divide the burials into 10 categories (see Table 1 and Table 3), however it is possible to collapse the "jar", "double-pithos", "amphora" under the "pithos" category; and the "pit?", "sherds covering simple inhumation" under "simple inhumation" category. The burials that have stone markers for instance were referred with their main burial type with a note on special treatment instead of being referred as a separate type.

Western Anatolia shows uniformity in the extramural burial types among the EBA sites which are ceramic container burials with several exceptions (i.e Iasos: cist burials). The most common type of burial in Demiricihöyük-Sarıket is also pithos burial which overlaps with the general picture for Western Anatolia (Table 4 and

[81] not all are identified: labeled on the chart as "unknown" and "uncertain"

Table 5). If we add double pithoi and the jar and amphora burials to the regular pithos type, about 70% of the burial types in Demircihöyük cemetery consist of ceramic containers (Chart 9 and Table 3).

The distribution of the different burial types in the cemetery does not seem to show a regular pattern. The pithos and simple inhumation burials are distributed all over the cemetery, but they are especially clustered in the middle of the cemetery (Chart 10). There is no certain area that is reserved only for a specific type of burial, however the outer edges of the cemetery do not seem to reveal cist burials. Mostly what we have on the outer circles of the cemetery are pithos burials. It is also not possible to say that there are clusters of burials in certain parts of the cemetery except the center -the area between XX/85-86 and YY/85-86, where cist burials appear in a higher density (closer to each other); whereas in other areas they are scattered. This might be again due to the fact that this area is the center and also the most heavily used part of the cemetery. As it is seen in the plan the further from the center the less burial numbers appear.

1.1.3.1 Mudsink: The exceptionality of this burial (G100) is not only due to its type and isolation but also due to the fact that this is the only burial that had the single example of a fenestrated axe found in the cemetery. It is one of the richest burials in number of metal finds. There was a single adult (minimum 40) in this burial that was assigned to be Male?.[82] It seems like whenever there is an uncertainty about the gender, the burial finds were taken as a reference, so in this case an axe was immediately assigned to a male. However as it will be discussed in the "metal finds" section an axe was also found in a female adult burial (G494). This is the main

[82] but I preferred to put it in "uncertain adult" gender category to avoid the biased interpretation.

reason why there are “unknown” and “uncertain” categories for adults separately: the ones that are referred in the publication as “?” are referred as “unknown” and the ones that are either “M?” or “F?” are referred as “uncertain”, to be as less biased as possible.

1.1.3.2 Ceramic Burial Containers:

6.1.3.2.1 Jar: The use of jars for children and infant burials has its roots in the Neolithic for Eastern Anatolia (Uhri 2010: 102-109) when the first pottery was used. For Western Anatolia the use of jars for infant and children burials starts with the Chalcolithic (Uhri 2006:257) in the form of intramural burials, and this continued even in the EBA in extramural cemeteries. In Demircihöyük as it is seen from Chart 12, individuals that were younger than 10 years were mostly buried in ceramic containers. The number of jars used for infants is smaller than pithoi. Except for three cases, children younger than 10 years do not appear in simple inhumations. In these three cases the infants were always buried with an adult (Table 6). This table shows only the instances where an adult was buried with a child younger than 10 years. In two cases the adults are females, but DNA analysis is necessary to ascertain the relationship between the adult and the child. For double pithoi and for the cist burials we do not have an adult-infant combination. Children were no longer buried in jar burials past the age of 6

1.1.3.2.2 Amphora: The amphora might or might not be a burial type since there is only a single example (G255) which did not have any find or bones. Moreover the vase itself is oriented towards the north which makes it the only burial oriented towards North. G422 had an amphora as a burial find in a simple inhumation burial; therefore this so-called amphora burial might be a burial find of a nearby burial

rather than being a burial on its own. However it should be noted that pithos burials in the form of large amphora were also found (G52).

1.1.3.2.3 Pithos & Double Pithos: The most common burial type is the pithos consisting of 329 examples.[83] Most of the single pithos burials[84] yielded a stone plate cover or several stones that formed a heap to cover or close the opening. [85] All the SE oriented pithoi had such a cover (Seeher 2000: 19). Since the pithoi in the Demirichöyük cemetery were not large enough to contain adults, two pithoi with openings facing each other were used for the body (Seeher 2000: 18-19) in 120 cases.[86] Some of the double pithoi had also stones around the burial, probably used as a burial marker or supporter rather than a closing installation.

There are also instances where the openings of the pithos burials were closed with bowls (Seeher 2000: 19).[87] Seeher states that in the settlement the storage wares were also covered with bowls (Seeher 2000: 19). The pithoi themselves were also found in the settlement. Because of the use marks, broken handles and other parts, Seeher states that the pithoi were not especially produced for the burials, but the ones in the settlement were re-used (2000: 18).[88] There are only 24% of pithos containers that are in good preservation state; almost all the pithoi were somehow damaged. There is no complete pithos in the cemetery. It is difficult to find a pattern for the distribution of gender or age for the pithos burials; because most of the individuals'

[83] double pithos category included
[84] in total 237
[85] See Fig. 21
[86] Seeher gives 124 for the number of double pithoi because he considers some of the burials covered with sherds as pithos and when there are sherds belonging to different pithoi than they are called double pithos.
[87] G10,G33,G175,G218,G282,G309,G447,G451,G452,G459
[88] for the settlement pithoi see Efe 1988:65-79

gender is unknown and it seems to be that pithos burials are the burials that showed the highest diversity in age ranges (Chart 13 & 14).

There are only 7 pithos burials that contained multiple burials (Table 7). What is interesting is that unlike the simple inhumations where children were buried with adults, here the individuals seem to be in a more or less similar in age[89] and they have either a single or no burial find. As discussed above, these second burials might belong to an earlier or later burial (since some examples are in the "disturbed" category), and therefore there might not be a child-adult combination in all the multiple pithos burials.

Pithos burials form the largest number of burials without skeleton or bone remains (Chart 15). This is partly due to the fact that there are more pithos burials than other burial types, and partly due to their preservation state. Other burial types have a lower number of burials without bone remains (on the table labeled as "-"). If the pithos (and double pithos) burials were not affected by modern plowing activities, the number of survived skeletons would be presumably much higher. This is supported by the number of total finds, where regardless of the preservation state of the pithoi, the double pithos burials had a close number of finds to the simple inhumation burials (Chart 16).

1.1.3.3 Simple Inhumation: This burial type is the second most common in the Demircihöyük cemetery with 92 examples.[90] However for Western Anatolia statistically cist burials are the second most common burial types (see above).

[89] Except G87
[90] "sherds covering simple inhumation" category included

Uhri defines simple inhumation burials as "burials placed in a rectangular pit without any installation or intervention" (Uhri 2006: 251). However for Demircihöyük both the excavators and I prefer to label burials that are placed in pits (regardless of the shape of the pit) which might have the stone or other installations as simple inhumations.[91] At Demircihöyük 1/3 of the simple inhumations were surrounded by stones or had a rectangular framework consisting of stones (Seeher 2000: 21). Although it was thought that these stones functioned as markers -as they probably did for the pithos burials, it is highly possible that these were part of a roofing installation for the burial that was probably made of organic materials (Seeher 2000: 21).[92] G60 had burned plant material, which can be an evidence for the presence of such installations.

There are also simple inhumations that were covered with stone plates such as G117, G243, G335, G367 and G376. Interestingly G117, G367 (B) and G376 had all a cattle pair skeleton next to the burial[93] (Table 8).

The simple inhumations yielded more adults than infant, children or adolescents. In fact children and infants appear very rarely in simple inhumations and when they do they are mostly in burials with multiple individuals (see Chart 11 and Table 9). Simple inhumation burials form the largest portion of the burials that had multiple burials (11 out of 24), followed by pithos[94] burials and cist[95] burials. The number of burial finds in multiple burials is higher than the pithos burials with multiple burials, but there are also simple inhumations with no burial finds. There are

[91] The burials surrounded or framed by stone plates are labeled as cist burial.
[92] wooden beams, branches or plant matting
[93] Only single examples of double pithos and cist burials yielded such a treatment
[94] 4 double pithos, 3pithos burials
[95] 2 cist burials- the rest are unknown type of burials

only a small number of gender-identified individuals in the simple inhumations (Chart 11), and the identified ones consist of female and male adults.

For the burial finds there is an inverse ratio with the number of burial finds and the number of simple inhumation burials. Most of the simple inhumations did not reveal any burial finds. However interestingly several simple inhumation burials have the highest number of finds in the cemetery (G57: 15 finds, G83: 13 finds, G243: 12 finds).

1.1.3.4 Cist Burials: Cist burials are defined by Uhri as burials that are surrounded by stones or framed with mudbricks, sometimes covered with a stone plate (Uhri 2000: 263). However in this paper cist burials are considered burials that are framed with stone plates and occasionally closed with a flat stone. In Demircihöyük there are no burials that are framed by mudbricks, so this will not be part of the definition in this case. Burials that are placed in pits but had stone surrounding are referred as simple inhumations (see above).

Cist burials are the second most common burial type in the Western Anatolian EBA, but in Demircihöyük with 4% they are the third most common type in the cemetery. Since the most common burial type of the EBA Cycladic Islands is the cist burial comments on the ethnicity are involved in the discussion; sometimes there is reference for Cycladic populations living on the Aegean shores of Western Anatolia (Pecoralla 1984). The cist burial cemetery at Iasos has yielded Cycladic objects (Pecoralla 1984) but this is not the case for all Western Anatolian cemeteries that have cist burials.

Although there might be a relation between the burial form and the effort, there is not much parallelism between the cist burial form and the total number of finds found in them. The highest number of finds in a single cist burial is 8 which is comparatively a lower number compared to the simple inhumation burials (Chart 17). Although the number of finds is neither very low nor very high, the variability of finds is very high. This burial (G350) of an adult male yielded a golden diadem, a copper/bronze razor, a copper pin, a lead bottle fragment, as well as a decorated jug, a bowl, a neck jar and a spindle whorl. However not all the cist burials have such a variability or high numbers of finds. There are 6 cist burials (half of them damaged half in good conditions) without any burial gifts. When we look at the preservation Chart 1, 12 out of 21 cist burials were in good condition. This discrepancy might be due to the fact that it is expected that cist burials would reveal more burial finds, and here they did not.

The orientation shows variability; they are mostly oriented with the heads towards the south-east, however there are also instances where the head is oriented towards east or south (see Chart 7). The distribution again does not show a different picture than other burial types with the highest number of cist burials in the center of the cemetery (trench YY/86: Chart 10).

There are only two cist burials with multiple burials (G26 & G296). In G26 there is one female adult (minimum30) and another adult (minimum20) whose gender could not be identified. These two burials were on top of each other (Seeher 2000: 23). In G296 both individuals are male adults, both minimum40 years old.

Except one instance,[96] there is no individual younger than 20 years old buried in a cist burial. Individuals younger than 10 years were not buried in cist burials. There are only two cist burials that were assigned to infants (G11 and G17) because either the burial did not contain any bones or there was only one bone remain. In total, there are only 3 male 1 female adults with identified genders that were found in cist burials. One point to note is that there is only one cist burial with an identified female and this was a burial with two individuals[97]. Therefore it is possible that females were not buried in cist burials alone. On the other hand, there are only two cist burials with identified male adults, so since there are not many individuals with an identified gender, it is difficult to draw any conclusions on this issue.

One cist burial had an associated pair of cattle skeletons (G321), which belongs to a 40 year adult with an unknown gender. This burial had no metal finds, but three ceramic objects (see Table 8). The burial type is a relatively high-effort type and there is a cattle skeleton, by looking at the small number of cattle skeletons it is possible to say that these appeared for special occasions. However the burial does not include any "special" type of finds or any metal objects. In fact, for the cattle skeletons it is not possible to say if they were especially buried in relation with the burial they were found on top or nearby; it is also possible that these were sacrificed in relation with a ceremony that may have regarded other burials nearby or as a general sacrifice to the cemetery.

[96] where the age range is given as 15-30 (G357), so it might be again over 20 years.
[97] The second burial was of an adult (G26).

1.1.4 BURIAL FINDS

In the cemetery there are 610 grave goods that are associated with a burial that has been given a number, but there are also scattered finds which are not going to be analyzed. 268 of these were found in burials that were in a "good" preservation state, 176 in "damaged" and 166 in "disturbed" burials. The burials had a broad range of number of finds from single to 22 finds, however there are also 234 burials without any finds. The number of damaged burials with no burial finds was higher than the disturbed burials (Chart 18). Pithos/double pithos and simple inhumation burials yielded the highest number of finds (Chart 19).

Although adult burials seem to have a higher number of burial finds and no children burials had such high number of finds, there are several infant burials with a high number of burial finds. The age-gender and the material and number of burial finds are going to be discussed.

1.1.4.1 METAL FINDS

In the final publication of the Demirichöyük cemetery the metal finds are categorized according to their form.[98] Here metal objects are going to be categorized firstly under their material: copper (/bronze?), bronze, gold, lead and silver. These are going to be discussed separately by looking at the object types/forms. The reason for this is that the primary criteria to make an object "different" is usually regarded as the form or decoration, however the material from which the object is made of must have also been very important.

[98] See Seeher 2000: 50-63

1.1.4.1.1 Copper (/bronze?) and Bronze Finds: Excluding jar and amphora burials, all other types had at least one copper object. The highest number of copper finds appeared in the double pithoi (45 objects), in simple inhumations (39 objects) and in single pithoi (34 objects).

1.1.4.1.1.1 Pins: The most common copper find is the pin with 74 examples (Chart 20). The pins form also the third most common burial find in the cemetery after jugs and spindle whorls (Seeher 2000: 57). There is a typology for the copper pins built according to their head form or to whether they have a needle hole or not.[99] Here rather than the typology the main focus will be on the appearance of pins in relation with other finds, burial types, age and gender.

The number of pins in different burial types is close to each other in simple inhumations and pithos burials (Chart 21). The simple inhumations yielded more copper finds with a copper pin-copper object combination. There is no specific pattern for the appearance of the copper pins with specific copper objects or in specific trenches throughout the cemetery.

The copper pins appear together with a great variety of other copper objects (Chart 21). Some burials had two pins (in total 7 burials) and a single burial contained 3 pins. Only one of these burials with two pins (G89), contained two individuals. This was a simple inhumation burial comprising an adult minimum 60 years old and a 13-15 year old adolescent for which neither of whom the gender could be identified. This means that pins were not placed in a burial according to the number of individuals in the burial. In addition to the pins, the burial yielded a jug, a

[99] For the typology see Seeher 2000: 57-58

Neolithic jar fragment and a spindle whorl. A comparable example is again a simple inhumation that had two pins (G517) together with a neck jar, two spindle whorls and a dagger that belonged to a 10-15 year old adolescent. As it is seen the burial type and the age group, as well as the burial finds are similar; however, in this burial there is only one individual, which means there does not have to be an equal number of individuals and pins. There are three other simple inhumations that also contained two individuals and had pins (Table 10). Interestingly all these simple inhumation burials have an adult- child combination and all had at least one pin and one jug.

Since jar burials were reserved for infants and children one would suggest the absence of pins in jar burials might indicate that pins were not put in children burials. However there are 11 burials (two of them contained two individuals) that contained children between 0-8 years with pins (one contained three pins). This shows that pins were not only reserved for adults. In addition, the 4 jar burials in the EBA cemetery did not reveal many finds. In fact the only find was a single beak-spouted jug and metal finds were completely absent. The reason might not be directly related to age since other children burials yielded finds. It might be basically due to the preservation state because ¾ of the jar burials were "damaged". Moreover there is a case where a child burial is in good preservation state and yielded a special type of copper pin. In this pithos burial (G309) a copper pin was found which was covered with golden sheet on the head. This pin is one of the three metal finds[100] (silver ring, lead bottle) of a child 0-6 years old. The fact that the pin has a special application and the child is the only individual in this burial, and by looking at the evidence

[100] There is also a ceramic bowl find in this burial.

presented above it is possible to say that pins were not reserved for a certain age group.

As Seeher underlines there seems to be pins both in male and female burials, regardless of the age group and there is no correlation between the pins and other burial finds (Seeher 2000: 61). Chart 21 depicts that the copper pin-copper objects combinations do not repeat, except cases where two pins appear in the same burial.

It has been suggested that the pins were part of the burial garment or part of the daily life clothing since similar pins were also found in settlement (Seeher 2000:58, Uhri 2006:326-328). Uhri suggests that the fact that not all burials had pins might be considered as status objects (Uhri 2006:326).

Three of the copper pins were analyzed and published in the Demircihöyük cemetery's final publication. One of these was from a pithos (G317), the other from a double pithos (G582) and the last one was from a burial that had a stone plate on pithos fragments and other stones, therefore categorized as "?" burial type (G376) [101]. These pins were not made of pure copper, they were composed of copper, tin, arsenic, silver, zinc and other metals (Pernicka 2000: 233) like most of the other copper objects found in the cemetery. The pin from G317 had relatively higher portions of silver and tin, whereas the pin from G582 more arsenic.[102]

It is difficult to see a pattern or a relation between the composition or typology of the pin and the burial type. It is unfortunate that there is no analyzed pin from a simple inhumation burial which could have added to the discussion on the

[101] This burial had a pair of cattle skeletons as a special treatment
[102] See Table 1 and Table 2 in Pernicka 2000: 233-234

relationship between the burial type and the composition of the material-if there was any.

1.1.4.1.1.2 Weapons: There is a variety of copper "weapons": There are 7 copper daggers, 5 copper maceheads, 2 axes and 2 razors. In total 7 of these were analyzed.[103] There are also two other weapons; one spear head and one fenestrated axe made of bronze and these were also analyzed. These objects appear with a variety of other objects (Table 11).

One axe, one razor and one macehead had high arsenic in their composition. The axe was from a female adult simple inhumation, the razor from an adult pithos and the macehead was again of an adult in a simple inhumation burial. All these three burials contained only one individual, so if there was a relationship between the use of arsenic and the gender or age, it would be possible to see it with these samples. The fact that all these three were adult burials, do not imply that children were not buried with "weapons". As Chart 22 and 23 clearly show, all genders and almost all age groups yielded at least one copper or bronze "weapon". However the majority of the burials that had these finds contained adults.

The most common copper/bronze weapons in the cemetery are the daggers. They appeared in 4 times out of 7 instances in pithos burials, 2 times in simple inhumations and once in a cist burial. There is again no pattern for the age or gender and the appearance of daggers as Seeher also stated (2000:57). On the other hand maceheads and razors appeared only in burials where the individual were minimum 20 years old. In fact children and infant burials had only daggers from the weapons

[103] marked on table 10 with (*)

category. Moreover razors and maceheads never appeared in identified female burials. Razors appeared in a cist and a pithos burial, not in simple inhumations. On the other hand maceheads appeared only in pithos and simple inhumation burials and in two out of three simple inhumations that yielded a macehead, had a macehead that was "mushroom" shaped.

The only fenestrated axe in the cemetery was made of bronze and was in the rich mudsink burial (G100). This burial as mentioned before was of a minimum 40 years old Male?. In this burial there are 5 more burial finds and 4 of these were metal objects: a golden diadem, two copper pins and a lead bottle. Clearly this burial has a different nature than the other burials with the variety and rareness of its metal objects.

There are two other axes in the burials, one in a pithos burial (G171) which did not contain bone remains; the other in a simple inhumation burial (G494) of a 15-20 year old female. Interestingly the pithos did not have any other burial finds other than the axe, but the simple inhumation had also a copper pin, a jug and a spindle whorl. However the axe in the pithos burial was rich in tin and arsenic[104] which might increase the value of the object.

Only a single bronze spear-head appeared in the cemetery that was from a secure burial context was from again from a simple inhumation burial (G243) that contained a 20-40 old male who had also a silver pin, 2 golden diadems, a copper pin and macehead and 4 spindle whorls. It is a comparatively richer burial in the number and value of the metal finds with bronze, silver and gold objects.

[104] See Table 1 in Pernicka 2000: 233

These copper weapons appeared mostly in pithos and simple inhumation burials. Cist burials had comparatively smaller number of copper weapons, which might or might not be related with the fact that they were robbed (see above). They appear mostly on the north, central and eastern parts of the cemetery. On the western half no copper weapons were found except the single mushroom macehead in trench A/84-85.

Two copper weapons never appear in the same burial together. When there is more than one copper object in a single burial these are usually a combination of a copper weapon and a pin/ pins. However there are instances where a copper and stone, or copper and bronze weapon appears in the same burial (G132, G243, G316, G485).

Copper and bronze "weapons" mostly appeared in adult burials, however as stated before, infant, children and adolescents' graves also had "weapons" (Chart 22 and 23). It is true that the number of identified male adults with weapons is higher than the female burials, but if we consider that there is only one identified female burial with copper/bronze weapons and only two male burials, we are far from establishing rules

1.1.4.1.1.3 Sheets: Copper sheets and sheet fragments are relatively common in the burials. Some of these sheets are in complete form and are referred to "diadems", since most of these were found close to the head, and some were even on the forehead (Seeher 2000: 61-62). These objects were usually perforated, and Seeher suggests that these holes might indicate that these could have been attached to

a garment or piece of cloth, and even when they do not have holes the sheets are in a shape that that could still be attached to textiles (Seeher 2000: 62).

Double pithos burials had the largest number of these finds, followed by pithos burials. Only three simple inhumations and only a single cist burial contained copper sheets/fragments (Chart 24). Trenches XX/86 and ZZ/86 had the highest number of copper sheets/fragments which are both on the eastern part of the cemetery.

The copper sheets/fragments appear together with other copper and metal objects, except for one double pithos of a female adult (G212) that had two copper diadems, two copper sheets never appeared in the same burial even when the burial contained more than one individual. There is one double pithos burial where a copper and also a golden sheet appear together (G583), however here the copper sheet is more like an appliqué to another object since it has small studs, which makes the golden sheet the only sheet in the burial. This burial is also the only burial that had a copper sheet and other metal objects (golden sheet and a lead bottle fragment). All the other burials with a copper sheet had no other metal objects. Moreover, the copper sheets appear in burials that never have more than 7 burial finds. Interestingly they never appear with metal weapons. There are only two burials that had "weapons" but these were a flint blade and a stone macehead.

Although burials of all age groups have yielded a copper sheets/fragments, adult burials have the highest number of copper sheets/fragments. However they also did not appeared in any of the identified male burials (Chart 25), while in identified female burials they did. There is one female adult pithos burial that yielded the only

example of a possibly silver diadem, but it could not be ascertained as the possibility that it too is copper remains (G496).

There are 21 golden sheets which is a close number to the 22 copper (plus one bronze) sheets. There are also 2 lead strips found in G231 which is the only burial in the cemetery with 5 individuals. One bronze sheet was surfaced in a simple inhumation burial of a male adult, which also contained a stone macehead (G21). By looking at the number of the copper or other metal sheets and diadems, it is possible to say that if the sheets were part of a burial garment or clothing, then only a very limited number of people had such a garment.

1.1.4.1.1.4 "Diadems": Uhri categorizes the diadems under "prestige or status objects" because they were found in the "royal tombs" of Alacahöyük, Arslantepe and Kültepe, however he also underlines that for Western Anatolia there is no correlation between the burial types and these finds, therefore this assumption is not for valid for Western Anatolia (Uhri 2006: 315). For Demircihöyük, although there is no all-applying rule for the relationship between burial type and the diadems, as stated before pithos burials, especially double pithoi with diadems or copper sheets outnumber the other burial types with such objects.

1.1.4.1.1.5 Personal Adornments: In addition to diadems, there are other copper personal adornments: rings, bracelets, and a bead. Trench XX/86 has again yielded the highest number of these finds which is located on the southern-central part of the cemetery. In total there are 11 burials that had these finds.8 out of 15 of the objects were found in double pithoi, 4 in pithoi and 3 in simple burials (Chart 26), there were no cist burials with these finds and there are also no multiple burials

that contained copper personal adornments. The two simple inhumation burials yielded only rings. Only one of these rings in the simple inhumation burial (G440) was analyzed and it appeared that it contained high tin and arsenic besides copper.

None of the burials with rings, bracelets or beads yielded a weapon neither made of copper or any other metal or material. Although there are none of these burials had more than 8 burial finds in total, there is a variety of the burial finds in these burials. Interestingly there is a pattern in the copper find combinations in these burials: 4 of these 11 burials had a copper jewellery & copper pin, or copper jewellery & copper sheet combination. Moreover all the 5 burials with copper jewellery and pottery had only jugs as the pottery shape.

Most of the personal adornments appeared in adult burials, however only one of these burials had an identified gender, which was a female. The copper personal adornments never appeared in identified male burials. Infant, child and adolescent burials also had copper personal adornments (Chart 27). One of these infant burials had the highest number of finds with 8 finds compared to other burials with copper personal adornments. It was a 3-4 year old infant in a double pithos burial (G295). Otherwise there is not much difference between the number of finds between the adult and children burials for this category of finds. There is one burial with small bone remains but no skeleton (G79) which yielded the only copper bead in the EBA cemetery. This bead was a part of the necklace that had 15 beads made of various materials including rock crystal, carnelian, silver and gold. In this burial there was also one of the three bronze bracelets in the named EBA burials.

Bronze bracelets appeared only in two burials and both were pithos burials (G37 and G79). More interestingly both burials had not only bronze and copper finds, but also gold sheets. The fact that G37 was an infant burial shows that infants were also buried with metal adornments. Uhri states that the personal adornments might serve as multifunctional symbolism including prestige and gender (Uhri 2006: 278). It is true that in Demircihöyük cemetery the copper and bronze personal adornments never appeared in identified male burials. However one should note that there are quite a number of burials for whom gender identifications could not be made.

As it is seen for the copper personal adornments it is possible to see certain patterns in their combination with other objects, burial type and gender. However one has to consider that there is a very small number of burials that contained these finds. One of the reasons why actual numbers are preferred in the discussion instead of the percentages, is to underline the small size of samples that the patterns and interpretations are based on. The small number of the samples also shows that the combinations were not a shared preference of all the habitants but a preference of a limited number of people, perhaps of certain households.

1.1.4.1.2 Gold Finds: In Demircihöyük the gold finds consist of beads, sheets/diadems, rings and earplugs. Trench YY/86 had the highest number of gold objects and also the highest number of gold sheets (Chart 28). In this trench there are no other metal finds than copper pin and golden objects; except one burial with 2 bronze bracelets (G37).

Double pithoi are the burial type with highest number of gold objects, as it was for copper objects. Double pithoi were followed by simple inhumation and pithos burials. Only 2 cist burials and the single mudsink yielded gold objects (Chart 29). Golden objects do not appear in multiple burials frequently. There is only one of the simple inhumation with gold objects that contained two individuals (G95).

Gold objects appear mostly in burials with 3 burial finds. However there are also burials with golden objects that had comparatively very high numbers of burial finds. Gold finds appeared mostly with copper pins (Chart 30), also with copper weapons. Surprisingly although there are 21 burials with copper diadems/sheets, only one of those yielded a gold object.

Two different gold objects never appeared together except one burial that had 9 gold beads and a gold sheet. The other burials that had 2 or 3 golden objects had the same type of objects. For instance there is one burial with 3 golden earplugs (G295), 2 golden diadems (G243) or 2 gold beads (G69). 4 out of 7 burials that had a bronze object had at least one gold object. Both of the burials with bronze weapons (G100 and G243) yielded gold diadems, and these two burials belonged to adults. Considering that gold and bronze were not easily available materials and the fact that the special bronze weapons and gold diadems are not frequently found, these two burials might have had a different status if not a special one. One of these burials (G100) is the mudsink burial with in total 6 burial finds, which has already a distinct type of burial and the other burial is a simple inhumation (G243) with 12 finds in total, which also one of the burials with the highest number and variety of metal objects.

Gold objects appear mostly in adult burials, and identified male burials had more gold objects than the identified female burials (Chart 31). There are also two children and two infant burials with gold objects, but none of the infants were younger than 3 years old (Chart 32). There is only one simple inhumation burial with two individuals that yielded a gold sheet fragment together with a copper pin that contained a minimum 40 year old adult and a 5-8 year old child (G95).

1.1.4.1.2.1 Sheets: The golden sheets and sheet fragments are categorized separately, however it is possible that the golden sheet fragments might have had belonged to a golden diadem. Actually the golden sheets and the diadems do not show a huge difference except the diadems are usually complete and had a more regular shape.

Most of these sheets were found in trench YY/86 and there are no more than two diadems in the same trench (Chart 28). By looking only at this information it is possible to state that diadems were not reserved for a specific part of the cemetery. Again it is possible that each household had its own important/ older/ special/ different person who was buried with these golden objects.

Simple inhumation burials yielded the highest number of golden sheets and diadems, followed by pithos burials. Cist burials did not reveal any golden sheets, except one cist burial with a gold diadem. The mudsink burial yielded only one gold diadem fragment .Golden diadems never appeared in burials where copper diadems were found. This might show that the diadem was probably an object that was produced in different materials but still had the same meaning and this therefore

there was no need to place two diadems made of different materials in the same burial.

The gold diadems and sheets were mostly found in adult burials. However diadems appeared only in burials of individuals minimum 20 years old, whereas the sheets appeared also in infant and child burials (Chart 31). Gold diadems never appeared in identified female burials, but there are 2 identified males with gold diadems (G243 and G350). G243 contained 2 gold diadems which one of the burials that was already assigned to be "different" than other burials (see above). Since there are more burials with unidentified or unknown genders than burials with identified genders, it is possible females also had gold diadems. However the existing data might indicate that males were given gold diadems and females were not.

1.1.4.1.2.2 Personal Adornments: The rest of the golden objects consist of beads, rings and earplugs. Only pithos/double pithos and a single cist burial yielded these gold adornments (Chart 33). Although simple inhumations had high numbers of gold sheets and diadems it is interesting there are no simple inhumations with these gold personal adornments.

There are 13 golden beads in total, however there are only 4 burials that yielded golden beads. The gold beads were only found in pithos and double pithos burials. There is only one identified male burial with two golden beads (G69), whereas the single identified female (G305) and the single child burial (G511) had one golden bead. There is a burial with 9 gold beads (G79), which did not reveal any bone remains. This burial had 6 other beads made of metals and stones (see above) therefore the 9 beads can be counted as part of a single find, perhaps of a necklace or

bracelet. Since beads appeared with all genders there seems to be no correlation between their appearance and gender or age group. The most important inference that can be made from the existence of golden beads, (but also beads made from other materials: metal, stone, and bone) is that the burials that had beads never had metal or stone weapons, except one pithos burial of a female adult (G305) which had a copper dagger.

There are no golden bracelets in the cemetery but there are two gold rings and a gold spiral, which all might serve the same function. These do not appear to be bracelets, but more like hair spirals. None of these appeared in children or infant burials. There is only one burial with a gold ring that has an identified male adult. One of the two burials was also of an adult but the other did not reveal any bone remains, which makes it possible that the burial belonged to an infant or child. Therefore this find group is also left with no further comment on differentiation in age or gender. But it should be noted that identified female burials did not contain gold rings. The three burials with golden rings consisted of two double pithoi and a cist burial, so simple inhumations did not reveal any golden rings. All these three burials had a single copper pin and contained in total 3 burial finds.

There is only one burial with 2 gold earplugs and one gold sheet that was reconstructed to cover an earplug that was probably made of a material that did not survive (Seeher 2000: 62-63). It is interesting that the burial contains a single burial but there are three earplugs. Seeher suggests that the earplugs had probably only a symbolic function which might explains the presence of the third earplug. The only burial that has yielded these earplugs was a double pithos burial of a 3-4 years old infant, which also contained 2 copper/bronze bracelets, a copper pin, an idol and a

lead bottle (G295). In the settlement there are no gold earplugs; however there were two greenstone earplugs (Baykal-Seeher & Obladen-Kauder 1996: 180) and clay earplugs (Baykal-Seeher & Obladen 1996: 256).[105]

1.1.4.1.3 Lead Finds: In total there are 31 lead objects found in burials. The lead objects in the Demircihöyük cemetery consist of lead bottles and there is only a single simple inhumation burial (G231) that had two decorated lead strips. None of the trenches in the cemetery had more than 4 lead objects (Chart 34) and none of the burials yielded more than 2 lead objects. Pithos burials yielded only complete lead bottles. The pithos and double pithos burials yielded the highest number of lead bottles/fragments (Chart 35). Simple inhumation burials yielded the same number of lead objects, but not all the lead objects in the simple inhumations were complete. The third burial type with high numbers of lead objects is the double pithos burials. The only burial that had two lead bottles is a double pithos (G326) of an adult. This burial has also yielded 2 copper pins and a single gold sheet fragment. There are only two cist burials with a lead bottle and a lead bottle fragment. The single mudsink has also yielded a single lead bottle. No jar, amphora or pit burials contained lead objects.

1.1.4.1.3.1 Bottles: The highest number of finds in burials with lead objects is 8, however most of the lead bottles appeared as the single find in the burial (Chart 36). There are in total 9 burials with only one find which is a lead bottle, and 7 of these burials contained an adult, one contained a 8-10 year old child and the one did not reveal any bones.

[105] in room 108

Lead objects never appeared with copper diadems. There is only one burial that yielded a lead bottle and a copper sheet. Lead bottles were found with silver rings in two burials.

The burials that yielded lead objects never contained multiple burials except this simple inhumation burial with 5 individuals (G231). This is the only burial in the EBA cemetery of Demircihöyük with more than 2 individuals. The fact that this burial is also the only burial that yielded two lead strips with impressed decoration might highlight its difference than the other burials. In addition to the two lead strips there were two jugs (one beak-spouted), a stone macehead, an unused basalt grinding stone-which is the only example in the EBA cemetery, and 2 spindle whorls. The high number and variety of the burial finds can be connected to the high number of individuals. All the individuals in this burial were adults at least 20 years old. There is only one identified female and one male. Some of the individuals were laying on top of each other (Seeher 2000: 93), so probably they were not put in the burial at the same time. The question whether these individuals were related was not answered.

In total there are 29 lead bottles/fragments in named burials and 23 of these were complete. 20 of these 29 lead bottle and bottle fragments were found in adult burials mostly minimum 20 years old (Chart 37). However all age and gender groups were found in burials with lead objects, except females (Chart 38). No females were found in burials with lead bottles; there is only the single female in the burial with 5 individuals and 2 lead strips and therefore these lead finds might not be associated with the female. Interestingly none of the identified male burials yielded a complete lead bottle. All the infants, the child and the adolescent with lead bottles were found either in pithos or double pithos burials.

Only two lead bottle fragments were analyzed (G69 and G92); they were made of almost pure lead except the inclusion of iron which probably was due to the soil corrosion (Seeher 2000: 234-235).

The function of the lead bottles is not exactly known. Seeher suggests that it might be symbolic or probably the use of lead was due to its silvery color, which would substitute for the rarer material; silver. The specific shape of the lead bottles shows that the lead bottles were not an imitation of a ceramic shape (Seeher 2000: 51).

The fact that the lead bottles both appear in burials that were rich metal-wise but also graves with single finds, does not explain the relationship with the lead bottles and other materials. There is also not a concrete pattern between the lead objects and gender/age.

1.1.4.1.4 Silver Finds: In fact silver was one of the rarest metals in the cemetery. In total there are only 7 silver objects and a silver fragment. 3 of these were silver rings, 2 were silver pin, there is a single silver sheet and a single bead.

Only the pithos burials and two simple inhumation burials yielded silver finds (Chart 39). The double pithos burials yielded a silver ring, pin and a silver fragment; the pithos burials had two rings and a bead, and the simple inhumation burials contained a sheet and a pin. Silver finds never appeared as a single find in these burials, in fact there is no burial with silver finds that had less than 3 burial finds. In other words silver appears in burials with high number of burial finds. Considering the rarity of silver one might speculate that the burials with silver were comparably

"richer" than the other burials. Moreover the burials with silver finds had always another metal objects.[106]

1.1.4.1.4.1. Rings: The three silver rings appeared only in two pithos (G309 and G372) and one double pithos burial (G323). The individuals found in these three burials belonged to three different age groups: one 0-6 year old infant, one 12-15 year old adolescent and one minimum20 year old adult. The infant and adolescent burials both had a lead bottle and the adolescent burial had also a copper ring and the silver ring. The adult burial had no other metal finds than the silver ring, but it had a stone bead as a personal adornment. None of the identified female burials yielded a silver ring. Silver rings never appeared together with gold objects.

1.1.4.1.4.2 Pins: One of the two silver pins was found in a double pithos burial of a 0-6 year old infant (G213) and the other was in a simple inhumation burial of a 20-40 year old adult (G243). These two burials were the only burials with 12 burial finds in total. The burial of the adult is one of the richest burials in the EBA cemetery in terms of the variety of the metal finds, it contained all kinds of metal objects except lead. In terms of other finds both burials had jugs and several spindle whorls. These two burials were located in close trenches which were both in the center of the cemetery. The similarities in the burial features (except the burial type) might raise the question whether these two burials were somehow related. At this point another DNA analysis could be useful.

1.1.4.1.4.3 Bead: The only silver bead was found in the pithos burial which did not contain any bone fragments (G79), but had 9 gold beads, 1 copper, 2

[106] except the pithos burial G372 of an adult which had a jug and a stone bead besides the silver ring

rockcrystal and 2 carnelian beads that were probably part of the same object. This shows that actually this burial had also a special find, if not a special status. It would be useful to know the age and gender of the individual. There is the possibility that the burial was of an infant and therefore the bones were not preserved.

1.1.4.1.4.4 Sheet: The silver sheet appeared in a simple inhumation of a minimum 20 year old adult that also had 2 copper pins, a jug, an undecorated and a decorated spindle whorl (G230). Except these two copper pins there were no other metal objects in this burial. There is another silver sheet/diadem that contained copper in addition to silver, which was found in the mudsink burial (G100). Clearly this burial is different than the other burials, since even the diadem was made of a unique composition. The silver fragment on the other hand was also a flat sheet like fragment; however, it had no holes on it, which might make it a part of a silver object. This fragment was found in a double pithos of a minimum 20 year old male adult (G70), which also contained a single jug and a single copper pin. This fragment was analyzed and it appeared that it contained gold in its composition (Pernicka 2000: 234-235), which was not a unique composition for the gold and silver objects found in the EBA cemetery of Demirichöyük.[107]

In general there is no clear correlation between the silver finds and the age/gender of the deceased. No silver find was found in an identified female adult, but there are 2 male adult burials with silver objects. Child burials did not contain silver but one adolescent burial and one infant burial had a silver ring, and another infant burial had a silver pin.

[107] See above: gold finds

1.1.4.2 SMALL FINDS

The small finds are labeled in the database as “other”, since the database is based on the materials of the burial finds. Different from the pottery, here the small finds made of clay such as figurines or spindle whorls will be discussed. In addition, the stone and the only bone object from the cemetery are also included in this section.

1.1.4.2.1 Clay objects: The distribution of clay finds in different burial types is parallel to the distribution of the spindle whorls discussed below, except the fact that the number of pithos burials with clay objects is a little higher than the double pithos burials (Chart 40). There are only three multiple burials that contained clay small finds, in all three cases these were spindle whorls (Chart 41).

Two of the multiple burials with clay objects contained 2 individuals: One of them had a minimum 60 year old adult and a 13-15 year old adolescent (G89), whereas the other one had two minimum 20 year old adults (G144). The third multiple burial consisted of 5 individuals: two minimum 20 year old adults, one 20-40 year old adult, one female and one male adult minimum 20 year old (G231). There is no adult and child/infant combination among these burials. All these three burials were simple inhumations. Interestingly in G144 and in G231 all the finds were somehow grouped in doubles. For instance in G144 there are 2 decorated jugs, 4 bowls and 2 spindle whorls; and in G231 there are 2 decorated lead strips, 2 jugs, 2 spindle whorls and 2 stone objects (one macehead, one grinding stone). G89 has also 2 copper pins and 2 ceramics (jug and jar fragment), however there is only one

spindle whorl. It is not clear what this double grouping might mean anything, or whether it was actually intentional.

Adult burials have the highest number of clay small finds. There are 9 female adult burials and 5 male adult burials. Clay objects appeared in all genders and age groups (Chart 42).

1.1.4.2.1.1 Spindle Whorls: To start with the most common small find type, there are 96 spindle whorls from named burials, and 42 of these were decorated. Simple inhumation burials yielded 39, double pithoi 33, pithos burials 17, cist burial 5 and unknown burials yielded 2 spindle whorls (Chart 43). Decorated spindle whorls appeared mostly in pithos burials, whereas undecorated spindle whorls appeared mostly in simple inhumation burials.

There is no area with a cluster of spindle whorls; however there is a double pithos burial located in YY/86-87, and this burial contained in total 21 spindle whorls (G579). The second highest number of spindle whorls is 9; there are two simple inhumation burials with 9 spindle whorls. One of these contained a 40-60 year old male (G83) and the other had a minimum 20 years old adult (G57). Both of these burials had gold sheet fragments. Although there are burials with high number of finds that contained high numbers of clay objects, clay objects usually appeared in the burials with 3 burial finds (Chart 44).

Adult burials have the highest number of spindle whorls and the highest number of burials with spindle whorls. There are 9 identified female burials with 10 spindle whorls in total, on the other hand there are 5 identified male burials with 17 spindle whorls in total.

Although there is no material that does not occur with spindle whorls, jugs and copper pins are the most common burial finds that appear together with spindle whorls. The rarest materials that are found with the spindle whorls -and also with other clay objects- are bronze and gold.

1.1.4.2.1.2 Rattles: There are two rattles[108] and both of these were found in pithos burials, which did not contain any other burials finds. One of the burials did not reveal any bone remains (G548), and the other burial had several bone fragments of a presumed child but the gender and age remains unknown (G71). Seeher assigns these two burials as children burials, therefore assumes that the function of the rattles might be either toys or symbolic protectors- the same function he thinks the figurines have (Seeher 2000: 65). The fact that the one found in G71 had an anthropomorphic head might have lead Seeher to such an interpretation. The head of the second rattle was missing therefore it is not possible to comment on this issue further. The rattles were also found in the settlement, some of which had also head-like top parts.[109] In the settlement the courtyard but also several front and back rooms of houses yielded rattles (Baykal-Seeher & Obladen-Kauder 1996:255).[110]

1.1.4.2.1.3 Figurines: Clay figurines were only found in two burials. One of these was a pithos burial which did not contain identifiable bones (G107). There were in total three burial finds and 2 of these were head fragments of stone figurines,[111] and one lower body of a clay female figurine. The other one was in a pithos burial of a 3-4 year old infant (G295) with a single (almost complete) clay

[108] in the database instead of rattle, "sistrum?" was used, due to a mistranslation.
[109] See Baykal-Seeher & Obladen-Kauder 1996: Plate 107,7.8 and 108: 4-6
[110], see Ibid Abb.184
[111] Since the head fragments had eyes these were called figurines rather than idols which do not have identifiable facial features: in the Charts these two stone figurines were counted among the clay finds by mistake

figurine and this burial had a variety of metal objects: 3 golden ear plugs, a lead bottle fragment, 2 bronze/copper bracelets and a copper pin. There were no pottery or stone finds in this burial, but the number and variety of the metal objects in this burial mark its difference than most of the other infant burials.[112]

The figurines and the stone idols show difference in their style; the 4 marble idols fragments that were together in a double pithos burial of a 0-6 year old infant (G213) were more stylized or abstract than the more naturalistic clay figurines. This only burial that had these stone idol fragments was also rich in the number and variety of finds: in addition to the 4 marble idol fragments there was a copper/bronze dagger, 3 copper pins, a silver pin, a decorated jug, and 2 decorated spindle whorls. The abstract nature of the stone idols is also seen in the single metal idol found in a simple inhumation burial of a minimum 20 year old male (G481). This metal idol is the only find in this burial. Except the one burial with the stone idol fragments (G213), none of the burials with the rattles, clay figurines or the stone and metal idols had any other stone or clay objects, not even pottery. It is worth noting that the two burials with clay and stone figurines were of infants buried in a double-pithos, which were both rich in terms of number and variety of other objects.

1.1.4.2.2 Stone Objects: The stone objects consist of stone weapons, idols, beads and stone tools. The highest number of burials with stone objects is the simple inhumations, followed by pithos and double burials. Cist and jar burials did not reveal any stone objects (Chart 45). There is no specific area with considerably high number of stone objects. There are only 23 burials with stone objects, which in total contained 38 objects of stone. Considering the fact that stone was presumably more

[112] There are several other rich-in-metal infant burials: G37, G213 and G309.

available than metals, it is surprising that there are more than a hundred burials with metals but only over 30 burials with stone objects.

Most of the stone objects appeared in burials with 2 or 3 burial finds. There is only one burial with 12 burial objects and this is the highest number of finds among burials with stone finds (Chart 46). Half of the burials with stone objects contained at least one piece of pottery; however more than pottery, stone objects appear with metals. Although no burial yielded a combination of stone and gold objects, all other metals appear with a stone object. Copper pins are again the most common metal object that appears with stone objects (Chart 47).

There are only three multiple burials with stone objects (Table 12). All of these were simple inhumation burials. Two of these burials had two individuals; one with a child and adult combination (G192), one with two adults (G316). Neither of these burials had a pottery find, but one had a copper/bronze mushroom macehead. The only burial in the cemetery with 5 individuals (G316) has the high number of stone finds, which may be due to the high number of individuals. This burial contained the only grinding stone in the EBA burials, which was interestingly an unused one. There are both female and male individuals in this burial, however the age groups appear to be homogenous; there are no child, infant or adolescents. This is not very unusual for the burials with stone objects, since in total there is only one infant and one child burial with stone objects and no adolescent burials. On the other hand most of the stone objects appear in adult burials; however only three of these have identified genders (1 female, 2 male).

1.1.4.2.2.1 Weapons: Although the most common stone finds are the beads, these appear only in three burials, therefore stone weapons are actually the most

common stone objects (found in 18 burials) in the EBA cemetery. The weapons consist of axes, a maceheads, a hammer and a flint blade. Stone weapons appear mostly in simple inhumations, followed by double and pithos burials.

Two stone weapons never appeared in the same burial, however there are burials where copper and stone weapons occur together. The most common copper objects that appear with stone weapons are the copper pins and mushroom maceheads (Chart 47). The only material that does not appear with the stone weapons is silver. Gold also does not appear commonly in burials with stone weapons. There is only one double pithos burial that did not reveal any bone fragments (G583), which contained the only flint blade in the EBA cemetery and it was found together with a golden diadem. There are no other burials with a gold object and a stone weapon.

Except the two multiple burials, all the stone weapons appeared in unknown/uncertain adult or male adult burials. It is possible that the stone weapons were made for male adults, since the only female burial that has a stone weapon is the burial with 5 individuals (G231), and the only child burial with a stone weapon contained also an adult (G192). Uhri also assigns the weapons to male burials (Seeher 2000: 306), however since there are few individuals with identified genders, it is better not to draw conclusions on this assumption.

There are two identified male burials with stone maceheads (G21 and G231), whereas all the other stone weapons were found in adult burials with unidentified genders. There are only two stone weapons that appear in burials with no bone remains and these two burials contained the unique stone finds in the cemetery: a stone hammer (G169) and a flint blade (G583). G583 is especially rich in the number

and variety of the metal finds: there was a copper sheet fragment, copper studs, a golden diadem fragment, 3 copper pins and a lead bottle fragment. A cattle pair was also associated with this double pithos burial, which interestingly did not reveal any pottery finds. Other burials with stone weapons yielded less than 3 metal objects, therefore this burial stands as a "different burial".

1.1.4.2.2.2 Grinding Stone: There is another burial with high number of finds, this time with a variety of other finds (stone and clay small finds). This is a simple inhumation (G231) which was the only burial with 5 individuals. An unused basalt grinding stone was found close to the feet of the female adult (Seeher 2000: 65). This is the only grinding stone found in the EBA burials, which was in the same burial with the unique decorated lead strips. Due to the unique finds and unique number of individuals this burial might also be categorized under "different" burials.

1.1.4.2.2.3 Whetstone: There is a simple inhumation burial of an adult that is at least 20 years of age (G117) with a unique stone object which is the "whetstone"[113] made of sandstone. This burial had no metal finds but a variety of pottery types: 2 jugs, a s-profile bowl handle, a bowl fragment. More surprisingly this burial had also a cattle pair associated with it.

1.1.4.2.2.4 "Idols": The last burial with unique stone object(s) is the double pithos burial of a 0-6 year old infant (G213). This is the only burial that contained the 4 marble idol fragments. One of these was only the head of an idol, another one had a broken head and the body, but the other two had only the body parts. There were a copper/bronze dagger, 3 copper pins, 1silver pin, 2 decorated spindle whorls and a decorated jug in addition to the idols, which makes also this infant burial one of the

[113] The whetstone has a hole on its short edge, and therefore it is possible that it was kind of a pendant. The other short edge was broken.

burials with the highest number and variety of objects and materials. There was no cattle skeleton associated with this burial, however one of the pithoi was surrounded by stones.

1.1.4.2.2.5 Stone Beads: Beads are the only personal adornment type in the stone category. All the three burials with stone beads were pithos burials; two of them were adult burials and one did not reveal any bone remains. The two adult burials yielded single jugs whereas the one without bones did have any pottery finds. The burial without bones (G79) has the highest number of beads in all kinds of materials: 2 rock-crystal, 2 carnelian, 1 copper, 1 silver and 9 gold beads, besides a bronze bracelet and a gold sheet. All these beads were counted as a single find, as the 6 marble, 1 greenstone, 2 limestone beads and 1 burned bone[114] bead in the adult burial (G463) were counted as a single find. The last burial has only one stone bead but it also has a silver ring as a personal adornment (G372). There is not much information on the gender of the burials with stone beads; however we know that they were mostly found in adult burials. This does not imply that infant burials did not reveal personal adornments consisting of beads, since there is one burial which did not had any bone remains, which might be due to the fact it was an infant burial and therefore did not preserve. Moreover there is a child burial (G511) with a golden bead (see above).

1.1.4.3 POTTERY

Although pottery is the most common burial find in the cemetery, more than half of the burials did not reveal any vessels. There are 206 burials which had pottery. Most of these consist of pithos and double pithos burials (Chart 48). Except

[114] which is the only bone bead but also the only bone find from the EBA cemetery.

the amphora, all the burial types yielded at least one pottery find. In almost half of the burials the pottery finds were the only find in that burial (Chart 49). Obviously the reason why only about a half of the population was receiving pottery is a matter of the preferences of the households or a personal choice, if not a symbolic matter or a matter of preservation.

Pottery vessels were found mostly in single burials but there are also double burials with pottery and the only burial with 5 individuals (G231) also contained vessels as burial finds (Chart 50). Adult burials had the highest number of pottery, however infant, child and adolescent burials had also pottery. There are more identified female burials than male burials with pottery vessels, but for most of the adult burials the gender remains unknown or uncertain (Chart 51).

1.1.4.3.1 Jugs: The largest number of vessels in the cemetery is in the form of jugs. Seeher states that the reason for having such an amount of liquid serving vessels might be related with the fact that that a liquid was offered for the deceased (Seeher 2000: 37). The fact that not all burials had such a vessel is seen due to the possibility that such containers may have been made of organic materials (Seeher 2000: 37). The jugs had also traces of use prior to their disposal in the cemetery just like all the other shapes (Seeher 2000: 37).

The jugs in the cemetery consist mostly of Red Wares which is the ware that was dated to the earlier phases of the settlement, however occasionally there are also examples for Black Ware[115], Grey Ware and Brown Ware (Seeher 2000: 37, Efe 1988: 58). There are no specific shapes that appear only in a specific ware, or a specific ware that appears only in a certain gender/age group. However there are

[115] which had usually decoration on them

specific types of jugs that were made only in specific wares. For instance the types A1, A2, A3, A4, B1 and B6 appear only as red wares; and C2 appears only as black ware.[116]

The jugs are subcategorized in two main groups in the database: jugs and beak spouted jugs. The C group represents the beak spouted jugs and there is no burial that has more than one C group vessel. This might indicate the rareness of this specific type; unfortunately there is no pattern neither in the distribution of this group in specific burial types or specific gender/age groups. Furthermore there is also no rule for the fine wares to be beak spouted or not.

Again except the amphora all the burials had jugs, but especially pithos and double pithos burials had the highest number of jugs. Simple inhumations contained also a higher number of jugs compared to the cist burials (Chart 52). Most of the jugs were found in trench YY/86, which is also the trench with highest number of finds (Chart 53 & Chart 4).

Out of 171 burials with jugs 153 burials had only a single jug. The rest consist of several jugs or a combination of jug and jug fragments. There are 123 single burials with jugs and only 13 multiple burials had a jug, one of which is the burial with 5 individuals (Chart 54). [117]

Adult burials have the highest number of jugs, but again most of adult burials belong to unidentified gender/age groups. The number of identified female and male burials is close to each other, with females being a little more (Chart 55). All age groups yielded jugs. Most of these burials with jugs contained only a single individual, whereas there are also double burials with jugs (Chart 54). There is a

[116] For the typology see Seeher 2000
[117] G231

single pithos burial of an infant with a side spouted jug (G370), which is the single example in the cemetery, although comparanda were found in the settlement Phase L (Seeher 2000: 44). It has been suggested that these types of jugs were used as feeding bottles for infants (Uhri 2006: 295-296). However since no other infant or non-infant burial had a comparable example it is not possible to assume that these have the same function or meaning in the Demircihöyük cemetery.

There is again no specific type of objects or material that strictly appears together with the jugs. Copper pins are the most common artifacts that appear with the jugs. The burials with jugs did not have any lead bottles; except G350 which had only a body fragment of a lead bottle. This is one of the richest male adult cist burials in terms of the variability and number of finds. The reason why lead bottles and jugs do not appear together might because they served a similar function. If so, then there might have been a difference between the individuals receiving a ceramic vessel or a metal vessel. However there are only 28 burials with lead bottles and there are still 268 burials with no vessels.

The clay figurines (from the two burials G107 and G295) are the second type of finds that were not combined with jugs. The last type of find that does not appear with jugs is the copper mushroom maceheads.

1.1.4.3.2 Bowls: There are 29 burials with bowls. The bowls are subcategorized as bowls, deep bowls and s-profile bowls as Red and Black Wares. Seeher states that the Red Ware bowls were –as it was in the settlement- the daily-used ones, whereas the Black Ware or the blacktopped wares were the ones with more finishing applications, such as polish and decoration (Seeher 2000: 33). The bowls in the burials were not containing any materials; in fact most of the bowls

were actually used as covers or lids for the burials (Seeher 2000: 33). Although the s-profile bowls were rare in the settlement and appeared only after Phase L, in the cemetery there are more s-profile bowls than ordinary bowls (Seeher 2000: 33). This is true if the bowls that are found outside of the named burials are included; if not, the number of s-profile bowls and non-s-profile bowls are close to each other. The reason behind this might as Seeher suggests, related to the period the burials were buried or it could also be a choice of a specific shape for the burials (Seeher 2000: 33).

There is no trench that had more than 4 burials with bowls (Chart 56). Most of the burials with bowls were pithos, double pithos and simple inhumations and except the amphora and jar burials, all burial types had at least one bowl (Chart 57).

In 9 burials the bowls were the only burial finds and 7 of these burials contained adults. The rest did not contain any bone fragments. The highest number of finds in a burial with a bowl is 15, but most of the burials with bowls either have one or two burial finds (Chart 58).

Decorated or non-decorated bowls appear in all genders' and age groups' burials (Chart 59), however the highest number of bowls is in the simple inhumation burial G143/151 of an adolescent and female adult with 8 bowls[118].

Decorated bowls appeared both in adult and child burials, however there is no identified female or an infant burial with a decorated bowl. The decorated bowls only appeared in simple inhumation and pithos burials.

Burials that contained multiple bowls never contained a metal find[119]. Two of these burials with multiple bowls contained 2 individuals and interestingly the bowls

[118] 4 of them s-profile
[119] G75,G117,G143/151,G144 and G468

appear in double combinations: In the simple inhumation burial G144 there were two adults with 2 s-profile bowls and 2 spindle whorls, and in the simple inhumation G143/151 there was an adolescent and an female adult with 4 bowls and 4 s-profile bowls.[120] The double combination appeared also with the small clay finds in burial G231.[121]

There are 8 deep bowls, only one of them was decorated and two were s-profile types. All the deep bowls and the only footed bowl in burial G368 were red wares. It should be noted that the deep bowls in the settlement were also mostly red wares. These burials with deep bowls never yielded stone or metal objects. Out of 19 s-profile bowls found in 15 burials only one burial was of a child and one contained an adolescent in addition to an adult female. All the other burials with s-profile bowls were of either adults[122] or did not contain any bone remains. Plain bowls appear with metals, with clay objects and with other pottery shapes; but they do not appear with stone objects.[123] They appear in all gender/age groups, mostly in adult burials.

Although 19 out of 29 burials with bowls contained a single individual, there are 6 burials with 2 individuals. None of these burials were pithos or double pithos burials and again none of these burials contained metal finds. All these burials had more than one pottery find except G327. It seems like the multiplicity of the individuals in burials with bowls or the multiplicity of bowls might have been a counter category for the burials with metal finds. In other words the burials that did not have or could not have metals were somehow substituted by multiple bowls.

[120] 6 of them were fine red ware and 2 were black ware.
[121] see above-clay finds
[122] There is only one burial with 2 identified male adults
[123] except the whetstone in G117

Bowls appear with all kinds of objects and materials, except stone. In the simple inhumation burial G117 where the whetstone/ pendant? was found there is no complete bowl, only fragments. The most common materials bowls appear with are copper and gold.

1.1.4.3.3 Jars: Seeher prefers to divide jars as "bottles" and "neck jars", however in the database these are merged into the category neck jars. Here the typological differences between the jar parts (handles, rims etc.) were not taken as criteria to subcategorize the neck jars. Seeher divides the jars into two as "Type a" which are the black wares with upright handles, and "Type b" which are the red and brown wares with vertically pierced knobs. "Type a" was much more common in the settlement whereas "Type b" was only represented by fragments in the settlement (Seeher 2000: 35).

Jars in general appear mostly in adult burials; and the number of the identified female adults is higher than the identified male adults with jars (Chart 60). There are more children burials with jars than infant or adolescent burials with jars.

Jars appeared mostly with copper pins, golden sheets/diadems and spindle whorls. The burials in which the jars were the only burials finds are either pithos or double pithos burials. Although the number of simple inhumation and double pithos burials with jars are the same, simple inhumations had more jars than the double pithoi. These are followed by the pithos burials with and by cist burials with jars (Chart 61).

Jars were found in 26 burials in 15 trenches. None of the trenches had more than 6 jars (Chart 62) and no burial contained more than 3 jars. Compared to other shapes, jars appear rarely in the cemetery as Seeher also notes (Seeher 2000: 35).

Jars that are black or grey are mostly decorated (7 out of 12), whereas the red and brown jars were not decorated in most cases (9 out of 12), but they had a higher variety of shapes: there are red and brown ware tripod jar, a brown cooking ware jar and a red basket-shaped jar, in addition to the neck jars. Jars are subcategorized according to their variation in shapes: tripod, basket-shaped, but the majority of jars consist of the neck jars.

The mudsink burial (G100) yielded a single fine black ware decorated neck jar. Due to the fact that this burial was "different" than other burials,[124] it is possible that the fine black ware decorated neck jars might have had a special value too. As Efe states the jars in general were carefully produced (Efe 1988: 53), which supports this possibility. In fact all the decorated jars[125] were fine wares with a single exception that was encrusted.[126] The other fine black ware decorated neck jars appear mostly pithos and double pithos burials, one in a cist burial and one in the mudsink burial, but never in a simple inhumation. The only fine ware in the simple inhumation burial of an adolescent (G517) was a fine red ware neck jar.

Although most of these burials with decorated fine ware jars were of adults, there are 3 double pithos burials with children that contained 2 fine red wares and one fine grey ware. The burial with the grey fine ware (G181) did not contain any metals, whereas the two burials with fine red wares had a single copper object and both were in the same trench (G456 and G498 in Trench XX/86). The genetic relationship of these two children might be an interesting question to answer. In addition, these three burials had all a decorated neck jar and a jug and no stone or clay objects.

[124] See above and below
[125] Decoration on the jars is usually incised diogaonal stripes/lines if not indicated otherwise
[126] There are 7 black, 2 red 1 brown fine wares.

The only identified female adult burial was a pithos burial (G305) with a fine grey-black ware decorated jar that had an in-situ lid. Since there is neither another jar found with an in-situ lid, nor another female adult burial with a decorated jar it is not possible to compare this burial with any other burial. Except for this female adult burial, the other adult burials with a decorated fine ware jar did not reveal any silver, clay or stone objects, but also no pottery except jugs. There is no identified male burial or an infant burial with a decorated jar. Except for the infant and adult male burials, decorated neck jars appear in all gender/age groups and also in all burial types that had a jar.

There are only two burials with multiple jars. Both of them are simple inhumation burials (G57 and G509). In G57 there are 2 neck jars and a decorated neck jar, a gold sheet fragment and 9 spindle whorls. This adult burial has the highest number of jars and it is also one of the burials with the highest number of spindle whorls. The decorated neck jar was a white- into-black encrusted ware; one of the only two examples of encrusted jars. Again this shows that the decoration might have had increased the value of the pottery and therefore also might have increased the status of the burial.

Although jars also appear as the single finds in burials, most of the jars were found in burials with 3 burial finds (Chart 63). Except two burials with 2 individuals, jars appear mostly in burials with a single individual (Chart 64). One of these burials had one of the three examples of the tripod jars. These three burials with tripod jars did not reveal any other finds than pottery. Interestingly one of these burials was of a female adult, one of a male adult and one of an adolescent; therefore it is difficult to assign a specific gender/age group to the tripods.

1.1.4.3.4 Other shapes

1.1.4.3.4.1 Miniature vessels: The fact that miniature vessels were found in all 4 major burial types (pithos, double pithos, simple inhumation and cist burials) makes it difficult to assign miniature vessels to a specific burial type. However in the pithos (G527) and in the double pithos (G1) burials the miniature vessels were the only burial finds and in both they appear as fine red wares. G1 contained a male adolescent a female adult whereas there were no bone remains in G527. In the simple inhumation burial the miniature vessel was found together with a high number and variety of metal, clay and pottery finds (G243); whereas in the cist burial the miniature vessel is one of the 4 finds in the burial which were all pottery (G26). Except for the miniature vessel in the pithos burial, all the miniature vessels were in form of plain cups, whereas the one in the pithos burial was more like a jar with knobs.

The double pithos (G1) and the cist burial (G26) contained each two individuals: the double pithos was of a female adult and a male adolescent, and the cist burial was of a female adult and of an individual with unknown gender/age. The simple inhumation (G243) was of a male adult and the pithos burial did not reveal any bone remains. By looking at the gender/age data regarding the burials with miniature vessels it is seen that no children or infant burials had miniature vessels.

1.1.4.3.4.2 Tankards: The two tankards were both in pithos burials; one in a child burial and the other without bone remains. The child burial (G317) contained also a pin fragment and no other burial finds. The tankard in this burial was a fine red ware. The other burial (G294) has a decorated body fragment and a decorated spindle whorl burial finds. The tankard in this burial was a fine black ware. The tankards

were probably special drinking wares since both were fine wares. When we consider that tankards were unknown in the settlement (Seeher 2000: 46), it is not surprising that there are only two tankards in the Demircihöyük EBA burials.

1.1.4.3.4.3 Amphora: The only amphora in the cemetery[127] was found in a simple inhumation of an adult (G422) together with a stone macehead. Amphorae were found in the settlement as early as Phase H but disappears after Phase F or G, therefore it is possible to say that the amphorae were reserved for the second period of Demircihöyük (Seeher 2000: 46). As discussed before, the amphora burial (G255) could also have been a burial find and would double the amphorai found in the EBA cemetery.

1.1.5 "DIFFERENT" BURIALS ACCORDING TO THEIR GENDER/AGE GROUPS

1.1.5.1 Adults: Out of 498 burials in Demircihöyük cemetery there are 320 burials with skeletons or bone remains. 11 of these could not been identified and therefore were labeled as "unknown" in the database. Individuals that were minimum18 years old were identified as adults.[128] There are 26 female adults and 22 male adults. Adults are subcategorized as "unknown" and "uncertain" since in the final publication catalog there are some individuals which were assumed to male or female but were not certainly identified; these are called "uncertain" where as the ones left with a question mark were called "unknown". The unknown and uncertain adults are 165 in total. All together adults are densely buried in trenches YY/86, XX/86, ZZ/86, ZZ/87 and A/85. Except A/85 all the trenches are located in the eastern central part of the cemetery (Chart 65).

[127] if we do not count the amphora burial G255
[128] The age categorizations are artificial that is they do not present the social age ranges.

Adults appear mostly in simple inhumation burials; however when we look at the burials with identified genders, females appear more in pithos and double pithos burials, whereas males appear again in simple inhumation burials. Although the number of simple inhumation burials of females is close to the number of pithos burials of females, males appear only in several cases in pithos burials (Chart 66). As stated before there are not many specific objects that can be only assigned to adults.

Multiple adult burials are not as much as single adult burials; female adults appear in 23 burials as the single individual. In 2 burials they appear with infants, in one burial with an adult and in one burial with 4 other adults. Male adults are the single individuals in 16 burials but they appear in 5 burials with another adult, but never with a female adult, an infant or a child. The only burial with 5 individuals contained 1 identified female and male together.

Male burials yielded more finds than the female burials in cases where the identified female/male was the only individual. It is important to stress that the number of finds in female burials are more or less close to each other, except one burial with 11 finds (G305). [129] This burial has also the exceptional in situ lid of a neck jar.

There are more male burials with high number of burial finds such as G83 with 15 burial finds[130] and G243 with 12 burial finds.[131] Although these burials had a higher number of finds the larger part of these finds were spindle whorls, which are comparatively an "easier-to-access" and perhaps and a "cheaper-to-produce" object. On the other hand there are 2 male burials that have a smaller number of clay objects

[129] 6 of these were spindle whorls.
[130] 9 of these were spindle whorls.
[131] 4 of these were spindle whorls.

and a higher number and variety of metals and other finds. These were the cist burial with the single male adult (G350) and the simple inhumation with 5 individuals (G231). Since G231 had 5 individuals a higher number of burial finds is expected, but the fact that no other burial had 5 individuals may mark its difference. On the other hand it is possible to say that G350 was different than the other burials if we take only the number and variety of burial finds as the criteria.

Some other adult burial are also "different" in terms of a presence of a special treatment, namely the cattle pair skeletons. Unfortunately all the 8 burials with associated cattle skeletons are of adults without an identified gender.[132]

Other than burials with cattle skeletons, there are burials with special elements that could also indicate a difference than the other burials. To start with the single example of the special burial type "mudsink", G100 is certainly different than other burials not only with its variety of metal finds but also with the difference in its construction. As discussed before its location isolated from other burials may also mark its difference. It is unfortunate that the gender is not certain for this burial, which was assumed by the excavators to belong to a male adult (Seeher 2000: 78). As Table 12 shows there are not many markedly different female adult burials except the ones with high number of burial finds or high variety of finds such as G305 and G441. G441 does not have a high number finds, but the fact that the copper bracelets and the copper pin were decorated may mark a difference.[133]

1.1.5.2 Adolescents: There are 14 adolescent burials in the Demircihöyük cemetery. The adolescents are individuals between 11/12 and 18 years old. Unfortunately there

[132] See below
[133] See above

is only one adolescent with an identified gender.[134] This is a double pithos burial with two individuals: a female adult and a male adolescent (G1) which contained only one miniature cup as a burial find. There is another adolescent buried with a female adult in the form of a simple inhumation but this one had 8 bowl fragments as burial finds (G143/151). The last multiple burial with an adolescent was again a double pithos (G488) which was buried together with an adult of an unidentified gender, and this burial contained only a single copper sheet as a burial find.

Although double pithoi contained most of the adolescents, the number of pithos and simple inhumation burials is close to the double pithoi of adolescents (Chart 67). Most of these burials were located in trenches YY/86 and A/86 (Chart 68). There is no adolescent burial with more than 6 burial finds, except the double burial with 8 burial finds (G143/151).

Adolescent burials did not reveal any gold or stone objects. The total number of burial finds in adolescent burials is the lowest among all other gender/age groups. One adolescent burial might be different than the others with the variety of materials of the finds (G517) which had a copper/bronze dagger, 2 pins, a neck jar and 2 decorated spindle whorls. However if we consider the rarity of the finds, the pithos burial with a tripod jar and the only footed bowl in the cemetery (G368) could be "different", if we consider the rarity of these objects in the cemetery.

1.1.5.3 Children and Infants: Individuals between 5 and 11/12 years old were categorized under "child". Out of 37 child burials there are 5 double burials. 4 of these were of an adult-child combination. There is only one burial with two children.

[134] The rest of the adolescents are under the category "adolescent-unknown".

Almost all of the child burials were either pithos or double pithos burials (Chart 67), except two simple inhumation burials which were actually double burials with an adult-children combination and therefore can be excluded. Child burials again appeared mostly in trenches XX/86 and YY/86 (Chart 68).

Burials that contained only children never yielded more than 3 burial finds. The most common burial find in children burials is fine wares jugs and copper pins. There are no childr burials with stone or silver objects and there is only one child found with a spindle whorl (G391B). Child burials did not have as many burial finds as the infant or adult burials. Moreover the fact that the simple inhumation burials had the highest number of burial finds and children were not commonly found in simple inhumations may indicate that children were not given a lot of finds for their burials. There is one simple inhumation burial with a child and an adult which contained a stone axe (G192), however the exceptional stone weapon in a child burial might be due to the presence of the adult in the burial.

On the other hand when we look at the rare finds in the children burials, there is a child burial with a bronze dagger (G479), another one with a lead bottle (G378), and a child burial with one of the two tankards in the cemetery (G317) which might have been different than other child burials. It should be noted that all these three child burials with unique finds were pithos burial.

Infants are categorized as individuals between 0 and 5 years old. There are 41 infants found in the cemetery. Most of these infants were found in pithos and double pithos burials (Chart 67). There are also several cist and jar burials with an infant. However there is no simple inhumation burial with an infant except the double burial

with a female adult and infant combination (G299). Another female and infant combination appears in a pit burial (G45). Interestingly both of these burials contained two burial finds; in both instances one was a jug. Except these burials there are no other multiple burials with infants. The highest number of infants was again found in trenches YY/86 and A/85 (Chart 68).

Although most of the infant burials either did not reveal any finds or had one or two burial finds, there are several exceptional infant burials with not only high number of finds but also with high variety of burial finds. All of these exceptional burials were either pithos or double pithos burials. The infant burial with the highest number of finds was a double pithos burial with 12 finds. A copper/bronze dagger, 3 copper pins, a silver pin, 2 decorated spindle whorls, 4 marble idol fragments and a decorated jug were the burial finds. This burial (G213) can be considered one of the "different" burials. The second "different" infant burial might be another double pithos (G295) with 8 burial finds: 3 golden earplugs, a lead bottle fragment, 2 bronze/copper bracelets, a copper pin and a clay figurine. These two burials were in the same trench (ZZ/85). The other three "different" burials were pithos burials, again with high number and variety of metal finds except G320 which did not reveal any metals but had 3 jugs which was the only burial with 3 jugs. As it is seen in Table 16 these burials did not reveal any stone weapons or stone beads; the only stone finds were the 4 marble idols. In fact this burial with 4 marble idols was also unique due to the fact no other burial had marble idols. Infant burials had more jugs than the children burials. The vessels in these burials were mostly fine wares which again underlines the "different" status of these burials. Compared to the "different children burials", the "different infant burials" have more burial finds.

1.1.5.4 Burials with No Bone Remains: In total there are 178 burials with no bone remains and most of these were pithos or double pithos burials. There are only several instances where no bone remains were found in other burial types.[135] The highest number of burials without bones was found in trench ZZ/85.

There is one double pithos burial without bone remains (G579) that had the highest number of spindle whorls and also the highest number of finds in the EBA. The two pithos burials that had 3 burial finds (G79 and G107) are different than the other burials due to the fact that in the EBA cemetery there was no other burial with multiple figurine fragments. The fact that none of the burials had a combination of beads made of such a variety of materials as in G79 also makes this burial "different". As it is seen, except the burial with 22 burial finds, the difference in the other three burials is due to the uniqueness of the materials found in the burial,[136] not due to the number of burial finds.

1.1.5.5 Burials Associated with Cattle Pair Skeletons: There are seven burials that yielded skeletons of a cattle pair buried nearby. Of course it is not very clear which burial the cattle skeletons should be associated with when there are overlapping burials as it was the case for G583. The excavators concluded that most of the burials associated with cattle skeletons were covered with large stone plates (Seeher 2000: 30).

All the burials with cattle skeletons contained single individuals except G316 which is also the only burial associated with cattle pair that is oriented towards the NE (Table 8). An aspect that shows consistency in all the burials associated with a

[135] The mudsink and the pit burials never appeared without bone remains.
[136] it should be noted that these were all found in ceramic burial containers, although usually simple inhumations have yielded such unique objects.

cattle pair is that they all had burial finds. Among these finds are rare burial finds such as a whetstone, stone axe, and mushroom copper macehead for simple inhumations, and a flint blade, face-jug fragment and copper studs for the other burial types.

The gender is not certain for the individuals in these burials; however the identified ones are all adults older than 20 years. Interestingly these are not the burials with the highest number of burial finds, but with the presence of rare burial finds, a special importance might had been given to these burials, if the cattle were only related with the associated burials.

1.2 DEMİRCİHÖYÜK EBII SETTLEMENT

In the settlement, pottery forms the major group of finds. The evaluation on pottery is going to be based on Efe's analysis, statistical information and charts (Efe 1988). Again typological differences will not be the major concern; instead the shapes and wares are going to be the most important variable to look at. Since it is impossible to analyze each and every individual pottery find in the limits of this thesis, the statistical outcomes are going to be used.

Finds made of stone, clay, bone and metal are categorized under "small finds" (Chart 69). [137] The small finds were analyzed by Seeher-Baykal and Obladen-Kauder whose work will be used as the primary source for the small finds (Seeher-Baykal and Obladen-Kauder 1996).

1.2.1 METAL FINDS

In the EBA settlement there were only 28 metal artifacts and most of these – including the single slag find- were found in the courtyard. The metal artifacts consist of tools (awls, needles), weapons (arrowheads), daily used objects (blades, spoon?) and personal adornments (pins, buckle) (Baykal-Seeher & Obladen-Kauder 1996: 313).

Half of the metal finds were analyzed and it appeared that most of these were corroded pieces. [138] Only 3 objects contained tin in their composition, other than these three bronzes and one lead fragment, all the other objects were composed of

[137] Chart based on Seeher-Baykal and Obladen-Kauder 1996: 3

[138] H.G. Bachmann and H. Otto 1987 "Demircihöyük II", in Baykal-Seeher & Obladen-Kauder 1996: 313

copper usually mixed with arsenic (Baykal-Seeher & Obladen-Kauder 1996: 313). There are no silver or gold objects found in the settlement, not because they were not produced since they are known from the cemetery, but perhaps due to their value. There is only one slag composed of lead-copper found in the courtyard from Phase MN (Baykal-Seeher & Obladen-Kauder 1996: 314).

There are no weapons or daily used objects found in the houses and phases that are discussed here. Only Room 108 which is a front room yielded an arrowhead in Phase I, but there are also arrowheads from a backroom such as Room 6. The area outside the enclosure wall had also a single arrowhead in Phase F1F2F3 (Baykal-Seeher & Obladen-Kauder 1996: 314). Interestingly unlike many other find types the courtyard did not reveal any arrowheads in any phase. As it is seen there is no clear pattern where the ranged weapons appear. This is also valid for the daily used objects. The two blades for instance were both found in the courtyard; one in Phase K2, the other in Phase M. The awls from the settlement were all found before Phase I; 3 from the backrooms, one from the courtyard and one from Room 400 (the gateway on the south-east) (Baykal-Seeher & Obladen-Kauder 1996: 314). The only metal spoon (?) was found in Room 104 from Phase H, although whether the actual function of it was spoon is not certain (Baykal-Seeher & Obladen-Kauder 1996: 314). The last find type in metal represented with a single example is the copper buckle found in Room 109 in Phase I.

If we look at the subject rooms in the later phases, there is only one spherical headed ornamental pin found in Room 108 in Phase M and one needle found in Room 109 in Phase K2. The ornamental pin with a hole is typologically the Type 1 found also in the cemetery (Seeher 2000: 58) and this type of spherical headed pins

were found in burials G243 and G309. The other ornamental pins were found in Room 109 (one example from Phase I) and in the courtyard (one example from Phase K1 and one example from Phase NO). Only the body of the needle from Room 109 survived and therefore it is difficult to assign it to a type. The other needles were found in the courtyard (Phase GHI), in a back room (Room 6 in Phase F2F3) and also from outside the enclosure wall (disturbed layer). Even the existence of these few samples is enough to know that the pins were not only reserved for the mortuary sphere and their find spot indicates that they were probably part of the daily use.

1.2.2 CLAY FINDS

In the settlement the largest portion of the clay finds consist of the ceramic sherds. These are categorized in the final publication under "objects used for the production of another product" together with spindle whorls and loom weights. There are also clay weapons, daily used objects, toys, personal adornments and figurines. It is expected that the daily used objects such as combs or andirons were absent in the cemetery, on the other hand it is interesting that clay weapons were not found in the burials whereas stone and metal weapons were.

1.2.2.1 Sherds: The ceramic sherds that had traces of re-use were categorized under the small finds. These sherds were drilled, pierced or reformed into round, oval, rectangular or triangular forms. Most of these sherds were pierced and round (Baykal-Seeher & Obladen-Kauder 1996: 215). The numerical distribution of sherds among phases seems to be close (Baykal-Seeher & Obladen-Kauder 1996: 217-218).

The pierced sherds were mostly fragments of open vases such as bowls, due to the fact that closed shaped would have a more concave shape and perhaps a flat piece was more efficient for the activity these sherds were used (Baykal-Seeher & Obladen-Kauder 1996: 216). Although a larger part of the pierced sherds were black wares, the drilled sherds and sherds without piercings or drills were mostly red wares.

Room 109 yielded the highest number of the pierced sherds through periods with 4 samples, whereas Room 111 had the lowest number of pierced sherds in between phases K2-L (Chart 70). In terms of continuity Room 110 showed more consistency than the other rooms, however pierced sherds appeared from the earliest to the latest phases (K1 to NO- with gaps) in Room 109. It is interesting that in these houses the back rooms (including Room 999-which is a middle room) did not reveal pierced sherds for the subject phases.[139] Although in the later phases front rooms preserved better than the back rooms, it is also possible that the activity that involved the use of the pierced sherds was done in the front rooms. In general in the number of pierced sherds there is not a big difference between these 4 rooms.

The second category for the sherds is the drilled sherds, which have drillings on one side or on both sides that were usually not matching. The drills were not necessarily centered (Baykal-Seeher & Obladen-Kauder 1996: 216). Among the subject rooms in the later phases only one drilled sherd was found in Room 109 in Phase K1. Again the courtyard had the highest number of drilled sherds through different phases.[140] In fact in the last phases of the settlement only the courtyard had

[139] see Baykal-Seeher & Obladen-Kauder 1996: 218, Abb.145
[140] see Baykal-Seeher & Obladen-Kauder 1996: 219, Abb.147

drilled sherds. The reason might be that the drilled sherds were actually the discarded pieces which were attempted to be pierced but failed and therefore were discarded into the courtyard.

There are also sherds that were reformed but did not have piercings or drills. 3 of our subject rooms yielded such sherds especially in Phase K1 (Chart 71). Sherds without pierces or drills were again absent in the back rooms and were mostly found in the courtyard.[141] Interestingly in Phase L Room 109 is the only area with such sherds; even the courtyard did not reveal any sherds without pierces and drills in this period. These 4 sherds from Room 109 represent also the highest number of sherds without pierces and drills in a room in a specific phase. Room 110 and 999 did not contain any of these sherds. After Phase L these sherds disappear in the rooms except Room 200 (the courtyard).

1.2.2.2 Spindle Whorls & Loom Weights: In addition to the worked sherds, spindle whorls and loom weights are also under the category of objects used for textile production. It is possible that some of the smaller spindle whorls had been used for other purposes such as personal adornments.

Out of 183 spindle whorls[142] found in the settlement 71 were decorated (Baykal-Seeher & Obladen-Kauder 1996: 228), whereas in the cemetery there were 42 decorated spindle whorls out of 96 spindle whorls which are almost half of the total. This means that decorated spindle whorls were also in use and they were not only decorated for mortuary purposes. The majority of the spindle whorls were fired in darker colors but there are also fired red and beige and unfired spindle whorls

[141] see Baykal-Seeher & Obladen-Kauder 1996: 219, Abb.149
[142] Unstratified, 108 stratified

(Baykal-Seeher & Obladen-Kauder 1996: 232). Both spindle whorls and loom weights were made of fine clays.

In the subject rooms spindle whorls disappear after Phase M, whereas in other rooms they disappear after Phase K2.[143] This might be again due to preservation circumstances. Spindle whorls appeared mostly in the front rooms, but in this case Room 999 also yielded spindle whorls. Phase H depicts a different picture than other periods where Room 109 and Room 6 had the highest number of spindle whorls among all the other rooms in all phases.[144] The fact that the courtyard did not reveal any spindle whorls in Phase H raises the question whether in this period the textile production was moved from outdoors to indoors. However the presence of 2 loom weights in this period in the courtyard may also suggest otherwise, if the loom weights were not produced in the courtyard. It is also worth noting that after Phase K1K2L only the courtyard, Room 109 and Room 110 had spindle whorls which might either mean that the scale of textile production decreased or only these areas were reserved for this activity (if it is not related with preservation).

In the subject rooms most of the spindle whorls appeared in Phase K2 (Chart 72). On the other hand, Room 109 did not reveal any spindle whorls in this phase however it has the highest number of spindle whorls among the houses and it is also the only room that yielded spindle whorls in two phases (Phase K1 and L). In any case it should be noted that even if this room has the highest number of spindle whorls, it has only one more spindle whorl than Room 111 in Phase K2 for instance.

[143] see Baykal-Seeher & Obladen-Kauder 1996: 228, Abb.162
[144] Except Room 2000 in Phase O

In other words there is not much difference in the number of spindle whorls among the subject rooms or phases.

The courtyard (Room 200) has already been assigned to be an area of production, where the spindle whorls appear only after Phase F2 and where their appearance showed continuity throughout phases. On the other hand there are several rooms that yielded spindle whorls already before Phase F, but none of the rooms in these phases showed a consistent appearance of spindle whorls.

There are more loom weights than spindle whorls found in the settlement. Loom weights appear in different forms and sizes. There are weights with one pierce on the center top but there are also shapes where there are two pierces on the two side tops. Decoration is also attested on loom weights; out of 227 loom weights[145] 34 were decorated (Baykal-Seeher & Obladen-Kauder 1996: 239). The fired loom weights were mostly pink in color, whereas unfired ones were mostly grey-beige (Baykal-Seeher & Obladen-Kauder 1996: 242).

The earliest in situ loom weight group of 28 loom weights was found in Phase E1 (Baykal-Seeher & Obladen-Kauder 1996: 239) in Room 6 which was also one of the rooms with a larger number of spindle whorls. Another in situ group consisting of 35 loom weights was found in Phase H in Room 999. These two rooms -which were both not front rooms- had the highest number of loom weights among the rooms throughout different phases, even higher than the courtyard (Room 200) which is unusual.[146] The distribution and number of loom weights support that Phase H has a different scale of textile production. It is also possible that the reason why there are

[145] Unstratified, 186 stratified
[146] See Baykal-Seeher & Obladen-Kauder 1996: 240, Abb.170.

more objects in Phase H might be due to the fact that Phase H (together with Phase E1 and L) was disturbed by catastrophic events (Baykal-Seeher & Obladen-Kauder 1996: 245) and probably loom weights were not the most important possessions to take.

As it was also the case for the spindle whorls in the early phases (earlier than Phase H) there are more loom weights in the rooms on the south of Room 108, whereas in later phases the subject rooms yielded more loom weights and spindle whorls. It is possible that certain building blocks were used for certain production activities or not all houses had the weaving loom. It has also been noted that in terms of in-situ loom weights, in the early phases the back rooms had more loom weights whereas for later phases the front rooms and the courtyard had more loom weights. This again is perhaps due to the fact that in the later phases front rooms preserved better than the back rooms.

Room 109 and Room 110 had relatively higher numbers of loom weights in the later phases and also showed continuity in the appearance of loom weights. These two rooms had each 3 in-situ loom weights in Phase L (Baykal-Seeher & Obladen-Kauder 1996: 241). Although Room 999 contained 35 loom weights for the Phase H, after Phase K1 loom weights no longer appear in this room. Spindle whorls also did not appear in this room after Phase K2. Room 111 did not reveal any loom weights after Phase H and no spindle whorls after Phase K2.

Among the later phases, Phase K2 appears to be the busiest phase for Room 108 in terms of textile production. In this Phase Room 108 also yielded the only clay comb among the subject rooms. Since the clay combs are assumed to be used for

teasing wool (Baykal-Seeher & Obladen-Kauder 1996: 245) Room 108 was probably used for textile production in Phase K2. Interestingly whenever the rooms had more loom weights in a certain phase the courtyard had less loom weights and vice versa.

1.2.2.3 Andirons: Under the category of "daily used objects" andirons form another group of clay objects. Out of 63 andirons 49 were stratified. 8 of these stratified andirons were found in situ. For the early Phases Room 6 (Phase E1 and H), and for the later phases Room 109 (Phase L and O) had in-situ andirons. Most of the in-situ andirons were in a pyramidal shape. Most of the andirons had some surface finishing treatments and there also small numbers of andirons with decorations. It is suggested that the decorated ones might not have necessarily a cultic function rather it could be an artistic attempt of the producer (Baykal-Seeher & Obladen-Kauder 1996: 248). Due to the exposure to fire, andirons were mostly in grey color. It should be noted that there are also unfired examples.

Although Room 6 and the courtyard (Room 200) had the highest number of andirons throughout different phases, andirons usually appeared either as single examples or as 2 examples in the same room and in the same phase.[147] Other than Room 6 and the courtyard, Room 109 and Room 110 also had comparatively more andirons. There seems to be not much difference in the distribution of the andirons in the front or back rooms. Moreover the houses never yielded two rooms with andirons in the same phase.

[147] see Baykal-Seeher & Obladen-Kauder 1996: 247, Abb.178.

For the later phases the Room 999 and Room 108 did not reveal any andirons, whereas Room 109 and Room 110 had the highest number of andirons and also the longest continuity of the appearance of andirons. Room 111 had only one andiron in only Phase M (Chart 74).

Unlike the textile production objects, andirons show an even picture in terms of the distribution in different rooms and in different periods, except Phases G and H where the number of andirons is relatively higher than other periods. The lower number of andirons is not surprising since one andiron could be used for multiple materials or purposes. The exact function of the andirons in Demircihöyük is not known, however the ones with inner holes are assumed to be used as brazier holders or grills in relation with hearths or fireplaces. This assumption was supported by an example where the andiron has a black-smoked side (Baykal-Seeher & Obladen-Kauder 1996: 248). But still the unfired andirons remain with an unknown function.

1.2.2.4 Slingshots: The slingshots are the only object type found in the subject rooms and phases under the "clay weapons" category. Slingshots were long-distance fight and hunt weapons when used with slings, which were presumably made of organic materials. Slingshots appeared in oval, round, rhombic, cylindrical and spherical forms. None of the slingshots were polished although such surface treatments could increase the velocity, the range and the accuracy (Baykal-Seeher & Obladen-Kauder 1996: 250). Most of the slingshots were fired and in orange-red color. Their weight was usually between 0 and 50 grams.

In the settlement only 25 of the 48 slingshots were stratified. Although the courtyard (Room 200) did not reveal any slingshots before Phase K1, it had the

highest total number of slingshots.[148] None of the houses or rooms, including the ones closer to the gates (such as Room 999 or Room 111) yielded a concentration of slingshots. Even the open courtyard did not have a concentration of a large number of slingshots in a certain phase. For the later phases, Room 110 and Room 109 had comparatively more slingshots (Chart 75); however most of the rooms in most of the phases had single examples for slingshots.

1.2.2.5 Toys: The toys in the subject rooms and phases are limited to two examples: One rattle and one game piece. In other rooms and phases toys also do not appear very frequently. There are in total 16 stratified rattles and 8 stratified game pieces.

1.2.2.5.1 Rattles: The rattles are categorized under "toys" however it has been suggested that these might have been used as sistrums with a cultic or symbolic function (Baykal-Seeher & Obladen-Kauder 1996: 255). For the two rattles found in the EBA burials G548 and G71, Seeher has suggested the possibility that the rattles might have had a symbolic function as the figurines also might have had (Seeher 2000: 65). In fact there is one rattle with anthropomorphic features found in Room 12 in Phase F1F3[149] which might support Seeher's suggestion.

There are examples for rattles or rattle fragments from front and backrooms but also from the courtyard.[150] Room 2 which is a back room had two in situ rattles in phase E1 (Baykal-Seeher & Obladen-Kauder 1996: 255). These in situ rattles found in a back room suggest that perhaps the back room was the place where the infant was kept if the rattles were actually used as toys. For the subject rooms only Room 108 yielded a rattle in Phase K1.

[148] see Baykal-Seeher & Obladen-Kauder 1996: 250, Abb. 180
[149] see Baykal-Seeher & Obladen-Kauder 1996, Katalog:370, Tafel:128-1
[150] see Baykal-Seeher & Obladen-Kauder 1996: 255, Abb.184

1.2.2.5.1 Gaming Pieces: The gaming pieces are small clay objects usually in a conical form or in a form that look similar to stamp seals. However they did not have decorational elements such as incisions. Gaming pieces did also not have smooth or polished surfaces. There are both fired and unfired gaming pieces. The authors do not explain why these clay objects were called "gaming pieces". Since they also look like tokens they might have had a different function. Mostly front rooms yielded these objects and the courtyard had these only after Phase K1. There are not many rooms and phases with these objects and therefore the distribution does not show a clear pattern. Such objects were not found in the cemetery, and among the subject rooms only Room 111 had one example again in the same phase Room 108 had a rattle (Phase K1).

1.2.2.6 Personal Adornments: There are limited types of personal adornments made of clay in the settlement. These are earplugs, pendants and beads. Metal earplugs, metal and stone beads were found in the cemetery, however no clay earplug or bead was surfaced in the burials. As usual the highest number of personal adornments was found in the courtyard.

1.2.2.6.1 Earplugs: There are 3 stratified earplugs from the settlement and all of these were from the later phases. In fact all the clay personal adornments appear only after Phase F1. Two of the stratified earplugs were from the courtyard; one from Phase K2L and the other from Phase O.[151] The third was found in Room 108 in Phase L. The earplugs were made of fine clay and there are both fired and unfired examples with colors ranging from beige, pink to grey (Baykal-Seeher & Obladen-Kauder 1996: 256). The earplugs actually do not look anything like the ones found in

[151] see Baykal-Seeher & Obladen-Kauder 1996, Katalog: 358 Tafel 109: 1-3

the cemetery or like the stone examples which again brings about the possibility that these could be tokens or objects that have an unknown function.

1.2.2.6.2 Pendants: There are also 3 stratified clay pendants from the settlement. These pendants are more like pierced sherds rather than being particularly produced to be pendants. They had no decoration but some surface treatments such as smoothed surfaces. Room 108 yielded one such object in Phase L and the courtyard had another one in Phase I-K2.[152] These two were red; whereas the last one was found in Room 107 in Phase F1-F2 was dark brown. Usually these types of pendants were made of stone or bone, so these are exceptional finds in the settlement. Pendants were not found in the cemetery and since clay beads were not found either in the cemetery or in the subject rooms in the later phases, they are not going to be discussed here.

1.2.2.7 Figurines: The clay figurines in the settlement consist of female figurines and animal figurines. Although bone figurines were also found, stone or metal figurines were not unearthed in the settlement. Not all the figurines were found complete; in fact the most of the figurine finds are fragments. The extensively discussed question whether the breaking of the figurines was intentional or not is not going to be discussed here. However it should be noted that the female figurines were found considerably more in fragments than many other find types (Baykal-Seeher & Obladen-Kauder 1996: 279), which may actually indicate that they were broken before their disposal.

[152] see Baykal-Seeher & Obladen-Kauder 1996, Katalog: 358 Tafel 109: 4-6

1.2.2.7.1 Anthropomorphic Figurines: The anthropomorphic elements of figurines consist of head, eyes, mouth, nose, ears, hair, breasts, belly, vagina, hands/fingers, feet/toes, spine and ornaments on the neck, hair and body decoration/belt? were also indicated (Baykal-Seeher & Obladen-Kauder 1996: 259). However not all the figurines had all these features appearing together. The eyes of the Head/Type A figurines are interestingly very similar to the spindle whorls with eye decorations (Type D and H).[153] The fact that figurines and spindle whorls were found both in the burials and in the settlement might support the assumption that these objects had a second/different meaning or function than their primary meaning or function.

There are seated, standing figurines but also figurines without feet were found.[154] The figurines mostly fired, were red in color and were smoothed or polished. Interestingly there are several examples where the excavators were able to trace secondary burning traces on complete figurines (Baykal-Seeher & Obladen-Kauder 1996: 275).

Half of the female figurines were stratified; there are 116 stratified female figurines including fragments and complete pieces.[155] The earlier phases yielded small numbers of female figurines, however there are more rooms in these earlier phases with female figurines. Front rooms had more female figurines than the back rooms. The courtyard (Room 200) has again the highest numbers of female figurines throughout the later phases without an interruption after Phase H. Except for the courtyard, rooms usually had 1 or 2 female figurines. Especially in the early phases

[153] see Baykal-Seeher & Obladen-Kauder 1996: 229, Abb.159
[154] see Baykal-Seeher & Obladen-Kauder 1996: 262, Abb. 187
[155] see Baykal-Seeher & Obladen-Kauder 1996: 259, Abb. 196

there is no room with more than 2 female figurines. Only in Phase K1 Room 108 had 4 figurines. After Phase K2 only the courtyard and Room 109 yielded female figurines. Room 109 had also the highest number of figurines throughout different phases (Chart 76), after the courtyard. Rooms closer to the gate yielded only single female figurines in a certain phase. In addition Rooms 110, 111 and 999 did not reveal any female figurines after Phase K2. Two in situ female figurines were found in a storage bin in the courtyard (Baykal-Seeher & Obladen-Kauder 1996: 273).

Although Obladen has given a very detailed typological analysis of the body parts of the female figurines and their appearance throughout different phases, there is no clear demonstration of the difference between the rooms in terms of the appearance of different types of female figurines. Although it has been noted that 11 out of 23 Type Body/I female figurines were found in front rooms, the question whether a certain type appears in certain rooms remains unanswered. This is mainly due to the fact that there is a separate typology for almost each body part.

1.2.2.7.2 Animal Figurines: Animal figurines consist usually of cattle[156] and sheep representations. The difference between species and types was made by looking at the distinguishable features like feet, heads, horns or tails. Except for three cases[157] all the animal figurines were sexless (Baykal-Seeher & Obladen-Kauder 1996: 280). Although again the function of these figurines remains unknown, the possibility that these were toys cannot be dismissed. The analysis of the animal bones has shown that in fact sheep and cattle were the most common domestic animals followed by pigs and dogs (Baykal-Seeher & Obladen-Kauder 1996: 280).

[156] in the early excavations the cattle figurines were reported as bull figurines by Bittel/Otto, 1939
[157] 2 female and 1 male

On the other hand it is not clear why the livestock animals form the larger part of the animal figurines.

Most of the animal figurines were made of fine clays; Obladen notes that especially in later phases the animal figurines were made of very fine clays (Baykal-Seeher & Obladen-Kauder 1996: 284). Although most of the animal figurines were fired in beige and pink colors, there are also unburned ones in grey and brown colors and also few figurines with secondary burning traces (Baykal-Seeher & Obladen-Kauder 1996: 284). In terms of surface treatment, animal figurines do not show a great variety of indicated features as female figurines do, however there are animal figurines with of smoothed and polished surfaces.

Out of 275 animal figurines and animal figurine fragments, only 149 of them were stratified. None of these animal figurines were found complete (Baykal-Seeher & Obladen-Kauder 1996: 283). There are 9 in-situ animal figurines from courtyard which were found in the storage bins.

The courtyard yielded the highest number of animal figurines, but also the front rooms had also high numbers of animal figurines. In fact Room 109, Room 108 and Room 110 have the highest number of animal figurines throughout different phases.[158] For the later phases especially Room 108 with 13 and Room 109 with 17 samples had relatively high numbers of animal figurines. Among the subject rooms there is only Room 999 without an animal figurine (Chart 77). In fact back rooms (including Room 999) did not reveal any animal figurines for the later phases.[159] Phases L and K2 have high numbers of animal figurines that appeared only in a

[158] see Baykal-Seeher & Obladen-Kauder 1996: 284, Abb.202
[159] Perhaps due to the fact that back rooms were not as well prserved as the front rooms in the later phases

limited number of rooms. This shows that animal figurines were not abundantly found in every house/room. Throughout the settlement history the courtyard had the highest number of animal figurines and front rooms had more animal figurines than the back rooms (Baykal-Seeher & Obladen-Kauder 1996: 328).

Excluding the courtyard, it seems like animal figurines continue to appear in a longer time period and in more rooms than female figurines. Although there is a more homogenous distribution of the animal figurines among the rooms in the early phases, for the later phases Room 108 and Room 109 have yielded more animal figurines. Female figurines also showed this homogeneity in the early phases and again in later phases Room 108 and Room 109 stand out with more number of female figurines.[160] If these are assigned to a cultic function these two rooms may have had such a function. On the other hand if the figurines were toys than it might be assumed that the household of these rooms had a larger number of children.

The courtyard is the only area with continuous appearance of high numbers of female and animal figurines. It is likely that the reason for this was because the courtyard was the production area and the figurines were produced here. But it is also possible that if the figurines were toys they would probably be played in the courtyard. The last assumption could be that the cultic activities were also practiced in the courtyard if one accepts that the figurines were used in such activities.

1.2.2.8 Miscellaneous clay finds: This category consists of clay finds that were either single finds or could not be placed under other categories. For the subject rooms and phases there are 3 miscellaneous clay objects. One of them is the cross-

[160] Compare: Baykal-Seeher & Obladen-Kauder 1996: 284, Abb.202 and 1996: 273, Abb. 196

formed drilled grey coarse clay ball. This was found in the courtyard in Phase K1 (Baykal-Seeher & Obladen-Kauder 1996: 285). Although this object looks like a spindle whorl, it was probably used as a bead or as Obladen suggests to fasten strings (Baykal-Seeher & Obladen-Kauder 1996: 285). The second object from the courtyard from Phase LM is also a clay ball this time made of fine clay and fired. This also looks like a spindle whorl but the center of it was not drilled all the way to the other side, which raises the possibility that was a "half-product" (Baykal-Seeher & Obladen-Kauder 1996: 286). Neither of these clay balls were decorated, although there is one decorated clay ball exist in the settlement dated to the disturbed layer of Phase G in Room 8, 80. The last clay object is in a form of a 4-sided star which was also made of fine clay and was fired into a pink color. This was found in Room 109 from Phase K1 (Baykal-Seeher & Obladen-Kauder 1996: 286). There is no comment on the function, however there is no reason why this could not be also a gaming piece.

1.2.2.9 Clay finds that were not found in the subject rooms: Clay weapons were not found in the subject rooms except slingshots. In fact throughout the settlement there is evidence only for clay tools to produce arrowheads. There are no clay arrowheads; however there are clay arrow shaft straiteners. There are only two examples of these in the settlement; both from outside the settlement's enclosure wall, which might mean that these were not produced or used inside the enclosure wall. There is also one miniature clay axe from the surface layer of Phase G, found between Room 105 and 106. This may not be categorized as an actual weapon due to its small dimensions.

Among the daily used clay objects spoons are very rare. Only 4 rooms yielded spoons and half these were fragments. Spoons were found in phases starting from Phase F3 until K1K2L[161] in the courtyard, in Room 101, Room 8 and Room 111, so both in front rooms and back rooms. Another daily used object that was not found in the subject rooms is clay pestles. In the settlement there is only a single example for the clay pestles which had a broken handle. This pestle was found between Room 7 and Room 107 in Phase F2F3 (Baykal-Seeher & Obladen-Kauder 1996: 286).

There is only one clay lump with impressions which is suggested to be a sealing with seal impressions (Baykal-Seeher & Obladen-Kauder 1996: 286). It was found in situ in one of the pits in the courtyard from Phase F2. There are no seals from the settlement or from the cemetery. Interestingly the game pieces have a very similar form to stamp seals, however none of these had a decorational element on their flat surface. The absence of seals at the settlement may indicate that the economic activities were not necessitating the use of a recording system or a symbolic indication of personal property. If there was a recording system or the notion of personal property perhaps it did not leave material remains that survived.

1.2.3 COMPARISON OF ROOMS: CLAY FINDS

To compare the number of clay finds found in the subject rooms Room 108, Room 109, Room 110, Room 111 and Room 999 in the late phases (after Phase K1), a database was created. The clay objects from the courtyard (Room 200) were also included, however only for the phases that the subject rooms had clay objects. The

[161] see Baykal-Seeher & Obladen-Kauder 1996: 254, Abb.183

aim was to see whether the courtyard had more, or less clay objects than the subject rooms in the phases when the subject rooms had clay objects.

1.2.3.1 PHASE K1: In this phase all the subject rooms and the courtyard yielded clay objects (Chart 80). This might be explained by the fact that the use and production of clay objects was not limited to indoor or to outdoors. However it should be noted that the lowest number of clay objects was found in Room 999 which is the middle room of the three-roomed house. The reason why this inner room had such a low number is perhaps because activities involving clay objects were not commonly done in the inner rooms. However Room 111 which is the front room of Room 999 did also not reveal high numbers of clay objects neither in Phase K1 nor in any other phase (Chart 81).[162]

Excluding the courtyard, there seems to be an increase from the northern rooms towards the southern rooms. Room 108 has the highest number of clay objects in this phase among the other rooms and Room 111 and Room 999 have the lowest (Chart 80). Compared to other phases, Phase K1 is when Room 108 had the highest number of clay objects (Chart 82). Room 109 is the second room with the high numbers of clay objects. Only these two rooms had more clay objects than the courtyard in Phase K1. Although Room 109 did not reveal clay objects in the mid-phases (Phase K1K2, K1K2L and K2L), it showed one of the longest continuity of the appearance of clay objects. Room 110 had yielded clay objects almost without interruption throughout these later phases (except Phase K2L and Phase LM).

[162] Chart 81 and Chart 90 are the same

It is interesting that in this phase courtyard is not the area with the largest number of clay finds, since it is the largest area. Although there is only a slight difference between the number of clay objects found in the front rooms of neighboring houses, the difference is more dramatic between Room 108 and Room 110 or Room 111.

The relationship between the rooms and their number of clay finds in Phase K1 is:

- 108 > 109 > 200 > 110 > 111 > 999

1.2.3.2 PHASE K1K2 and Phase K1K2L: In these interval phases only two front rooms and the courtyard had clay objects. In Phase K1K2 Room 108 yielded two and Room 110 had a single clay object, whereas the courtyard had 6 clay objects (Chart 83). It is possible that in this phase the use and/or production of clay objects was mainly done in the courtyard. Compared to the previous phase there is an important decrease in the total number of clay finds surfaced in Phase K1K2 (Chart 82).

In Phase K1K2L Room 110 is the only room that had a clay object. This was a pierced sherd. The rare appearance of clay objects in this period may be due to the short time of the period itself.

1.2.3.3 PHASE K2 and PHASE K2L: After Phase L, Phase K2 yielded the highest number of clay objects throughout the settlement's EBA history (Chart 82). Also in this phase all the subject rooms had clay objects. For the first time in this period the courtyard outnumbers the subject rooms in the number of clay finds. The same phenomenon appears also in the same phase for the bone finds.

Among the subject rooms Room 108 has the highest number of clay finds, but this number is almost half of the number of clay finds found in the courtyard (Chart 84). Obviously front rooms were also used for activities involving clay objects, however it seems like in this phase the courtyard became the main area of activities. Room 109 follows Room 108 in the number of clay objects. This picture is the same also for the bone objects (Chart 94). This might mean that in certain phases certain houses were more actively involved in activities involving bone or clay objects. Another possibility is that since the major activity area was the courtyard, houses that had less bone or clay objects were doing the activities in the courtyard whereas some houses preferred to do them indoors.

Room 110 and Room 111 contained the same number of clay objects, and Room 999 had only a single clay object. This is the last phase when Room 999 had a clay object. After the same phase bone objects also disappear from Room 999. The reason for this might be that the activities moved certainly towards the front rooms and outdoors and back rooms (and the middle room) were reserved for other activities (i.e sleeping) or again it could be a matter of preservation.

The relationship between the rooms and their number of clay finds in Phase K2 is:

- 200 >108 >109 > 110 = 111 > 999

In Phase K2L only the courtyard and the area between Room 109 and its back room Room 9 yielded single clay objects. Although it is not certain whether Room 9 had actually a clay object or whether this belonged to Room 109, probably it was

from Room 109 since the single clay object was a slingshot and it was presumably not used in a living or sleeping area.

1.2.3.4 PHASE L: Among the later phases Phase L yielded the highest number of clay objects (Chart 82). After this phase there is a considerable decrease in the total number of clay finds, as it is for the bone objects (Chart 95). Except for Room 999 all the subject rooms and the courtyard had clay objects in this phase. Interestingly in Phase L Room 999 did not reveal bone objects either.

The highest number of clay objects in Phase L appeared in Room 109 (Chart 85). Again for bone objects the highest number appeared in the same phase in Room 109. Room 109 seems to be an intensive activity area in Phase L. Although for bone objects Room 110 had an equal number of bone objects with Room 109, for clay objects the second area with the highest number of clay objects is the courtyard. Room 110 also had considerably more clay objects than Room 108. Room 109 and Room 110 had more clay objects in Phase L than they yielded in other phases. Room 111 had only a single clay object and this was a pierced sherd, therefore it is better to exclude Room 111 as a high-activity area in terms of clay objects. The activities involving clay objects seem to concentrate in the 2 front rooms and the courtyard.

After this phase there is no other phase when all the 4 subject rooms (Rooms 108,109,110 and 111) reveal clay objects in the same phase. Moreover none of these rooms will reveal a comparably high number of clay finds after Phase L. Only the courtyard continues to reveal clay objects until the end of Phase O and in every phase after Phase L the courtyard reveals the highest number of clay objects. The same phenomenon appears again also with bone objects (Chart 92).

The relationship between the rooms and their number of clay finds in Phase KL is:

- 109 > 200 >110 > 108 > 111

1.2.3.5 PHASE LM and PHASE M: Only Room 108, Room 109 and the courtyard had clay objects in Phase LM (Chart 86). Room 109 and the courtyard were also among the three areas in Phase LM that yielded bone objects. Although Room 110 and Room 111 did not have any clay objects in Phase LM, they had clay objects in Phase M (Chart 87). Moreover in this phase no clay object was found in Room 108.

Including Phase LM and Phase M in the last phases of the settlement the courtyard yielded always the highest number of clay and bone objects. The subject rooms reveal only several clay or bone objects (Chart 82 & Chart 92).

1.2.3.6 PHASE NO and PHASE O: Although the total number of clay objects found in Phase NO is the lowest among the later phases, the courtyard had again the highest number of clay objects for both phases. In Phase NO the second room after the courtyard with a higher number of clay objects is Room 110 which had only 2 clay objects, whereas Room 109 and Room 108 had only one (Chart 88).

Phase O shows an increase in the total number of clay objects, which was decreasing since Phase LM (Chart 82). Other than the courtyard, only Room 110 and Room 109 yielded both 2 clay objects (Chart 89).

1.2.3.7 CONCLUSION

For the later phases the highest number of clay objects appeared in Phases K1, K2 and L (Chart 82). In phases when the subject rooms yielded relatively higher

numbers of clay objects, the courtyard had usually not more than the subject rooms (except Phase L). However in phases when the subject rooms had only small numbers of clay objects, the courtyard outnumbered the subject rooms considerably (Chart 82). This might mean that in different phases the location -where the activities involving clay objects- was switching from indoors to outdoors.

Room 108 and Room 109 showed the greatest diversity in the type of clay objects and these rooms also had the highest number of clay objects after the courtyard (Chart 90). Rooms 108, 109, 110 and the courtyard showed the longest continuity of the appearance of clay objects. The relationship between the rooms and their number of clay objects is:

- 200 >109 >108 >110 >111 > 999

As it is seen neither the front room of the three-roomed house, nor the middle room of the same house yielded more clay objects than the other two-roomed houses' front rooms. In fact these two rooms had the least number of clay objects. This might mean either that the activities involving clay objects were not taking place in the three-roomed house (perhaps the household of this house was doing the activities in the courtyard), or this room was reserved for other purposes, since clay objects appear rarely in these two rooms.

In general the clay objects found in the settlement do not appear in the cemetery. There are only three exceptions: spindle whorls, rattles and clay anthropomorphic figurines. As noted above, the reason why a tool like the spindle whorl appears in burials might be due to its symbolic meanings. Rattles and figurines were probably also carrying such a meaning.

1.2.4 BONE FINDS

Bone objects must have been the least energy and time consuming objects to produce compared to metal, clay or stone objects. This is due to bone's abundance as a disposed material but also due to its easily workable and long-lasting qualities.

For most of the bone object the species which the bone object was made of is known. These species are mostly sheep and goat, cattle, pig and dog. Only a very small percentage of the bones were of wild animals such as fox, hare or wild boar (Baykal-Seeher & Obladen-Kauder 1996: 287-288). It is been reported that the rib and metatarsal bones were the most preferred bones (Baykal-Seeher & Obladen-Kauder 1996: 288).

Bone objects consist mostly of utensils such as cutting or polishing tools. Awls form the largest number of bone finds (Baykal-Seeher & Obladen-Kauder 1996: 287). Bone objects are usually daily used objects or parts of composite objects. There is also a category for figurative bone objects (cultic?), however their function remains unknown. In the subject rooms and phases the most common bone objects are the awls and spatulas. Antler objects also exist, however they are very scarcely found.

1.2.4.1 Awls: Awls are the tools with a sharp end which may had been used for various/multiple functions. For awls the most commonly used bones were sheep bones.[163] Obladen provides a detailed typology for the awls by looking at their material (species that the bone belongs), dimensions, point and shape shapes

[163] see Baykal-Seeher & Obladen-Kauder 1996: 290, Abb.207

(Baykal-Seeher & Obladen-Kauder 1996). However these are not going to be discussed here.

There are in total 385 awls, however only 205 of these were stratified (Baykal-Seeher & Obladen-Kauder 1996: 297). In the later phases (after K2) most of the awls were made of sheep and goat bones and there are no awls made of cattle bones. On the hand in the earlier phases, especially between Phase D and Phase F2 there are also awls made of cattle (Baykal-Seeher & Obladen-Kauder 1996: 299). The reason why awls made of cattle bones were used very occasionally between Phase F3-K2 and disappear after Phase K2 may be due to the shortage of cattle consumption. However it is also possible that the comparatively higher percentage of the unknown bones in these later phases may represent unidentifiable cattle bones. Since after Phase K2 for instance all the spatulas were made of cattle bones (see below), the reason might be more about the possibility that certain species' bones were more preferred (or better?) for certain tools, rather than the possibility of a shortage in cattle.

As usual the courtyard has the highest number of bone awls followed by the rooms closer to the northern gate, i.e Room 108, Room 109, Room 110 and Room 111. Phase K1 yielded the highest number of bone awls in the highest number of different rooms.[164] In Phase K1 interestingly the room with the highest number of awls is not the courtyard but it is Room 109, which neither before nor after Phase K1 yielded a comparable number of bone awls. Room 110 has a comparable number of awls in Phase L (Chart 78). Before Phase I, awls never appeared in a room more than

[164]see Baykal-Seeher & Obladen-Kauder 1996: 299, Abb.229

3 times in the same phase. However after Phase I even rooms other than the courtyard had 5 or 6 awls in a single period.

For the later phases Room 110 showed the longest continuity of the appearance of awls among the subject rooms. The front rooms (Rooms 108,109 and 110) have a close number of awls in the later phases, whereas the Room 999 had small numbers of awls only between Phases F3G and K2.

Daily used bone objects such as tools were not found in the cemetery and the awl is one of those objects.

1.2.4.2 Spatulas: Spatulas are the tools that were made usually of the rib bones of cattle. These rib bones were smoothened and flattened to create a handle and 2 rounded[165] or triangularly[166] sharpened edges of the spatula (Baykal-Seeher & Obladen-Kauder 1996: 301). None of the spatulas at the settlement were found complete and as Obladen notes, this was probably due to the instability of the long and thin form of the spatula itself but also due to the intensive use (Baykal-Seeher & Obladen-Kauder 1996: 301).

There are in total 84 spatula fragments including the half-products and 45 of these were stratified. Spatulas made of sheep and goat bones were only found in the early phases (Phase D-F2) and in these early phases more than half of the spatulas were made of cattle bones (Baykal-Seeher & Obladen-Kauder 1996: 303). The percentage of the spatulas made of cattle drop between Phases F3 and K2 since the majority of the bones used for spatulas were not identified. In the later phases (after Phase L) all the spatulas were made of cattle bones.

[165] The rounded spatulas are the most common type of spatulas in the settlement (Type II)
[166] The rectangularly formed spatulas are the least common type in the settlement (Type III)

After Phase GH none of the rooms on the south of Room 108 yielded spatulas, whereas the rooms 108, 109, 10, 111 and 999 never had spatulas before Phase GH.[167] It seems like there was a shift of the location of the activity for which the spatulas were used. It is possible to state that throughout different phases front rooms had more spatulas than the back rooms. The courtyard has a relatively lower number of spatulas compared to other finds, but still it has the highest number of spatulas among the other rooms with spatulas. The courtyard also yielded spatulas only after Phase GH. Except the courtyard none of the rooms had more than 2 spatulas in a certain phase.

Among the subject rooms 108 and 109 had the highest number of spatulas; both had 2 spatulas in Phase K2 and Room 109 had also 2 spatulas in Phase NO. Except Room 999 which is a middle room, all the subject rooms had spatulas in the later phases and all had one spatula in Phase K1 (Chart 79). There are two instances where two rooms of a house both yielded spatulas. These are Room 10 and Room 110 in Phase HI and Room 111 and Room 999 in Phase H. Other than these each house had only one room with a spatula which might mean that one spatula was usually enough for the entire household for whichever activity it was used for. Obladen suggests that the function of the spatulas might be related with smoothing other larger objects such as spindle whorls, andirons, combs or rattles, or with stirring, with spreading materials such as dye or lastly with scraping leather (Baykal-Seeher & Obladen-Kauder 1996: 304).

1.2.4.3 Blades/Knives: The bone blades or knives are the bone objects which have one bluntly grinded side used for cutting. There are only 5 bone blades in the

[167] see Baykal-Seeher & Obladen-Kauder 1996: 303, Abb. 233

settlement and 3 of them were made of cattle rib bones whereas the two remain with an unknown species (Baykal-Seeher & Obladen-Kauder 1996: 301). Out of these 4 were stratified. The stratified blades were found in one back room (Room 6 in Phase E1E2), in one front room (Room 108 in Phase K2) and in the courtyard (one in Phase K2L and one in Phase L). The random distribution in phases and rooms cannot be explained due to the small number of examples.

1.2.4.4 Polishing Tools: The bone polishers usually had one side that showed traces of intensive use and a highly polished surface. Obladen suggests that these were probably used to smooth or polish other objects (Baykal-Seeher & Obladen-Kauder 1996: 304). None of the bone polishers were found complete. In total there were 9 polishers and 5 were analyzed osteologically: 2 of them were made of cattle bones, 2 of ruminants and one of an unidentified animal (Baykal-Seeher & Obladen-Kauder 1996: 304).

5 bone polishers were stratified and only one was found in situ. For the early phases Room 2[168] (Phase E1) and Room 8 (Phase F1F2F3) had single examples of bone polishers. For the later phases only Room 108 among the subject rooms had a bone polisher in Phase L. The courtyard yielded two examples (one in Phase K1 and one in Phase K2). Looking only at this limited number of polishers it seems like the polishers were not in use for a long time period. Perhaps other objects were also used for polishing.

1.2.4.5 Spoons: The bone spoons have a concave plate part and a shaft and the concave part was in different forms such as oval, round or asymmetrical. Most of

[168] The one that was found in situ

them were in a “spatula-form” or oval (Baykal-Seeher & Obladen-Kauder 1996: 305). In fact since spatulas and spoons could be used for the same activity it is not unusual that they have a similar form. This may explain why they appeared roughly in the same phases.

In the settlement 19 spoons were surfaced, however none of these were found in a complete form. There was also one half-product spoon found in Room 4 in Phase F1F2. It is interesting that a half-product was in a back room which might suggest disposal rather than production. 14 of the spoons were analyzed and it appeared that 9 of these could not been identified which species they belonged to. Only 4 were identified to be of cattle and 1 was of an unidentified mammal (Baykal-Seeher & Obladen-Kauder 1996: 305).

8 spoons were stratified and 4 of these were found in front rooms, 2 in back rooms and 2 in the courtyard. The ones that appeared in the front rooms appear only in the early phases (Room 4 in Phase F1F2[169] and Room 6 in Phase GH). On the other hand the courtyard and the back rooms yielded spoons only in the later phases. Room 109 had one example in Phase K1K2, the courtyard had two examples; one in Phase K2 and one in Phase L.[170]

Since there is also one metal spoon (?) in Room 104 from Phase H and clay spoons were found in the courtyard, from Room 101, Room 8 and Room 111 between Phases F3 and K1K2L (see above) it seems like the middle phases in the settlement (about from Phase F until Phase MN) were the range of the appearance of the spoons.

[169] a half-product
[170] see Baykal-Seeher & Obladen-Kauder 1996: 305, Abb.234

Spoons were not found in the cemetery however it is also possible that the metal "razors" had a similar function to the spatulas if not to the spoons.

1.2.4.6 Handles and Sockets: The bone handles are parts of composite objects represented in 23 examples and 21 fragments, although except several cases[171] it is not clear what objects these handles belonged to (Baykal-Seeher & Obladen-Kauder 1996: 306). More than half of the fragments were examined and it appeared that most of them could not be identified or assigned to a species (Baykal-Seeher & Obladen-Kauder 1996: 305). Most of the handles were either round or oval.

13 of these bone handles were stratified. Only the courtyard yielded two handles in the same phase, other than that, all the houses had only a single room with a single handle in a certain phase. This single room was usually the front room. Before Phase F3 mostly the rooms on the south of Room 108 had bone handles, whereas after this phase the rooms on the north of Room 108 had bone handles.[172] This may again depict a possible shift of production location. Among the subject rooms Room 109 had one bone handle in Phase L, Room 111 had one in Phase K1 and the courtyard had 2 examples in Phase L.

Sockets are the tubular hollow objects made usually of long bones of cattle, sheep/goat and hare[173]. These were probably also parts of composite objects. Under this category there are 17 examples and 9 of these were stratified. Most of the sockets were found in the middle phases (Phase F3-K2) (Baykal-Seeher & Obladen-Kauder 1996: 306). There is a back room that yielded bone sockets in early phases (Phase E1E2 and F1F2) and as usual the courtyard had the highest number of bone

[171] 2 samples are known to belong to spoons: Baykal-Seeher & Obladen-Kauder 1996: 306
[172] see Baykal-Seeher & Obladen-Kauder 1996: 306, Abb. 236
[173] see Baykal-Seeher & Obladen-Kauder 1996: 306, Abb. 237

sockets appearing after Phase K1K2.[174] Among the subject rooms again only Room 109 yielded one bone socket in Phase L and Room 111 had another one in Phase K1 which are both front rooms. It is interesting that these two rooms were also the only two rooms among the subject rooms with bone handles and the bone handles and bone sockets appear in the same phase in the same room. In other words, Room 109 had a bone handle and a bone socket in the Phase L) and Room 111 had a bone handle and a bone socket in the Phase K1. This might indicate that whatever tools these bone parts belonged to, were used comparatively more intensively in Room 109 in Phase L and in Room 111 in Phase K1.

There are some bone sockets with traces of incision which are suggested to be "idols" (Baykal-Seeher & Obladen-Kauder 1996: 307); however these incisions look more like decorative applications than anthropomorphic features and do not seem to have a similar shape/form either to the metal or stone "idols".

The only antler object in the subject rooms is an antler socket found in Room 108 on a surface younger than Phase K2. This was made of a fallow deer (Baykal-Seeher & Obladen-Kauder 1996: 312). This was a hallow base or handle for another object as the other bone sockets were.

The small number of bone handles and sockets shows that perhaps they were part of an object that was also not very commonly found in the settlement. Presumably some metal weapons (daggers for instance) had bone or wooden handles, but none of the objects found in the cemetery had such handles, may be due to preservation or may be due to the fact handles were not put in the burials.

[174] see Baykal-Seeher & Obladen-Kauder 1996: 306, Abb. 238

1.2.4.7 Tubular Objects: Differently than the handles or sockets the tubular objects do not seem to have a wide enough width to put some other object in them. Usually both edges of the tubular objects were worked in a way to create a tube. There are 11 tubes found in the settlement and 4 out of 9 analyzed tubes could have been identified. 3 of these were of sheep and goat and one was of a fallow deer (Baykal-Seeher & Obladen-Kauder 1996: 307).

6 tubes were stratified and except for one tube that was found in relation with the courtyard and the front rooms Room 106 and Room 107 (Phase K1), all the tubes were found either in a back room or in the courtyard. There is no room or house with more than one tube. The earliest appearance of these objects is in Phase F2 in Room 6. None of the subject rooms yielded a tubular object in the later phases. Only Room 999 had one tube in Phase H and for the phases later than Phase H, all the tubes come from the courtyard. Obladen suggest that these might have been used for blowing dye on the ceramics or on other objects (Baykal-Seeher & Obladen-Kauder 1996: 307); however there is no further note such as whether there are remains of such a process (i.e dye, charcoal etc.). Another possibility is that these were sucking tubes/straws (Baykal-Seeher & Obladen-Kauder 1996: 307), but they might simply be decorative applications or pendants since beads/pendants in similar forms were also found (see below). The cemetery did not reveal any example for such tubular bone objects.

1.2.4.8 Accessories and Personal Adornments: Although Obladen analyzes the objects such as belt buckles, shells and jewellery separately, due to the small of number of these objects found in the subject rooms these are going to be discussed here together.

There were two belt buckles and one belt hook found in the settlement. Out of these 3 belt accessories one belt buckle and the belt hook were stratified. The belt buckle was from Room 109 (Phase H) and the belt hook was from the courtyard (Phase K1K2) (Baykal-Seeher & Obladen-Kauder 1996: 307). The belt hook was fragmentary but it had a circular opening. The reason why these objects were assigned to be belt accessories is due to comparanda found in other prehistoric sites (Baykal-Seeher & Obladen-Kauder 1996: 307) where similar objects were also called "belt buckles".

The bone jewellery consists of beads and pendants in Obladen's categorization; and none of these were found in the subject rooms. However objects that were categorized as "amulets" which were not identified could also be counted as personal adornments since some of them might have been worn as pendants (see below).

The separate category of the 12 "drilled objects" could also be as pendants or buttons and therefore they are going to be discussed here. There are three examples found in the subject rooms for the later phases. The small one found in the wall between Room 108 and Room 109 (Phase K1K2) was probably part of a needle with a single hole; however the possibility of being a bead or pendant may count also for this object. The other two were from Room 109 found in Phase L (Baykal-Seeher & Obladen-Kauder 1996: 309). One of these had two holes which was probably an attachment for clothing or again a different type of pendant. There is no comment on the form of the second drilled object from this room in the final publication. Still it is worth noting that Room 109 had two of these drilled objects. Room 109 seems to have the greatest diversity of bone objects among other rooms.

1.2.4.9 "Amulets": Although neither beads nor pendants were found in the subject rooms in the later phases, amulets were surfaced in two of the subject rooms. The amulets do not have an exactly known function; it is also not certain whether these were actually amulets. The "amulets" found in the two subject rooms do not seem to be made to be worn like pendants, however the other two amulets had notches on their sides which could be places where the string was wrapped. The "amulet" found in Room 108 was from Phase K2. This was made of a human skull fragment which had lots of scratch marks on it (Baykal-Seeher & Obladen-Kauder 1996: 309). Obladen suggests that this might be part of a magical practice since it was found in relation with a ceramic container (Baykal-Seeher & Obladen-Kauder 1996: 309); which actually does not explain exactly why this should be interpreted as a magical practice. Perhaps since it was a human cranium and it was not transformed into a tool, this might give it a symbolic meaning than a practical function.

The other amulet was made of cattle bone which was found in Room 109 in Phase LM. This one has also notches on the sides and therefore stylistically it may not be very different than the other "amulets". However Obladen suggests that this amulet has a phallic form (Baykal-Seeher & Obladen-Kauder 1996: 309) although it looks more like the bone anthropomorphic figurines for instance found in Room 6 in Phase F1F2.[175]

In the settlement there are also some bone objects or fragments of worked bones which do not have an identified function. One of these was found in one of the subjects rooms. This was a decorated phalanx bone found in Room 109, 110 in Phase K2 (Baykal-Seeher & Obladen-Kauder 1996: 381). Other than this room there two

[175]see Baykal-Seeher & Obladen-Kauder 1996: Tafel 151-1

more rooms with such decorated phalanxes which could be amulets/pendants or gaming pieces. One of these was found in a back room (Room 7 in Phase F3) and the other was outside the enclosure wall (Room 300) close to Room 8 and Room 9 (Baykal-Seeher & Obladen-Kauder 1996: 381).

1.2.4.10 Unknown: In the subject rooms there are in total 4 worked bones which have a form and function that remain unknown. All of these were found either in Room 108 or in Room 109 only between phases K1 and K2 (Baykal-Seeher & Obladen-Kauder 1996: 381). There are also several worked antler fragments found in Rooms 200 and 108 (Baykal-Seeher & Obladen-Kauder 1996: 312), however the function of these are also unknown.

1.2.4.11 Bone Objects that were not found in the subject rooms: Some of the bone tools and none of the antler tools were found in the subject rooms for the later phases. Bone tools that were absent in these rooms are mostly cutting tools like scrapers, slicers and chisels. It is not certain whether the function that these tools were assigned were actually used for that purpose. This is mainly due to the small number of these finds in the settlement. Most of these tools were usually found in the courtyard. One of the chisels was found in the rubble area in Room 300 (Phase E2) which was outside the enclosure wall perhaps thrown as a disposal. Although there is one chisel found in Room 11 in Phase E1, most of the bone tools were found either in open areas or in the front rooms. In addition to these tools there is another daily used object that was represented by a single find in the settlement. This is the carved bone fork which was found from the stone deposits between Room 8 and 108 in Phase H (Baykal-Seeher & Obladen-Kauder 1996: 305).

Although bone awls were found comparatively in high numbers, bone needles were absent in the settlement. Needles were separately categorized than the awls, however there is not much difference between awls and needles in terms of the size of the shaft and the sharper edge (Baykal-Seeher & Obladen-Kauder 1996: 300). Since all the needles were broken on two ends, it was not possible to know which side was the sharp edge, except one example which had a needle hole. Out of 4 bone needles only one was examined osteologically and the species and the species could not been identified (Baykal-Seeher & Obladen-Kauder 1996: 300). Moreover only one of them was stratified which was found in the courtyard in Phase K1.

The antler tools in the settlement consist mostly of hitting tools such as hammers and none of these were found in the subject rooms. The only antler object found in the settlement is the antler socket (see above). The hitting tools were all made of reed deer antler except one that was made of fallow deer antler (Baykal-Seeher & Obladen-Kauder 1996: 311). Half of the stratified hitting tools were found in the courtyard between phases E1 and F3. For the later phases only Room 111 yielded one hitting tool from Phase OP. The only antler hammer found in the settlement was from Room 12,300 in a disturbed layer of Phase I (Baykal-Seeher & Obladen-Kauder 1996: 382).

Shells usually appeared as personal adornments or beads in prehistoric contexts, and there is such a shell bead from the courtyard of the Demircihöyük settlement (see below). However the other shells found in the Demircihöyük settlement were exceptional. There are 6 shells in the settlement and 5 of these were found in situ part of a find assemblage that was consisting of miniature vessels, spindle whorls, rattles, a comb, a polishing stone and one polishing bone. This

assemblage was surfaced in Room 2 in Phase E1 (Baykal-Seeher & Obladen-Kauder 1996: 307). Obladen states that the shells were used as palettes since one of the shells had red pigment remains in it (1996: 307). Another shell with red pigments was found among the fallen mudbrick remains in Room 300 in Phase K1 (Baykal-Seeher & Obladen-Kauder 1996: 380). It is interesting that such an assemblage was found in the back room, not in the usual production areas, which perhaps supports Obladen's theory that the shells were used for make-up (Baykal-Seeher & Obladen-Kauder 1996: 307).

In addition to tools, there are personal adornments and figurative representations that were surfaced in the settlement but were absent in the subject rooms. The personal adornments consist of pendants and beads. Teeth of animals like dogs and foxes were drilled to make pendants (Baykal-Seeher & Obladen-Kauder 1996: 307); however no such objects were found in the subject rooms in any phase. Only back rooms had single tooth pendants in the early phases. The courtyard yielded in total 4 tooth pendants one in each of the phases I, IK1, L and M (Baykal-Seeher & Obladen-Kauder 1996: 307). The one found in Phase IK1 had a half-way drill[176] and therefore it represents the only half-product of this type of objects. The fact that the half-product was found in the courtyard again underlines the possibility that for many objects in many phases the courtyard was the main production area. There is only one tooth pendant that has an indentation it and this pendant was made of a cattle tooth perhaps to be worn as a pendant. This was found again in a back room (Baykal-Seeher & Obladen-Kauder 1996: 307).

[176] see Baykal-Seeher & Obladen-Kauder 1996: Tafel 150-3.

In total there were 10 bone beads, 6 of these were discussed in the final publication. The bone beads were usually covered with light blue or turquoise color made of copper or cobalt pigments (Baykal-Seeher & Obladen-Kauder 1996: 308). The analyses on these beads revealed that these were actually ivory beads (Baykal-Seeher & Obladen-Kauder 1996: 308). 3 of the bone beads were stratified and these were from Room 109 (Phase E2F1), from Room 108 (Phase H) and from the courtyard (Phase IK1) (Baykal-Seeher & Obladen-Kauder 1996: 308). There are also shell and sea urchin fossil beads and these were also found in relation with the courtyard (Phases K1K2 and Phase OP) (Baykal-Seeher & Obladen-Kauder 1996: 308).

There were in total 2 anthropomorphic and 1 animal figurines that were not found in the subject rooms. The anthropomorphic figurines were made of rib bones, one of a cattle and one of an unknown animal bone (Baykal-Seeher & Obladen-Kauder 1996: 308). One of these was found in Room 6 from Phase F1F2. This one had features like head, lower and upper body, arms, and facial features like eyes, however it is missing its legs. The other one was found between Room 11 and the northeastern gateway (Room 500) in a disturbed context (Baykal-Seeher & Obladen-Kauder 1996: 308). This one had only the head and its upper body which were in a very stylistic form that are similar to the stone idols found in the cemetery, except the fact that the ones in the cemetery had a round body form and this one has a more rectangular upper body. The single animal figurine is not certainly identified. This was found in the courtyard in Phase K1K2 (Baykal-Seeher & Obladen-Kauder 1996: 308). The form does not completely look like an animal; therefore it might also be one of the worked bones with an unidentified function.

1.2.5 COMPARISON OF ROOMS: BONE FINDS

To compare the number of bone finds found in the subject rooms Room 108, Room 109, Room 110, Room 111 and Room 999 in the late phases (after Phase K1), a separate database was created. The bone objects from the courtyard (Room 200) were also included, however only for the phases that the subject rooms yielded bone objects. The aim was to see whether the courtyard had more or less bone objects than the subject rooms in the phases when the subject rooms had bone objects.

1.2.5.1 PHASE K1: In Phase K1 all the subject rooms and the courtyard yielded bone objects, just as they all yielded clay objects. This means that the use or production of bone objects was not limited to certain area in the settlement.

For Phase K1 Room 109 and Room 111 had the highest number of bone objects (Chart 91). Room 111 is the front room of the 3-roomed house and therefore it would be expected to find more materials in this room and in Room 999 which is the middle room of the same house. However Phase K1 is the only phase where Room 111 has a higher number of bone finds than the other front rooms (Chart 92). Moreover Room 999 usually had the lowest number of bone finds, perhaps due to the fact that it was a back room and the activities involving bone objects were not taking place in this middle room.

Room 109 which is the front room of one of the two-roomed subject rooms, also did not reveal a higher number of bone objects than other subject rooms in any other phase than Phase K1.

Phase K1 is one of the three phases together with Phase K2L and Phase L when the courtyard had less bone objects than the subject rooms. The other rooms have a more or less close number of bone finds in this phase.

The relationship between the rooms and their number of bone finds in Phase K1 is:

- 109 > 111 > 108 > 200 > 110> 999

1.2.5.2 PHASE K1K2: This phase is one of the two phases when the courtyard did not only reveal the highest number of bone objects but also when there are only two other rooms with bone objects in the same phase (Chart 93). In this case 1 bone objects was found in Room 109 and 3 more bone objects were found between Room 108 and Room 109, whereas the courtyard had 8 bone objects. The large difference between the courtyard and the subject rooms in this phase, and the fact that there are more bone objects in the courtyard than the previous phase (Phase K1) might be explained by the move of the activities involving bone tools from indoors to outdoors.

1.2.5.3 PHASE K2: The total number of bone objects from Phase K2 is equal to the total number of bone objects from Phase K1, however the distribution of the bone objects among houses is very different. The highest number of bone objects in Phase K2 appeared in the courtyard and there is a slight increase in the number of bone objects compared to Phase K1K2.

Room 108 follows the courtyard in the number of bone objects in this phase (Chart 94). This is the only phase when Room 108 has more bone objects than the other subject rooms. As Chart 92 shows there is a considerable increase in the

number of bone objects in Room 108 compared to the previous phases. Moreover after this phase Room 108 never yielded such a high number of bone objects.

The number of bone objects found in Room 999 is the same in Phase K1 and Phase K2; in both phases there is only one bone object in this room. This is perhaps again due to the fact that this was not a front room. After Phase K2 bone objects disappear from Room 999. On the other hand Room 111 and Room 109 showed a decrease between Phase K1 and Phase K2. In fact Room 111 drops considerably from Phase K1 to Phase K2 (Chart 92). Room 111 reveals only one bone object in this phase just like Room 999 which are both in the three-roomed house. Although the house has three rooms it had the least number of bone objects in this phase compared to the other subject rooms.

Different than Room 111 and Room 109, Room 110 showed consistency in the number of bone objects between Phases K1 and K2, although bone objects are absent in this room in Phase K1K2.

After this phase Room 999 no longer yielded bone objects.

The relationship between the rooms and their number of bone finds in K2 is:

- 200 > 108 > 109 > 110 > 111 = 999

1.2.5.4 PHASE K2L: In this phase only Room 108 and the courtyard had bone objects. As in Phase K1, in this phase Room 108 had more bone objects than the courtyard. However compared to the previous phase, the number of bone objects decreased in Room 108. In addition to the 3 bone objects from Room 108, there is

only a single bone object from the courtyard in this phase. Bone objects were absent in all the other subject rooms.

1.2.5.5 PHASE L: Phase L is the last phase when the courtyard has less bone objects than the subject rooms (Chart 95). Room 110 and Room 109 which are rooms of neighboring houses had an equal number of bone objects in this phase. Moreover these rooms have the highest number of bone objects in Phase L. After Phase K1 Room 109 never yielded such a high number of bone objects. This phase is also the only phase when Room 110 has the highest number of bone objects not only among other rooms, but also when it has the highest number of bone objects throughout different phases.

The courtyard and Room 108 show a decrease compared to Phase K2, however compared to K2L both show an increase in the total number of bone objects. After this phase Room 108 and Room 111 no longer reveal bone objects.

The relationship between the rooms and their number of bone finds in Phase L is:

- 110 = 109 > 200 > 108 > 111

1.2.5.6 PHASE LM, PHASE M and Phase NO : Phase LM onwards, the courtyard seems to be the major production and use area of bone objects since there are only two other areas than the courtyard that reveals bone objects. In Phase LM this is Room 109 and in the two last phases (Phase M and NO) it is Room 110. Neither of these rooms are part of the three-roomed house. After Phase L there it a sudden drop in the number of bone objects and gradually this number becomes smaller and

smaller. The latest phase with bone objects is Phase NO and there are only two bone objects in this phase, one from the courtyard and one from Room 110.

1.2.5.7 CONCLUSION

For the later phases the highest number of bone objects appeared in Phases K1, K2 and L (Chart 92). Almost in all the later phases the courtyard had the highest number of bone objects and more bone objects than the subject rooms. Only in Phases K1, K2L and L there are front rooms that had more bone objects than the courtyard. In terms of diversity, Room 109 had the greatest variety of bone objects throughout these later phases. Furthermore it is also the room with the highest number of bone objects after the courtyard (Chart 96). The relationship between the rooms and their number of bone objects is:

- 200> 109 > 108 > 110 > 111 > 999

As it is seen neither the front room of the three-roomed house, nor the middle room of the same house yielded more bone objects than the other two-roomed houses' front rooms. Only in Phase K1 Room 111 outnumbers some other subject rooms, however Room 999 is always one of the rooms with the lowest number of bone objects in any phase. This might be due to the fact that the middle room was not used for activities involving the use or production of bone objects.

Since the only bone object from the named burials is the bone bead from burial G463, it is not possible to make a comparison between the bone objects from the cemetery and from the settlement.

1.2.6 FLINT AND OBSIDIAN ARTIFACTS

In terms of the numbers flint and obsidian artifacts form the largest body of small finds since flakes, cores, debris and artifacts are all counted under this category (Chart 69). Flint and obsidian artifacts were discussed separately from the ground stone finds in the publication; therefore here they are also going to be discussed likewise.

The flint and obsidian artifacts consist of primary products such as cores, flakes and debris, and also of secondary products like tools such as blades, scrapers, awls, burins, sickle blades and arrowheads. Again the typological differences which are discussed already in detail in the final publication will not be discussed here. The main concern is to see whether the remains of the stone tool production is concentrated in a certain room, house or area.

1.2.6.1 Cores: All the cores found in the settlement were found with blade negatives on them (Baykal-Seeher & Obladen-Kauder 1996: 16). The flint cores were grouped according to different types by looking at the number of surfaces the core had traces of hits. The most common type of cores is the ones with a single hit surface and which did not have preparation ridges.[177] This type is also the most common type of cores appeared in the subject rooms.

There in total 58 stratified flint cores in the settlement. Except Room 109 in Phase K1 with 5 cores and the courtyard in Phase LM, there is no room that had

[177] Type 1b: Baykal-Seeher & Obladen-Kauder 1996: 18, Abb.5

more than two cores in the same phase. None of the phases yielded more than 9 cores and these 9 cores were found in Phase K1.[178]

Flint cores appeared mostly in Phase K1 in the subject rooms although the courtyard did not reveal any cores in this phase (Chart 97). Room 109 had 5 cores (1 more in relation with other rooms) in this phase and Room 110 had a single core (2 more in relation with other rooms). Room 108, Room 111, Room 999 and the courtyard did not reveal flint cores in Phase K1. In fact, except Room 108 which had a single core in Phase K1K2, Room 111 and Room 999 did not reveal any cores throughout the later phases. It seems like the production of the cores was concentrated in Phase K1 in the courtyard and in the Rooms 109 and 110.

The subject rooms reveal only single cores between Phase K1K2 and Phase M, only the courtyard had 3 cores in Phase LM. In this phase only Room 110 among the subject rooms yielded a single core. Room 110 is also the only room among all areas and rooms that yielded a core in Phase K2. It is possible that in Phase K2 the production of flint objects disappeared.[179] In deed after this phase the cores appear in a considerable number only in the courtyard in Phase LM.

The number of the obsidian cores is less than the flint cores, however again the largest number of obsidian cores appear in Phase K1 (Chart 98). Room 109 in this case had the highest number of obsidian flakes among the subject rooms; however the courtyard outnumbers the subject rooms in the total number of obsidian cores. As it was for the flint cores in Phase LM, obsidian cores also appear only in Room 110 and the courtyard in Phase L. Again Room 111 and Room 999 did not

[178] see Baykal-Seeher & Obladen-Kauder 1996: 18, Abb.5
[179] Also obsidian cores also did not appears after Phase K2

reveal obsidian cores in any phase. The appearance of obsidian cores lasted a shorter time period than the appearance of flint cores; obsidian cores disappear after Phase L in the subject rooms.

The distribution of cores implies a limited distribution both throughout phases and throughout rooms/areas. Core discs and core edge also show a parallel picture where only Room 109 (in Phase K2), Room 110 (in Phase K1) and the courtyard (in Phase K1K2) had single examples of flint core discs.

1.2.6.2 Items of Debris: These were flint debris that had no sign of retouch. There are in total 1338 flint debris items, but only 476 of these were stratified. Since the debris are the byproducts of another tools' preparation, together with cores they reveal where the production concentrated.

The distribution of flint debris items is interesting since rooms on the south of Room 106 and on the west of Room 111 did not reveal any flint debris in the later phases[180]. Although in earlier phases both back and front rooms contained high numbers of debris, in the later phases back rooms never yielded debris. The courtyard also yielded higher numbers of debris in the later phases.

Between Phase K1 and Phase K2L the appearance of flint debris is the highest. When considered together with the number of cores in this period, the high number of debris items might indicate that in this period flint production was more intensive than the previous or following phases. As it was for the cores again Room 109 had the highest number of flint debris among the subject rooms. In the total number the courtyard outnumbers all other rooms, however only in Phase K1, Room

[180] see Baykal-Seeher & Obladen-Kauder 1996: 23, Abb.11

108 and Room 109 had more debris items than the courtyard (Chart 99). Although Room 111 had several flint debris items, its back room Room 999 did not reveal any flint debris items.

The flint debris continues to appear over different later phases in Room 108, Room 109 and Room 110, but the courtyard yielded in all the later phases (Chart 99). This continuity shows that flint tools continued to be produced at the site in the later phases, mostly in the front rooms and in the courtyard.

1.2.6.3 Un-retouched Flakes: Flakes are also categorized under the primary flint products and there are 5169 un-retouched flakes. Most of the stratified 2040 flakes were found in the courtyard. The ones found in the houses follow the same pattern of distribution with the flint debris: Again rooms on the south of Room 106 and on the west of Room 111 did not reveal any flint debris in the later phases.

Another pattern that appeared also with the flint debris is that between Phase K1 and Phase L the number of the un-retouched flakes is the highest.[181] Moreover again Room 109 outnumbers the other subjects rooms with its number of un-retouched flint flakes (Chart 100). Especially in Phase K1 Room 109 yielded 101 un-retouched flint flakes which is a number that any room including the courtyard did not reveal in any phase. Room 109 seems to have a special place in terms of lithic production. In addition to Room 109, Room 6 which is a back room yielded a number of un-retouched flint flakes that no other back room yielded in any phase. The same room also showed the same pattern for the flint debris. Since this happened

[181] see Baykal-Seeher & Obladen-Kauder 1996: 24, Abb.13

in the early phases of Room 6 it is possible that it had a similar function to Room 109 in the earlier phases.

Room 108 and Room 110 have a close number of un-retouched flint flakes however the appearance of these artifacts in these rooms seems to shift from phase to phase. For example in Phase K2 Room 108 has more un-retouched flint flakes than Room 110, whereas in Phase L Room 110 has more un-retouched flint flakes than Room 108. Room 111 also had its highest number of un-retouched flint flakes in Phase K1, however Room 999 had only a single un-retouched flint flake which does not imply necessarily a production in this room.

Phase K1 and Phase L are the only periods when the subject rooms had more un-retouched flint flakes than the courtyard. This is also valid for the un-retouched obsidian flakes. However the courtyard showed a longer continuity in the appearance of un-retouched flint flakes and it also continued to reveal un-retouched flint flakes after the subject rooms no longer yielded un-retouched flint flakes.

There are also 117 stratified un-retouched obsidian flakes found in the settlement. This time Room 108 had the highest number of un-retouched obsidian flakes followed by Room 110 and Room 109 which have the same number of un-retouched obsidian flakes in the later phases (Chart 101). Phase K1 is again the period when the highest number of un-retouched obsidian flakes appeared. Interestingly in this period the courtyard yielded only a single un-retouched obsidian

flake.[182] In Phase K2 the courtyard did not reveal any un-retouched obsidian flakes and in Phase L Room 110 had more un-retouched obsidian flakes than the courtyard.

The subject rooms have a closer total number of un-retouched obsidian flakes in the later phases than they have for the un-retouched flint flakes. There is also not a big difference between the courtyard and the subject rooms. Room 111 should be excluded from this pattern since it only had a single un-retouched obsidian flake (Phase K1) and again Room 999 did not reveal any un-retouched obsidian flakes in the later phases.

1.2.6.4 Un-retouched Blades: The last category of primary products is the un-retouched flint blades and bladelets. There are in total 1304 the un-retouched flint blades and 553 were stratified. Most of these stratified blades were from the courtyard. The ones found in the houses follow the same pattern of distribution with the flint debris and un-retouched flint flakes: rooms on the south of Room 106 and on the west of Room 111 did not reveal any un-retouched flint blades in the later phases. This pattern might indicate that the production of flint was taking place in a certain area only in the later phases, whereas in the early phases the area of production was much more scattered.

Phase K1 has yielded the highest number of un-retouched flint blades not only in the later phases but throughout all the phases in the settlement. In this phase and in all other phases, and among all other rooms Room 109 had the largest amount of un-retouched flint blades.[183] In Phase K2 Room 108 outnumbers both Room 109 and the courtyard. Room 109 is followed by the courtyard and by Room 108 (Chart

[182] see Baykal-Seeher & Obladen-Kauder 1996: 79, Abb.89
[183] see Baykal-Seeher & Obladen-Kauder 1996: 29, Abb.19

102) in the total number of un-retouched flint blades. Room 110 and Room 111 have a close number of un-retouched flint blades, although the phases when they yielded un-retouched flint blades differ. Room 111 has for the first time a comparable number of flint products in Phase K1 with the other subject rooms. It is possible that flint blades were used instead of being produced in this room.

As it was the case with the other primary flint products, the courtyard yielded less un-retouched flint blades than the subject rooms in Phase K1. As already noted before, Phase K1 seems to be the zenith of the production not only in the subject rooms but also in the entire settlement.

1.2.6.5 Retouched Flakes: The retouched flint flakes are a group of secondary products and this category also includes the 6 retouched debris items and 8 notched flakes which makes a total number of 344 retouched flint flakes. Since the retouched debris and the flakes did not have much difference in their form or it was not possible in all cases to distinguish one from the other, they were discussed together.

Out of 344 flint flakes 158 were stratified. This time some rooms on the south of Room 106 and on the west of Room 111 reveal several retouched flint blades in the later phases. However none of the back rooms including the middle room Room 999 yielded retouched flint flakes in the later phases.[184] In the later phases there is not much difference between the courtyard and the subject rooms in a single phase. In deed the numbers of the retouched flint blades found in Room 109 (which has the highest total number of retouched flint blades) and the courtyard is very close to each other, especially in Phase K2 (Chart 103). Room 109 had especially high numbers of

[184] see Baykal-Seeher & Obladen-Kauder 1996: 30, Abb.21

retouched flint blades in Phase K1. This phase is the only phase that Room 111 yielded retouched flint blades. Room 108 reveals more retouched flint blades than other subject rooms and the courtyard in Phase K2L. There are only two retouched obsidian flakes from Phase L found in Room 109 and Room 110.

The numbers of the appearance of retouched flint blades is notably less than the primary products, however still the distribution of retouched flint blades among rooms but also among phases is similar to the primary product, although it is not exactly same. For instance Phase K2 outnumbers Phase K1, although for the primary products usually Phase K1 was the phase with the highest numbers.

1.2.6.6 Re-touched Blades: In the final publication Obladen discusses edge-retouched, end-retouched, tip-retouched, back-retouched flint blades separately, however here they are all collapsed under the category "retouched blades". There are in total 227 re-touched blades and bladelets but most of these were fragmentary (Baykal-Seeher & Obladen-Kauder 1996: 32). Only 104 of these were stratified.

As it is with the other stone industry materials, the back rooms yielded only a small number of retouched blades. This time the rooms on the south of Room 108 did not reveal any retouched flint blades in the later phases (except 1 back-retouched blade found between Room 106 and 107 in Phase K2L). Also the earlier phases seem to reveal less retouched blades than the later phases.

In different phases different subject rooms had the highest number of retouched blades (Chart 104). For instance in Phase K1 Room 109 had the more retouched blades than all other subject rooms and also than the courtyard, whereas in Phase L Room 110 outnumbers other rooms. This shows that there was no continuity

in the place where the activities involving retouched blades took place. Although the courtyard did not reveal notably more retouched blades than the subject rooms in a certain period, the courtyard yielded retouched blades in almost all the later phases which in the end outnumbered the total number of retouched blades found in the subject rooms. The only subject room that did not reveal any retouched blades in the later phases is Room 999.

The fact that there are small numbers of retouched blades in the rooms suggests that a retouched blade was sufficient for multiple activities which took place usually in the front rooms and in the last phases mostly took place in the courtyard.

Although there were only 2 retouched obsidian flakes, obsidian blades outnumber the flint blades with 1367 examples. 594 of these were stratified. Obladen explains the reason for this high number of obsidian blade/blade fragments due to the fact that obsidian is easily breakable whereas flint is not blades (Baykal-Seeher & Obladen-Kauder 1996: 80). This is supported by the small number of actually retouched obsidian blades (Baykal-Seeher & Obladen-Kauder 1996: 80).[185]

The common pattern of rooms on the south of Room 106 and on the west of Room 111 not revealing any cut stone artifacts is also seen here. In fact these rooms do not reveal any obsidian blades after Phase GH.[186] Phase K1 and Phase K2 show exceptionally high numbers of obsidian blades, especially in Room 108 and Room 109 (Chart 105). In Phase K2L Room 108 continues to reveal more obsidian flakes than other rooms, however after this phase obsidian blades almost disappear from Room 108, whereas Room 109 continued to reveal obsidian blades until Phase NP.

[185] 83 in total
[186] see Baykal-Seeher & Obladen-Kauder 1996: 83, Abb. 95

However it should be noted that Room 108 had more obsidian blades than the other subject rooms in the phases predating Phase K1. Room 110 shows relatively smaller numbers of obsidian blades than Room 108 and Room 109. Only in Phase LM Room 110 yielded more obsidian blades than all other rooms including the courtyard. Room 111 had obsidian blades only in two phases: Phase K1 and Phase K1K2. As usual Room 999 had only several obsidian blades in Phase K1 and Phase K2. The courtyard shows again the longest continuity and the highest number of obsidian blades appear in Phase K2L when only Room 108 among the subject rooms has a comparable number of obsidian blades.

1.2.6.7 Sickle Inserts: There are in total 816 sickle inserts from the settlement but 744 were in a shape and size to identify them typologically blades (Baykal-Seeher & Obladen-Kauder 1996: 38). Some of the blades were fragmentary and therefore could not been identified, therefore another criteria was taken for identifying sickle inserts. This was the microscopic analysis of the edges with smooth or shiny surfaces which proved the use of the sickle blades on plants blades (Baykal-Seeher & Obladen-Kauder 1996: 38). There is a detailed typology for the sickle inserts, however here they were all taken as a single group. The sickle inserts show variability in their thickness and width.

It is unexpected to find sickle inserts in the back rooms and they actually do not appear commonly in back rooms in the later phases, however sickle inserts also do not appear in front rooms except the subject rooms in the later phases. Room 999 for instance yielded several sickle inserts before Phase K1, but for the phases after K1 there are no sickle inserts in Room 999 (Chart 106). On the other the other subject rooms follow again the same pattern of the flint/obsidian blades, although

there are differences in the distribution of the sickle inserts in different phases. Interestingly in Phase K1 all the subject rooms outnumber the courtyard. Except Phase K1 and Phase L, in all phases the courtyard had more sickle inserts than the subject rooms, which is expected since sickle inserts or sickles were presumably not part of the household activities.

The highest number of sickle inserts found in the same room in a certain period is 14 (Room 109, Phase K1), however it is not possible to make an assumption whether this was the maximum number of inserts placed in a single sickle.

The phases between K1 and K2L yielded the highest numbers of sickle inserts and after this period the total number gradually decreases. This does not have to mean that there was also a decrease in agricultural production, since other artifacts also follow a parallel pattern.

1.2.6.8 Awls and Burins: Although Obladen discusses awls and burins separately, due to the small number of burins and due to the fact that awls and burins may had served similar purposes (i.e drilling) these are discussed here together. Obladen underlines that awls were probably used for drilling leather, shells or materials like wood, stone or bone blades (Baykal-Seeher & Obladen-Kauder 1996: 48), however the burins are suggested to be used in tool production blades (Baykal-Seeher & Obladen-Kauder 1996: 54). Awls are categorized according their length and width and these are assumed to be used for drilling different materials. Whatever activity the awls were used for was, it was taking place in doors since the courtyard had considerably less awls than the rooms.

There are 91 awls and 9 burins from the EBA settlement. 42 of the awls and 2 of the burins were stratified. Both of the stratified burins were from Phase K2L; one from Room 108, one from the area between Room 108 and the courtyard.

Compared to other stone artifacts the number of awls and burins is very small and their appearance in different phases or rooms is limited. There is no room in any phase with more than 2 awls. It should be noted that the later phases yielded more awls than the early phases. In the later phases only the subject rooms and the courtyard had awls blades (Baykal-Seeher & Obladen-Kauder 1996: 53). None of the rooms of the three-roomed house (Room 111 and Room 999) yielded awls. All the other subject rooms had the same total number of awls although there is difference in the phases they yielded awls (Chart 107).

There were also three obsidian awls in the EBA settlement only one was stratified which was from Phase K2L[187] found in the courtyard. The small number of obsidian awls may suggest that obsidian was perhaps not the best material for this purpose. Bone awls seem to be used more than flint or obsidian awls (Chart 78).

1.2.6.9 Chisels/Splitters: The chisels usually had fragmentation traces on their edges which led to the conclusion that these were middle tool used in the process of hitting a harder material (Baykal-Seeher & Obladen-Kauder 1996: 55). In addition to the fragmentation traces, the chisels had also surfaces with an indentation where they were hit with another tool (Baykal-Seeher & Obladen-Kauder 1996: 56). There were 55 chisels found in the settlement and 28 of these could be stratified.[188]

[187] The same period that the burins were found
[188] see Baykal-Seeher & Obladen-Kauder 1996: 56, Abb. 59

The appearance of chisels is very limited. The chisels appear only in 4 later phases and only in two subject rooms. Room 108 had chisels in Phase K1 and K2 whereas Room 109 also yielded chisels in Phase K2L and Phase M (Chart 108). In these phases the courtyard had close numbers of chisels to Room 109. Interestingly one of the back rooms that also had a diverse assemblage in the early phases (Room 6) yielded more chisels than other back rooms again in the early phases. Although for the early phases the subject rooms did not reveal more than one chisel for the later phases the main area of the use of chisels seem to be Room 108 and Room 109, followed by the courtyard. Again Phase K1 is the phase with the largest number of chisels.

1.2.6.10 Arrowheads and Arrow points: M. Korfmann made a distinction between the arrowheads and the arrowpoints according to their weight and Obladen also uses this distinction blades (Baykal-Seeher & Obladen-Kauder 1996: 57). The arrowheads have a trapezoidal shape with cut edges, whereas the arrow points had a more triangular point or an almond shape. The shaft was also a criterion to distinguish these two types.

The arrowheads are called "diagonal-cut arrowheads" and there were in total 20 of these found in the settlement. 9 of these were stratified. In the early phases only the back rooms had these arrowheads, on the other hand in the later phases only the front subject rooms and the courtyard had arrowheads,[189] perhaps this time not due to preservation but due to the fact that arrowheads were not used indoors. All these arrowheads appeared only as single examples in a single room at a certain phase. Interestingly the subject rooms never yielded arrowheads in the same phase. Arrow

[189] see Baykal-Seeher & Obladen-Kauder 1996: 59, Abb.62

heads were found only in Room 109 (one in each- Phases K1 and K2) and in Room 110 (one in Phase L) among the subject rooms. It is unusual that the arrowheads were not found in the area outside the enclosure wall (Room 300 and Room 600 since these were probably used for hunting activities.

There are more arrow points than diagonal-cut arrowheads with 34 complete and 9 fragmentary examples found in the settlement. Most of these are reported to have asymmetrical cut blades (Baykal-Seeher & Obladen-Kauder 1996: 60). There is again an extensive typology of arrow points according to their size, form and shape. Out of the 21 stratified arrow points the most common type is the elongated triangular arrow points[190] which resemble to the metal arrow points (see above).

Arrow points are also rare finds and always appear as a single example in the rooms except the courtyard which had two examples in Phase IK1.[191] Only one back room had a single arrow point (Room 7 in Phase E1E2). Among the subject rooms Room 109 (2 examples in Phase K1, one in Phase M) and Room 110 (one in Phase L) yielded arrow points. This distribution shows a consistency with the diagonal-cut arrowheads. Again the open areas outside the settlement did not reveal any arrow points. The courtyard had several arrow points in phases the subject rooms did not reveal arrow points.

Since 5.4 % percent of the animal bones found at the site were of wild animals blades (Baykal-Seeher & Obladen-Kauder 1996: 317), the presence of arrowheads and arrow points is not unexpected. However the small number of the

[190] Type 3b
[191] see Baykal-Seeher & Obladen-Kauder 1996: 64, Abb.68

wild animal bones and the small number of the hunting artifacts suggest that hunting wild animals was not the main subsistence strategy.

1.2.6..11 Scrapers: 247 scrapers and scraper fragments were surfaced in the settlement and 60 of these were found complete blades (Baykal-Seeher & Obladen-Kauder 1996: 67). Typologically these showed differences mostly in form and size. There are round but also flat scrapers. Although it is possible that scrapers were multi-functional tools, they were probably especially used for working on materials like animal skin/leather.

112 scrapers were stratified. Until Phase HK1 there is no room with more than 2 scrapers.[192] Different than other flint artifacts scrapers appear in the subject rooms, in the back and front rooms in the early phases, but again in the later phases rooms on the south of Room 6 did not reveal any scrapers. Phase K1 is when the highest total number of scrapers were found. In this phase Room 108 and Room 109 yielded the highest numbers of scrapers throughout all the phases and rooms, whereas no scraper was found in the courtyard in Phase K1. Room 109 outnumbers all the subject rooms and the courtyard in the later phases.[193] The second subject room with high numbers of scrapers is Room 108; however scrapers appear in this room for a short time (Chart 109). Room 111 had two scrapers only in Phase K1, whereas Room 999 did not reveal any scrapers in the later phases. It is worth noting that none of the subject rooms had bone scrapers.

There are also a different category of scrapers that are labeled as “scraper-like blades” blades (Baykal-Seeher & Obladen-Kauder 1996: 72). These were very

[192] see Baykal-Seeher & Obladen-Kauder 1996: 71, Abb.74
[193] in Phase K1 Room 109 had 6 scrapers

similar to the scrapers and probably were also used as scrapers but were more in a blade form. In the later phases among the subject rooms only Room 109 had such tools again in Phase K1, which supports the assumption above.

1.2.6.12 Proximal Fragments with Hitting Surface: The last category of worked stone artifacts is the flake-, blade-, scraper-like tools which had surfaces that were all retouched. In total there are 26 stratified proximal fragments. The appearance of these artifacts is randomly scattered among rooms and phases, but there is no room with more than 3 examples in a certain phase.[194] In the later phases all the subject rooms -except the rooms of the three-roomed house had at least one proximal fragment. In each of the later phases one subject room had these artifacts. For instance in Phase K1 only Room 109 had 3 proximal fragments, in Phase K2 only Room 108 had 2 proximal fragments and a single proximal fragment was surfaced in Phase K1K2 only Room 110. The courtyard yielded only 2 examples in the later phases. Since these were not very common artifacts it is not possible to discuss the distribution in more detail.

The subject rooms yielded at least single examples of all the flint and obsidian artifacts listed in the final publication. This indicates that the use or production of these artifacts was not only an open-door activity.

1.2.7 COMPARISON OF ROOMS: FLINT AND OBSIDIAN ARTIFACTS

As it was for the clay and bone objects, another database was created for the flint and obsidian finds found in the subject rooms Room 108, Room 109, Room 110, Room 111 and Room 999 in the late phases (after Phase K1). Again the courtyard

[194] see Baykal-Seeher & Obladen-Kauder 1996: 73, Abb. 80

(Room 200) was included only for the phases that the subject rooms had bone objects to make a consistent comparison between the subject rooms and the courtyard.

1.2.7.1 Phase K1: As noted before Phase K1 had the highest number of flint objects among the later phases (Chart 110). This might be due to the fact that Phases K1 was one of the well stratified phases of the later phases (Efe 1988:4) and perhaps the preservation was better than other phases.

The number of flint artifact almost doubles the second phase with the highest number of flint artifacts (Phase K2). Only in Phase K1 Room 109 had more flint objects than the courtyard (Chart 111). In this phase the courtyard had less flint artifacts than all the subject rooms except the middle room Room 999 which did not have any flint artifacts.

The obsidian finds in this phase show a parallel picture in the distribution where Room 109 outnumbers not only the courtyard but also all other subject rooms (Chart 112). Again there were more obsidian artifacts in the subject rooms than the courtyard except Room 999.

It seems like the courtyard was not preferred for the activities involving flint artifacts. Instead Room 109 was the main area for such activities and the other subject rooms that were front rooms were also used for flint production or use.

In the interval Phase K1L only Room 111 and the courtyard yielded flint artifacts and therefore it is difficult to make a comparison between the subject rooms.

The relationship between the rooms and their number of flint artifact in Phase K1 is:

- 109 > 108 > 111 > 110 > 200

The relationship between the rooms and their number of obsidian artifacts in Phase K1 is:

- 109 > 108 > 110 > 111 > 200

1.2.7.2 Phase K1K2: There is a decrease in the total number of flint artifact surfaced from Phase K1K2 compared to Phase K1. There is also a dramatic change in the distribution: In this phase Room 109 did not have a single flint artifact whereas the courtyard had more flint artifacts than all the subject rooms (Chart 113). This is also attested with the obsidian artifacts. In addition, the number of obsidian artifacts also decreased. On the other hand Room 999 had both flint and obsidian artifacts in Phase K1K2. In fact the only phase when Room 999 had more obsidian artifacts than a subject room is Phase K1K2. Among the subject rooms Room 108 had the highest numbers of flint and obsidian artifacts in this phase.

Since more than half of the flint objects were found in the courtyard, it is possible to say that the main activity area involving flint (and perhaps also obsidian) artifacts moved from indoors to outdoors. The presence of these artifacts in some of the subject rooms and in the back room shows that the use or production of flint and obsidian artifacts was not exclusively taking place in the courtyard or in front rooms.

The relationship between the rooms and their number of flint artifact in Phase K1K2 is:

- 200 > 108 > 110 > 111 > 999

The relationship between the rooms and their number of obsidian artifacts in Phase K1K2 is:

- 200> 108 > 999 >110 > 111

1.2.7.3 Phase K2: In this phase Room 109 becomes again the room with the highest number of flint artifacts among the subject rooms, however the area outnumbering all the subject rooms is again the courtyard (Chart 114). On the other hand Room 109 and Room 108 had close numbers of obsidian artifacts and also more obsidian artifacts than the courtyard (Chart 115). After Phase K2 the total number of obsidian gradually decreases.

Room 108, Room 111 and the courtyard show consistency in the number of flint artifacts they yielded between Phase K2 and K2L, whereas Room 109 shows sudden increases or decreases. This might indicate that the households of Room 108 and Room 111 never became the main area of flint production or use, but Room 109 was such an area in certain places. The main open door activity area was the courtyard and therefore the continuity of the appearance of flint artifacts is not unexpected. In terms of the total number it seems like flint use and production was both and indoor and outdoor activity in this phase. Room 999 did not reveal any flint artifacts in Phase K2, perhaps again due to the fact it was a middle room.

Considering the above stated assumption that obsidian might have a higher value than flint, brings about the question whether the three-roomed house had more obsidian than other areas. In Phases K1 and K1K2 Room 111 had less obsidian artifacts than the other subject rooms and in Phase K2 it did not reveal any (Chart 116). Room 999 which was the middle room of the three-roomed house yielded no

obsidian artifacts after Phase K2 and in this phase it had only a single obsidian find. Although Room 999 could be excluded from the discussion (since it is the only middle room), the activity area of the three-roomed house (Room 111) fails to support that the larger house had more obsidian.

The appearance of flint is limited to several numbers of artifacts in only two subject rooms (Room 108 and Room 110) in Phase K2K3, and therefore this phase is not going to be discussed further.

The relationship between the rooms and their number of flint artifact in Phase K2 is:

- 200 > 109 > 108 >110 > 111

The relationship between the rooms and their number of obsidian artifacts in Phase K2 is:

- 109 > 108 > 200 >110 > 999

1.2.7.4 Phase K2L: In Phase K2L the courtyard, Room 108 and Room 111 had a close number of flint artifacts that they had in the previous Phase K2 (Chart 117). On the other hand Room 109 and Room 110 show a decrease in the number of flint finds. However it should be noted that the area between Room 109 and the courtyard had more flint artifacts than Room 109. Room 110 interestingly did not reveal any flint artifacts in this phase. The fact that the courtyard had more flint than the total number of flint artifacts found in all the subject rooms might suggest that in this phase production may had shifted from indoors to outdoors and the presence of the flint artifacts indoors were representing the actual use of the flint tools.

This shift from indoors to outdoors appears also with the obsidian artifacts since in this phase the courtyard provides the largest amount of obsidian artifacts (Chart 118). Room 108 continued to have an approximate number of obsidian to the previous phase, whereas Room 109, Room 110 and Room 999 showed a decrease in the number of obsidian artifacts. In fact Room 110, Room 111 and Room 999 did not reveal any obsidian. The exceptional circumstance of Room 108 can only be explained by the possibility that the household of this room/house was more involved in the obsidian tool production or use. After this period Room 108 never reveals a comparable number of obsidian artifacts.

The relationship between the rooms and their number of flint artifact in Phase K2L is:

- 200 > 108 > 109 >111

The relationship between the rooms and their number of obsidian artifacts in Phase K2L is:

- 200 > 108 > 109

1.2.7.5 Phase L: With the flint artifacts the gradual decrease starts in this phase (Chart 110). It is interesting how the distribution of flint changes throughout different phases. The subject room that did not have any flint artifacts in Phase K2L (Room 110) had the highest numbers of flint artifacts in this phase even outnumbering the courtyard. Also Room 109 showed a sudden increase, whereas Room 108 showed a sudden decrease in the number of flint artifacts. The rooms of the three-roomed house (Room 111 and Room 999) showed consistency in the number of the flint

artifacts (Chart 119). There are 2 subject rooms that had more flint artifacts than the courtyard in this phase: Room 109 and Room 110. It is important to stress that although all subject rooms had in a certain phase more flint artifacts than the courtyard except Room 999.

There is a drop in the total number of obsidian artifacts in this phase, however again the courtyard had the highest number of obsidian although there is also a decrease in the total number of obsidian found in the courtyard. (Chart 120). The distribution of obsidian artifacts among the subject rooms shows a considerable change. The number of obsidian artifacts decreases considerably, whereas Room 110 which did not reveal any obsidian artifacts showed a sudden increase. The only room that continues a close number of obsidian artifacts is Room 109. Room 111 and Room 999 remained with no obsidian artifacts.

Although in the previous phases there was a parallel pattern in the distribution of flint and obsidian artifacts, in this phase there is a slight difference where obsidian artifacts appear mostly in the courtyard whereas the flint artifacts appear mostly in the subject rooms.

The relationship between the rooms and their number of flint artifact in Phase L is:

- 110 > 109 > 200 > 111 > 108

The relationship between the rooms and their number of obsidian artifacts in Phase L is:

- 200 > 110 > 109 > 108

1.2.7.6 Phase LM: In Phase LM the decrease in the total number of flint artifacts continued, however the courtyard showed an increase (Chart 121) although in the previous phase it followed the general pattern. This is the phase when the subject rooms Room 108, Room 109 and Room 110 had a close number of flint artifacts, whereas there is a big difference between the subject rooms and the courtyard. The rooms of the three-roomed house (Room 111 and Room 999) did again neither reveal flint nor obsidian artifacts.

Compared to the previous phase the biggest increase in the number of flint artifacts occurs in the courtyard, but Room 108 also showed a slight increase. On the other hand the biggest decrease is seen in Room 110 and Room 109 also had less flint artifacts than it had in Phase L. Room 108 did not reveal flint artifacts after Phase LM.

In contrast to the total number of flint artifacts, there is a slight increase in the obsidian artifacts in Phase LM compared to Phase L (Chart 116). The number of obsidian artifacts in Room 108, Room 110 and in the courtyard was close to the previous phase, although Room 109 had less obsidian artifacts in this period. Room 110 has the closest number to the courtyard as it was also the case in Phase L. Neither Room 111 nor Room 999 yielded an obsidian artifact in this phase, however there was a single obsidian artifact found between these two rooms.

The constant shift in the distribution suggests that the flint and obsidian industry was not specialized industry reserved for a certain household that continued this industry over time.

In the interval phase, Phase LN only the area between the courtyard and Room 109 had 2 obsidian and 2 flint artifacts among the subject areas. In Phase LO the only subject room is Room 110 with a single flint artifact.

The relationship between the rooms and their number of flint artifact in Phase LM is:

- 200 > 110 > 109 > 108

The relationship between the rooms and their number of obsidian artifacts in Phase LM is:

- 200 > 110 > 108

1.2.7.7 Phase M: After Phase LM there is a remarkable decrease in the total number of flint artifacts (Chart 110), accordingly there is also less flint found in the subject rooms. Perhaps due to the same reason there are also only two subject rooms with flint artifacts: Room 109 had almost half the number of flint artifacts than the courtyard had and Room 110 had also several flint artifacts (Chart 123). Although there were fewer flint artifacts in Room 109 in this phase, this room had the closest number of flint artifacts that it yielded in Phase LM. Starting with Phase LM the rooms of the three-roomed house stopped revealing flint artifacts and this continues until the abandonment of the settlement.

The distribution of obsidian artifacts in Phase M is very similar to the flint artifact distribution: The courtyard has the highest number of obsidian followed by Room 109 (Chart 124). It is interesting that Room 109 is the room with the highest number of obsidian artifacts among the subject rooms, although it did not reveal any

obsidian in the preceding phase. Room 109 did not have a comparable number of obsidian artifacts after Phase L until Phase M. The only other subject room that had obsidian artifacts in this period is Room 109. Neither Room 108 nor the rooms of the three-roomed house yielded an obsidian artifact in Phase M. Obsidian artifacts also show a decrease after Phase LM and this trend of decrease towards the end of the settlement is also seen with the other small finds.

The relationship between the rooms and their number of flint artifacts in Phase M is:

- 200 > 109 > 110

The relationship between the rooms and their number of obsidian artifacts in Phase M is:

- 200 > 109 > 110

1.2.7.8 Phase MO: The last phase flint artifacts appear in the subject rooms is Phase MO. In this phase the number of flint artifacts found in the courtyard, in Room 109 and in the area between these two were the highest. Also a number of flint artifacts found in these areas were close to each other (Chart 125). Again the only subject rooms with flint artifacts were Room 109 and Room 110. Room 109 showed a decrease in the number of flint artifacts compared to the previous phase, whereas Room 110 had more flint artifacts than it had in Phase LM.

Phase MO is the last phase when more than one subject room yielded obsidian artifacts. Room 109 and Room 110 yielded only single examples, whereas the courtyard and the area between the courtyard and Room 109 had the highest

number of obsidian artifacts in this phase, although compared to the previous phases these numbers are very limited. In the following phase, Phase NO again the only subject areas that had obsidian are the courtyard and Room 109. After this period obsidian appears for the last time in Phase OP in the area between the courtyard and Room 110.

The relationship between the rooms and their number of flint artifact in Phase M is:

- 200 > 109 > 110

The relationship between the rooms and their number of obsidian artifacts in Phase M is:

- 200 > 109 = 110

1.2.7.9 CONCLUSIONS

For the later phases the highest number of flint and obsidian artifacts appeared in Phases K1, K2 and K2L (Chart 110 and Chart 116). Almost in all the later phases the courtyard yielded the highest number of flint artifacts and more flint artifacts than the subject rooms. Only in Phase K1 Room 109 and in Phase L Room 110 had more flint artifacts than the courtyard. These two rooms and Room 108 had more flint artifacts than the room of three-roomed house (Room 111 and Room 999) throughout different phases. Rooms 108, 109 and 110 yielded different types of flint objects throughout the settlement history; only Room 111 and Room 999 had limited flint artifact assemblages. Room 109 was the second area with a dense flint use or production following the courtyard (Chart 127). Excluding the interval phases, there

is a gradual decrease in the total number of flint artifacts starting with Phase K1. The presence of flint mostly in the courtyard but also in a front room suggests that the use or production of flint tools was not taking place only outdoors or only indoors.

There are fewer obsidian artifacts than flint artifacts throughout the later phases. There is also a smaller difference between the courtyard which had again the highest number of obsidian artifacts in the later phases and the subject rooms with the highest number of obsidian artifacts (Chart 128), which are Room 109 and Room 108. Room 110 had less obsidian than these two subject rooms, although it had a close number of flint artifacts to Room 108. Again these three rooms had more obsidian than the three-roomed house (Room 111 and Room 999). The small difference between the in-door areas and the courtyard suggest that the use and production of obsidian tools was not concentrated in a certain area or room and that at least several subject rooms had a more or less equal access to obsidian.

The relationship between the rooms and their number of flint artifacts and obsidian artifacts is the same with the clay and bone objects:

- 200 > 109 > 108 > 110 > 111 > 999

In none of the later phases the rooms of the three-roomed house had more obsidian or flint than the other subject rooms, which indicated that if there was a differentiation in the access to flint or the rarer material obsidian, the larger house did not have a privilege that the other subject rooms did not have. The constant shift from outdoors to indoors (and vice versa), might mean that none of the households had a monopoly in the production of obsidian that continued more than a phase, if there was such a monopoly at all.

1.2.8 GROUND STONE FINDS

The stone finds that were formed by grinding were under the ground stone category in the final publication. Unfortunately there is no comparison between the rooms that yielded ground stone finds in the final publication, most of the discussion is based on the typology of the ground stone finds. Therefore the discussion here will be more on the general appearance and distribution of the ground stone finds that appeared both in the settlement and in the cemetery.

Grinding stones, hand stones, mortars, pestles, pecking stones, polishing stones, whetstones, grooved stones, hammers, shaft-hole axes, maceheads, beads, pendants, earplugs and modified unknown stone objects were found in the settlement.

There is no ground stone object that appeared only in the cemetery that was unknown in the settlement (except idols?). However there are ground stone objects that appeared only in the settlement. These were hand stones, mortars, pestles, pecking stones, polishing stones, grooved stones, small spherical pebble, chipped discs, “weights”, small anvils, heavy hammers and a palette (?). These objects which were mostly daily used objects/tools probably did not have a symbolic meaning concerning the mortuary sphere.

1.2.9 POTTERY

Unfortunately in this publication there is only room-by-room comparison for the bowls and deep-bowls. For the other shapes there is a comparison between the total number of vessels found in the rooms and found in the courtyard. This was due to the difficulty to find the matching pieces of all the pottery finds that were found in

a room over different excavation cycles (Efe 1988: 5). Therefore the comparison between the rooms is going to be discussed only for the bowls as it was in the publication. The other shapes are going to be discussed in relation with the pottery found in the cemetery.

The main pottery shapes found in the settlement are bowls, deep bowls, pitchers, jars, cooking pots, pithoi, plates and miniature vessels. In the settlement there are more open shapes than closed shapes. There are three ware groups: black burnished ware, red-slipped burnished ware and coarse unburnished ware (Efe 1988). However not all shapes yielded examples for all the wares; for instance bowls were never coarse wares.

The distinction between the bowls and deep bowls is their diameter; the larger bowls were called "deep bowls" rather than "larger bowls" to have a consistent terminology between the settlement and cemetery. However in the final publication the deep bowls are referred as "large bowls" which had a diameter greater than 20 cm (Efe 1988).

1.2.9.1 Bowls: Although the number of black and red ware bowls is usually close to each other throughout the later phases, bowls appear mostly as black wares.[195] The subject rooms seem to follow this pattern, although Room 108 and Room 111 had more red ware bowls than black ware bowls (Chart 129). Not only the number of black and red wares, but also the total number of bowls found in the subject rooms Room 108, Room 109 and Room 110 is close to each other. On the other hand Room 111 and especially Room 999 had relatively lower numbers of both red and black

[195] see Efe 1988: 12, Abb. 6

bowls. Room 110 had the highest total number of black ware bowls, whereas the room with the highest total number bowls and with the highest number of red bowls is Room 108. Only Room 110 and Room 999 had more black bowls than red bowls. The two rooms of the three-roomed house yielded less bowls than the other subject rooms.

1.2.9.1.1 Phase K1 and Phase K2: Only in Phase K1 all the rooms yielded more black ware bowls than red ware bowls. In this phase Room 108 and Room 110 had more black wares than the red wares but also more black wares than other subject rooms, whereas in the following phase (Phase K2)Room 109 replaces Room 108. Room 109 outnumbers all the other subject rooms in Phase K2; both the numbers of red and black ware bowls. This might again be due to preservation, however it should be noted that Room 109 outnumbered the other subject rooms in the number of small finds. In Phase K2 there is a decrease in the total number of bowls.

The relationship between the rooms and their number of bowls in Phase K1 is:

- 108 > 109 = 110 > 111 > 999

The relationship between the rooms and their number of bowls in Phase K2 is:

- 110 > 109 > 111 > 108 > 999

1.2.9.1.2 Phase L: In Phase L Room 109 continued to reveal more black and red ware bowls than the subject rooms. Room 110 seem to continue to have more black ware bowls than red ware bowls in Phase L. Room 111 on the other hand had more

black ware bowls than red ware bowls only in Phase L and Phase K1 (when all the other subject rooms had more black ware bowls too) . After Phase L, Room 999 no longer yielded bowls.

The relationship between the rooms and their number of bowls in Phase L is:

- 109 > 110 > 108 > 111

1.2.9.1.3 Phase LM and Phase MNO: In Phase LM Room 108 and Room 109 had more red ware bowls than black ware bowls, whereas again Room 110 did not fit this pattern. In Phase LM Room 111 did not reveal any bowls. In the following phase (Phase MNO), only Room 109 showed a decrease in the number of bowls. Even Room 111 which had no bowls in the previous phase had more bowls than Room 109. As the other subject rooms did, Room 110 had more red ware bowls than black ware bowls in this phase.

The relationship between the rooms and their number of bowls in Phase LM is:

- 109 > 108 > 110

The relationship between the rooms and their number of bowls in Phase MNO is:

- 110 > 111 > 108 > 109

1.2.9.1.4 Phase OP: The last phase that yielded bowls is Phase OP. In Phase OP, Room 109 had the lowest number and Room 108 had the highest number of black

and red ware bowls, although the other two subject rooms also had a close number of bowls to Room 110 and to Room 111.

The relationship between the rooms and their number of bowls in Phase OP is:

- 108 > 111 > 110 > 109

The S-profile bowls start to appear in the subject rooms only after Phase L. In none of the later phases Room 111 or Room 999 yielded more S-profile bowls than the other subject rooms. This is also valid for the ordinary bowls. These two rooms of the three-roomed house never had the highest number of bowls in any of the later phases.

It is not possible to compare the courtyard and the subject rooms in the later phases, since the only phase that both the courtyard and the subject rooms both yielded bowls is Phase LM.[196] In this phase the total number of bowls found in the rooms was more than the courtyard, however there is no note on whether one subject room had also more bowls than the courtyard in the final publication.

It has been noted that in the later phases bowls became shallow and open and this period is also when the S-profile bowls started to appear (Efe 1988:124). The most common decoration on the bowls was interior grooving. Unfortunately there is also no comparison between the rooms that had decorated bowls. However it should be noted that black ware bowls were usually decorated which might indicate that the more common red ware bowls were probably used for daily use, whereas the black wares had a more special use/function.

[196] see Efe 1988: 13, Abb. 7-9

1.2.9.2 Deep Bowls: Different than bowls, there were very few black ware deep bowls (Chart 130). The highest number of black ware deep bowls was found in Room 108, whereas Room 110 had more black ware bowls than the subject other rooms. Other than Room 108, the subject rooms yielded only several black ware deep bowls and Room 999 did not reveal any. As Chart 130 clearly depicts red ware was the preferable ware for the deep bowls. In total (red and black ware), Room 109 had the largest amount of deep bowls, but Room 108 and Room 110 had also a close amount of deep bowls to Room 109. Room 999 had again the lowest number of deep bowls.

1.2.9.2.1 Phase K1 and Phase K2: In Phase K1 the only subject room with black ware deep bowls is Room 108, which also yielded the highest number of red ware deep bowls. Again Room 109 and Room 110 had a close number of deep bowls. The lowest number of bowls was found in the rooms of the three-roomed house Room 111 and Room 999, whereas in the following phase, Phase K2, except Room 999 all the subject rooms had a close number of deep bowls. In this phase only Room 111 and Room 108 had single black ware deep bowls. After Phase K2 Room 999 neither had black nor red deep bowls.

The relationship between the rooms and their total number of deep bowls in Phase K1 is:

- 108 > 110 > 109 > 111 > 999

The relationship between the rooms and their total number of deep bowls in Phase K2 is:

- 109 = 111 > 108 = 110 > 999

1.2.9.2.2 Phase L, Phase LM and Phase MNO: The close number of deep bowls among the subject rooms changes with Phase L. In this phase Room 109 outnumbers the other subject rooms and it is also the only room with a single black ware deep bowl. In the following phase (Phase LM), there is a general trend of decrease in the number of red ware deep bowls, however only Room 108 had more red ware deep bowls than it had in Phase L. Room 108 also had the highest number of both red and black ware deep bowls in this phase. Room 108 and Room 109 were the only rooms with black ware bowls in Phase LM. Room 111 and Room 999 did not reveal black or red ware deep bowls.

Interestingly after Phase LM, Room 111 becomes the room with the highest number of red ware deep bowls and the only room with black ware deep bowls. Room 110 had also less deep bowls than Room 108 and Room 109 in Phase LM, but in this phase it has the second highest number of deep bowls. Room 108 had the same number of deep bowls in Phase LM and Phase MNO, whereas Room 109 showed a slight decrease.

The relationship between the rooms and their total number of deep bowls in Phase L is:

- 109 > 110 > 108 = 111

The relationship between the rooms and their total number of deep bowls in Phase LM is:

- 108 > 109 > 110

The relationship between the rooms and their total number of deep bowls in Phase MNO is:

- 111 > 110 > 108 > 109

1.2.9.2.3 Phase OP: The last phase the subject rooms yielded deep bowls is Phase OP. The decrease in the total number of deep bowls continues in this phase in Rooms 109, 110 and 111, however Room 108 had more deep bowls than it had in phase MNO. Room 108 had also the highest number of deep bowls in this phase. In this phase Room 108 and Room 110 had single black ware deep bowls. Phase OP is in fact the only phase that Room 110 yielded a black ware deep bowl.

The relationship between the rooms and their total number of deep bowls in Phase OP is:

- 108 > 110 > 109

S-profile deep bowls start to appear in Phase LM and these were all red wares. Compared to bowls there are less s-profile deep bowls. The subject rooms had only several examples of s-profile deep bowls. The highest number of s-profile deep bowls were found in Room 110 in Phase OP.

It is again not possible to compare the courtyard and the subject rooms in the later phases, since the only phase that both the courtyard and the subject rooms both had deep bowls is Phase LM.[197] In this phase the total number of deep bowls found in the rooms was more than the courtyard, however there is no note on which subject room had more deep bowls than the courtyard in the final publication.

[197] see Efe 1988: 13, Abb. 7-9

1.2.9.3 CONCLUSION: Both the settlement and the cemetery yielded small numbers of black ware bowls. Red ware bowls are common, but they were usually not decorated, whereas black ware bowls ware bowls had decorations or finishing applications. In the cemetery there are more bowls than deep bowls, as it was the case in the settlement. Although the s-profile bowls were rare in the settlement and appeared only after Phase L, in the cemetery there are more s-profile bowls than ordinary bowls (Seeher 2000: 33). As noted before this is true if the bowls that are found outside of the named burials are included; if not, the number of s-profile bowls and non-s-profile bowls are close to each other. The limited number of s-profile bowls in the settlement may be explained by the possibility that this type was preferred for specific activities one of which was the mortuary sphere.

APPENDIX B: TABLES

Burial type : Total number (Percentage)	DAMAGED #	DAMAGED %	DISTURBED #	DISTURBED %	GOOD #	GOOD %
PITHOS: 229 (49%)	111	48	64	28	54	24
DOUBLE PITHOS: 120 (26%)	45	38	31	26	44	37
JAR: 4 (1%)	3	75	0	0	1	25
AMPHORA:1 (<0%)	0	0	0	0	1	100
SIMPLE INHUMATION: 86 (18%)	31	36	29	34	26	30
SHERDS COVERING SIMPLE INHUMATION: 5 (1%)	4	67	1	17	1	17
CIST:21 (4%)	5	24	4	19	12	57
PIT?: 2 (<0%)	0	0	2	100	0	0
MUDSINK:1 (<0%)	1	100	0	0	0	0
?-Unknown: 28 (6%)	20	71	6	21	2	7

Table 1: Burial Types and Their Preservation States

Burial	Location	Burial Type	Orientation	# of Individuals	Preservation	# of Finds	Gender	Age
G243	YY-ZZ/86	Simple Inhumation	SE	1	Good	12	Male Adult	20-40
G305	YY-ZZ/86	Pithos	SE	1	Good	11	Female Adult	20-40
G120	YY/86-87	Pithos	SE	0	Good	1	?	?
G579	YY/86-87	Double pithos	E	?	Damaged	22	?	?

Table 2: Burials in Areas with High Number of Burial Finds and Low Number of Individuals

Burial type(s)- Demircihöyük	Total number	Percentage
PITHOS	229	46%
DOUBLE PITHOS	120	24%
JAR	4	1%
AMPHORA	1	<0%
SIMPLE INHUMATION	86	17%
SHERDS COVERING SIMPLE INHUMATION	6	1%
CIST	21	4%
PIT?	2	<0%
MUDSINK	1	<0%
?-Unknown	28	6%

Table 3: Burial Types

Mezar Yönleri ve Oranları

Yönlendirme	Yer Sayısı	Mezar Sayısı	Oran (%)
Doğu-KD-GD	22	1208	96,4
Batı-KB-GB	5	19	1,5
Kuzey	4	4	0,4
Güney	4	21	1,7
Toplam	35	1252	100

Table 4: Burial Orientations and Ratios[198]

[198] Translation: Orientation- #of Places- # of Burials -Ratio
East-NE-SE, West-NW-SW, North, South, Total

Batı Anadolu ETÇ Mezar Tip ve Sayıları

Mezar Tipi	Rastlanılan Yer Sayısı	Mezar Sayısı
Basit Toprak	18	52
Pithos	44	724
Çömlek	14	68
Taş Sandık	22	205
Sahte Oda	3	6

Table 5: Western Anatolian EBA Burial Types and Numbers[199]

Burial No	Individual1 Gender	Individual1 Age	Individual2 Gender	Individual2 Age	Burial Type	Orientation	Total # of Finds
G45	Female Adult	Minimum 20	Unknown	1-4	Pit?	?	2
G87	Unknown	Minimum 20	Unknown	4-6	Pithos	E	1
G95	Uncertain	Minimum 40	Unknown	5-8	Simple Inhumation	SE	4
G192	Unknown	2-6	Unknown	minimum20	Sherds covering Simple Inhumation	?	1
G299	Female Adult	20-50	Unknown	1.5-2.5	Simple Inhumation	SE	2

Table 6: Multiple Burials with an Adult-Child Combination

[199]Translation: Burial Type- Number of Places Found- Number of Burials
Simple Inhumation- Pithos- Jar- Stone Cist- Pseudo Chamber Room

Name of the burial	Location-trench	Burial Type	Orientation	No of Individuals	No of finds	Gender Individual1	Gender Individual2	Age Individual1	Age Individual2
G1	XX/84-85	Double pithos	SE	2	1	Male Adolescent	Female Adult	11-12	minimum20
G87	XX/85-86	Pithos	E	2	1	Unknown	Unknown	minimum20	4-6
G101	B/85	Pithos	E	2	1	Not certain (male or female)	Not certain (male or female)	4-6	4-6
G198	ZZ/85	Pithos	?	2	0	Male Adult	Male Adult	40-60	minimum20
G392	A/85	Double pithos	SE	2	1	Male Adult	Not certain (male or female)	minimum50	minimum20
G470	A/85-86	Double pithos	SE	2	0	Not certain (male or female)	Unknown	15-25	8-9
G488	XX/87	Double pithos	SW	2	1	Unknown	Unknown	12-14	20-60

Table 7: Pithos Burials with Multiple Individuals

Name of the burial	Location-trench	Burial Type	Orientation	# of individuals	Total # of finds	Gender of Individual1	Age of Individual1	Special Treatment
G117	YY/85	Simple Inhumation	?	1	5	Adult-uncertain	Minimum 20	SE: cattle pair, W,E,S surrounded by stones, on W covered with a large stone plate
G125	XX/85	Simple Inhumation	?	1	1	Adult-uncertain	Minimum 20	E: cattle pair ,on the sides stone blocks
G316	A/84-85	Simple Inhumation	NE	2	2	Adult-unknown x2	Minimum 20 x2	NE:cattle pair on top,covered with stone plates,on top pitho sherds
G321	A/85	Cist	SE	1	3	Adult-unknown	40	SE: cattle pair &human bones on the closing stone
G335	ZZ/85	Simple Inhumation	SE	1	2	Adult-uncertain	20-40	SE:cattle pair
G367B	B/86	Simple Inhumation	SE	1	2	Adult-uncertain	Minimum 20	S:cattle pair
G583	WW/85	Double pithos	SE	?	7	-		cattle pair-on top

Table 8: Burials associated with Cattle Skeletons

Name of the burial	Location-trench	Burial Type	Orientation	# of individuals	Total # of finds	Gender of Individual 1	Gender of Individual 2	Age of Ind.1	Age of Ind.2
G89	YY/85-86	Simple Inhumation	South-east	2	5	Adult-unknown	Adolescent-unknown	Minimum 60	13-15
G95	YY/86	Simple Inhumation	South-east	2	4	Adult-uncertain	Child-unknown gender	Minimum 40	5-8
G143/151	YY/84	Simple Inhumation	?	2	8	Adolescent-unknown	Female Adult	12-15	Minimum 20
G144	YY/84	Simple Inhumation	South-east	2	9	Adult-uncertain	Adult-uncertain	Minimum 20	Minimum 20
G192	ZZ/85-86	Sherds covering inhumation	?	2	1	Child-unknown	Adult-unknown	2-6	Minimum 20
G231	ZZ/86	Simple Inhumation	South-east	5	8	Male Adult	Adult-unknown	Minimum 20	Minimum20
G299	ZZ/85	Simple Inhumation	South-east	2	2	Female Adult	Infant-unknown gender	20-50	1.5-2.5
G316	A/84-85	Simple Inhumation	North-west	2	2	Adult-unknown	Adult-unknown	Minimum 20	Minimum20
G327	A/85	Simple Inhumation	South-east	2	1	Adult-uncertain	Adult-uncertain	Minimum 20	15-25
G484	XX/87	Simple Inhumation	South-east	2	0	Male Adult	Unknown	Minimum 20	?
G497	XX/86	Simple Inhumation	?	2	1	Adult-uncertain	Adult-uncertain	Minimum 20	Minimum20

Table 9: Simple Inhumation Burials with Multiple Individuals

Name of the Burial	Location	Burial Type	Orientation	Preservation	Metal	Pottery	Other	Gender1	Gender2	Age1	Age2
G89	YY/85-86	Simple Inhu.	SE	Good	2pins	jug, Neolithic jar fra.	spindle whorl	Unknown	Unknown	Minimum 60	13-15
G95	YY/86	Simple Inhu.	SE	Good	golden sheet, pin	2jugs		Not certain	Unknown infant	Minimum 40	5-8
G299	ZZ/85	Simple Inhu.	SE	Good	pin	jug, Neolithic jar fra.		Female Adult	Unknown infant	20-50	1.5-2.5
G376	B/86	?	NE	Disturbed	copper sheet,pin	face jug fra.		Not certain	Not certain	Minimum 20	Minimum 20

Table 10: Burials with 2 Individuals that yielded Copper Pins

Name of the Burial	copper (/bronze?)	bronze	gold	lead	silver
G100	2pins	Fenestrated axe*	Golden diadem	Lead bottle	
G132	mushroom macehead*				
G171	copper flat axe				
G213	copper/bronze dagger,3 copper pins				silver pin
G243	copper pin, copper macehead*	bronze spear head*	2golden diadem		silver pin
G259	copper dagger, pin				
G266	copper dagger				
G305	bronze/copper dagger, pin		golden bead		
G316	copper/bronze mushroom macehead*				
G334	copper/bronze macehead*				
G335	copper/bronze mushroom macehead*,pin			deco.lead bottle fragment	
G350	copper/bronze razor, pin		golden diadem	lead bottle fragment	
G421	Copper razor*				
G479	copper/bronze dagger				
G485	copper/bronze dagger			lead bottle	
G494	pin, copper/bronze axe*				
G517	copper/bronze dagger,2pins				

Table 11: Burials with Copper "weapons" and Their Occurrence with Other Metal Objects

Burial Name	Burial Type	# of indivi.	Finds-Metal	Finds-Pottery	Finds-Other	Total # of finds	Gender/Age 1	Gender/Age2
G192	Sherds on s. inhumation	2			stone axe	1	Child-unknown: 2-6	Adult-unknown: minimum 20
G231	Simple Inhumation	5	2 decorated lead strips	1bs jug,jug	stone macehead, basalt grinding stone-unused, 2 spindle whorls	8	1)Male Adult: minimum 20 2)?:minimum 20 3)Adult : 20-40	4)Adult-unknown: minimum 20 5)Female Adult: minimum20
G316	Simple Inhumation	2	copper/ bronze mushroom macehead		stone axe	2	Adult-unknown: minimum20	Adult-unknown: minimum20

Table 12: Multiple Burials with Stone Finds

Name of the burial	Trench	Burial Type	Orientation	# of individuals	Finds-Metal	Finds-Pottery	Finds-Other	# of finds	Gender of Individual2
G143/151	YY/84	Simple Inhum.	?	2		8 bowls (4 with s profile)		8	Female Adult
G368	B/86	Pithos	SE	1		tripod jar,footed bowl		2	
G517	YY/87	Simple Inhum.	?	1	copper/ bronze dagger, 2pin	neck jar	2deco.spindle whorl	6	

Table 14: “Different” Adolescent Burials

Burial	Trench	Burial Type	# of indivi.	Finds-Metal	Finds-Pottery	Finds-Other	# of finds	Gender Individual 1	Gender Individual2
G100	B/85	Mud sink	1	2pins, axe, lead bottle, golden diadem sheet	neck jar-decorated,		6	Adult-uncertain	
G231	ZZ/86	Simple Inhumation	5	2 decorated lead strips	1bs jug, jug	stone macehead, basalt grinding stone-unused,2spindle whorl	8	Male Adult	2) adult-unknown3)?-minimum20 4)UC-20-40 5)F.adult-minimum20
G243	YY-ZZ/86	Simple Inhumation	1	2golden diadem, copper pin, silver pin, bronze spear head, copper macehead	bs jug, miniature cup	3 deco spindle whorl,1 undeco.spindle whorl	12	Male Adult	
G305	YY-ZZ/86	Pithos	1	golden bead, bronze/ copper dagger, pin	jug, deco neck jar with lid	2undeco.& 4 deco. Spindle whorl	11	Female Adult	
G350	A/86	Cist	1	golden diadem,copper/bronze razor,pin,lead bottle fra.	bowl, deco.jug,neckjar	spindle whorl	8	Male Adult	
G441	XX/86	Pithos	1	copper sheet fra.,pin,2copper/bronze bracelets with notches	jug		5	Female Adult	
G83	YY/85-86	Simple Inhumation	1	2 pins,2 gold sheet fra.	jug, bowl fra.	9 spindle whorl	15	Male Adult	

Table 13: "Different" Adult Burials

Name of the burial	Location-trench	Burial Type	Orientation	Finds-Metal	Finds-Pottery	Finds-Other	Total # of finds
G317	A/85	Pithos	SE	pin fra.	tankard	-	2
G378	B/86	Pithos	East	lead bottle		-	1
G479	XX/87	Pithos	SE	copper/bronze dagger	2 jugs	-	3

Table 15: "Different" Child Burials

Name of the burial	**Location-trench**	**Burial Type**	**Finds-Metal**	**Finds-Pottery**	**Finds-Other**	**Total # of finds**
G37	YY/86	Pithos	gold fra.,2bronze bracelets,pin	bowl,jug		6
G213	ZZ/85	Double pithos	copper/bronze dagger,3 copper pins,1silver pin	deco.jug	2 deco.spindle whorls,4 marble idol fra.	12
G295	ZZ/85	Double pithos	3 golden earplugs,lead bottle fra.,2 bronze/copper bracelets,pin		figurine	8
G309	A/85	Pithos	Silver ring covered with gold sheet,pin,lead bottle	bowl		4
G320	A/85	Pithos		3jugs,1neck jar	1undeco&1deco spindle whorl	6

Table 16: "Different" Infant Burials

Name of the burial	Location-trench	Burial Type	Orientation	Finds-Metal	Finds-Pottery	Finds-Other	Total # of finds
G79	YY/85	Pithos	SE	bronze bracelet, 1copper, 1silver & 9 gold beads,gold sheet		2 rockcrystal, 2karneol	3
G107	B-C/85	Pithos	SE			3 figurine fragments	3
G579	YY/86-87	Double pithos	East		jug	11 deco&10 undeco.spindle whorls	22
G583	WW/85	Double pithos	SE	copper sheet fra.&studs,gol den diadem fra.,3pin,lead bottle fra.		flint blade	7

Table 17: "Different" Burials with no Bone Fragments

APPENDIX C: FIGURES

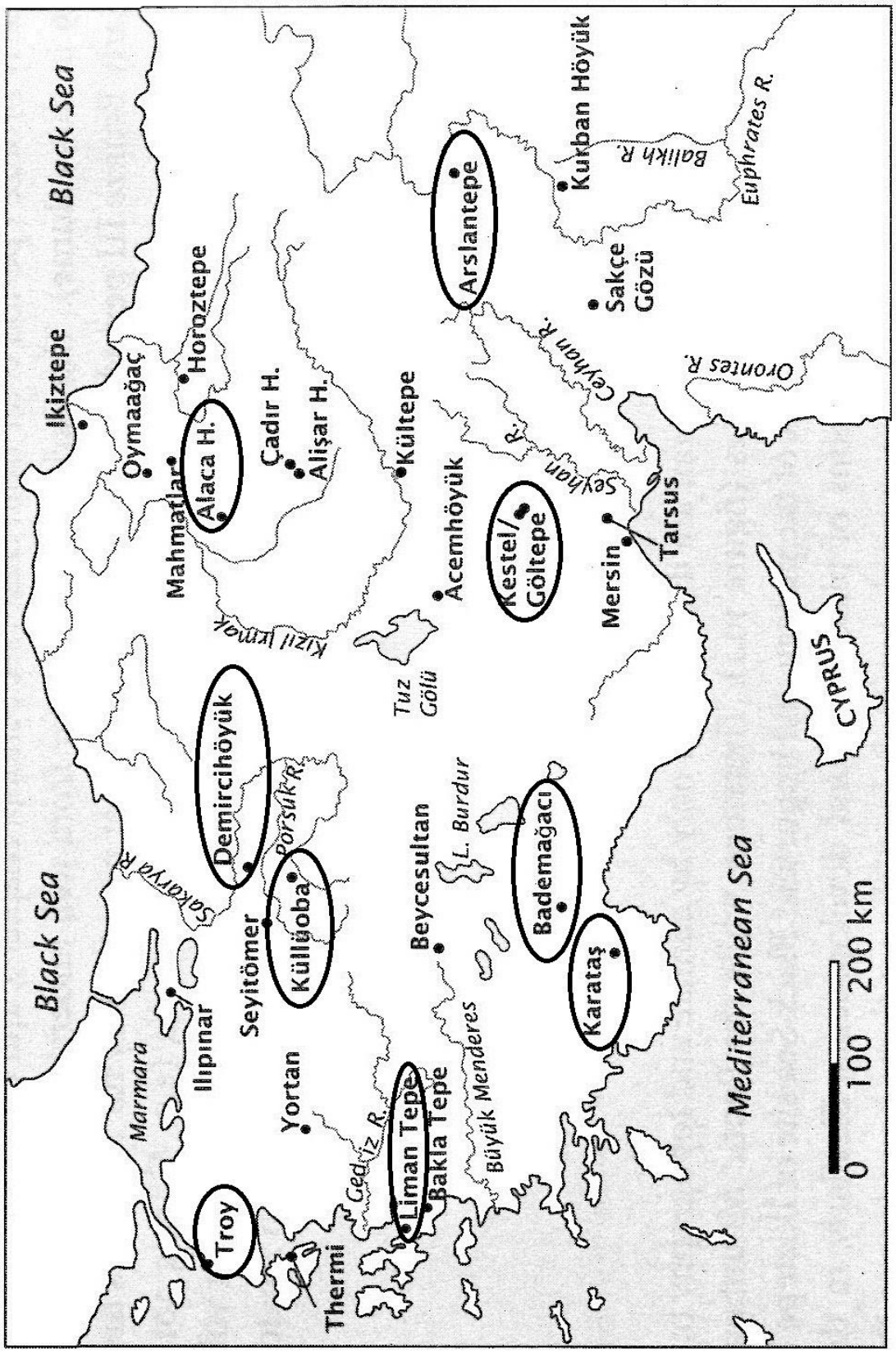


Fig. 1 Sites mentioned in the text- marked with circles (Steadman 2011, Fig. 10.1)

Fig. 2 **Representative Sites of the EBA Regional Settlement Sequence in Anatolia** (Yakar 2011, Table 4.5)

Period	Aegean	West-Central	Central	North	Cilicia	East	Southeast
2000 B.C.E. EBA IIIc	Troy IV Limantepe	Beycesultan VII	Boğazköy Vf Alacahöyük 5 Alişar 12T Kültepe 11 Acemhöyük 8	Ikiztepe Mound I Cemetery	Tarsus	Arslantepe VID Korucutepe F Norsuntepe 8–6 Tepecik	Amuq J Gedikli IIIk Titriş Kurban III Tilbeş Kazane
2150 B.C.E. EBA IIIb	Troy III–IV	Beycesultan IX–VIII	Boğazköy Vc Alacahöyük 6 Alişar 12T 6M Kültepe 12 Acemhöyük	Ikiztepe Mound I Cemetery	Tarsus Increase in north and west contacts	Arslantepe VID Korucutepe F Norşuntepe 10–9 Tepecik	Amuq I–J Gedikli Titriş Kurban IV Tilbeş Kazane Lidar
2300 B.C.E. EBA IIIa	Troy III Troy IIg	Beycesultan XII–X Küllüoba	Alacahöyük 7 Alişar 12T 7M Kültepe 13 Acemhöyük 9	Ikiztepe Mound I Cemetery	Tarsus Cultural implant from the west	Arslantepe VID Korucutepe E Norşuntepe 12–11	Amuq I Gedikli Titriş Kurban IV Tilbeş Lidar
2500 B.C.E. EBA IIb	Limantepe	Barcın Höyük Demircihöyük Küllüoba Beycesultan XIV–XIII Karataş V	Alacahöyük 8 Alişar T13 8M Kültepe 14 Acemhöyük 10	Ikiztepe	Tarsus	Arslantepe VIC2 Korucutepe D Norşuntepe 20–13 Pulur	Amuq H Gedikli Titriş Kurban IV Tilbeş
2600 B.C.E. EBA IIa	Troy IIa Limantepe	Demircihöyük Küllüoba Beycesultan XIV Karataş III	Alacahöyük 8 Alişar T14 Kültepe 14	Ikiztepe	Tarsus From village to town	Arslantepe VIC1 Koructepe C Norşuntepe 24–21 Pulur	Amuq H Gedikli Hassek Titriş Kurban IV Tilbeş
2700 B.C.E. EBA Ib	Troy I final ca. 2719 Limantepe Baklatepe	Demircihöyük Küllüoba Beycesultan XVI Karataş I	Alacahöyük Alişar 12 M	Ikiztepe	Tarsus	Arslantepe VI B2 Koructepe C Norşuntepe 30–25 Pulur	Amuq G Gedikli Hassek Kurban V Tilbeş
2900 B.C.E. EBA Ia	Troy Ia ca. 2920 Kumtepe Ib Limantepe Baklatepe	Demircihöyük Küllüoba Beycesultan XIX–XVII	Alacahöyük Alişar 19M– Çadır Höyük	Ikiztepe	Tarsus	Arslantepe VIB1 Koructepe C Tepecik Pulur	Amuq G Gedikli IIIa Hassek Titriş KurbanV

EGE	TROAS BÖLGESİ	İÇ KUZEYBATI ANADOLU (FRİGYA K ÜLTÜR BÖLGESİ)			ORTA İÇ BATI ANADOLU KÜLTÜR BÖLGESİ			GÖLLER BÖLGESİ (LİKYA - PİSİDİA KÜLTÜR BÖLGESİ)			
	Troya	Demircihöyük	Küllüoba	Keçiçayırı	Beycesultan	Afyon	Kusura	Harmanören Mezarlığı	Karataş-Semayük		MÖ 2000-1900
Erken Kiklad III	V		II A		VI					Geç ETÇ III	
			II B-C		VII-VIII					(Orta Tunç Çağına	
	IV		II D-E		XI-IX					Geçiş Dönemi)	MÖ 2200
Kastri - Lefkandi I	III		III A		XII	Kaklık ETÇ III mezarları		Birkaç mezar	VI:2	Erken ETÇ III	
Geç ETÇ II	II d-h		III B								
	II c		III C		hiatus?				VI:1		MÖ 2400
	II b										
Erken Kiklad II	II a		IV A		XIIIa	Karaoğlan ETÇ II	Kusura B		V: 3	ETÇ II	
	I k	O-P	IV B		XIIIc-b				V: 2		
	I g h i	N-M	IV C		XIV						
ETÇ II (Erken)	I f	K-L	IV D						V: 1		
	I e	I	IV E		XV						
	I d	H	IV F		XVI				IV		MÖ 2700
ETÇ I B	Ic	G	2		XVII		Kusura A		III	ETÇ I	
	Ib	F									
Erken Kiklad I		E			XVIII				II		
	Ia	D			XIX						MÖ 3000-2900
ETÇ I A	Kumtepe IB		3			Kaklık Mevkii			I	ETÇ'ye Geçiş Dönemi	
			4								
			5								MÖ 3200

Fig. 3 Inner Western Anatolian EBA Chronology (Efe and Türkteki 2011, Fig.1)

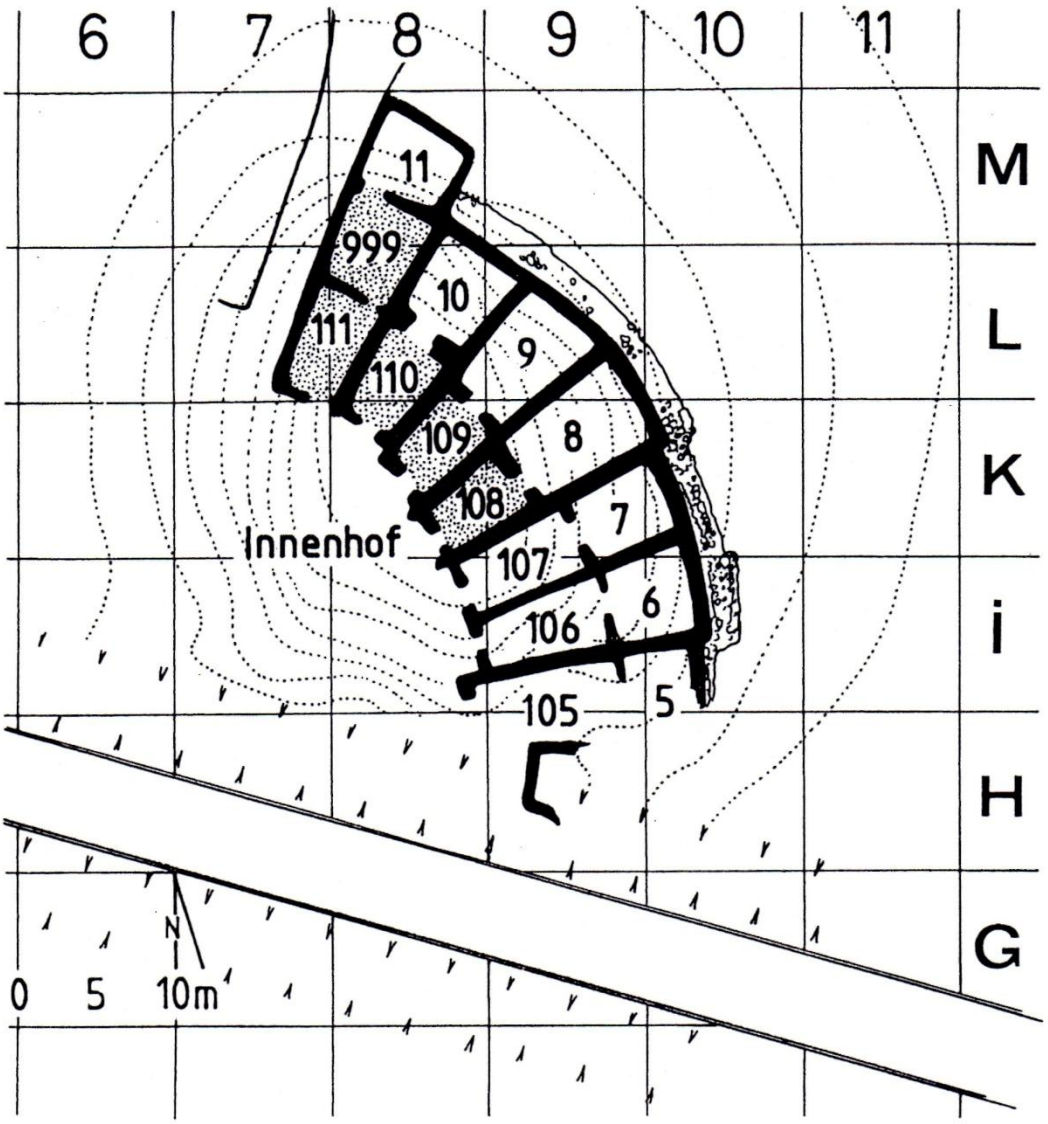


Fig. 4 The five rooms that were compared: “Subject Rooms” (Efe 1988, Fig. 1)

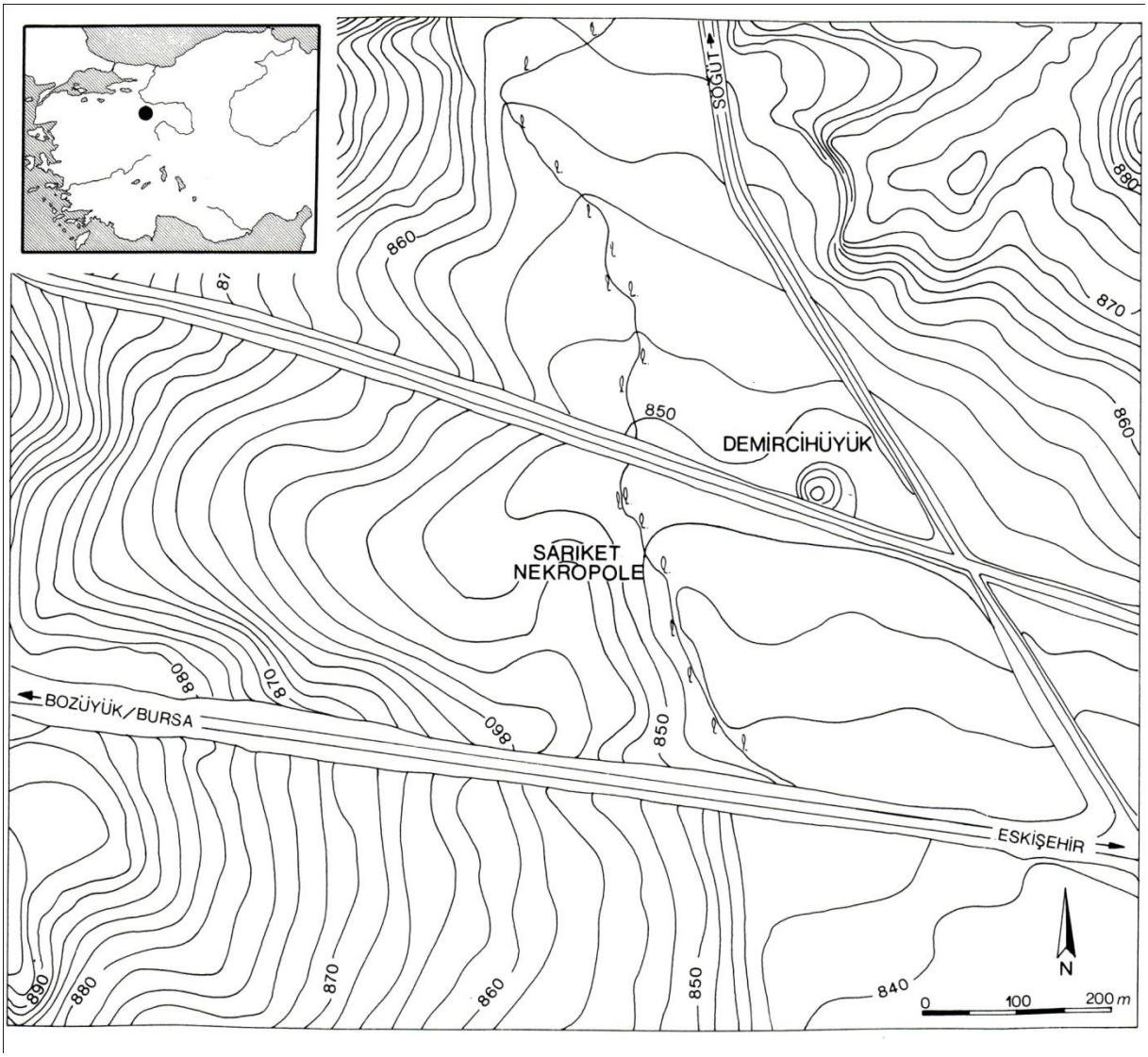


Fig. 5 The topographic map and the location of the mound of Demircihöyük and the Sarıket cemetery (Seeher 2000, Fig. 1)

Fig. 6 Plan of Demircihöyük based especially on the remains from Phases F1 and H (Korfmann 1983, Fig. 343)

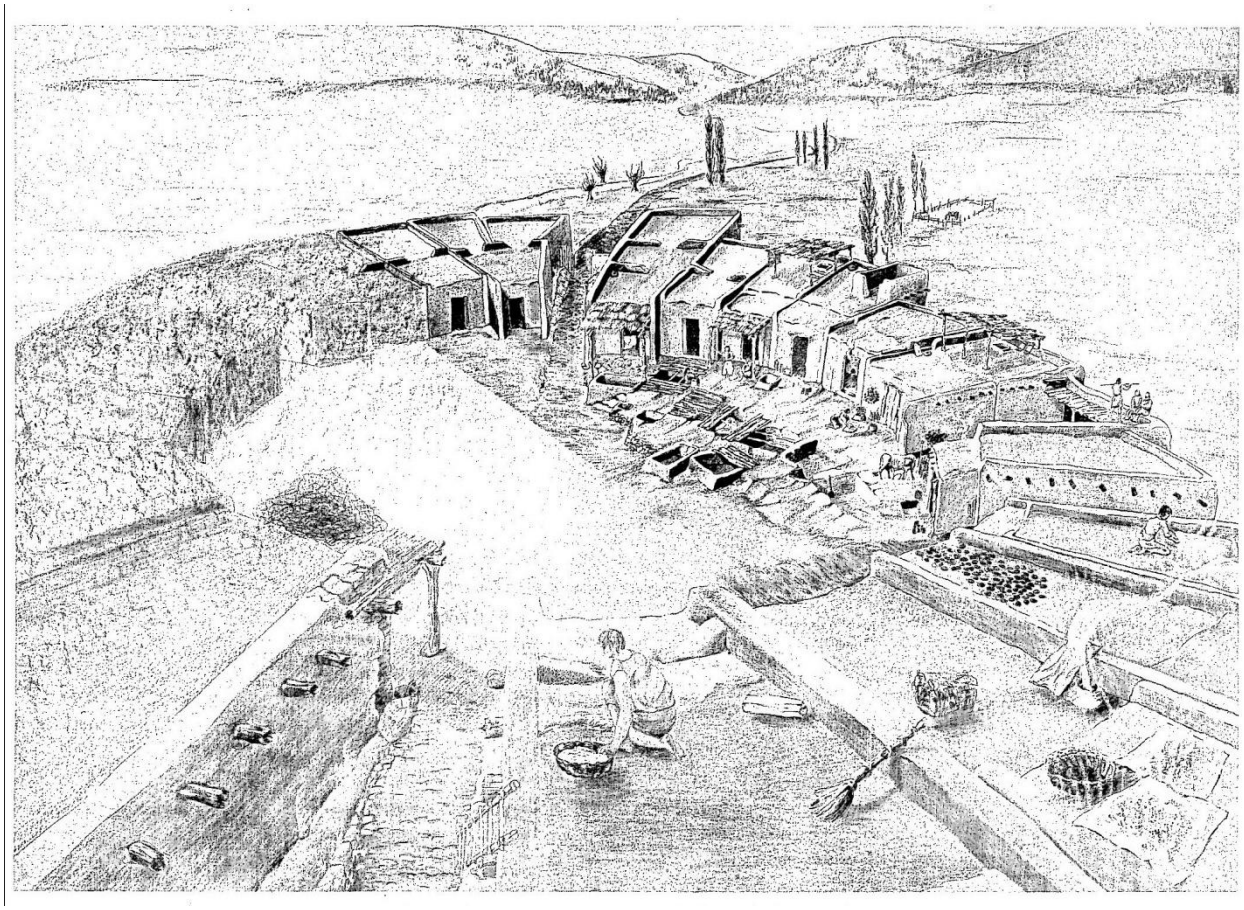


Fig. 7 Reconstruction of Demircihöyük's settlement plan (Korfmann 1983, Fig. 345)

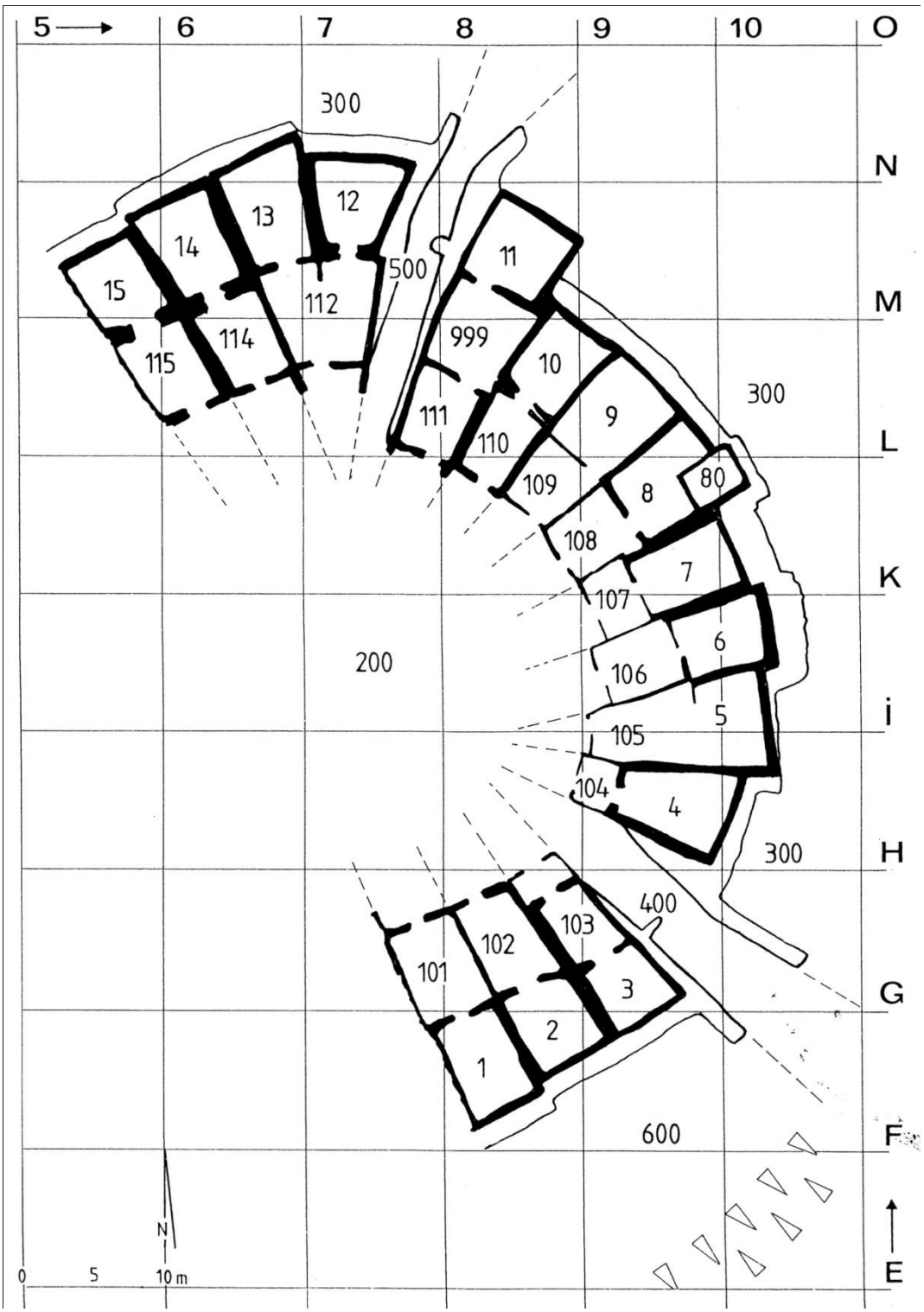


Fig. 8 The excavated parts of the settlement (Baykal-Seeher and Obladen-Kauder 1996, Fig. 1)

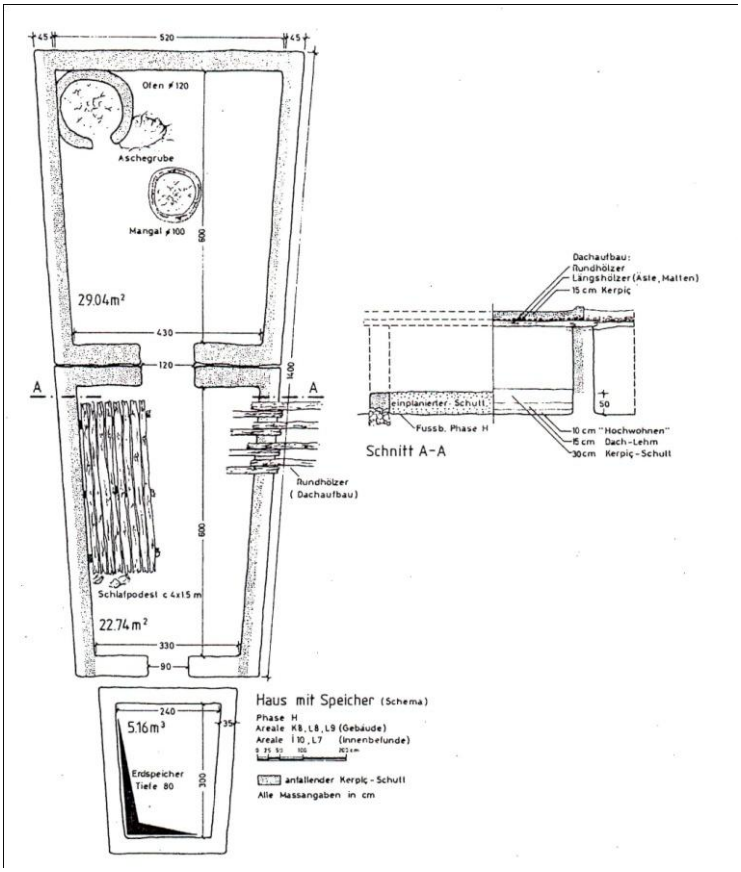


Fig. 9 The "standard house plan" (Korfmann 1983, Fig. 352)

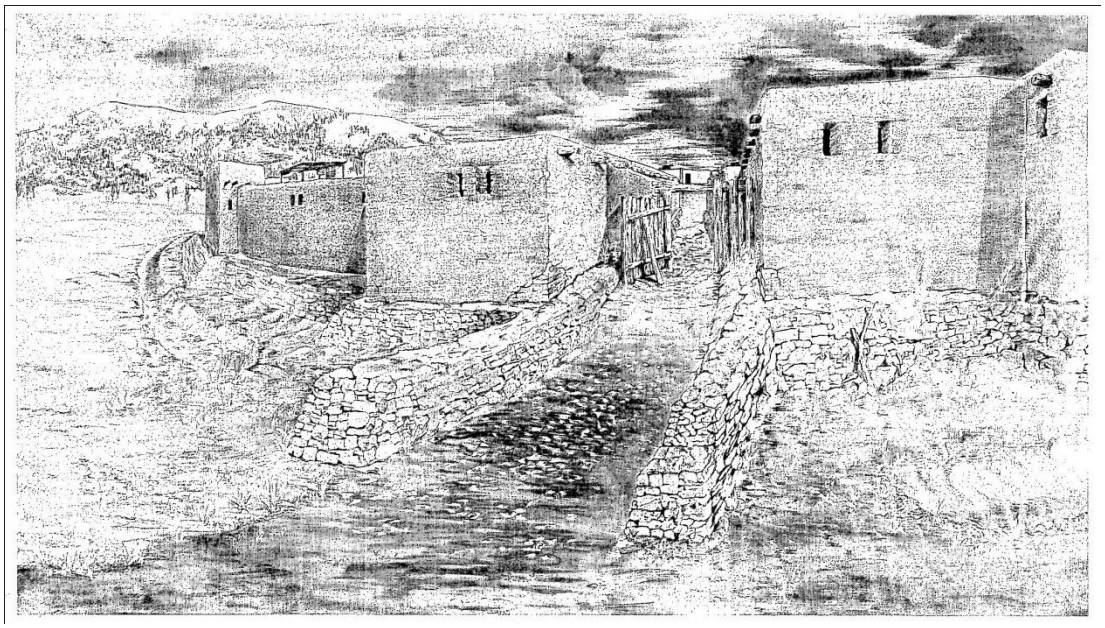


Fig. 10 View from the northern part of the settlement-reconstruction (Korfmann 1983, Fig. 344)

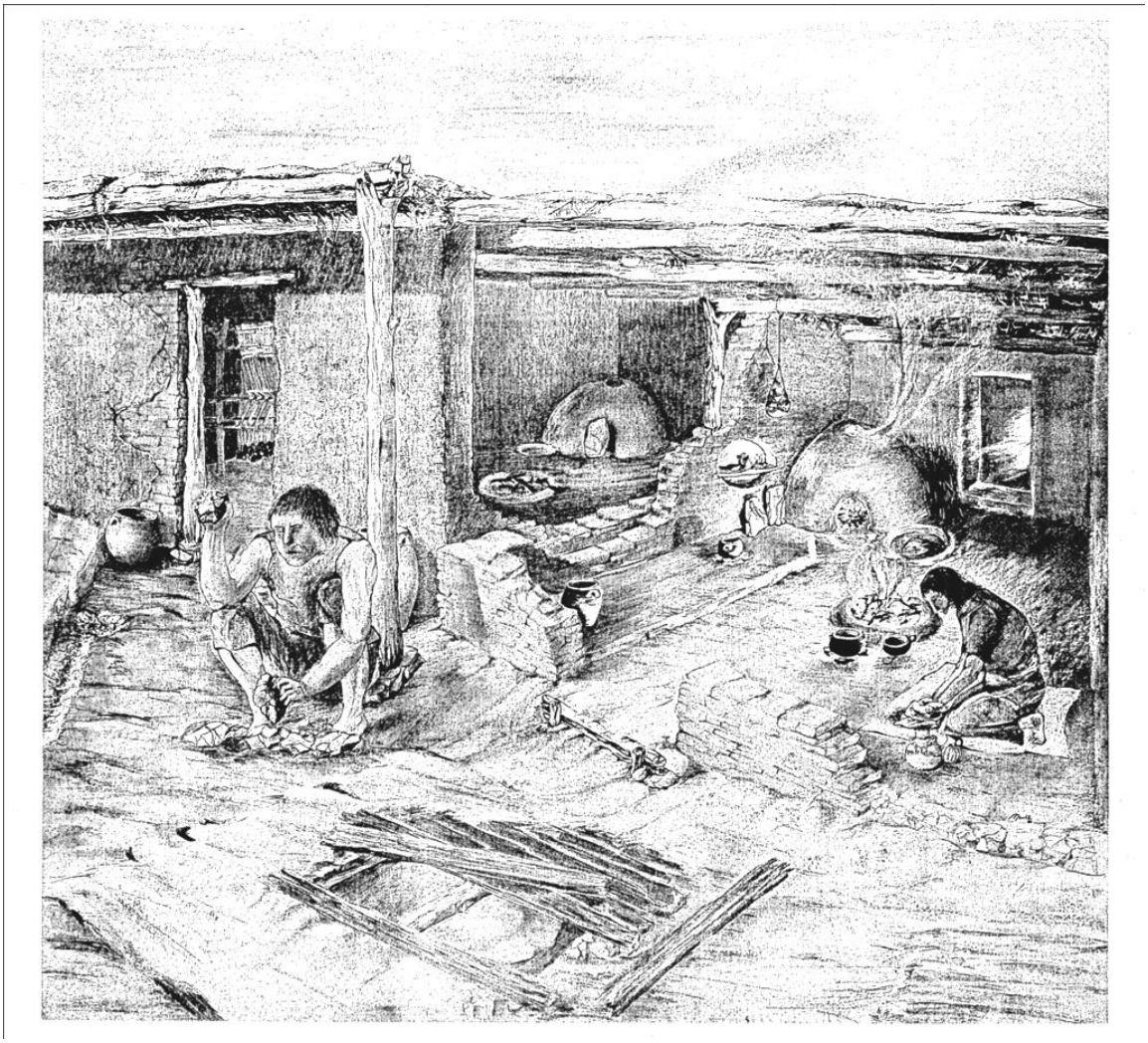


Fig. 11 Production activity areas-reconstruction (Korfmann 1983, Fig. 346)

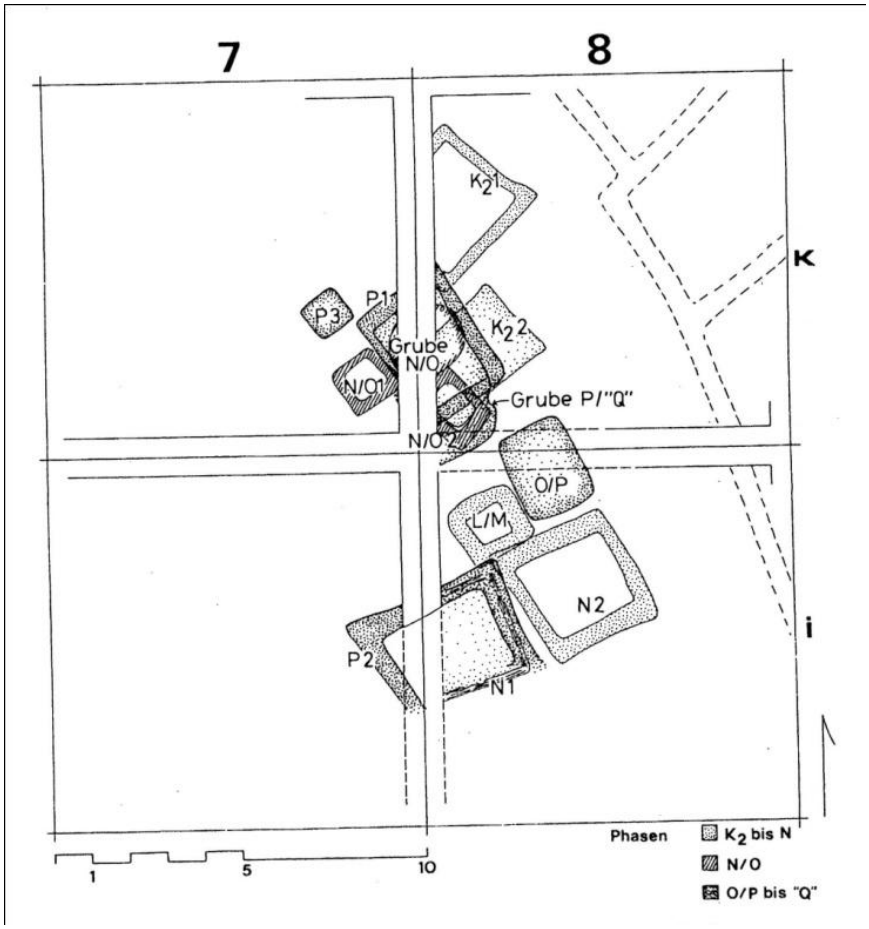


Fig. 12 The storage bins in different phases (Efe 1988, Fig. 4)

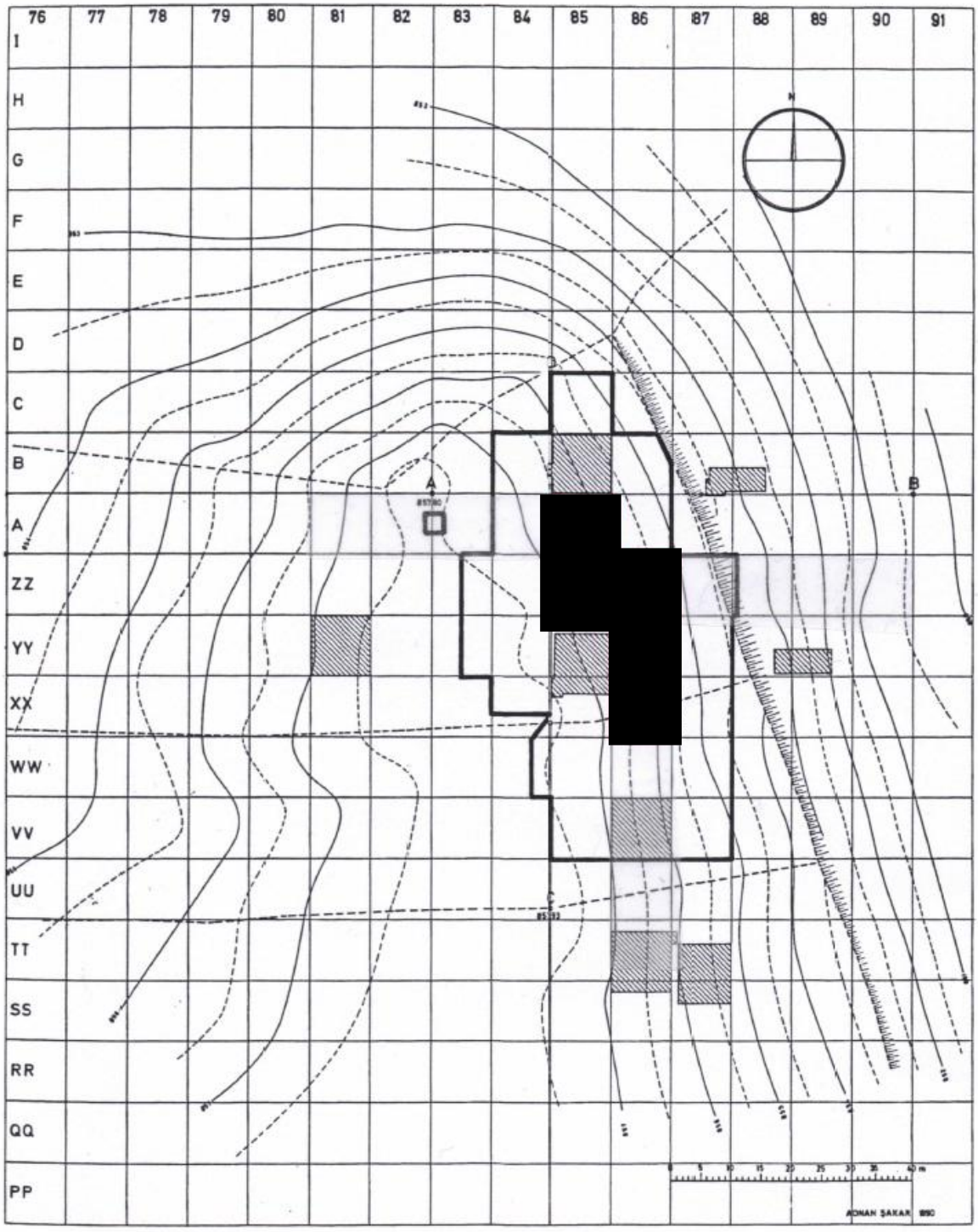


Fig. 13 The best preserved areas in the cemetery with the richest amount of data, marked with solid black boxes (Seeher 1992b, Fig.1)

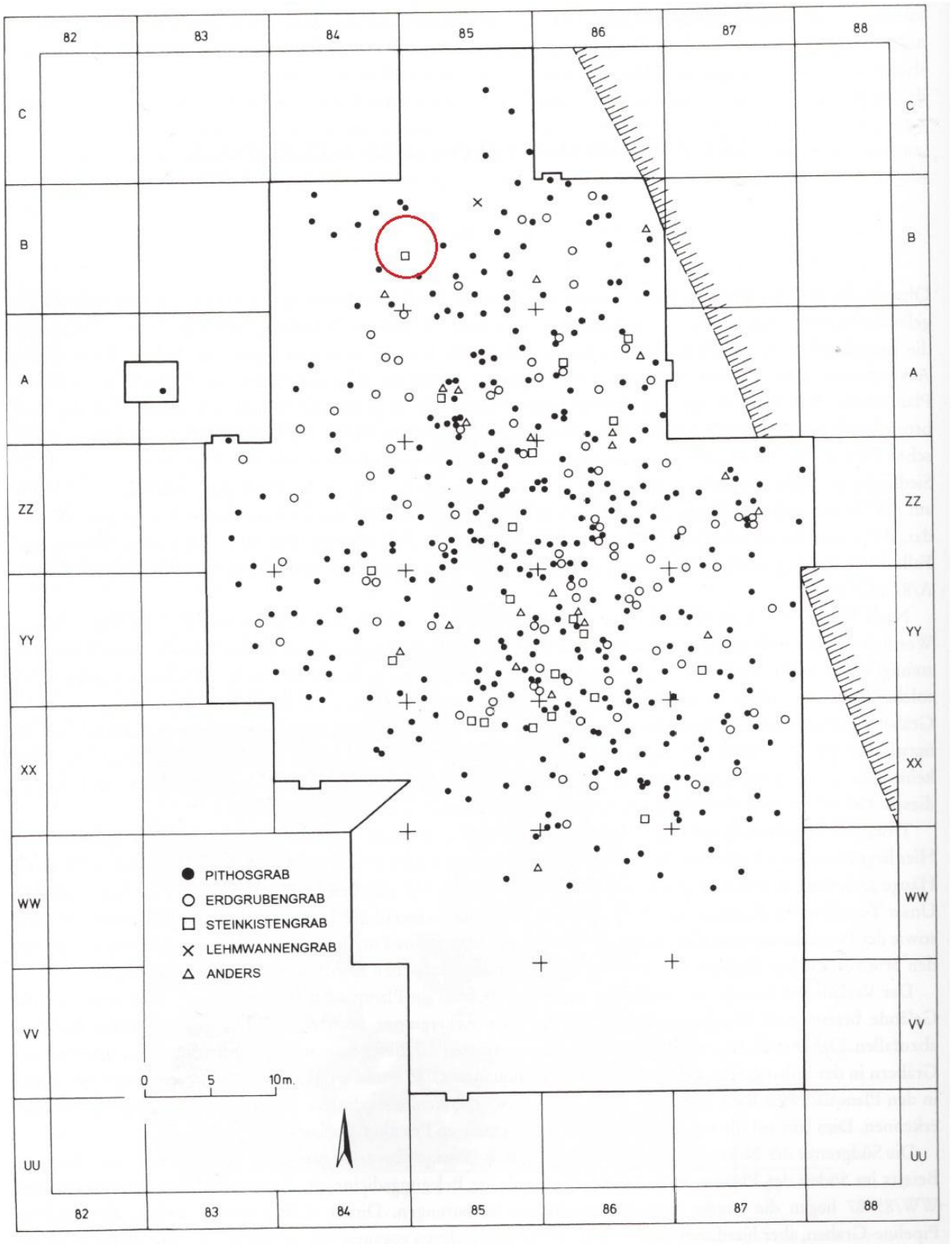


Fig. 14 The isolated location of the mudsink burial- marked with a circle (Seeher 2000, Fig. 8)[200]

[200] Legend's translation: pithos burial, simple inhumation burial, cist burial, mudsink burial,other

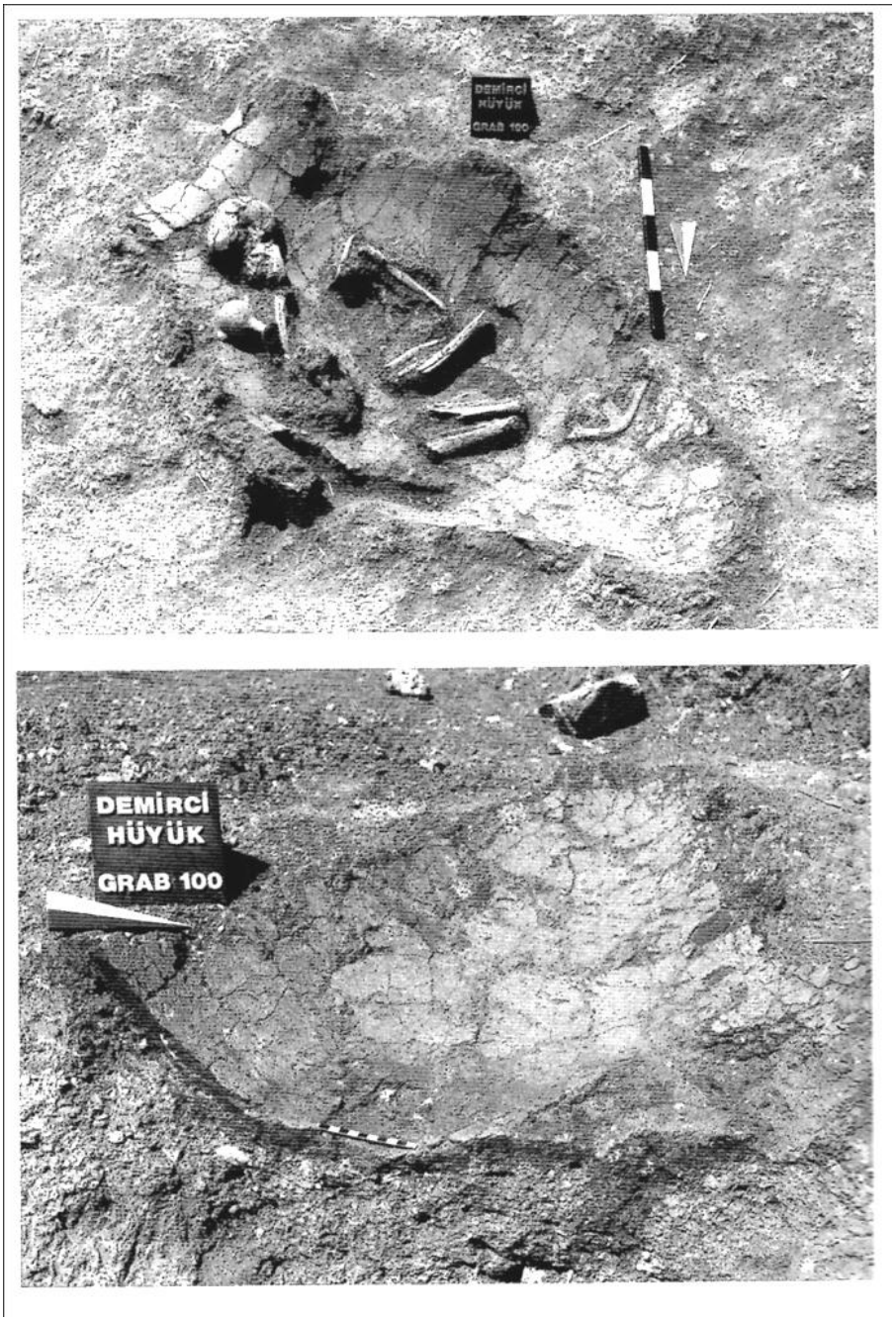


Fig. 15 G100, The “mudsink” burial (Seeher 2000, Plate 6.1-2)

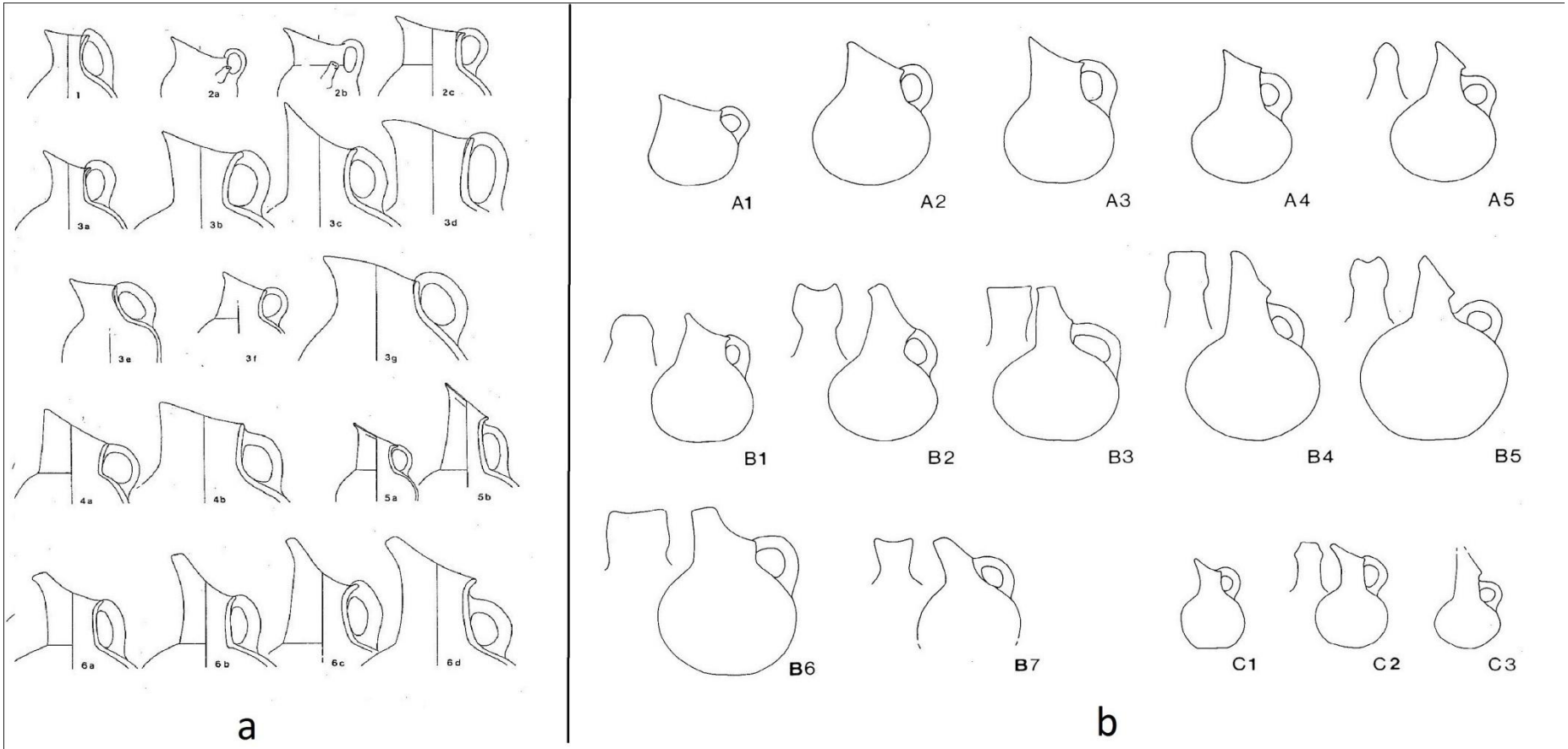


Fig. 16 The jug typology for the settlement: a (Efe 1988, Fig. 64) and for the cemetery: b (Seeher 2000, Fig. 11)

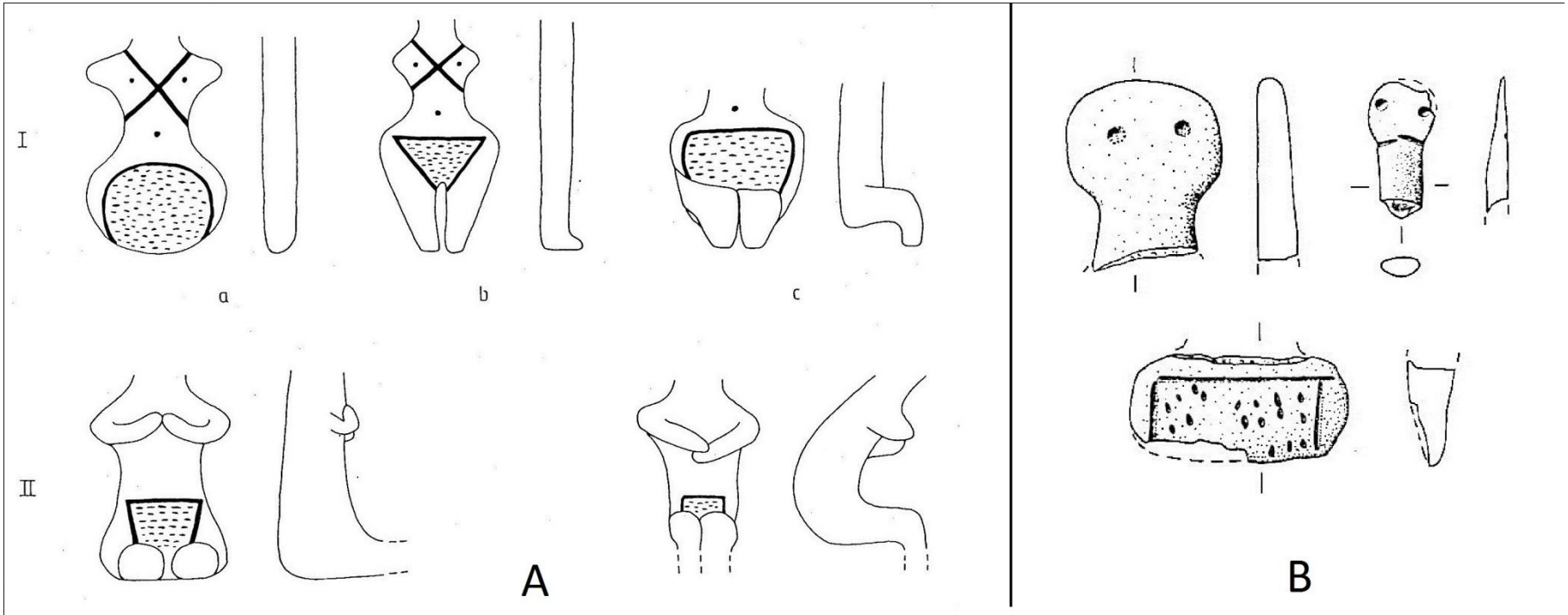


Fig. 17 The body typology for the clay figurine found in the settlement: A (Baykal-Seeher and Obladen-Kauder 1996, Fig. 187) compared to the stone figurine fragments from G107: B (Seeher 2000, Fig. 24)

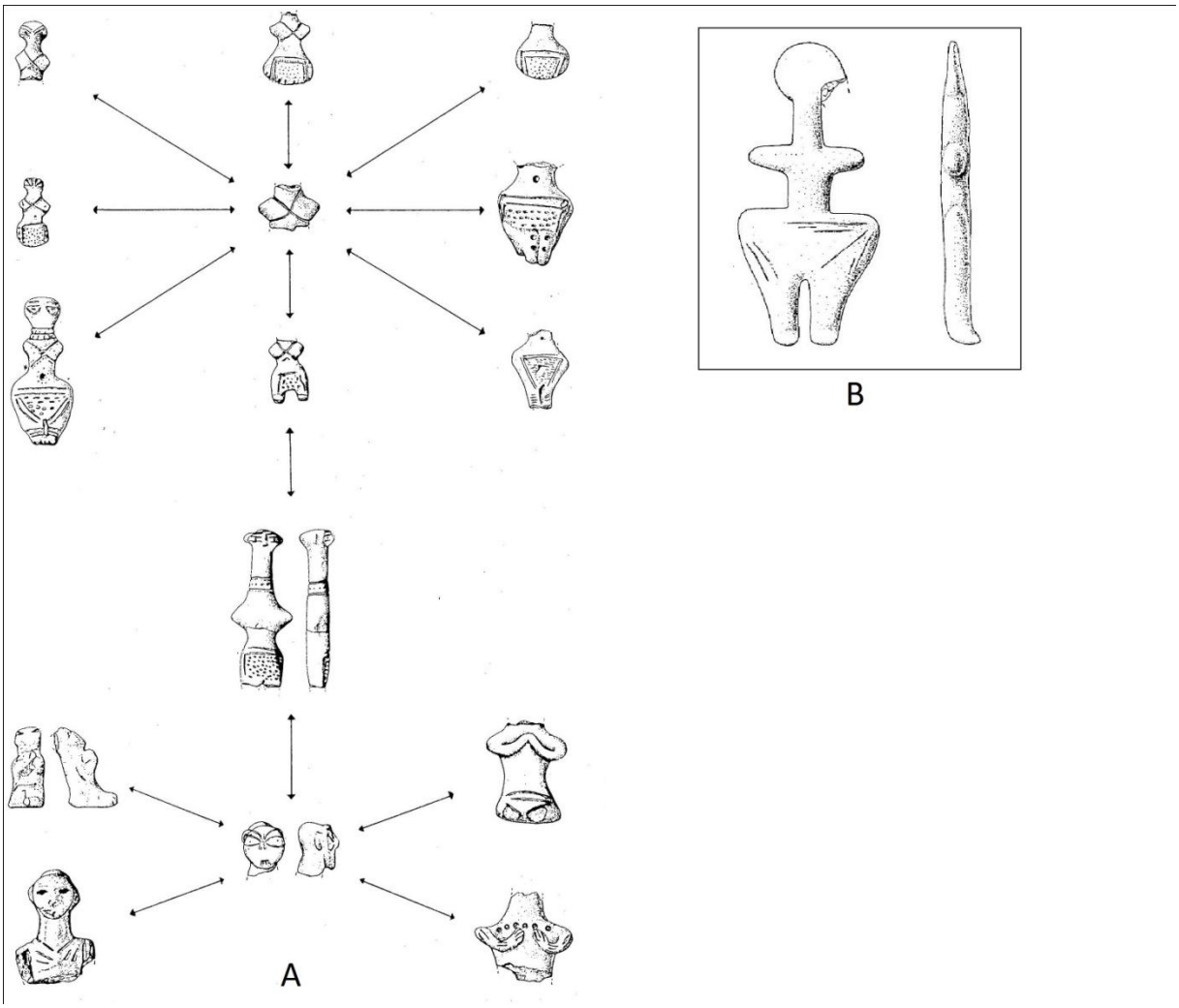


Fig. 18 Combination possibilities for the female figurine typologies in the settlement: A (Baykal-Seeher and Obladen-Kauder 1996, Fig. 189) compared to the Stone figurine from G295: B (Seeher 2000, Fig. 36)

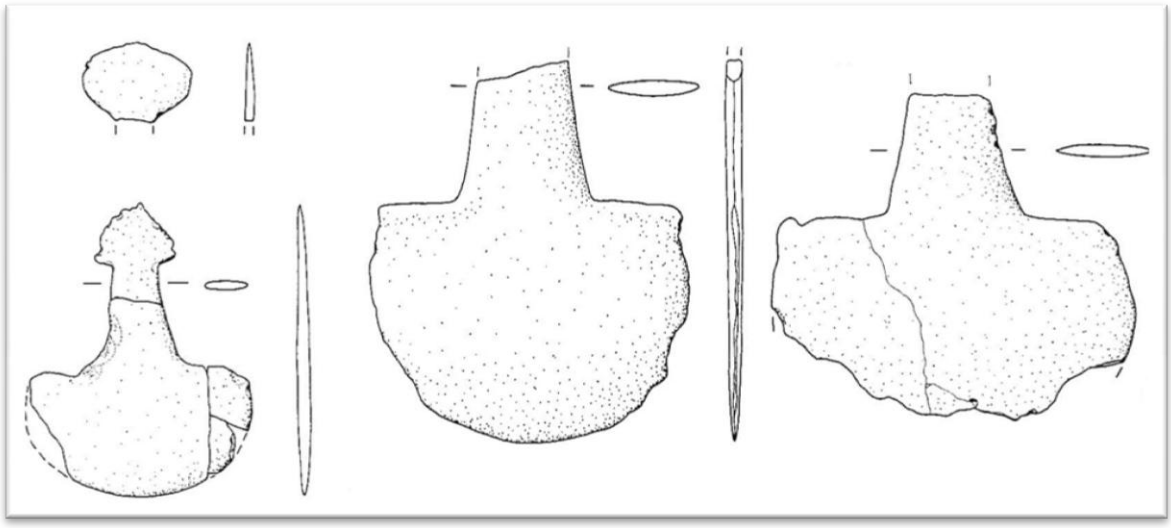


Fig. 19 The stone idols from G213 (Seeher 2000, Fig. 30)

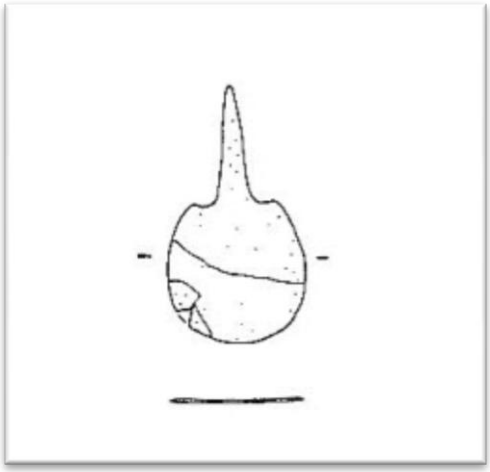


Fig. 20 The silver “idol” (?) from G481 (Seeher 2000, Fig. 48)

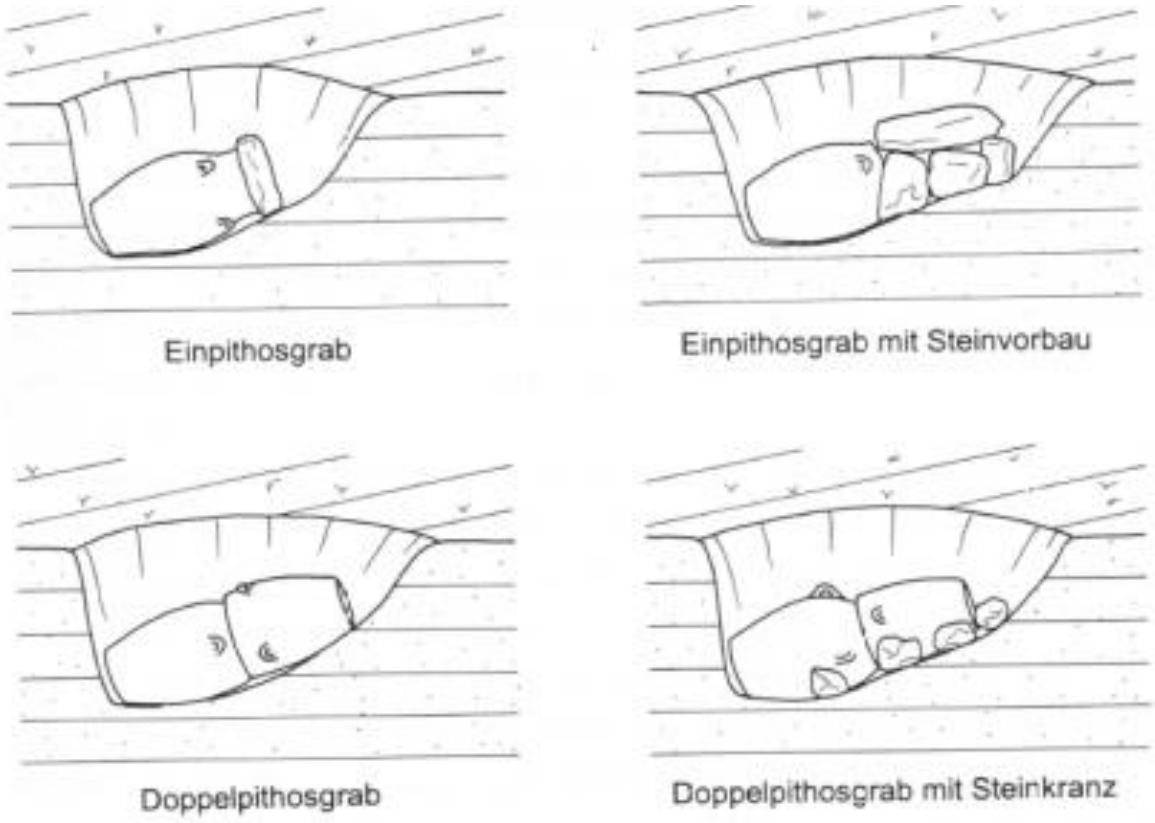


Fig. 21 Pithos Burial Variations at Demircihöyük Cemetery (Seeher 2000, Fig. 9)[201]

[201] Translation: Single pithos, single pithos with stone installation, double pithos, double pithos with stone installation

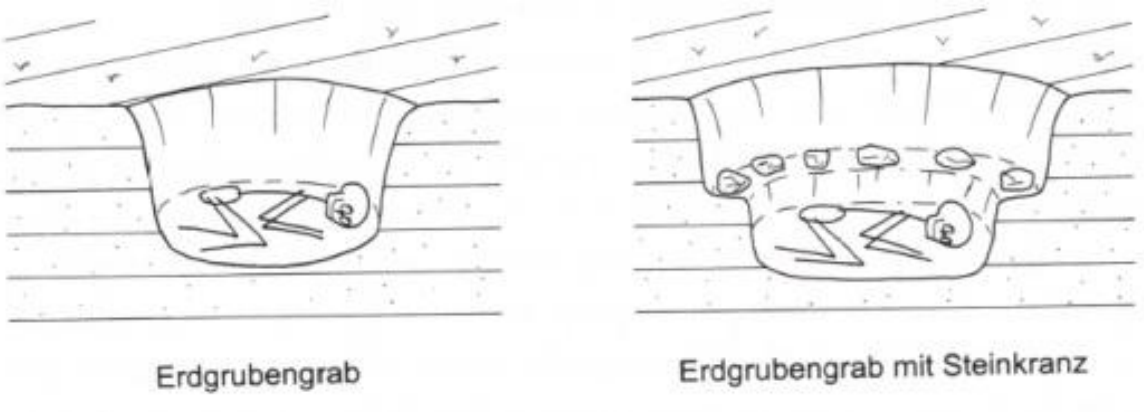


Fig. 22 Simple Inhumation Burial Variations at Demircihöyük Cemetery (Seeher 2000, Fig. 9)[202]

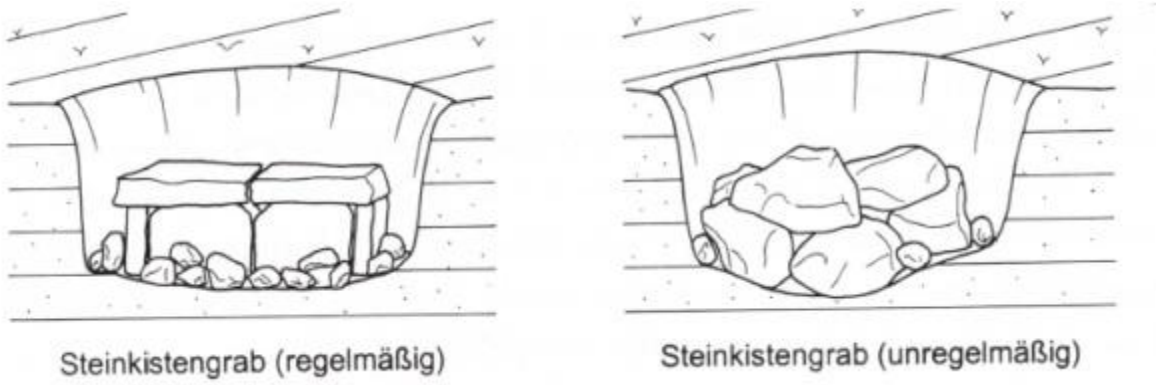


Fig. 23 Cist Burial Variations at Demircihöyük Cemetery (Seeher 2000, Fig. 9)

[203]

[202] Translation:Simple inhumation, simple inhumation with stone circle
[203] Translation: Cist burial (regular), cist burial (irregular)

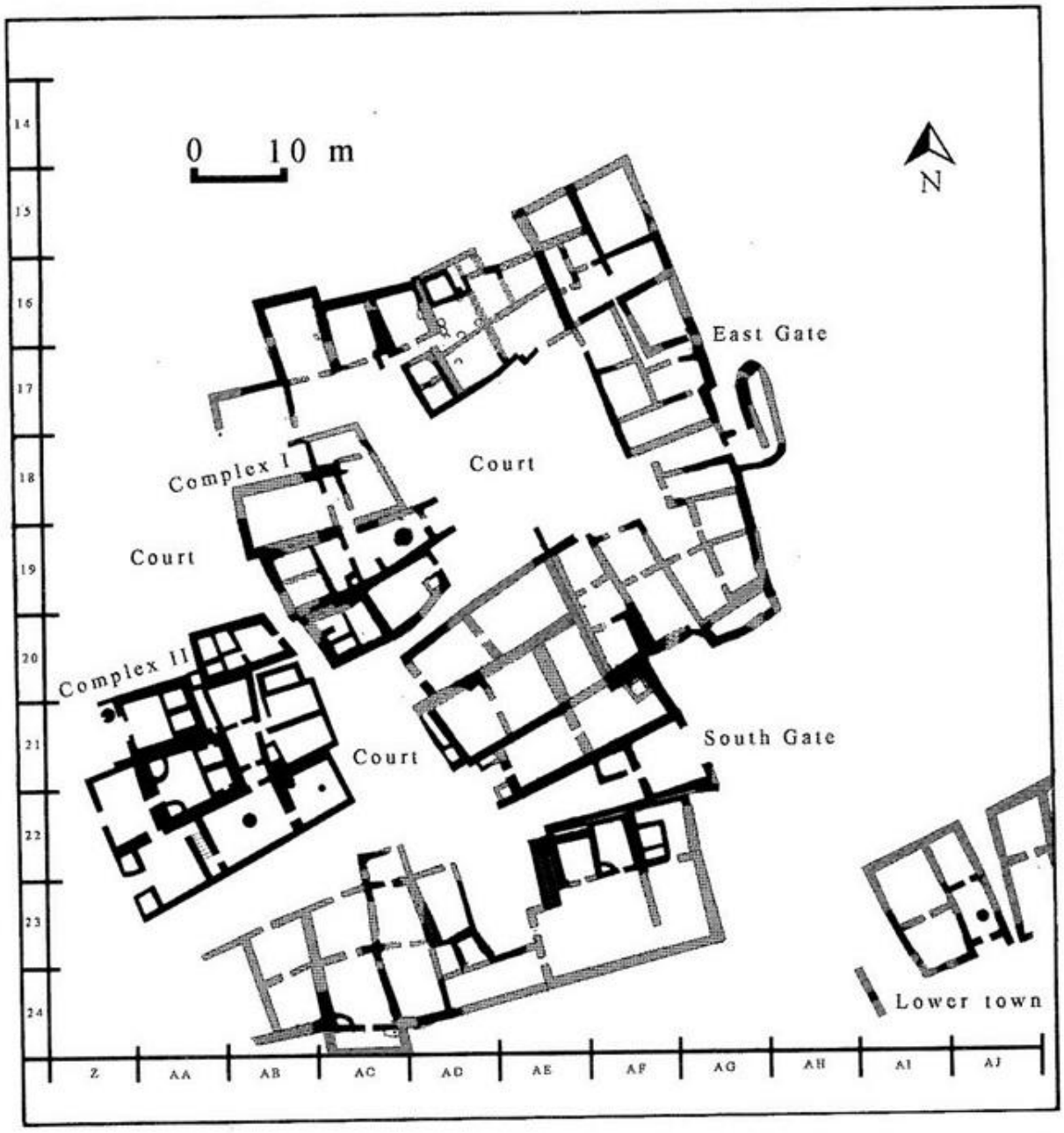


Fig. 24 The settlement plan of Külloba Phase V (Sagona & Zimansky 2009)

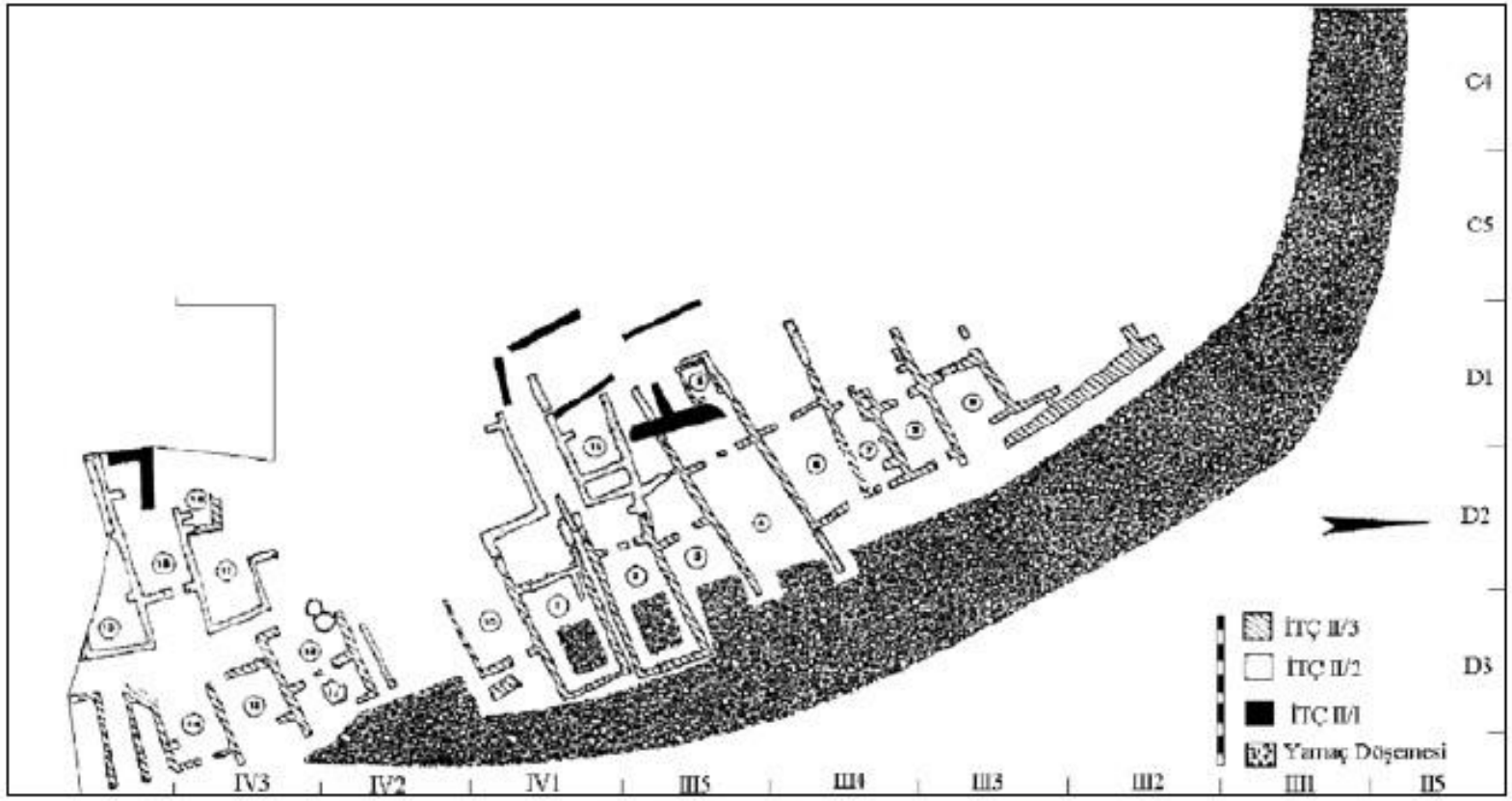


Fig. 25 The settlement plan of Bademağacı (Duru 2004)

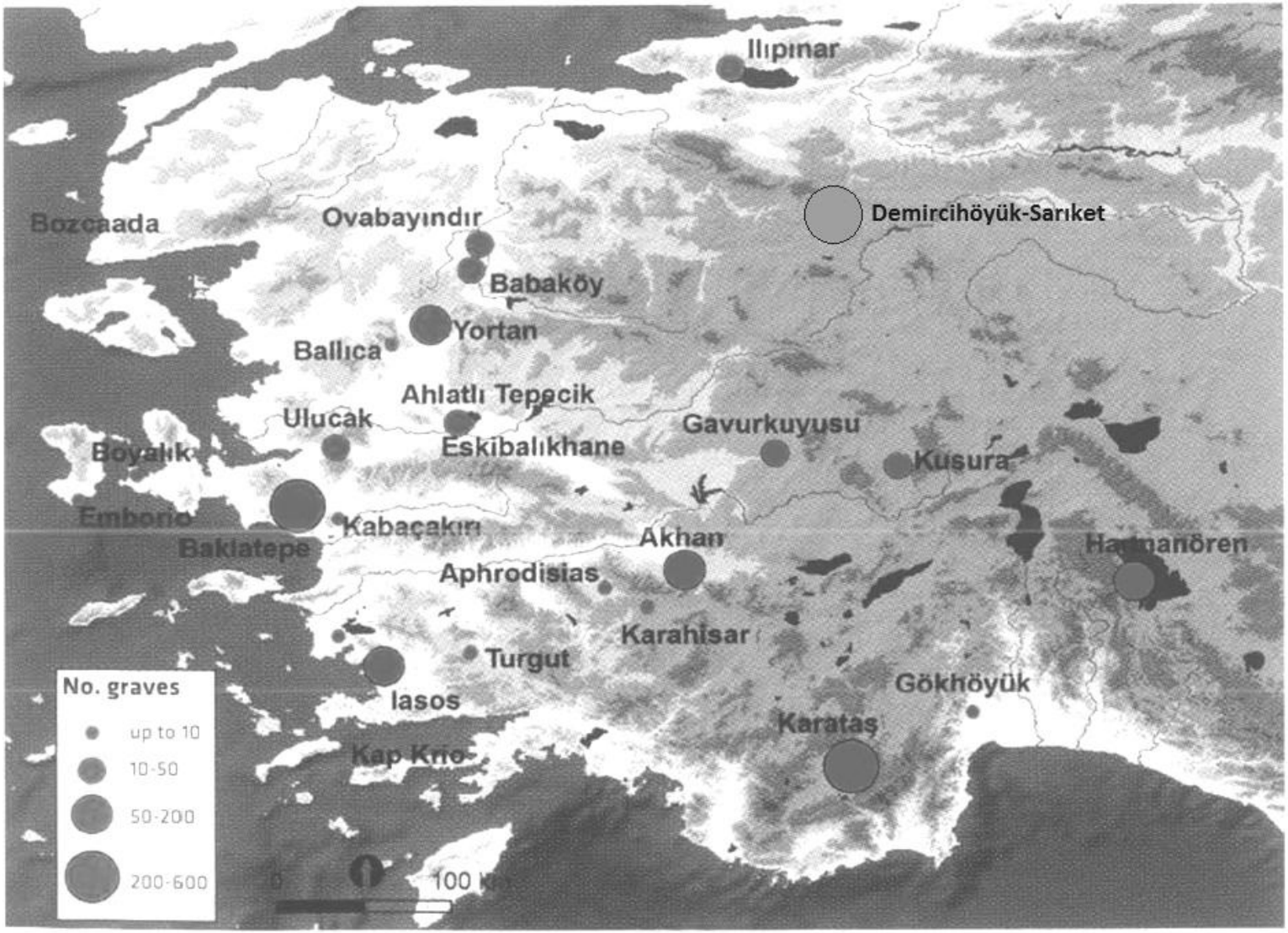


Fig. 26 The scale of the excavated cemeteries in western Anatolia (Massa and Şahoğlu 2011, Fig. 1)

APPENDIX D: CHARTS

Chart 1: The Preservation of Burial Types

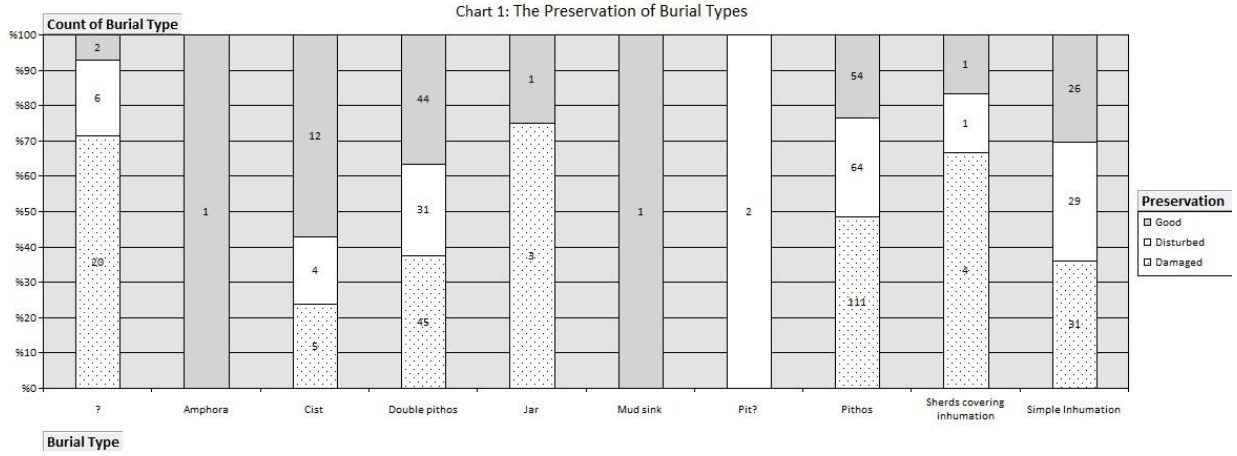


Chart 2: The Preservation of Trenches

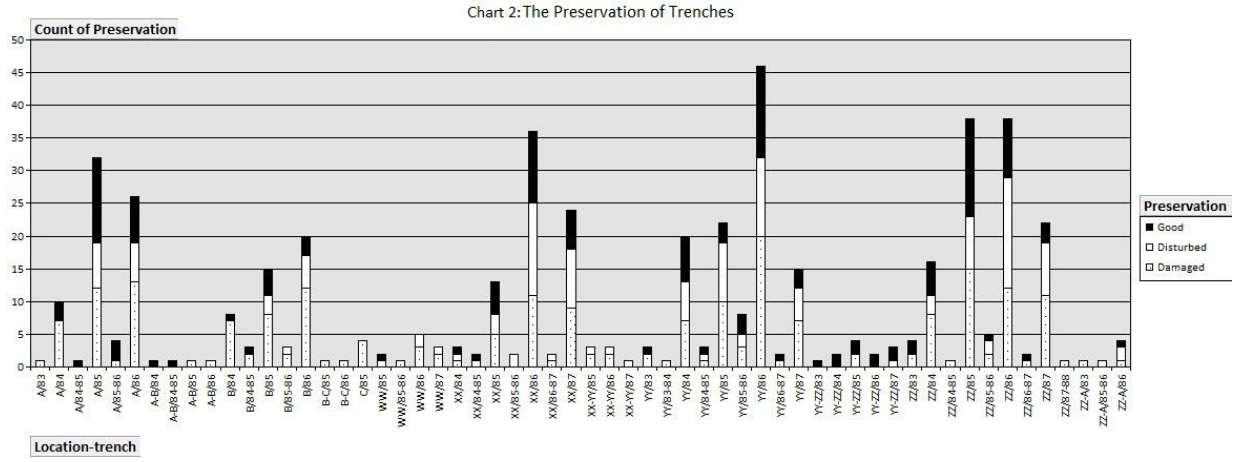


Chart 3: Number of Burials in the Trenches

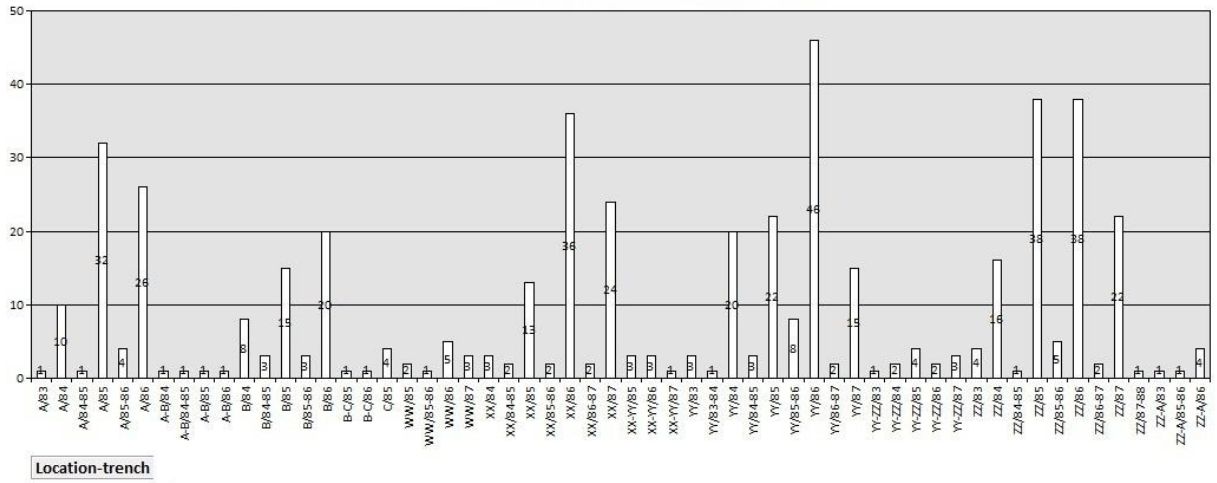


Chart 4: Number of Finds in Different Trenches

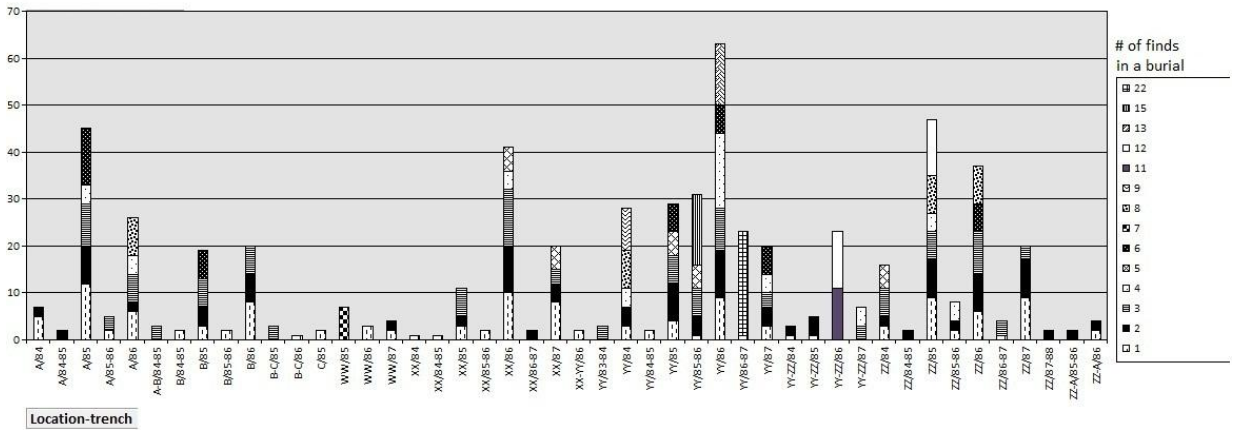


Chart 5: Number of Individuals in Different Preservation States

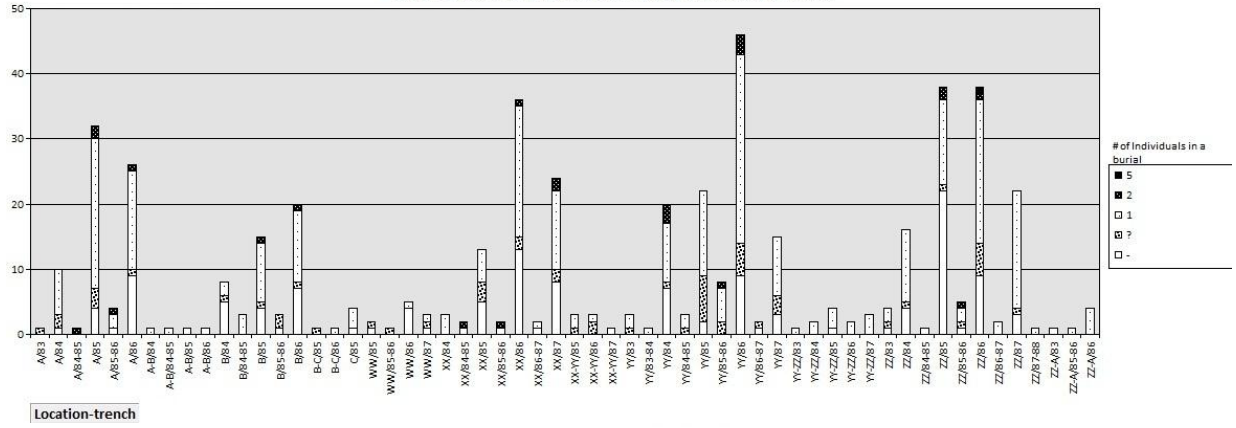


Chart 6: Number of Burials and their Orientation

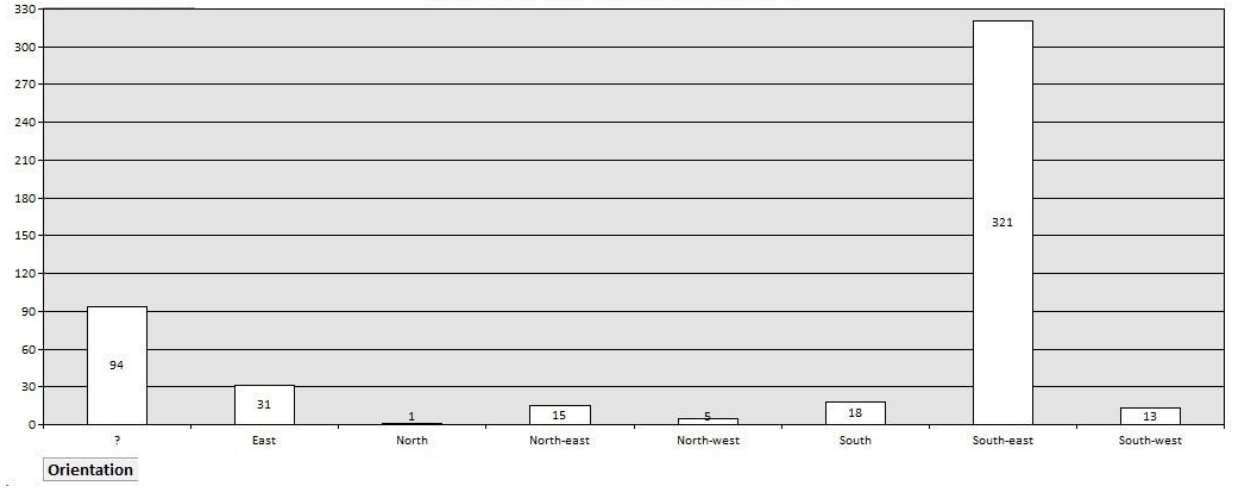


Chart 7: Orientation of Burial Types

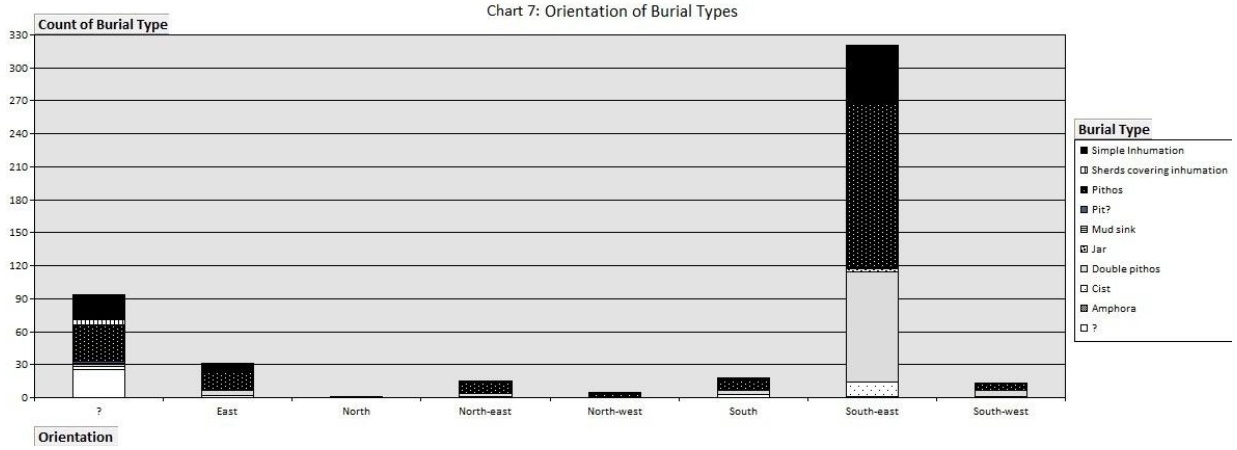


Chart 8: Orientation and Gender

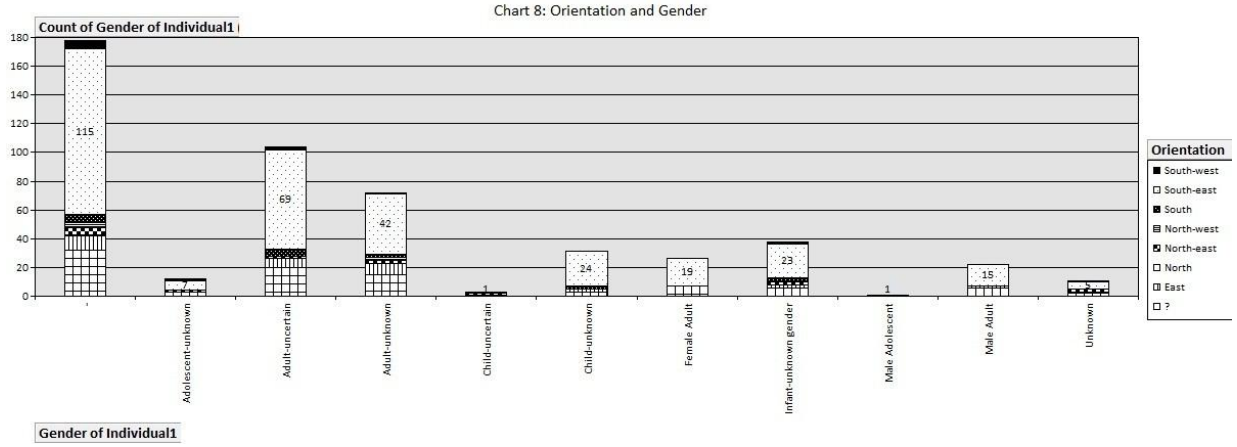


Chart 9: Burial Types

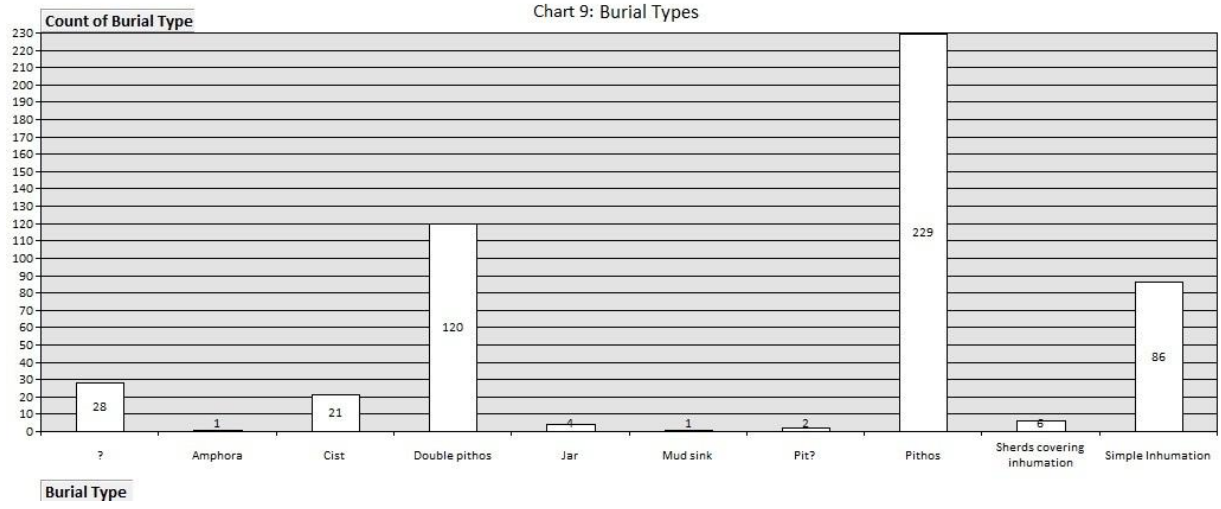


Chart 10: Number of Burial Types in Different Trenches

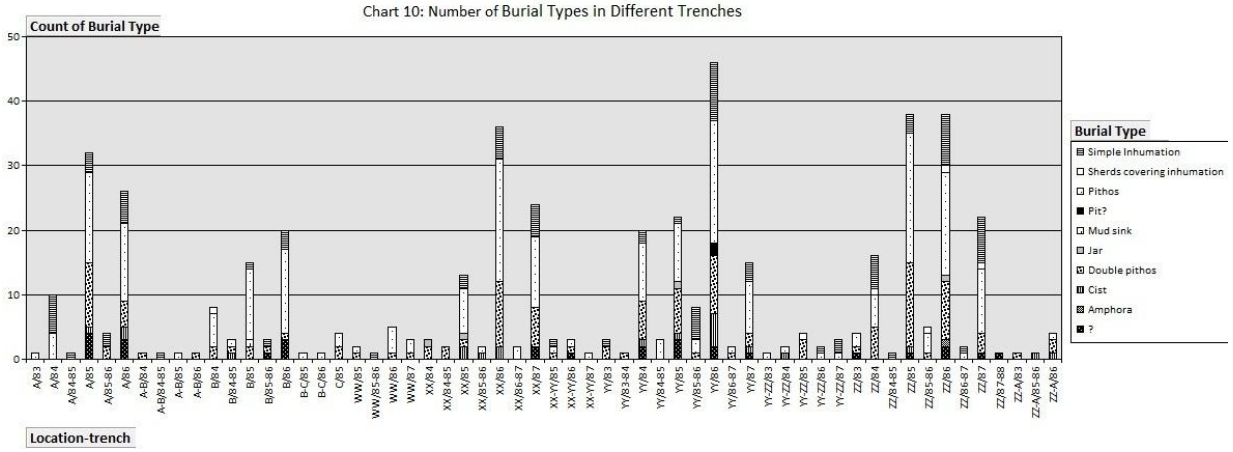


Chart 11: Burial Types and Gender/Age Groups

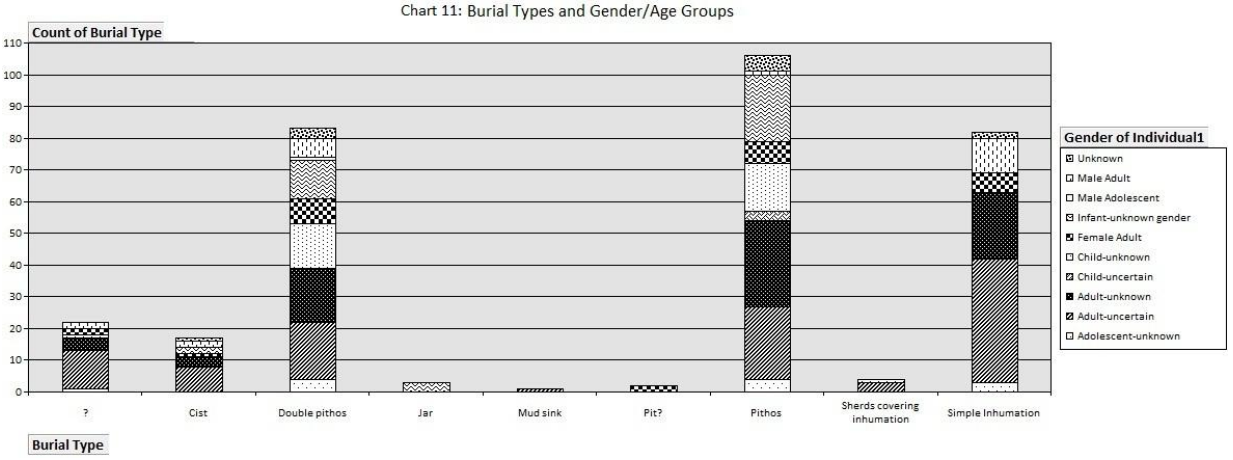


Chart 12: Burial Types of Individuals Younger than 10

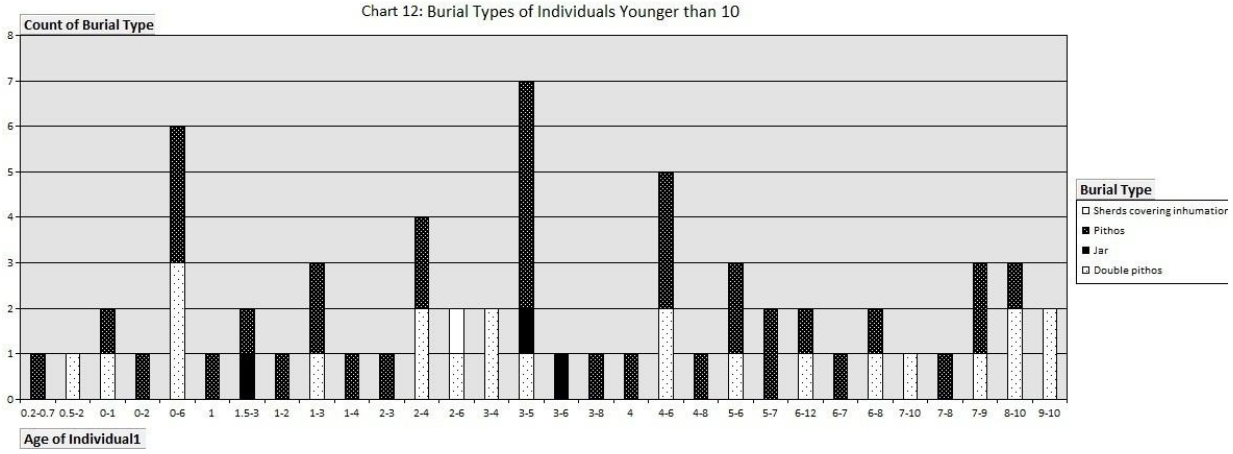


Chart 13: Pithos Burials and Age Ranges

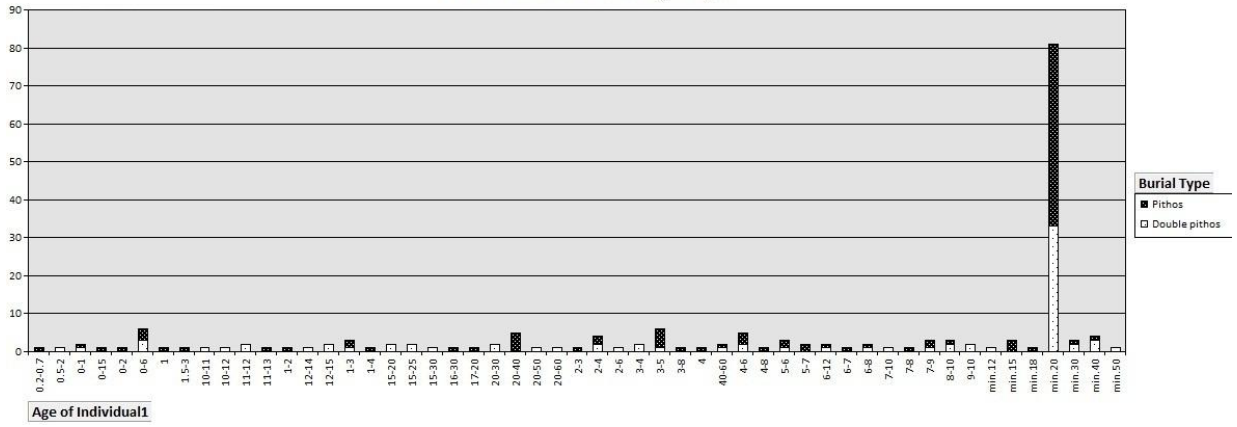


Chart 14: Pithos Burials and Gender/Age Groups

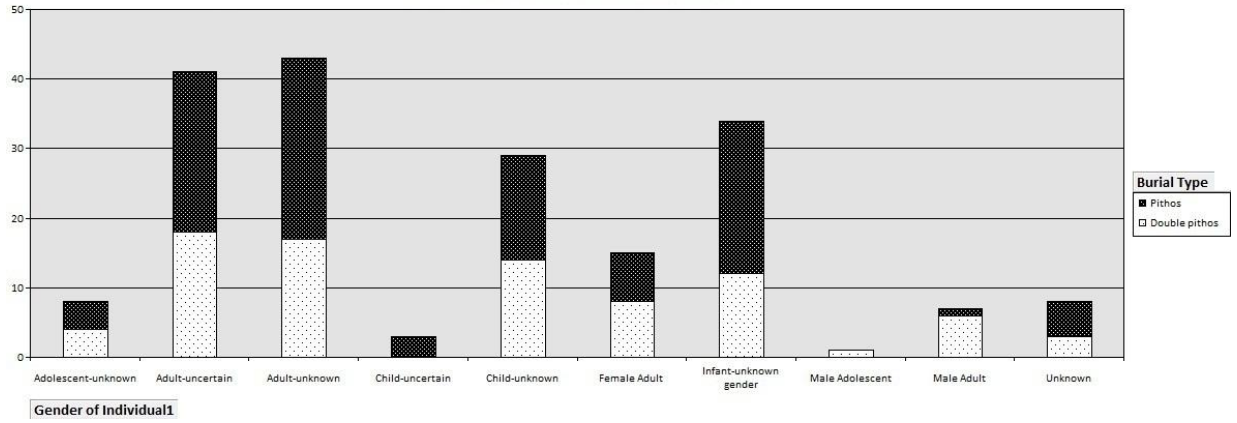


Chart 15: Burial Types and Number of Individuals

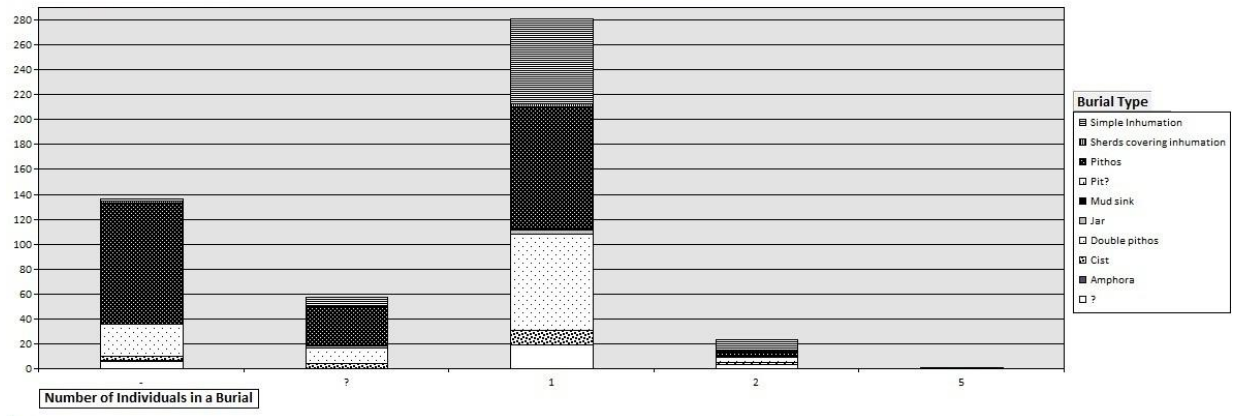


Chart 16: Number of Finds and Burial Types with Different Total number of Finds

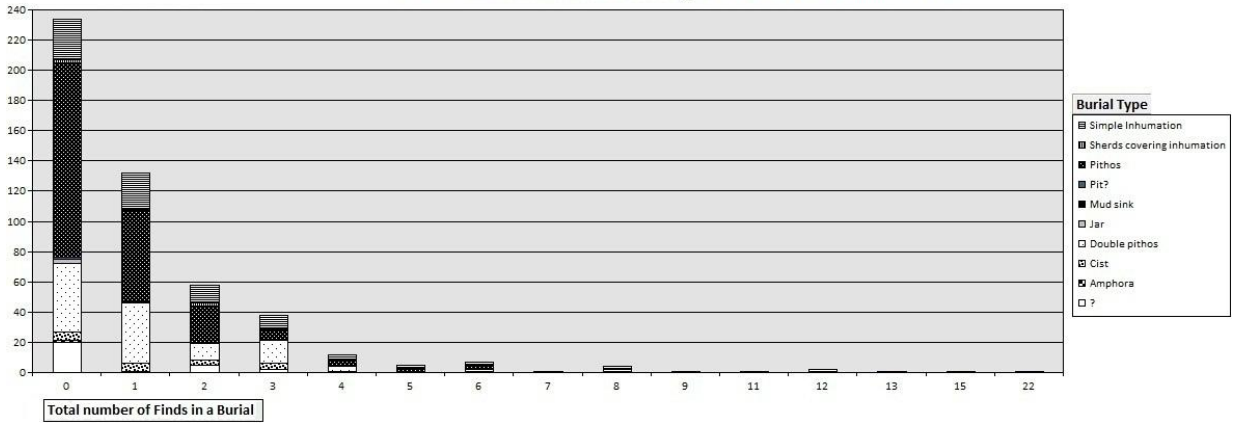


Chart 17: Burial Types and Number of Finds

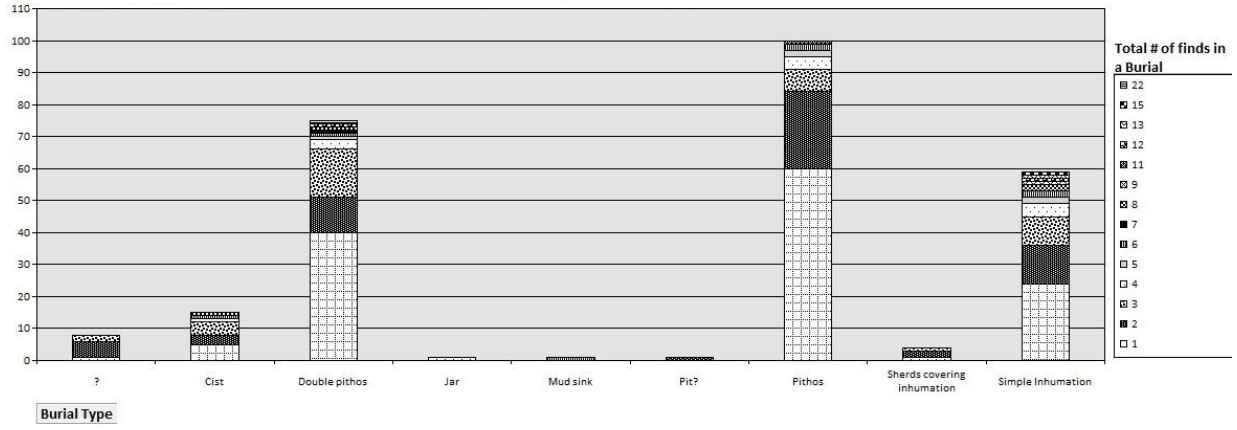
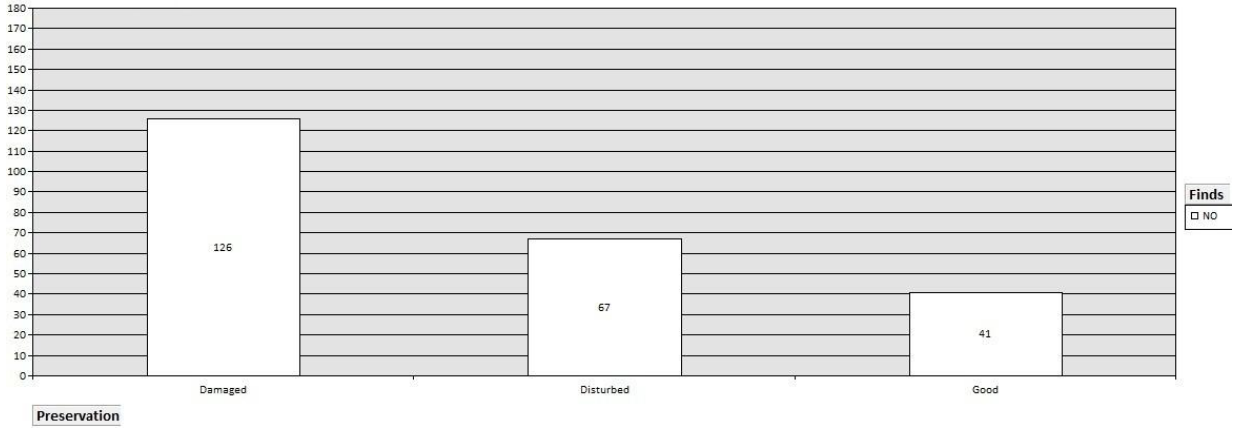


Chart 18: Burials with No Burial Finds in Different Preservation States



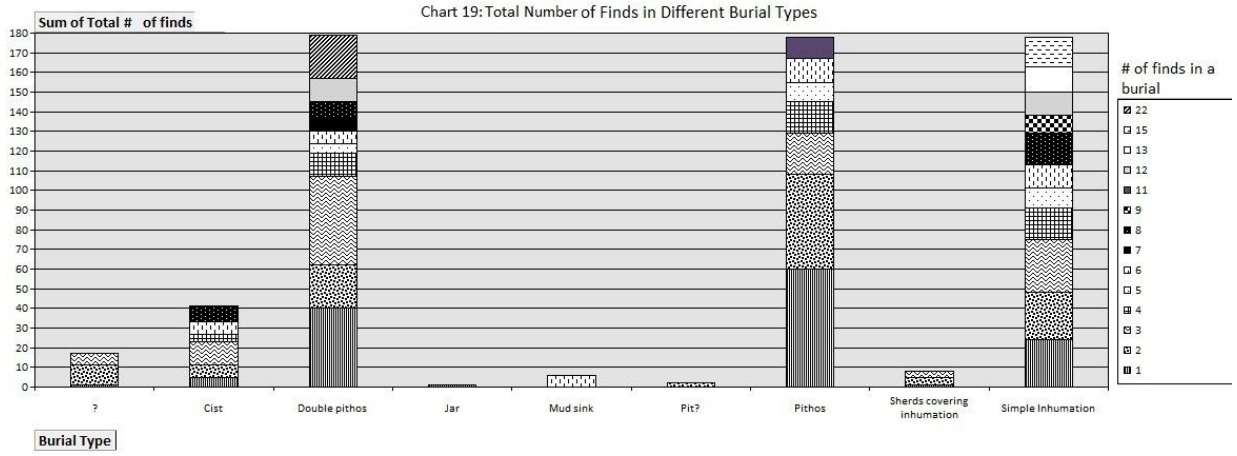


Chart 19: Total Number of Finds in Different Burial Types
Sum of Total # of finds
# of finds in a burial
22
15
13
12
11
9
8
7
6
5
4
3
2
1
?
Cist
Double pithos
Jar
Mud sink
Pit?
Pithos
Sherds covering inhumation
Simple Inhumation
Burial Type

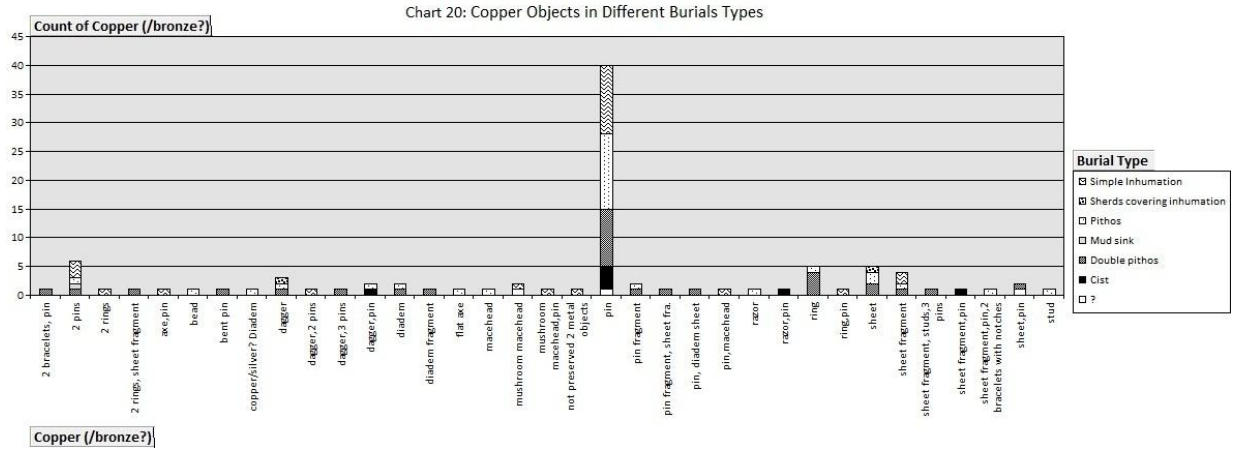


Chart 20: Copper Objects in Different Burials Types
Count of Copper (/bronze?)
Burial Type
Simple Inhumation
Sherds covering inhumation
Pithos
Mud sink
Double pithos
Cist
?
2 bracelets, pin
2 pins
2 rings
2 rings, sheet fragment
axe,pin
bead
bent pin
copper/silver? Diadem
dagger
dagger,2 pins
dagger,3 pins
dagger,pin
diadem
diadem fragment
flat axe
macehead
mushroom macehead
mushroom macehead,pin
not preserved 2 metal objects
pin
pin fragment
pin fragment, sheet fra.
pin, diadem sheet
pin,macehead
razor
razor,pin
ring
ring,pin
sheet
sheet fragment
sheet fragment, studs,3 pins
sheet fragment,pin
sheet fragment,pin,2 bracelets with notches
sheet,pin
stud
Copper (/bronze?)

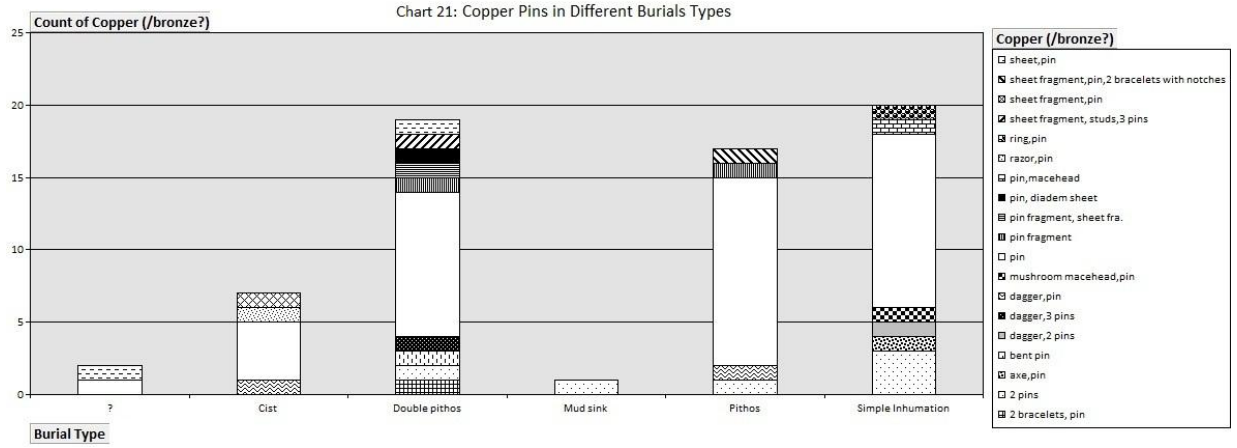


Chart 21: Copper Pins in Different Burials Types
Count of Copper (/bronze?)
Copper (/bronze?)
sheet,pin
sheet fragment,pin,2 bracelets with notches
sheet fragment,pin
sheet fragment, studs,3 pins
ring,pin
razor,pin
pin,macehead
pin, diadem sheet
pin fragment, sheet fra.
pin fragment
pin
mushroom macehead,pin
dagger,pin
dagger,3 pins
dagger,2 pins
bent pin
axe,pin
2 pins
2 bracelets, pin
?
Cist
Double pithos
Mud sink
Pithos
Simple Inhumation
Burial Type

Chart 22: Copper Weapons and Age Ranges

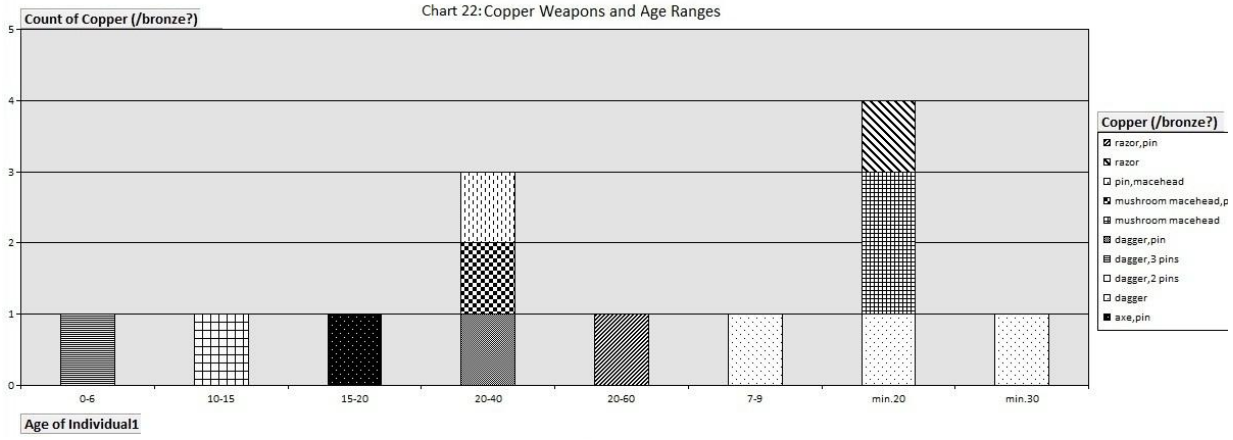


Chart 23: Copper Weapons and Gender/ Age Groups

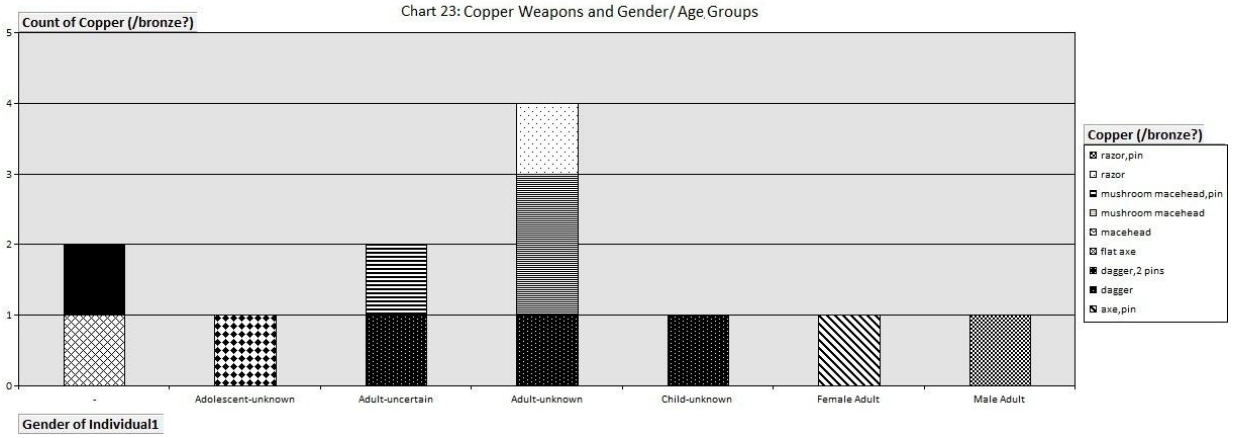


Chart 24: Copper sheets/Diadems found in Different Burial Types

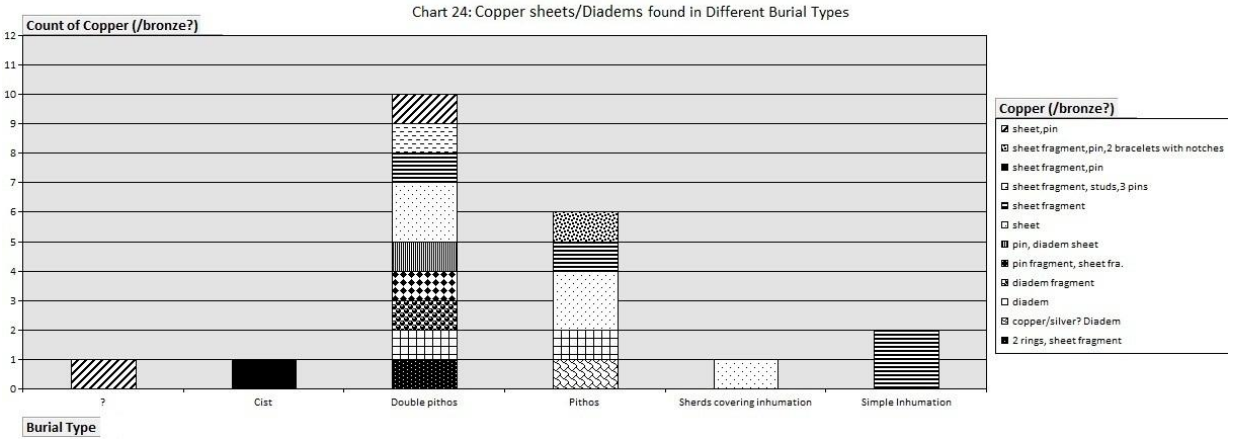


Chart 25: Copper Sheets/ Diadems and Gender/Age Groups

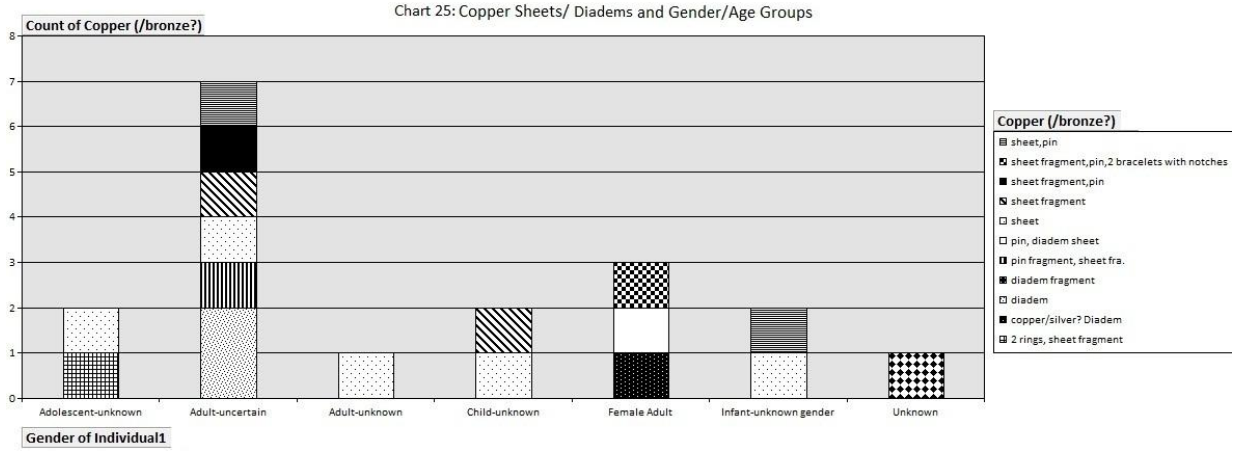


Chart 26: Copper Personal Adornments and Burial Types

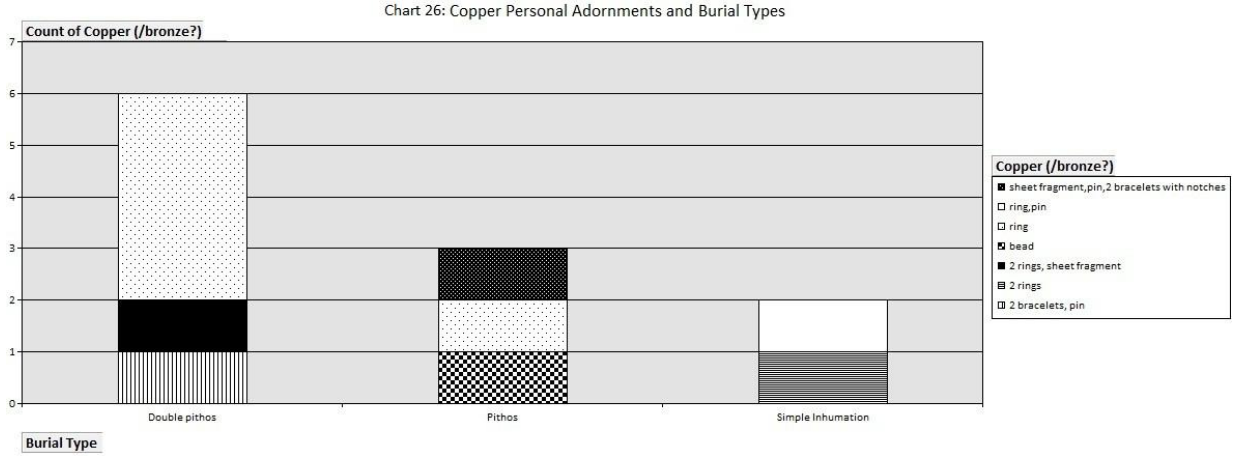


Chart 27: Copper Personal Adornments and Gender/Age Groups

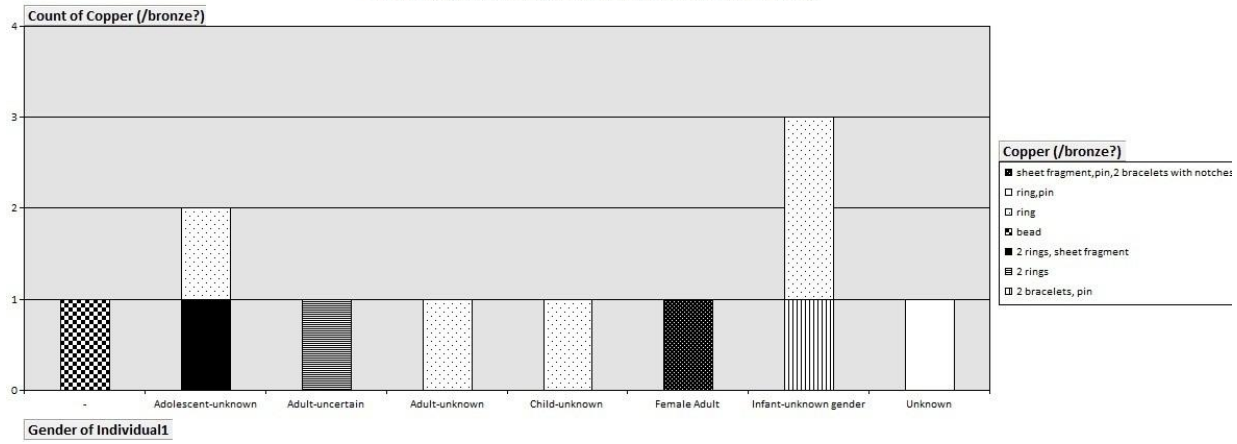


Chart 28: Gold Objects in Different Trenches

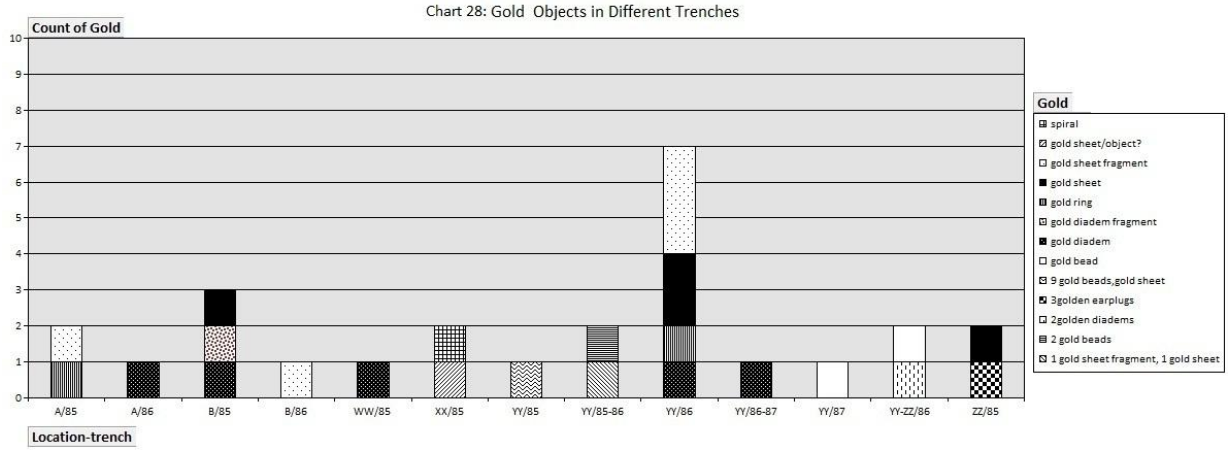


Chart 29: Gold Objects in Burial Types

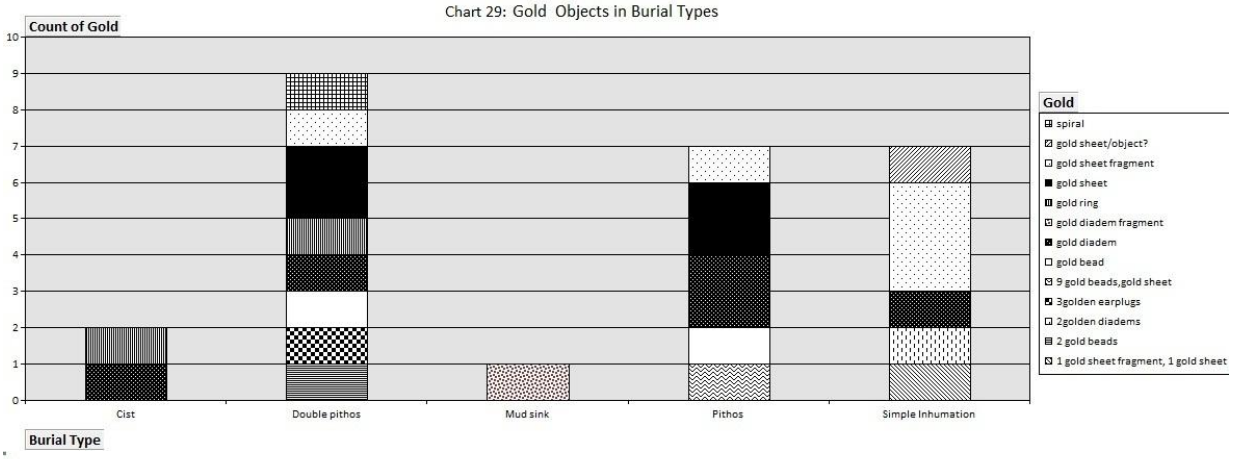


Chart 30: Gold and Copper Objects that appear together

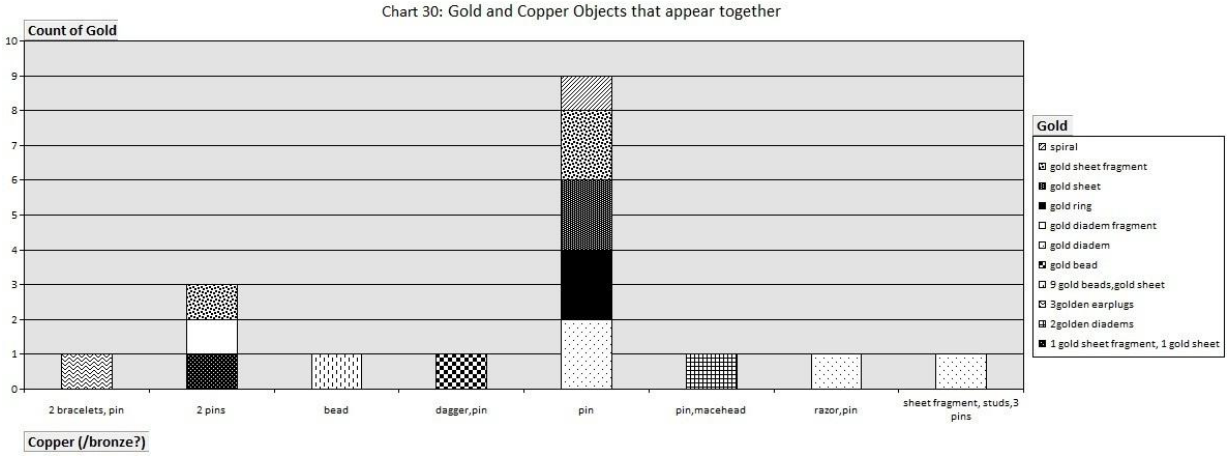


Chart 31: Gold Objecst and Gender/Age Groups

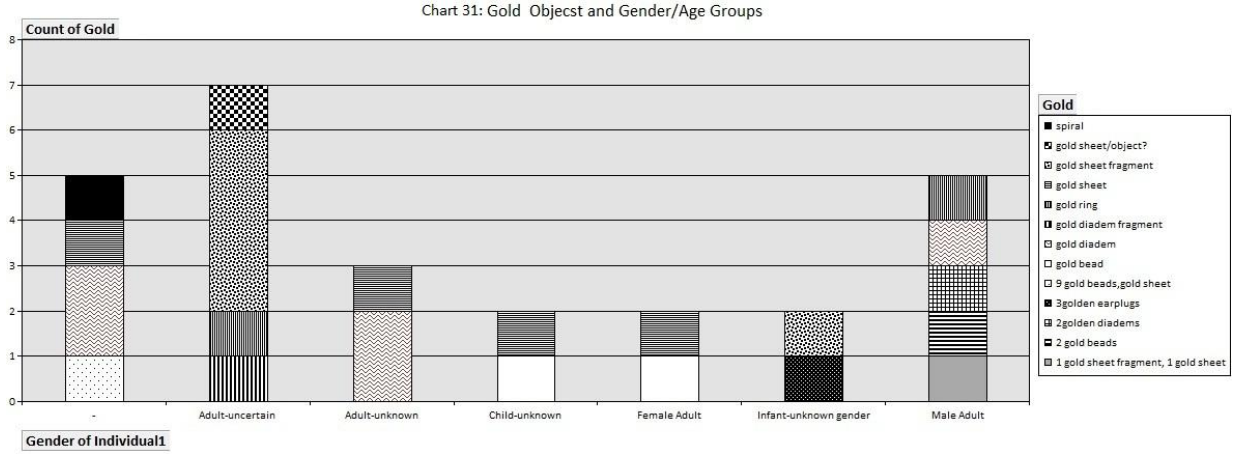


Chart 32: Gold Objects and Age Ranges

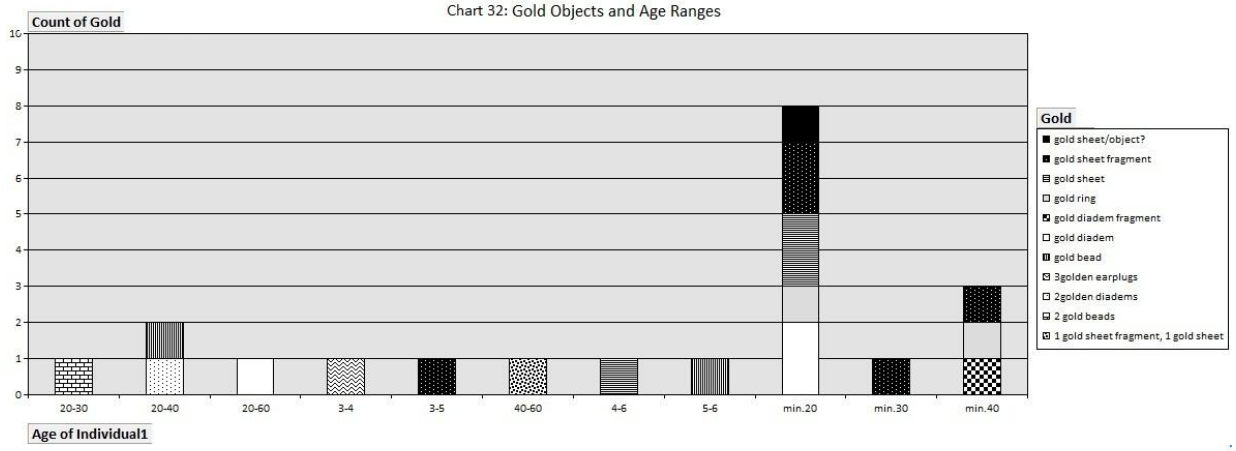


Chart 33: Gold Adornments in Different Burial Types

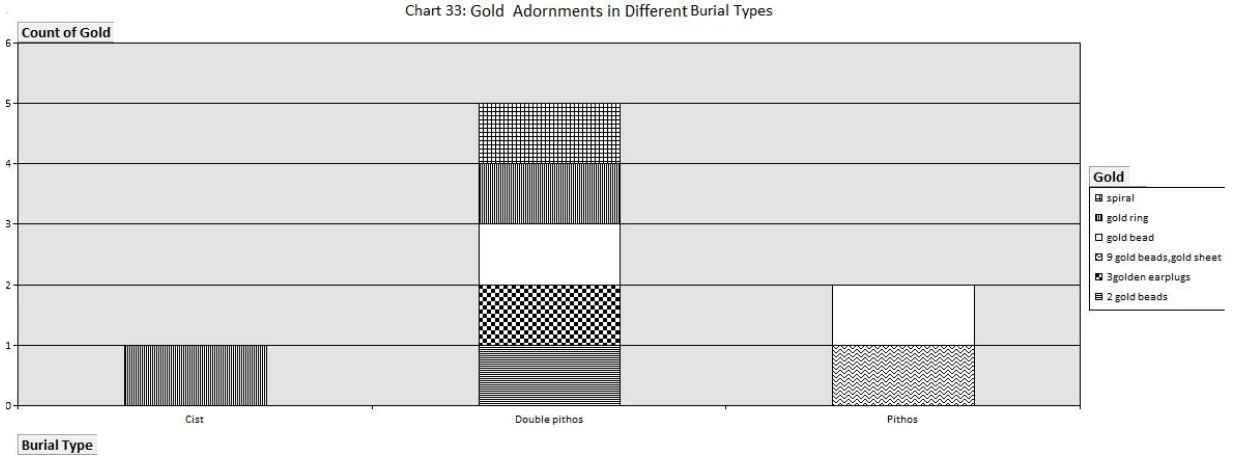


Chart 34: Lead Objecst and Trenches

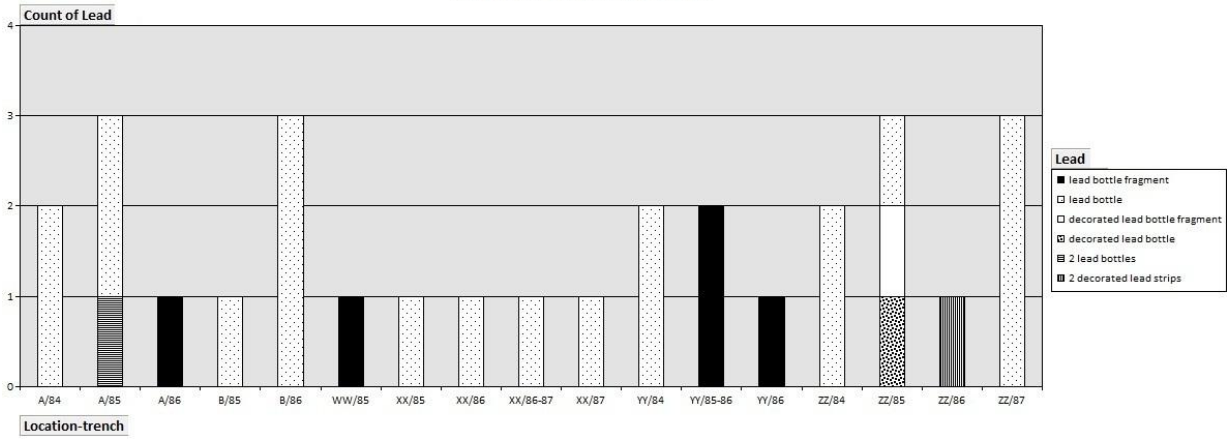


Chart 35: Lead Objecst and Burial Types

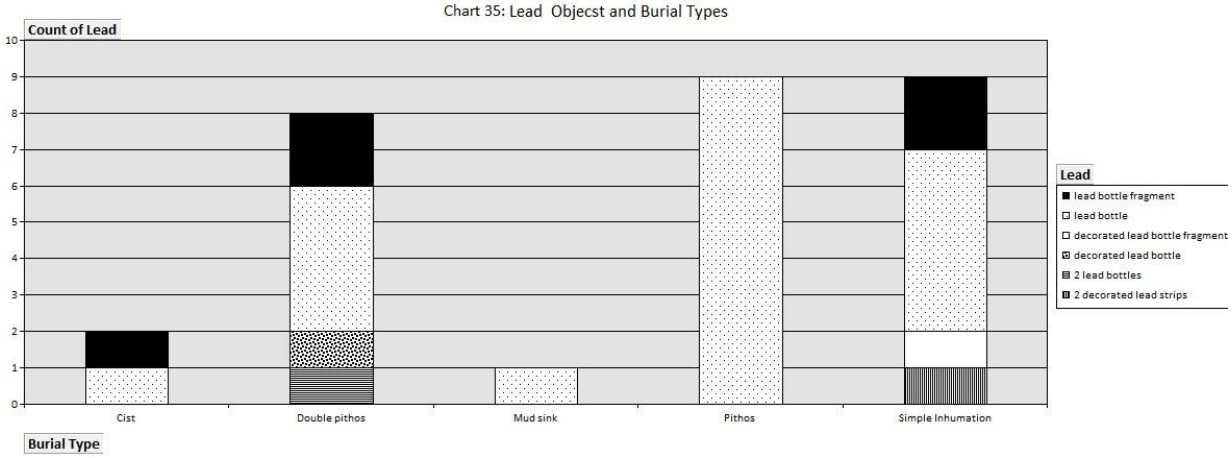


Chart 36: Lead Objecst and Total Number of Finds

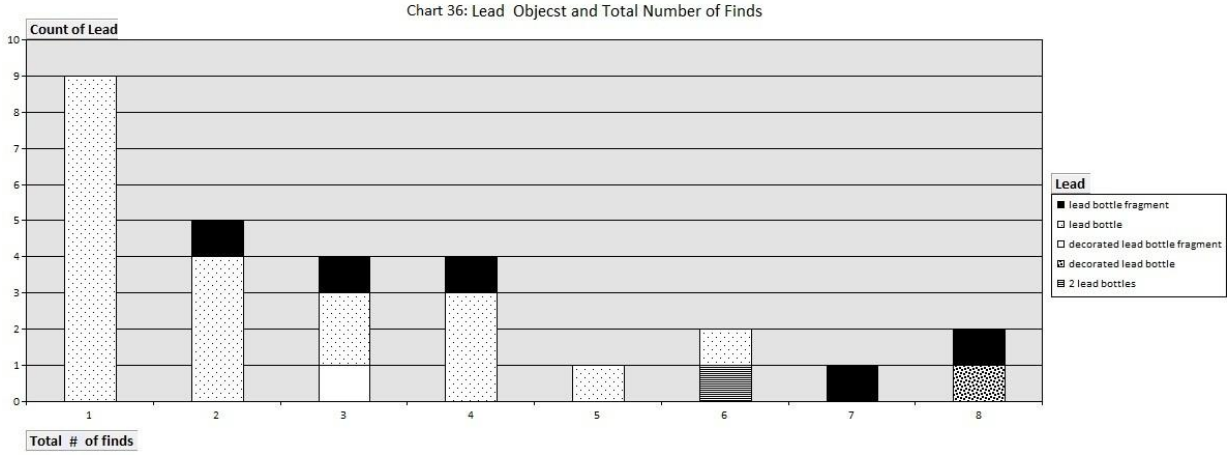


Chart 37: Lead Objecst and Age Ranges

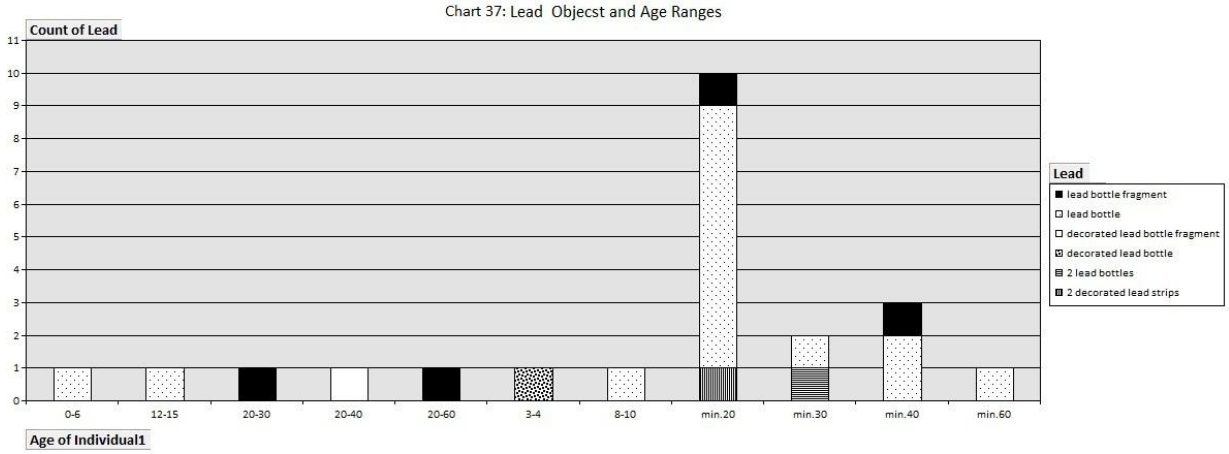


Chart 38: Lead Objecst and Gender/Age Groups

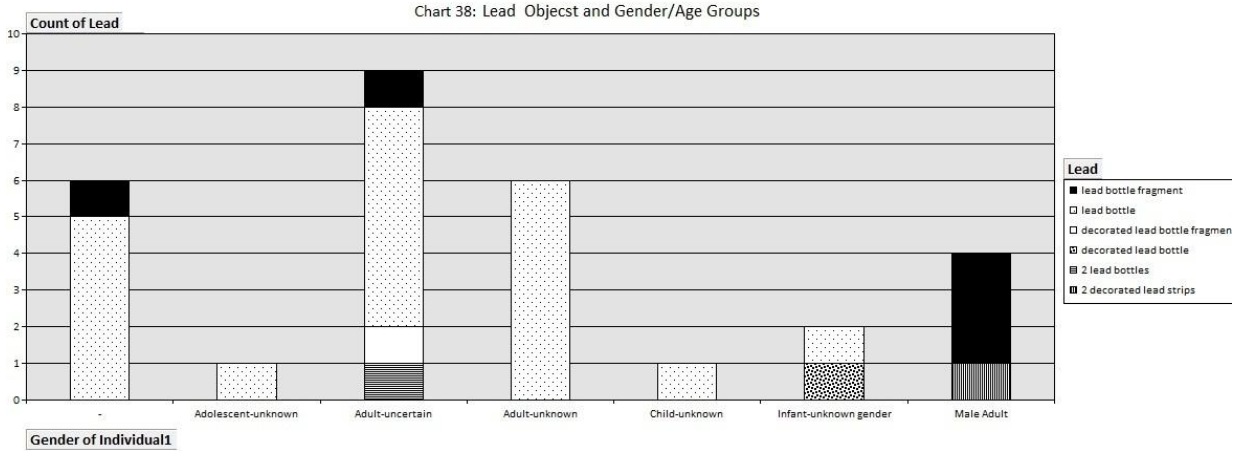


Chart 39: Silver Objects and Burial Types

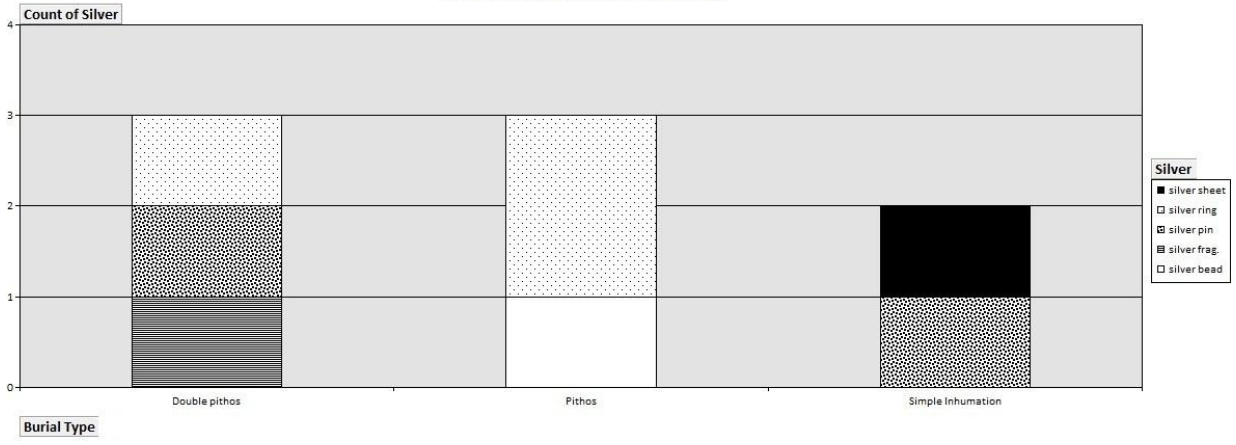


Chart 40: Clay Small finds and Burial Types

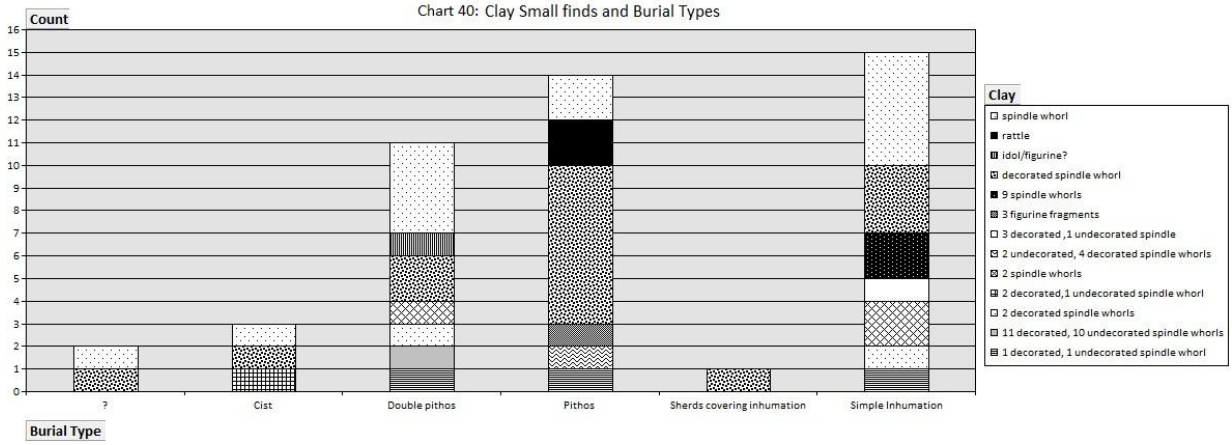


Chart 41: Clay Small Finds and Number of Individuals

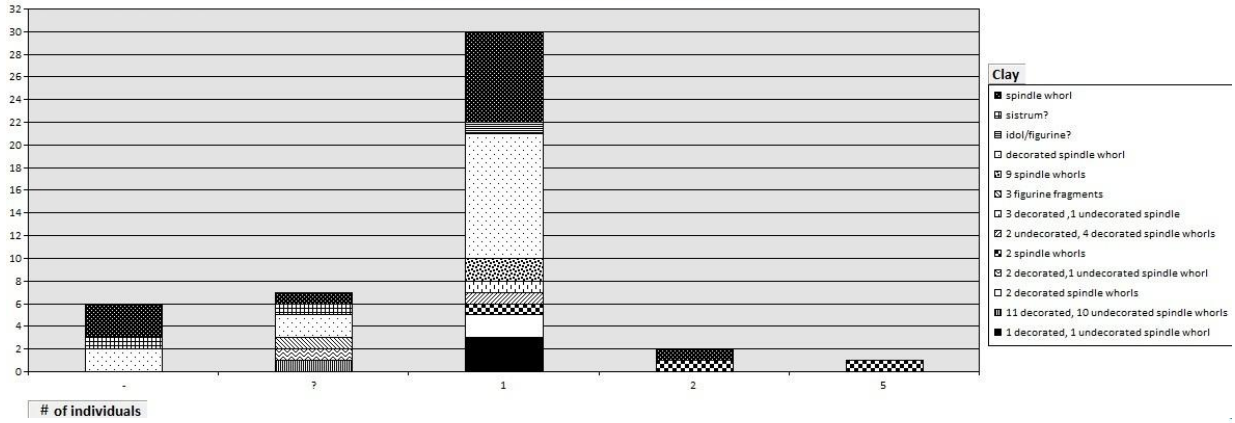


Chart 42: Clay Small Finds and Gender/Age Groups

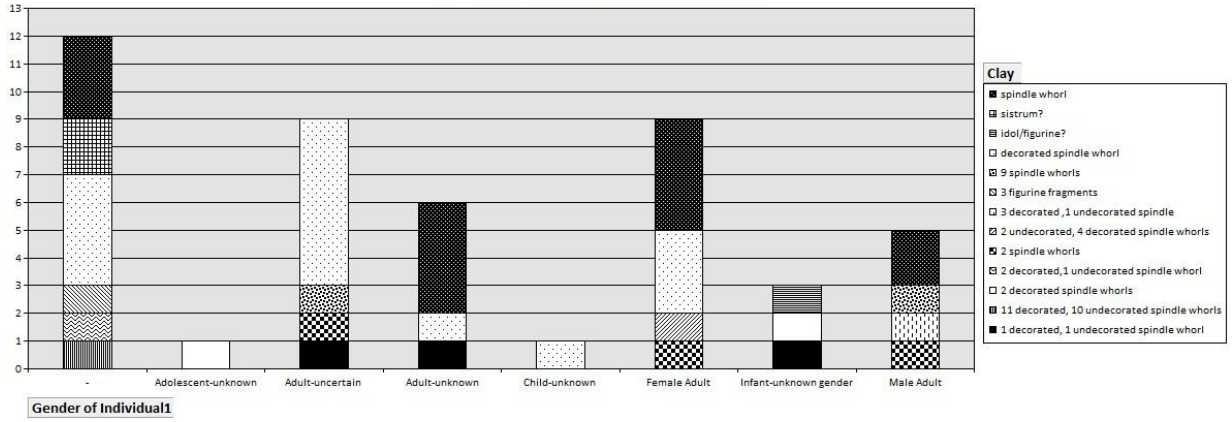


Chart 43: Spindle Whorls and Burial Types

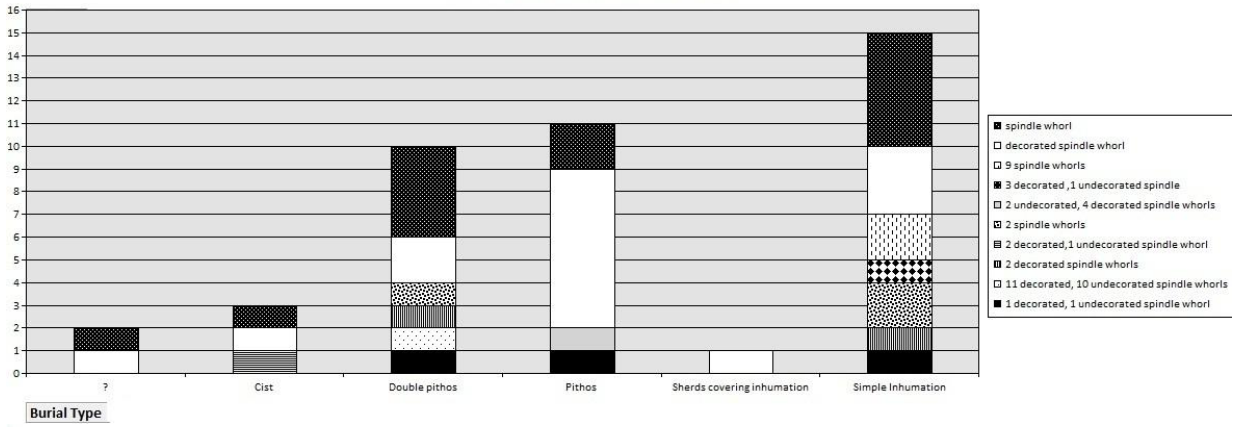


Chart 44: Spindle Whorls that appeared in Burials with Different Total Number of Finds

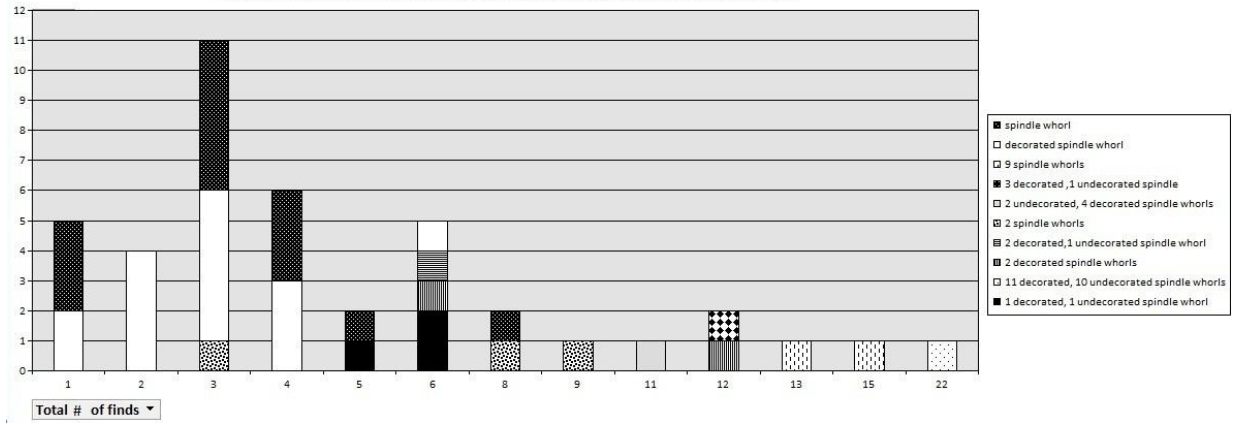


Chart 45: Stone Objects and Burial Types

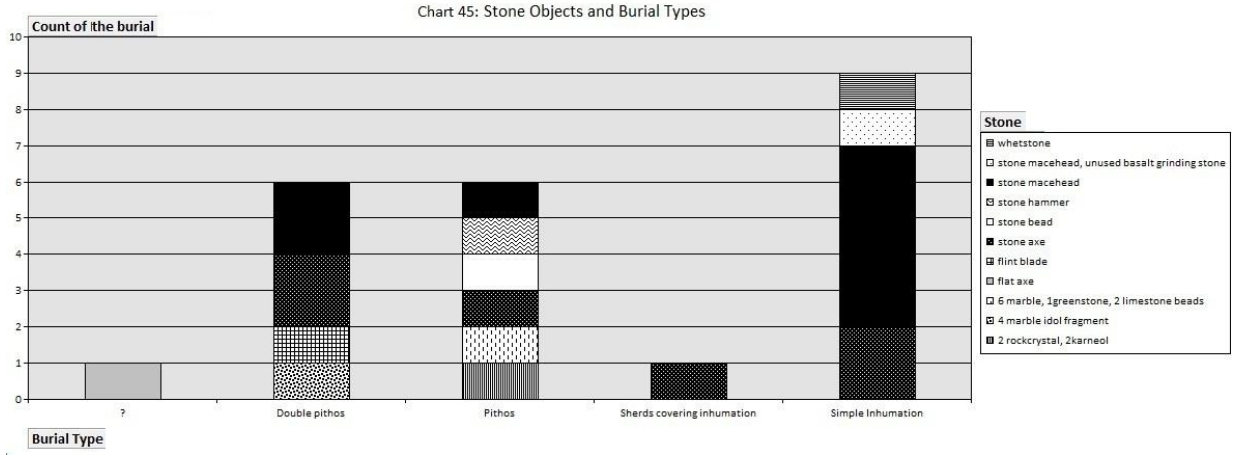


Chart 46: Stone Objects that appeared in burials with Different Total Number of Finds

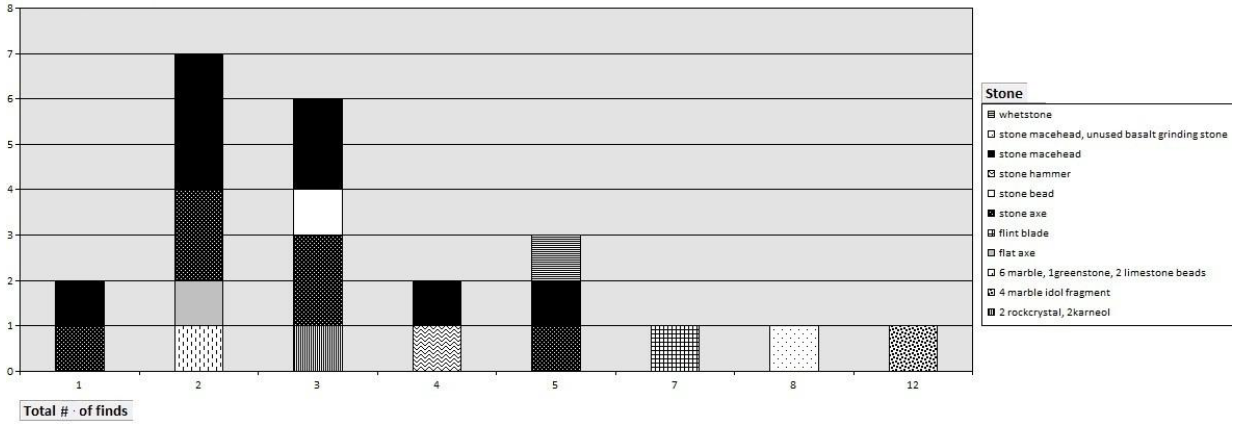


Chart 47: Stone Objects and Copper Objects

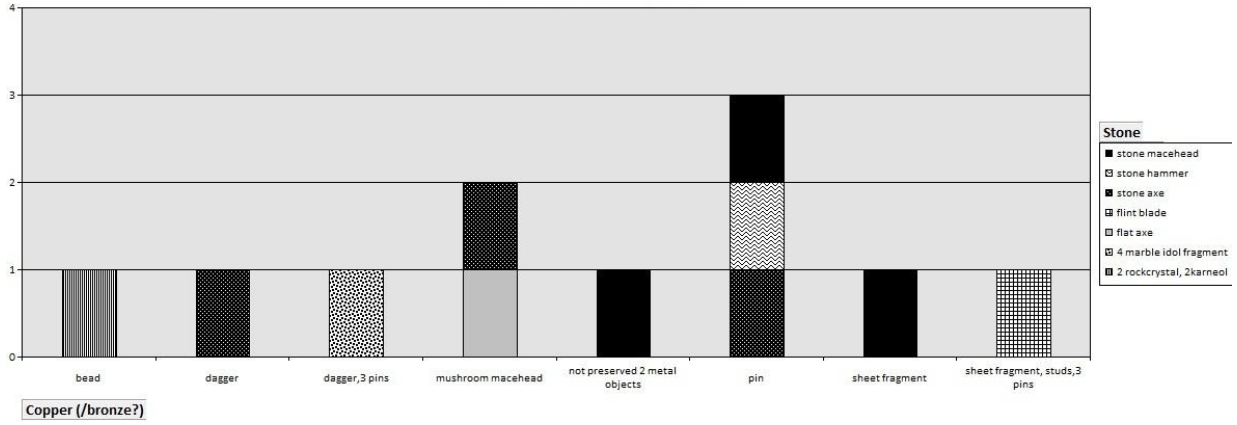


Chart 48: Number of Burials with Pottery

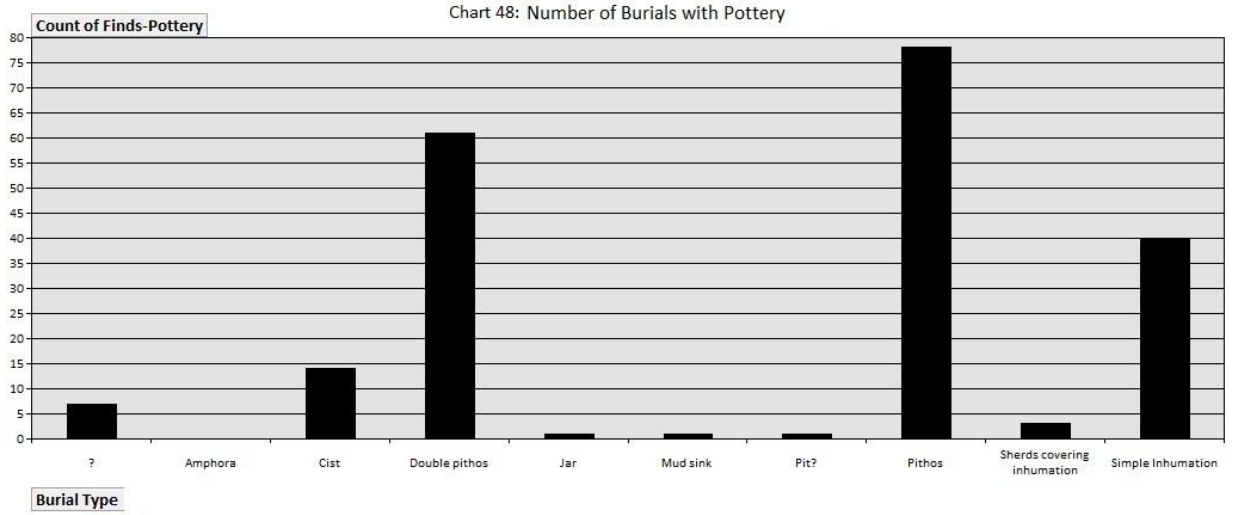


Chart 49: Number of Burials with Pottery that had Different Total Number of Finds

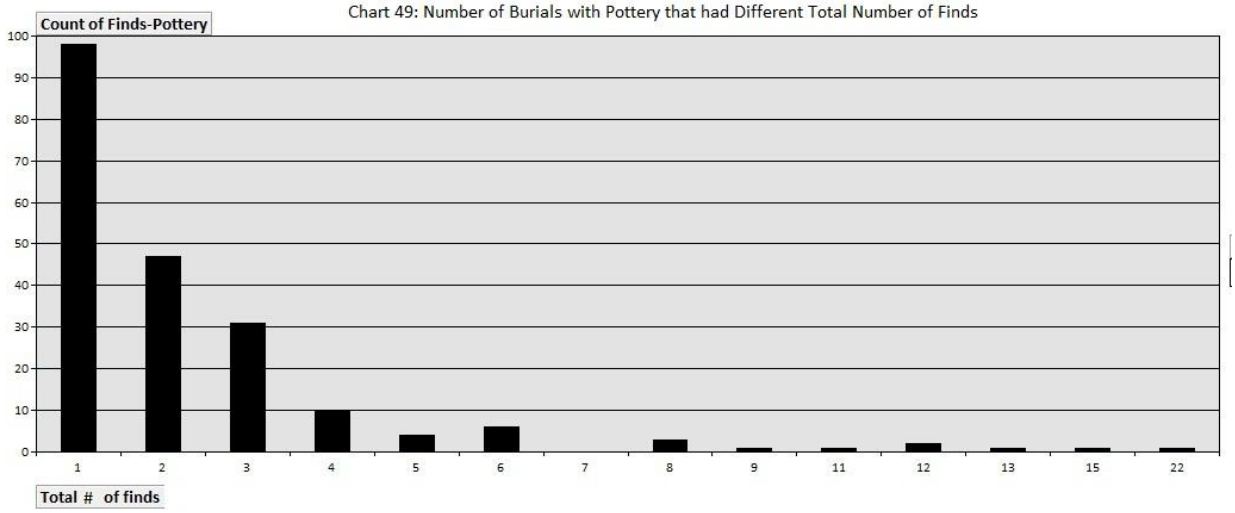


Chart 50: Number of Burials with Pottery and The Number of Individuals in these Burials

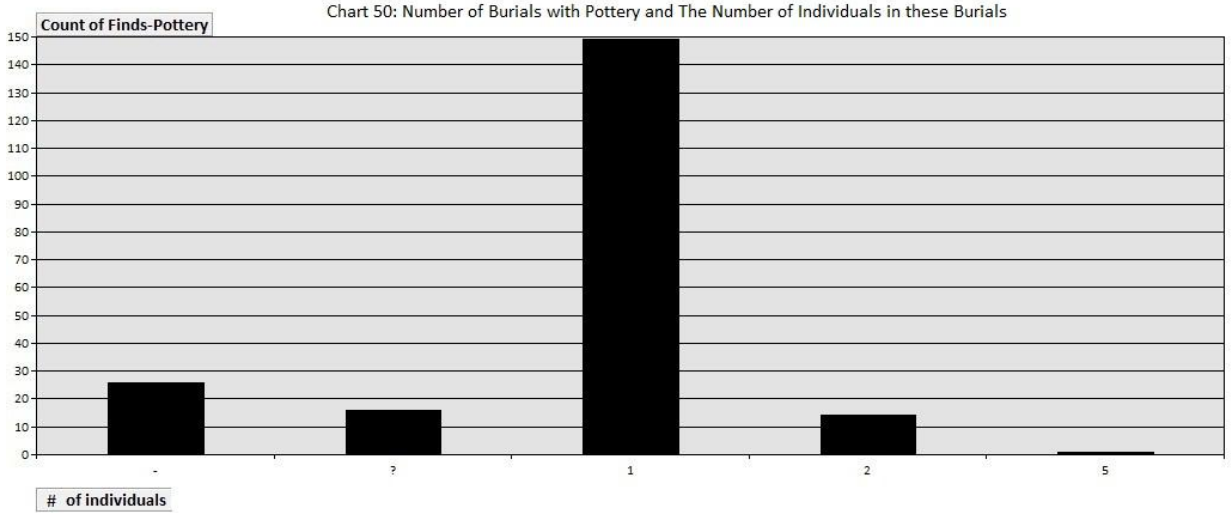


Chart 51: Number of Burials with Pottery and the Gender/Age Groups of the Individuals in these Burials

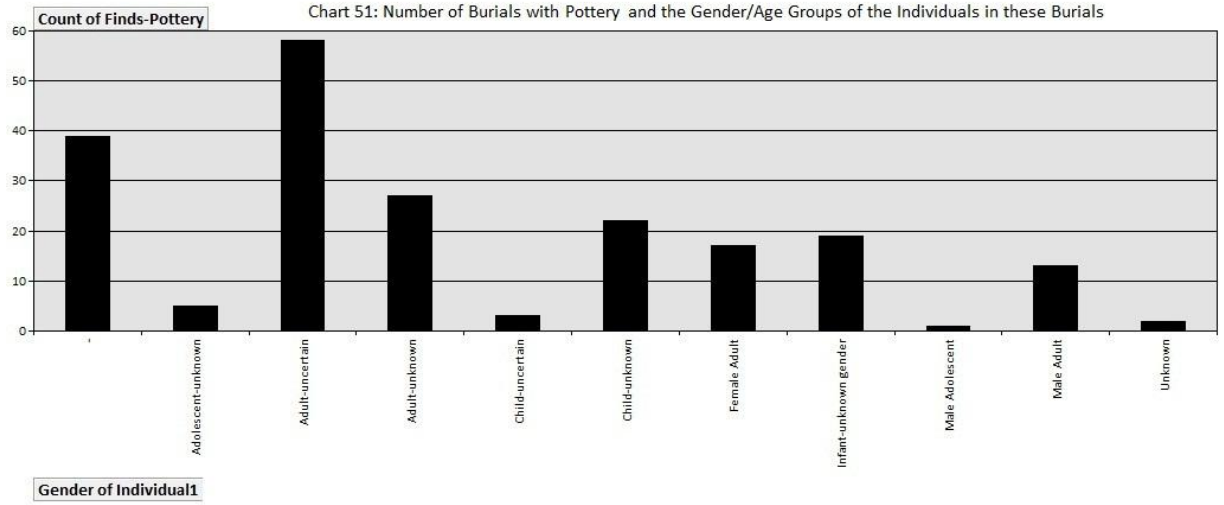


Chart 52: Jugs in Different Burial Types

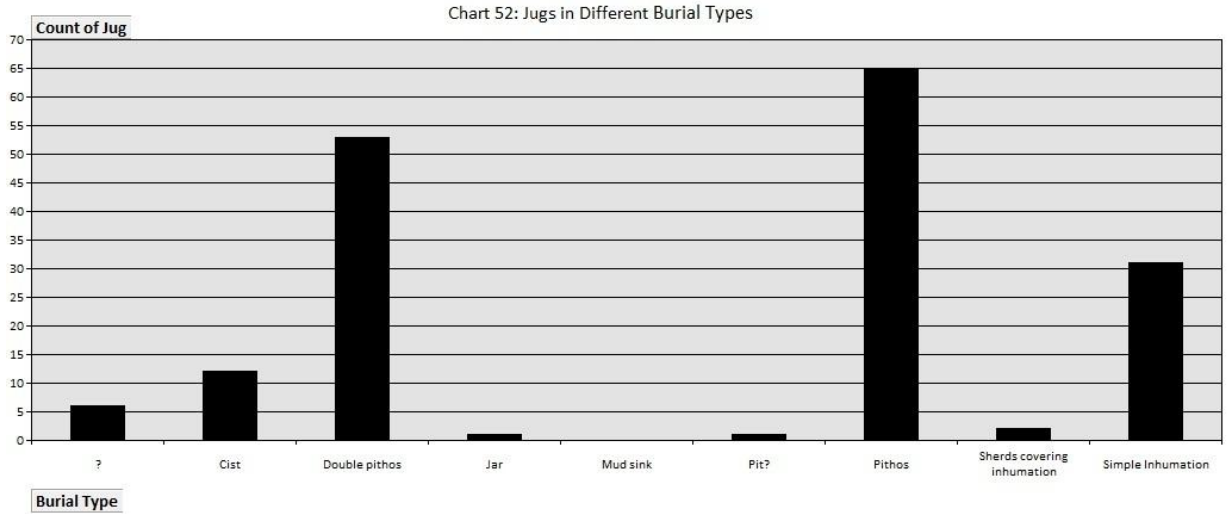


Chart 53: Trenches with Jugs

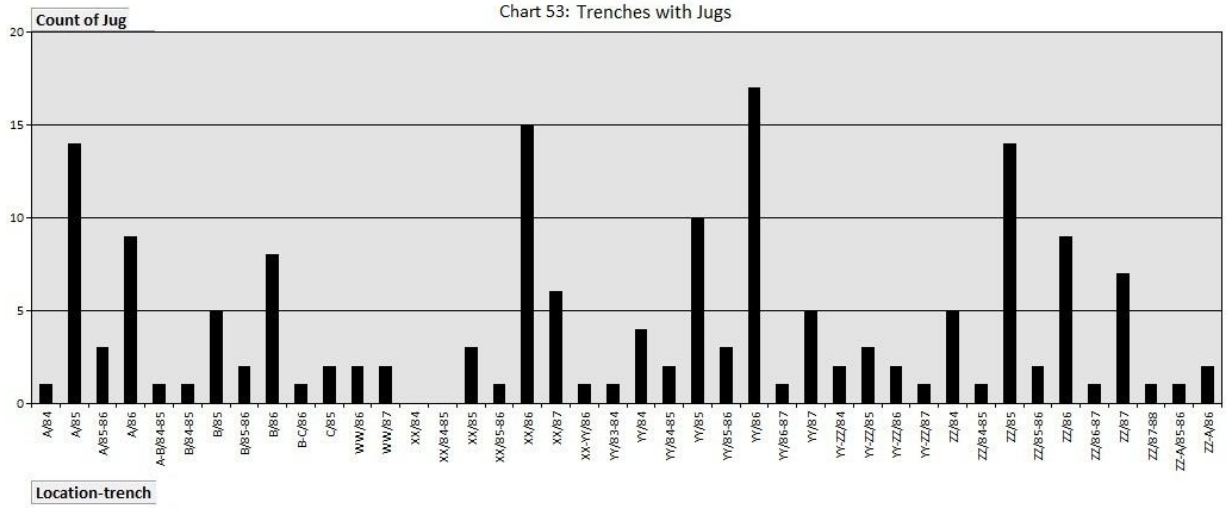


Chart 54: Number of Jugs in Burials with Different Number of Individuals

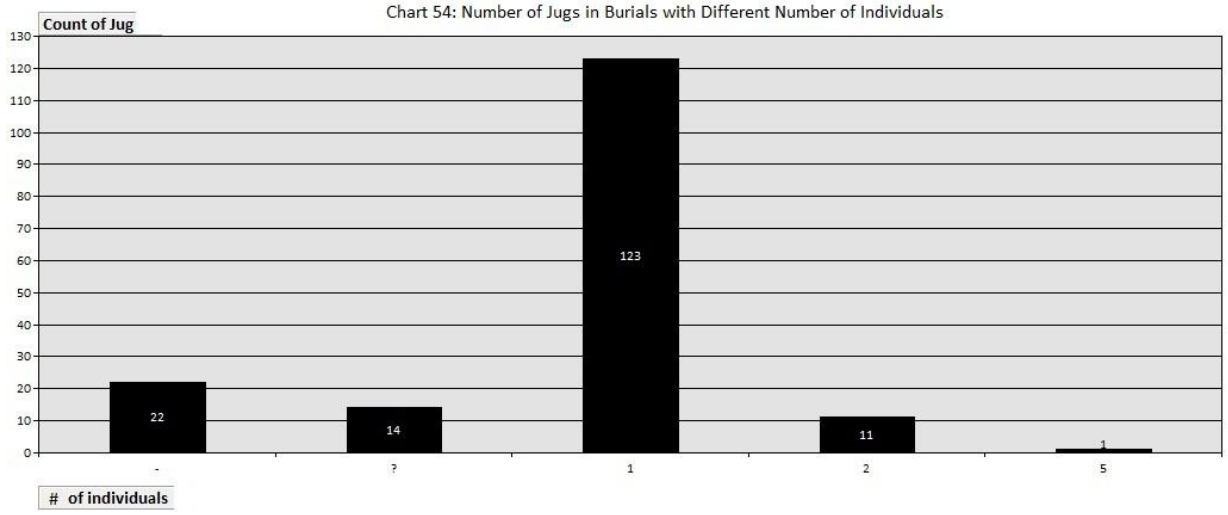


Chart 55: Jugs and Gender/Age Groups

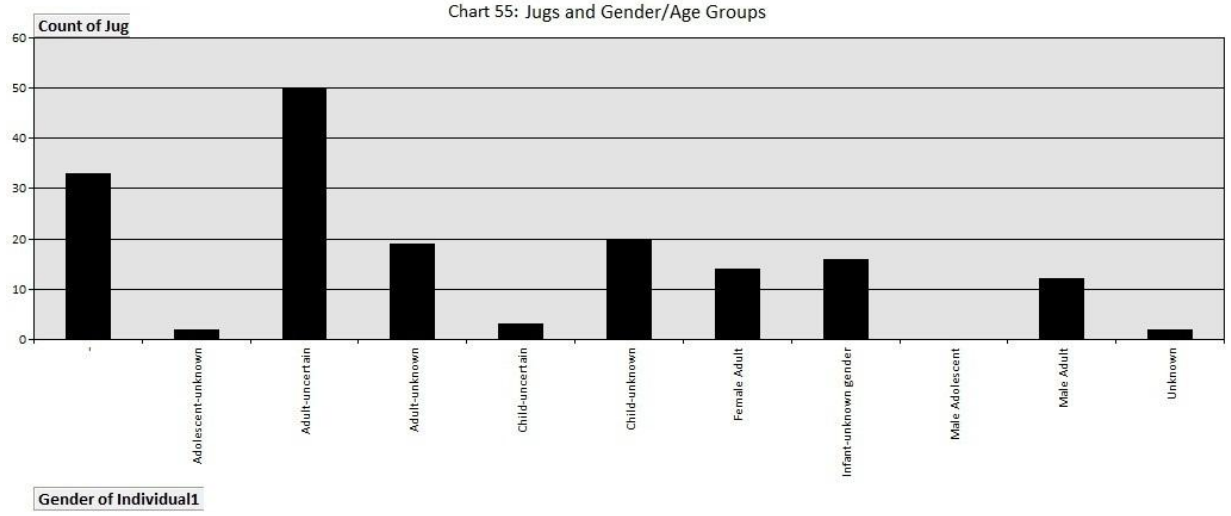


Chart 56: Trenches with Bowls

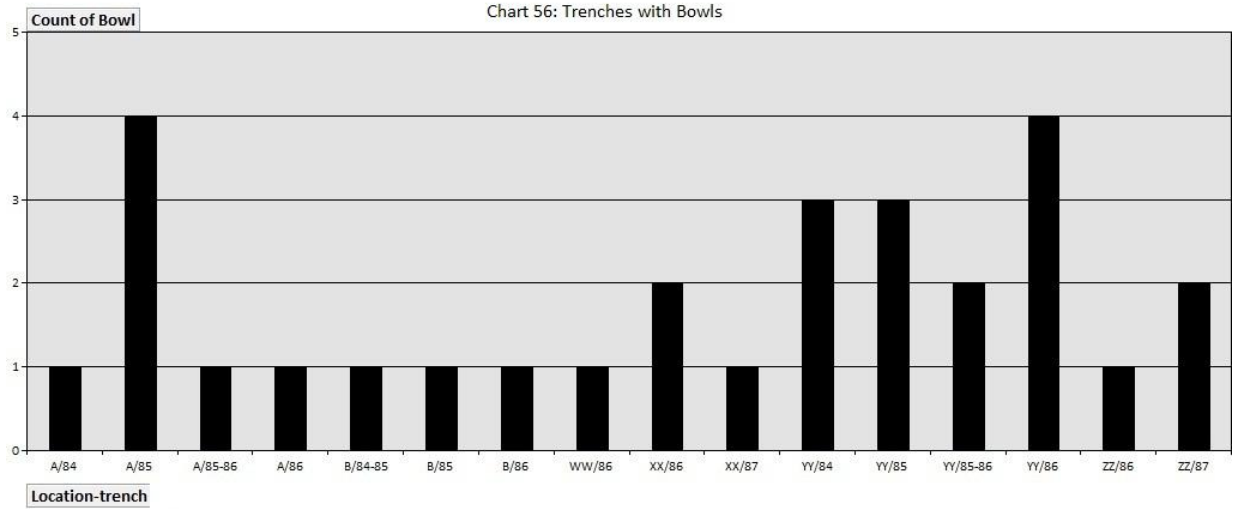


Chart 57: Bowls in Different Burial Types

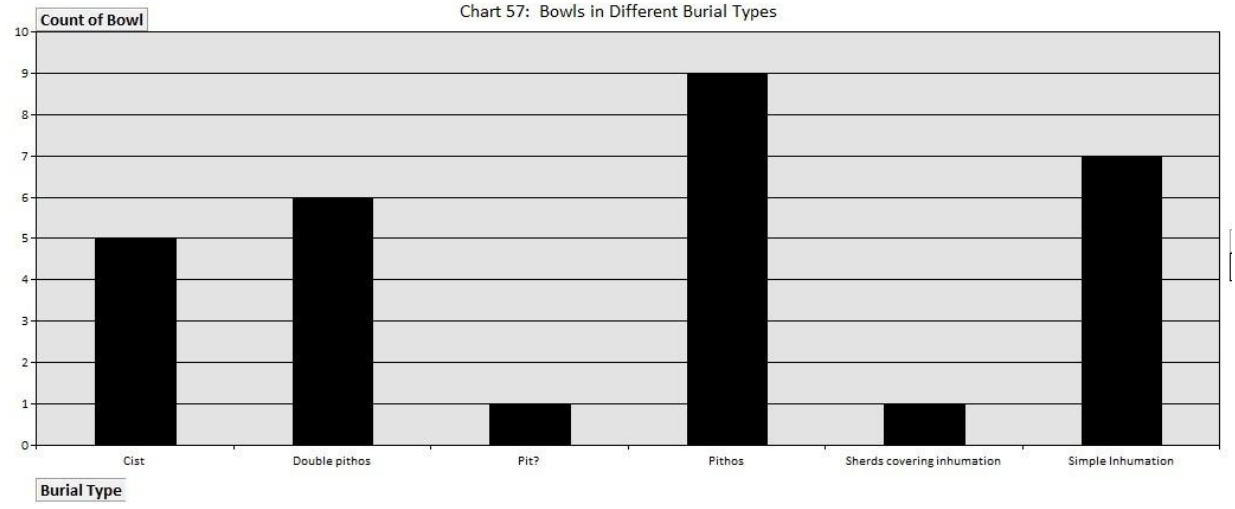


Chart 58: Number of Bowls in Burials with Different Total Number of Finds

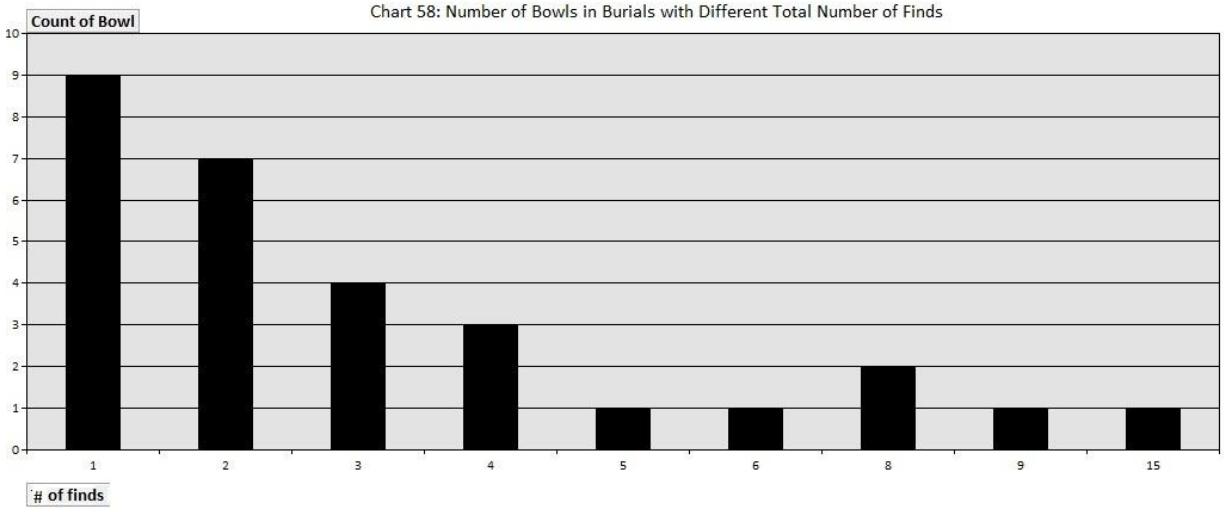


Chart 59: Bowl Types and Gender/Age Groups

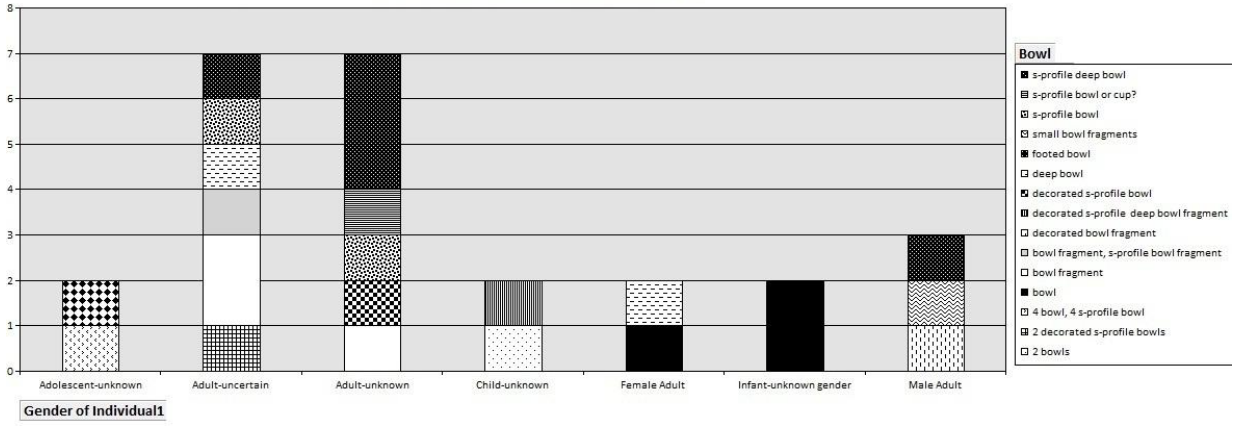


Chart 60: Jars and Gender/Age Groups

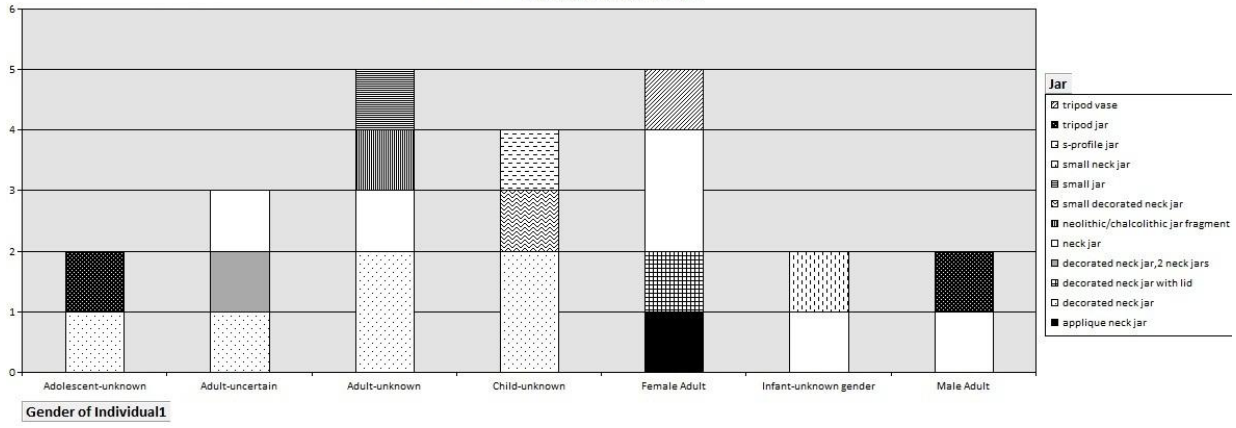


Chart 61: Jars in Different Burial Types

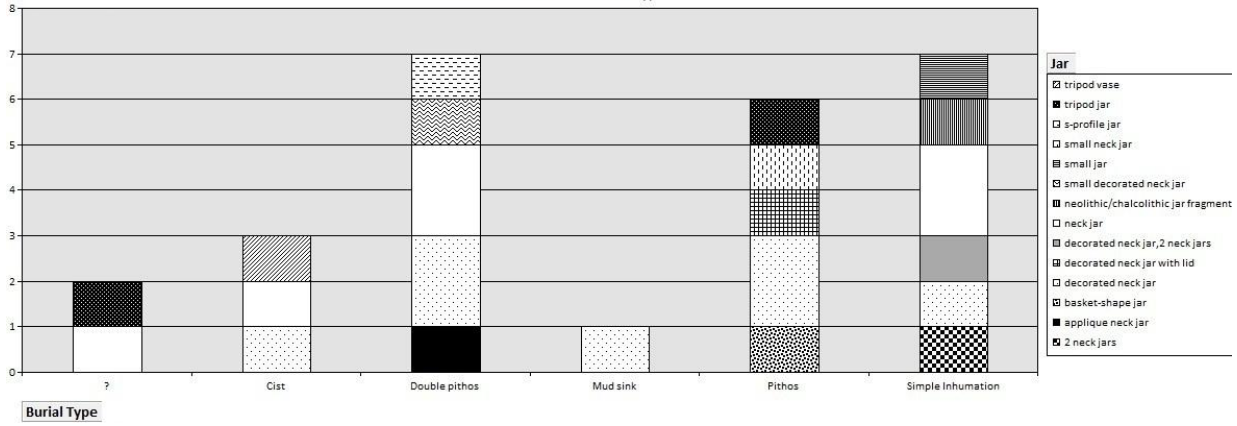


Chart 62: Trenches with Jars

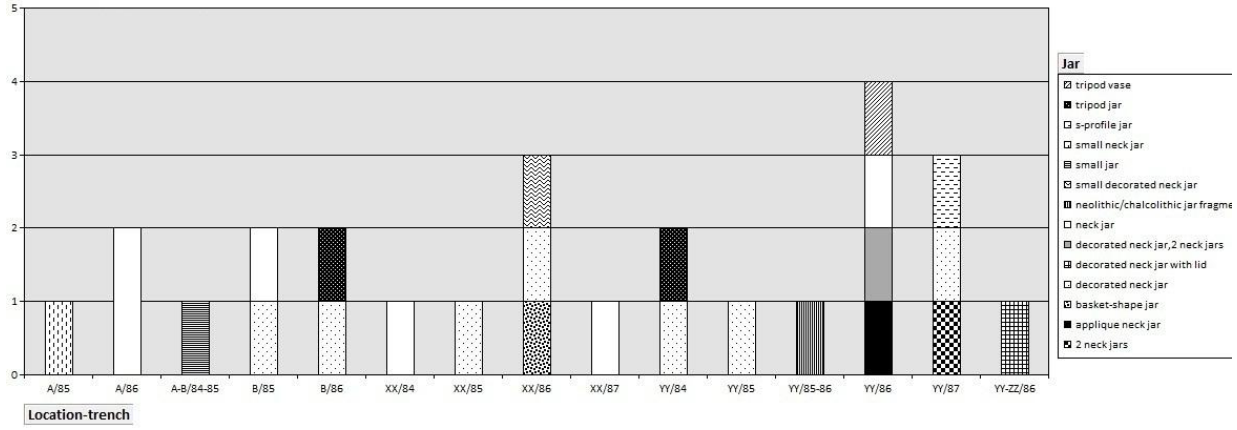


Chart 63: Number of Jars in Burials with Different Total Number s of Finds

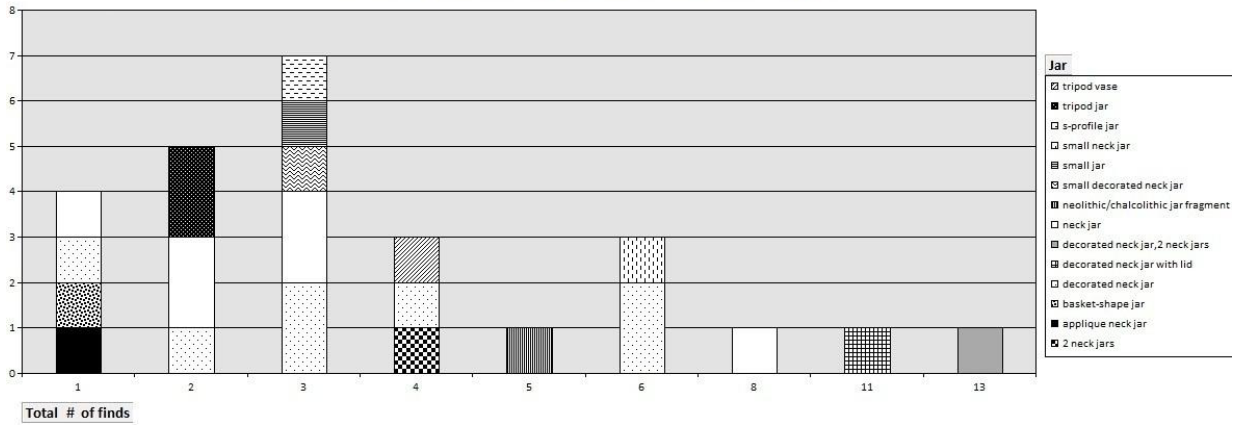


Chart 64: Number of Individuals in Burials with Jars

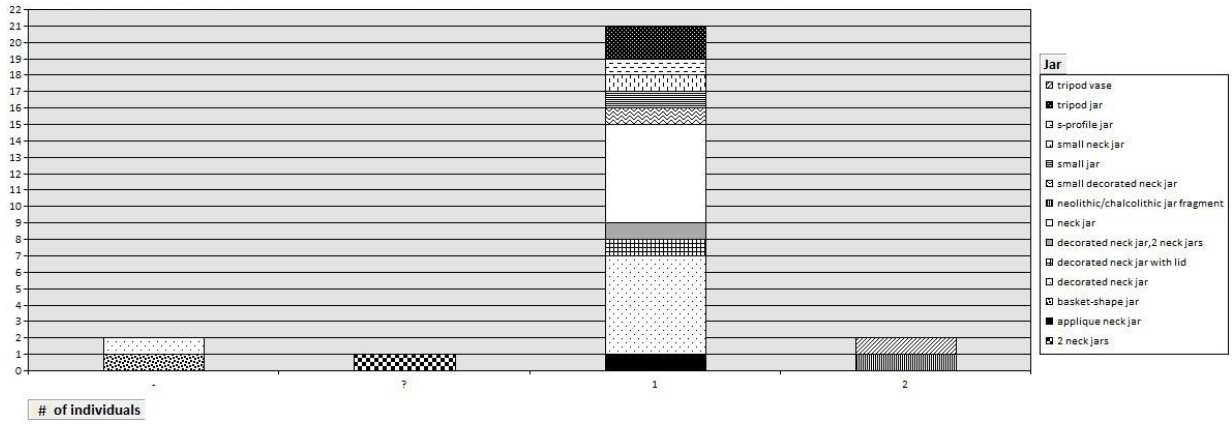


Chart 65: Adults in Different Trenches

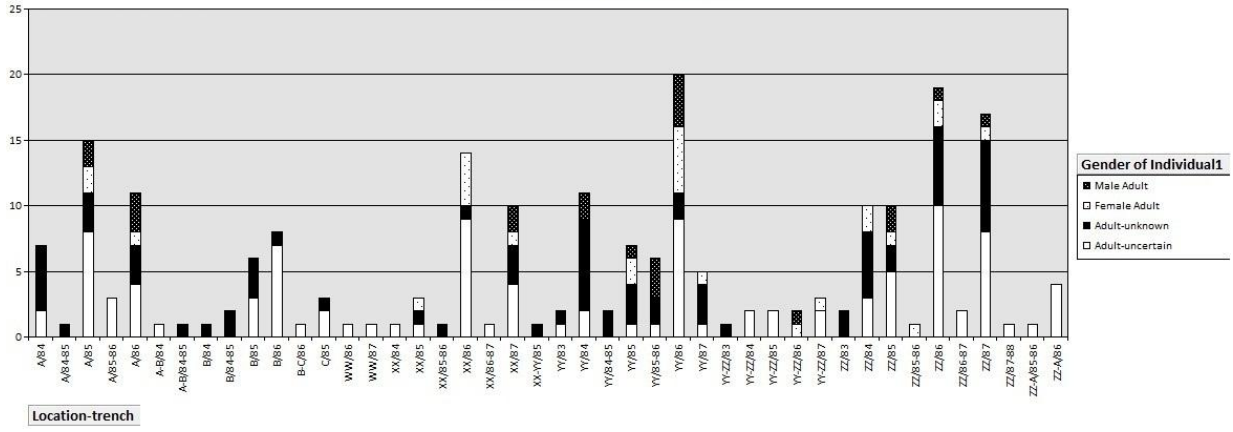


Chart 66: Adults in Different Burial Types

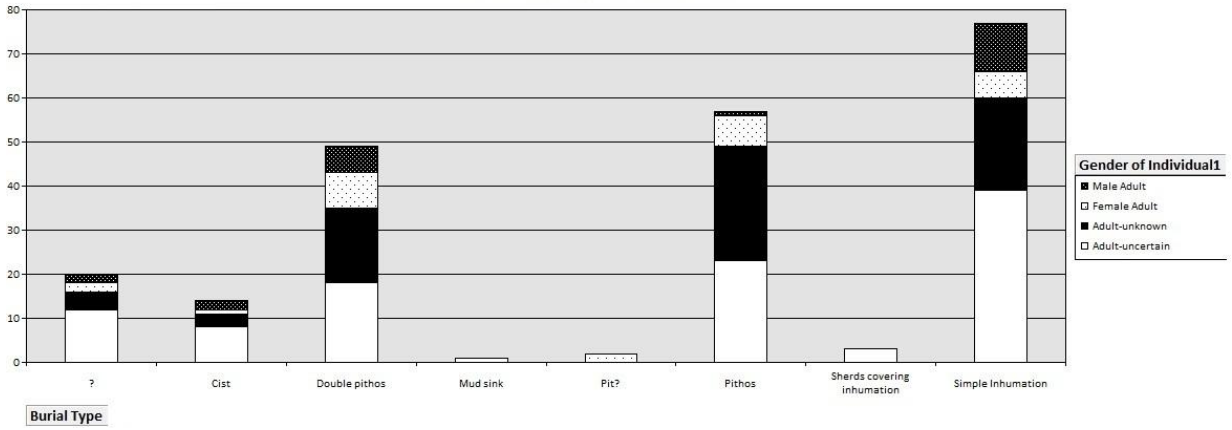
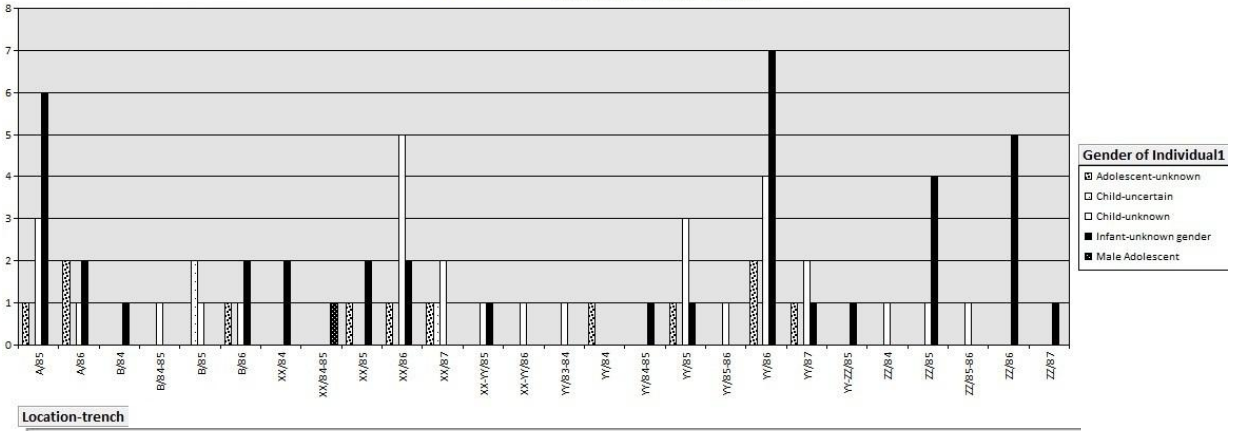


Chart 67: Non-Adults in Different Burial Types

Chart 68: Non-Adult Burials in Different Trenches



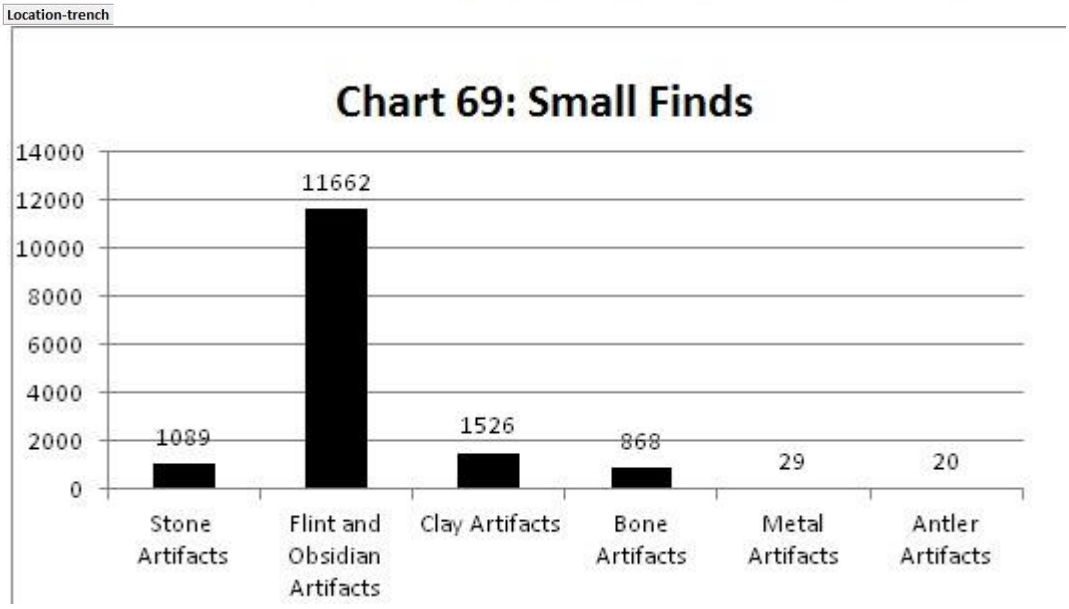


Chart 70: Pierced Sherds

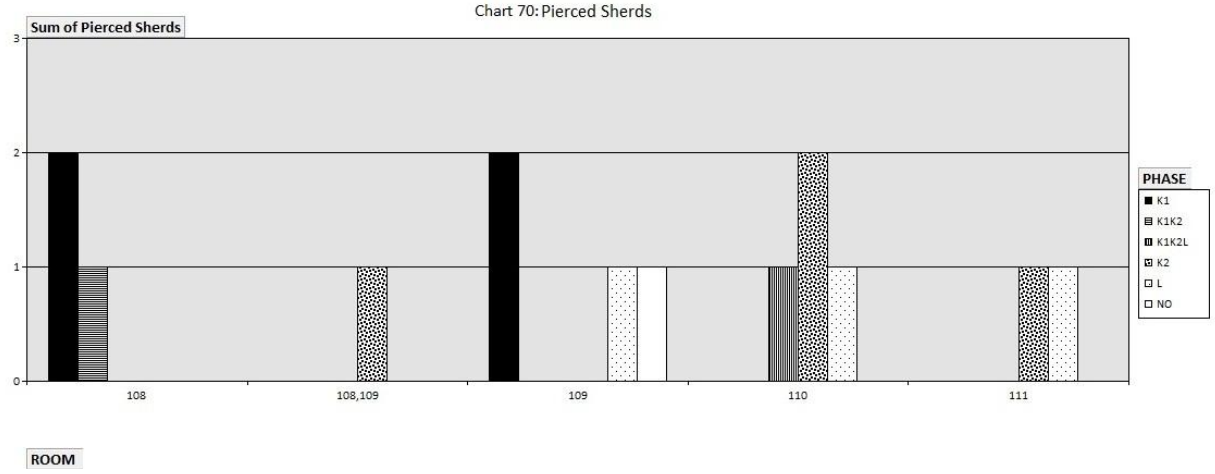


Chart 71: Sherds without pierce or drill

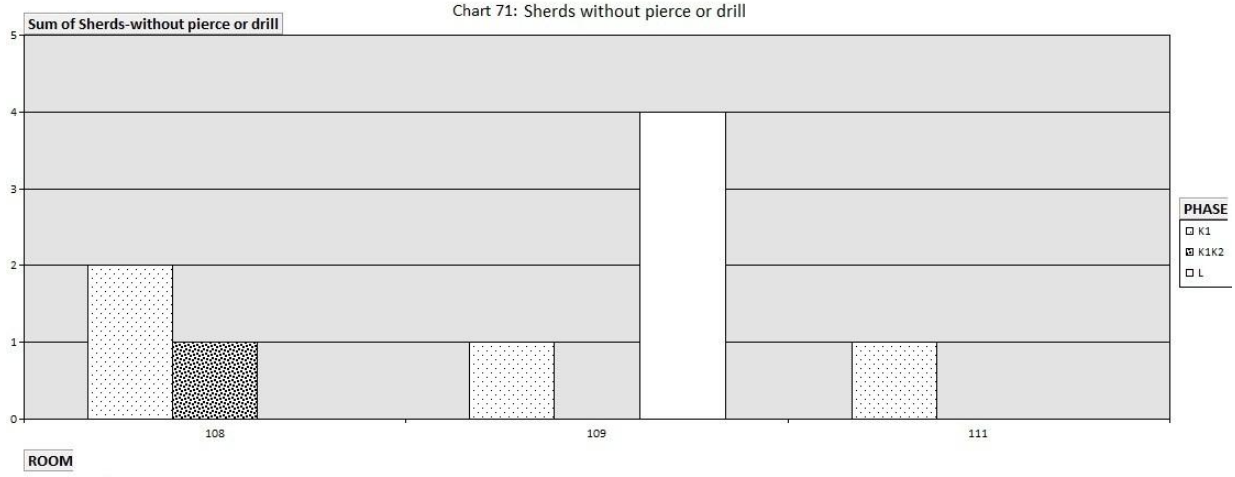


Chart 72: Spindle Whorls

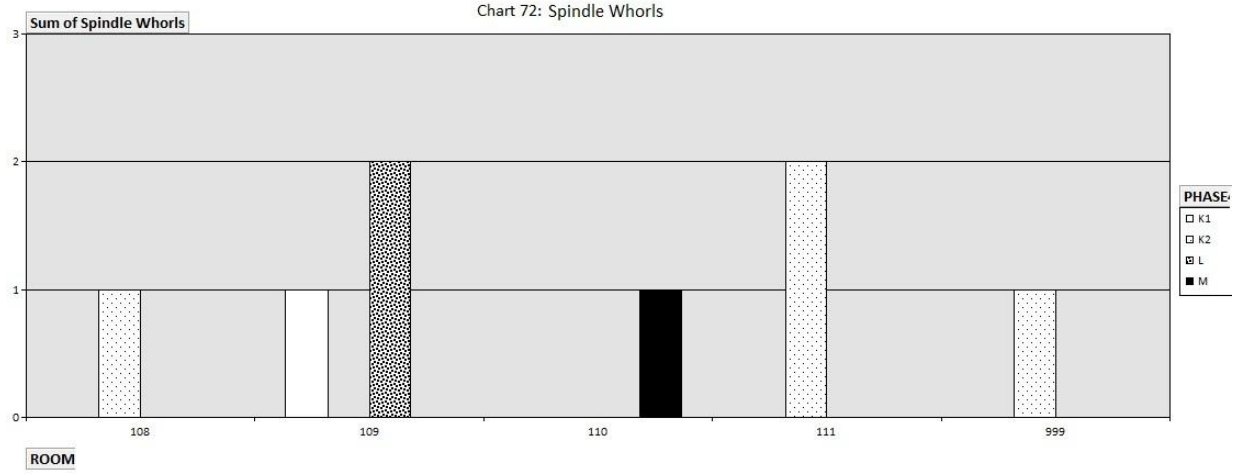


Chart 73: Loom Weights

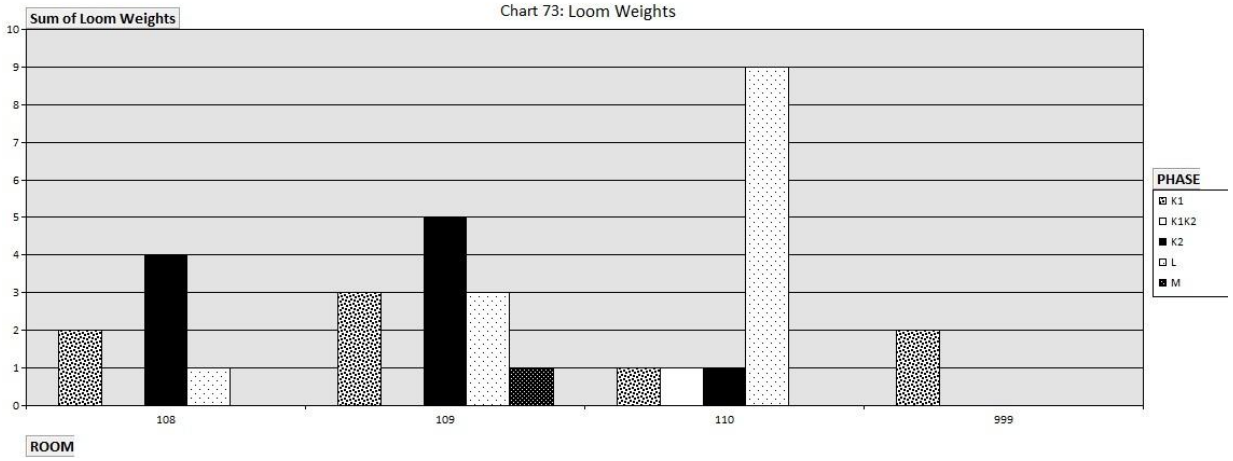


Chart 74: Andirons

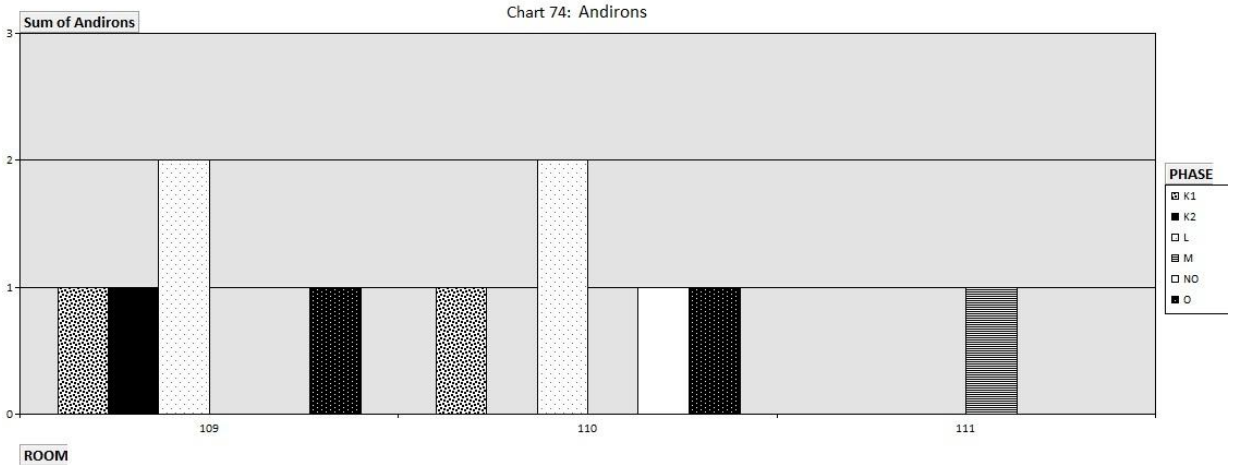


Chart 75: Slingshots

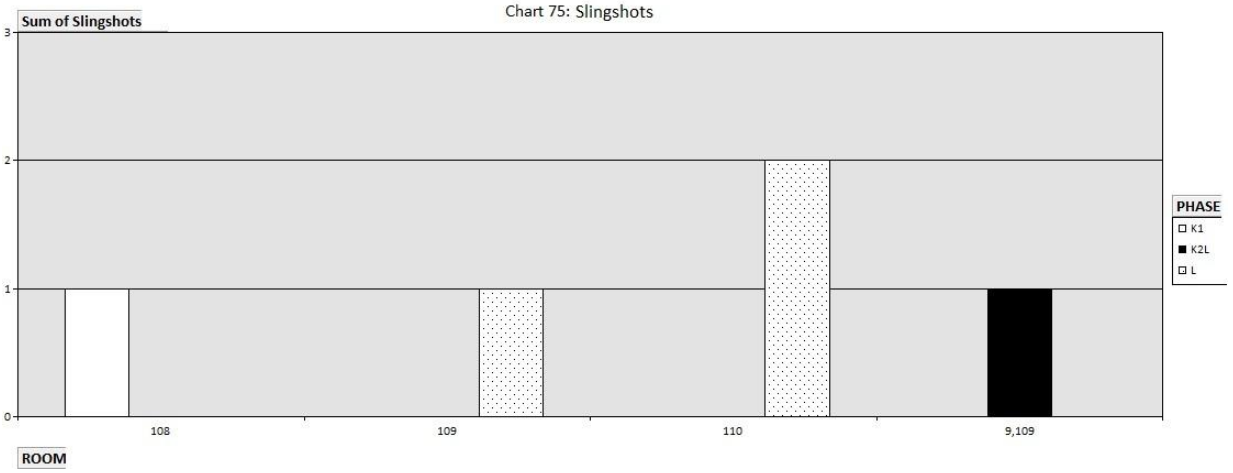


Chart 76: Female Figurines

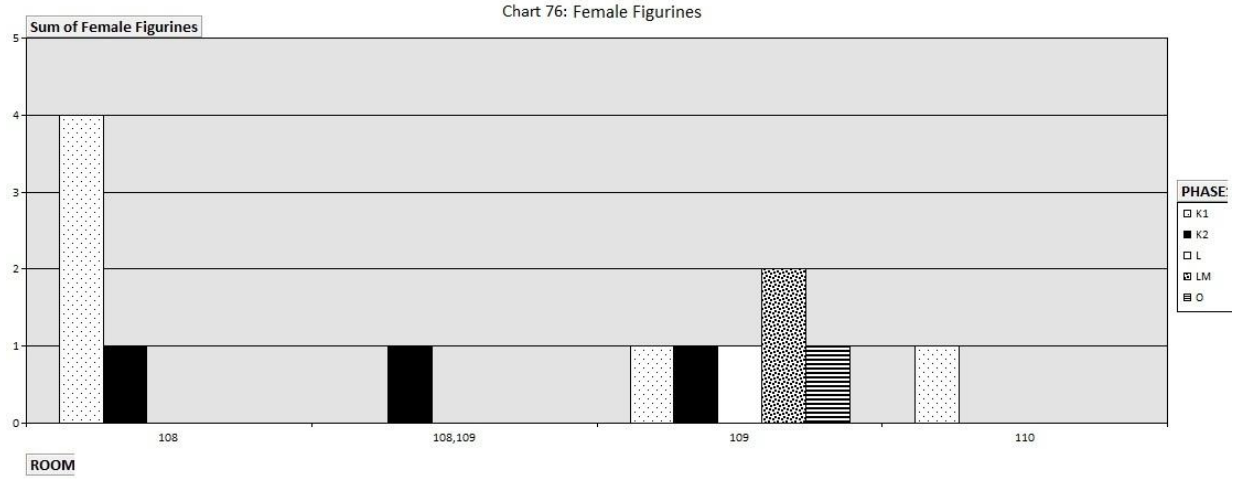


Chart 77: Animal Figurines

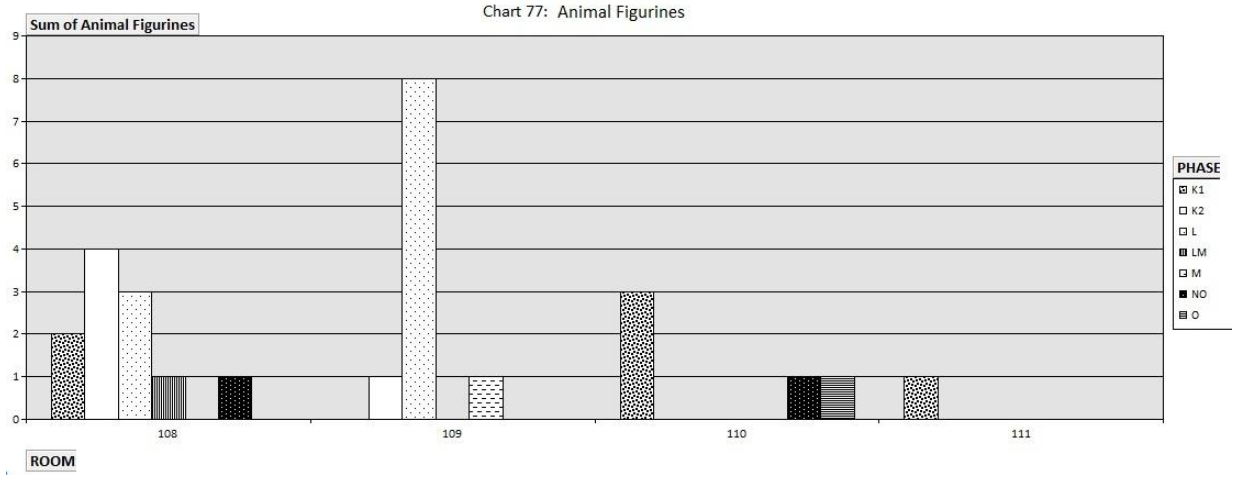


Chart 78: Bone Awls

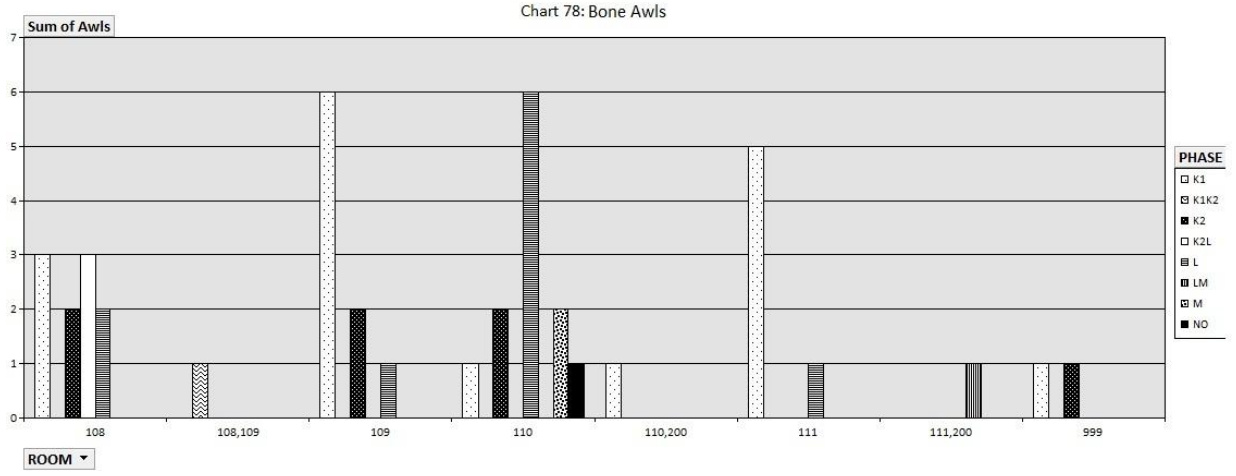


Chart 79: Bone Spatulas

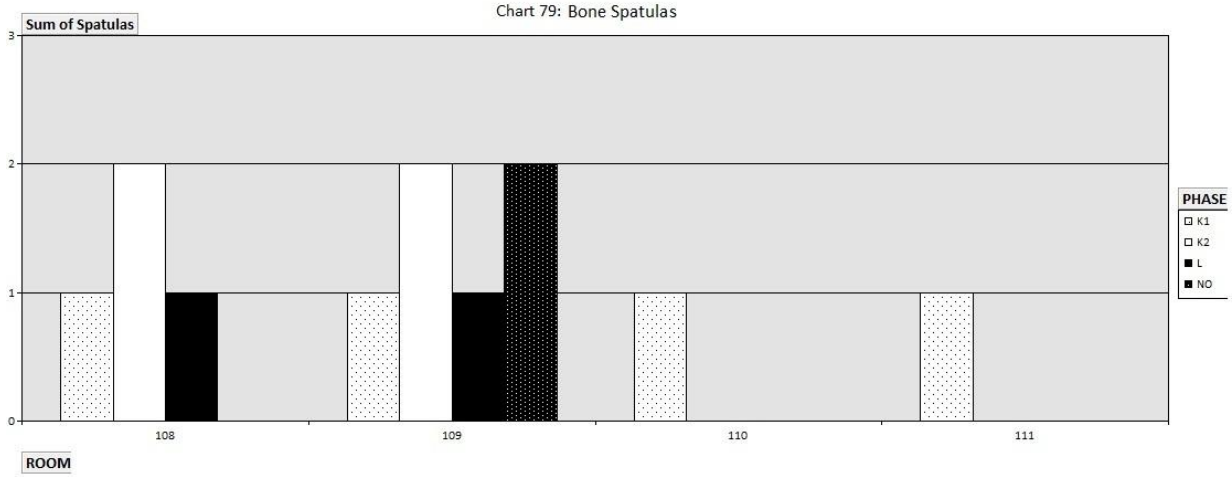


Chart 80: Number of Clay Finds in Phase K1

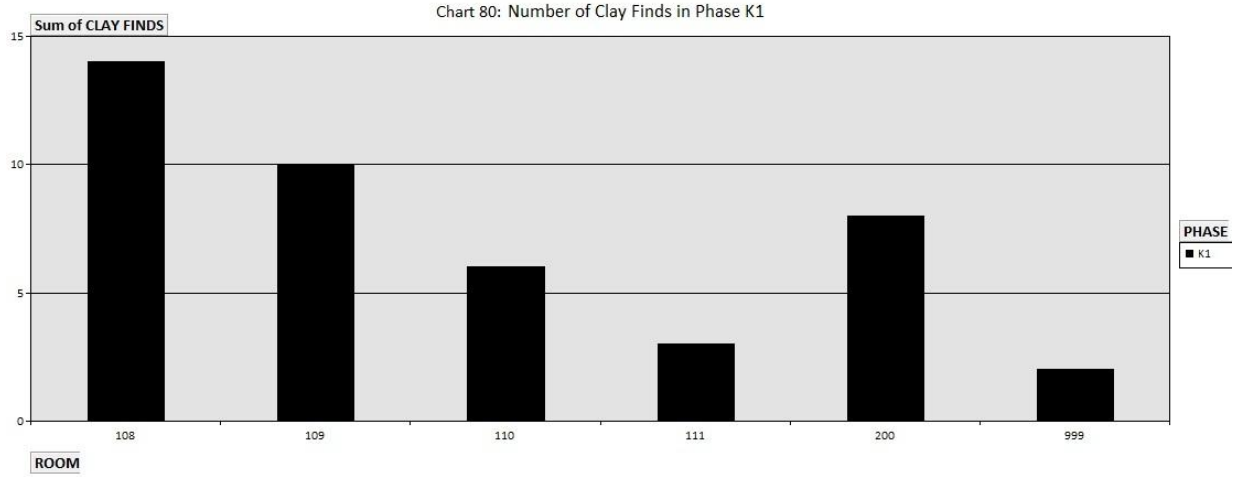


Chart 81: Number of Clay Finds in the Subject Rooms and in the Courtyard

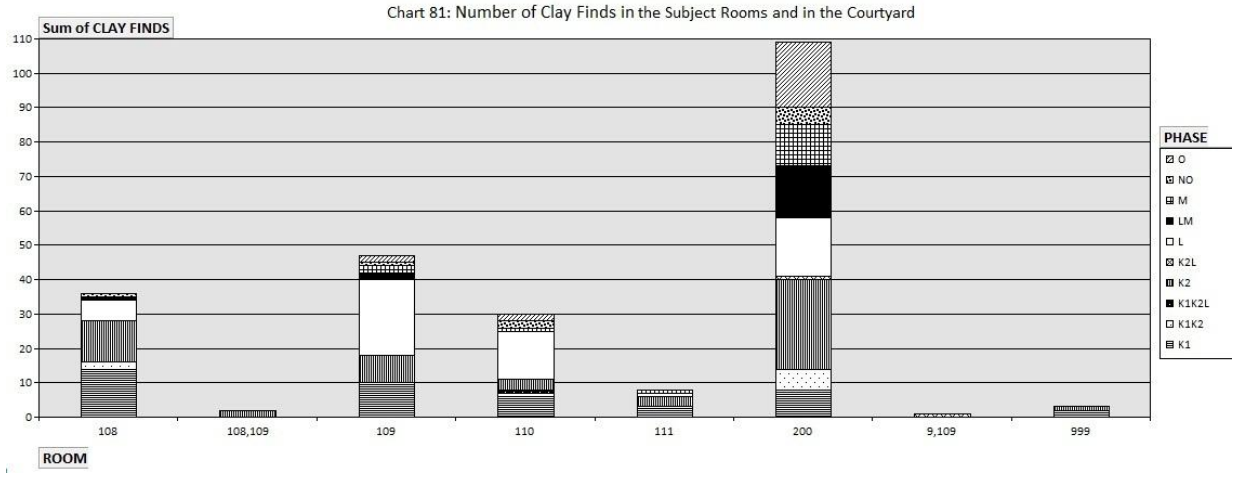


Chart 82: Total Number of Clay Finds in the Later Phases

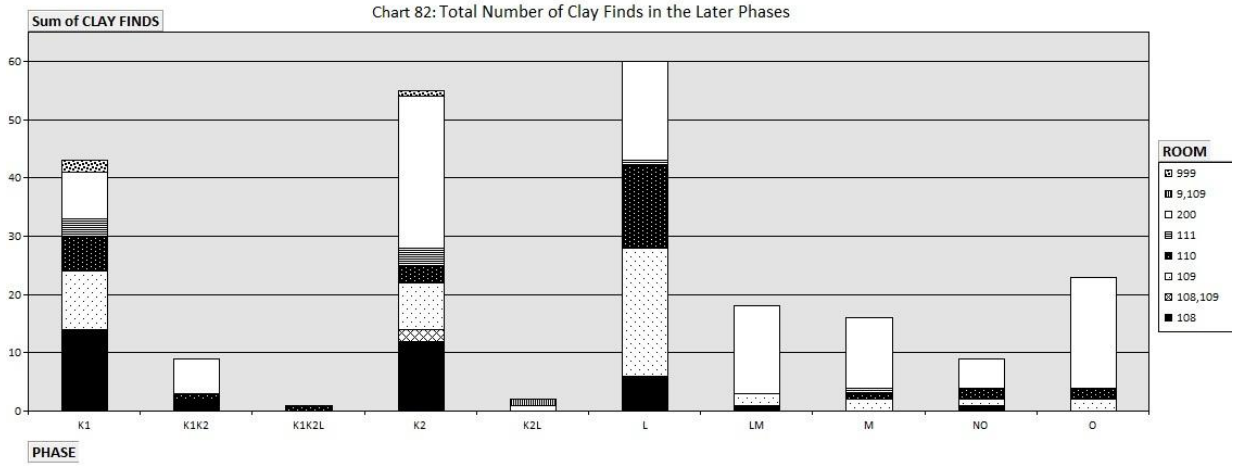


Chart 83: Number of Clay Finds in Phase K1K2

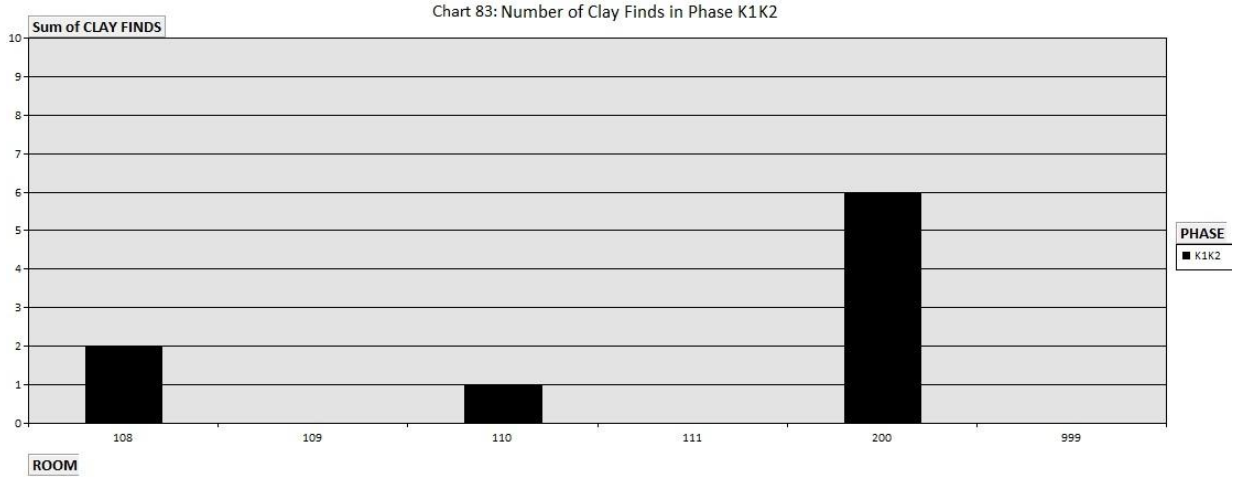


Chart 84: Number of Clay Finds in Phase K2

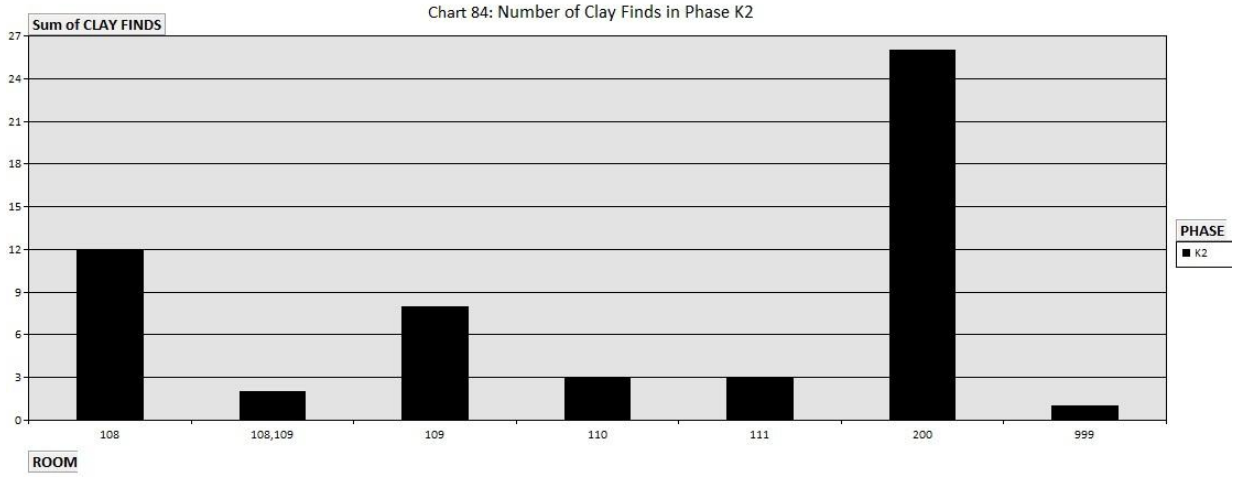


Chart 85: Number of Clay Finds in Phase L

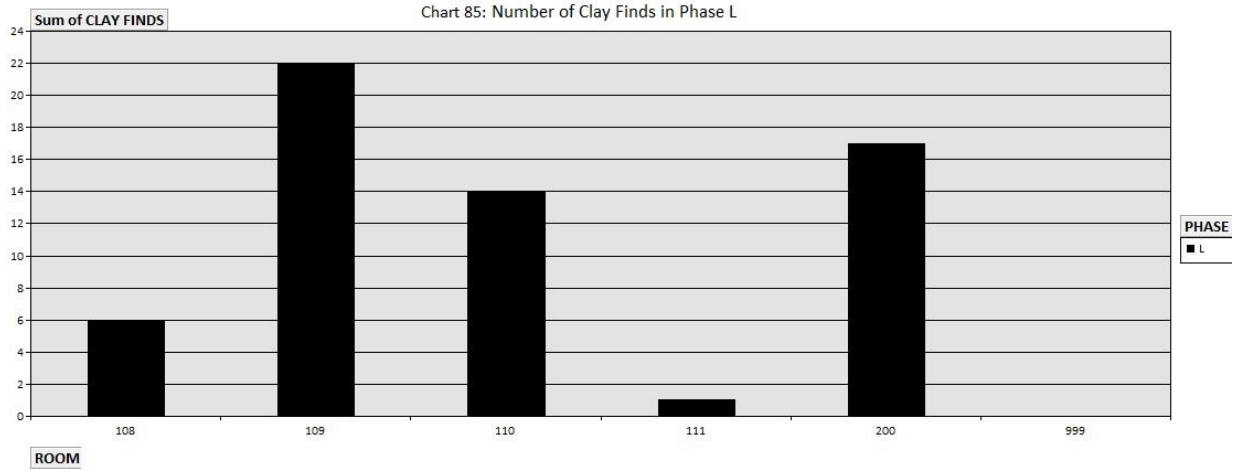


Chart 86: Number of Clay Finds in Phase LM

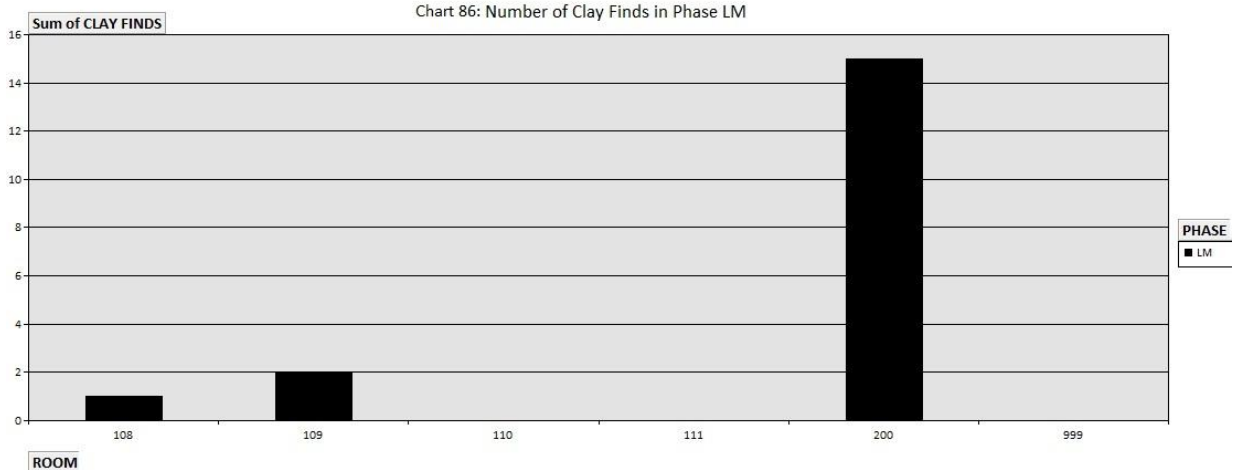


Chart 87: Number of Clay Finds in Phase M

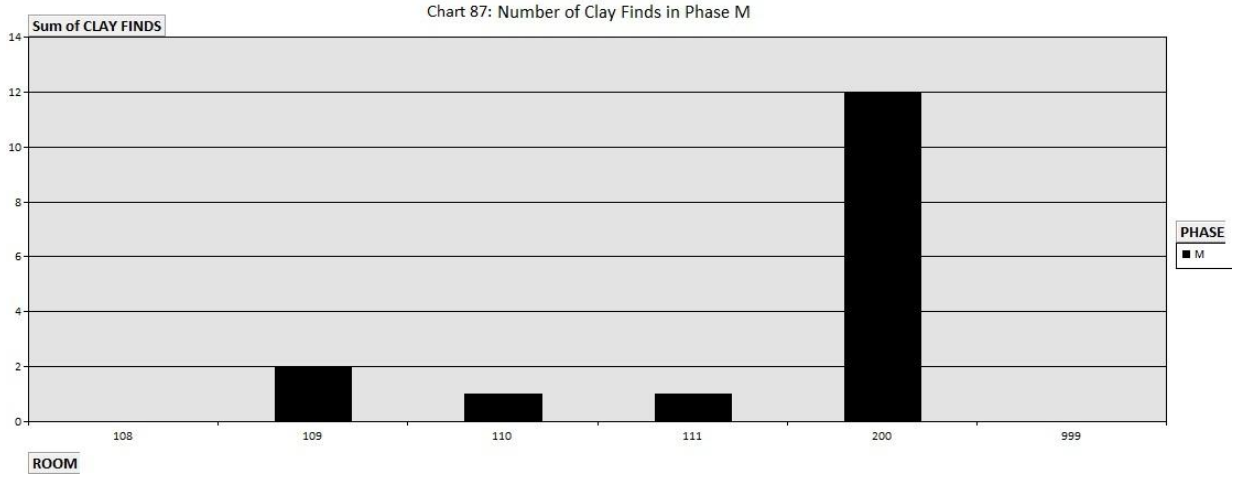


Chart 88: Number of Clay Finds in Phase NO

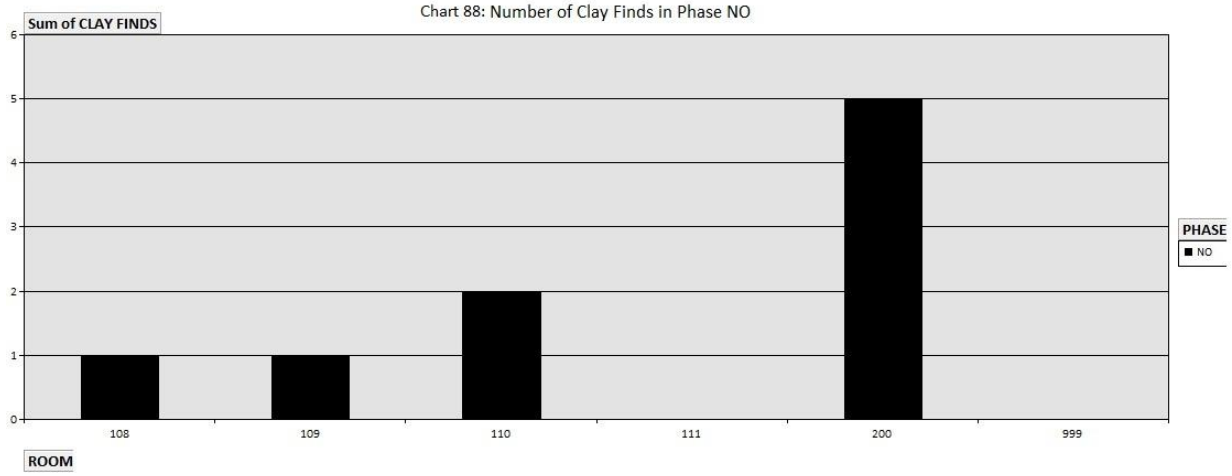


Chart 89: Number of Clay Finds in Phase O

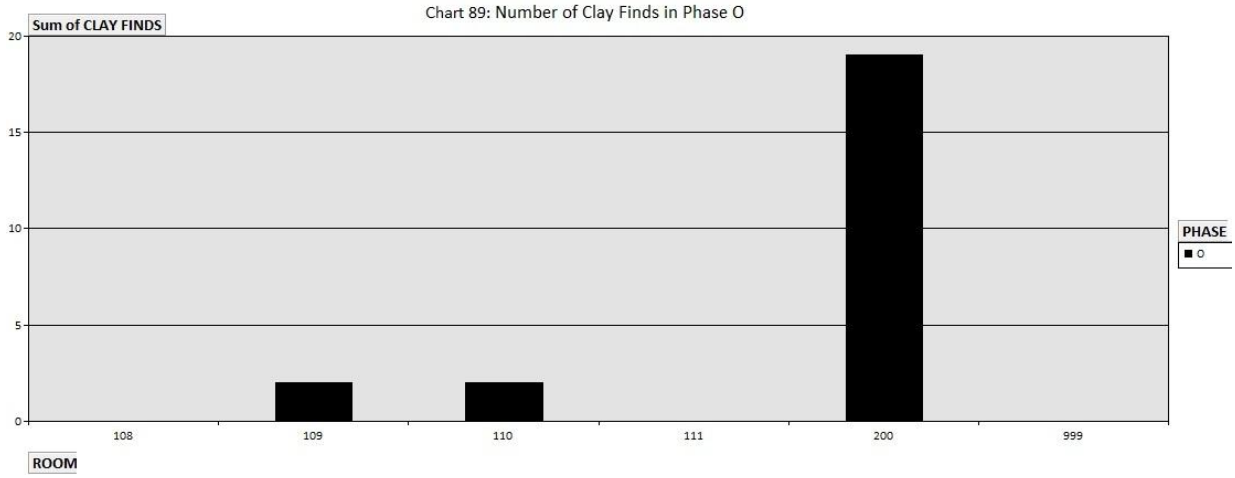


Chart 90: Number of Clay Finds in the Subject Rooms and in the Courtyard

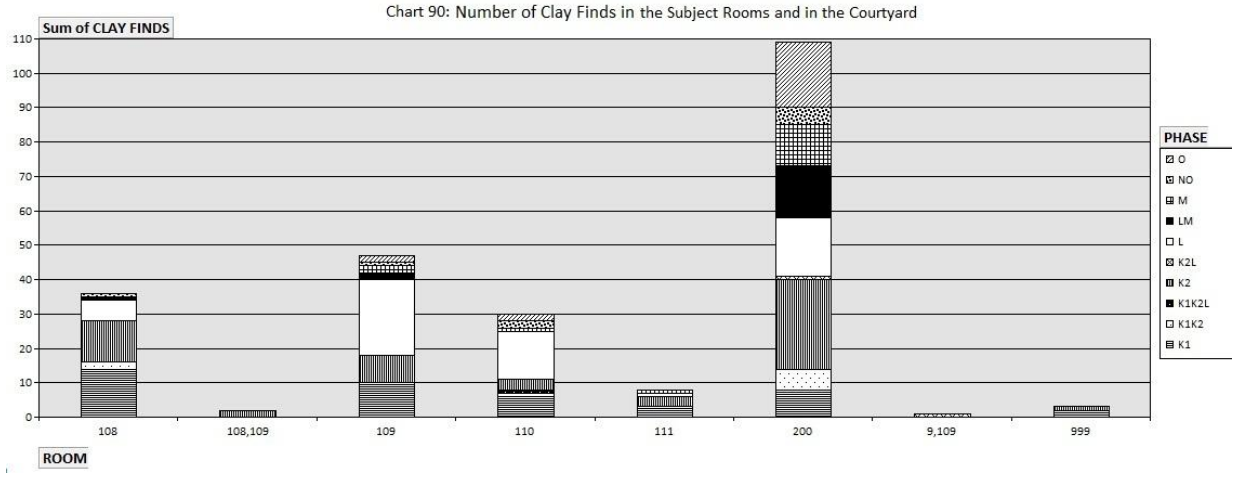


Chart 91: Number of Bone Finds in Phase K1

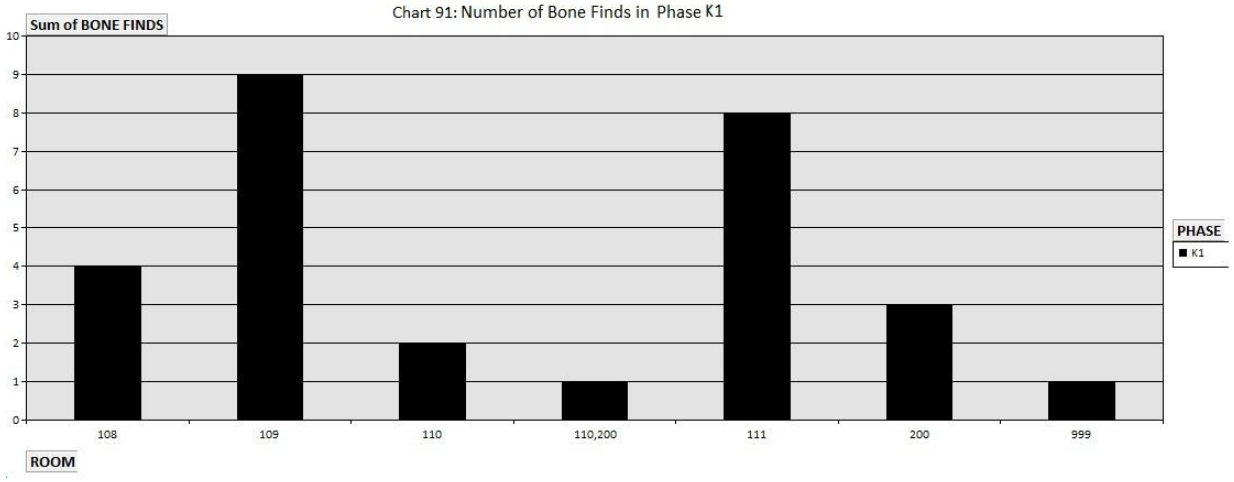


Chart 92: Number of Bone Finds in the Later Phases

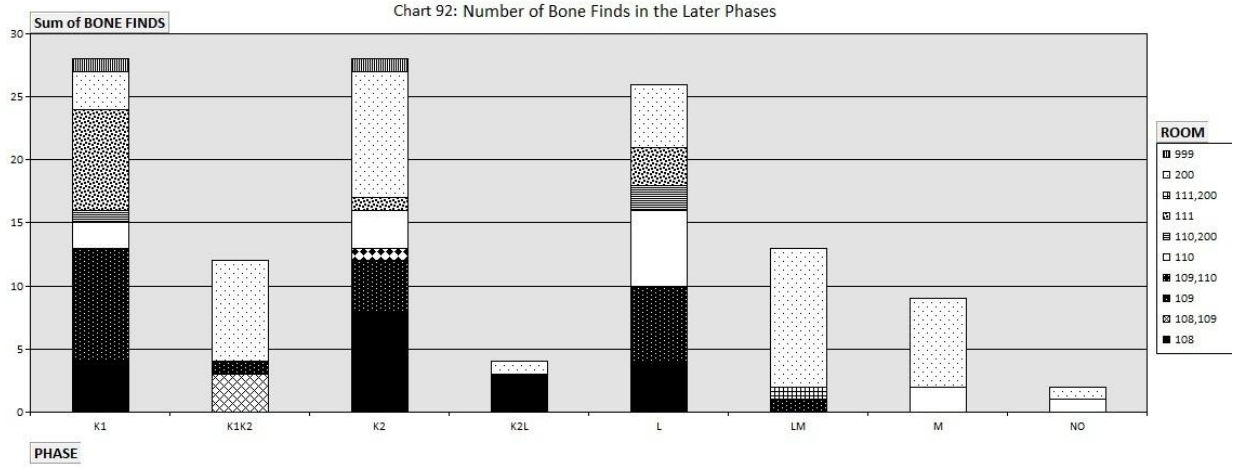


Chart 93: Number of Bone Finds in Phase K1K2

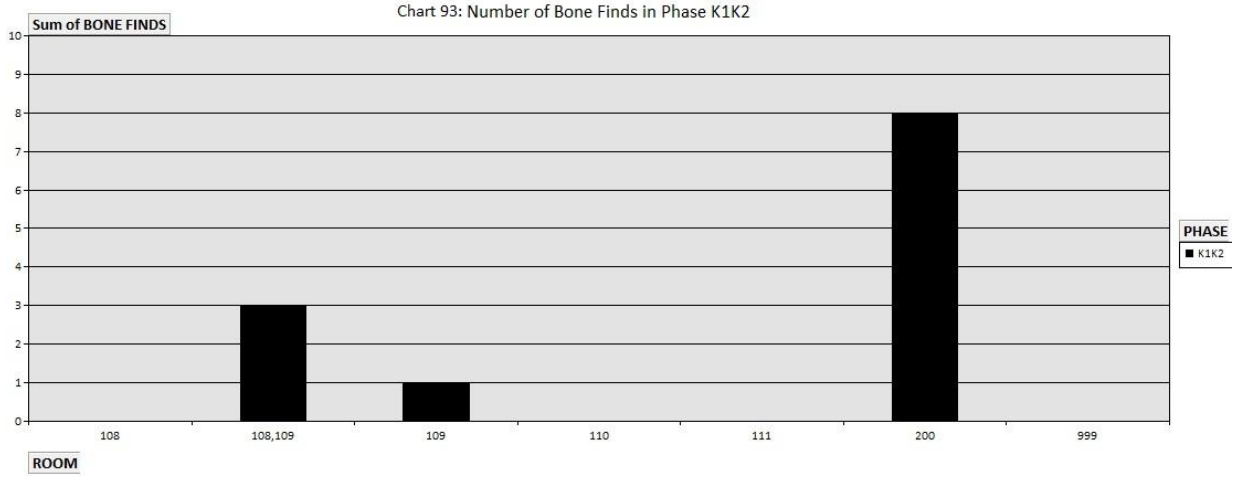


Chart 94: Number of Bone Finds in Phase K2

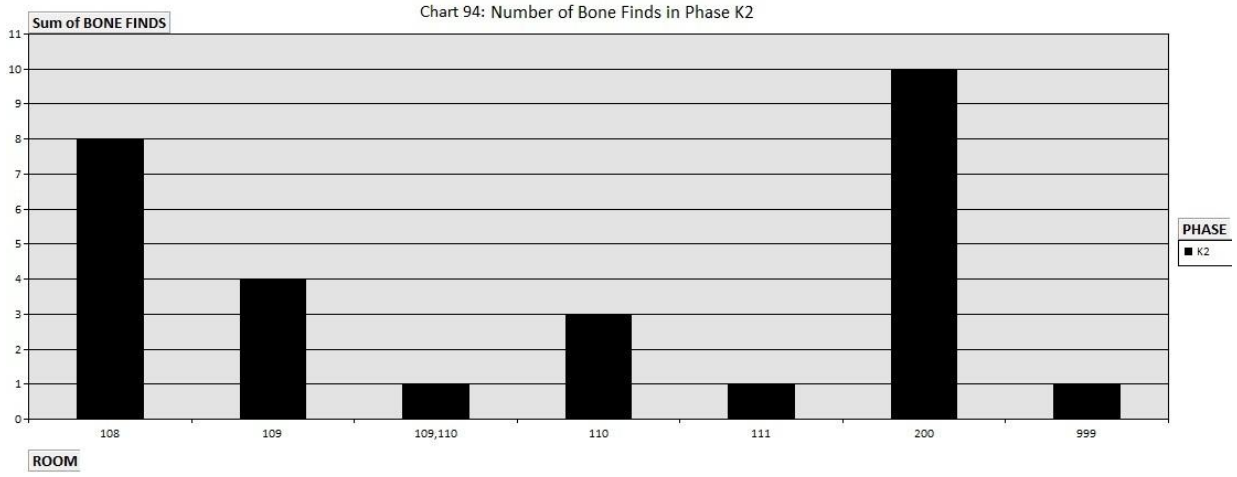


Chart 95: Number of Bone Finds in Phase L

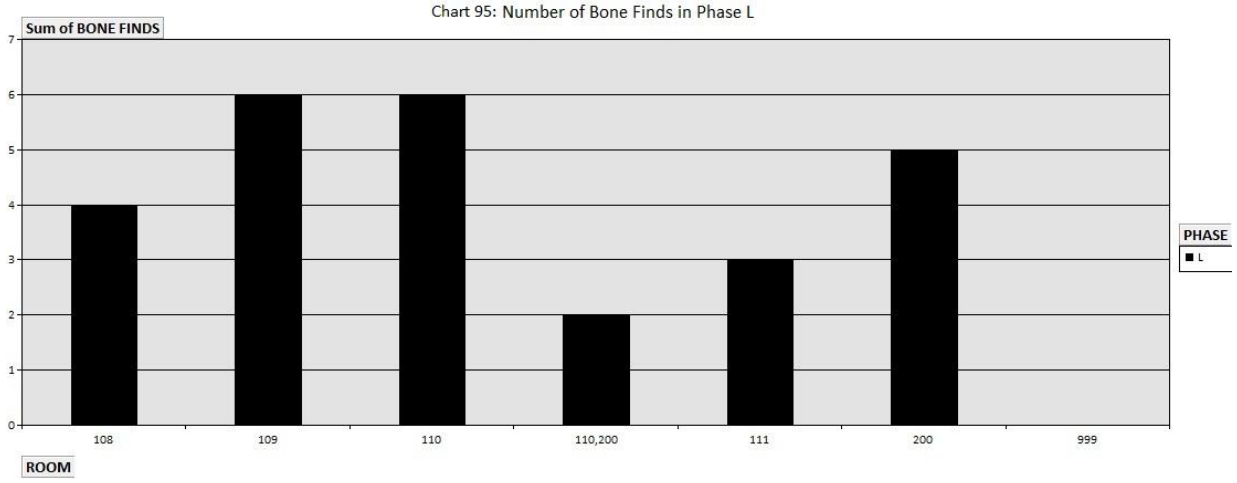


Chart 96: Number of Bone Finds in the Subject Rooms and in the Courtyard

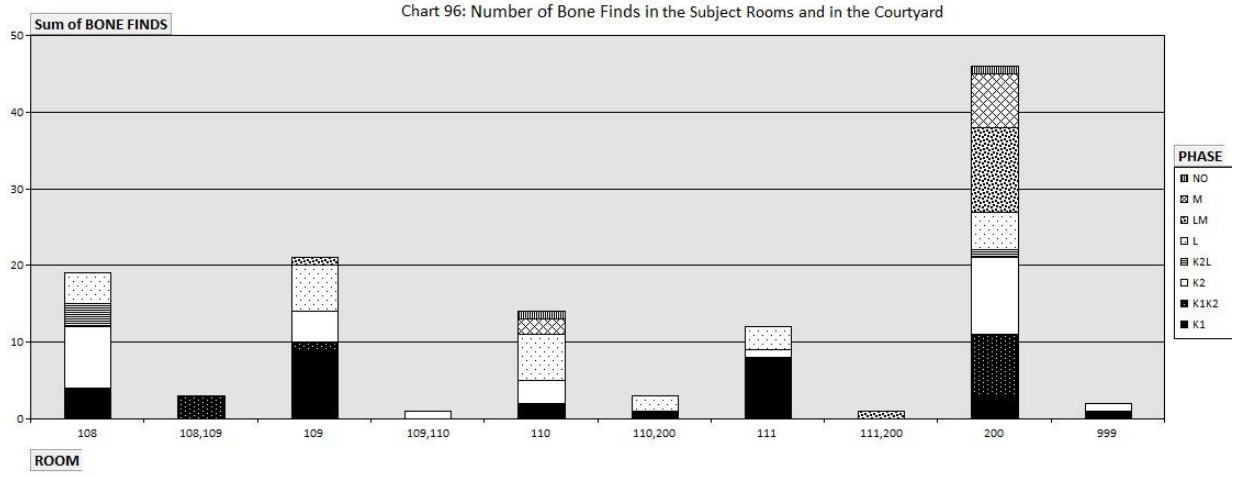


Chart 97: Flint Cores

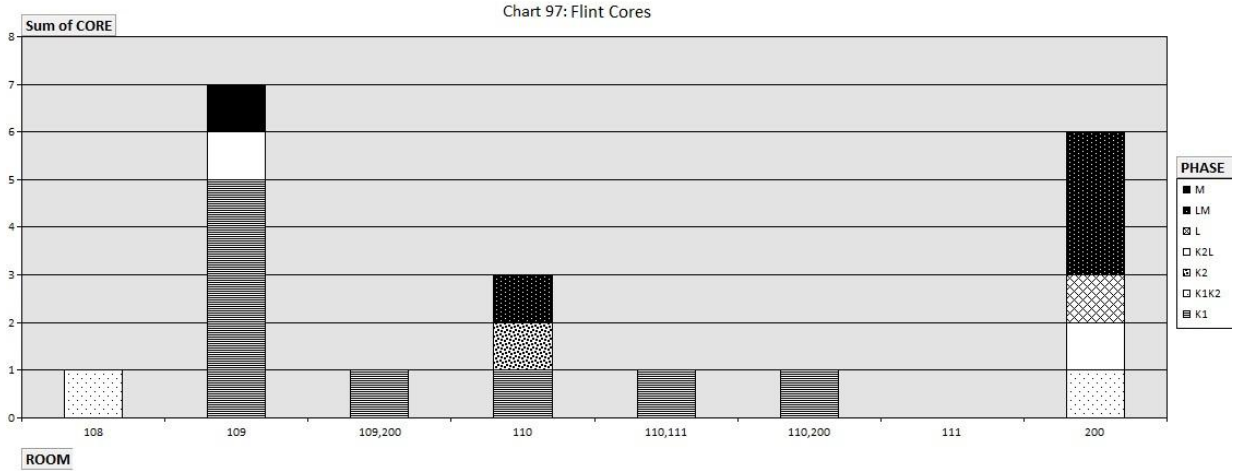


Chart 98: Obsidian Cores

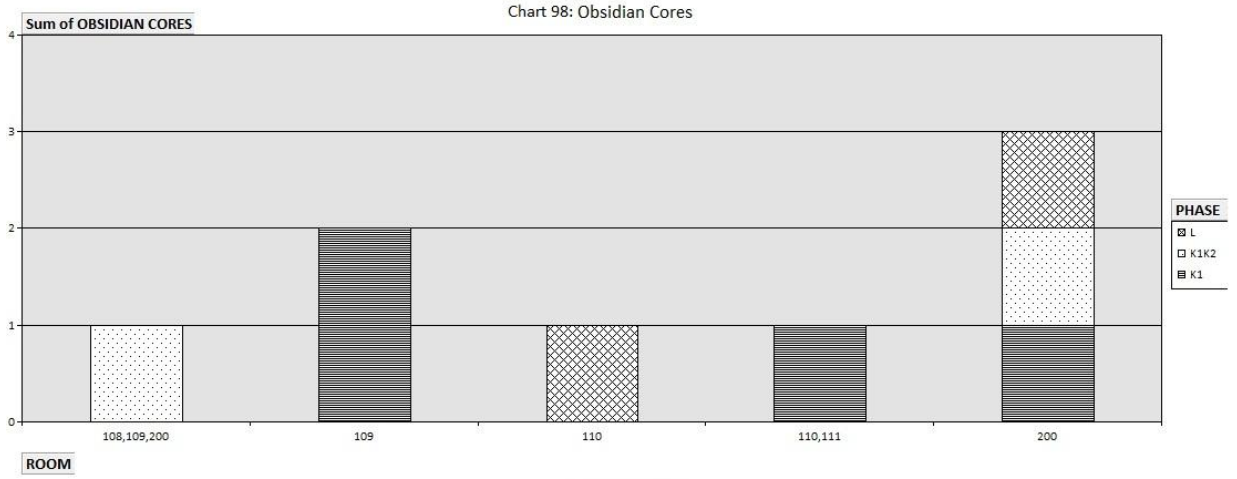


Chart 99: Items of Debris

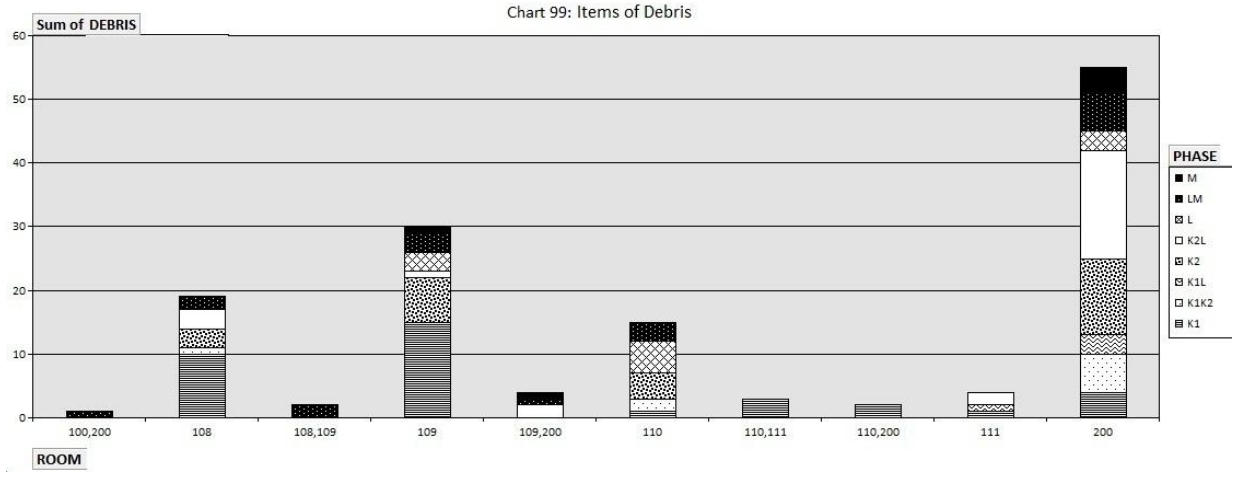


Chart 100: Unretouched Flint Flakes

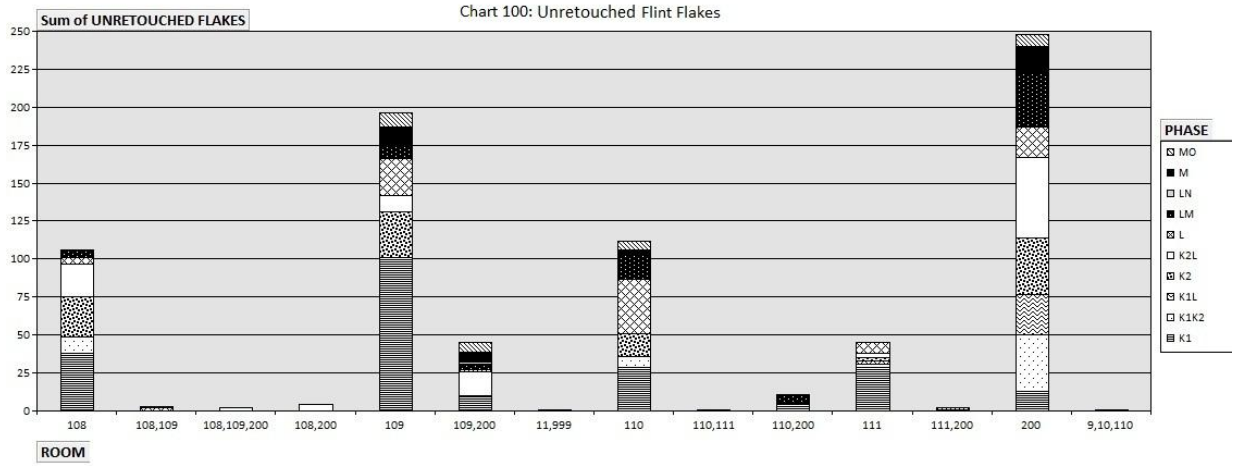


Chart 101: Unretouched Obsidian Flakes

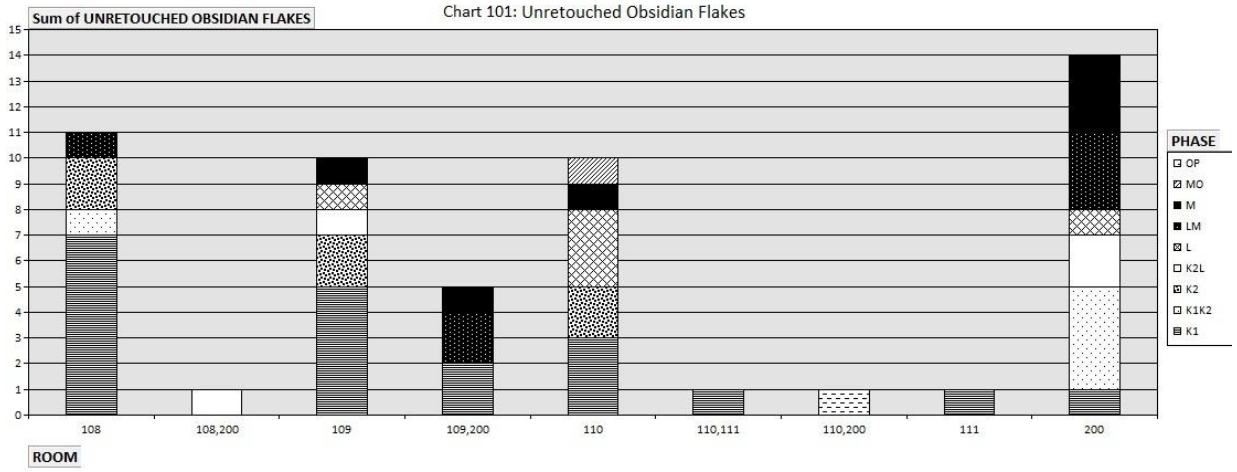


Chart 102: Unretouched Flint Blades

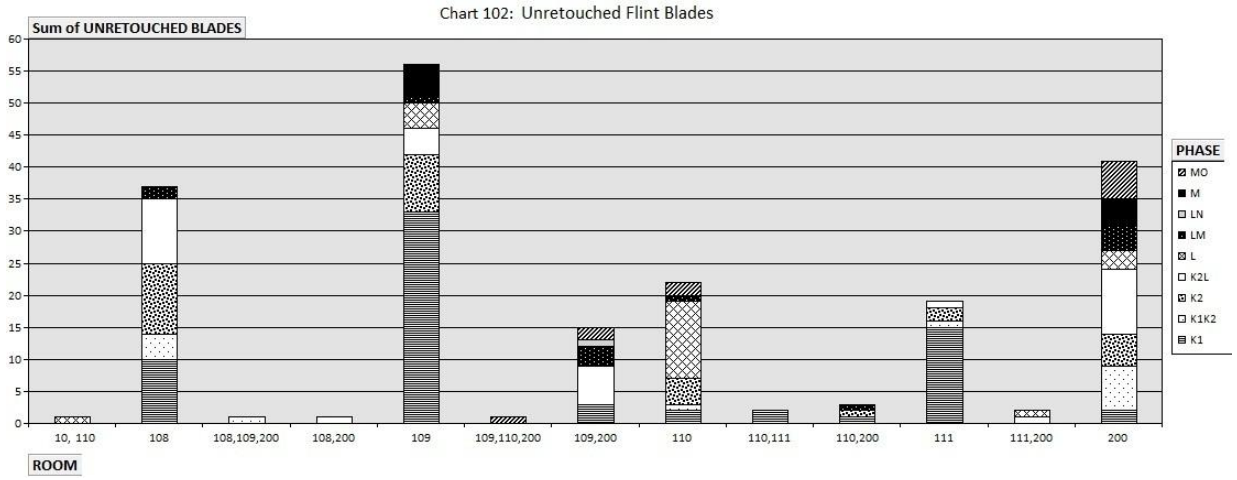


Chart 103: Retouched Flint Flakes

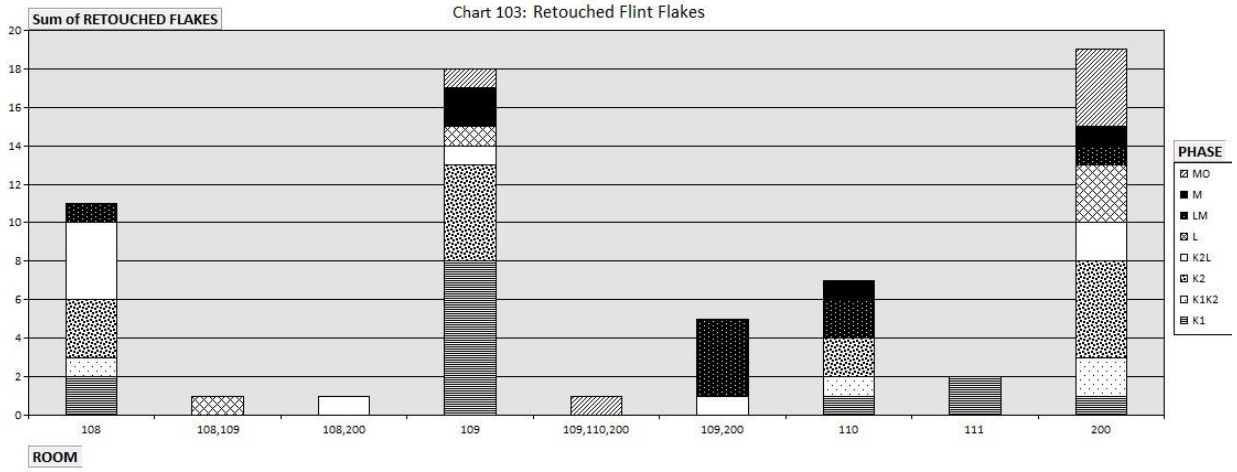


Chart 104: Retouched Flint Blades

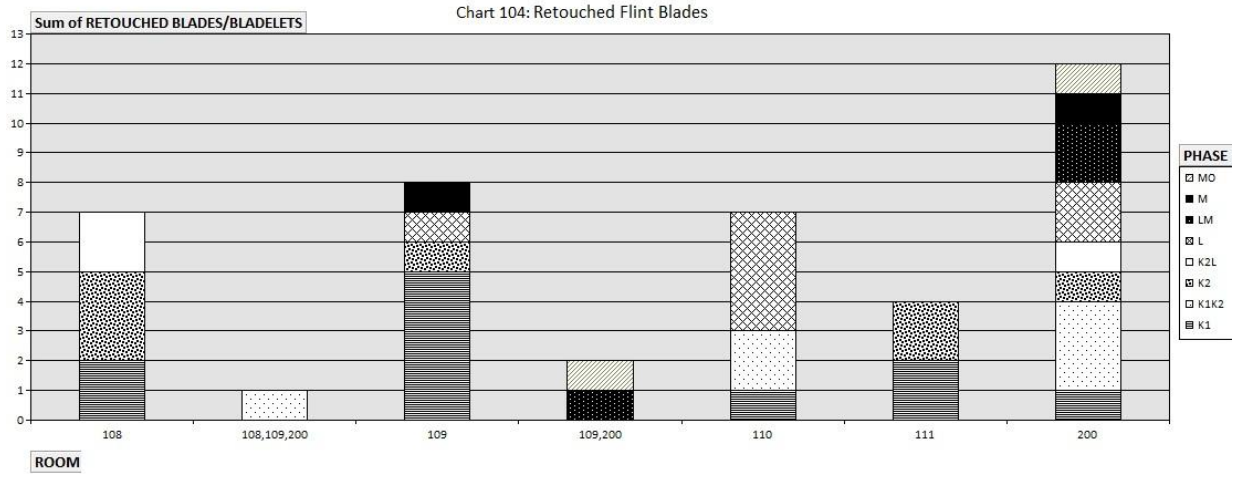


Chart 105: Retouched Obsidian Blades

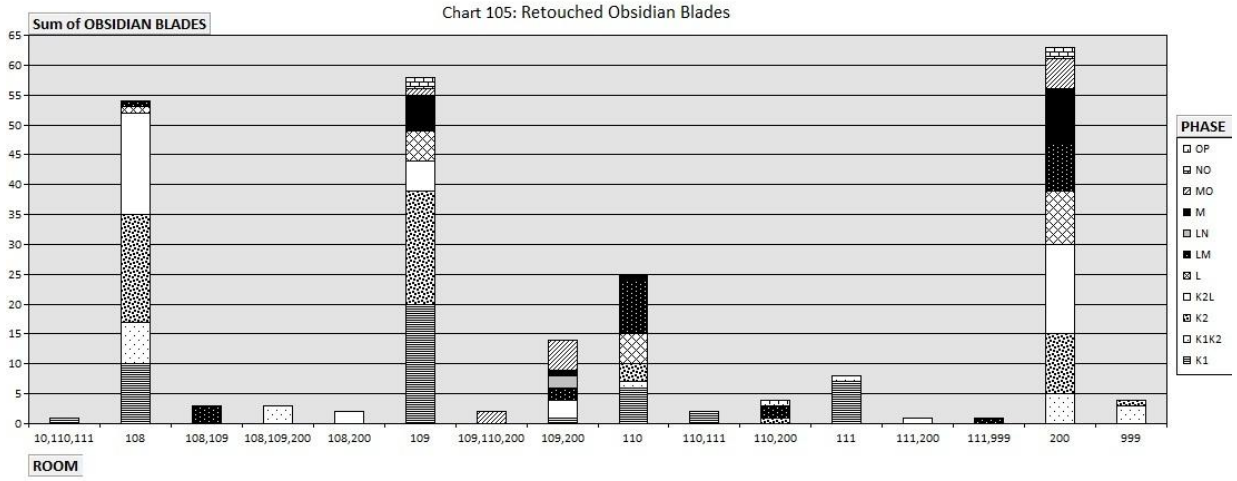


Chart 106: Sickle Inserts

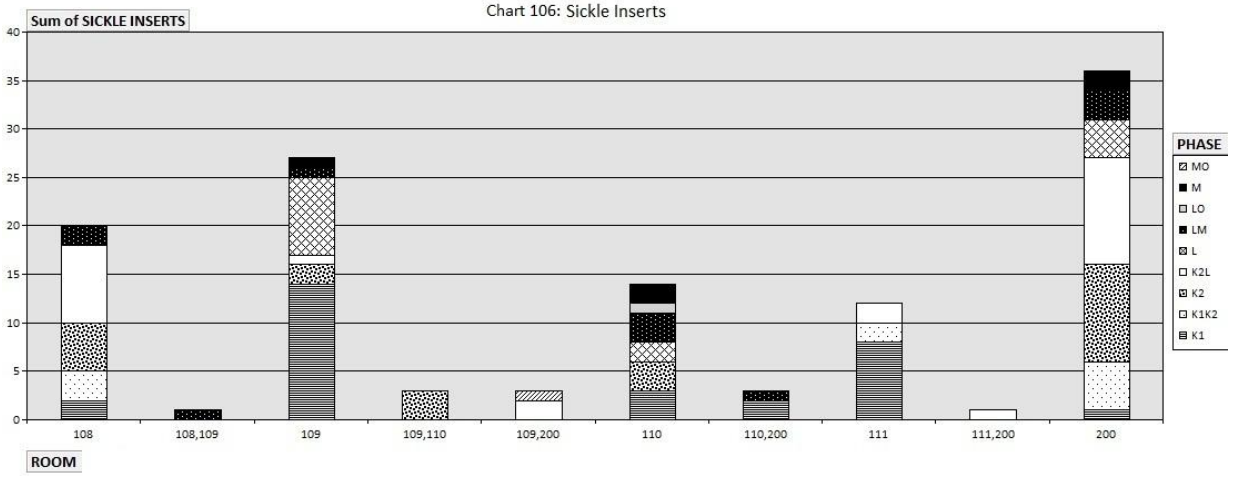


Chart 107: Flint Awls

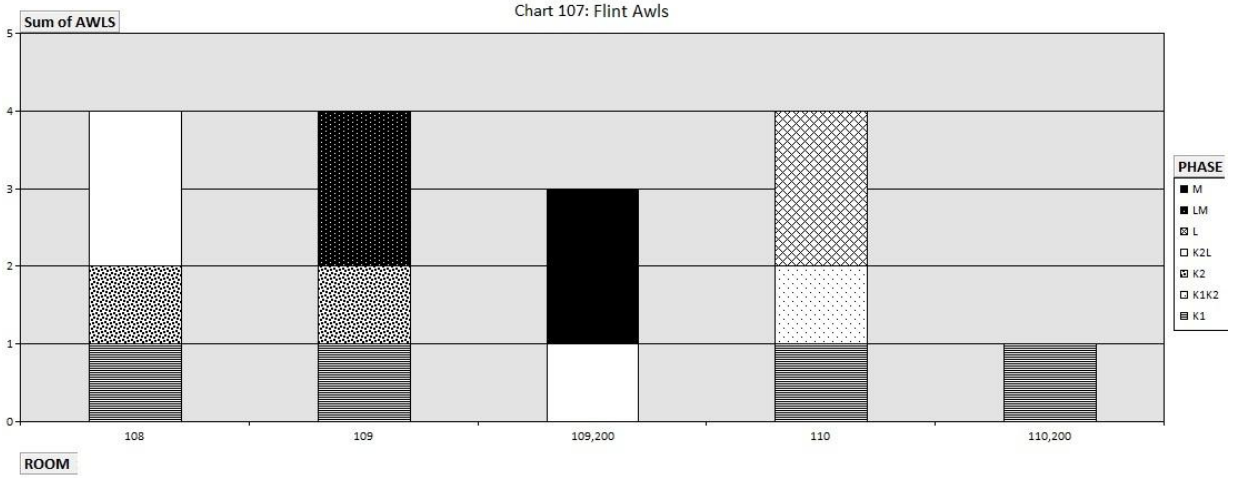


Chart 108: Flint Chisels/Splitters

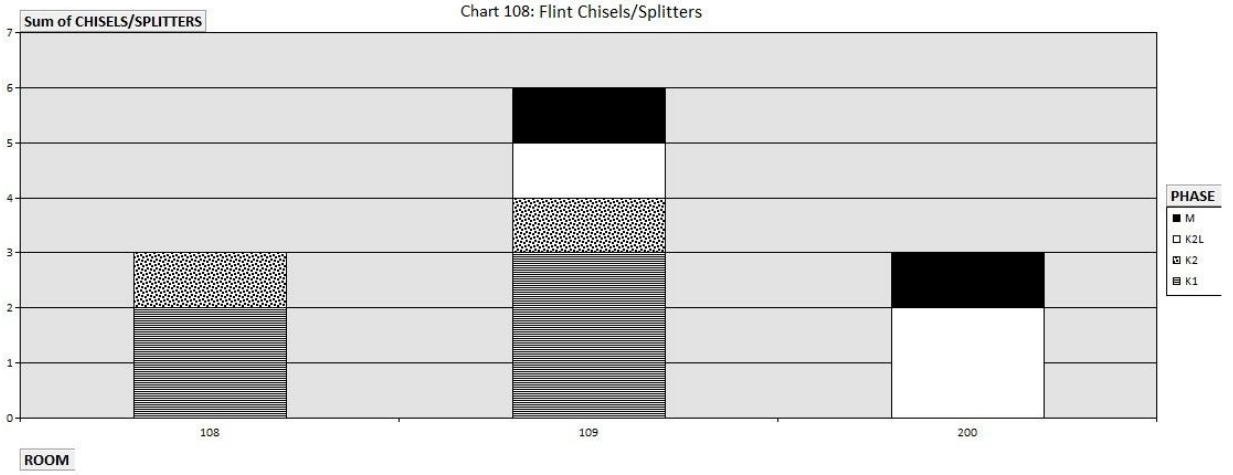


Chart 109: Flint Scrapers

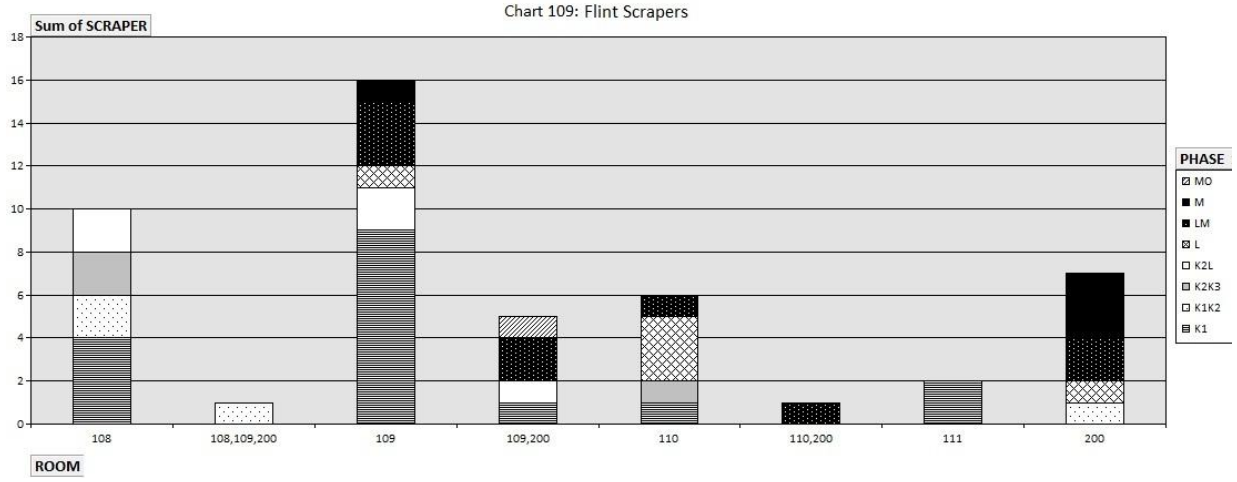


Chart 110: Number of Flint Finds in the Later Phases

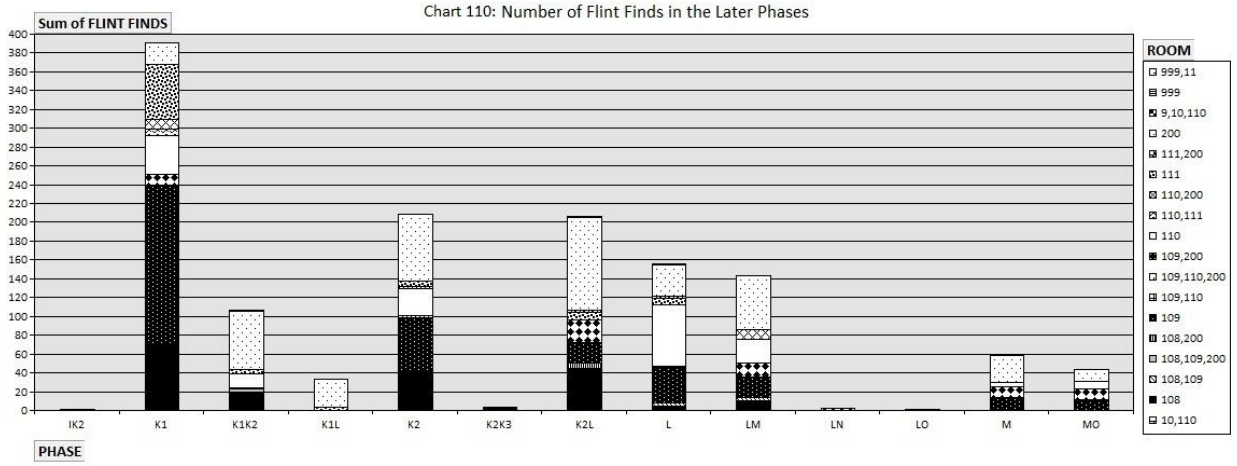


Chart 111: Number of Flint Finds in Phase K1

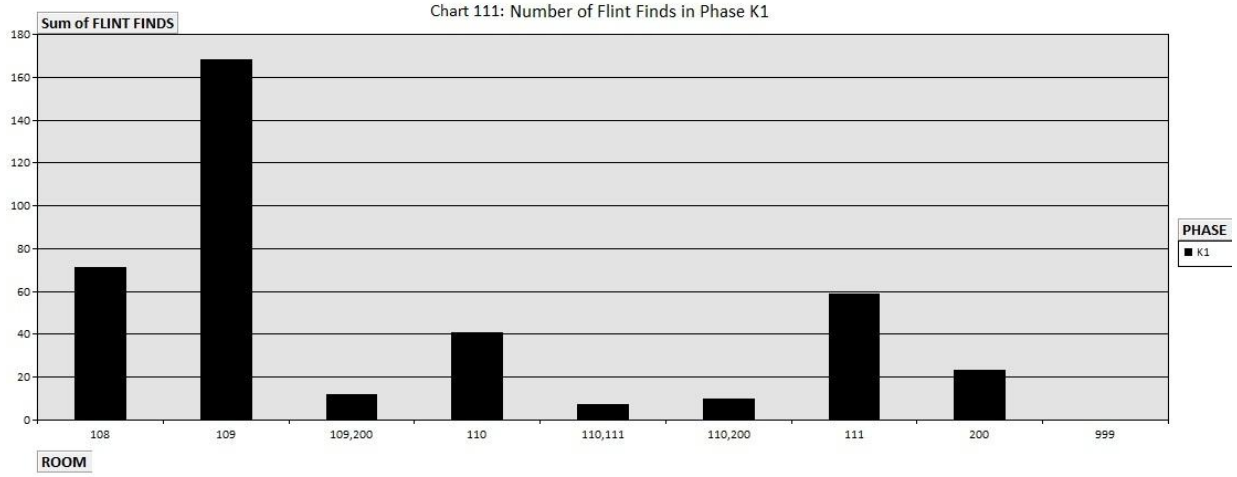


Chart 112: Number of Obsidian Finds in Phase K1

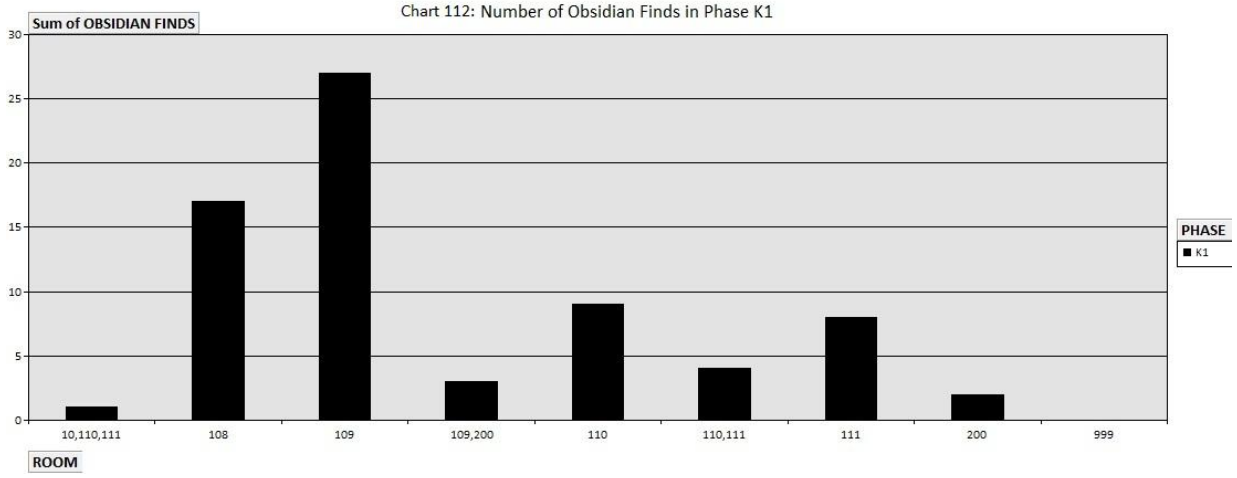


Chart 113: Number of Flint Finds in Phase K1K2

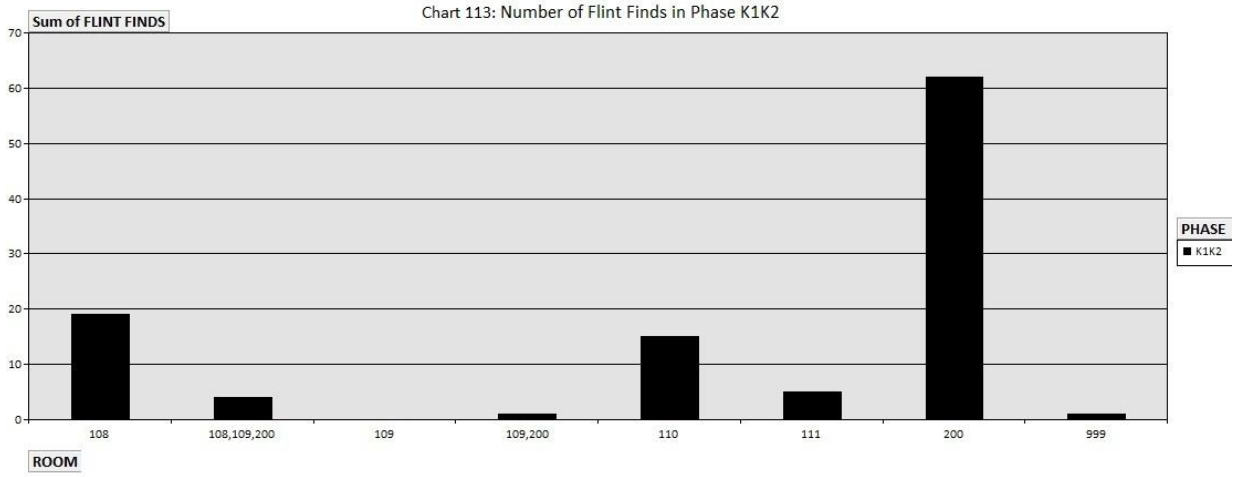


Chart 114: Number of Flint Finds in Phase K2

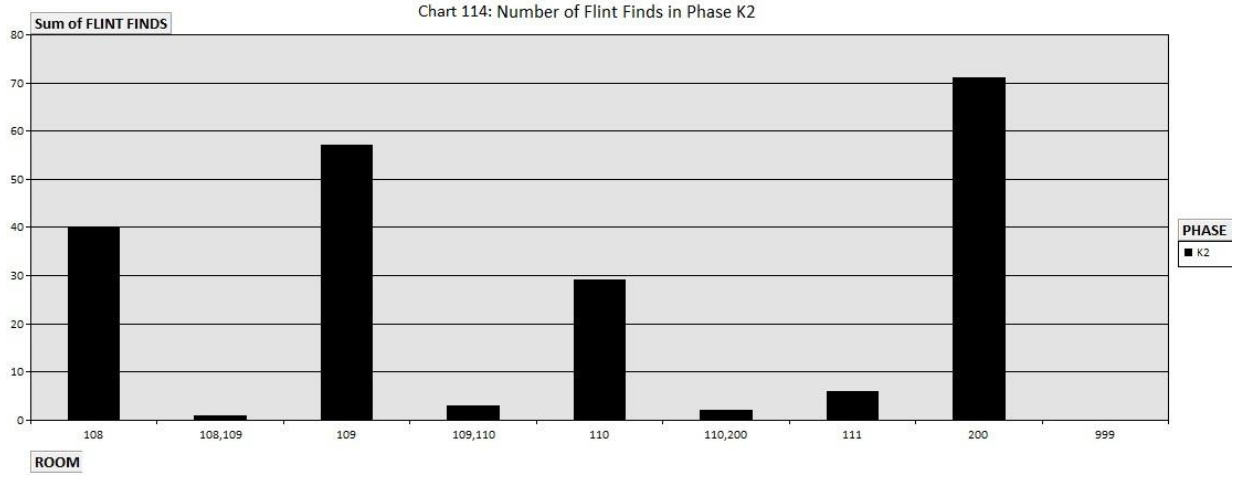


Chart 115: Number of Obsidian Finds in Phase K2

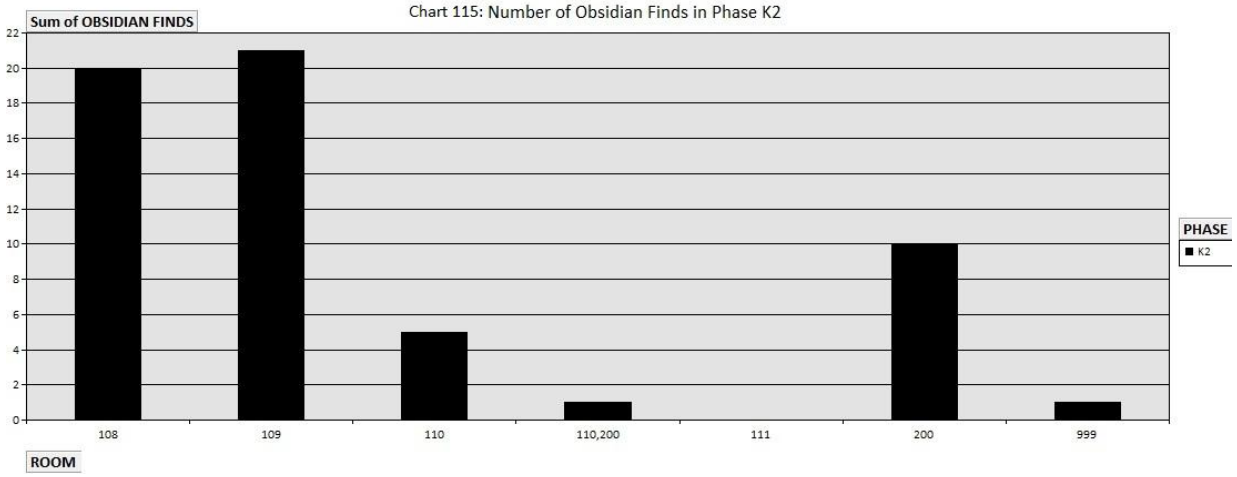


Chart 116: Number of Obsidian Finds in Later Phases

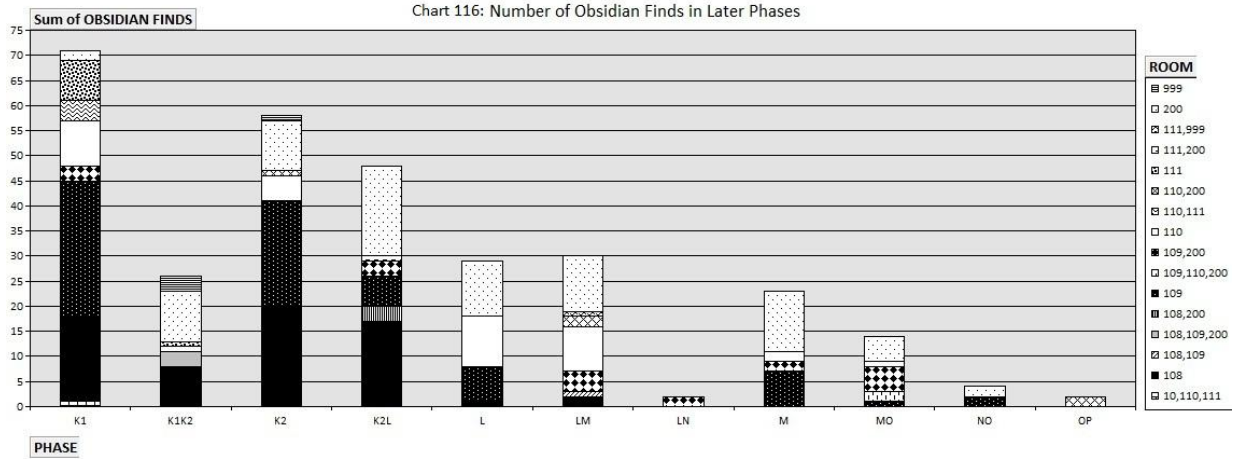


Chart 117: Number of Flint Finds in Phase K2L

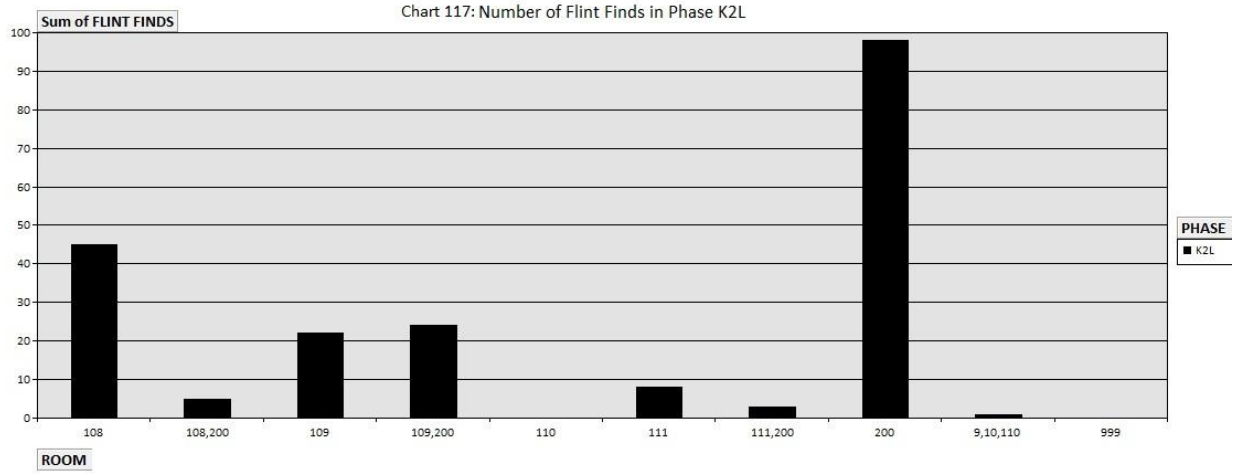


Chart 118: Number of Obsidian Finds in Phase K2L

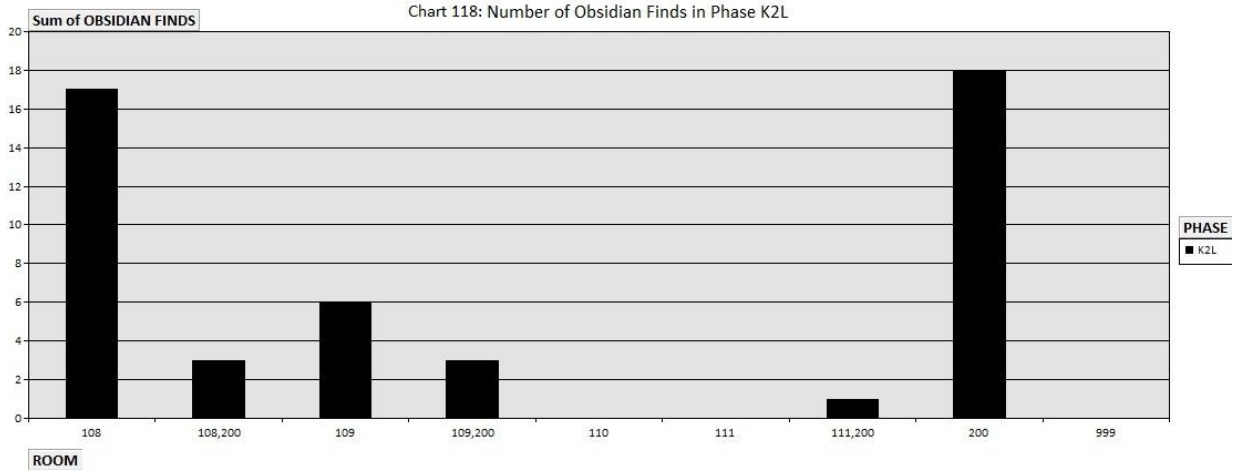


Chart 119: Number of Flint Finds in Phase L

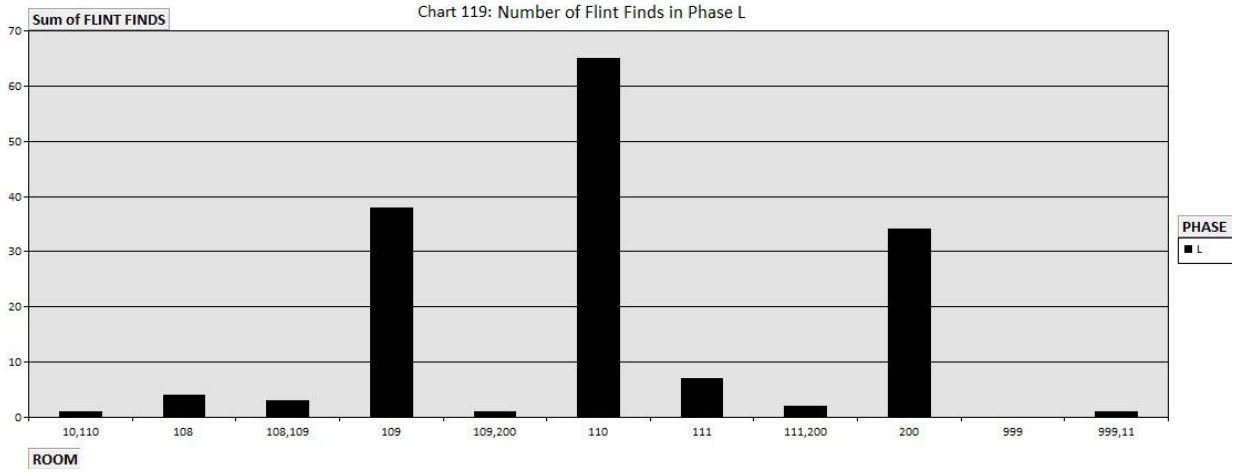


Chart 120: Number of Obsidian Finds in Phase L

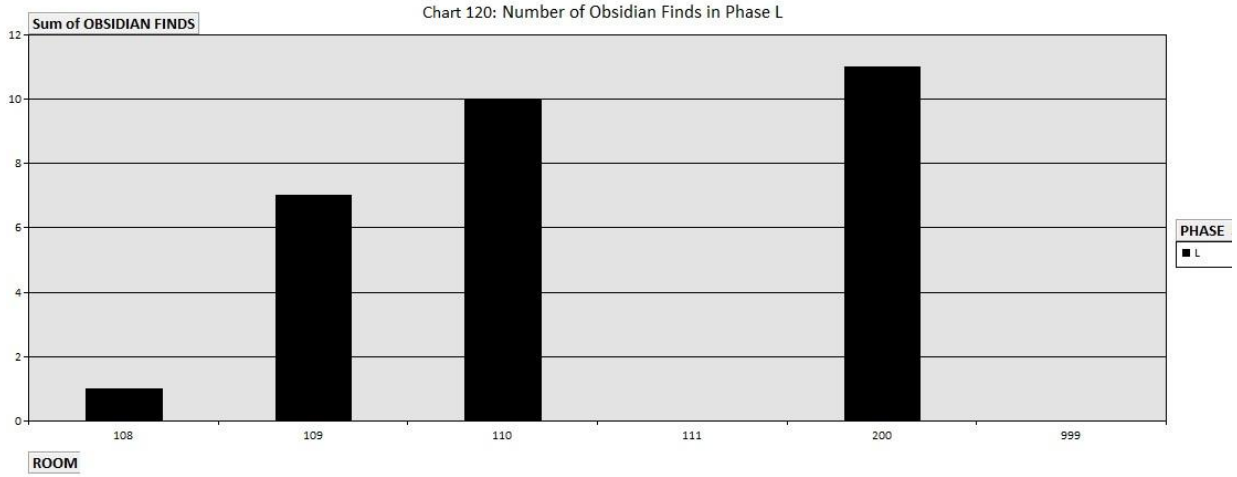


Chart 121: Number of Flint Finds in Phase LM

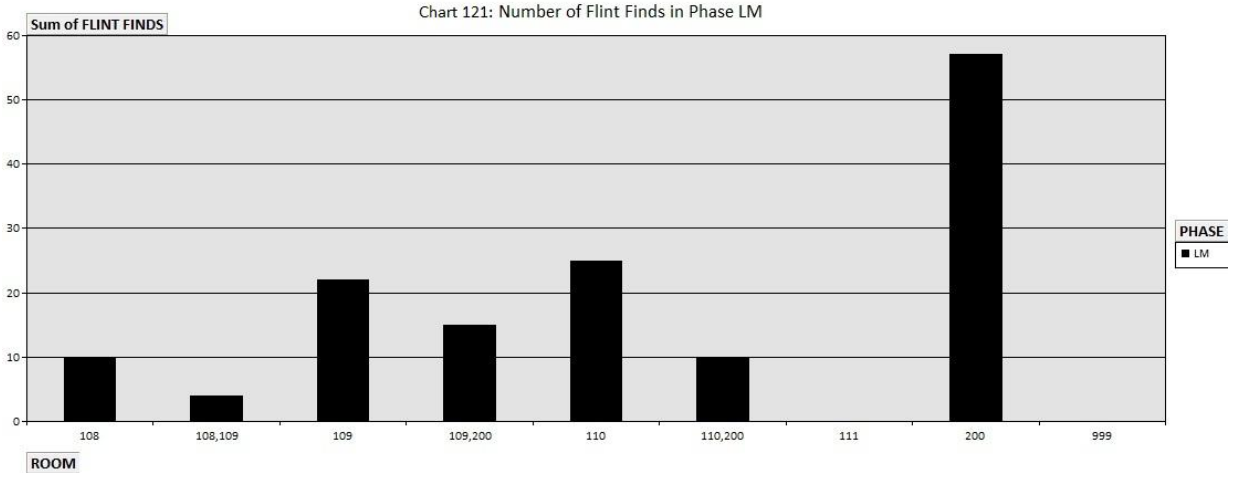


Chart 122: Number of Obsidian Finds in Phase LM

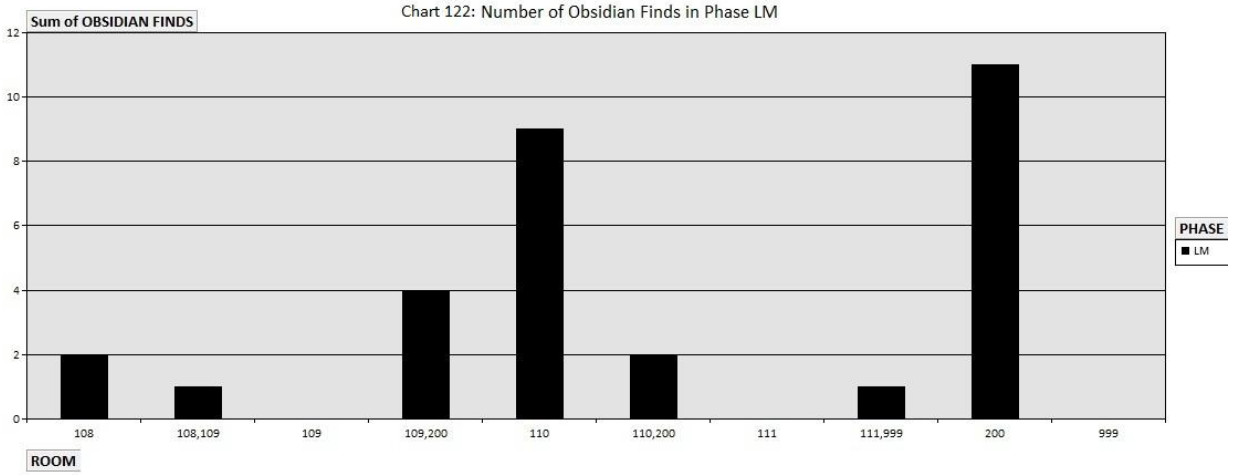


Chart 123: Number of Flint Finds in Phase M

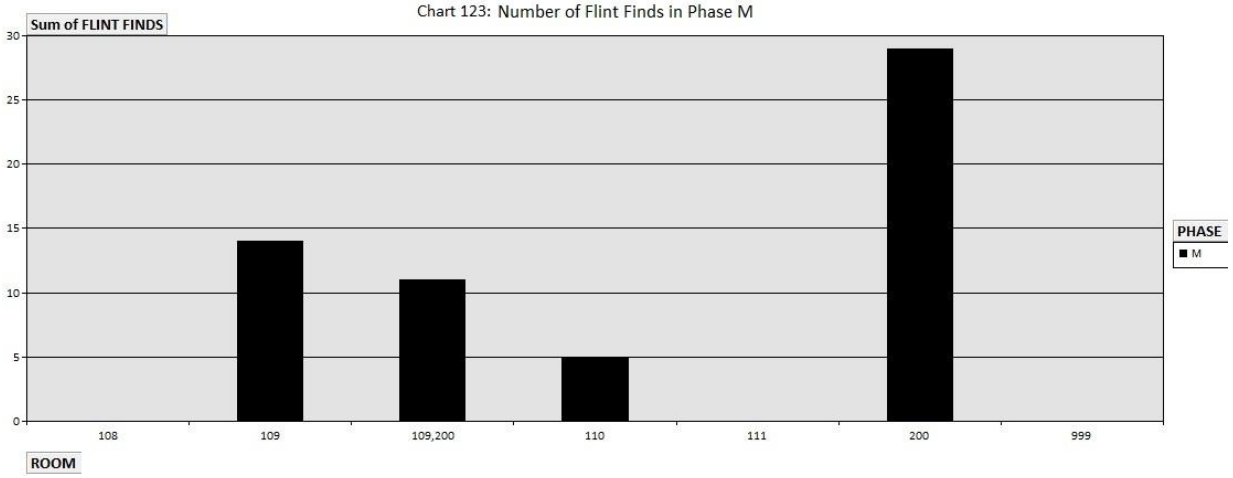


Chart 124: Number of Obsidian Finds in Phase M

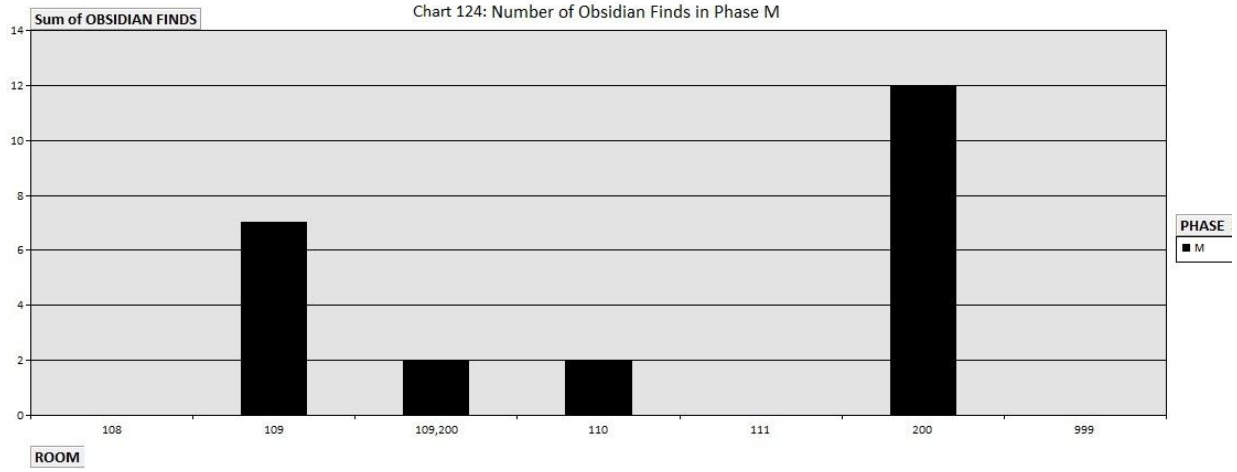


Chart 125: Number of Flint Finds in Phase MO

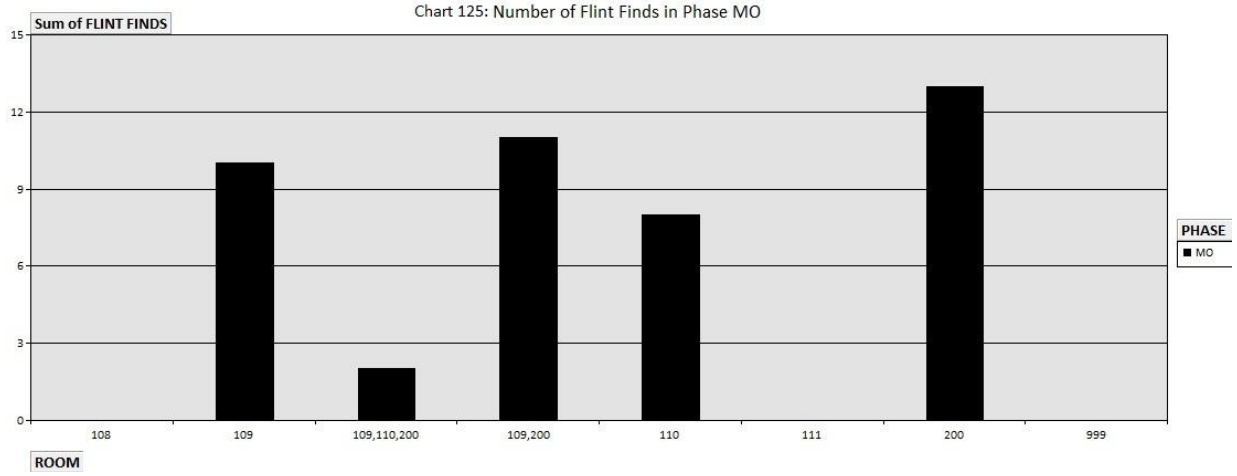


Chart 126: Number of Obsidian Finds in Phase MO

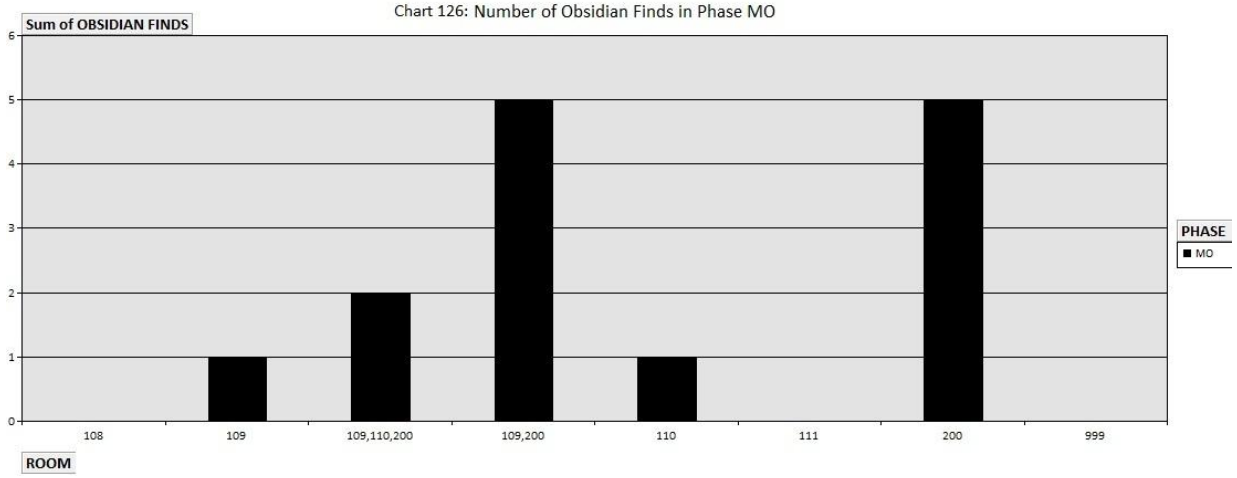


Chart 127: Number of Flint Artifacts in the Subject Rooms and in the Courtyard

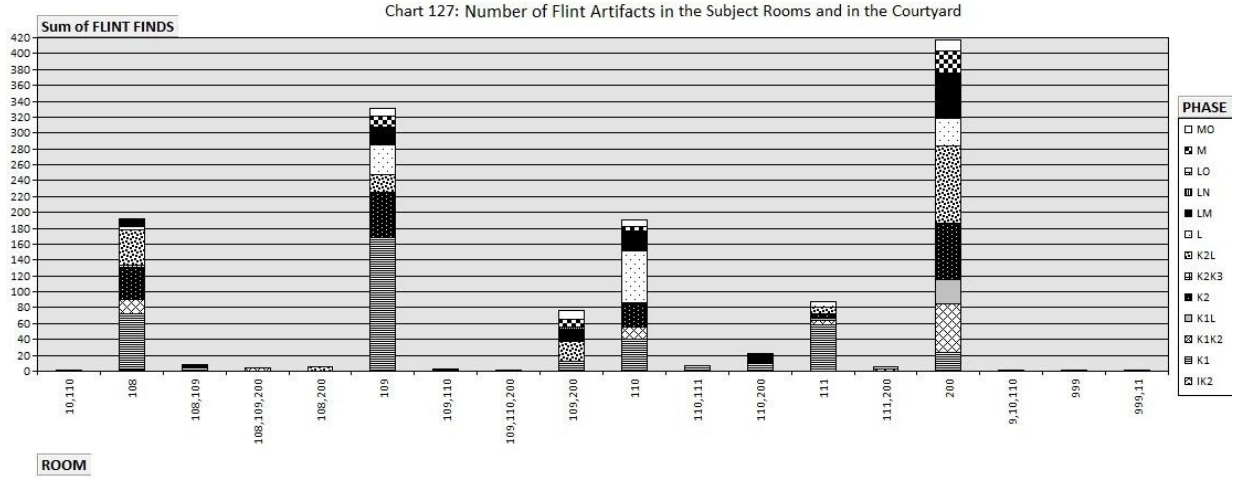


Chart 128: Number of Obsidian Artifacts in the Subject Rooms and in the Courtyard

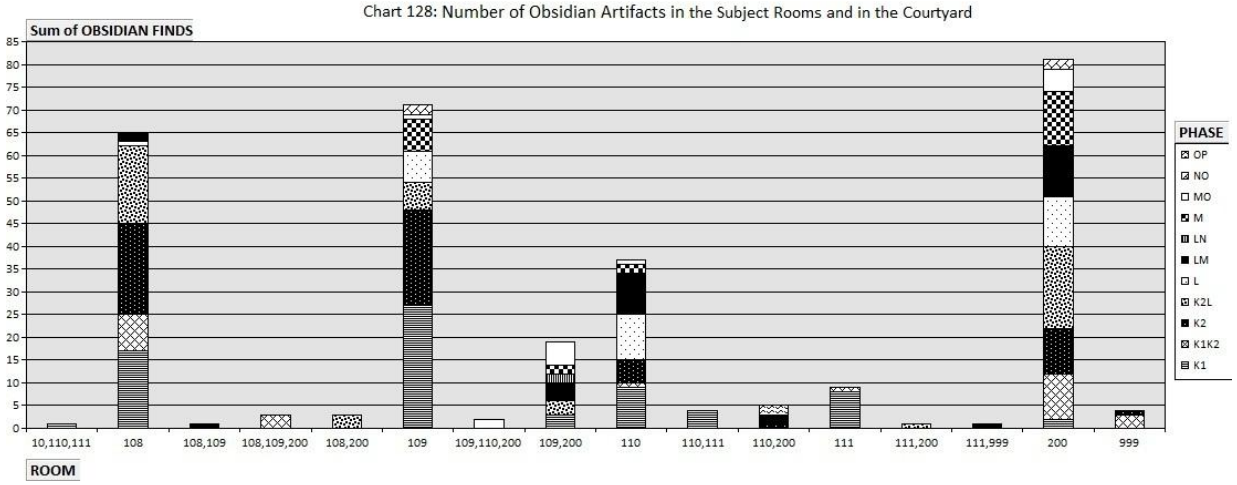


Chart 129: Total Number of Bowls in the Subject Rooms

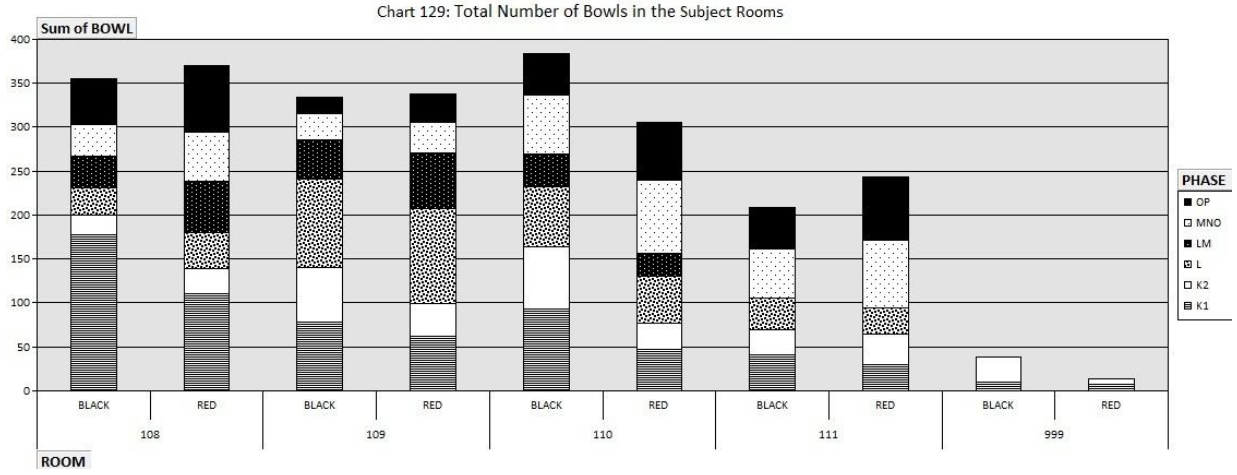
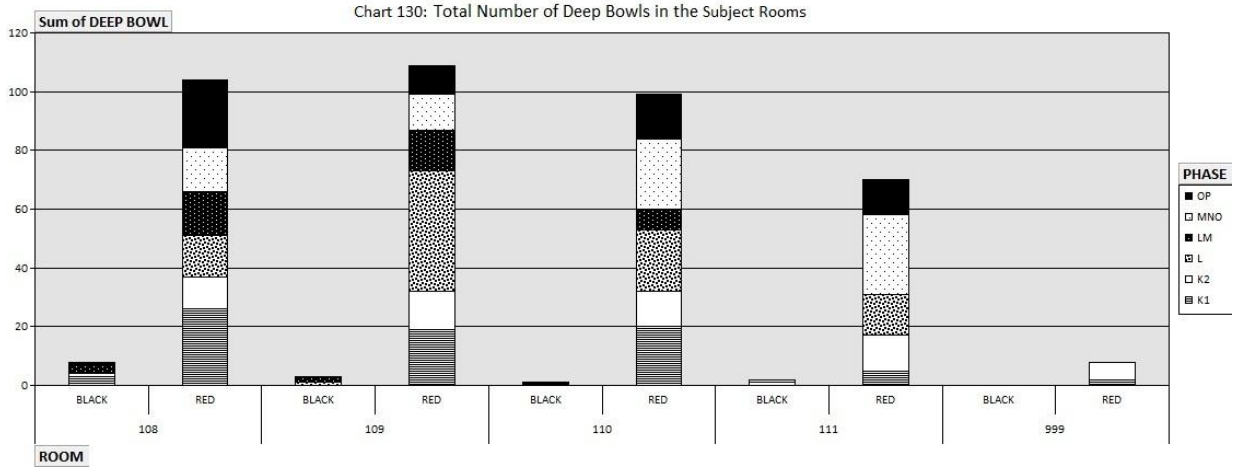


Chart 130: Total Number of Deep Bowls in the Subject Rooms



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