

Greek and Related Pottery from Al Mina.

**A Case Study of Production, Consumption and Distribution
of Greek pottery in the Eastern Mediterranean from the 9th to
the End of the 7th Century BC.**

**Part A: Main Text
and Bibliography**

Thesis Submitted for the Degree of Doctor of Philosophy in Archaeology

Alexander Vacek

Merton College

Trinity Term 2012

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ABSTRACT

The present thesis provides an examination of the Greek imports from Al Mina dating from the end of the 9th to the end of the 7th centuries BC. Al Mina, located on the Orontes river in the Hatay province of Turkey, was excavated by L. Woolley in 1936 and 1937. In particular the large quantities of Greek imports recovered from the sites triggered a debate about the site's function and its foundation date.

In order to overcome past deficiencies the present thesis provides a detailed record of the Greek pottery recovered from the site. The fragments are analysed stylistically and dated in order to establish a local chronology. Further, a detailed statistical study of the whole assemblage, which comprises about 4800 pieces, reveals evidence for local consumption patterns and further sheds light on the site's external contacts during the 8th and 7th centuries BC. The study also entails a contextual analysis of specific Near Eastern sites in order to set Al Mina in its regional context. Three questions are of major concern in this respect: is it possible to identify the users of Greek pottery in the East in terms of their socio-economic background? Further, is Greek pottery better understood

as a commodity or as a gift? Finally, What role does Greek tableware play within the trade with other commodities?

The study illustrates that pottery primarily circulated within the lower social classes. It also highlighted a diverse pattern in which high quality products are circulating besides “mass ware”. This can be understood as a diversification process that was initiated in order to reach a wider range of consumers.

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I. Introduction

Al Mina is a site that has received a lot of attention in previous scholarship. The dispute between scholars has not become narrower over the past decades.¹ Although some problems have been addressed thoroughly in previous scholarship, exemplified by Luke's publication "Ports of Trade, Al Mina and Geometric Greek Pottery in the Levant", other problems remain open and led Niemeyer to the conclusion that "there is no way out of the Al Mina debate".²

More than 70 years after the excavation by L. Woolley, the Greek imports have never been thoroughly analysed. Past studies, such as the work by Robertson, Boardman, Kearsley and Descoedres, are only piecemeal considering the large corpus of Greek imports discovered at the site.³ This unsatisfying publication status is one of the main reasons for the ongoing debate.

1. Aims and Scope of the Study

The present study can be considered as an attempt to overcome the incomplete state of publication by providing a detailed analysis of the Greek imports dating from the 9th- to the end of the 7th century BC. One of the problems related with the study of the Greek imports from Al Mina is that the material is dispersed between Australia, USA, Turkey, Denmark and England. It is therefore impossible to consider the full record of Greek

¹ For an overview of the debated issues see Descoedres 2002, 49.

² Luke 2003; Niemeyer 2005.

³ Robertson 1940; Boardman 1959; Boardman 1964; Boardman 1990; Boardman 2002a; Descoedres 1978; Kearsley 1995a.

imports. Nevertheless, the amount of Greek imports incorporated in this study consists of such a large sample that the results can hardly be altered by new discoveries of hitherto unknown pieces or minor collections that could not be considered.

The Greek material presented in this study includes the collection in the British Museum, the Ashmolean Museum, the study collection of the University of Cambridge and the collection from the Garstang Museum in Liverpool. Only sherds that could be examined by the author, and where details such as fabric and provenance could be checked, were considered in the analysis. Pieces, which have been published previously, such as a number of Protocorinthian fragments by Robertson, and which could not be located, were not included.⁴

While there are many open questions, the examination of the pottery focuses on those aspects that can be properly addressed by the material. This includes the chronology of the site. In particular the 7th century BC has not been examined thoroughly before. Previous works focussed on the material from the 8th century BC.

Another issue to be discussed is the function of the Greek pottery in the Levant. Can we consider these vessels as valuable gifts or should we rather see them as cheap commodities sold together with other goods such as copper or other raw materials? Related to the last question is another topic that should be dealt with: who are the consumers of Greek pottery? Do they belong to the elite or do they primarily consist of “ordinary people”?

⁴ Robertson 1940, pl. 3-4.

A further focus in this study is on the consumption of Greek pottery. Can we observe patterns in the East, different from Greece, which allow us to draw conclusions about their usage? What impact did local consumers have on the range of objects that were sold at Al Mina and in the Levant? Did the decoration of the pots play any role in the success of Greek pottery in Near Eastern markets? How does the record from Al Mina fit into the general picture in the Levant?

Apart from this, the Greek pottery offers a detailed overview about Al Mina's external contacts. While Boardman has already outlined the broad development of the relationship between Al Mina, the Aegean and Asia Minor, a detailed record of the 7th century BC is still missing.⁵ Which Greek cities or regions are involved in long-distance trade with the Levant and how did the record change over time?

The rich assemblage of pre-classical Greek imports that spans about 200 years allows us not only to study local consumption patterns but also provides us with information about the economic situation in North Syria during a period of dramatic changes. Within the course of 200 years the region saw the struggle of the Neo-Hittite and Aramaic kingdoms with Assyria, the Pax Assyriaca during the 7th century BC, and finally the advance of the Babylonian empire. The record from Al Mina provides the opportunity to see how these upheavals and periods of peace affected the economic situation of Al Mina.

⁵ Boardman 1964, 39-51.

3. Organisation of the Thesis and Presentation of the Material

The word limit poses a serious problem for the scope of the study. Therefore the thesis contains several Appendices (1-3) that include important additional information and supporting data. The Appendices comprise a more thorough discussion of the stratigraphy, the record of the Greek pottery from the 9th end 8th century BC, and a systematic analysis of the Greek pottery from selected Near Eastern sites. References to the Appendices are made whenever necessary. The Appendices also contain the catalogue of the pottery, to which I refer throughout the discussion.

II. Methodological Considerations and History of Research

The discussion about Al Mina is mainly caused by the insufficient excavation methods, according to “modern” standards, and further enhanced by the poor publication status of the excavated material. It is also due to a huge controversy between different research disciplines, which are involved in this debate. The most complex issue above all is the question whether the “origins” of Greek culture come from the East or from Greece, and can the roots of our so-called developed Western civilisation be traced back to Greece or Anatolia or even further southeast to the region labelled as the Near East?⁶ Who took the initiative, the active role in these early contacts and who was the receiver? Such questions have been addressed by various scholars. Chester G. Starr comments in his Book (The Origins of Greek Civilization), written in 1961 best reflect the classical concepts of the so-called orientalisising period. In his chapter about the “Significance of

⁶For the term Near or Far East and its connotations see for instance Horden and Purcell 2000, 17-18.

the Orient”, he answered those who understand Greek civilization as an Oriental extension: ”external borrowings are not distinguished from internal (Greek) spirit, which alone gives meaning to historical inheritances.”⁷ And he goes on to say, ”If Greece was now (during the 8th century) to resume close contact with the Orient, this connection rose largely because men of the eighth-century Aegean were ready to widen their keen and to built more loftily”.⁸ Thus the Greek orientalisng period, which goes hand in hand with new contacts between the East and the West, was conceived by a “classicist” as a phenomenon initiated by the Greeks rather than by “Orientals”.

The debate about Al Mina, at the end, is also a debate about the potential of the archaeological disciplines. Can we construct cultural history, or at least, are we able to interpret a cultural assemblage like the one excavated at Al Mina, being consistent not only in our methodology but also in our argumentation and without stressing the evidence too much? In archaeology similar context can always be interpreted differently. We only have to be aware of the problems, which are inherent in our discipline, and of those problems that are more related to our own stereotypes about the past.

The following chapter is therefore dedicated to both: the history of the site’s scholarship and the site itself. The focus should be on those articles that are likely to contribute to my own research goals as set out in a previous chapter above (see Chapter I). Therefore, the works relating to the later history of the port (mainly the Classical, Hellenistic, Roman periods and Late Antiquity) are omitted in this overview, as well as the articles that discuss different groups of artefacts. I shall only refer to them briefly in order to

⁷ Starr 1961, 193.

⁸ Starr 1961, 194.

complete the picture or whenever it is relevant for the understanding of the previous historical and cultural developments of the settlement. In addition to the large corpus of articles, which can be directly associated with Al Mina, a long list of works also exists that is related to the site in a wider sense. Most of them refer to Greek involvement in trade with the East or Greek presence in the East during the Geometric- and Archaic periods.

1. History of Research

The history of research of Al Mina itself would justify a single book.⁹ The site received continuous interest since its excavation by Woolley and there can be no doubt that the present thesis will not put an end to it. Due to limited space only the most important issues will be addressed here.

The site was excavated by Leonard Woolley in 1936 and 1937. The most important works on Al Mina, which every scholar must examine, are still the early publications of the finds and architectural remains published in 1937 and 1938.¹⁰ A final report of the excavation results has never appeared. This unsatisfactory publication status can be explained only by Woolley's lack of interest in the site and the fact that he had already committed his attention to Tell Atchana (Alalakh) in the Amuq plain.¹¹ We can underline his lack of concern by drawing on his own report from 1938, in which he stated that a "detailed account of all the hundreds of rooms excavated and noted would

⁹ For a good overview see Descoedres 2002.

¹⁰ Woolley 1937, 1-15; Woolley 1938, 1-30. 133-170.

¹¹ For the latest results of the BA mound see Yener 2005; Yener and Batiuk 2010.

have been at once wearisome and otiose".¹² The purpose of his research project can be best described in his own words: "tracing connections, if such existed, between the early civilisations of the Aegean, in particular that of Minoan Crete and the more ancient cultural centres of hither Asia".¹³ It is this agenda, which guided him throughout his work at Al Mina.

The main source is still the publication from 1938, which contained the architecture, the chronological sequence, the small objects, and the general history of the site.¹⁴ The selective publication of the finds by Woolley, his excavation method and limited documentation, are certainly the biggest problems concerning Al Mina.¹⁵

Still a matter of debate is the chronology of the site, which has been discussed by various scholars.¹⁶ Although it seems that there exists a general agreement about the rough outline of the chronology, minor variations still exist. In particular the date of the foundation is a matter of continuing controversy.¹⁷ The 7th century BC has not been discussed at all despite its rich record in foreign imports.

Since Woolley's initial interpretation of the site as Posideion and his belief that Al Mina served the BA palace of Alalakh, Al Mina was either interpreted as a Greek foundation, a local foundation including participating Greeks or even as a settlement

¹² Woolley 1938, 133.

¹³ Woolley 1938, 1.

¹⁴ Woolley 1937, 1-15; Woolley 1938, 5.

¹⁵ Woolley 1938, 133. See discussion in Papadopoulos 1997, 196; Waldbaum 1997, 5-6; Descoedres 2002, 54-55.

¹⁶ For the discussion of the chronology see chapter III 5. 1.

¹⁷ See the latest contribution by Lehmann 2005.

founded by Greek mercenaries.¹⁸ Boardman's interpretation of Al Mina as a native settlement populated by Greeks, who among others, conducted trade with the Levant, is the general accepted view among classical archaeologist.¹⁹ Boardman also suggested that Euboeans had an important role during the 8th century BC within the long-distance trading networks that connected the Levant with Greece.

Several scholars, who considered Al Mina either as a Phoenician- or as a North Syrian trading port, have rejected this interpretation.²⁰ Lately, Luke has published a study on Al Mina, in which she convincingly argued that Al Mina was a local foundation belonging to the kingdom of Unqi, which later became part of the Assyrian empire.²¹ The question of the nature of the site – emporium, apoikia, or local port of trade – and the identity of the residents, are certainly two of the most controversial topics within the debate about the site.

Studies that dealt with the Greek, Cypriot and North Syrian pottery are numerous but all of them are selective.²² The majority focussed on the early periods while the record from the 7th century BC was totally neglected.²³ Problems with the chronology of the site are primarily due to the selective approach to the material evidence. Kearsley's contribution e.g. contained only 274 pieces, which is less than 20 % of the available

¹⁸ Smith 1942, 87-112; Cook 1946, 78-79, 82-86; Dunbabin 1957, 25-30; Roebuck 1959, 62-65; Boardman 1959; Boardman 1964; Boardman 1982; Boardman 1990; Boardman 1999; Boardman 2002a; Boardman 2002b; Boardman 2005; Boardman 2006; Kearsley 1995a, 68; Kearsley 1999, 69.

¹⁹ Boardman 1964, 43; Coldstream GGP, 312; Coldstream 1977. See also Coldstream 1982 who changed his view about the settlement. Ridgeway 1992, 24-26; Lemos 2005, 57 "... probably populated by a mixture of traders from the Aegean, Cyprus and the Levantine coast.

²⁰ Saltz 1978; 18; Graham 1986, 51-65; Perrault 1993, 59-83; Crielaard 1993, 144.

²¹ Luke 2003.

²² Cypriot and North Syrian pottery see Taylor 1959; Gjerstad 1974, 107-123; Lehmann 1996; Lehmann 2005; Greek pottery: Robertson 1940; Descoedres 1978; Kearsley 1995a; Lehmann 1996. Al Mina ware: Boardman 1959.

²³ The record from level VII-V received only limited attention. See Robertson 1940; Descoedres 1978. Lehmann 2005; Boardman 1964 provides a good overview but the evidence is missing.

evidence. The stylistic analysis of the pottery was followed by a series of clay analysis, which were carried out in order to trace the origin of the imports.²⁴ The analysis showed that in particular Euboean pottery was exported in large quantities to Al Mina, which supported the view that Euboeans were heavily engaged in the West-East trade.²⁵ This notion has been challenged by Papadopoulos e.g., who criticised the applied sample strategies and the general assumption to identify “pots with people”.²⁶

The question of the quantity of Greek imports in relation to other categories such as the local wares and the Cypriot imports is another debated issue. Boardman suggested that the Greek imports outnumber all other categories.²⁷ Those who claim that the record is not reliable argue that Woolley discarded much of the finds and only kept a selected range of pottery. The only reason why the Greek wares outnumber the local and other wares is that the material from Al Mina was badly excavated, selectively recorded and kept, and inadequately published.²⁸

The Greek pottery was either interpreted as a commodity used by Greeks or as gifts for local inhabitants.²⁹ The role of the fine tableware within the East-West trade and the question of who acquired it, are still issues that have not been adequately addressed by past scholarship.

To find a way out of the “Al Mina debate”, it is necessary to re-examine the available material record in detail before we make our conclusions. The author of this thesis

²⁴ Popham et al. 1980; Popham et al. 1983; Jones 1986; Ashton and Hughes 2005.

²⁵ Popham et al. 1983, 289.

²⁶ Papadopoulos 1997, 194-195. 197-198.

²⁷ Boardman 1990, 169-190; Boardman 1999, 135-161; Boardman 2002, 315-331.

²⁸ See Papadopoulos 1997, 196; Waldbaum 1997, 5-6; Descoedres 2002, 54-55.

²⁹ Boardman 1964, 44; Crielaard 1993, 144; Crielaard 1999, 281-284; Luke 2003, 52-53.

believes that his work will not be the end of the discussion. He rather hopes that the debate will develop from this point on a new path with additional material evidence in hand.

2. Methodological Considerations

2.1 Production and Interdependent Markets

Production-related questions play a role only in as much as the record from Al Mina offers the chance to verify or reject possible evidence for interdependent market systems during the Iron Age. Signs of Euboean market research, as postulated by Coldstream for the production of psc-plates, raise the question whether foreign markets like Al Mina and their consumers had an impact on Greek pottery manufacture.³⁰ Foreign markets had an impact on the production of archaic and classical ceramics, which can be seen by the introduction of new shapes in Athens. These were made to be exported to the regions where they originated.³¹ Writing in the 7th century BC, Hesiod mentions that the “potter is angry with potter”.³² The competition Hesiod refers to is certainly not an artistic one but that for customers and income.³³ It also testifies that in this period production already has achieved a certain level of specialisation.³⁴ Better quality in the manufacture and decoration of ceramics could be one strategy to increase the range of consumers. Another approach is through adaptation or introduction of new shapes targeted at specific consumer demands either at home or abroad.

³⁰ Coldstream 1998a, 305.

³¹ Sparkes 1996, 162-164. See for instance the distribution of Nikosthenic black figure, which is mostly distributed in Etruria, or more generally, somewhere in Italy: Tosto 1999, 200-201.

³² Hes. Op. 25-26.

³³ Not to say these two parts of the economy were not related with each other.

³⁴ See the discussion in Fless 2002, 14-15.

An unsolved question is at what point does a foreign market reaches such an importance that it acts as an instigator for imitations. Studies of the Attic pottery distribution show that some potters not only adopted foreign shapes but according to Osborne, the Nikosthenic workshops even “produced explicitly for a foreign market”.³⁵ The Attic pottery industry had apparently reached that stage already in the Archaic period but did the foreign markets of the LG or 7th century BC have such an impact on Greek potters as well?

Al Mina with its considerable amount of Greek imports that reached the site over a period of about 200 years serves as good study case to identify possible influences on local Greek markets.

2. 2 Economic Models in Classical Archaeology

The character of economical modalities in Early Iron Age or pre-modern societies in general has its bearings on the role of pottery within long-distance trading relationships between Greece and the Near East. Of further importance is the question of who engaged in trade and what kind of economic activities took place. There is no need here to embark on a new discussion of the formalist and the substantivist models. The basic argument is over the question to what degree a pre-industrial economy reflects the modern economy or is the market a necessary prerequisite for every economy.³⁶ Rostovtzeff, a proponent of the formalist model, saw differences only in scale between

³⁵ Osborne 1996, 32. For a more nuanced view see Tosto 1999, 205-206. Further Fless 2002, 16 no. 9.

³⁶ A useful discussion is provided by McGeough 2007, 8-31. See also Möller 2000, 9-11.

modern and ancient economies.³⁷ Polanyi proposed an opposite view. He considered economy “embedded” within society. According to him, they cannot be separated and it is impossible to compare economies of different societies with each other without a clear framework.³⁸ After Mauss, he considered that exchanges are total activities having economic, social, political juridical, moral and religious implications.³⁹ He defined three different levels of economy, which form the fundamentals of approaching ancient economy: reciprocity, redistribution and market-exchange.⁴⁰ Important in this respect is that none of the three modes of exchange exclude each other but they can exist side by side. Reciprocity, also called gift exchange, is between equals and their economic self-interest is less important.⁴¹ Redistribution on the other hand, is a system that collects goods from the periphery via a hierarchy to an “appropriative centre”.⁴² The last form, market-exchange, is a form of voluntary exchange of goods between individuals or groups and does not entail any social obligations. The value of the goods is negotiable, untied from social constraints and not fixed.⁴³ Finally, Appadurai defined exchange as the source that creates value. The “exchange of sacrifice and gain” sets the criteria for utility and scarcity and is therefore the real source of value rather than just its result.⁴⁴ Tandy distinguished four types of market exchanges: peripheral, controlled-, dominant- and limited markets. The differences between them depend on the degree of integration, the number of participants, the types of goods traded within the markets and the degree

³⁷ Rostovtzeff 1963. See the discussion in McGeough 2007, 12.

³⁸ Polanyi 1977, 47-56.

³⁹ Möller 2000, 10 no. 11.

⁴⁰ For the definition, see Polanyi 1977, 35-36.

⁴¹ Tandy 1997, 94-100 provides references to Homer and the Bible highlighting existing reciprocity systems during the EIA in the Levant. See also McGeough 2007, 21.

⁴² Tandy 1997, 101.

⁴³ Polanyi 1977, 42; Tandy 1997, 113.

⁴⁴ Appadurai 1986, 4.

of control.⁴⁵ Tandy's model is a useful refinement of Polanyi and should be kept in mind throughout the discussion.

2.3 Polanyi and Ports of Trade

For Polanyi long-distance trade is confined to what he called the "port of trade", of which administered trade is one of the major defining characteristics.⁴⁶ In other words, prices are fixed by treaties and not according to supply and demand.⁴⁷ Ports of trade are neutral places located outside of the control of the state although limited administration could occur.⁴⁸ Their neutral position can also be observed in their location: they are usually separated from local towns and situated at the sea, riverbeds or inland trading routes.⁴⁹ Another characteristic of ports of trade is their mixed population, which might be traceable in the archaeological record although similar living conditions may create common identities as Möller rightly noted.⁵⁰ Important is that according to Polanyi the trade occurring in these ports is administered with fixed prices. The connection to the hinterland markets is prohibited and ruling authorities defining prices and markets do not exist.⁵¹ Al Mina served as one of Polanyi's model as a classical port of trade and he concluded: "History points towards a broadly independent existence of these ports of trade".⁵²

⁴⁵ Tandy 1999, 117-126.

⁴⁶ Möller 2000, 22-23; Polanyi 1963, 30-31.

⁴⁷ Polanyi 1977, 78-79.

⁴⁸ Polanyi 1963, 30; Möller 2000, 22-23.

⁴⁹ Möller 2000, 20-22.

⁵⁰ Möller 2000, 24.

⁵¹ Möller 2000, 22-23.

⁵² Polanyi 1963, 33.

Polanyi's concept was taken over by scholars such as Möller to explain the nature of Naukratis and it was also influential in Luke's study of Al Mina.⁵³ One of the characteristics of the concept of ports of trade is that trade between them and the hinterland is separated. Luke defined three different types of ports of trade and concluded that Al Mina was an administered port, first controlled by Unqi and later by the Assyrians.⁵⁴ According to Luke, local authorities controlled the prices for goods. Exports were collected by authorities and imports redistributed. Administered trade may take the form of gift exchange.⁵⁵

It is questionable however, to what extent foreign traders were separated from inland markets in the Near East given the evidence from written sources such as the Bible where Nehemiah states: "men of Tyre came and brought fish and all manner of ware, and sold on the Sabbath unto the children of Judah".⁵⁶ This demonstrates the existence of markets and that foreigners could have access to them under certain conditions.⁵⁷ Trade treaties between the Assyrians and Tyre or between king Ahab and king Ben Hadad of Damascus illustrate that access to markets was also regulated and was not free for everybody.⁵⁸ This does not mean that foreigners were allowed to sell anything they wanted but certain commodities were apparently not under the control of the king. But there is no need to assume that all sorts of goods were controlled in an administered trade system. Thus, Luke's type port A – the category to which Al Mina belongs – may

⁵³ Möller 2000; Luke 2003.

⁵⁴ Luke 2003, 21. For the different types of ports of trade and their material characteristics see Luke 2003, 5-10.

⁵⁵ Luke 2003, 5-6.

⁵⁶ Nehemiah 13:16. The translation follows Silver 1983, 815.

⁵⁷ For further evidence for markets see Silver 1983.

⁵⁸ Yamada 2005,70-72; I Kgs. 20: 34.

also entail aspects of her type B, in particular that the nature of the terms of trade were perhaps more fluid than acknowledged by her.⁵⁹

The application of the model of the “gateway community” may also serve as a useful model to explain the role of Al Mina. According to Hodges they are neutral trading sites founded as a result to regulate irregular direct long-distance trade with the king in order to maximise the flow of goods.⁶⁰ Imports can be found also at other sites far away from the site.⁶¹ With a certain size, trade cannot be rigorously administered anymore in controlled gateway communities.⁶² The result will be that craft products of the gateway community will spread to the local population undermining the control of certain products reserved for the king.⁶³ The problem of maintaining control from the distance is certainly an issue at the time when Al Mina becomes part of the Assyrian empire.

Polanyi’s model about pre-monetary economy and the application of the port of trade-concept on Al Mina is not without problems. In particular scholars working in the Near East demonstrated the existence of markets and that regulation of prices was not as central as thought.⁶⁴ We can observe market mechanisms and foreigners may even have access to local markets. While the port of trade model is certainly still a useful mould to analyse the pre-modern economy and in particular the trade at Al Mina, we have to concede that different kinds of market integrations worked side by side in ports of trade:

⁵⁹ Luke 2003, 7. Type B port distinguishes itself from type A by its terms of trade, which in the latter case could be either state controlled or independently.

⁶⁰ Hodges 1982, 120.

⁶¹ Hodges 1982, 120.

⁶² Hodges 1982, 122. Gateway communities can also be divided into three types. Here, I am referring to Hodges type B.

⁶³ Hodges 1982, 122.

⁶⁴ McGeough 2007, 23-27. See in particular Röllig 1976, 288-289. 293. For a thorough discussion see Silver 1983.

redistributive systems with controlled prices and goods and gift exchange on the one hand and market economy on the other. A good example for two simultaneous operating systems is illustrated in the *Iliad* where Euneos sends wine to the Achaeans at Troy. Apparently Agamemnon and Menelaus receive wine as a gift while the other Achaeans are able to acquire a different quality of wine by exchanging their goods.⁶⁵ This also entails that the commodities offered may include a variety of products of different quality made for consumers of different social standing. In addition, access to the hinterland may not have been as restricted as thought.⁶⁶

Finally, the goods exchanged in the port of trade provide information about the socio-economic background of the involved trading partners.⁶⁷

The Near East has to be considered as a complete different economical sphere from Greece with a long tradition of interregional exchanges and complex economic systems, or “modes of integration” existing side by side.

⁶⁵ Il. 7, 467-475. The passage has been interpreted differently by scholars. While Tandy 1997, 118 does not seem to acknowledge the difference between the wine sold to Agamemnon and Menelaus, Sherrat 2004, 204 made the distinction between these two different types of transactions. For Sherrat’s interpretations speaks the different words used for wine, one time the poet uses οἶνος and the other time μέθυ. Secondly, the verb χυρίζ seems to indicate that the wine for Agamemnon and Menelaus have to be separated from the wine for the Achaeans.

⁶⁶ The system described here is perhaps closer to complexity theory, which stresses more the variability of people who take part in exchange networks and their various different motives for doing so. In such a model as proposed by McGeough for the economy of Ugarit, everything seems possible. No coherent rules apply. While such a model may be closer to the actual reality of economic processes, as a heuristic tool it does not seem to be useful here since every single pattern could be explained by an endless number of factors depending on the number of agents. See McGeough 2007, 33-37.

⁶⁷ Möller 2000, 24.

2. 4 Merchants

The identity of the people involved in the trade is not an unimportant factor in order to decipher the nature and function of pottery within the long distance-trade between Greece and the Near East in the EIA. Möller considered two ways of approaching this question: first by examining their motives and secondly, by considering their social status.⁶⁸ She concluded that traders either belonged to the very rich or the very poor segments in archaic societies.⁶⁹ According to her, there was no middle class.⁷⁰ It is hard to find the right place for the trader described by Hesiod who is also a landowner.⁷¹ He conducts trade not as a means of subsistence but in order to acquire additional wealth.⁷² This person is a private entrepreneur, neither extremely wealthy nor extremely poor.⁷³ How sporadic such trading ventures conducted by such traders were, which are described by Hesiod, is hard to tell. They certainly depended on the success of previous expeditions and on the available resources.⁷⁴ The procurement of prestigious goods such as raw metals was certainly limited to the elite and the goods traded by entrepreneurs were of different nature. Furthermore, long-distance trade was also dependent on specific knowledge of sea routes, the nautical knowledge and the awareness of potential raw metal sources and markets. In this respect it remains open if a situation, as can be observed for the LBA – increasing amount of circulating scrap metal, which was interpreted as an increase of private non state-controlled trade including people of various socio-economic backgrounds – can also be applied to the

⁶⁸ Möller 2000, 15.

⁶⁹ Möller 2000, 15.

⁷⁰ Möller 2000, 15.

⁷¹ Hes. Erg. 630-632.

⁷² Osborne 1996, 41.

⁷³ Criellard 1996, 311 “well-off person”.

⁷⁴ Tandy 1999, 212.

EIA.⁷⁵ Judging from the archaeological record, trade in prestigious goods, an important segment of long-distance trade, was in the hand of the aristocracy but besides that we may observe some evidence for entrepreneurs who engaged in trade in less valuable commodities.⁷⁶

The situation in the East was perhaps a totally different one. Like the economic system, which was much more complex and sophisticated, the socio-economic background of traders was more diverse. Sources from archives indicate the existence of private traders next to merchants employed by the ruling elite.⁷⁷ Private ship-owners are known already from LBA Ugarit.⁷⁸ Archives provide even evidence for a variety of sizes and wealth of merchant firms that also employed “junior agents”.⁷⁹ These junior agents could become a *tankarum*, a wealthy trader of the social upper class. The size of the middle class trader in the East is hard to determine but for Ugarit a class of merchants is attested which had to fulfil their duty towards the defence of the city.⁸⁰ They can perhaps be compared to the hoplite class in classical Athens. Although the middle class cannot be easily defined in social- and economic terms, the class, which possessed the financial power to supply their own weapons for the military service, is a useful criterion to define the “middle class”. The picture portrayed here derives its information primarily from BA sources. It remains unclear whether we can transfer this situation to the 9th or 7th century BC. Nevertheless, there are few reasons why the economical

⁷⁵ Sherratt 2003, 41. See also Sherratt 1998.

⁷⁶ This has been argued by Crielaard in his dissertation and in several articles. See e.g. Crielaard 1993; Crielaard 1996, 187-294

⁷⁷ Silver 1983, 822-823.

⁷⁸ Wachsmann 1998, 324-325; Hoftijzer and van Soldt 1998, 339 (KTU 4. 647).

⁷⁹ Veenhof 1977, 117. See also recently Singer 2010, 272 who noted the smaller size of the Cape Gelidonya shipwreck and related it and the finds from it with seafarers of a lower social status than the Uluburun ship.

⁸⁰ Silver 1983, 824-825.

system of the LBA should be much different from the Iron Age. The difference between the BA and EIA economy might be one of scale but not in nature.

We have to conclude, that the persons residing at trading ports may belong to different classes of various socio-economic backgrounds. This entails also a complex society of different economical power for consumption at such places like Al Mina.

2. 5 Gifts or Commodities

The circumstances under which certain objects, in this case pottery, circulate in different cultural settings, is of great concern. Do we consider them as a commodity like other goods or do we interpret them as gifts, exchanged between elites in order to establish long-term relationships between trading partners?⁸¹ The perspective that views Greek pottery as potential gifts is a long established model, which has also been used by Luke in her treatment of Greek Geometric pottery in the Levant.⁸² It is one of the main aims of this thesis to clarify whether the Greek imports at Al Mina were exchanged as gifts or if they were considered as commodities. Commodities can be defined as objects destined for exchange regardless of the form of transaction. They possess a certain social potential, which makes them distinguishable from objects and artefacts.⁸³ Two types of commodity exchange can be defined: barter and gift exchange.⁸⁴

⁸¹ In this respect it is important to draw attention to the distinction between gift-exchange as a social function, the way Luke 2003, 49-52 uses the term, and the opinions that understand gift-exchange as another form of economical exchange. The latter is only different from trade by its social setting, which is limited to the elite. See Crielaard 1993, 139. For a theoretical treatment of gift-exchange, see Wagner-Hasel 2006. On ritualized friendship, see Herman 1989.

⁸² Luke 2003, 52-53. For previous advocates of such a model see Coldstream 1983.

⁸³ Appadurai 1986, 6.

⁸⁴ Appadurai 1986, 9.

Reciprocity or gift exchange between elites is attested archaeologically and by ancient sources such as Homer. The dispute centres more around the question what types of goods qualify as gifts.⁸⁵ While Coldstream, Crielaard and Luke e.g. considered pottery as an adequate gift during the periods before 700 BC, Papadopoulos stressed the fact that ancient sources never refer to pottery but always to precious goods like silver- or gold vessels and slaves etc.⁸⁶ Drawing on Herman's analysis of ritualized friendship, Luke concluded that although elites from the East were not likely to exchange silver, gold garments, or other valuable objects for pottery, clay vessels functioned as preliminary gifts, objects of low value but of high symbolic significance.⁸⁷ They would have served to "grease the wheels" for exchange in more valuable objects.⁸⁸ Archaeological evidence for the use of pottery as *doron* comes from a painted clay vessel found on Ithaca, which seems to be referring to a guest-friendship.⁸⁹ Whether this friendship was established in order to exchange more valuable goods or for another reason is unclear but it certainly created a social bond between giver and receiver. Unclear in the case of the pot from Ithaca remains also the social status of both parties. Perhaps the pot was exchanged as a gift between two non-elite members. According to Herman the custom of *xenia* is an "overwhelmingly upper-class institution" but this might be explained through the specific focus of ancient historians on the aristocratic sphere while customs of "ordinary" people did not feature the same prominent role

⁸⁵ Luke 2003, 53.

⁸⁶ Coldstream 1983, 206; Crielaard 1993, 145; Luke 2003, 52 with further references; Papadopoulos 1997, 200.

⁸⁷ Luke 2003, 52. For the function of preliminary gifts, see Hermann 1989, 50. The concept that Luke proposed is similar to the *kula* system in the western pacific studied by Malinowski in 1922. See Renfrew and Bahn 1991, 309.

⁸⁸ Rupp 2005, 56.

⁸⁹ Jeffery 1990, 230 pl. 45a. b. For the different terms as gifts and their various connotations see Herman 1989, 75-80.

within written sources.⁹⁰ Besides, people of lower standing are not totally absent in the written sources, which speaks against an exclusive system.⁹¹

For the discussion of the function of Greek pottery at Al Mina, it is necessary to keep in mind the two different uses of Greek pottery within reciprocal relationships: the first one, seen more often in ancient sources, is a gift between equals, in the majority of the cases members of the elite, and the gift is always of high material and social value. The second type of gift, the preliminary gift, is usually of low material value but could embody a certain symbolic significance.⁹² Its intention is to lead to a transaction in other more valuable commodities. The difference between the two types is not only the value of the gift but also the social implications that go along with it. In the latter case the exchange of preliminary gifts does not necessarily result in a long-lasting bond between giver and receiver. The social relationship ends with the transaction. Regarding Polanyi's three different modes of integration we also have to consider that the gift-exchange takes part in a system of reciprocity while the preliminary gift is more an instrument of market-exchange.⁹³ Lastly, it is important to note that the preliminary gift is perhaps only necessary on first encounters and once the wheel of commerce has been "greased" enough, preliminary gifts are not necessary any more.

⁹⁰ Herman 1989, 34.

⁹¹ Herman 1989, 34 mentions the *emporos* Themison from Herodotus 4. 154 as example for a non elite-member participating in a guest-friendship relation.

⁹² See above. However, the passage on the funeral games of Patroklos mentions a Sidonian silver mixing bowl given by Phoenicians to Thoas. The Phoenicians apparently set the mixing bowl in the harbour as a gift. This episode exemplifies the use of preliminary gifts in order to get access to a market. Like gifts between aristocrats the preliminary gift in this case is a highly valuable item. One wonders whether preliminary gifts made out of pottery would have a similar effect. There are no references in Homer, which would indicate the custom of low value preliminary gifts. For the passage, see *Il.* 23, 740-746.

⁹³ A preliminary gift can also be involved in a reciprocity system.

The question, gift or commodity, automatically raises the problem of the value or prices of pottery.⁹⁴ I hereby refer only to the most relevant contributions and confine myself to a few comments.⁹⁵ Firstly, all our information concerning prices and value, and related to it the quantity of exported Greek tableware, derive from later periods. Neither for the 9th-8th nor for the 7th century BC are any price inscriptions, or other sources that demonstrate the prices of pottery, known. Secondly, all models that consider fine painted pottery only as saleable ballast infer their conclusions from later Archaic, Classical or even later periods since IA shipwrecks have not yet been excavated.⁹⁶ However, LBA shipwrecks such as the Uluburun wreck suggest that sets of drinking vessels were only one of many commodities on board of merchant ships and fine ware was perhaps limited to a few pieces.⁹⁷ Any comments on the value of Greek pottery in the Near East are therefore pure speculations. As will be shown below, low value objects certainly have the potential to acquire a significance that goes beyond their intrinsic value but for the present purpose, the only question is how can we distinguish objects exchanged as initiatory- or preliminary gifts from merchandise in the archaeological record?

In his examination of contacts between Cyprus and Greece, Crielaard explained the quantity of Geometric Greek imports at Al Mina as gifts or trading goods.⁹⁸ The argument here is partly based on quantity and partly on find context.⁹⁹ Low amounts

⁹⁴ For an interpretation of the term value in pre-modern societies see Voutsaki 1995, 8-9.

⁹⁵ Proponents for low value: Gill 1991; Gill 1994; Vickers and Gill 1994, 90. Relative high value: Boardman 1988a; Boardman 1988b; Williams 1996, 231.

⁹⁶ Saleable ballast: Vickers and Gill 1994, 90; Parker 1985, 34 “lack of Bronze Age and Iron Age finds”. For the Bronze Age, the situation has changed now in scholarship. Iron Age wrecks are known but have not been excavated yet.

⁹⁷ Wachsmann 1998, 306. 331.

⁹⁸ Crielaard 1993, 144.

⁹⁹ Explicitly mentioned by Rupp 2005, 54: “the fact that only very small quantities are involved makes it highly unlikely that they were brought to the island for the purpose of market exchange”.

restricted to a few and primarily elite contexts as opposed to large amounts in non-elite contexts.¹⁰⁰ Rupp explains with a similar argument the difference in distribution between Aegean and Phoenician pottery on IA Cyprus. The latter is found more frequently outside his “superordinate” elite households, according to him a result of the higher frequency of Phoenician visits.¹⁰¹ A similar view is postulated by Luke who wrote that Geometric ceramics and “their restricted distribution does not support the idea of their commodification at this early date, and they seem to have been part of an exchange network centred around central places, wherein most control over cross-cultural contacts was exercised”.¹⁰² According to her, with the disappearance of Euboean pottery from the East and the arrival of East Greek imports, pottery enjoys a much wider distribution and is proportionately more important at the sites where it is found.¹⁰³ Haider goes even further by postulating that Greek pots are a rarity and therefore only for the upper class.¹⁰⁴ Lanfranchi too concludes that pottery is an exotic object purchased only by the elite to be displayed on social occasions and Jasink and Bombardieri explain the Greek imports from Tarsus and Mersin in a similar way.¹⁰⁵ Again, the argument rests on the amount and the distribution but to what extent does the archaeological record support these statements? The 7th century BC imports from Al Mina are almost unknown and neither the precise distribution of Greek imports in the Levant nor a detailed record of find contexts is available for the 7th century BC. A comparison between the record from 8th and the 7th century from Al Mina will highlight whether previous statements in this respect are correct.

¹⁰⁰ The few occasions where Greek pottery appears in non-elite contexts or subordinate elite context is explained as redistribution from aristocratic households to subordinate peers. See i.e. Rupp 2005, 55 fig. 7. 6.

¹⁰¹ Rupp 2005, 56.

¹⁰² Luke 2003, 60.

¹⁰³ Luke 2003, 60.

¹⁰⁴ Haider 1996, 77.

¹⁰⁵ Lanfranchi 2000, 10; Jasink and Bombardieri 2008, 42.

The amount of imports together with their find spot is certainly an important indicator for the interpretation unrelated to the relation of the amount of local pottery. A final point needs to be considered: pottery in low social contexts may indicate that pots were traded as commodities but it has also been noted that finds in non-elite context may indicate a redistribution system responsible for the dissemination of pottery among lower social classes.¹⁰⁶ Such a system can only be excluded observing the absence of Greek imports within elite contexts. Another hint would be provided by the structure of the economic system. A centralized organization would support redistribution from one social class to the other while a decentralised system puts certain limits to controlled redistribution mechanisms.

2. 6 Consumption

Until recently, consumption-oriented approaches to Greek pottery were only of minor importance in classical archaeology.¹⁰⁷ The focus laid more on production-related processes as well as workshop relations. The situation changed with the publication of *The Complex Past of Pottery*, which put the consumer of Greek pottery on the agenda of classical scholars.¹⁰⁸ Models that portray the buyers as passive receivers of foreign commodities, underestimate social forces that drive consumption mechanisms.¹⁰⁹ Objects operate in a social environment, thereby serving social strategies employed by agents, who endow them with a specific meaning. Consumption is therefore better

¹⁰⁶ Ward 1991, 15. Similarly argued by Rupp in the case of Greek finds in sub-elite contexts on Cyprus: See Rupp above.

¹⁰⁷ For an overview of the discussion in social theory, see Mullins 2004.

¹⁰⁸ Wijngaarden et al. 1999.

¹⁰⁹ Appadurai 1986, 31; For a definition of commodity as opposed to products, objects, goods artefacts, see discussion in Appadurai 1986, 6-16; See also Kopytoff 1986, 68-69.

understood as a social act depending on various factors that can be of cultural and political origin. As has been rightly pointed out, demand for goods is rarely an automatic response to their availability.¹¹⁰ The mere appearance of Greek pots at Al Mina does not necessarily mean that there was a desire, let alone a need for these objects. If we accept that Greek pottery in the Near East has to be primarily interpreted, although not exclusively, as a commodity, we have to ask ourselves what initiated the demand for it in the first place. As a major argument for the attractiveness of Greek pottery, classical archaeologists usually stress the superior quality of the Greek vases.¹¹¹ Coldstream identified the metallic, shiny, watertight paint as one characteristic feature that contributed to the popularity of Greek pots in the East.¹¹² And yet, imitations such as the Al Mina ware skyphoi rarely apply a slip on the interior. While it cannot be denied that the Greek paint certainly constituted an attribute not encountered in the local pottery production in the Near East, we first have to look for evidence that confirms that a shiny watertight slip was really considered as qualitatively superior to the red slip or bichrome decoration that dominated local Near Eastern fine wares. Further, even if we reach such a conclusion, it remains open whether this automatically leads to its preference in a foreign culture.¹¹³ Regardless of the answer to this question, demand requires an agent who defines the tastes and fashions that inspire consumption. This automatically raises the question of the identity of potential agents.

¹¹⁰ Dietler 1999, 485.

¹¹¹ This argument goes back to Desborough who explained the adaptation of Attic styles in other regions as the result of superior quality. See Desborough 1952, 301.

¹¹² Coldstream 1988, 39. The paint especially is used to describe the success of Greek pottery in the East, and in some cases it is even seen as the factor that generated “prime value”. See Rupp 2005, 56.

¹¹³ Whitely 1994, 61.

For Appadurai, demand and consumption are socially regulated variables.¹¹⁴ One major regulatory force is the aristocracy, who certainly plays an important role in creating acceptable models for internal tastes by filtering exogenous fashions, a process labelled by Appadurai as “turnstile” function.¹¹⁵ The reason for the demand of foreign goods may simply lay in the fact that access to them can be controlled more easily than access to local products and that these foreign commodities at the same time function as the visual expression of what Helms called the “authority of distant knowledge”.¹¹⁶ The implication for the interpretation of Greek imports is that their popularity has perhaps nothing to do with higher quality or functional aspects, but with the fact that they were foreign and that their consumption could be controlled.¹¹⁷

Elite attempts to restrict the access to foreign goods are in stark contrast to the goals of merchants. Unlike the aristocracy, who prefers regulated trade, conservative tastes and sumptuary laws, merchants tend to be the advocates of open access to foreign goods; they strive for equality, and they are generally more likely to be associated with exotic tastes.¹¹⁸ Those who engage in distant affairs, who are in contact with foreign people and objects, were considered “professional boundary-crossers and procurers of desired goods”.¹¹⁹ Their status within society derives from their ability to manage and engage with distant cultures and there is no better way to symbolize their importance than through exotic tastes and use of foreign commodities. Traders, like the aristocracy,

¹¹⁴ Appadurai 1986,

¹¹⁵ Appadurai 1986, 31. See also Gill and Vickers 1990, 24.

¹¹⁶ For the symbolic significance of foreign objects and their association with high status, see Helms 1988, 121. 124. 128-129. For the authority generated by contacts with geographically distant places, see Helms 1988, 131-148.

¹¹⁷ Helms 1988, 119. 149. A good example for the status enhancing qualities of pottery is given by Melas, who drew attention to the way in which foreign pottery is used to enhance the owner status. Subsequently, he interprets the particularly rich pottery finds in Cypriot homes at copper-controlling sites such as Tammassos and Kalavroso-Ayios Dhimitrios in a similar way. Melas 1993, 374.

¹¹⁸ Appadurai 1986, 33.

¹¹⁹ Helms 1988, 112.

therefore have to be considered as agents that stimulates certain consumption patterns. One may even go one step further by suggesting that it is possible that they even constitute their own social class with specific values, which were also visually expressed in the material culture as a sign of their ability to provide foreign commodities for the society. Thus, two different forces can be identified as important instigators of demand and consumption within broader segments of the society: the aristocracy and the merchants, two groups that cannot be separated necessarily from each other at all times and in every region.¹²⁰

Mullins, on the other hand, suggested that foreign goods offer more possibilities for the consumers' imagination by providing ambiguous styles and functions, which can be charged with meaning in a variety of forms.¹²¹ The implication for the present study is that the absence or presence of certain Greek objects could be due to their similarity or because of their difference. For instance it is worth considering whether the popularity of the Greek psc-skyphoi and plates in the East was not because they were foreign objects; rather their attraction was more related to their psc-decoration. Decoration of concentric circles or semicircles painted with a multiple brush can be found frequently on Cypriot pottery, another ware that appears in large numbers in the Levant and which was also widely imitated.¹²² The same concentric circles can also be found on other objects such as ivory plaques, which have a certain elite connotation because ivory was a valuable material.¹²³

¹²⁰ Mullins 2004, 205.

¹²¹ Mullins 2004, 205 with further references.

¹²² See for instance the local production at Tarsus or Kinet Höyük.

¹²³ Winter 1976, 1.

It has been stressed that consumption is subject to various forces. One of the forces that “manipulates” consumer choices, particularly if they are dependant on external supply, are “sumptuary laws”, in other words “taboos” driven by social rules and subject to political control.¹²⁴ Such strategies are an effective counter reaction to the spread of consumption habits among broad segments of the society.¹²⁵ Hodder rightly emphasized that the “presence of absence” can be as significant as the presence of certain artefacts.¹²⁶ Therefore, the present study not only analyses why and how certain Greek vessels were introduced into the existing Near Eastern cultures, but also why certain categories were rejected, less popular or repelled after some time of use.¹²⁷

The diametrical forces between merchants and the aristocracy partly explain the close relationship between elites and merchants that can be observed particularly during the Bronze Age.¹²⁸ Their close cooperation is a powerful control mechanism that regulates the flow of foreign goods. Imposing taxes on certain commodities is not only a source of income for the ruling class but also another important control tool to limit access to certain goods that are considered status symbols. Losing the control of a group of merchants can become a threat to the power of established elites. Thus, the dissemination of foreign artefacts may serve not only as an indicator for changing attitudes towards certain commodities, but also might be interpreted as evidence for changing power-relationships within the society.¹²⁹ Therefore, the interpretation of the Greek pottery in the East has to be considered behind the background of the political

¹²⁴ Appadurai 1986, 31-32; See also Wijngaarden 1999, 10.

¹²⁵ Dietler 2001a, 86. For example Yasur-Landau 2010, 197 argued that small numbers of LBA vessels in the Levant indicate limited availability thus the imports could not bring a large-scale change in behavioural patterns.

¹²⁶ Hodder 1986, 131.

¹²⁷ See Dietler 1999, 484.

¹²⁸ McGeough 2007, 333-336. 378. See also the discussion in Heltzer 1978, 121-131.

¹²⁹ Renfrew and Bahn 1991, 311.

and social changes in the Near East during the 8th and 7th century BC. And it is exactly this period that saw major political changes with the arrival of the Assyrian empire, which threatened old established elites but also provided new opportunities for other members of the society. This point seems important since the foundation of Al Mina in the plain of the Orontes can be considered either as a counter to changing environmental conditions or changing perceptions of traders. In the latter view, the foundation of the port can be interpreted as an attempt to confine the “professional boundary crosser” and their heroic attitudes in order to control their authority and separate them from the rest of the society.¹³⁰ The record of Greek imports together with the distribution of these artefacts is also a valuable indicator for the degree of state administered trade. High amounts of imports in various different social contexts speak against a firm control of Greek imports and pottery in particular.¹³¹

2. 7 Feasting and Dining. Pottery as Diacritical Device

Looking at the record of Greek pottery exports to the Near East, it becomes obvious that the bulk of imports belong to a class of pottery that can be summarized as tableware, which consists of vessels usually associated with the consumption of food and drink. Other categories, such as storage-, transport- or cooking jars, are only of minor importance. The concentration on consumption of Greek tableware, and therefore on drinking and eating, is not only driven by the Al Mina-assemblage itself. It is corroborated further by ancient sources, which pay considerable attention to dining rituals. Ancient historians for instance often mention variations in dining rituals in order

¹³⁰ Whitley 1994, 60.

¹³¹ With a certain amount of finds in subordinate or non-elite contexts, it is also difficult to argue in favour of top-down redistribution by a controlling elite household.

to describe differences between Greeks and “barbarians”.¹³² The ancient notion that the consumption of food and drink goes beyond the mere fulfilment of basic human needs by embodying also cultural differences is also shown by anthropological research.¹³³ Drinking and eating are highly charged symbolic acts accompanied by a clear set of guidelines, which vary from one society to another.¹³⁴ This is particularly true for feasts. From this follows that the containers used during the preparation and consumption of food and drink automatically acquire a symbolic function that cannot be separated from the actual ritual itself.¹³⁵ Since eating and drinking are one of the few ancient customs that always needed containers, which, on most occasions, consisted of clay vessels, it is one of the few rituals traceable in the archaeological record.

Several different suggestions have been put forward to explain the appearance of new shapes in the Near East from the Bronze Age down to the Iron Age. For example Yasur-Landau understood the appearance of new shapes in Philistia as an indication of new dietary practices, which point to the appearance of new people.¹³⁶ In their discussion of the evidence from Mesad Hashavyahu and Tell Keisan, Fantalkin and Neimeier, respectively, reached similar conclusions.¹³⁷ In both cases, Greek fine ware together with cooking pots is the major evidence to postulate Greek presence.¹³⁸ Other scholars, such as Joffe or Dietler, stress the importance of foreign drinking containers as well as foreign drinking practices and exotic food in establishing or affirming social

¹³² Chaniotis 2005, 143.

¹³³ Summarized in Dietler 2001a, 72.

¹³⁴ Steel 2004, 162.

¹³⁵ See e.g. Orton et al. 1993, 227; Steel 2004, 162.

¹³⁶ Yasur-Landau 2010, 277.

¹³⁷ For a detailed discussion of both sites, see the Appendix. Neither Mesad Hashavyahu nor Tell Keisan can be compared with the case of Philistia discussed by Yasur-Landau. All three provide additional information that further support their arguments.

¹³⁸ Fantalkin 2001, 116 goes even further to suggest Egyptian presence because of one lid fragment of a possible Egyptian cooking pot.

relationships within hierarchical systems.¹³⁹ According to them, foreign exotic containers or drinking practices were primarily valued for their diacritical symbolic function. The theoretical discourses resulted in the differentiation of three different categories of feast:

The Entrepreneurial or Empowering feast – commensal hospitality is manipulated in order to gain social or economical capital.¹⁴⁰

The Patron-role feast – commensal hospitality is formally used to reiterate and legitimize symbolically institutionalized relations of asymmetrical social power.¹⁴¹

The Diacritical feast – this type involves the use of differentiated cuisine and styles of consumption as a diacritical tool to naturalize and reify existing concepts of hierarchy.¹⁴²

The diacritical feast is similar to the patron-role feast but the emphasis is not on quantity of consumed beverages and food but on matters of style and taste. The feasts are characterized by distinct cuisine and elaborate dining sets. Moreover, they can be marked by references to specialized knowledge of external and exotic customs to demonstrate their exclusivity.¹⁴³ The diacritical feast constitutes a shift from asymmetrical relationships between unequal partners observable in the other two types to a testimony of restricted and unequal dining circles.¹⁴⁴ Greek vessels therefore may

¹³⁹ Dietler 1990; Joffe 1998; Turkon 2004, 227.

¹⁴⁰ Dietler 2001a, 76-80.

¹⁴¹ Dietler 2001a, 83.

¹⁴² Dietler 2001a, 85.

¹⁴³ Chaniotis 2001, 164. A case for diacritical use of pottery might be observed at Lefkandi where the rare shape of plates occurs predominantly in elite contexts together with other foreign exports. It remains open however how widespread the use of psc-plates was in the SPG settlement. For the plates and their connection with foreign imports see e.g. Coldstream 1998a, 304-305.

¹⁴⁴ Dietler 2001a, 85.

be an effective device for the visual communication of existing social order. Having said this, a cautionary note is necessary. Although Greek goods may act as diacritical tool and consequently help to identify diacritical consumption in the archaeological record, it is necessary to remember that the use of objects is only one of several different ways for the visual expression of hierarchy.¹⁴⁵ Absence of exotic pots does not entail absence of diacritical feasts. Moreover, similar symbolic devices can be used to mark events as well as categories of people. Certain customs may be used to distinguish particular groups from each other and similar practices can be employed to differentiate ritual feasts from daily consumption.¹⁴⁶ Apart from exotic vessels, foreign food or beverages also can be used to separate feasts from daily consumption.¹⁴⁷ Greek wine may have served such purposes but that does not exclude the use of wine on a more daily basis.¹⁴⁸ The presence of whole sets of Greek symposium ware together with Greek wine amphorae is more likely to be evidence for diacritical feasts than the occurrence of any one single shape or the presence of Greek wine alone.

Foreign vessels and customs therefore may be particularly interesting for the aristocracy to negotiate and display their rank within society. This does not mean however, that these strategies are only limited to the elite. Eating, drinking and feasting also take place on a lower social level. On particular occasions like on public feasts in a sanctuary for instance, broad segments of the community would drink and eat together.¹⁴⁹ Foreign drinking paraphernalia also could serve other classes as a means to differentiate

¹⁴⁵ Chaniotis 2005, 164-166.

¹⁴⁶ Dietler 2001a, 89.

¹⁴⁷ Dietler 2001a, 89.

¹⁴⁸ Arthur 2003, 517.

¹⁴⁹ A good example for a non-exclusive feast is Kouklia-Evreti. See Steel 2004, 170-171. Wright 2004, 5 stresses the fact that a large segment of society takes part in feasting activities. Luke 2003, 47 sees feasting confined to the Greek aristocracy. Her main source is Homer, who focuses on the world of the aristocracy. As Sherratt has demonstrated in a recent assessment of references to feasting in Homer, other social classes can take part as well in a feast. See Sherratt 2004, 184.

themselves from others. We can therefore identify another possible interpretation in changing pottery assemblages: changing drinking practices, which cannot be untied from social implications and which are not necessarily confined to one specific class.

One major concern of this study is to analyse whether the buyers of Greek pottery belonged to a certain social rank or whether the use of foreign tableware was a more widespread phenomenon. It has been stated by Luke that Greek pots in the Near East served as gifts to establish friendships, known as *xenia*.¹⁵⁰ She further states that it is only after the disappearance of Euboean pottery that Greek ceramics enjoy a wider distribution and only after that period that they can be considered as commodities.¹⁵¹ Apart from the question whether Greek pots can be considered as commodities, the previous discussion has shown that foreign drinking vessels can also be understood within the framework of local consumption patterns as tools for social distinction and as markers of special rituals. One crucial question is to define the relationship between frequency of contacts with foreigners and the value of foreign commodities such as pottery. Do Greek imports play an equally important role for elites with restricted access to foreign objects caused by their geographical position, such as the inland capitals of Hama or Samaria, as they do for the aristocracies of coastal cities? Strategies to restrict access to foreign goods are certainly dependant on the general availability of foreign commodities. Landlocked cities are confronted with a more complex supply chain and are therefore more likely to face a disruption in foreign goods. At the same time a complex distribution system allows them to control access to these goods easier than cities with a permanent flow of imports. Related to this issue is the question whether open access to foreign goods affects their social role. In other words, is a foreign good

¹⁵⁰ Luke 2003, 50-52. Similar views already were proposed by Coldstream 1998b.

¹⁵¹ Luke 2003, 60.

still exotic and valuable if it is available for everybody or is the sheer fact that it is foreign enough to acquire a specific social value? If we still find foreign pottery in elite context while encountering Greek pottery in contexts of lower social classes, then one may argue that it is the foreignness of objects, rather than its rareness, which causes social value. Furthermore, it will be interesting to see if it is possible to detect differences in the distribution of particular shapes and variations in quality. Such a case has been made for Chinese porcelain imports in 15th-16th centuries AD Philippines, which showed a noticeable qualitative distinction between elite- and ordinary households after porcelain became available to a wider class of consumers.¹⁵²

The Greek pottery recovered at Al Mina and at other sites along the Levantine littoral travelled an enormous distance, perhaps passing through several different intermediaries, before it finally reached its consumers. It constitutes a body of material that was used and deposited in a socio-cultural milieu that was totally different from where it was manufactured. The cross-cultural consumption of Greek pottery requires therefore the examination of local cultural mechanisms and tastes that resulted in the acquisition and adaptation of Greek vessels.¹⁵³ Developing these considerations further automatically leads to the question whether the introduction of Greek pottery implies the adaptation of Greek drinking customs.¹⁵⁴ Ulf concluded that such a transmission occurred only at highly frequented contact zones where a direct transfer between producer and recipient could take place.¹⁵⁵ This question is particularly suggestive in the case of Al Mina, where, as will be shown, not only Greek pottery was imported over

¹⁵² Junker 2001, 292-293.

¹⁵³ Dietler 1999, 477.

¹⁵⁴ See e.g. the discussion by Osborne 2009.

¹⁵⁵ Ulf 2009. A similar close process was used to explain the high amount of plates at Pithekoussai by Coldstream 1995, 308.

a considerable period of time, but where it appears also in unprecedented numbers and where the shape variety is much higher than at any other site in the Levant and Cilicia. Having said this, one has to point out that food consumption and feasts are subject to changes under certain circumstances, a fact that complicates the interpretation of the archaeological record further. One important stimulus for the modification of dining customs derives from increasing social and economic contacts with the outside world.¹⁵⁶ The introduction or adaptation of foreign shapes has to be analysed within this context.

As has been emphasized, demand for certain products is never an automatic response to availability, a conclusion that automatically puts the consumer and his desires, which are generated by social norms, in the centre of this study.¹⁵⁷

2. 8 Fine Painted Pottery and Trading Patterns

Fine painted pottery is considered as a useful piece of evidence to trace long-distance trading patterns but only as a poor category to study trade. The fact that pottery is seen as a bad indicator for trade is due to its little importance to the ancient economy.¹⁵⁸ Its potential lies more in the well-known relative-, and in some cases absolute chronologies, and derives further from partly easily distinguishable regional styles.

¹⁵⁶ Hally 1986, 272; Dunbabin 2001, 81-101, gave an example for the change of drinking customs through outside contacts.

¹⁵⁷ Dietler 1999, 485.

¹⁵⁸ There are different views about the importance of the Attic pottery industry during the archaic and classical period. Attic pottery has received the most attention since we possess a large corpus of material from this major centre. For the basic literature see: Cook 1959; Boardman 1988a; Boardman 1988b; Arafat and Morgan 1989, 336; Johnston 1979, 50-51. For a different view see in particular Hopper 1979, 44; Gill and Vickers 1990; Vickers and Gill 1994; Gill 1994, 104; Tomber 1993, 143.

Thus, as Tomber rightly noted, pottery reflects trade patterns instead of generating it, a view also taken over by Osborne who suggested that fine painted pottery follows more valuable items but does not create the pattern of exchange itself.¹⁵⁹ Both scholars might be right with their assumptions, it remains only questionable whether the same principles also apply for the EIA.¹⁶⁰ One way of answering this question would be to study the scale of pottery production in cities such as Corinth and Athens. The outline and structure of the Corinthian pottery quarter at Corinth, a major pottery production centre during the 7th century BC seems to support those who consider pottery only as a minor factor for ancient economies.¹⁶¹

In order to trace trading patterns or decipher trade routes it is important to understand the structure of trade. The basic question is whether the majority of trade was conducted through direct trade, or by stopping-off trade. In the first scenario traders would have a particular market in mind while the latter model suggests that merchants were hugging the coast from one harbour to the next in order to exchange their commodities.¹⁶² Johnston e.g. suggested that there is little evidence for a stopping-off trade between Attica and Italy to sell vases at Etruria down to the late 6th century BC.¹⁶³ One of his arguments is that the majority of discovered shipwrecks seem to be containing homogeneous cargoes of a particular origin, which speaks in favour for direct trade.¹⁶⁴ A similar conclusion can be drawn from the record of imports recovered from the Malophoros sanctuary at Selinus. The imports of Corinthian pottery indicate continuing

¹⁵⁹ Tomber 1993, 143; Osborne 1996, 39.

¹⁶⁰ See also Kerschner 2000, 488 for the discussion of trade with East Greek fine painted pottery.

¹⁶¹ See in particular Arafat and Morgan 1989.

¹⁶² See for instance Tomber 1993, 148 who considered cargo from ships nearly as good as written itineraries of a ship's route.

¹⁶³ Johnston 1979, 51.

¹⁶⁴ Osborne 1996, 38. He basis his assumption on Parker 1992, 451.

close ties between one or more workshops and consumer on the one hand and between merchants and producers on the other hand.¹⁶⁵ According to Osborne, by the late 8th- and early 7th century BC, traders made particular choices for certain markets, which they targeted directly.¹⁶⁶

Against such a view speaks e.g. the shipwreck from the island of Giglio that contained not only amphorae from different sources but also fine ware from different production centres.¹⁶⁷ The analysis of roman shipwreck revealed a similar pattern: the pottery, whether transport amphorae or other types were always represented by more than one type and regularly by more than one source, perhaps corresponding to the mixed ownership of the cargo.¹⁶⁸ We may even have to assume that different types of commodities were circulating within different systems: commodities like raw materials and amphorae were more directly traded while painted pottery and other low value products were hawked from port to port.¹⁶⁹ Like the evidence from Attic trade, the Roman long-distance trade does not necessarily resemble trade of earlier periods and EIA shipwrecks, which would confirm mixed cargoes, have not been detected yet. In this respect the evidence from the Bronze Age is illuminating. The LBA Uluburun shipwreck e.g. carried a cargo of exceptional variety, which would advocate a BA trade that was not much different from classical or later roman times.¹⁷⁰

¹⁶⁵ Dehl-Kaenel 1994, 55-83.

¹⁶⁶ Osborne 1996, 42.

¹⁶⁷ Bound 1991, 14-21.

¹⁶⁸ Tomber 1994, 146.

¹⁶⁹ Tomber 1993, 161. See also Baika and Kamarinou 2005/06, 9 for different patterns of trade existing sided by side.

¹⁷⁰ Wachsmann 1998, 307, 331; Baika and Kamarinou 2005/06, 8-9.

In his study of Euboean long-distance trade Crielaard proposed that the further away the pottery is from its original source, the greater the chance that it travelled through the hands of several trading agents.¹⁷¹ The problem with this statement is that an increase in middleman also means an increase in the value of the object. This is unrelated to the type of the economic system. Even in systems where the price is not regulated by supply and demand, the value of a commodity must increase with the frequency of transactions. If a pot is exchanged for a particular commodity and if it is intended to be sold on, the middleman has to ensure to receive a larger amount of a similar commodity or of a good that is worth the same value.¹⁷² Thus, the lower the value of an object, intrinsically or symbolically, the more limited is the number of potential intermediary agents. Hodder and Orton make a similar argument, although by a complete different approach, by suggesting that higher value can be related to greater mobility and precious objects may be handed on with greater frequency. As a result they tend to be on demand over a wider area.¹⁷³ We may conclude therefore that lower valuable commodities are less likely to go through the hands of several intermediaries.¹⁷⁴ This however does not exclude that they were possibly sold at various ports of call during a ships itinerary.

According to Kerschner, the rules of the market reflect the distribution of fine painted pottery. The success of pottery is determined by price and quality.¹⁷⁵ The problem with this statement and Dehl-Kaenel results from the Malophoros sanctuary at Selinus is that it stands in contrast to the general assumption, which considers pottery only as by-

¹⁷¹ Crielaard 1996, 103.

¹⁷² The frequency of transactions is also limited by the “fair prize” concept that excludes that a certain commodity can reach a prize, which is much higher than its actual value.

¹⁷³ Hodder and Orton 1976, 142-143.

¹⁷⁴ This does not exclude the possibility that pottery was traded through another port e.g. To define the exact limit of possible intermediaries is difficult. It is related to the amount of pottery circulating in a specific period and or region.

¹⁷⁵ Kerschner 2000, 490. Kerschner did not define market more precisely or how prices are generated. It seems though that by market he does not mean market that is driven by supply and demand.

product of other more valuable commodities. Taken as a by-product, the distribution of pottery must be more production related than driven by specific fashions or market prices. The only way to reconcile direct trade with the trade in fine painted ware, which follows other rules than the trade in commodities such as raw metals or agricultural products e.g., is to consider different levels of trade. Various categories of commodities may circulate in different trading networks targeted at various consumer needs and socio-economic backgrounds.

In order to trace trading routes or even certain networks, some principle guidelines can be established: the frequency of imports is certainly one important factor that allows to outline direct relations between production- and find place.¹⁷⁶ Concentrations of pottery, which is usually absent at other places, can be considered as an even stronger proof, whereas in the case of widely exported products we cannot exclude that they have been purchased at various intermediary markets.¹⁷⁷ Moreover, if the find place of pottery reveals also artefacts of different categories from the same production centre, we may assume that a direct relation must have existed. Similarly, the occurrence of large numbers of pottery over a longer period of time is another indicator for direct trading relationships. The occurrence of fabrics and shapes, which are otherwise rarely exported, may also point to a direct connection.¹⁷⁸ Another strong indicator for direct links are inscriptions like the Hera dipinti on cups found at Naukratis.¹⁷⁹ Finally, if a

¹⁷⁶ Cook 1949, 154.

¹⁷⁷ Cook 1959, 118, 123; Kerschner 2001, 490. Kerschner e.g. postulated a Milesian trading route running along the east coast of Calabria and Sicily with the main target Etruria based on the distribution of rare EWG-MWG style pottery (SiA Ib-c).

¹⁷⁸ Kerschner 2000, 491.

¹⁷⁹ Cook 1959, 118. See also the Sostratos inscription from Naukratis. Johnston 1979, 189-190. Johnston suggested to identify these inscriptions with the famous Aeginetian trader Sostratos mentioned by Herodotus.

production place receives imports from one of its major export market it might be also safe to assume that a direct relationship existed.

While these principle consideration may enable us to distinguish between major hub and relay-harbours, and possible help us to define long-distance trading networks, particular attention has to be drawn to the fact that some networks may existed, which did not leave any trace at all. Graffiti on Chian kantharoi dedicated by a certain Aristophantos at Naukratis and Aegina could be interpreted as links between Chios, Naukratis and Aegina respectively. Kerschner proposed instead of linking Chios with these two sites, that the Chian pottery from Aegina was imported via Naukratis and therefore no direct relation could be established between Chios and Aegina.¹⁸⁰ This demonstrates that certain commodities were available at several places and could have been imported through various ports. In this respect it is also important to consider that many cities did not produce any painted fine ware and might be therefore underrepresented in the archaeological record.

2. 8 Contextual Approach to Greek Pottery in the East

Besides generating distribution maps of Greek pottery in the East, which only reflect the current state of research, and which have the additional disadvantage that they do not provide any useful information about the fluent and varying processes that generated them, the contextual approach may offer, under particular circumstances, a whole set of

¹⁸⁰ Kerschner 2001, 90.

information of material culture and past human behaviour.¹⁸¹ By context I first and foremost mean the immediate archaeological context although the wider social context is important in order to comprehend the use of Greek pottery in a foreign social environment.¹⁸² Contextual archaeology stresses the relation between use, context, shape and decoration of objects as well as their final deposition.¹⁸³ All these criteria are related to each other and provide information about the active transformation of material culture to create social order.¹⁸⁴ To this one may add that these criteria also provide information about the relationship of various objects to each other as well as their rank within a particular social structure. Such an approach to material culture is bound to a specific set of information, which is not always available. In an ideal world, not only statistical reliable information of deposits and assemblages are needed for comparison, but also contextual information of a variety of different places of human activity (domestic, ritual, burial) is required. Unfortunately, only in few instances such a wide range of data is available, which severely limits the possible results of the contextual approach.¹⁸⁵ Moreover, since certain cultural patterns are not necessarily stable and may change from region to region, necessary interregional comparisons and diachronic analyses are an important prerequisite for the interpretation. It goes without saying that any attempt to draw such a continuous picture is hampered by the patchy archaeological record. Furthermore, in order to understand the depositional behaviour as well as the role of different objects within a deposit, one has to rely on explanatory models, which are either supplied by historical or ethnographical sources. While a broad range of ethno-archaeological studies are particularly concerned with drinking and food habits as

¹⁸¹ Hodder 1982; Hodder and Orton, 1976, 239- 240. Problems related to distribution maps see Hodder 1982. For the contextual analysis of material culture see Hodder 1986, 121-155.

¹⁸² Hodder 1982.

¹⁸³ Hodder 1986, 4.

¹⁸⁴ Hodder 1986, 8- 9. Summarized by Whitley 1994, 52.

¹⁸⁵ Hodder 1986, 145.

well as feasting (see above), and are therefore of intrinsic importance for the interpretation of the majority of the Greek fine ware, our historical sources from the period and region that is in the focus of this study, are scarce.

Another difficulty is that Greek pottery is a foreign “intruder” into local Near Eastern culture. Its “actual use” and function might be completely different from its intended use in its original cultural context.¹⁸⁶ Objects have particular meanings that are created by society. As soon as the object leaves its cultural environment and enters a new one, its meaning is going to be renegotiated and is “recharged” with a different set of meanings.¹⁸⁷ To complicate matters even further, associations of items in a previous context affect its use in a new context and therefore cannot be separated from it.¹⁸⁸ According to Hodder, the study of prehistoric exchange has to take into account the symbolism of the exchanged artefact in the receiving society.¹⁸⁹

However, despite the patchy record, a contextual analysis of Greek pottery from the East is missing so far. Even the latest attempt by Luke considered context only in a general way by providing statistical data according to the three categories of settlement, burial and ritual contexts.¹⁹⁰ Possible variability within these categories was not considered nor did she examine the “context within the context”.¹⁹¹ The same can be said about the work of Crielaard.¹⁹²

¹⁸⁶ For the definition and difference of “actual” and “intended use” and the importance to distinguish between these two terms see Rice 1987, 207-242; Skibo 1992, 35.

¹⁸⁷ Appadurai 1986.

¹⁸⁸ Hodder 1986, 12.

¹⁸⁹ Hodder 1982, 207-208.

¹⁹⁰ Luke 2008, 31- 42.

¹⁹¹ Hereby I refer to what Hodder called scales of depositional units: Hodder 1986, 135; For the definition of context see Hodder 1986, 143.

¹⁹² Crielaard 1996.

For Al Mina, the above-described criteria are only partly available. Although, as will be shown, the quantitative information can be considered as reliable, the contextual information is completely missing.¹⁹³ This situation however, does not apply to all sites in the East and one may infer from one site to another or at least provide interpretative models for “reading” the record from Al Mina.¹⁹⁴ Past scholarship focused in particular on the period from ca. 1000-700 BC but the 7th century has so far been totally neglected despite the relatively rich corpus of Greek imports in the Near East during this period.

The contextual approach to Greek pottery is the only way to identify the use of pottery, its social significance in different regions and the socio-economic status of the consumers. Despite existing deficiencies, like missing written sources that would highlight specific cultural behaviours related to the use of pottery, there seems to be no alternatives to a contextual approach, which would allow us to discuss the relevant issues. Information obtained from other sites with a better-documented record may allow us to make inferences about the use of pottery at Al Mina.

¹⁹³ This is only true for the fine painted pottery.

¹⁹⁴ Inferences from one distinct society to another are problematical in particular if one follows Hodder in his interpretation that meanings are context dependent Hodder 1986, 6. 121.

III. The Settlement of Al Mina- A Case Study

1. The Physical Environment of the Region

The geographical setting of Al Mina is important for understanding the port's significance for trade between Greece and Asia Minor and the Levantine region during the 8th and 7th century BC, a fact which was already acknowledged by Woolley and the main reason for him to carry out his programme of research in the Orontes delta.¹⁹⁵ Several trading routes, the fertility of the Amuq plain as well as other geographical factors constitute the background for the historical development of Al Mina and should be briefly outlined in the following chapter.

1. 1 Al Mina and the Orontes Delta

The site of Al Mina is located in the Orontes Delta in southern Turkey in the Hatay region on the Eastern Mediterranean coast.¹⁹⁶ The river delta consists of a triangular plain of about 40 sqm. with a shoreline of about 15 km. The Orontes River runs through it and connects the coast with the Amuq plain in the hinterland 40 km eastwards. Al Mina is surrounded by the Mount Amanus, which divides the Orontes Delta from the Gulf of Alexandretta and Cilicia.¹⁹⁷ In the south lies the Jebel al-Aqra or Kel Dagi, the well-known Mount Kasios of the ancient times (Fig 1). The Delta was reshaped during the course of time by tectonic movements and sedimentation by the

¹⁹⁵ Woolley 1938, 1-3.

¹⁹⁶ Al Mina (OS 11): see Pamir 2005, 67- 98; Pamir and Nishiyama 2002, 294-314; Pamir 2006, 535-543.

¹⁹⁷ Str. XVI 2. 8; Plin. HN 5. 18. 79; Wolley 1938, 1-3.

Orontes.¹⁹⁸ Today Al Mina is located on the northern bank of the Orontes, some 1,8 km inland from the coast.¹⁹⁹

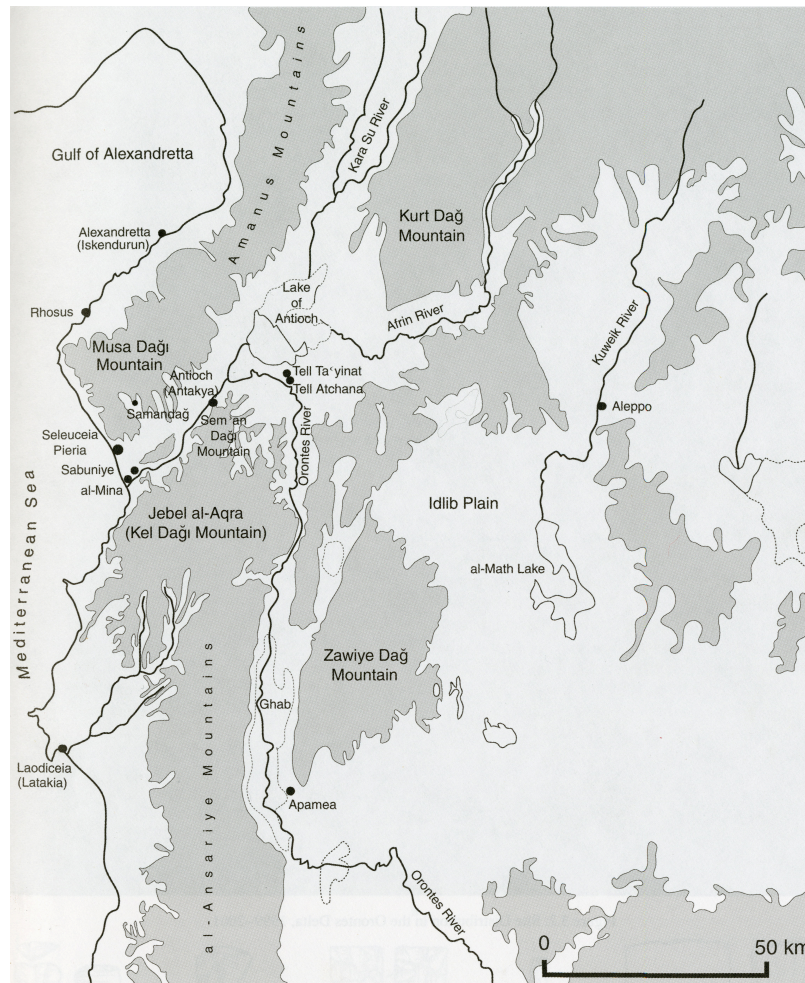


Fig. 1 Orontes Delta and the Amuq plain

The Orontes River connects Al Mina with the centres in the Amuq plain and further on to Aleppo, Carchemish and finally Mesopotamia.²⁰⁰ The East-West connection was not the only important strategic road, which ended or began in the delta. Another overland

¹⁹⁸ Pamir 2005, 68; Pamir 2006, 536 no. 6. Pamir and Nishiyama 2002, 311-312; Pamir 2005, 72. Geomorphological research in the delta suggests the area to the east of Al Mina was situated in a marshy waterlogged environment. It seems that the coastline was further to the east than nowadays although it is impossible to say in what periods the shifting of the shoreline took place.

¹⁹⁹ See Pamir and Nishiyama 2002, 298.

²⁰⁰ According to Strabo, ships were sailing to Antioch in later periods. Str. 16. 2, 7.

trading route runs through the Amuq valley and along the Kara Su River up to the north, connecting the inner land of Anatolia with the Aegean Sea.²⁰¹

The mound of Al Mina rises only a few metres (height ranges between 2 m on the south to 5 m in the east) from the plain and is oriented north-west / south-east, slightly sloping from the north to the south. Today the hill occupies an area of approximately 1.6 ha. The riverbank of the Orontes is to be found 250 m south of the site as indicated in the map on Fig. 2.

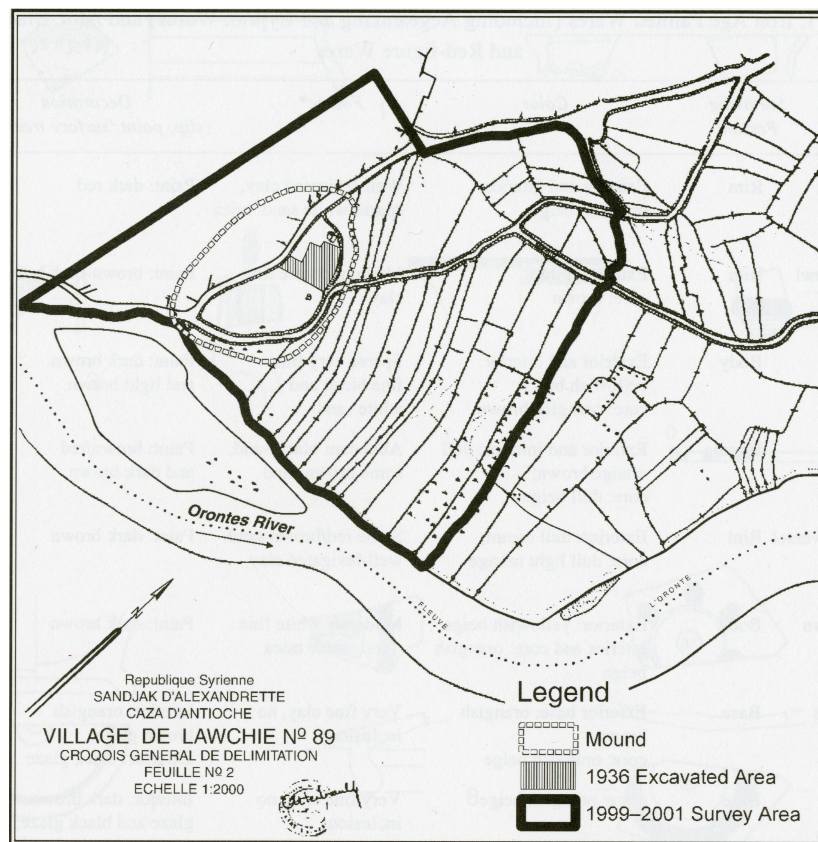


Fig. 2 The mound of Al Mina on the northern banks of the Orontes

By the time of Woolley, in 1936, the hill was surrounded by agricultural land and on the southwest side as well as on the south side by cottages and buildings of the modern

²⁰¹ The strategic position of Al Mina was also recognized by Woolley and is also the reason why he carried out his excavations at Al Mina. Woolley 1937, 5; Woolley 1938, 169.

village of Al Mina.²⁰² The northern part of the hill was also agricultural land before Woolley carried out his excavations on that part of the mound, with the effect that the uppermost layers could probably be disturbed because of agricultural activities like ploughing etc.²⁰³ The situation has not changed over time and the mound is still surrounded and even occupied by orchards and fields today.²⁰⁴ To the west of the Tell one can find the modern village of Liman Mahallesi.²⁰⁵ A modern street divides the hill into two parts. The area to the west of the street was not excavated by Woolley and his team in 1936/37 because he thought that the western part only contained the poorer quarters of the later periods. Further, the southern part was also not touched by Woolley because he believed that the archaic levels in which he was interested did not extend further to the south.²⁰⁶ Today a farmhouse and a 50 x 60 m field where orange trees are grown occupy the southern part of the hill.²⁰⁷

Parts of the Tell were washed away by the Orontes and farming activities carried out on and around the Tell have caused further damage.²⁰⁸ Survey results suggest that the original Tell extended about 10-15 metres further to the East.²⁰⁹ Sherds collected to the West and Northwest demonstrate that the mound also extended in these directions.²¹⁰

Over the course of time the shape of the Tell was transformed by cultural and physical factors, such as human activities and agricultural use of the surroundings as well as the mound itself. Further, it has to be kept in mind that the foundation of the modern

²⁰² Woolley, 1938, 4.

²⁰³ Woolley 1937, 4.

²⁰⁴ Pamir Nishiyama 2002, 298.

²⁰⁵ Pamir 2006, 539.

²⁰⁶ Woolley 1938, 6.

²⁰⁷ Pamir and Nishiyama 2002, 298.

²⁰⁸ Woolley 1937, 4. In particular the long straight section on the east side of the Tell suggest that parts of the Tell were destroyed for the nearby fields.

²⁰⁹ Pamir and Nishiyama 2002, 300; Pamir 2006, 539-540.

²¹⁰ Pamir and Nishiyama 2002, 302; Pamir 2005, 73 Pamir 2006, 539.

settlement on the territory of the ancient city as well as the modern road, which cuts the Tell into two are both factors, which contributed to the continuing loss of archaeological information and the reshaping of the original outline of the mound.²¹¹

The Orontes delta survey discovered five Iron Age sites, of which only Al Mina was located in the plain.²¹² This settlement pattern demonstrates Al Mina's unique position founded for the special purpose of serving as a harbour for the hinterland. Two of the five sites already existed during the BA, among them Sabouniyeh on Hisallitepe some 5 km up the river from Al Mina, where Woolley conducted trial excavations.²¹³ The site was occupied from the MBA to LBA down to the Medieval-Islamic period.²¹⁴

Unfortunately, the relationship between Al Mina, Sabouniyeh and the Amuq Valley is not well known, but both settlements must have played a significant role for the distribution of foreign artefacts to the hinterland. Sabouniyeh probably served as a harbour for Alalakh, the capital of the Amuq during the Bronze Age, which was destroyed by 1194 BC.²¹⁵ Over the course of time the shoreline moved westwards due to the heavy sedimentation of the Orontes, so that Sabouniyeh lost its connection to the sea. Later, during the 8th century BC, the distance must have grown to such an extent that a new port-settlement was founded, namely Al Mina, which served now as a gate to the Aegean, but this time for Tell Tayinat, the new capital of the Amuq plain.²¹⁶

²¹¹ For cultural and physical transformation of archaeological sites in the region see especially Casana and Wilkinson, 30-31.

²¹² With this settlement pattern the Orontes delta is quite different from the Amuq plain where the majority of the settlements are located in the plain. See Casana 2007, 204; Casana and Wilkinson 2005, 38.

²¹³ Woolley 1937, 11-12; Woolley 1938, 8-9. For the location of the site see Pamir and Nishiyama 2002, 304; Yener 2005, fig. 3. 9.

²¹⁴ Pamir and Nishiyama 2002, 309-310. Pamir 2006, 541-542.

²¹⁵ Woolley 1955, 398-399.

²¹⁶ Casana and Wilkinson 2005, 38; Yener 2005, 193. 200.

The name “Al Mina” or al-Mina derives from a modern, small hamlet in the vicinity of the mound excavated by Woolley, which can be best translated as “The Port”. The locals called the mound Tal Sheikh Yusuf after a cenotaph of an Alouite saint, which crowns the small hill on its highest point in the north-east.²¹⁷ During the crusading period the harbour town was called Port de St. Simeon/Symeon after St. Simon Stylites the Younger, whose church was situated on a hill nearby.²¹⁸ Unfortunately, the name of the IA port remains a secret of history. Woolley believed that Al Mina must be the Greek Posideion, but this has to be ruled out for a number of reasons.²¹⁹

1. 2 Butaamu-Ahtaa-Thapsa- Potamon Karon

In an account of Tiglath- Pileser III’s conquests of the year 738 BC a list of places on the north Syrian coast is given.²²⁰ It includes a place called Ah-ta-a “the trading post (*bit-kari*) by the sea, the kingship store”.²²¹ According to the inscription, Ah-ta-a was located between a cape called “re`si-surri” followed by the Jebel Aqra mountains (kur sa-pu-na) and the Amanus mountains (sad taskarinnu).²²² ‘Re’ si-surri is best translated as “Cape of the rocks” although other suggestions have been put forward as well.²²³ The best candidate for the cape of the rocks is Ras el-Bassit, the next possible anchorage south of Al Mina. Zadok as well as Parpola and Porter suggested identifying Al Mina

²¹⁷ Woolley, 1937, 3.

²¹⁸ Woolley 1937, 5; Woolley 1953, 169; For the theory that Al Mina was only one of several ports of St. Simeon see Vorderstrasse 2005, 140-143. For the location of the monastery see Sinclair 1990, 301-303.

²¹⁹ For the reference in Herodotus see Hdt. III 91; Woolley 1937, 13-14; Woolley 1938, 28-30; Woolley 1948, 148; Woolley 1953, 160; Against Posideion: Courbin 1978, 48-62; Courbin 1986, 175-220; Courbin, 1990b;

²²⁰ Tadmor 2007, 102-105 Stele IIB 12-13. 137-138.

²²¹ For the translation of karun as trading station or merchant business see Wiseman 1956, 129 (comment on line 16).

²²² Tadmor 2007, 104 12’; Zadok 1996, 11; For Ba’ali-Sapuna as Jebel elAqra see Tadmor 2007, 61 (line 6).

²²³ See Na’aman 2004, 33- 39; von Soldt 2005, 159; Lane- Fox, 2008, 97.

with Ah-ta-a while Tadmor equated Ah-ta-a with uru Ta-ia-a in Unqi.²²⁴ Bagg on the other hand locates Ah-ta-a in the province of Simirra.²²⁵

It is also unclear whether the “trading post by the sea and “the kingship’s store” refers to one and the same place.²²⁶ A reference to two places would not be too farfetched if one recalls the site of Sabouniyeh situated further inland only a few kilometres away from Al Mina. Perhaps Sabouniyeh is the “place of the kingship’s store” and Ah-ta-a the “trading post by the sea”.²²⁷ Yamada translated the term *bit-kari* as customhouse or as “the place of trade”.²²⁸ He further suggested that despite the singular form used in the passage, it may refer to all the other coastal cities mentioned in the text: Siannu, Ellisu, Simirra, Resi-surri and Ahtaa or even the whole northern Phoenician coast.²²⁹

Astour on the other hand proposed to call Al Mina Bu-ta-a-mu mentioned by Salmanasar III in 858 BC and identified it also with the Potamon Karon mentioned by Diodoros.²³⁰ Lane Fox recently revived this old idea suggesting that the destruction record at Al Mina level III can be associated with the Ptolemaios and his army.²³¹

The major problem with the Bu-ta-amu hypothesis is that the archaeological record of the site speaks against an establishment of Al Mina already in the first half of the 9th century BC. Perhaps Bu-ta-a-mu can be identified with Sabouniyeh situated further inland.

²²⁴ Tadmor 2007, 104 12’; Zadok 1996, 11-12 (with arguments against Tadmor); Parpola and Porter 2001, 24.

²²⁵ Bagg 2011, 176 Karte 1.

²²⁶ For the unsecure translation for “storehouse” see Lane Fox 2008, 106 with no. 10.

²²⁷ Lane- Fox 2008, 106.

²²⁸ Yamada 2005, 68.

²²⁹ Yamada 2005, 68.

²³⁰ Diod. XIX 79, 6.

²³¹ Lane- Fox 2008, 107.

Lipinski argued to equate Al Mina with Thapsakos mentioned in the periplus of Pseudo-Skylax.²³² Thapsa might be the transcription from Hebrew *tps* meaning “ford”, which led Lipinski to suggest that Al Mina was called Thapsa in the period from the 8th to the 4th century BC.²³³ The only way to reconcile the two suggestions is that the name Potamon karon replaced the old “Hebrew” Thapsa at some point during the 4th century BC.

1. 3 The Amuq Plain

The plain can be considered one of the most important cultural landscapes in the East, with a history of occupation since at least the Paleolithic period.²³⁴ Like the Orontes valley, the Amuq plain has been the focus of intensive research activities since the last few years. The survey carried out by the Institute of Oriental Studies Chicago has increased our knowledge about this area substantially. The map of identified Tells, which were occupied during the Bronze and Iron Ages, demonstrates the significance of the plain for the harbour of Al Mina at the coast.²³⁵ There are three rivers flowing through the plain: the Orontes, the Karasu and the Afrin Rivers, which enable the possibility of irrigated agriculture. The rivers and abundant rainfall further increase the agricultural potential of the already fertile soil.

²³² The Periplus is preserved in the Codex Parisinus suppl. Gr. 443 from the 13th century, which cannot be equated with the Skylax of the 6th century BC and probably derives from the 4th century BC. Despite this it contains information that predates the 4th century BC. See Lipinski 2004, 267.

²³³ Lipinski 2004, 271.

²³⁴ Casana and Wilkinson 2005, 34-35; Casana 2007, 198.

²³⁵ Casana and Wilkinson 2005, fig. 2. 16. It is also necessary to keep in mind that a lot of information is lost because of considerable sedimentation in the plain. Therefore, the number of Bronze and Iron Age sites might even be underestimated.

The vast number of Tells (over 80) is a clear indication for the agricultural potential of the whole plain.²³⁶ Tells such as Catal Höyük, Tell Judaida, Yurthöyük, Salihiyah, Karatepe, Tell Ahtana and Tell Tayinat show that there were several cities of considerable size (all measuring more than 5 ha), some of them serving as a residence for the local rulers such as Tell Tayinat, for example, during the time when Al Mina was occupied. That demonstrates that there must have been a certain demand for foreign goods, especially luxury goods from the Aegean.

The Orontes Delta together with the Amuq Valley were both located in a fertile region. Additional to that, these two plains were situated on the crossroads of important trading routes. All this contributed to the attractiveness of the region for foreign merchants who were either looking for a market to sell their goods or who would like to get into the “metal trading business” for example.

2. The Archaeological Problems

2.1 A Survey of the Excavation and the Documentation

Saltz and Boardman are two scholars who analysed the stratigraphy before.²³⁷ A critical discussion of the site’s stratigraphy as well as Woolley’s working method is important due to several aspects and should therefore precede the analyses of the pottery from the site. First and foremost, such a discourse is needed in order to clarify if the stratigraphy and the architectural remains support the previous hypotheses concerning the historical

²³⁶ Casana and Wilkinson 2005, fig. 2.17.

²³⁷ Saltz 1978, 8-17; Boardman 1999.

development of the site. Furthermore, it is necessary to understand the site's transformation over the period of time. Finally, it will allow us to assess the liability of Woolley's interpretation concerning the levels and the artefacts associated with it.

The examination of the chronological and architectural development of the settlement is hampered by the limitations of the available records. Woolley published the ground plans of the buildings and a description of the general character of the specific levels as well as the most important finds associated with them in 1937 and 1938.²³⁸ Unfortunately, the usefulness of the ground plans is limited due to missing elevations. No detailed analyses or drawings of the architectural remains exist nor any thorough description of archaeological layers and finds or their relation to the architectural remains. Further, the photographic documentation is confined to a few pictures of archaeological contexts.²³⁹ Additionally, eleven pages of Woolley's field notes survived, which are today in the University College London's Special Collection together with some negatives of published pictures (see Appendix). Another important source is the pottery distribution list (pdl).²⁴⁰

Excavations were carried out at Al Mina during the spring season (end of March till end of June) in the years 1936 and again in 1937.²⁴¹ The archaeological field staff of the 1936 campaign included four members in 1936 and five in 1937.²⁴² Each of them had to

²³⁸ Woolley 1937; Woolley 1938.

²³⁹ A few pictures were taken from contexts from level II-III (the sarcophagus belongs probably to level III and not to IV as indicated on pl. III). See Woolley 1938, pl. I-IV.

²⁴⁰ There are two boxes housed in the Special Collection of the University College, London, which contain the pottery distribution inventory, several pictures of artefacts and ground plans, a topographical map, and Woolley's field notes. The pottery distribution inventory records the pottery and provides information about their distribution. The finds were divided between the British Museum, Damascus and Antakya.

²⁴¹ In 1936 most of the time was devoted to Al Mina and work on Tell Atchana (Alalakh) was limited to only 10 days. Woolley 1937, 4.

²⁴² Woolley 1938, 5.

look after about 60 workers.²⁴³ The area was divided into different squares ranging from 1-10 and A-L. The excavation was conducted according to a box-grid system.²⁴⁴

In the first year the area excavated by Woolley was confined to squ. H-J 4-7, H 8-10, G-F 6-9, E-D 5-9 and C 6-9. The north-west part and the south-east sector remained untouched until 1937 (squ. A-G 2-4, J 8-9 and J-L 9-10). It seems that the squares G-J 7-9 were excavated first.²⁴⁵ The whole stratigraphy of the site was divided into 10 different levels. Level 1 (the most recent one) comprises the remains of the town from the period of the crusades.²⁴⁶ Level 10 is the lowest level of the site and was probably laid out on natural soil by the founders of the settlement. Woolley assigned all walls as well as the layers to one particular level whenever he thought they belonged to the same phase. He did not discern between different floors within one certain level even though in his excavation report he mentioned them in some instances.²⁴⁷ He also did not distinguish between layers of soil, which lay on the floors or which were found below the floors. So it is difficult to understand how Woolley defined a particular layer or what he called a “level”.

A passage from his 1938 report demonstrates that Woolley assigned a floor together with the material on top of this floor to one level and the cut between two levels was made under each floor.²⁴⁸ The consequence for the chronology is that the levels do not provide the *terminus post quem* for the layout of each level since material of different

²⁴³ Woolley 1937, 4. A total of 180 workers were enrolled in 1936. We can only assume that the conditions were not much different in the ensuing campaign.

²⁴⁴ This can be deduced from Woolley 1938, pl. 2 (top picture).

²⁴⁵ Woolley 1938, 150.

²⁴⁶ Woolley 1937, 5; Woolley 1938, 6, 8-9. For the site's history of the Late Antiquity until the end of the Ottomans period see the Vorderstrasse 2005.

²⁴⁷ See e.g. Appendix field note page 1: “thin burnt ash stratum showing a temporary surface”.

²⁴⁸ Woolley 1938, 148. Woolley mentioned that he discovered the terra cotta MN 32 under floor IV thus it must belong to level V.

phases of the use of one building got mixed up in one big layer. The method of uniting several layers to one historic level prior to the analyses of the artefacts associated with it, makes it impossible to define the chronological difference between succeeding human activities such as the layout of new floors and the following abandonment of the buildings.

One has to point out that Woolley was totally aware of the problems involved with the stratigraphy of a Tell like Al Mina. What he described as “levels” did not conform to horizontal planes and he also stated that the town was never destroyed or repaired as a whole, a comment, which will be relevant for the historical significance of the results. Especially his remarks about the “nature” of the levels are of importance. Woolley noted that ”Sometimes a new level may consist in little more than the addition of a few new walls and the laying of a somewhat higher floor; sometimes it may mean entire reconstruction over the razed ruins of the old; the same phase occur, but buildings of the same date, even though adjacent, are not necessarily on the same horizontal plane, and each block had to be classified on its own evidence rather than by reference to its neighbour”.²⁴⁹

2.2 The Transformation of the Tell

As can be seen from the ground plans, the settlement of Al Mina did not occupy the whole Tell throughout its history. Remains of level X and IX e.g. are missing in the northern part of the mound. The question of a possible shift of the settlement was suggested by Woolley who was looking for an explanation for the missing Bronze Age

²⁴⁹ Woolley 1938, 6-7, 9.

occupation of the site.²⁵⁰ Woolley believed that the older Bronze Age levels were located in the north-east sector of the Tell, exactly where the mound had been severely damaged by the river 100-150 years before Woolley excavated the site.²⁵¹ His conclusion seemed to be further supported by a shift of the settlement's later levels to the south, which in his eyes indicated a movement of the riverbed in the same direction.²⁵² The general development of the settlement showed a shift from north/north-east to south/south-west. As stated by Saltz, his theory does not seem to be convincing.²⁵³ While the earliest remains, walls from level X and IX, are confined to the southern section (pl. 168. fig. 1), the succeeding periods of level VIII and VII seem also to expand to the northern sectors of the excavated area (squ. D-G 3-6, G-J 7-9).²⁵⁴ If anything can be deduced from the published ground plan it is that probably after the end of level IX, but certainly after the end of level VIII, the settlement expanded towards the north/north-west.²⁵⁵ A plausible hypothesis would be, that the settlement was laid out along the riverbanks in its initial stage and expanded to the north since the river blocked a further southward movement of the village prior to level IV. A possible southward shift of the town cannot be verified since the southern part of the Tell remained unexcavated. A move to the North occurred with the beginning of level VII followed by a second northward expansion with level VI.²⁵⁶ Both shifts, or rather expansions,

²⁵⁰ Woolley 1937, 11. He referred to one locally made vessel of sub-Mycenaean form, which was the only evidence for any earlier occupation of the site. Unfortunately no picture of this vessel was ever published.

²⁵¹ Woolley 1938, 8. That is at least what the local legend preserved. However, if one looks at the picture published in Woolley 1938, pl. 1, where the edge is almost in one straight line, like today, it seems more likely that the current situation, which is not much different from Woolley's times, is rather caused by agricultural exploitation than by the changing river bed.

²⁵² See for instance Woolley 1938, ground-plan level 4 (squ. I-K 8-10); Woolley 1938, ground-plan level 3 (squ. I-L 10).

²⁵³ Saltz 1978, 9-11.

²⁵⁴ Concerning a possible expansion of the settlement to the north already in level 8 see the discussion below.

²⁵⁵ Saltz 1978, 11.

²⁵⁶ This can be deduced from the published ground plans. The area squ. D-G 3-6 does not contain any pre level 9 remains while in the area squ. A-C 2-3 pre level 6 walls are missing. The allocation of few wall fragments to level 8 on the other hand is very doubtful but this cannot be checked due to the lack of preserved information (see below).

perhaps reflect an increase in the harbour's population and are a possible sign for the port's growing importance as a trading station during the 7th century BC.

The recent results from the Orontes delta survey also speak against a possible BA occupation. Not one single BA artefact was found so far.²⁵⁷ Due to the destruction of the site and the fact that large parts of the mound remain unexcavated, certain questions like the layout of the town in its initial phase, its extent during the 8th and the 7th century BC or its relation to the sea, cannot be answered.

2.3 Historical Breaks in the Occupation

The question of possible historical breaks in the occupation is a more complex issue with far wider ranging consequences.²⁵⁸ Woolley observed interruptions in the settlement's history, which were primarily based on the architectural remains. His system of allocating certain levels to chronological groups, which reflected either continuity or discontinuity in the settlement pattern, set the trend for the pottery study. In consequence, the pottery was also allocated to certain groups, which severely limits their chronological potential in indicating historical breaks in the settlement.²⁵⁹ The process should be the other way round as it is the pottery of the single levels, which is able to show continuity or a break in the occupation of a site.

The principle behind Woolley's arguments is that certain features in the architecture, such as continuing use of the same wall foundations, the following of older outlines of

²⁵⁷ Pamir and Nishiyama 2002, 300-301; Pamir 2005, fig. 3. 11-12.

²⁵⁸ This is also a disputed question. For different views on this matter see Boardman 1999, 135-136, 151-160; Saltz 1978, 21-22.

²⁵⁹ Robertson 1940, 2. He assigned the sherds in two major groups: IX-VIII and VII-V. He did not follow Woolley and his interpretation of a historical break between level VIII and VII.

walls, or the same construction techniques during two or more succeeding periods, are an indication for continuity while a change in one or more categories can be interpreted as a sign for discontinuity. All of the above mentioned features can certainly be understood as indicators but they certainly do not indicate the duration of such a possible break.

However, previous studies of Al Mina's archaeological record picked up Woolley's method arguing against or in favour of his explanation of the settlement's development over time. Woolley considered levels X-IX, VIII-VII, VI-V as belonging together with breaks between these groups but scholars called this system of historical breaks and continuity into question.²⁶⁰ The main focus of the debate was whether the "main break" was between level VIII and VII or VII and VI.²⁶¹ Taylor for instance, believed that there was a decline and a short period of abandonment after level VII even though she admitted at the same time that it was not possible to separate the material of level VII from level VI.²⁶² Boardman on the other hand divided the pottery in the two classes, level X-VII and level VI-V with an archaeological and historical break between level VII and VI.²⁶³ Saltz concluded that a main break occurred between level VIII and VII and level VII and VI should be considered as two closely united phases.²⁶⁴

The problems with the interpretation of the excavated remains, the architecture and the finds as well as the question of breaks, can be best explained by turning to Woolley's field notes. First and foremost, it is interesting that there is no record for a level X

²⁶⁰ Level X sherds could only be identified through the pottery distribution list. For the problem of the level marks see further below. See also Kearsley 1995a, 16-18. Level VIII town built on new lines: Woolley 1938, 16; Level VII reconstruction of level VIII with but minor modifications: Woolley 1937, 9; Woolley 1938, 154. Level VI-V successive phases of a single period: Woolley 1937, 8-9.

²⁶¹ See Saltz 1978, 21-22; Boardman 1999, 135-136.

²⁶² Taylor 1959, 87. 91. Robertson 1940 also divided the material in the groups IX-VIII and VII-V.

²⁶³ Boardman 1964, 39; Boardman 1999, 136.

²⁶⁴ Saltz 1978, 47.

among Woolley's field notes while there are sherds that were said to come from level X according to the pottery distribution inventory. Despite this, no sherds marked with level X could be identified so far. Furthermore, when Woolley published his first report in 1937 the level X walls were outlined in the ground plan but according to the title of the plan only contained "levels IX-VII".²⁶⁵ It was only in 1938 that level X walls were identified in the ground plan.²⁶⁶ This demonstrates that Woolley was not sure about the existence of a level X when he was excavating in 1936, but only one year later decided that there was also an earlier stage of occupation.

The eleven pages from Woolley's field notes are the only evidence we have from the stratigraphic relations of the early levels. They all seem to refer to the SE part only (squ. G-J 7-9), which was excavated first.²⁶⁷

2.4 The Stratigraphy of the Site (Levels X-V)

Due to restricted space, the detailed discussion of every level has been transferred to the Appendix. Here I only provide the most important points, which are relevant for the interpretation for the analysis of the pottery and the chronology of the site. The same applies for the discussion of the level marks and their significance for the study of the pottery.

²⁶⁵ Woolley 1937, pl. 10.

²⁶⁶ While the level 10 assignment was missing in the ground plan, he mentioned a level 10 in his description. Woolley 1937, 10.

²⁶⁷ The original of Woolley's field notes together with a transcription is provided in the Appendix. One fragment was already cited by Boardman 1999, 142. I also provided here the other pages, the original notes together with the transcript, which allows the reader to check the transcription. The transcription had been made by the Special Collection UCL and I followed them wherever I was able to compare the transcription with Woolley's handwriting. Whenever I made different readings I indicated it in an own footnote.

Taking the available evidence together, it becomes clear that the results gained from the discussion of the settlement's stratigraphy are anything but solid.

2. 4. 1 Levels X-IX

The south sector was excavated first by Woolley and was probably his kind of framework, which he adapted for all the other excavated parts. It became clear that in this southern area he did not face the same problems as in the north where for instance levels V, VI and occasionally VII were more closely related than in the south. In squ. J8 he discovered no level V, and level VI was 1.45 m below level IV. Therefore the recovered artefacts theoretically could have been more easily assigned to one particular level than in other sections. Further, the difference in elevation between the later levels was quite substantial (usually at least 0.3 m or one foot) and in the SE part of the mound either a clear floor was discovered (pebble floors of level VIII) or clear signs of destructions, which are always a good indicator for floor levels (first phase level VIII). The only difficulty was probably to decide whether every clay floor set directly on the sand belonged to level X or rather to IX.

The most important outcome of the discussion of the preserved notes, the published plans and reports, is that level X is certainly a distinct stratigraphic phase within the settlement's development. It is possible, though, that finds of level X and IX were mixed up like a pottery hoard mentioned by Woolley and therefore cannot be separated chronologically.²⁶⁸

²⁶⁸ Even though the elevation of the pottery hoard from room 4 is an indication that it belonged to level IX, an assignment to level VIII is still a possibility, which should not be ruled out. Therefore a confusion of finds from level X to VIII, however unlikely, cannot be ruled out. For the pottery hoard see the Appendix 1 field note page 9.

The level X-settlement was confined to the southern part of the excavated area, a situation that lasted probably until the end of level VIII. The houses were laid out on natural sand and the ground floor was probably rising from west to east. Further, the architectural design of the houses did not change much until level VI. Due to the construction technique applied at the first two periods, levels X and IX were badly preserved.

Level IX houses were also in some instances set on the natural sand and partly overlying older foundations. The general outline of the buildings did not change much from level X to IX, though level IX could be clearly distinguished on stratigraphic grounds. Further, the general orientation of the buildings and the whole settlement already goes back to this settlement period.

Despite that the level IX- remains were laid out partly on a different outline, as will be shown later, there is no indication that the settlement was abandoned before level VIII was laid out.

2. 4. 2 Level VIII

The settlement of level VIII followed a different plan than previous levels, as far as one can deduce from the ground plan. Earlier walls were almost never used for the new buildings and level IX walls were in many cases removed before the erection of the new settlement. It must remain uncertain however, how substantial the change really was because the available evidence is far from being exhaustive.

Level VIII consisted perhaps of two phases. The first phase suffered a violent destruction, which becomes clear from a massive ash layer that was discovered in several different rooms.²⁶⁹ Judging from the available evidence, the destruction was only confined to the eastern part of the excavated area, but any detailed information concerning the western part is simply missing. In some instances level VIII walls found in the eastern part (squ. H 7 e.g.) do not agree with other level VIII remains and suggest that the ground plan of some of the level VIII houses was changed after the destruction. In no other early phase were so many floor levels detected than in level VIII. This is probably also demonstrated by the fact that more small finds could be attributed to level VIII than to level VII (see chapter III 2. 5).²⁷⁰ The only other level where clear floors were detected was the other destruction level in phase III.

Like the other two earlier levels, level VIII could be clearly distinguished. Only the two possible phases of level VIII were assigned to one level VIII. Woolley believed that the level VIII walls in the NE section are contemporary but the orientation together with some obvious confusion of some walls in this part speak against such an assumption. Therefore the wall fragments in the NW section of the excavated area most likely do not belong to level VIII and the expansion of the settlement to this part did not happen before level VII.

2. 4. 3 Level VII

Level VII was not so easily distinguished from the previous as well as from the succeeding phase. The reasons for this are the absence of clear floor levels and the fact

²⁶⁹ See the detailed discussion in Appendix 1, 4-5.

²⁷⁰ Saltz 1978, 15-16. The figures of small finds however, could be heavily misleading since Woolley only published a proportion of the discovered finds and suppressed whatever was redundant and therefore it is doubtful how representative his list of small finds is.

that in many cases the foundations of the earlier level VIII walls were used as foundation for level VII. Woolley's comment that the stratification of level VII and VIII were for the most part confused, fits perfectly with this observation.²⁷¹ The evidence from the architecture does not support any assumption in favour for a clear break between level VIII and VII as stated by some scholars.²⁷² In this period falls also the first expansion of the settlement to the north.

The radical break seems to have occurred between the next two levels, at least to judge from the architectural remains. Here the general outline of the houses changed, the city expanded further, this time to the NW and to the NE and later level VI walls used only occasionally early level VII foundations (squ. D-F 3-4). A further indication for a radical new layout of the city is a change in constructional characteristics of the houses such as deeper foundations and the usage of different building material for the wall foundations. The deeper foundation trenches applied with the beginning of level VI could be one reason for the application of multi-level markings on the pottery fragments, though this is not the only possible explanation.

Only a few clear floors were detected in levels VII, VI and V. Further, the difference in elevation between level VII, VI and V in the NW was not much and the absence of clear floors probably further complicated matters.

2. 4. 4 Levels VI-V

Levels VI and V were closely associated with each other. In no other previous phase obvious repairs or additions could be made out. Also some outlines of level V walls

²⁷¹ Woolley 1938, 154.

²⁷² Saltz 1978, 47. For further reference see Boardman 1999, 135.

were used in the next level. The bad preservation of the remains in the NW part of the mound was possibly caused by the fact that the walls rested on higher ground than the same levels in the south.

No other signs of a clear destruction other than the ash layer related to level VIII could be observed but it is unclear how extensive this destruction was. Based on the available evidence one must be careful to assign the destruction in level VIII (first phase) to any violent external causes. Our information is limited and the damage included almost the whole SE part of the excavated area so that we cannot exclude a belligerent act.

For the examination of the pottery the following main points are important:

1. Finds from levels X and IX could be probably mixed up (see the pottery hoard).
2. Levels X, IX and VIII were clearly recognizable distinct stratigraphic units and the occurrence of a destruction and the identification of floors in the SE together with a usual difference in elevation of 0.3 m between the different levels probably allowed the excavator to assign the finds to specific levels.
3. Level VIII included two phases. A fire destroyed the first phase. The cause of the fire has to remain open at this point.
4. Levels VII, VI and V were confused because of the absence of clear floor levels and the relatively small difference in the elevation between the floors, especially in the NE. The digging of deep foundation trenches that cut through earlier levels undertaken during level VI is another source of mixing up levels and artefacts. These features however, do not apply necessarily to all parts of the settlement and the possibility that some finds could be assigned clearly to certain levels cannot be excluded. Finds from level VI could possibly be easily allocated to the correct stratum in the south since level V was severely destroyed here. Level V could

probably be easier distinguished from level IV than V from VI and VI from level VII.

5. Woolley's method of allocating floors together with the filling material on top of the floors to one level, implies that the date given by the finds associated with the levels must be the *terminus ad or ante quem* for the construction of the floor because the material of the floor is mixed up with the later fillings on top of these floors. At the same time the date of a level provides the *terminus post quem* for the next level sitting on top of it.

Another problem is the contamination of levels through undetected pits and wells. In one instance Woolley admitted that he recognized a well only after he had reached the next level. Further, on the ground plan of level X-VII (pl. 104) two Arab pits/wells are illustrated but they are missing in the upper levels, an indication that they were not detected before the excavator had reached the lowest layers.

2. 5 The Level Marks and Historical Breaks

One of the biggest problems for establishing a chronological framework for Al Mina is the recording method used for the archaeological artefacts during the excavation. The artefacts were assigned to a certain level and in the case of the pottery the fragments bear a level mark. Unfortunately, not all contain such a level mark. About 33 % of the total number of the pottery fragments can be assigned to a particular level (pl. 157 fig. 1). Only for 16 pieces we know the room number (room 8) even though we cannot

assign this room to any particular building.²⁷³ An additional piece bears the mark “room 4” on it. Again it is impossible to assign this room to any building.²⁷⁴

The already limited chronological potential of the finds is further reduced by the fact that a large part of the marked sherds bear double marks on them e.g. VI-VII or V-VI. Some of them even bear marks on them, which cover three periods V-VII.

From this observation arise two questions:

What does the double or triple marking of the sherds mean, and is this double marking in any respect significant for the stratigraphic interpretation of the development of the site's structures?

The double or triple marks have to be related with the unclear stratigraphic relation at some parts of the Tell.²⁷⁵ They certainly cannot be considered as distinct intermediate levels. The majority of the sherds marked with double numbers come perhaps from the NW sector of the Tell where the stratigraphy was confusing.

²⁷³ Kearsley 1995a, 76. She mentions 14 pieces in total. To this I would like to add two more pieces: cat.no. **326**, a flat handle with horizontal strokes on it, probably from a LG kantharos; and cat.no. **303** a wall fragment from a sos-amphora. The room might be identified as room 8 in squ. H8.

²⁷⁴ Ash 1954.278. A wall fragment of a middle wild-goat style (SiAI b-c) closed vessel bears the mark MP 89 J and R 4, presumably from room 4. This room might be identified with room 4 in squ. G7.

²⁷⁵ See Appendix 1 page 19-20.

The results can be summarized as following:

Level	Reliability of context		
X	Mixed with IX?	t.a.q. for IX	t.p.q. for VIII
IX	Mixed with X?	t.a.q. for IX	t.p.q. for VIII
IX-VIII	Mixed with VIII	t.a.q. VIII	t.p.q. for VII
VIII	Clear context	t.a.q. VIII (b)	t.p.q. for VII
VII	Mixed context	t.a.q. for VII	t.p.q. for VI
VII- VI	Mixed context	t.a.q. for VI	t.p.q. for V
VI	Clear context (in the south?)	t.a.q. for VI	t.p.q. for V
V-VI	Mixed context	t.a.q. for V	t.p.q. for IV
V	Clear context (in the south?)	t.a.q. for V	t.p.q. IV

The determination of the end of level VII therefore will be a big problem even more so since the architectural remains as well as their stratification suggest a break between those two levels.

The other major difficulty will be to determine the beginning and duration of level X. Especially for the beginning of the phase clear stratified contexts are missing.

Finally, the question of the historical breaks has to be addressed. Who is right Boardman and Taylor or Saltz? Taking all the parameters together there seems to be rather a break between VII and VI, although at the moment it is not possible to say anything about its duration. Furthermore, the break between VII and VI was not the only one. In fact, there are some indications for an interruption within level VIII though it is unclear how extensive the destruction was. It seems that it affected most of the SE sector (squ. 7-9, G-J). Unfortunately, Woolley did not distinguish these two phases and so it is impossible to divide the material between those two sub-levels.

Saltz suggested that a break between VIII and VII occurred and she connected it with Tiglath-pileser's campaign against Unqi in 738 BC.²⁷⁶ The conquest of Unqi with the capital of Kinalia (Kunulua) was an important event probably in the year 738 BC according to the Calah Annals.²⁷⁷ It is not always necessary to assume violent destructions in every small settlement of Unqi but the record clearly notes "I [subdued] Unqi to its full extent...".²⁷⁸ Al Mina certainly belonged to Unqi and some indications for destruction during level VIII could be noticed.²⁷⁹ It does not seem impossible to connect the subjugation of Unqi with the signs of destruction at Al Mina. However, this occurred at the end of the supposedly first phase of level VIII and not at the end of the last phase so we cannot relate the end of level VIII with the campaign of Tiglath-Pileser III as Saltz did.²⁸⁰ The only artefact of level VIII, which can be clearly connected with the last stage before the destruction, is the almost complete preserved Cypriot or local Cypriotizing krater found between two layers of cobbled floor.²⁸¹ Nevertheless, if the signs for a fire could be related with the Assyrian campaign in 738 BC than it is important since it would provide us with a firmly attached *terminus post quem* for the lay out of the second phase of level VIII and in consequence for the erection of level VII.

For the time being the cause for the new layout of the town in level VII has to remain open. There is no evidence so far that would connect the layout of level VII with Assyrian actions against rebels in Syria around 720 BC.²⁸² Upheavals in Que (Cilicia) that lead to the destruction of Tarsus in 696 BC could have possibly affected Al Mina

²⁷⁶ Saltz 1978, 49.

²⁷⁷ Tadmor 2007, 56-59.

²⁷⁸ Tadmor 2007, 59.

²⁷⁹ Ah-ta-a as the Assyrian name for Al Mina see chapter III 1. 2. Tadmor 2007, 104-105.

²⁸⁰ Saltz 1978, 43-49.

²⁸¹ Woolley 1938, 17 fig. 5. The krater is now in the museum of Damascus.

²⁸² Boardman 1964, 44. Boardman noticed extensive repairs that marked the transition between level VIII and VII, something, which cannot be deduced from Woolley's reports or field notes.

once more as put forward by Boardman but it cannot be ruled out that those upheavals might be responsible for the end of level VIII and the new layout of level VII slightly later.²⁸³

3. The Greek Pottery from Al Mina (Levels X-V)

3.1 Introduction

Before we can embark upon questions concerning the cultural history, the historical and chronological frameworks, in which ancient cultures evolve, deserve our attention.²⁸⁴ In order to understand the full significance of certain socio-cultural and economical developments, it is necessary to place them into their historical and chronological context as rightly emphasized by Fantalkin.²⁸⁵ Therefore, the establishment of the relative as well as the absolute chronological sequences of any archaeological site is of primary importance not only for the interpretation of historical events and their regional impacts but also as an important precondition for any further examination of socio-cultural phenomena.

Finally, the local chronology of Al Mina is also significant for the synchronization of the North Syrian chronology. Even after a long period of intensive excavations in the Levant, Al Mina remains the only site with such a high quantity of Greek imports of Geometric and early archaic date. Al Mina offers the unique opportunity to study assemblages that contain comparatively high numbers of Greek, Cypriot and Phoenician pottery.

²⁸³ Boardman 1964, 46.

²⁸⁴ Morris 2000,3-9.

²⁸⁵ Fantalkin 2006, 199-200.

3. 2 Previous Studies

In the case of Al Mina, numerous scholars suggested slightly different chronological interpretations for the excavated remains of the site so that another attempt to establish a chronological sequence seems to be necessary (see fig. 3).²⁸⁶

As already outlined, the most complex and debated issues are its foundation date and the date that marks the end of level VII and the beginning of level VI.

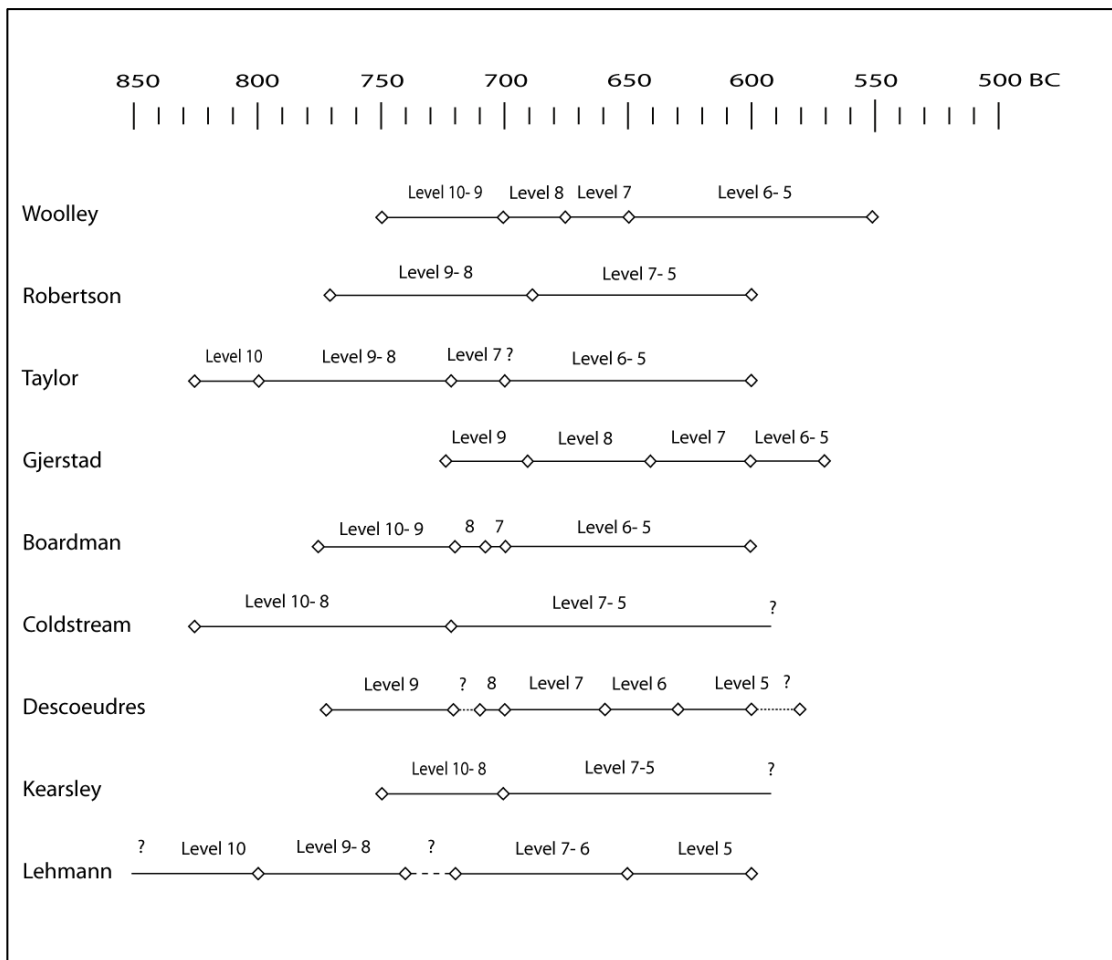


Fig. 3

In general, there are three main interpretations regarding the foundation of the site.²⁸⁷

²⁸⁶ This summary only includes the most important suggestions by authors who worked with material from Al Mina: Woolley 1938, 16-18; Robertson 1940, 21; Taylor 1959, 91-92; Gjerstad 1974, 121-122; Boardman 2002, 315; Coldstream GGP, 312- 316; Descoedres 1978, 15-17; Kearsley 1995a, 67-68; Lehmann 2005, 82; Lehmann 2008, 246 Tab. 2.

1. The foundation of the site goes back into the second half of the 9th century BC.
2. The port was founded in the first half of the 8th century BC, prior to the foundation of Greek colonies in the West.
3. The port was founded after 750 BC, at the same time or slightly later than the first trading station at Pithekoussai, in which Greeks also participated.

Previous detailed studies of the pottery from Al Mina focussed on the earliest levels (levels X-VIII).²⁸⁸ These earlier studies are integrated in the present discussion and are enriched with new evidence from my own research. The additional information provided by the hitherto unpublished fragments from Al Mina increases the amount of dated pottery from the site and therefore provides a better understanding of the early assemblages from levels X-VIII. The majority of the pottery from levels VII-V has not been discussed in detail at all and will shed more light on the site's history during the 7th BC.

A re-evaluation of the earliest levels (X-VIII) is not only necessary because of the new evidence provided here. Additionally, recent publications that are concerned with the pottery from Euboea and Asia Minor provided new evidence that may have implications on the chronology of Al Mina. The latest publication of the Swiss archaeological school on Euboean pottery offered a detailed account of the stylistic development of Eretrian pottery.²⁸⁹ Even more important, and of great significance for the purposes of the present thesis concerning Al Mina's chronology, are the conclusions reached with

²⁸⁷ Descoedres 2002, 61-69 provides a useful summary of the conclusions reached until 2001.

²⁸⁸ Especially J. Boardman has written a vast numbers of articles about Al Mina that all had a major impact on the debate. For a detailed discussion about previous work see chapter I.

²⁸⁹ Eretria XX.

regards to the relative and absolute chronology.²⁹⁰ The new proposed relative and absolute classification of Eretrian pottery is slightly different to what was put forward by scholars who previously studied Euboean pottery from Chalcis, Lefkandi and Eretria.²⁹¹ The relative and absolute sequences of all of these studies are primarily based on stylistic comparisons with Attic and Corinthian pottery.²⁹² This is also true for the latest publication from Eretria that has the additional weakness that the published material mainly derives from pits while material from floors of succeeding layers and fillings, is missing.²⁹³ It is always hard to determine the time interval of the deposits of artefacts in wells and pits.²⁹⁴ Furthermore, the stratigraphical relationship of different pits is often unclear.²⁹⁵ But it is exactly the latter factor that is decisive when it comes to the establishment of a relative sequence, and which is why material from a settlement context would be so important.²⁹⁶

The other site on Euboea that might fill in this methodological gap is Lefkandi. There, a local sequence exists that is based on material from the settlement with clear distinguishable phases.²⁹⁷ The only problem with the evidence from Lefkandi is that the published pottery cannot be considered as a large sample and any information regarding the quantity of certain vessel types is missing.²⁹⁸ The information provided by

²⁹⁰ Eretria XX, 108-111.

²⁹¹ See for instance the different chronology concerning the appearance of the bichrome type skyphos: Lefkandi I, 66; Coldstream GGP, Suppl. 464; Coldstream 2003, 194; For Chalcis see Andreiomenou 1984; Andreiomenou 1985; Stratified material from Eretria see Descoedres 1976, 13- 58.

²⁹² Rightly emphasized by Coldstream GGP, Suppl. 464; See also Andreiomenou 1984, 37 no. 3.

²⁹³ Eretria XX, 20 (nine pits and one well); The corpus of material is further enriched by the publication of the Geometric necropoleis of Eretria: Eretria XVII.

²⁹⁴ Also noted by the authors of the latest Eretria volume: Eretria XX, 64 no. 258.

²⁹⁵ This is explicitly mentioned in the case of the deposits from the sanctuary of Apollo at Eretrian in Eretria XX, 39-40. One has to concede that the choice for the selection of the material was made according to the quality of the preservation of the pottery and according to the quality of the stratigraphical record: Eretria XX, 39.

²⁹⁶ Material from stratified succeeding layers from the West Gate quarter was published by Descoedres in *Eretria V*.

²⁹⁷ Lefkandi I, 58- 59. 73- 74.

²⁹⁸ The new excavation undertaken by I. S. Lemos on the Xeropolis promontory since 2003 will certainly add new important information concerning the chronological and stylistic development of Euboean

Andreiomenou regarding Chalcis is not helpful either for the relative and absolute chronology of Euboean pottery since the material comes mainly from one closed deposit and otherwise from *loci* where a clear stratigraphy is missing.²⁹⁹

3.3 Presentation of the Material

Since material from levels X-VIII has already been partly discussed, the discussion of these levels is provided in the Appendix. The hitherto unpublished fragments of levels X-VIII are discussed thoroughly, but given the required word limit, such an analysis cannot be included in the main part of the thesis. For levels X-VIII only a short summary is given. For more detailed information the reader is asked to consult the Appendix, which includes references to plates and catalogue numbers.

A thorough discussion of the 7th century BC (levels VII-V) follows the summary of levels X-VIII. The material of the 7th century BC consists of a large corpus of unpublished material, which is discussed here for the first time.

The dating of the 7th century levels (VII-V) rests on the chronology of the associated Greek pottery, which is mainly of East Greek provenance. New studies dealing with the stylistic development and the chronology of East Greek pottery are particularly important in this respect. The newly established chronologies of the bird kotyle, bird bowls and the cups with everted rim – all types, which are found in considerable numbers among the marked fragments – may offer a more precise chronological picture.³⁰⁰ A newly suggested chronology for the Wild Goat style class may also have

pottery production. It will also provide a detailed account of the quantitative relation of the different pottery shapes and types.

²⁹⁹ Andreiomenou 1984, 37; Lefkandi I, 76 no. 101.

³⁰⁰ Kerschner 1995; Kerschner, 1997, 193-94; Töpferzentren; Schlotzhauer 2000.

its bearings on the chronology of Al Mina.³⁰¹ The latest publication of the pottery from the Athena sanctuary of Assesos, which has been destroyed by the Lydian king Alyattes, is another contribution that has to be considered in conjunction with the dating of the levels VI and V.³⁰² Finally, the recent publication from the 604 BC destruction level from Ashkelon provides a useful fixed date for the absolute chronology of East Greek pottery.³⁰³

Terminology, abbreviations and dating refer to the system used by Coldstream.³⁰⁴ Given that the majority of the imported fragments in the early levels (X-VIII/VII) come from Euboea, the present study follows the stylistic chronological terms (LG I-II), which refer to the Euboean sequences as summarized by the latest publication of pottery from Eretria.³⁰⁵ Any departing from this chronology or terminology will be mentioned in the text.

3. 4 Level X, IX

Level X contains only eight fragments: five skyphoi (**1, 3-6**), one drinking vessel (**2**), one krater (**7**) and one bowl pyxis (**8**). Among the skyphoi is one psc-skyphos (**3**). Seven fragments come from Euboea. The pieces date from SPG III to LG II. The psc-skyphos **3** and the skyphos **1** are the only fragments, which perhaps still belong to the first half of the 8th century BC.³⁰⁶ The rest can be dated already to the LG period.

³⁰¹ See Kerschner and Schlotzhauer 2005.

³⁰² Kalaitzoglou 2008.

³⁰³ Ashkelon 3.

³⁰⁴ Coldstream GGP, 4-5. 330.

³⁰⁵ Eretria XX, 111.

³⁰⁶ For a brief discussion of the problems concerning the date of the psc-skyphos see the Appendix 2, level X.

What is striking about level IX is the number of 22 sherds (18 with an additional 4 pieces that are doubtful) that can be dated according to stylistic criteria to LG II (see e.g. pl. 8. **45, 46**). Five pieces may belong to LG I (**11, 25, 31, 107, 111**). The majority can only be dated to the LG period in general. Interestingly, early fragments from the beginning of LG or slightly earlier are totally lacking.³⁰⁷ Three pieces (**51, 97-98**) perhaps date to the end of MG II or the beginning of LG (e.g. pl. 9, **51**).

Al Mina ware fragments appear in considerable numbers with a narrow range of patterns. Dominating are scribble decoration (e.g. pl. 4. **28, 5, 29**) and linear patterns (e.g. pl. 9. **57, 10, 61**).

Euboean and Corinthian kotylai can be found among level IX. The best preserved example is the Euboean kotyle **31** with vestigial lip dated to the LG I period (pl. 5).

Of further interest because absent in the rest of the East are fragments of the so-called Phaleron cups (pl. 6. **35, 9, 54**). They are of the Sub-Geometric type dated to the late 8th to early 7th centuries BC.³⁰⁸

The four fragments from Ionian cups with everted rim (**78-81**) of the second half of the 7th century can only be interpreted as residual (pl. 12). This is because contexts in Ionia suggest that this shape did not appear before the second half of the 7th century BC.³⁰⁹ Their appearance in the level IX assemblage seems to confirm the view expressed in chapter III 2. 4 that level IX is probably mixed up with the succeeding levels and cannot

³⁰⁷ Fragments from the first half of the 8th century BC can be found among material marked with levels IX-VIII (see below).

³⁰⁸ See Agora VIII, 191; Delos XV, pl. 31. A 1. For the discussion and further references see the Appendix 2, level IX (cups).

³⁰⁹ Kerschner 1997, 178-182; Schlotzhauer 2000, 413- 414. 411 fig. 298.

be used as a secure context.³¹⁰ Pits or wells that were not discovered during the excavation might be another explanation for the appearance of the four cups.³¹¹ Apart from the four sherds of cups with everted rim, the bird jugs are the only imports from East Greece among the level IX material (82, 113-114). It is hard to understand their appearances in level IX given the fact that the East Greek cup fragments are probable residual. Even more so since the majority of marked fragments of these jugs all come from later levels.³¹² It is hard to assess the significance of such an observation when the majority of jug imports that can be dated from the second half of the 8th to the middle of the 7th century BC are, in fact, unmarked.

Nonetheless, since they appear first at the end of the late 8th century BC, it is possible to interpret them as part of the original assemblage and not as residual like the cups. If one leaves aside those four sherds of cups with everted rim, then the jugs have to be considered as the latest imports found in level IX. As outlined in the Appendix they were produced between the end of the 8th century until ca. 640 BC according to finds from Samos.³¹³ The earliest fragments from level IX belong to LG I phase, while the majority can be placed between LG I-II.

The problem is that we cannot say where exactly the fragments are coming from. Sherds with a level IX- mark theoretically could come from a level IX floor surface, from levelling material from below the floors, or even from later floor fillings of the succeeding phase. This has consequences for the chronological interpretation. If we assume that the whole assemblage comes from the lowest and therefore earliest

³¹⁰ All other marked fragments of cups with everted rim are from level VII or later. The only way that these fragments came to level IX might be through a later (younger) pit, or a massive recirculation of earth.

³¹¹ See Appendix 1, level IX.

³¹² The majority comes from level VII-VI. For the discussion see chapter III 3. 9. 3.

³¹³ See Appendix 2, level IX (jugs).

stratigraphical units of level IX and was not put together with the levelling material of the succeeding level, then 710-640 BC has to be considered as the *terminus post quem* for the layout of level IX. It would also be arguable to interpret the latest sherds coming from the end of the use of the level IX buildings because it is not likely that any material from the period of level IX houses survived. In this case 750-700 BC has to be taken as the time horizon when level IX was laid out. Assuming that the East Greek jug fragments are from the latest use, or possibly even from the levelling material of the next level, 710-640 BC has to be considered as the time span during which level IX came to an end and a new level was built. Strictly speaking, all that can be said after scrutinizing the evidence from level IX is that this level was laid out at the same time or before 710-640 BC.³¹⁴ Also relevant in this respect seems to be the absence of the Euboean bichrome style imports in level IX. This could only be accidental but it has to be outlined that Euboean bichrome style skyphoi were found among the imports from Al Mina (see Appendix level VIII).³¹⁵ Their absence in earlier levels could be seen as an indication that level IX might have ended before this class came into fashion on Euboea.

While Descoedres thought that Euboean bichrome skyphoi belong to the beginning of LG, Boardman places their first appearance during LG II, something that is to some extent confirmed by the results from the recent publication of LG pottery from Eretria. The only difference is that the authors consider this type as marking the beginning of LG II (at around 735 BC).³¹⁶ In this respect the appearance of LG II fragments is interesting. If one would like to consider the absence of conical bichrome skyphoi as significant for the absolute date of level IX, one has to conclude that although the LG II

³¹⁴ This is only true if my interpretation of the excavation process as outlined in chapter III 2 is correct, and the assemblage has to be understood as the *terminus ante quem* for the layout of the level IX walls.

³¹⁵ See e.g. cat.no. 271. Some fragments are already published by Boardman 1957, pl. 2 (a), a-d. no. a comes from level V and no. c from level VII; bichrome style skyphoi are otherwise very rare. See Eretria XX, 83 no. 431.

³¹⁶ Descoedres 1976, 45; Lefkandi I, 73; Eretria XX, 109.

style was already in fashion in Level IX, the bichrome skyphos had not been introduced yet. The same may be said about the soldier bird kotylai, which are also absent in level IX but which are found in level VIII.³¹⁷ Therefore, in the case of the Euboean bichrome style skyphos the evidence seems to support those who would like to see the introduction of the bichrome skyphos not at the beginning of LG II but slightly later.

All these conclusions rest on unstable ground, because it is impossible to determine precisely enough the origin of each fragment in order to relate it to each other and to the architectural- and floor remains. Another problem is that the observations made above rest on the theoretical assumption that what is presented here can be considered as the complete assemblage of level IX. Unfortunately, this is probably not the case. The high number of marked level IX-VIII pieces highlights this problem.

The rim fragments of cups with everted rim as well as the high number of LG II sherds also draw attention to the problem of using level IX as a fixed secure chronological reference. On the other hand, if level VIII really suffered a destruction under the Assyrian conquest of 738 BC, then the level IX assemblage could also be interpreted differently. In this case the high number of LG II fragments in level IX could probably be an indication that the beginning of LG II on Euboea has to be raised to at least 738 BC. A similar conclusion could be drawn from the East Greek jugs. While the lower end of this class (640 BC) is marked by the building of the south stoa in the Heraion on Samos, secure absolute dates for the invention of this jug type are missing and it is unclear on what evidence Walter's assumptions are based.³¹⁸ But before any

³¹⁷ See cat.no. 275.

³¹⁸ Important in this respect is the dating of the well G that was dug before 640/30 BC, the time of the building of the south stoa and according to Walter very soon after the LG flooding: Samos V, 86. Unclear however remains the dating of the two flooding layers that are considered to belong to the late 8th century and to around 670 BC: Walter 1957, 38-39. Another weakness is that it is not clear why the well G could

conclusions about the absolute chronology are drawn, the succeeding level phases have to be analysed first.

3. 5 Assemblage VIII- IX

The assemblage is not much different than level IX. It contains skyphoi of SPG III-LG I date (114-135), pieces date to the LG period (136-171) and LG II fragments (172-186). Among the fragments one can find Euboean imports, (e.g. pl. 17. 173, 175, 179, 180), Al Mina ware (pl. 15. 158) and perhaps East Greek LG to Sub-Geometric skyphoi (pl. 18. 185). Another category present among the assemblage are Euboean kotylai (pl. 18. 193. 20. 192). 209 was assigned to a tankard or to a hydria by Coldstream and Kearsley.³¹⁹ The triangular rim is typical for Euboean cut-away neck jugs and the row of dancers finds a close parallel on such a jug from Eretria.³²⁰ This piece therefore rather comes from a cut-away neck jug of Euboean origin.

The group marked with level VIII-IX contains the earliest fragments of Greek imports from Al Mina (pl. 13. 114-115).³²¹ They are of Cycladic provenance (perhaps from Naxos) and date to the end of the 9th century BC. Whether they belong to level VIII or IX is hard to assess. Neither of the two options can be rejected. No matter in which level they had been deposited, they confirm that the first Greek imports must have reached Al Mina before 750 BC. Only if we assume that they were in use for over 50 years before

only have been dug soon after the flooding and not much later and why well G was built 20 years later than the well F that is dated to 730-640 BC. Clearly the LG and early archaic flooding layers were dated according to the material found in them and cannot be used as clear chronological reference as stated in Walter 1957, 38. Date of well G see also Vierneisel and Walter 1958/59, 18.

³¹⁹ Kearsley 1995a, 63 no. 250; Coldstream GGP, 313 no. 2 (tankard); Coldstream 2010, 47 no. 143 (Euboean hydria).

³²⁰ Eretria XX, pl. 72, 351.

³²¹ Since the pieces do not join, they are treated here as two single pieces. Coldstream and Kearsley suggest that they belong to the same vessel. Coldstream 2010, no. 165; Kearsley 1995a, 60-61 no. 247.

they were shipped and finally got broken at Al Mina, one can reject the assumption that Al Mina was founded before 750 BC.³²² A lifespan of 50 years seems unlikely for cups used daily for different purposes. There are no data for ceramic “survivorship” in ancient societies. Ethnoarchaeological surveys carried out in primarily Latin America suggest that the longevity of comparable drinking vessels and food bowls usually does not exceed three years.³²³ Only larger vessels with thicker walls, less frequently used, have a longer lifetime. Large cooking vessels e.g. have a life expectancy of around 30 years.³²⁴ Even cooking vessels with thick walls used on a day-to-day basis have only a limited lifetime and from this one can assume that our skyphoi probably did not last for more than a few years.³²⁵

In a scenario where Al Mina was founded after 750 BC, the appearance of the other fragments (16 pieces in total, including the psc-skyphoi, one krater and one amphora) that can be dated to MG II/SPG III-LG I, and which might therefore probably also belong to the period before 750 BC, would also be hard to explain. A foundation date before 750 BC is also confirmed by the preliminary analysis of the local pottery from Al Mina.³²⁶

The majority of the assemblage belongs to the second half of the 8th century BC but there are also some pieces that are of Sub-Geometric or orientalizing character including one East Greek bird kotyle (pl. 20. **195**) and several fragments of closed vessels. One piece is of East Greek origin, perhaps from Chios (e.g. pl. 20. **206**). Apart from jugs,

³²² Only if we take the lowest possible date for the two earliest fragments (around 800 BC), the lifespan must amount to 50 years. If one considers the highest date for the pieces the lifespan would come to over 70.

³²³ DeBoer and Lathrap 1979, 126 fig. 4.5. 127: For a general discussion involved with longevity analysis see Rice 1987, 296-299.

³²⁴ DeBoer and Lathrap 1979, 126-127; Hildebrand and Hagstrum 1999, 38.

³²⁵ Hildebrand and Hagstrum 1999, 38 tab. 6.

³²⁶ Lehmann 2005, 82 with fig. 18.

also one neck-handle amphora is among the pieces labelled VIII-IX (205). It probably belongs to the same vessel as 299 from level VIII.

Although it remains open to which level these fragments belong, it is likely that they come from level VIII. The assemblage also contained a considerable number of kraters (196-204). One piece was assigned to the Cesnola workshop (199).³²⁷ Further fragments from the Cesnola workshop derive from level VIII (290-292). The workshop exported its products also to Zagora on Andros, Crete (Vrokastro, Chania), Cyprus (Kourion, Amathus), Delos, Samos and Italy (Pithekoussai), and it is not surprising that some pieces also appeared at Al Mina.³²⁸

Imports from the Cesnola workshop cover the whole second half of the 8th century BC and it seems that this workshop exported pottery during its whole existence to Al Mina. Further, all fragments that can be assigned to the Cesnola workshop, belong to large kraters. Other shapes like jugs are missing or have not been identified. Although it is hard to say whether the workshop only exported kraters – most likely many skyphoi fragments found at Al Mina came from the same workshop – it seems that the products from this workshop were much appreciated among traders and consumers.

Interestingly, the earliest fragments all derive from the Cycladic islands. Despite the fact that the pieces marked VIII-IX are not helpful in establishing an absolute chronology or to define the end of level VIII or the beginning of level IX, they suggest that the earliest activities at the site go back to the late 9th century BC. It is noteworthy that only at the

³²⁷ Coldstream 2010, 2010, 47 no. 145.

³²⁸ Coldstream 1971, 8-9; Gjerstad 1977, 29 cat.no. 91-92. pl. 8-9. For a list of pieces associated with the Cesnola workshop see Lefkandi I, 74-75.

end of MG II other shapes than skyphoi were exported to Al Mina. Earlier examples of kraters or oinochoai that antedate 750 BC are missing.

3. 6 Level VIII

A total of 121 fragments belong to level VIII including 19 non-diagnostic pieces.³²⁹ The number of level VIII fragments is therefore considerably high in comparison to earlier levels (IX and VIII-IX) despite previous observations made by Woolley that during level VIII the Greek imports decreased and only Cypriot sherds were recovered.³³⁰

SPG III-LG I psc-skyphoi (**212-217**), and other skyphoi that date to the end of MG II/ beginning of LG I can still be found in Level VIII. The majority of the fragments from level VIII belong to the LG period though. What is striking about level VIII in comparison to previous levels, is the increasing number of LG II sherds together with a few pieces of East Greek provenance that date from the second half of the 8th to the first half of the 7th century BC.

Several different skyphoi categories are present in level VIII. One can find bird skyphoi (**238-240**) from Chios and the Cyclades. Further, the monochrome skyphos **250** is a rare class at Al Mina (pl. 25). Al Mina ware fragments appear also in level VIII (**254-260**). **260** is an exceptional piece that was only produced in small numbers judging from its distribution (pl. 32).³³¹ Al Mina ware skyphoi are with eight fragments well represented

³²⁹ The catalogue contains only 119 fragments. Four pieces have been excluded because they are too fragmented. They are included in the statistical analysis.

³³⁰ Woolley 1938, 154.

³³¹ For the type see Appendix 2, 4. 1. This “delicate” Al Mina ware class is further discussed in level VII-VIII.

in level VIII and demonstrate that the production of this class continued into the last quarter of the 8th and possibly even into the early 7th century BC.

Other rare pieces found in level VIII are the Euboean skyphos **268** (pl. 27) and a possible tankard fragment **279** (pl. 29). Important for the chronology is the soldier bird kotyle fragment **275** (pl. 32). This type appears for the first time at Al Mina in level VIII.³³² Equally important are the East Greek imports **281**, **282** (pl. 32. 33). Both are types that appear for the first time around 700 BC. The jug fragment **309** decorated with an open cable pattern is another piece that does not appear before the 7th century BC (pl. 34).

Level VIII revealed the earliest examples of Greek transport amphorae (pl. 34. **301**. pl. 30. **302**).³³³ The sos-amphora is a category of import that was absent in previous levels. The transport amphorae are important evidence for the character of the trade between Greece and the Near East although the few numbers are hard to interpret. They can either be seen as evidence that agrarian products were only of minor importance or they are evidence for the selective recovery and documentation of finds from Al Mina. Given the fact that the sos-amphora is usually easy to identify due to its decoration on the neck and their painted body, there is no point to suggest that Woolley would have not been able to recognize the class and hence discarded the majority of it. As already pointed out, it was in his interest to collect as much as Greek pottery available in order to demonstrate the links between the Aegean and the Near East.

³³² For a discussion of this type see Appendix 2, 4. 1.

³³³ The assignment of **303** to level VIII is based on the fact that the piece is marked as coming from room 8. All other pieces with similar room number were all marked as coming from level VIII.

Imports from Greece outnumber all other categories and East Greek fabrics only amount to a few pieces. Interesting for the chronology of the site is the growing number of fragments that belong to the end of the 8th- or even to the 7th century BC. The appearance of the conical bichrome skyphos (pl. 26. **269**. 32. **271**) and the soldier bird kotyle is also significant. The first appearance of the soldier bird kotyle is open to discussion and it is unclear whether the type belongs to the third or the fourth quarter of the 8th century BC.³³⁴ For the bichrome skyphos the situation is slightly different. There is no evidence at the moment that would put the bichrome skyphos before 735 BC. Open however, is the question whether this type appears already at the beginning of LG II or slightly later. The absence of this type in level IX might be an indication that level IX came to an end before this type was introduced in Euboea.

Fragments that date to LG II period are also well represented in Level VIII so that a LG II date for level VIII seems likely (e.g. pl. 27. **273**. 32. **263**). The open question is when does level VIII end? The bird kotyle, the zigzag kotyle as well as the closed jug fragment with orientalisising decoration all belong to the period after 700 BC. The two dinoi (**295-296**) of East Greek provenance are most likely also a 7th century BC date (pl. 29. 33). Although they are not the earliest East Greek imports that were shipped to Al Mina – East Greek imports were also found in level IX³³⁵ – they are the first fragments that can be dated certainly to after 700 BC.

Like in previous levels it cannot be ruled out that material from the upper layers of level VIII and the lowest layers of level VII were mixed up and ended up in level VIII. Nevertheless, if the latest fragments give the *terminus post quem* for the layout of level

³³⁴ See discussion in Appendix 2, 4. 1.

³³⁵ One jug fragment of LG- Sub-Geometric date. The other three fragments of an Ionian cup dating to the second half of the 7th century BC were certainly residual.

VIII, then the East Greek imports of the 7th century BC are the defining pieces. Since level VIII, like the previous levels, cannot be considered as one layer on which the foundations of level VIII were set upon, we have to assume that some material derives from the time after the layout of the building or even from the end of the use of the houses. The material dated to the 7th century may therefore be interpreted as coming from the latest phase of level VIII and these fragments define the time when level VIII went finally out of use. The problem with such an approach is that the upper limit, the date of the erection of the houses, might be drawn completely arbitrarily. What can be ruled out is certainly an MG II/SPG III- LG I date for the erection of the houses. Already level IX contained later material. In fact, the assemblage from level IX even included LG II material (at least 14 pieces). This is an argument to conclude that the foundations of level VIII must have been erected after the beginning of LG II (735 BC). If one accepts that the conical bichrome skyphos appeared slightly later than the beginning of LG II, one could argue that level IX came to an end after 735 BC, but before the introduction of the bichrome skyphos and the soldier bird kotyle on Euboea.³³⁶ On the other hand, there remains the theoretical option that the bichrome skyphos comes from the latest use-phase of the level VIII houses, something we cannot exclude, even more so since the bichrome type was probably produced until the end of the 8th century BC.³³⁷ Considering the fact that already level IX contained LG II fragments, I think that level VIII followed level IX without any interruption. Further, level IX does not contain any material from the 7th century BC and therefore, most likely, ended before 700 BC. Level VIII does not contain any SiA Ia fragments (phase

³³⁶ This is only true if one accepts the absolute sequence for the bichrome skyphos proposed by Boardman (Lefkandi I, 73-74) and if the soldier bird kotylai belong to the phase after 725 BC as proposed in Eretria XX, 110-111.

³³⁷ The question, when this type went finally out of use seems to be still unsolved. See Eretria XX, 83 with no. 432. The correlation of this type with early 7th century material from East Greek in level VIII suggest that the type may also go down to the early 7th century BC.

that starts at 670 BC) and therefore this level came to an end before the beginning of the second quarter of the 7th century BC.

Given the relatively high number of 7th century imports in level VIII and the fact that level VIII also contained fragments that are of Sub-Geometric character, it seems that level VIII continued into the 7th century BC and came to an end at around 675 BC by the latest.

Even though one has to put a big question mark behind all these assumptions, it became clear that the composition of the assemblages X-VIII changed, which allows us to establish a relative sequence. No matter which absolute date one would like to assign to the bichrome skyphos and the soldier bird kotyle, the evidence from Al Mina indicates that both types were produced at the same time.

3. 7 Level VII-VIII

Level VII-VIII contains only 15 fragments. Three pieces deserved special attention.³³⁸ Two of them (336-337) belong to the Al Mina ware and are unique in their fine decoration and in their craftsmanship (pl. 35). The application of a fine white slip, which is only applied on the decoration zone, is limited to a few fragments and suggests one common workshop.³³⁹ Pieces of this workshop have been found only at Sukas and

³³⁸ For a discussion of the other pieces see Appendix 2, 5.

³³⁹ See also cat.no. 260.

in few numbers on Cyprus.³⁴⁰ **336** is only partly preserved but a sketch in the pdl from the year 1937 illustrates how the piece looked like (see fig. 4).³⁴¹

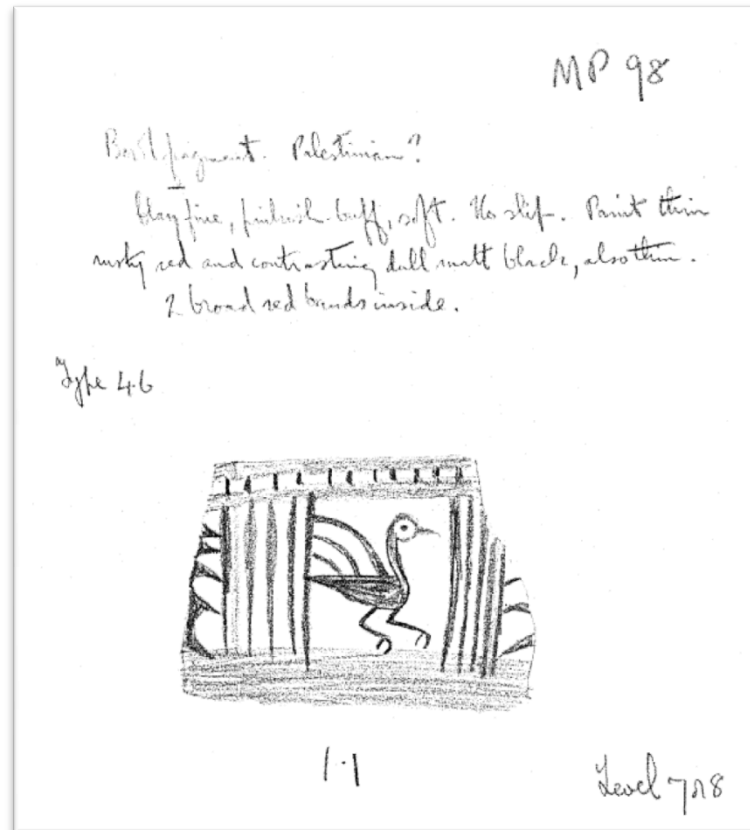


Fig. 4 Fragment 336, inventory no. MP 98, Woolley's notes 1937

The last piece mentioned here briefly is the kotyle **341**. It is an Euboean imitation of a Corinthian soldier bird kotyle (pl. 37).³⁴² **341** is unique since it belongs to a rare type where soldier birds and solid rays are combined. As already stated, rays do not appear before the introduction of EPC. **341** confirms that the soldier bird kotyle of Euboean manufacture belongs to the end of the 8th century BC unless one would like to put the introduction of the solid rays on Corinthian vessels before 725 BC, which, according to the present evidence, seems to be unlikely.

³⁴⁰ Calvet and Yon 1977, pl. 4; Coldstream 1979, 263 no. 11 pl. 31. 1-2. 5-6; Plough 1973, pl. 2. 44.

³⁴¹ See also Robertson 1940, 19 fig. 8. a, where the piece was still unbroken. The whereabouts of the other fragments are unknown.

³⁴² See discussion in Appendix 2, 5.

3. 8 Level VII

Fragments from level VII are confined to 32 pieces. Despite their low amount, fragments marked only with “7” are crucial to determine the lower end of the level since in the case of the assemblage VI-VII it has to remain open whether the fragments belong already to VI or still go with VII.

Nine fragments come from drinking vessels (skyphoi, kotylai, mugs and bowls). One fragment might belong to a plate, although one cannot be sure due to the preservation of the piece. Only one dinos derives from level VII. The rest of the 21 pieces belong to closed vessels, mostly jugs and a few amphorae/hydriai.

3. 8. 1 Open Shapes

Euboean skyphoi and Euboean kotylai can still be found in level VII (**347-348. 351-351**). **347-348** are of the same shape, fabric and bear similar decoration on the rim. They are of LG II date and probably belong to the same vessel although the numbers of the reserved lines on the interior are different and both fragments do not join. While **347** (pl. 38) is marked only with the inventory no. MP 91, **348** bears only the mark “R 5”, which is probably the room number where the piece was found.³⁴³ In Woolley’s notes, under the entry MP 91, a skyphos, which looks exactly as **348**, can be found. It is recorded as coming from R 5 and derives from level VII. It seems reasonable therefore, to assign **348** and **347** to level VII, although one cannot rule out that **347** was marked wrongly as MP 91 given the similarity of the shape and decoration.

³⁴³ In Kearsley 1995a, no. 248 the piece is therefore marked as “level unknown”.

Another skyphos, that deserves attention, and which is recorded in Woolley' notes under MP 181, is **349** (pl. 38). Boardman published it in 1959 without a level number.³⁴⁴ With the help of the field notes it is possible to assign it to level VII. The sherd itself belongs to the bichrome Al Mina ware. The decoration zone bears groups of vertical scribble lines in black paint while the horizontal bands are in red. Interestingly, the lower part of the body is painted with one broad band like on **336** and **337** from level VII-VIII. **349** bears the same decoration as **337**, the only difference is that on **349** the slip is applied on the whole surface, on the out- and inside, while on **337** the slip is only confined to the decoration zone and missing on the interior. Woolley stated in his notes that **349** and **336** have the same fabric.

Another remarkable difference is that the slip was also applied on the interior even though the inner surface was also fully painted. This is a technical detail that is usually not found among the Al Mina ware, where the category, which is fully painted on the inside, does not bear a slip underneath the paint. An explanation for this phenomenon might be that the potter originally wanted to decorate the interior with encircling bands but finally decided to paint the interior. Another reason could be that the workshop, which produced **349**, applied the slip not with a brush but used to dip the whole vessel into the slip. This would be a departure from standard Cypriot- and Greek technique where the slip is usually applied with a brush and where the interior underneath the paint is not slipped.

Problematical for the chronology is **354** (pl. 38). It is an Ionian bowl, which is decorated with groups of triple encircling bands. It is of East Greek origin and partly

³⁴⁴ Boardman 1959, no. 23.

contemporary to the last bird bowl types. They were exported to Al Mina in considerable numbers. Their production does not start before the last quarter of the 7th century BC (at around 620 BC) and lasts until the beginning of the 6th century BC.³⁴⁵ The bowl stands out from the majority of the other finds from the same level, which mostly belong to the first half of the 7th or around 650-630 BC.

353 is a unique piece among the imports from Al Mina (pl. 38). It belongs to a type of cup with flat base, vertical strap handle and a straight wall which is usually fully painted.³⁴⁶ Later, reserved bands are added on the rim and at the base and the wall is more flaring.³⁴⁷ Our example is decorated with a hatched battlement that covers only a narrow zone below the rim. This type of cup is absent in level X-VIII and the majority of cups, which are all of the later type with flaring concave wall, come from level VI-VII. Decorated pieces are rare but not uncommon as demonstrated by finds from Samos.³⁴⁸ The shape and the decoration of **353** indicate that it belongs to the last quarter of the 8th- or early 7th century BC.

One skyphos, not included in the catalogue because it is in the Antakya museum on display, is a monochrome skyphos. Judging from the fabric and the paint it is of Euboean manufacture. It is one of few completely preserved examples from Al Mina. It is marked with the inventory number MN 253 and in addition it bears the level number VII on it.³⁴⁹ The profile seems to be similar to LG II examples from Euboea.³⁵⁰

³⁴⁵ Kerschner 1997, 190-191; Kerschner 2002, 71. At Emporio all bowls with groups of lines derive from period IV (630-600 BC): *Emporio*, 133-132 pl. 43. 450-454.

³⁴⁶ Kopcke 1968, pl. 104. 1.

³⁴⁷ Kerschner 1999, 24. See also the discussion of one handle caps in chapter 3. 1. 9 (level VI-VII).

³⁴⁸ Samos V, pl. 83. 456.

³⁴⁹ In the p.dl. of the year 1936 under MN 253 one can find a Sub-Geometric vessel coming from level VII, which seems to confirm the level number on the piece.

³⁵⁰ It is of similar shape as Lefkandi I, pl. 60. 8; Eretria XX, pl. 64. 312.

The dinos **356** with its shape and decoration belongs to the end of the 8th- or beginning of the 7th century BC.³⁵¹ The piece is covered with a thick, very pale brown slip, and is painted on the inside (pl. 39). These details as well as the fabric distinguish **356** from the majority of the dinoi for which an East Greek origin is assumed. Similar examples with the same rim decoration are rare but based on the fabric of **356**, Euboea and the Cyclades are both possible candidates for the origin while East Greece can be ruled out.³⁵²

3. 8. 2 Closed Vessels

The rest of the fragments from level VII are from closed vessels. All of them are probably of East Greek provenance except for **357**, which is unique in several aspects (pl. 41). First, the concentric circles on the shoulder are a typical Protogeometric motif.³⁵³ Examples of vessels with concentric circle decoration from Samos, Chios, Miletus and Delos demonstrate that this pattern resumed a revival on closed and open vessels in Ionia and on the Cyclades from the late 8th to the 7th century BC.³⁵⁴ The tight arrangement of the circles and the thin lines are unusual for the 7th century BC though. The fabric with the black inclusions speaks against an East Greek provenance and an Euboean origin can also be ruled out. If it is a Protogeometric import, than it is the only one known so far from Al Mina and given the fact that the earliest imports from the site belong to the end of the 9th century BC (**114-115**), one wonders how this piece made its

³⁵¹ Fragments of similar shape come from Tarsus from the Assyrian period: Tarsus III, pl.

³⁵² The absence of mica is an indication that the dinos was probably not produced on Naxos.

³⁵³ Lemos 2002, 56. 60. 66.

³⁵⁴ For closed vessels see e.g. Samos V, pl. 45. 271. 99, 522- 523; *Emporio*, 139, no. 493- 494; Delos XV, pl. 9. 33 (group Aa). Open shapes see von Graeve 1978, 35-36 pl. 12 fig. 1.

way to Al Mina. It is also worth mentioning here that there is no local pottery that would date to the end of the 11th or beginning of the 10th century BC.³⁵⁵

358 is another amphora or hydria-fragment from level VII (pl. 40). It has a rounded undercut rim and a slightly slanting wall. The neck is decorated with a thick zigzag/wavy line. Such amphorae/hydriai are known from East Greece and have a relatively long lifespan.³⁵⁶ Similar pieces were found at Tarsus and Mersin, where the few stratified fragments belong to the 7th century BC.³⁵⁷ The composition and surface treatment of **358** differs from the East Greek examples. The wavy line is very tight and squat; the surface is rough and covered with a slip that does not seem to be East Greek. The matrix of the fabric however, does not vary much from East Greek clay. Hanfmann thought that some of the pieces found at Tarsus are the products of local manufacture, which were imitating Greek originals and **358** could also be a regional product.³⁵⁸

The wall fragment **359** belongs perhaps to another amphora (pl. 41). The decoration and fabric point to a non-Greek source. A Cypriot or a local origin seems to be possible although the arrangement of the decoration on the surface recalls also a pithos recovered on Chios.³⁵⁹

The majority of the sherds come from jugs. Most prominent is **361 (a-b)**. Shown in the catalogue are only the shoulder fragment (a) and the base (b). It belongs to a closed

³⁵⁵ Lehmann 2005, 81.

³⁵⁶ Furtwängler 1980, 186 pl. 219 fig. 20, III/37. III/41 (phase III late 7th century BC).

³⁵⁷ Tarsus III, fig. 150, 1624 (below 12,9); Barnett 1939, pl. 122. 51. 1.

³⁵⁸ Hanfmann distinguished between fabrics made in Greek colonies around the bay of Iskenderun and, based on clay and slip, “mixobabarus” workshops working in Greek settlements in Cilicia: Tarsus III, 324. Local ware: Tarsus III, 325, 1608. 326, 1624-1630 fig. 150.

³⁵⁹ *Emporio*, pl. 44. X.

vessel of which probably another 55 pieces were recovered.³⁶⁰ The shoulder fragment **360 (a)** perhaps also belongs to the same vessel. What is clear though is that **360** is of the same fabric as **361(a)** and so are the pieces **362** and **363**. The shoulder of **361 (a)** is separated into several panels that are divided by three vertical lines (pl. 42). In one of the metopes, two birds with cross-hatched bodies are striding to the left. Cross-hatched triangles are placed in between them and above their bodies. On the left edge, just next to the vertical lines, the tip of another motif, most likely a lozenge, is visible. **364** belongs also to a closed vessel with similar decoration and derives probably from the same region (pl. 43). Jugs with bird decoration, cross-hatched triangles and large lozenges arranged in metopes, are known from Samos and Chios.³⁶¹ The figural style of the birds on **361 (a)** however, is slightly different from the Samian example. The body is completely hatched in the case of **361 (a)**. The birds are on the move and not static as on the Samian and Chian examples. The feet are executed as a long curved line while on the Ionian pieces the feet are always spreading into at least two lines at the end.

Such bird oinochoai were produced in several parts of Ionia. It seems that there were two traditions current at the same time, a north Ionian and a south Ionian production and both exported their bird oinochoai to Al Mina. Although an attribution of **360-363** to Samos is unsecure, a south Ionian origin seems to be likely given the fabric and surface treatment of the fragments. The base fragment (pl. 41. **362**) is similar in fabric and slip and only varies from **361 (b)** in its decoration. The latter is simply decorated with encircling bands while **362** was painted with diagonal lines around the base.

³⁶⁰ The base fragment in the catalogue is also from the same vessel and is therefore not listed as a separate piece even though the base and the shoulder are obviously not joining. The total number of fragments that belong to the same vase is 55 and they fragments are all stored in a separate drawer in the British Museum storeroom. The pieces are all unmarked except for one fragment. Only a few fragments join with each other so that it cannot be verified whether they all come from the same vase. Fabric, slip and state of preservation suggest however that they all belong to the same vessel.

³⁶¹ Samos V, pl. 52. 304; 53. 308-309; *Emporio*, pl. 48. 548; 49. 551. 554.

Nevertheless, **362** might also come from south Ionia, and it dates to LG or early 7th century BC like the other jug fragments from south Ionia. The figure decoration on **363** is exceptional and also deserves special attention (pl. 41). It shows parts of a crab on the shoulder of yet another closed vessel. This figure decoration is certainly rare and a parallel is found on an aryballos from Delos and two further examples from Eretria.³⁶² Descoedres assigned all of these three aryballoi to the same painter or workshop, which he located at Eretria and which he called the crab painter.³⁶³ The relationship between the crab painter and **363** is unclear. The crab on **363** varies in detail from the Eubean aryballoi: the body of the crab on **363** has a more triangular body and eight instead of six feet and two feelers are also depicted on **363**.³⁶⁴ The fabric and slip of **363** are close to **360-362**, which are perhaps south Ionian products. While the motif of a crab could certainly be the product of foreign (Euboean?) inspiration, it has to remain open, which way this motif travelled. For **363** a date to the end of the 8th- as well as an early 7th century BC is possible and therefore the Eretrian aryballoi as well as the fragment from Al Mina belong more or less to the same period.³⁶⁵ The stylistic relationship between Euboean and East Greek pottery has not been subject of a detailed analysis yet but mutual influences have been suggested, something which is not surprising given the fact that Euboean imports made their way to e.g. Samos.³⁶⁶ The crab on the **363** is perhaps another sign for the relationship between these two regions.

³⁶² Delos XVII, pl. 65. 14; *Eretria* XVII, pl. 93. 2 (T11, 8); Descoedres 1972, 275 fig. 5.

³⁶³ Descoedres 1972, 270. 273; Also Kahil 1968, 100.

³⁶⁴ Crielaard 1193, 151-152 assigned the piece to a Euboean fabric of the so-called "crab painter".

³⁶⁵ The series of the aryballoi from the crab painter are dated to around 700 BC and later: Descoedres 1972, 276-277.

³⁶⁶ See Descoedres 1972, 281: whether the volutes on the juglet are really the result of stylistic adoption of Ionian prototypes or whether they are rather the result of Protoattic influence has to remain open. For a comparable volute in Protoattic vase painting see: Rocco 2008, pl. 1. 4 (hydria of the Analatos painter). For the stylistic relationship between Euboea and Ionia compare e.g. the lions on the aryballos from the crab painter (Descoedres 1972, 279 fig. 10-11.) with the lions on a kantharos from Samos (Samos V, pl. 62. 363.). The Samian example is slightly later but note in particular the arrangement and the birds underneath the lions as well as the tail that swings above the back. For another close comparison with the lions from the crab painter see the Samian krater (Samos V, pl. 63. 366): note in particular the reserved

374 is a type of juglet, which was fully painted and decorated only with a reserved zone on the belly (pl. 39). The paint was applied with a brush, obviously very hastily. Such juglets appear at Samos in well F and G.³⁶⁷ There seems to be three different types: one with straighter neck and less bulbous in shape the “dull” type³⁶⁸, another type with a more splaying neck and rounded belly, the biggest diameter is at the last third of the vessel³⁶⁹ and finally, a more bulbous shape with trefoil lip with the largest diameter at the centre of the vase or slightly below.³⁷⁰ According to Walter, the “dull” type is the earliest, followed by the bulbous one that belongs to the end of the 8th century BC.³⁷¹ The rounded type with splaying neck stands next to the early LG type.³⁷² Furtwängler suggested that the black painted variant with reserved band goes down into the first half of the 7th century BC.³⁷³ The black painted type with reserved band, to which our **374** belongs, shows some morphological variation but at the moment it cannot be clarified whether this has also chronological implications. Based on the evidence from Samos, **374** can be dated from the end of the 8th- to the first half of the 7th century BC.

As will be shown later, this type of juglet appears in considerable numbers at Al Mina. The majority derives from level VI-VII. The juglets demonstrate that also less elaborately decorated Greek pottery made its way to Al Mina. **374** with its lavishly applied paint also illustrates that superior quality of Greek pottery was obviously not

and hatched zone on the neck, which can also be found on the oinochoe from the crab painter: Descoedres 1972, 279 fig. 11.

For Euboean imports to Samos: Samos V, pl. 49. 282-288.

³⁶⁷ Walter 1959, pl. 16. 3; 31. 2-4.

³⁶⁸ Walter 1959, pl. 16. 1-2.

³⁶⁹ Walter 1959, pl. 16. 3.

³⁷⁰ Walter 1959, pl. 16. 6-9.

³⁷¹ Walter 1959, 13-14.

³⁷² Walter 1959, 13; For comparison of the shape see: *Kerameikos V*, pl. 82. 881 (tomb 25); Agora VIII, pl. 4. 63 (third quarter of the 7th century BC). The example from Agora VIII seems to be stylistically later than **376**. One East Greek jug of the same type was found in the well R 17:5 at the Agora: Agora VIII, pl. 13. 228 (well R17:5 contained Protoattic fragments and therefore dates to the 7th century BC)

³⁷³ Furtwängler 1980, 175 with fig. 14. I/38a- I/39.

always a reason to purchase Greek vases and also “cheap mass ware” found its customers.³⁷⁴ It also questions theories that interpret the Greek pottery found at Al Mina as products of high value and as a luxurious commodity destined for the elites in the Amuq plain.

The following examples are particularly important for the dating of level VII. **366** is a rim fragment of a round mouth jug (pl. 43). The decoration on the neck is divided into horizontal panels. The upper one is painted with a chequer board and the panel below is cross-hatched. The principal decoration features suggest that **366** belongs to an East Greek round mouth jug, a class which appeared at the beginning of the second quarter of the 7th century BC. This type of jug was also classified as Wild Goat style, after a system firstly proposed by Cook.³⁷⁵ The system has been revised only recently and a new chronology together with a different classification system has been put forward.³⁷⁶ The division of the neck into panels is confined to the earliest phase (EA Ia= East Archaic Ia) that ranges from 670-650 BC and to the second phase (EA Ib= 650-630 BC) although in the latter phase this feature seems to be confined to early examples.³⁷⁷

The origin of the piece is less certain. The place of the chequerboard is remarkable since in the majority of the examples from south Ionia, it is placed in the middle and not on the top of the neck.³⁷⁸ The lower cross-hatched pattern is another uncommon motif of SiA Ia (South Ionian Archaic Ia). A cross-hatched zone can be found on the neck of a

³⁷⁴ Furtwängler 1980, 175 no. 134 did not believe that “mass ware” was exported to the Cyrenaica.

³⁷⁵ Cook, 1933/34. Cook, 1960, 118-126; Cook 1965, 507; Cook 1992, 256-262.

³⁷⁶ English version: Kerschner and Schlotzhauer 2005. Same article in German: Kerschner and Schlotzhauer 2007.

³⁷⁷ For the chronology see Kerschner and Schlotzhauer 2005, 8. Panel decoration on the neck: Kerschner and Schlotzhauer 2005, 16. 19 fig. 11 (SiA Ib).

³⁷⁸ See e.g. Jacopi 1931, 57 fig. 28.

jug from Rhodos.³⁷⁹ The provenance of the piece from Rhodes is unknown. A Rhodian as well as a Carian origin are possible. Another possible option is a north Ionian provenance, which is not implausible given the mass of north Ionian imports found at Al Mina. The early phase of north Ionian Wild Goat style is unfortunately less well known so that the origin of **366** has to remain open at this point.

367 is another round mouth jug of Ionian product (pl. 40).³⁸⁰ Like **366**, the neck is decorated with several panels. The top and the lowest panel bear the canonical cable pattern (without dots). The second panel from above is decorated with a cross-hatched zone, like **366**, and below it one can find the typical chequerboard, although a bit carelessly drawn. The handle is a strap handle with two vertical ridges and it is decorated with a fishbone pattern. Again, the decoration diverges from south Ionian products and the slip is also not of the fine shiny south Ionian type. The pieces itself can probably be dated into EA Ia or to the early part of the second phase (EA Ib). The horizontal extensions of the handle on the rim are perhaps an indication for a slightly later date in the series. Given the decoration and the appearance of the piece, a north Ionian provenance seems possible (NiA Ia-b?). Most certainly, a south Ionian origin can be excluded.

368 and **369** are probably both from the same vessel (pl. 43). Both pieces have a ridge preserved on the neck and they are of similar fabric and appearance. The figural composition on the shoulder consists of a central rosette flanked by antithetical lions. The mane of the lion on **369** consists of small rounded segments, like scales from a fish,

³⁷⁹ Samos V, pl. 87. 491; Jacopi 1932, 47 fig. 43.

³⁸⁰ The jug is broken into two fragments that are stored in separate boxes in the Ashmolean Museum.

which puts the piece stylistically in relation to a krater from Samos.³⁸¹ The Samian krater belongs to SiA Ia.³⁸² The eyes are still rounded and flanked by lines, which should stress the fright or uproar of the animal. The teeth are made of rounded segments and not solid like on the SiA Ia krater from Samos. The snout, which is separated from the neck by a rolling line, is dotted like on an oinochoai from Samos.³⁸³ A neat hook indicates the nose and the ears are divided into two parts. To the right of the neck one can find a group of tongues filled with a vertical line. Round eyes and scaling of the mane, are all early features in south Ionian vase painting.³⁸⁴ Stylistically, the fine rendering of the snout, the ears and the teeth however, put **369** later than the krater from Samos. The lion mane, which constitutes of round scales also found in north Ionian Wild Goat style, is not necessarily an early feature and it remains the question whether our piece can relay be associated with a south Ionian production.³⁸⁵ The dotted snout however, is unusual for north Ionia.

The other fragment, **368**, has the same ridge on the neck and the same tongues on the shoulder (pl. 43). The rosette is made of filled broad foils that are surrounded by an inner and an outer contour line.³⁸⁶ Jugs with similar decoration date usually to later periods. One example is known from north Ionia, now in the museum at Turin.³⁸⁷ This “baggy” type was “influenced” by late Protocorinthian to Transitional vase painting (650-625 BC).³⁸⁸ Another shoulder fragment from Al Mina level VI (**795**) is decorated

³⁸¹ Samos V, pl. 57. 341; 67. 377. Compare further the lion on a probably EphA Ia fragment, which is stylistically earlier than our piece: Kerschner 2007, pl. 31. 5.

³⁸² Kerschner and Schlotzhauer 2005, 10, no. 12.

³⁸³ Samos V, pl. 57. 341.

³⁸⁴ Kerschner and Schlotzhauer 2005, 16.

³⁸⁵ See e.g. Schiering 1957, pl. 14. 2.

³⁸⁶ Compare the rosette on **368** with the pending half rosettes on an oinochoe from the Vlastos collection: Schiering 1957, pl. 4-5. Beil. 3.

³⁸⁷ See the composition on the Oinochoe from Turin: Wild Goat Style, 88.

³⁸⁸ Amyx 1988, 488-489.

with a pending ray that is characteristic for this class of jugs, and such a ray can also be found on the north Ionian from Turin.

Although **795** from level VI and **368-369** do not join, there remains the possibility that they belong to the same vase. Both fragments from level VII differ stylistically from the jug from Turin, which is slightly later. The stylistic difference between **368-369** and the jug from Turin can also be explained through the existence of another (north?) Ionian workshop. The two fragments from level VII may therefore be assigned broadly late in EA Ic.

370 comes from the lower part of a jug (pl. 43). Solid broad rays on the base are known from south Ionian vase painting where they appear in SiA Ia and in a broader and longer version in SiA Id (610- 580 BC).³⁸⁹ In other regions solid rays are not foreign either.³⁹⁰ Particularly the outline of the solid ray is interesting and can be found on a jug, which probably derived from Caria.³⁹¹ Groups of encircling thin lines on the belly are usually associated with the early series of the Wild goat style (SiA Ia-b). Given the poor state of preservation and because of the absence of clear characteristic features, **370** may be dated to EA I (Ib late?) without assigning the piece to a particular region.

The shoulder fragment **371** is decorated with a bird (goose), a typical figure decoration of the Wild Goat style that can be found almost throughout the whole 7th century BC (pl. 43).³⁹² Striding birds usually appear on shoulders of oinochoai where they flank the

³⁸⁹ Kerschner and Schlotzhauer 2005, 16. 45.

³⁹⁰ Kassel 1981, 50 no. 17.

³⁹¹ Cook 1999, 87 no. 51.

³⁹² Kerschner and Schlotzhauer 2005, 24.

central volute at the centre or, rather rare, form a frieze of striding birds.³⁹³ The bird of **371** has no dotted reserved zones anymore, a feature common since SiA Ib but already rare by the end of SiA Ic.³⁹⁴ The colour of the paint is partly worn off and it has to remain open whether parts of the body were filled with added red. The bad preservation of the piece and the absence of further details prevent a clear classification of the date and the provenance. Nevertheless, the piece may belong to the second half of the 7th century BC, most likely from EA Ic to early Id (630- 600 BC).

The handle fragment **372** also preserves a part of the shoulder (pl. 43). It is covered with a thick white slip. The two reeds of the handles are decorated with horizontal dashes.³⁹⁵ The handle itself is attached just above the two encircling lines, which separate the shoulder from the belly. The neck is rather broad and low. On each side of the handle one can find a group of solid suspended rays. In south Ionian vase painting solid rays, comparable to the ones on **372**, appear at the beginning of the last phase of the Wild Goat style (SiA Id, 610-580 BC).³⁹⁶ The belly zone of the fragment was probably undecorated, to judge from the preserved parts. Given the preservation of the piece, the origin remains unknown. A date of **372** to the end of the 7th century BC is only based on the rays on the shoulders.

375 and **376** are vertical round handles, probably from the same closed vessel (pl. 43). They are covered with a thick white slip and they are painted with dashes on the outside. Date and origin are hard to verify. Given the large corpus of Ionian imports that

³⁹³ See e.g. *Samos VI*, pl. 63. 526 (SiA Id).

³⁹⁴ Kerschner and Schlotzhauer 2005, 25. 33; Schiering 1957, 65. For a dotted SiA Ic example see the Lévy Oinochoe in the Louvre: *Samos V*, pl. 117. 592.

³⁹⁵ For jugs with two instead of three reeds and horizontal dashes see Cook 1998, 41-42 fig. 8. 10.

³⁹⁶ Kerschner and Schlotzhauer 2005, 41 fig. 39. 44.

date to the second half of the 7th century BC, both fragments may fall within the same period.

The last fragment **377** belongs to a closed vessel, perhaps a jug (pl. 43). The composition of the clay as well as the painting stands out from all other Greek imports and the origin of this piece remains obscure. A local north Syrian provenance or an import from Cilicia cannot be ruled out. The piece can only be dated according to the context into the second half of the 7th century BC.

3. 8. 3 Summary

The value of the information gained from the analyses is only of limited significance given the small amount of marked pieces. Some conclusions can be reached though. First, Al Mina ware was obviously also produced in the late 8th- early 7th century BC. Interesting are also the two fragments of Euboean kotylai coming from level VII. They are evidence that the production of this type continued into the early 7th century BC.

LG I fragments are missing in the assemblage. East Greek products from Ionia dominate the finds from level VII and they cover the whole 7th century BC. The majority of them range from the 8th- to the first half of the 7th century BC. Three fragments cover the time from 670-630 BC. A total number of five pieces can be assigned to the period after 630 BC with one fragment possibly belonging to the last decade of the 7th century BC (**372**). Given the small sample, five pieces cannot be neglected but like in previous samples, they might be associated with the latest phase of level VII or even with material coming from the succeeding level VI.

Having in mind the result from level VIII, which suggests that this level may go down until 670 BC, the layout of level VII may fall between 670-630 BC. If one wants to fit in two further levels into the 7th century BC, the layout may lie closer to 670 than to 630 BC but such an assumption is hard to verify. The different levels could simply cover a different time-span.

A final conclusion about the end of level VII cannot be reached before level VI has been analysed. What seems to be clear is that level VII ended before 600 BC since finds dating to the 6th century BC are missing.

The continuing appearance of a few LG fragments as well as the high number of Sub-Geometric fragments together with the early 7th century BC pieces from level VIII underline the continuity from level VIII to level VII.³⁹⁷ Therefore, the hypothesis that the site was abandoned for some time before the lay out of level VII has to be rejected.³⁹⁸ If there ever was a gap in the occupation of the harbour, it must have been for such a short period that it cannot be verified through the material evidence.

³⁹⁷ This will become even clearer after the analysis of the level VII-VI assemblage.

³⁹⁸ For the discussion of gap versus continuity between level VIII, VII and VI see the discussion in chapter III 2. 5.

3. 9 Level VI-VII

3. 9. 1 Open Drinking Vessels

Open drinking vessels amount to a total of 210 fragments with 194 pieces listed in the catalogue (pl. 117).³⁹⁹ Skyphoi belonging to the second half of the 8th century BC, come to 21 pieces including five LG II fragments. A further nine pieces date from LG II to the first half of the 7th century BC. The majority is of Euboean provenance of types already encountered in earlier levels like **378** (pl. 44) or **381** (pl. 62). Absent in previous levels is an Euboean skyphos-krater (pl. 62. **400**).⁴⁰⁰ The lip was decorated with a net of lozenges, a motif that is frequently found on vases associated with LG II contexts at Eretria.⁴⁰¹ **383** (pl. 44) and **384** (pl. 62) might be Attic imports judging from the fabric. Attic imports amount only to few fragments. **386** is perhaps a rare example of an East Greek skyphos that can be dated to the LG period (pl. 44).⁴⁰² Characteristics are the large diameter and the lip decoration.⁴⁰³ The fabric is also similar to Ionian cups of the 7th century BC.⁴⁰⁴

Interesting are the three Thapsos class skyphoi **406-408** (pl. 46-47), a class that was absent in previous levels.⁴⁰⁵ **406** and **407** both belong to the panel type with one

³⁹⁹ The additional pieces are included for statistical reasons but are too fragmented to include them in the catalogue.

⁴⁰⁰ For the type see Boardman, Lefkandi I, 62. It is also discussed in Eretria XX, 84-86.

⁴⁰¹ Eretria XX, 84.

⁴⁰² A skyphos with similar lip decoration comes from Samos and is dated by Furtwängler to the end of the 8th century BC: Furtwängler 1980, 162. Since the lip is very out turned, one cannot exclude that the piece may go into the 7th century BC. Skyphoi with similar lip decoration (group of chevrons) produced in Greece or the Aegean islands, are unknown to me.

⁴⁰³ Eilmann 1932/33, Beil. XX, 5. 64 fig. 11. a (skyphos with large diameter).

⁴⁰⁴ The shape of the LG skyphos can be considered as the predecessor of the later 7th century Ionian cups: Schlotzhauer 2000, fig. 410 fig. 297. 413.

⁴⁰⁵ The Thapsos class was named after the first discovery of this type at Thapsos by Vallet and Villard: Vallet and Villard 1952, 337. 340. For the problems related to this class, its definition etc. see the

reserved line on the interior.⁴⁰⁶ The decoration of **406** remains unclear. Either it is painted with a “continuous” motif such as running spirals or with a “loose” motif.⁴⁰⁷ **406** belongs to the class with a single reserved line on the interior, a decoration which, according to Neeft, can only be associated with “loose” motifs.⁴⁰⁸ Unfortunately, no handles are preserved, which would allow us to identify the type.⁴⁰⁹ According to Neeft the type with a “loose” motif and single reserved band on the interior appears in contexts together with the Corinthian hemispherical and tall kotyle (Corinthian LG and EPC).⁴¹⁰ Coldstream as well as Neeft assumed that the panel type appeared at around 750 BC.⁴¹¹ Evidence from the western colonies suggests that its production continued until 690 BC with a change from reserved band with horizontal lines to single reserved line around 730 BC.⁴¹² Dehl who divided the types into one group decorated with a painted lower part and another group with horizontal lines on the lower body, called Neeft’s system of classification into question.⁴¹³ Dehl’s type with lower painted part, to

discussion in Bosana and Kourou 1983. For a further discussion see Coldstream GGP, 102-104. 324-325; Coldstream 1977, 124.

⁴⁰⁶ The Thapsos class skyphoi were thoroughly discussed and classified by Neeft 1981, 12 fig. 1b (panel type with one reserved line only on the interior). Neeft’s tight chronological and stylistic system was called into question by Dehl 1984, 47-48. Here I follow Neeft’s classification.

⁴⁰⁷ For the different motifs on Thapsos class skyphoi see Neeft 1981, 21 fig. 6: the motif on **406** could be either Neeft’s “continuous” motif no. 1, or one of his “loose” motifs no. 10 or 20. The preserved part suggests that it is either 1 or 20.

⁴⁰⁸ Compare table in Neeft 1981, 21 fig. 6. See further Neeft 1981, 23-24. If **406** is decorated with a continuous motif. Neeft’s classification has to be called into question.

⁴⁰⁹ According to Neeft 1981, 22, the type with single reserved line on the interior contains handles that are decorated with a single horizontal line only while the other type contains two.

⁴¹⁰ Neeft 1981, 24.

⁴¹¹ Coldstream GGP, 103-104; Neeft 1981, 24-25, list some stylistic arguments for his assumption. Clear closed contexts, which would support his suggestions, are missing though. The persistence of the type with loose motifs into the EPC period is suggested by EPC grave contexts. See Coldstream GGP, 325 no. 2.

⁴¹² Neeft 1981, 25-27. At about the same time the decoration changed from “continuous” to “loose” motifs.

⁴¹³ Dehl 1984, 48. I do not follow Dehl’s criticism here; in particular her comments on Neeft’s table 6 that lists the two types and the motifs, are unclear. The table shows with only three exceptions (continuous motif no. 3 also appears on a skyphos of the later type at Megara Hyblaea as well as on a skyphos of his earlier type at Delphi and Aetos; motif no. 9 can be found on the earlier type at Aetos and on a later type at Delphi; motif no. 11 appears on a skyphos of the later type found at Delphi as well as on an earlier type at Aetos.) that Neeft’s system is fairly consistent. The example of motif no. 3 that occurred on both types, can simply be explained by their concurrence for some time. The new type was perhaps introduced around the same time that Megara Hyblaea was founded and the production of the earlier type may not have ceased immediately.

which **407** belongs, is dated by her from the end of LG to the end of EPC.⁴¹⁴ **406** could fit into both of Dehl's classes but since the lower part is not preserved completely, the metope and the interior line are relevant, and these features put **406** into the same period as **407**. **408** is peculiar because it is fully painted inside. The five almost straight scribbles cannot be interpreted as the vertical lines separating the central field. They are part of the decoration, like the lavishly painted chevrons or sigmas on a Thapsos class skyphos from Eretria or another example from Pithekoussai, which is perhaps of local manufacture.⁴¹⁵

The origin of the Thapsos class is still a matter of debate and several regions have been proposed, among them Corinth, Aegina, Delphi and Megara.⁴¹⁶ Neef suggested a production centre situated west of Corinth while Dehl and Bosana and Kourou argued in favour for Corinth.⁴¹⁷ A new study indicates that Achaia might be one possible main production centre for the Thapsos class.⁴¹⁸ Imitations of Thapsos class skyphoi also come from Euboea.⁴¹⁹ In particular the fabric of **407** could point to Euboea. Moreover, the central metope, which is not separated by vertical dividing lines, is a feature also found on examples from Eretria. Thus, Euboea might be a possible candidate for its

⁴¹⁴ Dehl 1984, 72.

⁴¹⁵ Cf. Descoedres 1976, pl. 5. FK 195, 6. The vertical lines separating the central decoration zone are usually not more than three. Pithekoussai I, 523, tomb 525-1.

⁴¹⁶ For Corinth see Coldstream GGP, 103. For Aegina see Weinberg 1941, 43. Delphi see Laistner 1912/13, 61-69. Megara see Boardman 1970, 496.

⁴¹⁷ Neef 1981, 57; Dehl 1982, 187; Bosana and Kourou 1983. Both, Dehl and Bosana and Kourou, present two different lines of argument: while Dehl argues for a Corinthian manufacture because of the similar distribution of Corinthian pottery and Thapsos class ware, Bosana and Kourou's argument are based on the stylistic similarities between the Corinthian and Thapsos class pottery. The claims for Corinth are further supported by Neutron Activation Analysis applied to Thapsos class fragments, Protocorinthian and LG Corinthian pieces. All belonged to the same group: Bosana and Kourou 1983, 259 with further literature.

⁴¹⁸ Gadolou 2011, 54- 55. 123.

⁴¹⁹ Descoedres 1976, 22 FK 195.5-6 pl. 5. Probably an import is the fragment illustrated in Andreiomenou 1980, 28 no. 38 fig. 1. 25 pl. 6. 5.

origin.⁴²⁰ The imitations from Euboea further show that the interior decoration and the shape do not follow the originals in all details.⁴²¹ If **408** is a local Euboean imitation, then it is probably the latest piece of the three Thapsos class fragments and dates perhaps to the end of the 8th - or to the beginning of the 7th century BC.⁴²²

The decoration, fabric and quality of paint of **406** resembles the “original” Thapsos class skyphoi.⁴²³ The appearance of Thapsos class skyphoi at Al Mina is remarkable and they add another aspect to the production of this type.⁴²⁴ Despite the fact that they appear at Al Mina side by side with Corinthian pottery, other sources like Euboea or centres in East Greece might be responsible for the distribution of the type.⁴²⁵ The coexistence of both classes of Corinthian pottery does not allow drawing any conclusions about their distribution or their origin.⁴²⁶ The deposition of this class in

⁴²⁰ Descoedres 1976, 46 pl. 5. However, examples of the Thapsos class found at Megara Hyblaea demonstrate that the central decoration field of the “original” Thapsos class skyphoi is not always separated by vertical lines from the surrounding horizontal lines: Megara Hyblaea 2, 28 pl. 8. 2. This characteristic may be of chronological significance and not necessarily related to the origin of the piece. Another Thapsos class skyphos with similar decoration in the central panel without vertical lines comes from Pithekussai tomb 525 and is said to be a local production. The description of the clay as well as the decoration may point to an Euboean origin. If it is a local product, one may speculate whether an Euboean potter who drew on Euboean originals, like the one found at Eretria, made it. See Pithekoussai I, 523 Tomb 525-1 pl. 157.

⁴²¹ Both examples from Eretria are fully painted on the interior. For Descoedres these are stylistic features that place both pieces from Eretria somewhere between the latest Thapsos class and the “LPC type”. Descoedres 1976, 46. Unclear remains why Descoedres places FK 195.5 into the second quarter of the 7th century and FK 195.6 from the 2nd to the 3rd quarter of the 7th century BC although both pieces are found in the same layer and also show the same typological characteristics. However, the interior decoration alone is not enough to assign **408** to Euboea.

⁴²² For the date of the Eretrian context containing Thapsos class skyphoi see Descoedres 1976, 54 Beil. 1. At Oropos the Thapsos class skyphos enters the local repertoire with the end of Attic LG IIa and continues into the early 7th century BC (personal communication with V. Vlachou).

⁴²³ Since I have never seen the typical Thapsos class fabric myself, my conclusions rest only on comparisons with other pictures and description of the fabric. The fabric of **406** is very close to the description given by Bosana and Kourou 1983, 258 pl. 2. The only difference is the hardness and general appearance, which is certainly not powdery and soft but hard and smooth.

⁴²⁴ Neither Neef 1981 nor Dehl 1982 discuss the evidence from Al Mina. Kearsley discussed **407** briefly in 1995 and recognized Euboean imitations among the Thapsos class skyphoi. Genuine Thapsos class skyphoi escaped her attention: Kearsley 1995a, 23; Kearsley 1995a, 40.

⁴²⁵ Kearsley 1995b, 23 however, interprets the Thapsos class skyphos from Al Mina and their frequent appearance in Italy as evidence for direct contacts between Al Mina and the West.

⁴²⁶ This is suggested by Dehl 1982, 185-187. 189. She concluded that the Thapsos class was produced at Corinth because Corinthian pottery is the only other imported pottery that is found together with them in Italy and Greece. Although Dehl (1982, 188-189) discussed Euboea as a possible source, she rejects it

levels VI-VII and later, suggests that the type was produced and imported to Al Mina before the second quarter of the 7th century BC.

Next to Thapsos class skyphoi other Corinthian drinking vessels found their way to Al Mina at the end of the 8th and during the first half of the 7th century BC. Corinthian Sub-Geometric skyphoi **415** (pl. 63) and **416** (pl. 48) decorated with the usual chevrons appear for the first time in level VI-VII. 24 pieces belong to the tall type while one fragment has a shallow body (pl. 63. **419**).⁴²⁷ The latter is contemporary to the previous one.⁴²⁸ The type does not emerge before the end of the 8th century BC and seems to have a long time of use that covers almost the whole of the 7th century BC.⁴²⁹ Only in one instance (**415**) the decoration is preserved and it has to remain open if the type decorated with strokes was also represented among the Al Mina examples.⁴³⁰

The typical Corinthian kotylai are also part of the assemblage. They appear already in earlier assemblages (IX, VIII) but only in small numbers. Fragments marked with level VI-VII contain types with the four-limbed sigma (**423**) as well as the more “lavishly”

since she knows only one Thapsos class skyphos from Euboea, and because the Euboean pottery of the LG period is different in style and fabric to the Thapsos class.

⁴²⁷ For the type see Coldstream GGP, 108. A brief development of the shape is given by Dunbabin in Perachora II, 75-76. Unfortunately, the stratigraphy of the site did not permit the reconstruction of a more precise development. Megara Hyblaea 2, 37, distinguish between three forms: a tall or deep form (type III), a shallow form (type IV) and a dish form (type V), which all belong to their “seconde période géométriques” Megara Hyblaea 2, 32. It remains unclear however, on which evidence their conclusion is based.

⁴²⁸ Corinth XV 3, 261-262. Their appearance together with the taller type is also demonstrated at Pithekoussai where they appear in the same contexts: Pithekoussai I, T 259-2 (MPC); T 303 (MPC-LPC);

⁴²⁹ Payne 1931, 296; Coldstream GGP, 108; Neef 1975, 123; Dehl 1984, 77: shape since EPC and also in use during the MPC period. At the forum area at Corinth the type appeared in a LPC or even TR well: Williams and Fischer 1971, 28-29 no. 23 pl. 7. See also Corinth XV 3, 261-262: deep and shallow “cups” appear in contexts with LPC material and the author suggests that they should not be dated later than the last 3rd of the 7th century BC. The evidence from Pithekoussai seems to support the general chronology of the type: *Pithekoussai I*, T 141-2 (MPC); T 323-3 (EPC); T 328-2 (LG II); T 472-3 (EPC); T 530-2 (MPC); T 565-2 (MPC?); See also Karthago II, 461-462 with no. 68. Pithekoussai T 565 might be later than the suggested date and also 472 seems to belong already to EPC rather than LG II.

⁴³⁰ Decoration with blobs and strokes is considered as possibly representing a later stage in the development of the Corinthian skyphos as suggested by EC contexts at Corinth: Corinth VII 1, 46, 157-158. See also Tocra I, 24 with no. 7.

drawn chevrons (**424-426**). The sigma- kotyle appeared at the beginning of the 7th century and lasted until the end of MPC.⁴³¹ **421** is decorated with two- legged soldier birds and is assigned to Corinth according to the fabric although an Euboean origin cannot be excluded totally (pl. 49). It would be the only Corinthian example with this decoration found at Al Mina. Probably the latest fragment is **427**, which is decorated with simple dashes (pl. 63). The base fragment **431** (pl. 48) proves that Corinthian products reached the site until the late 7th century BC.

Euboean imitations of Corinthian kotylai are also abundant in level VI-VII. They contain the typical soldier bird decoration (**449-453**), meander hooks (**447**) and one fragment is decorated with scribble decoration **454** (pl. 64). Apart from **451**, all examples belong to the tall type and contain bands of added white on the interior (pl. 49-50. 64).⁴³² **453** carries a second frieze of soldier birds under the handle zone. A similar piece was also found in level VIII (pl. 32. **275**) and **453** may derive from the same vessel (pl. 64).⁴³³ The Euboean kotylai show a variety of surface treatments. **437**, **445** and **438** are all covered with a thin whitish- very pale brown slip, which is missing among **439**, **441**, **446**, **452-454**.⁴³⁴ Whether this is an indication of different workshops or a change in production technique, has to remain open. The shape of **437** and probably **445**, which are deep and broad, and therefore belong to the earlier kotyle type, favours the latter theory. The early fragment of a proto kotyle from level IX, which also carries a thick whitish slip, further supports this assumption (pl. 5. **31**).

⁴³¹ Dehl 1984, 75-76. Some contexts containing TR aryballois and sigma kotylai may indicate that the type was even produced until the last quarter of the 7th century BC.

⁴³² For the discussion of the type including the problems of the chronology see Appendix 2, 4.

⁴³³ One has to note that the legs of the soldier birds on **453** are much shorter than on **275**.

⁴³⁴ The white or very pale brown slip shows also some variation but it is hard to assess whether this variation is due to different production techniques or caused by post-depositional influences. **445** and **438** bear a thick slip while **437** on the other hand only a thin whitish to very pale brown wash. See also the comments about the slip in Boardman 1957, 6.

It seems that Euboean potters abandoned the application of the slip at the end of the 8th- or at the early 7th century BC, which would be less labour- intensive allowing a faster production. Other signs for a more rapid production or signs of less careful surface- or clay treatment cannot be observed.⁴³⁵ Interestingly, a comparison of Euboean and Corinthian kotylai demonstrates that the latter carry much thinner encircling lines (see **435** and **439** on pl. 64), illustrating that even the better Euboean examples did not reach the Corinthian “quality” in this respect (pl. 64. **441, 454**). Obviously this was never important for the Euboean potters.

The shape, decoration and surface treatment of the two kotyle fragments **455-456** are unusual (pl. 50. 64). Both are covered with a thin very pale brown slip and are decorated with multiple vertical scribbles. The wall is also much thicker than the usual Corinthian as well as Euboean kotylai. The decoration of multiple scribbles can be found on Corinthian- and Euboean skyphoi but the fabric of the two fragments makes an Euboean production more likely. A similar decoration can be observed on the skyphoi **399, 401-402** (pl. 45-46). Both, kotylai and the skyphoi, found their closest parallels at Aetos. Robertson and Benton attributed them to an LG Corinthian production.⁴³⁶ Skyphoi with similar decoration are known from LG contexts from Eretria and the decoration can also be observed on LG kraters from Lefkandi.⁴³⁷ A probable kantharos with similar pattern was found in a grave on Rhodes together with a locally produced conical aryballos pointing to a continuous use of the motif during the first half of the 7th century BC.⁴³⁸ A

⁴³⁵ The point here is that the large number of Euboean exports apparently did not affect the quality of the production.

⁴³⁶ Robertson 1948, 10 pl. 2; Benton 272. 276 pl. 41.

⁴³⁷ Eretria XX, pl. 49. 213; Lefkandi I, pl. 38. 29; 52. 227. 229.

⁴³⁸ Jacopi 1929, 38 no. 5 fig. 22. “Probabilmente di produzione locale”. The conical shape as well as the style of the figural decoration suggests a date after the second quarter of the 7th century BC, probably contemporary with MPC II or SiA Ia (670- 650 BC).

further fragment is known from Megara Hyblaea where it was interpreted as local imitation.⁴³⁹

Chian imports arrive at Al Mina already in level VIII or IX.⁴⁴⁰ In level VI-VII the connection with Chios is attested by a skyphos (**390**), which finds the closest parallel in an example from period I at Emporio and is therefore dated to the late 8th or early 7th century BC. The two Chian Chalice fragments **409-410** belong to the late 7th-respectively from the middle until the end of the 7th century BC (pl. 47. 62).⁴⁴¹

Three examples of monochrome Al Mina ware (**411-413**) testify the probable persistency of this type in the early 7th century BC (pl. 47. 63). One of them is decorated with a cross-hatched triangle in a metope and possibly can be reconstructed as a vertical hour-glass motif.⁴⁴² This motif finds parallels on Cycladic pottery of Dugas and Rhomaios class Bb.⁴⁴³ It is a typical Naxian pattern and it has been suggested that the Cesnola painter perhaps inspired its introduction on Cycladic vases.⁴⁴⁴ The appearance of the same motif on Al Mina ware can either be seen as Cycladic or Euboean inspiration. In this respect one has to recall that both pottery categories were also exported to Al Mina, with the latter one clearly dominating.

⁴³⁹ Megara Hyblaea 2, 145 pl. 127. 10.

⁴⁴⁰ From level VIII-IX comes the closed vessel **206** and another closed vase, probably a jug, is marked with level no. VIII (**309**). Both belong to the early- second half of the 7th century BC.

⁴⁴¹ For the closed Chian imports see below.

⁴⁴² See Boardman 1959, pl. 24. 18 (Ash 1954.381/10).

⁴⁴³ Delos XV, pl. 39. 40-42; 40. 43-44. 55.

⁴⁴⁴ Coldstream GGP, 175. The Naxian examples contain also a horizontal line, which divides both triangles. This might be the reason for assuming it derives from pendant double axes. Since the hourglass motif is cross-hatched and not filled and further vertical and not horizontally arranged, this suggestion does not seem to be convincing.

3. 9. 2 East Greek Bird Kotylai, Bird- and Banded Bowls

The majority of drinking vessels found in this level derive from Ionia. The main categories are the bird kotyle, the bird bowls, and the Ionian cups. Bird kotylai amount to 14 pieces. Examples of this category appeared already in level VIII-IX (**195**) and VIII (**282**). The earliest types with continuous frieze are missing.⁴⁴⁵ **457** preserves a narrow panel decorated with a vertical zigzag found on bird kotylai ranging from 750-650 BC.⁴⁴⁶ The fragments **460-464** belong to the same type. The zigzag line underneath the decoration panel is a feature that appears on kotylai around 720 BC.⁴⁴⁷ The renowned Nestor cup found at Pithekoussai belongs to the same type.⁴⁴⁸ **467** represents the latest kotyle type. At around 675 BC a row of dashes or dots replaced the zigzag band in the panel underneath the decoration zone.⁴⁴⁹ The same type was exported to Tarsus as well.⁴⁵⁰ The same panel decoration is also depicted on the first bird bowl type that succeeds the bird kotyle. Unusual is the decoration of **469**. The shape resembles the bird kotyle form but instead of the canonical lozenges, the area next to the handle is decorated with a curvilinear motif. Of the same form as the bird kotyle is **466**, but the decoration zone depicts two horizontal rows of zigzags. A similar piece was

⁴⁴⁵ I refer here to the typology established by Kerschner 1995; Kerschner types I-IV are all absent from the assemblages at Al Mina. For the earlier types see also the description of the development by Coldstream GGP, 278; Kerschner 1995, 12-13. Example of an early type see Delos XV, pl. 46. 4 (Kerschner's type I); Jacopi 1929, 102 fig. 96. (Kerschner's type II). Both are dated by Kerschner from 750-715 BC: Kerschner 1995, 12.

⁴⁴⁶ Due to the preservation of the fragment one cannot decide whether the type belongs to the kotyle with five fields including a narrow central field decorated with a simple ornament (Kerschner type V) or to Kerschner's slightly later type VIb with only four fields and the narrow decoration panel this time not in the centre of the decoration zone. For this type see Kerschner in *Töpferzentren*, 48 no. 25 fig. 17 (produced at Ephesus).

⁴⁴⁷ Kerschner 1995, 14-15. The same zigzag band also appears on a variant from Kerschner's type V that are dated from 750-675 BC. Since **460-464** only preserved the narrow panel underneath the decoration zone, it is possible that all pieces may derive from this subcategory. If one wants to be cautious, **460-464** cannot be dated more precisely than 750- 650 BC. The rest of the assemblage however suggest a later date so that I am inclined to assign these fragments to the later type VI-VII that bear the zigzag band and which date from 720- 650 BC.

⁴⁴⁸ Pithekoussai I, pl. 72, 168-9. The cup was found together with EPC aryballoi.

⁴⁴⁹ Kerschner 1995, 15; Kerschner 2008, 28-29.

⁴⁵⁰ Tarsus III, fig. 99, 1448. 1454.

encountered already in level VIII (**281**). The majority of the bird kotylai belongs to the so-called “standard fabricate” which is similar to Coldstream’s bird kotyle workshop.⁴⁵¹ The appearance of the pieces matches the description given by Kerschner and therefore a north Ionian provenance of these imports can be postulated.⁴⁵² Diverging from this typical fabric are the unusual decorated kotyle **469** and the zigzag metope kotyle **466**. The sherd of the latter is unusually red, which might be due to the firing process rather than to a different origin.

The bird bowls come to 20 pieces in level VI-VII.⁴⁵³ Their high number, compared to the 14 fragments of the bird kotylai, has to be kept in mind in respect to the absolute chronology of level VII.⁴⁵⁴ **470-475** belong to the earliest bird bowl types. The latter has a pronounced lip and a relatively small central metope, which is occupied by a bird. The other fragments are decorated with a row of dashes in the panel underneath the decoration zone.⁴⁵⁵ These are all typical features of the latest kotyle type. **476-480** are still fully painted on the lower part but contain horizontal bands only below the main decoration panel without any further decoration. These types of bird bowls cover the 2nd and 3rd quarter of the 7th century BC.⁴⁵⁶ During the 7th century BC one can observe the tendency to brighten up the dark ground decoration. At the same time a lipless rim replaces the typical carinated rim. In addition the shape of the bowl gets deeper, more globular and the thickness of the wall increases.⁴⁵⁷ This can be seen on the examples found in level VI-VII. **484** shows a reserved band on the lower part of the body and the

⁴⁵¹ For the results of the NAA analysis as well as the provenance of the bird kotyle workshop see Appendix 2, 3 (level IX).

⁴⁵² Töpferzentren, 66.

⁴⁵³ For the definition and terminology of this type see Töpferzentren, 63.

⁴⁵⁴ The MNI- factor of the bird bowls is also higher than the bird kotylai.

⁴⁵⁵ Dots and dashes appear on the latest bird kotyle type as well as on the first bird bowl types that were produced side by side for some time. See above.

⁴⁵⁶ Kerschner 1997, 189-190; Töpferzentren, 71; Kerschner 2008, 30.

⁴⁵⁷ Kerschner 1997, 190; Töpferzentren, 30; Kerschner 2008, 70.

handle zone is not painted anymore (pl. 66). The latter can also be observed on **486**. Both fragments already belong to the second half of the 7th century BC. The change in the shape is partly demonstrated by **487** (pl. 50), which has not yet developed the half round-shape of the later types. It dates to the same period as the previous piece.

The fragment **485** (pl. 66) illustrates another important change in the decoration of the bird bowls. Void rays ascending from the base replace the lower painted zone. The fragments **489-491** probably also derive from such late bird bowls although rays can also be found on meander cups of late 7th to early 6th century date.⁴⁵⁸ **485** further demonstrates the deep, almost half rounded shape of the later bowls. The central metope is stretched and the bird is “lost” in the field. The ankles of the bird’s legs are hastily drawn but still visible and the tail ends in a short horizontal line. The short ray pending from the rim is still depicted. The interior of **491** bears two encircling bands in added red on top of the black glaze, another trait of later bird bowls appearing around 630 BC.⁴⁵⁹ The bird bowls and the bird kotylai seem to belong to the same workshop.⁴⁶⁰ The fabric and surface treatment of the bowls are close to the bird kotylai and therefore probably belong to the same workshop.⁴⁶¹ As will become clear during the discussion of the later levels, bird bowls were popular at Al Mina and imported throughout the whole 7th century BC.

During the last quarter of the 7th century BC a new type of bowl, decorated with simple bands, appeared. **492-497** belong to the early type of this class, which is decorated with

⁴⁵⁸ See Kerschner 2002, 71; Iren 1993, 38-39. 50 fig. 1. 2; Cook and Dupont 1998, 27-28.

⁴⁵⁹ Kerschner 1995, 19; Töpferzentren, 71.

⁴⁶⁰ The difference in appearance of **486** might be due to post- depositional influences. Clay analysis demonstrate that the early bird bowls (Kerschner’s type I-IV) were all produced in one single workshop while later types (V-VI) were also produced in other north Ionian production centres, which have not been identified yet (three chemical groups can be distinguished: group B/C also group E, G; all produced bird bowls): Töpferzentren, 70-71.

⁴⁶¹ On the provenance of the bird bowls and their relation to the bird kotyle workshop see Töpferzentren, 70-71.

groups of thin encircling bands and dated from 620-590 BC.⁴⁶² A piece of this type was marked with level VII (pl. 38).⁴⁶³ One fragment from level VI-VII, **495**, consists of several fragments. One is marked with level VI-VII the other one with V. This suggests that the piece probably belongs to level VI rather than to VII. **498** and **499** are decorated with broader bands, which usually can be found on bowls of the late 7th and first half of the 6th century BC (pl. 51).⁴⁶⁴ The shape however, is different from the examples mentioned in the catalogue and the usual bands in added colour are missing.⁴⁶⁵ The fabric of **498**, which is close in appearance to **499**, resembles the bird kotyle workshop and was probably produced in northern Ionia.⁴⁶⁶

3. 9. 3 Cups with Everted Rim

Cups with everted rim are the second class of East Greek drinking vessels encountered in the assemblage.⁴⁶⁷ This category of drinking cups was probably produced in southern Ionia.⁴⁶⁸ 31 pieces can be assigned to this group and apart from the few fragments from level IX, which can be considered as residual, level VI-VII contains the earliest examples. **500-507** are the earliest of this type that is decorated with a wavy line above the typical encircling lines on the rim. The rest of the body was painted except for a

⁴⁶² These fragments belong to Kerschners type I: Kerschner 1997, 163 no. 111. 190-191.

⁴⁶³ Concerning this piece and the problems of the absolute chronology of level VII see chapter III 3. 1. 8.

⁴⁶⁴ Bowls with banded decoration are known from Tocra and found in deposit I, level 9 and deposit II, level 8, which, according to the excavator, date from the late 7th to the second quarter of the 6th century BC. Tocra I, 12. Examples from Clazomenae, which closely resemble our pieces, and which date from the 5th century BC, illustrate the longevity of this type. See Güngör 2004, 127 fig. 15.

⁴⁶⁵ The closest examples matching **498** and **499** all bear bands in added colours on the interior. Their is however also a class of banded bowl that is painted simply black on the interior but the bands on the outside are much thinner: see Tocra II, pl. 13. 2024-2025.

⁴⁶⁶ The fabric of **499** could not be determined due to the bad preservation of the piece.

⁴⁶⁷ For the problematical terminology and definition of Ionian cups see Schlotzhauer 2002. Further Cook 1998, 29. Classification of the Ionian cups see further Vallet and Villard 1955, 5-32; Hayes Tocra I, 111-120; Boldrini 1994, 137 with no. 4 for further bibliography concerning the Ionian cups.

⁴⁶⁸ Schlotzhauer 20002, 413; Schlotzhauer and Villing 2006, 61. A Milesian production is confirmed by clay analysis of wasters found in a kiln on the Kalabaktepe at Miletus: Töpferzentren, 37-38. An Ionian production was already proposed by Dupont 1983, 26-28. 33-35. 40.

reserved band on the belly between the handles. Remarkable is **500**, which has unique thin walls, which distinguish it from the majority of the cups. The type succeeded the Geometric skyphos that bears occasionally the same wavy band on the rim.⁴⁶⁹ Examples from Samos demonstrate that this class belongs to the early 7th century BC and that the island was probably one production centre.⁴⁷⁰ The evidence does not support a date to the 8th century BC, as proposed by Walter and Furtwängler.⁴⁷¹ A date to the early 7th century BC on the other hand, is further confirmed by the finds from Tarsus.⁴⁷²

The rest of the cups include examples with simple band decoration (**517**) on the rim or types, which are fully painted (**519**). All have a comparable shape with a relatively high and everted rim and a deep body. In some instances the rim can also be very straight (**513**). Cups with these features cover the whole second half of the 7th century BC.⁴⁷³ The fabric of the cups seems homogeneous. Slight variations can be observed in the paint, which can vary from matt black (**515**) to a shiny brown colour (**523**).⁴⁷⁴ The latter is also the only piece where a slip is applied on the surface. Unique is **530**, which differs in shape and fabric. The reserved field is relatively broad and the lip has a typical shape

⁴⁶⁹ For the chronology and stylistic development of the type see Schlotzhauer 2002, 413-415; Kerschner 2008, 31-32.

⁴⁷⁰ For reference concerning Samos see the catalogue. Although it is problematical to postulate a local production based simply on the relation between find spot and quantity, it seems very unlikely that a polis like Samos with such an important sanctuary as the Heraion did not have its own pottery production. Scientific clay analyses support the claim for a local Samian production. See Dupont 1983, 26-27. 33-34. 40; Jones 1986, 665; Töpferzentren, 39.

⁴⁷¹ Walter 1957, 41; Vierneisel and Walter 1958/59, 19; Furtwängler 1980, 162.

⁴⁷² Hanfmann's chronology is too high as has been shown by Boardman and has to be treated cautiously: see Boardman 1965, 5-15. For a different view see: Saltz 1978, 205-215; Forsberg 1995, 51-57. Despite the criticism to what extent Tarsus may provide evidence for the absolute chronology due to the partly disturbed stratigraphy, the cups with everted rim can be associated with the period just after the Assyrian destruction. The example 1386 e.g. that Hanfmann assigned to the middle period (Tarsus III, 287), was found "above Jo at a height of 14.15 thus above the level of the middle period, and therefore probably belonging to the "destruction fill".

⁴⁷³ Kerschner 1997, 13-194; Furtwängler 1980, 164. 209 fig. 16, II/4-5; Naveh 1962, fig. 7. 4; Schlotzhauer 2000, 411 fig. 298.

⁴⁷⁴ The red colour of **519-521** is the result of misfiring in the kiln.

of the so-called East Dorian cups found at Vroulia.⁴⁷⁵ A good comparison comes from Cyprus.⁴⁷⁶ A piece from Naukratis illustrates the wide distribution of the type, including Eastern Mediterranean sites.⁴⁷⁷ The body shape of **530** is quite different though and the base is a low ring base rather than the usual conical foot but the differences might be due to an earlier date of the piece.⁴⁷⁸ Knidos is one place, which has been proposed as one significant production centre for the Dorian cups.⁴⁷⁹

Base fragments of such cups show only little variation. **509** obviously belonged to a rather deep cup and contains a relatively high conical foot, which is rounded and flat on the underside. It probably derives from an early 7th century cup.⁴⁸⁰ The other base fragments **510**, **526-527** and **529** are also conical but are rectangular in section and contain a sharp edge (pl. 51. 53. 68). They cover almost the whole 7th century BC.⁴⁸¹

The latest piece of the Ionian cups is **522** (pl. 68). It belongs to a delicate class that is thin-walled with a sharply out-turned rim. It is decorated with a lustrous slip, on top of which bands in added white and red were applied. The type dates to the end of the 7th century BC, which is highlighted by destruction contexts in the East and in Ionia.⁴⁸² Like for the other cups with everted rim, a south Ionian production centre (Samos, Miletus) has been proposed.⁴⁸³

⁴⁷⁵ Vroulia, 167-173.

⁴⁷⁶ Gjerstad 1977, pl. 13. 12.

⁴⁷⁷ Schlotzhauer 2006, fig. 4-6.

⁴⁷⁸ Vroulia, 171.

⁴⁷⁹ Schlotzhauer and Villing 2006, 60.

⁴⁸⁰ Examples of similar base types from sites in the southern Levant like Tel Kabri show that the lifetime of this type may cover the whole 7th century BC. Tel Kabri, 226 fig. 5. 92. 11.

⁴⁸¹ Furtwängler 1980, 165-166.

⁴⁸² Naveh 1962, fig. 7. 12; Waldbaum 1994, 60-61 fig. 11; Waldbaum and Magness 1997, 27-28 fig. 2a-b; Fisher 2002, 51, fig. 4.a; Kalaitzoglou 2008, 86-88 pl. 11. 32; Iren 1993, 41-42. Examples from Chios belong to period IV: *Emporio*, 134 fig. 83. 459.

⁴⁸³ Dupont 1983, 27; Jones 1986, 288-90; Kalaitzoglou 2008, 73 no. 250.

3. 9. 4 One-handled Cups

Simple cups with vertical handles can also be found at Al Mina. The earliest example (**532**), with a relatively thick and straight wall and painted completely in black, may still belong to the 9th century BC although a LG date cannot be excluded (pl. 53).⁴⁸⁴ The cup **533**, perhaps dating from the second half of the 9th to the second half of the 8th century BC⁴⁸⁵, bears a graffito, either a “α” or an hourglass motif (pl. 54).⁴⁸⁶ The orientation of the graffito on the pot may point to the latter and possibly can be interpreted as a batch or owners mark.⁴⁸⁷ The same vessel also contains a whole in the wall, perhaps an ancient repair mark. If this is the case, one wonders why such an effort was undertaken to mend an ordinary cup like **533**. It suggests that the cup had a special significance for its owner.

Of later date are the cups **535-539** (pl. 54-55). During the late 7th century BC the dark surface is broken up by the introduction of reserved bands on the base (**539**) and the rim (**537-538**).⁴⁸⁸ Further, the wall profile is now concave with a splaying lip (**537**) and a sharp edge at the intersection between base and wall (**535**).⁴⁸⁹ The latter stands out from the majority of one-handled cups found at Al Mina due to its fine decoration. The

⁴⁸⁴ Kerschner, 2003, 48-49; Furtwängler 1980, 159 “spätgeometrisch”.

⁴⁸⁵ The date of this piece is unclear. Cups with similar profile come from the Heraion on Samos and appear in well A-E, F and G. The latter two contain LG as well as 7th century material while the other contexts are earlier. See Vierneisel and Walter 1958/59, 12-26. However, **533** does not have the s-profile of the later Sub-Geometric cups, and that is why I am inclined for an earlier date. On the other hand, the wall is not as straight as the examples from well A-E, so that a date to the second half of the 8th century seems possible.

⁴⁸⁶ For the date see Walter 1957, 40. An hourglass motif can be found on an amphora handle and may further support the interpretation of the motif as a batch mark rather than a letter. Maybe both vessels were imported at Al Mina as one single consignment. The amphora handle is unfortunately unmarked.

⁴⁸⁷ Trademarks have been collected and discussed by Johnston 1990. The mark on the **533** is his type 24B and it has a wide chronological spread not restricted to a particular region: Johnston 1990, 106. 199.

⁴⁸⁸ Kerschner 1999, 24. Note that the rim of **538** is fully painted and only the base is reserved. Whether this is pieces represents an intermediate stage between the fully painted type and the type with reserved zone on rim and base has to remain open at this point.

⁴⁸⁹ Kerschner 1999, 24 fig.12, 52; Kerschner 2003, 55.

reserved field is decorated with a broken cable, a popular motif of the 7th century BC in East Greece. Such more elaborate cups are not frequent but not uncommon in Ionia.⁴⁹⁰ The origin of these cups with concave wall and reserved bands is most likely Ionia, where they were found in large numbers.⁴⁹¹ The high amount of mica visible on the surface of the elaborately decorated piece **535**, probably points to Miletus although a Chian origin cannot be excluded keeping in mind that the closest parallels come from that island.⁴⁹²

Of different shape is the cup **534**. It has a convex wall profile and a sharp everted small lip (pl. 54). The reserved zone on the inside of the cup is decorated with multiple bands and a row of dots on the top. Parallels for this type of cup come from the Agora at Athens and from Mt. Hymettos where they were considered as Sub-Geometric. The presence of “ordinary” black painted cups is surprising, since they neither stand out from local cups in their technique nor in the quality or their decoration. So far, no other site in the East revealed similar cups. They are even absent at sites in the southern Levant where a broad range of different categories of East Greek pottery has turned up.⁴⁹³

Outstanding is also the drinking vessel **543** (pl. 55). Its clay is fine and the wall extremely thin. The decoration consists of a black interior and exterior with additional

⁴⁹⁰ Eilmann 1932/33, 59; Samos V, 37, 192-197.

⁴⁹¹ Walter 1957, 40. 48-49 (Samos); Kerschner 1999, 24 (Milet).

⁴⁹² Boardman suggested that **535** might be a Chian import and assigned the piece from Al Mina to his group of tall cups, which rest on a high ring base: *Emporio*, 123 with no. 2. The profile of 535 fits better to a cup with a flat base. The best parallel for this piece indeed comes from Chios, which is also of Boardman's tall type: *Emporio*, 124 fig. 75, 302 (period IV). The profile of the fragment from Emporio seems to fit better to the group of cups with a flat base as indicated by the sharp edge on the intersection between wall and base. The lower parts of the wall of the cups with ring base are all concave and tapering slightly towards the centre and do not have a flat straight base as **535**.

⁴⁹³ See Waldbaum and Magness 1997.

bands in added red and white. The shape looks similar to a lakaina from Tocra.⁴⁹⁴ The best parallel can be found on Cyprus. Both cited examples have a similar decoration. The previous one however, differs slightly with the upper part left unpainted. The shape is also close to cups from the Heraion on Samos although their decoration varies slightly.⁴⁹⁵ Decoration in added red and white is known from several regions, among them Corinth-, Laconia, and from the so-called polychrome ware from the Aeolis.⁴⁹⁶ The polychrome decoration can further be found on the fine cups with everted rim like on **522** so that an Ionian origin cannot be excluded.⁴⁹⁷ The closest parallels come perhaps from a burial from Ras el Bassit and from Ashkelon, which date to the late 7th century BC.⁴⁹⁸ The comparisons in shape with the lakaina from Tocra and the examples from Samos also point to a date to the last quarter of the 7th century BC.⁴⁹⁹

Some finds from level VI-VII could not be identified, among them the black glazed cup **542** and the drinking vessel **546**, either a kotyle or a cup/skyphos (pl. 69).

The discussion of the drinking vessels should be concluded with the already published piece of a black painted sherd that is inscribed with Greek letters.⁵⁰⁰ It is the only inscription from such an early context from Al Mina. According to the clay analysis, the

⁴⁹⁴ Tocra I, 91 no. 991 pl. 68. 991.

⁴⁹⁵ See e.g. Furtwängler 1980, III/6 fig. 18. Although these cups from Samos lack the decoration in added colours, it is still possible that **543** is just an elaborate version of them, given the close morphologic resemblance (see also comment below).

⁴⁹⁶ Posamentir 2006, 159 with no. 7. Kerschner 2006, 112; Larissa am Hermos, 91-92 pl. 39-40.

⁴⁹⁷ A parallel from Ionia, which would match our example, is missing according to my knowledge. Furtwängler 1980, 160 speaks of the Cypriot example as a cup “mit rein samischer Formgebung” and although he does not explicitly mention it, he is implying that the Cypriot parallel is a Samian product.

⁴⁹⁸ Courbin 1993, pl. 20. 4; Ashkelon 3, 231, 254.

⁴⁹⁹ The decoration with added red and white was further introduced in Corinth roughly at the same time, which further supports a late 7th century date. For the Corinthian ware see. Payne 1931, 19-20. 277. Further Amyx 1988, 39-40. Ionian cups of similar shape are dated to the last quarter of the 7th century BC: see e.g. Furtwängler 1980, 160.

⁵⁰⁰ Boardman 1982, 365-367.

fragment is an Attic import.⁵⁰¹ Boardman suggested that it belongs to the late 8th or early 7th century BC. The proposed reading by Boardman is ...]ναβεο[...] which meaning cannot be really deciphered. Some remarks about the piece and its inscription should be added to Boardman's discussion: since the sherd is not diagnostic, the only hint for its date is given by its context (see below).

Only the alpha, betha and epsilon are clearly visible; the proposed nu and omikron are not preserved. Possible would also be another alpha at the beginning and the last preserved letter could also be a theta, since the surface of the circle's inside is scratched. In this case one could also read ...]ααβεο[...] or ...]ααβεθ[...] or even ...]ναβεθ[...], which does not make much sense either. One may also think about somebody just practising writing on a broken sherd. Having said this, one has to point out that the letters were not inscribed on the sherd after it was broken, which is proven by fact that the first and the last partly preserved letter are cut off by the break.

3. 9. 5 Kantharoi

531 might be from an East Greek kantharos similar to examples found in the Heraion on Samos (pl. 53). It is a simple decorated type with irregular vertical bands pending from the lip across the whole body. The lower part is painted. To the same period, probably dating to the 3rd quarter of the 7th century BC, belong a group of one-handled cups with a similar decoration and due to the absence of a handle **531** might be also a simple cup.⁵⁰² Against an attribution to a cup speaks the wall shape of **531** that does not contain

⁵⁰¹ Boardman 1982, 366-367.

⁵⁰² Walter 1957, 48-49 pl. 71; Furtwängler 1980, 213 fig. 18, III/1-2.

the pronounced s- profile and the pronounced shoulder. Examples from Samos date the piece into the second half of the 7th century BC, probably into the last quarter.⁵⁰³

3. 9. 6 Dishes

Eight dishes of East Greek provenance were found in level VI-VII. **554** and **555** may belong to the same vessel and **553** probably goes with another fragment from level V. **549** on the other hand consists of several fragments, which are marked with level VI-VII and level V. One piece (**548**) is Sub-Geometric while another one (**549**) is of SiA Ic (630-610 BC) date. A similar vase recalling **548** comes from Tarsus and is dated to the late 8th century BC by Hanfmann.⁵⁰⁴ The rest belongs to the end of the 7th century BC (SiA Id).

Dishes can be divided into two different classes and both are represented at Al Mina: the stemmed dishes (**549**) and dishes resting on a low ring base (**551**).⁵⁰⁵ One has to note that only in the cases where the rim is preserved, it is possible to ascribe the fragments to this shape. This is because wall fragments from lids can be hardly distinguished from dishes and they were even decorated similarly.⁵⁰⁶ Kardara firstly classified dishes according to their decoration and while in principle her categories cover the majority of the types, her chronology has been revised but the development of the different types

⁵⁰³ Viernseil and Walter 1958/59, 19; 532 is very close in decoration to the so-called "halb gefirnißte Tassen" (half glazed cups) that appear at the last quarter of the 7th century BC according to Furtwängler 1980, 160.

⁵⁰⁴ Tarsus III, 327-328 no. 1632. The piece was found west of Oc at a level of 14.60 m and might be from the last floor of the middle period (in adjacent Oc apparently a floor was detected at exactly the same height). The plate may perhaps come from the last occupation period before the possible destruction of Sennacherib in 696 BC.

⁵⁰⁵ Kalaitzoglou 2008, 117 fig. 6.

⁵⁰⁶ Posamentir 2002, 10.

and their relationship remains unclear.⁵⁰⁷ Unfortunately, only few stratified contexts that contained East Greek dishes have been published so far. For this reason dating the examples from Al Mina relies almost entirely on stylistic comparisons.

548 (pl. 55) finds a parallel on Delos. Unfortunately, the origin and the date of the Delian plate is unclear. Shape and decoration may seem point to the early 7th century BC but a LG date cannot be excluded. **548** is perhaps the earliest dish import to Al Mina of 7th century BC date.

549 is a fine example of a stemmed dish decorated on the out- and inside with multiple horizontal Wild Goat friezes (pl. 69). The zigzag band with antithetic solid triangles, the appearance of the standing triangles in the frieze underneath the goat on the inside as well as multiple thin lines that divide the friezes, all indicate an SiA Ic date. But there are also younger features: the goat on the inside is running and not striding, the reserved part of the belly is not filled with dots, no additional colours were used and the goats are drawn neatly with all the details, exemplified by the execution of the rear leg seen on the outside. The legs of the running goat on the inside are outstretched like on an oinochoe from St. Petersburg, which dates to SiA Ib and the same is true for the leg preserved on the outside.⁵⁰⁸ Filling ornaments are still used with restraint and the later canonical alternating suspended half roundels and triangles are missing. **549** is stylistically earlier than a plate from Rom, which belongs to SiA Ic or a plate from Tarsus, where the frieze already shows the alternating suspended triangles and

⁵⁰⁷ Kardara 1963, 115-129; Kalaitzoglou 2008, 133.

⁵⁰⁸ Samos V, pl. 94; For the date see: Kerschner and Schlotzhauer 2005, 17 no. 22 fig. 12. Compare e.g. the rather static depiction of the goat on an oinochoe from Miletus dated also to SiA Ib: Käufler 1999, 206 fig. 6. For the date see: Kerschner and Schlotzhauer 2005, 17 no. 25.

roundels.⁵⁰⁹ Therefore a SiA Ic (early) date is suggested here.⁵¹⁰ An attribution to Samos, as suggested by Walter-Karydi, seems to be too unsecure so that a regional attribution is retained here.⁵¹¹

550 is fragmented but the rays and the guilloche motif indicate that the fragment is from a metope dish of SiA Id date. In particular the fabric points to a south Ionian origin.

551 comes from a dish with a low ring base (pl. 55). This type is found in considerable numbers at Al Mina. Preserved is only a part of the centre motif that consisted of a lotus cross.⁵¹² A similar central pattern can be found on a metope dish from Boston, which is decorated with a pair of eyes.⁵¹³ Several fragments of dishes found at Al Mina bear a face- motif so that it is not farfetched to conclude that **551** belongs to one of these fragments. The Boston dish with a lotus cross in the centre belongs to the end of the 7th century BC and so does **551**.⁵¹⁴ The origin has to be left open but south Ionia is a good candidate.

552 is from a stemmed dish with lipless rim (pl. 69). The outside is decorated with encircling bands like most examples of the dishes.⁵¹⁵ The field between the rays is

⁵⁰⁹ Samos VI 1, 60 fig. 127 pl. 77. 651. For the date see: Kerschner and Schlotzhauer 2005, 26 no. 58. Dish from Tarsus: Tarsus III, fig. 100. 1479.

⁵¹⁰ Kardara 1963, 68 no. 14 puts the fragments into his late orientalisising style (group A), which he dates to the second quarter of the 7th century BC: Kardara 1963, 67. Kalaitzoglou puts the appearance of stemmed dishes at around 630 BC, that is the beginning of SiA Ic: Kalaitzoglou 2008, 141. Cook and Dupont 1998, 36 thought however, that the first dishes appear in MWG I with reference to one piece from Al Mina (**871** level V). Kerschner and Schlotzhauer 2005, 18. 23 fig. 18 put the first stemmed dishes in SiA Ib (650-630 BC).

⁵¹¹ Samos VI 1, 12. Currently, the stylistic differences between the two centres Samos and Miletus are not well known in particular due to missing published reference material from Miletus.

⁵¹² For the motif see Samos VI 1, 45 fig. 67 pl. 25. 191.

⁵¹³ Samos VI 1, pl. 25. 191.

⁵¹⁴ Samos VI 1, 44.

⁵¹⁵ For the form see Kalaitzoglou 2008, 117 (form A, type 1).

decorated with a large ornament only.⁵¹⁶ The dish belongs to the group of metope dishes and may therefore date to the last decade of the 7th century BC and is probably of south Ionian origin.⁵¹⁷

553 is a dish with high rim that had a low ring base, similar to a dish fragment from level V (**874**).⁵¹⁸ Evidence for this category of dishes comes mainly from south Ionia, notably from Miletus, Assesos and Samos.⁵¹⁹ Apart from the low ring base, this type has four alternating spool shaped- and vertical knob attachments just below the rim. The cable pattern on top of the rim puts **553** close to **874** (level V), which belongs to the metope dishes decorated with a pair of eyes.⁵²⁰ To this class two further fragments can be added, which belong to level VI-VII: **554-555**, both most likely from the same vessel. Stylistically **554** is close to the known dish from Samos and to a lid from Miletus, although some differences remain – the almond shaped eyes end in a sharp edge, the nose is not connected to the eye and contains a nostril in double outline – so that one cannot be sure about a Milesian provenance but a south Ionian origin seems to be likely.⁵²¹ **555** perhaps belongs to the same vase as indicated by the double outline of the nostril. This piece highlights the stylistic differences in the composition of the face, which is different from the above cited examples from Miletus and the other pieces from Al Mina: the eyebrows end in a wedge shape extension and above it one can find a small solid triangle. On another piece from Samos the eyebrows are linked by a lozenge

⁵¹⁶ Kardara 1963, 122-124 (group ζ: dishes with metopes with large ornaments); Kalaitzoglou 2008, 137 (group IIc2).

⁵¹⁷ Examples that date to the very end of the 7th century were found at the Athena sanctuary of Assesos: Kalaitzoglou 2008, pl. 57. 339.

⁵¹⁸ Villing 1999, 198 fig. 15a-d; See further discussion of this type in Kalaitzoglou 2008, 128-129.

⁵¹⁹ Villing 1999, 194-197; Kalaitzoglou 2008, pl. 69. 360. Undecorated piece from Samos: Samos VI 1, pl. 34. 258.

⁵²⁰ For the composition of the decoration of the type see Samos VI 1, pl. 25. 191.

⁵²¹ Samos VI 1, pl. 25. 191; Posamentir 2002, 25 no. 23 fig. 4. This is only true if one accepts the close relation between the lid from Miletus and the dish from Boston and only if the lid from Miletus was really produced at the site. A dish fragment from Ephesus, which was analyzed by NAA, fell into no known north- or south Ionian group: see Töpferzentren, 107 no. 62 fig. 32.

while the eyebrows on a lid from Miletus as well as the fragment from level V (pl. 93. **876**) are directly connected.⁵²² It seems that different workshops exported dishes to Al Mina but without clay analysis it will be hard to determine their origin. The date of the dishes decorated with a pair of eyes belong to the group of the metope dishes that fall within the phase of SiA Id, the end of the 7th century BC.⁵²³

3. 9. 7 Kraters and Dinoi

18 fragments of kraters and dinoi are known from level VI-VII.⁵²⁴ The majority of the pieces are probably from an East Greek source.

The rim shape of the dinos is only subject of minor variations and often the whole profile is needed to give a precise date.⁵²⁵ Three main differences can be made out: one type is square or trapezoidal in section (**556**), the second type has a triangular rim with horizontal handles (**562**) and the last type has a round ledge rim that significantly protrudes into the interior of the vessel (**557-559**). The latter type has horizontal spool shaped handles that imitate metal originals. The decoration of the vessels is much more helpful to narrow down the date of the different vases. Unfortunately, only in a few cases the decoration can be reconstructed. The dinos and krater fragments of the 7th century BC can be divided into those that are decorated in the Wild Goat style and to another group painted either with Sub-Geometric patterns or even more simpler motifs. Within the latter group, the dinoi and kraters can be further divided into two classes: the

⁵²² Samos VI 1, pl. 25, 192; Posamentir 2002, 25 no. 22 fig. 4.

⁵²³ For the date of the metope dishes see: Samos V, 71; Samos VI 1, 13 (middle of the 7th century BC); Kerschner and Schlotzhauer 2005, 104; Schattner 2007, 433-434. For the date of the lids and dishes decorated with pairs of eyes see: Posamentir 2002, 18; Villing 1999, 197.

⁵²⁴ For the definition of the dinos or lebes see Amyx 1988, 475-476.

⁵²⁵ Schattner 2007, 297.

first class, the earlier one, retains the old Geometric metope decoration (**557-558**, **561**,) while the second class usually contains patterns which are arranged in a free zone around the whole belly (**565-566**). The typical patterns of the latter class are simple wavy lines, circles or scrolls.⁵²⁶

The decoration and shape of the krater **556** is close to **204** from level VIII-IX. The rim is rather square in section and the wall is turning outwards. A vessel with comparable profile but with different decoration style comes from Eretria.⁵²⁷ The resemblance to the piece from level VIII-IX is so close that **556** may even belong to the same vessel. The decoration of **204** – chain of lozenges in a narrow panel – recalls LG II kraters from Eretria.⁵²⁸

The dinos fragments **557** and **558** belong to the earliest dinoi marked with level VI-VII. They are almost identical in shape and decoration. The only difference is the colour of paint and the slip. Both have a steep wall and a ledge rim. The morphological characteristics resemble bronze cauldrons found in a well at Olympia closed around the middle of the 7th century BC.⁵²⁹ Further comparable examples made out of bronze were discovered in tombs 5 and 8 of the heroon in the west gate area at Eretria.⁵³⁰ Both tombs can be dated to the end of the 8th century BC.⁵³¹ The metope decoration with the pattern of diagonal crosses and pendent cross-hatched triangles recall LG traditions. Examples with similar decoration come from Samos, Eretria, Chios and Athens.⁵³² The upper side of the rim is decorated with diagonal crosses in panels, a decoration pattern found on

⁵²⁶ Samos V, 56.

⁵²⁷ Descoedres 1976, Beil. 4, FK 407,2.

⁵²⁸ Eretria XX, pl. 202, 335.

⁵²⁹ Gauer 1991, 22. 179 no. Le 9 fig. 6. 1 pl. 4. 1.

⁵³⁰ Eretria XVII, pl. 59. 77.

⁵³¹ Eretria XVII, 43. 46; Eretria III, 22-23.

⁵³² Samos V, pl. 6. 31; Descoedres 1976, pl. 3. FK 139/145.2; Kübler considered the diagonal crosses as Cycladic influence: Kerameikos V 1, 167 pl. 50. 784.

East Greek kraters towards the end of the 8th century BC like on e.g. Samos.⁵³³ The origin of the pieces is hard to verify. The white slip of **557** may point to an Euboean, Cycladic or East Greek provenance.⁵³⁴ In none of the three regions similar types of dinoi appeared so far. The published examples from Eretria and Samos bear a different decoration and from the Cyclades no dinoi are known to me.⁵³⁵

From Oropos two dinoi are reported so far but they are decorated in a Protoattic style and are probably stylistically later than **557**.⁵³⁶ The thick pink slip of **558** together with the fabric could be an indication for an Euboean origin. The shape and the decoration on the top of the rim of **559** recalls Euboean examples. The fabric however, is completely different. No slip is applied on the surface and the piece is well fired. The paint is of a thick black colour unlike **557** where the paint has partly faded. Also worth mentioning is the fact that all three fragments are painted on the inside.

561 is a dinos with an almost completely preserved profile. The rim is triangular in section decorated with groups of dashes on top of it. The lip and parts of the upper wall are decorated with a broad band. The decoration zone is divided into three metopes and each of them contains one cross-hatched lozenge. The lower part of the body is decorated with encircling bands while the interior is fully painted. A dinos with comparable profile comes from Tarsus but this example was decorated with multiple

⁵³³ Eilmann 1932/33, 74; Samos V, 33 pl. 71. 387-388. Not that the rims of the same type of kraters were also decorated with the common LG groups of dashes. That these pattern was applied on kraters of the second quarter of the 7th century BC is verified by the SiA Ia krater from Samos: Samos V, pl. 66. 377.

⁵³⁴ Boardman 1952, 7 mentioned that the published dinos examples from Eretria did not bear any slip, which would speak against an Euboean identification even though white slip was very often used to cover the surfaces of Euboean pots.

⁵³⁵ For dinoi from Euboea see Boardman 1952, 7 fig. 9-13 pl. 2. B.

⁵³⁶ This is in particular suggested by the steep wall of **558**. For the Oropian dinoi see Charalambidou 2007, 285 fig. 5-6. 1.

horizontal zigzag lines.⁵³⁷ Another East Greek dinos with a related profile is known from Ras el Bassit.⁵³⁸ From Euboea only a few dinoi are known so far. One piece derives from the sacrificial area to the north of the Apollo sanctuary.⁵³⁹ The lip is slightly slanting but the dinos is also decorated with groups of six lines on top of the rim and the rim and parts of the wall are decorated with a broad band.

Unfortunately, the Eretrian dinos did not preserve its body decoration. Another source might be Caria, where kraters show a similar decoration. On an example from Milas the body is divided into three metopes with the two outer ones painted with a large cross-hatched lozenge. The lower part bears several encircling lines.⁵⁴⁰ Another piece from a private collection shares apart from the main decoration also the regular encircling lines on the lower part of the body as well as the broad vertical band next to the handles.⁵⁴¹ Due to the lack of stratified comparisons, the date of the dinos is hard to determine. Judging from its wall, which is not as globular as **557-558** but slight ovoid, it must be slightly later than the latter two. The division of the decoration zone is still according to Geometric traditions and the cross-hatched lozenge is also a popular motif of Euboean LG II skyphoi.⁵⁴² Comparable examples from Tarsus are either non-stratified or their

⁵³⁷ Tarsus III, fig. 152. 1550 (note that the drawing of the decoration is wrong); 104. 1550. There are however, some other important differences between the examples from Al Mina and Tarsus: first, a broad vertical band like on the dinos from Al Mina does not separate the handle zone on the Tarsian example. Second, the lower part bears multiple encircling lines while the Tarsian dinos carries only a group of thin encircling lines on the lower part of the body.

⁵³⁸ Courbin 1978, pl. 15. 2. Unfortunately the profile is not given so one can only guess from the published picture how the shape looks like. The decoration is quite different though and may point to a later date.

⁵³⁹ Eretria XIV, 41 no. V117 pl. 37. 110.

⁵⁴⁰ Bulba 2010, 86-87 pl. 29. Kr 30.

⁵⁴¹ Bulba 2010, 88 pl. 52. LKr 5.

⁵⁴² Somehow related to this piece might be a dinos from Samos, which is decorated with dotted lozenges in the metopes: Eilmann 1932/33, 138 pl. 41. 2. Note that Eilmann thought it is a pyxis because they are not slipped inside.

location is not precise.⁵⁴³ Based on the available evidence a date to the first half of the 7th century BC is therefore suggested.

The krater **565** and the dinos **566** are slightly later than the previous pieces. Both are perhaps decorated with a wavy line on the belly. In the case of the dinos, the broad diagonal dashes may also point to the second half of the 7th century BC while the high rectangular rim of the krater **566** recalls krater forms of the end of the 7th- or beginning of the 6th century BC.⁵⁴⁴ The incised wavy line on the rim on the other hand is a feature that is popular on Samian kraters of the end of 8th or first half of the 7th century BC.⁵⁴⁵ The shape of **565** in combination with the decoration might be interpreted in such a way that this type of krater with high rectangular everted rim started to appear already in the first half of the 7th century BC and the shape did not alter much until the 6th century BC.⁵⁴⁶ Only the incised decoration on the rim was dropped and replaced by paint or simple bands. Level VI-VII is not helpful to decide whether this type already appeared before 650 BC or not since **565** may originally come from level VI, which certainly belongs to the later 7th century BC.

The dinos **568** (p. 58) belongs to the stylistic phase of SiA Ib while the krater rim **569** may also go with the next phase. The former is decorated with a lion with a mane of rounded scales and the filling ornaments are used only with restraint. Both features are rather early in the stylistic development of the Wild Goat style. The frieze of the

⁵⁴³ Tarsus III, no. 1550 (non-stratified). no. 1560 found in house X at 13.60-14.00 (floors belonging to the Assyrian period). Since the Assyrian period covers the whole 7th century BC, the later one could be either belong to the first or second half of the 7th century BC.

⁵⁴⁴ Cf. Samos IV, 156 no. 571 Beil. 17; Kopcke 1968, 265, fig. 16 belongs to the youngest finds of the pre-Rhoikian layer. Eilmann 1932/33, 74 on the other hand thought that thick dashes on the rim are Geometric in character. See also krater **296** from level VIII.

⁵⁴⁵ Samos V, 53.

⁵⁴⁶ In this respect one has to mention that kraters with similar morphological features appear in other regions earlier during the 7th century BC or even at the end of the 8th century BC. This is confirmed for instance by the krater **293** from level VIII, which is most likely of Cycladic origin.

decoration zone was obviously divided by a vertical band. A similar division and arrangement of figures can be found on a dinos from Ephesos dated to EphA Ib.⁵⁴⁷ Unfortunately, the bad preservation does not allow any secure date or to define the provenance of the piece. A south- as well as a north Ionian source seems possible.

The neck of the krater **569** is painted with an encircling hatched meander, a pattern that appeared around 650 BC and which can be found also on closed vessels.⁵⁴⁸ The shape consists of a projecting rim with a flat top and a neck tapering slightly inwards.⁵⁴⁹ This type of krater goes back to the early orientalising period although predecessors of it may even be found in the 8th century BC.⁵⁵⁰

With the piece **570** we are definitely in the second half of the 7th century BC. The neck of this krater is decorated with a broad cable that appears regularly on closed shapes of SiA Ic.⁵⁵¹ Shape and decoration assign the piece into the last third of the 7th century BC. Typologically **570** can be related to **569** although the latter one is earlier. Interestingly, the fabric of **570** does not differ from the majority of the Ionian products but the fragment lacks the typical white slip.

A single among the kraters is the wall **571** with concentric circle decoration in a metope. The interior is unglazed. The fragment probably belongs to a circle krater although such a decoration is not confined to kraters.⁵⁵² On closed vessels the concentric circles usually occupy the shoulder or the upper part of the belly and are generally larger while

⁵⁴⁷ Töpferzentren, 228 pl. 32. 1.

⁵⁴⁸ Kerschner and Schlotzhauer 2005, 24.

⁵⁴⁹ Cf. Eilmann 1932/33, 85 fig. 31.

⁵⁵⁰ Kalaitzoglou 2008, 196-198; Schattner 2007, 276.

⁵⁵¹ Appearance of cable pattern: Kerschner and Schlotzhauer 2005, 32.

⁵⁵² See e.g. Thera II, 203 fig. 406. The thickness of the wall and the unglazed interior speaks against a skyphos.

our fragment derives from the centre of the wall and might therefore be from a krater.⁵⁵³ Similar examples were also exported to Tarsus and Mersin and the pieces found there demonstrate that the unglazed interior is not unusual for large open mixing bowls.⁵⁵⁴

Hanfmann believed that the group comes from Ionia where related fragments were found on Samos but he also conceded that the “general effect” is closer to the mainland and Cycladic wares.⁵⁵⁵ Another piece comes from Tell Sukas.⁵⁵⁶ Although Ionian parallels exist, the fine rendering of the vertical lines, the circles and the fabric speak against an Ionian origin. Several fragments of skyphoi with similar decoration come from Delos and one piece of “Parian” origin was found at Zagora on Andros.⁵⁵⁷ While the origin has to be left open, comparable kraters from Ionia, the Cyclades and Zagora suggest that **571** may be dated from the end of the 8th to the first half of the 7th century BC.⁵⁵⁸

The last fragment, **573**, probably derives from a pedestal foot of a krater. The date and the origin of this piece have to remain open.

Finally, it is interesting to observe the appearance of clay lebetes or dinoi at Al Mina of probable Euboean but certainly Greek provenance. The bronze cauldrons found at Olympia and, even more important, those from Eretria were perhaps imported from the

⁵⁵³ For closed examples see Delos XV, pl. 16. 7. 12; 38. 34. The circles on the belly amphora of Delos XV, pl. 10. 35 are much larger and not divided by groups of vertical lines.

⁵⁵⁴ Tarsus III, fig. 147. 1545. 1548; Barnett 1939, 104 pl. 79. 7.

⁵⁵⁵ Tarsus III, 312-313; For related examples from Samos see Eilmann 1932/33, 73 fig. 23. c. pl. 23. 11.

⁵⁵⁶ Ploug 1973, 14-16 pl. 2. 42.

⁵⁵⁷ Delos X, pl. 55. 665- 668; Delos XVII, pl. 37. 18; Delos XV, pl. 29. 57; 30. 64; Zagora I, 59; Zagora II, pl. 233. For the “Parian” LG style see Coldstream GGP, 176. That circle kraters were not unknown on the Cyclades is further shown by a group of kraters with circles in a metope but the circles are filled with diagonal lines: Delos XV, pl. 53. 9. 11.

⁵⁵⁸ Cambitoglou dates the krater into LG II: Zagora II, 263 inv.no. 429.

East, most likely from North Syria.⁵⁵⁹ That Greek clay imitations of a popular Near Eastern vessel type were exported in considerable numbers to the East is not surprising. There remains the open question whether the absence of this shape on Euboea only reflects the lack of evidence of the 7th century BC, or whether the shape was more popular in the Near East and Asia minor. In the later case, the dinoi from Al Mina might be another hint for an active reaction of Greek potters to foreign consumption patterns.

3. 9. 8 Closed Shapes

Closed vessels marked with level VI-VII come to a total of 141 fragments.⁵⁶⁰ The majority belongs to jugs. Two fragments of transport amphorae could also be identified as well as a range of decorated amphorae and hydriai.

The two sos-amphora fragments were discussed already by Johnston and assigned to the middle and late type with **575** coming from Attica.⁵⁶¹

A large group of closed vessels originated on Chios. **578-579** are either from an amphora or a hydria while **580-586** could also be from larger jugs. To Chios points the distinctive thin whitish slip and the body decoration with its characteristic thin- thick band combination on the belly (**581-582. 586**).⁵⁶² Scrolls or volutes (**583**) as well as concentric circles (**584**) are another popular Chian shoulder decoration of the 7th century BC appearing at Emporio mostly in period II-IV (pl. 70-71).⁵⁶³ Other typical Chian jugs

⁵⁵⁹ Eretria III, 26-27; Gauer 1991, 24.

⁵⁶⁰ The catalogue lists only 109 pieces. The rest is only included in the statistical analysis.

⁵⁶¹ Johnston 1978, 107. 133. According to Johnston the Chalcidian versions have a groove instead of a ridge and are painted on the interior of the neck. See also Boardman and Jones 1986, 707. For a stylistic and chronologic development of sos-amphora see further Young 1942, 50-51; Agora VIII, 32-33; Strom 1971, 112-113.

⁵⁶² *Emporio*, 137.

⁵⁶³ *Emporio*, 137.

are decorated with multiple horizontal wavy lines on the shoulder (pl.71. **587**).⁵⁶⁴ This motif can be found on closed vessels on Emporio during periods II and III, which cover the early 7th- and third quarter of the 7th century BC.⁵⁶⁵

591 deserves to be mentioned since it bears an unusual decoration of a flower bud- like motif, which finds a comparable parallel on a hydria from Samos.⁵⁶⁶ Another possible hydria or amphora fragment of Ionian production is **590**, with the typical wavy line decoration on the belly. The exact date of this piece is unclear because such vases have a long lifetime.⁵⁶⁷

The fragments **593-596** bear a similar zigzag band decoration in a metope on the shoulder found frequently on jugs dated to the end of the 8th or early 7th century BC although examples from Chios appear also in period IV.⁵⁶⁸ **595** is painted with similar motifs but the decoration covers a zone further below the shoulder and on the belly. A similar arrangement of decoration fields can be found on Sub-Geometric amphorae from Miletus.⁵⁶⁹

3. 9. 9 Bird Oinochoai

Bird oinochoai are remarkably frequent at Al Mina. Their decoration stands in the tradition of the bird kotyle. The type itself was certainly produced in northern Ionia and

⁵⁶⁴ A similar piece was already encountered in level VIII- IX (pl. 20. **206**).

⁵⁶⁵ *Emporio*, 142 no. 540. 144 no. 585.

⁵⁶⁶ Samos V, 111 pl. 60. 353-355. They are all non-stratified finds from the Heraion assigned to hydriai.

⁵⁶⁷ Schattner 2007, 131. This decoration can be found on closed vases until the 6th century BC. For the examples from Samos see Eilmann 1932/33, 131 fig. 80; Vierneisel and Walter 1958/59, pl. 46-47.

⁵⁶⁸ Furtwängler 1980, 176-177; *Emporio*, pl. 47, 541.

⁵⁶⁹ Kerschner 1999, 26 fig. 14, 62.

frequent finds from Samos also suggest a local south Ionian production.⁵⁷⁰ Typical for the latter production is the white slip that is missing on north Ionian examples of the bird kotyle workshop.⁵⁷¹ Find contexts from Ionia (Samos, Miletus, Ephesus, Chios) date the bird oinochoe into the late 8th and early 7th centuries BC.⁵⁷² In level VI-VII **611**, a shoulder with a butterfly motif, is certainly from this north Ionian type while **597-610** and **615**, decorated with a chain of cross-hatched triangles, which is a characteristic decoration of this class like cross-hatched lozenges⁵⁷³, could also belong to other jugs or oinochoe types of south Ionian origin (pl. 71-72).⁵⁷⁴ The state of preservation does not allow specifying whether **611** belongs to the globular type or to the squat biconical variant, which, according to Coldstream, is a later development.⁵⁷⁵

Certainly from a bird oinochoe of north Ionian production is **613** that preserved the typical meander tree on the shoulder and on **614** parts of a bird can be identified (pl. 72). Unusual are certainly the shoulder decoration on **616** and **617** (pl. 59. 72). Both are decorated with different types of volutes. Volutes comparable to the ones depicted on

⁵⁷⁰ For bird oinochoai of the provenance group B/C and therefore belonging to the north Ionian “Standardfabrikat” or bird kotyle workshop see Kerschner in *Töpferzentren*, 69. Further Kerschner 2008, 49 no. 245.

⁵⁷¹ See above for the bird kotyle workshop and its clay characteristics.

⁵⁷² A detailed overview is given by Kerschner 2008, 49 no. 241. Important contexts are: well G on Samos (Fundgruppe XVII, 710-640 BC), at Emporio they can be found in context ranging from period II (690-660 BC) to period III (660-630 BC), at Miletus one example comes from a late Geometric and early Archaic context and from Ephesus evidence from the first period of the Agora settlement is known, which ends 680/660 BC.

⁵⁷³ Samos V, pl. 53. 307.

⁵⁷⁴ Cross-hatched triangles are not confined to bird oinochoai only as shown by examples like on a closed vessel from *Emporio*, pl. 48. 539. The question, whether all jugs with similar decoration features should be called bird oinochoai despite the fact that not all are decorated with a bird is slightly confusing. On the other hand, not all bird kotylai are necessarily decorated with birds. Therefore, all round mouth jugs or oinochoai decorated with the typical decoration of lozenges, triangles ect., all motifs frequently found on bird oinochoai in metopes, are subsumed under the term “bird oinochoe”. See also Samos V, 47-48.

⁵⁷⁵ Coldstream GGP, 278. A similar squat shaped jug comes from period IV from Chios. *Emporio*, pl. 51. 582.

616 come from Samian jugs while parallels for **617** are unknown to me. Both examples possibly belong to the early 7th century BC.⁵⁷⁶

Apart from the distinctive bird kotyle workshop, the exact provenance of the other bird oinochoe fragments has to remain open. Chios and Samos were probably two important production centres and the white slip can be found in both places although some stylistic differences can be observed.⁵⁷⁷ The majority of bird oinochoai seems to come from a south Ionian centre, most likely from Samos or from Miletus.⁵⁷⁸ Bird oinochoai are also known from Tarsus, although not in such large numbers.⁵⁷⁹ The few examples found there are all of north Ionian style and fabric.⁵⁸⁰

The rim **588** and the wall **589** might be of Cycladic production. In the case of **589** a similar motif can be found on an amphora from Delos and another example with similar pattern comes from Thera.⁵⁸¹ Jugs with large chevrons from the Cyclades are unknown. A belly- handled amphora from Thera bears a row of sigmas on the rim and might be a hint for the origin of the jug.⁵⁸² Although slightly diverging, the chevrons are drawn with a large brush and executed in an “excessive” manner, which is typical for the “Parian” vases.⁵⁸³

⁵⁷⁶ Compare also the jug in Samos V, 49 fig. 28 of the early 7th century BC.

⁵⁷⁷ Interestingly, Chian examples lack the typical lozenges in double outline, which might be a Samian or south Ionian characteristic. Judging from the few published examples from Emporio, Chian painters preferred to draw only a single outline. The same might be true for triangles. In this respect Chian products seem to be much closer to north Ionian products. Compare e.g. *Emporio*, pl. 49. 554 with Samos V, pl. 53. 309.

⁵⁷⁸ Bird Oinochoai are surprisingly rare at Miletus, another important pottery production centre: *Töpferzentren*, 69; *Emporio*, 142.

⁵⁷⁹ Tarsus III, fig. 98.

⁵⁸⁰ Tarsus III, 295 “Material and technique are so homogeneous as to suggest a single factory or at least one centre of production”.

⁵⁸¹ From level VI comes one fragment that has been associated with a Samian origin by Descoeudres 1978, 9 no. 14.

⁵⁸² Pfuhl 1903, pl. 30. 3 (J 6).

⁵⁸³ Coldstream GGP, 178. Against a Parian attribution would speak the application of a creamy slip on the surface, a characteristic usually not associated with “Parian” vases. See Coldstream GGP, 176.

Next to the Sub-Geometric bird oinochoe a variety of other later jugs can be found in level VI-VII. Among them are simple decorated jugs with horizontal bands (**619-620. 645-646**) or completely painted examples (**631. 635**). **633** is a unique piece covered in black glaze with horizontal bands in added white (pl. 60). Bands in added white can be found on a large range of vessels from different regions during the 7th century BC.⁵⁸⁴ Added white is applied on jugs of the so-called “schwarzbunte” or polychrome ware that originates in the Aeolis with Larissa as one prolific source of this category.⁵⁸⁵ Related to the Aeolian production might be the group of oinochoai found at Vroulia on Rhodes decorated in a similar technique.⁵⁸⁶ Added colour is also found on vases probably produced at Sardis.⁵⁸⁷ According to Payne added white decoration was introduced at Corinth during the LPC or TR period.⁵⁸⁸ The closest parallel for the decoration and the shape though, comes from the Heraion on Samos and it does not seem too far-fetched to assume a local Samian production for this type that imitates perhaps Corinthian originals.⁵⁸⁹ **633** has a slightly rounded rim and therefore may be later than the example from Samos. A date to around the middle or third quarter of the 7th century BC is suggested here.

⁵⁸⁴ Megara Hyblaea 2, 153-155.

⁵⁸⁵ Larisa am Hermos, 91-92 pl. 39-40. Kerschner 2006, 112, fig. 9. Examples of this class were exported to Naukratis and Berezan e.g. Posamentir and Solovyov 2006, fig. 3. Fragments of the so-called polychrome ware were also discovered at Tarsus: Tarsus III, fig. 102. 1526; 103. 1527-1529.

⁵⁸⁶ Vroulia, 190-192 pl. 2. 1-3; Kerschner 2006, 112.

⁵⁸⁷ *Sardis I*, 78-79.

⁵⁸⁸ Payne 1931, 19-20. 277; Amyx 1988, 39-40.

⁵⁸⁹ Kopcke 1968, 264 fig. 15; For another view see Furtwängler 1980, 169; Agora VIII, 100. Attic potters also applied this technique and Brann suggested that they imitated Corinthian originals. Attic examples employing this technique appear already at the beginning of the 7th century BC: See Agora VIII, pl. 39. 591. In this respect one can only outline that the technique of applying added white on a dark surface may have been transformed to East Greece through different ways during the 7th century BC since the technique was known in several regions there already during the LG period.

The only other examples with bichrome decoration found in the Levant are an oinochoe from a late 7th or early 6th century context from Tel Kabri and fragments from Ashkelon.⁵⁹⁰ The other simple monochrome jugs like **631** and **636** have a similar rim profile although **636** has a more pronounced rim and therefore might be slightly later. One almost complete preserved monochrome jug with the inventory number MN 203 containing a round mouth comes from one of three wells that cut into level VI and which are located in squ. H6.⁵⁹¹ In the pottery register of 1936 (pdl) three pieces of Rhodian jugs are mentioned bearing the numbers MN 203-205. All are said to be from level VI-VII.⁵⁹² A fourth one is listed under number MN 121 and is also from level VI-VII.⁵⁹³ The given height of all fragments suggests that they were almost completely preserved.⁵⁹⁴ Thus, perhaps all four fragments come from these wells. They were apparently thrown into the well after they were broken.

3. 9. 10 Wild Goat Style

Jugs of the so-called Wild Goat style also occur in level VI-VII. They cover the whole lifespan of this style. The earliest fragments are **625** and **627-628, 681-682**. They are all round mouth jugs. The neck is covered by the typical horizontal ornament zones, which are decorated with different motifs with the broken cable the most prominent one. This type of neck decoration is characteristic for the earliest jugs.⁵⁹⁵ **627** and **628** are painted with an unusual wavy line with dots or circles filling the interspaces (pl. 60). A similar

⁵⁹⁰ Tel Kabri, 233 no. 20 fig. 5.94-5; Ashkelon 3, 281-284.

⁵⁹¹ Woolley 1938, 154 pl. 13 (MN 203).

⁵⁹² Note that MN 203 is published in Woolley 1938, pl. 13.

⁵⁹³ They are marked VI-VII because the well was only detected after level VII was reached. Since Woolley could not be sure to which level the wells belonged he marked the material from it with VI-VII.

⁵⁹⁴ Despite this, they have not been added to the catalogue. According to the pdl they were all shipped to England but so far they could not be located. Perhaps their preservation caused them to stay at Antakya.

⁵⁹⁵ Kerschner and Schlotzhauer, 2005, 16.

decoration can be found on a jug that possibly comes from north Ionia dating to the earliest Wild Goat style phase (NiA Ia).⁵⁹⁶ The profile of the rim is slightly thickened, which may point to a date to the lower end of EA Ia.⁵⁹⁷ **681** was already published by Descoeders in 1978 and contains the typical decoration of early 7th century round mouth jugs with the dotted broken cable and the dotted chequerboard on the neck.⁵⁹⁸ Certainly to the next phase belongs **636** with the loop pattern and a running dog or fox.⁵⁹⁹ The latest piece is **643** with the typical ornamental band of squares alternating with diagonal crosses and dots.⁶⁰⁰

642 is listed under jugs despite that it was previously associated with a krater by Walter-Karydi.⁶⁰¹ It contains a vertical handle, which cannot be observed on any known krater form that usually have horizontal round handles and are attached higher on the shoulder.⁶⁰² The handle of **642** must be larger and it is also attached lower on the shoulder as indicated by the distance to the cable pattern, which would fit better with a jug.⁶⁰³ Also the diameter of the vessel (taken underneath the handle, 20 cm) points to a jug.

⁵⁹⁶ For the jug see Mayence and Verhoogen 1949, 2 pl. 2. 6; For the date and attribution to a north Ionian workshop see Kerschner and Schlotzhauer 2005, 10 no. 15.

⁵⁹⁷ Kerschner 2006, 79.

⁵⁹⁸ Kerschner and Schlotzhauer 2005, 16.

⁵⁹⁹ Note that the usual reserved interior line of the belly is missing. A dog or fox is the best interpretation although the height between belly and ground line fits better with a deer or goat. Loop pattern appear in SiA Ib but continue into the next phase: Kerschner and Schlotzhauer 2005, 24. 32.

⁶⁰⁰ Kerschner and Schlotzhauer 2005, 44-45; Kalaitzoglou 2008, 172. In Robertson 1940, pl. 3. h the fragment was already published together with four other fragments including the base of the jug. Unfortunately, the other pieces could not be located in the Ashmolean Museum due to refurbishment of the museum, which resulted in the distribution of the material to several storage facilities, which made it hard to retrieve all the pieces.

⁶⁰¹ Samos VI 1, no. 159. Krater fragments with face decoration are known from Assesos e.g. See Kalaitzoglou 2008, 196.

⁶⁰² See e.g. Kalaitzoglou 2008, pl. 96 (horizontal round handle); pl. 114 (vertical round handle on shoulder of dinos); Also Samos VI 1, pl. 65. 559 (dinos with vertical handle but flat shoulder).

⁶⁰³ See Wallenstein 1973, pl. 9; Robertson 1940, 10 lists the piece as a "broad" jug.

The face-decoration is typical for the latest phase of the Wild Goat style (SiA Id) and is commonly found on the interior of plates (see **554-555**). The cable pattern, which was replaced by simple bands during SiA Ic without disappearing totally, is unusual for the latest phase of Wild Goat style in south Ionia (SiA Id).⁶⁰⁴ Our piece may therefore be dated around the verge from SiA Ic to d.

One fragment can be assigned to a Corinthian olpe. The shoulder fragment is very straight and of the decoration only the inscribed outlines of tongues are preserved. Tongues on the shoulder are usually associated with LPC olpai but occur also during the EC period.⁶⁰⁵

A large group of closed vessels are small jugs (17). All of them belong to the same type and are of similar fabric, which suggests a common origin (pl. 61. 74). They have a flat base (**651**) and an ovoid body with a lipless rim (**652**). They are fully painted except for one reserved band below the vertical handle and one reserved zone at the base (**666. 653**). Comparable examples of these jugs come from Samos.⁶⁰⁶ They are considered as LG but certainly continue into the 7th century BC.⁶⁰⁷ Their appearance at Al Mina is intriguing since so far no other site in the Near East produced these simple decorated jugs, let alone in such quantities.⁶⁰⁸

⁶⁰⁴ Samos V, pl. 116. 592 (Lévy Oinochoe); Kerschner and Schlotzhauer 2005, 32; Kerschner and Schlotzhauer 2007, 309.

⁶⁰⁵ Corinth VII 1, 43-44 no. 142 pl. 20-21; Corinth VII 2, 126 An 143 pl. 57; Payne 1931, 19-20.

⁶⁰⁶ Vierneisel and Walter 1958/59, 13. 18-19; Furtwängler 1980, 174-175.

⁶⁰⁷ Eilmann 1932/33, 131; Walter 1957, 42; Vierneisel and Walter 1958/59, 18 pl. 31; Furtwängler 1980, 175.

⁶⁰⁸ The simple decoration made Furtwängler wonder whether such vessels were exported in masses to foreign places such as Tocra. Furtwängler 1980, 175 no. 134.

3. 9. 11 Aryballoi

A few examples of aryballoi can be found in levels VI-VII. The wall **667** is perhaps of an LG II Euboean aryballos or lekythos, an assumption based only on the fabric, which is different from the typical Corinthian clay (pl. 74).⁶⁰⁹ The majority comes from Corinthian aryballoi. The earliest piece is the base **668**, which is decorated with black paint and one reserved band (pl. 61).⁶¹⁰ The shape is globular and contains a large concave foot.⁶¹¹ All these characteristics can be found on EPC aryballoi.⁶¹² Unusual though, is the hollow centre on the underside of the foot as well as the placing of the reserved band relatively high up the lower part of the body. Therefore the assignment to EPC is done here only with some reservation.

The majority can be dated from the MPC to the LPC period. The fragments **669-671** possibly belong to the so-called Cerstedra type that is dated by Neeft from 660-630 BC (pl. 61. 74).⁶¹³ Characteristics are the combination of rays on the base, followed by alternating thin encircling lines and a painted zone with added colour. The belly

⁶⁰⁹ The fabric and the bands are very similar to the fabric and bands found on Euboean imitations of Corinthian kotylai. A Corinthian origin cannot be ruled out entirely. In this case the fragment would date to the EPC period.

⁶¹⁰ Black zone with reserved band can also be found on contemporary kotylai and oinochoai. See Neeft 1987, 50.

⁶¹¹ Coldstream GGP, 106-107; As Neeft 1987, 49 noted the large foot might be an indication for an earlier date but it does not necessarily have to be one. The foot of **666** is certainly a large one as can be deduced from Neeft 1987, 48.

⁶¹² See Neeft 1987, 29. 48-50.

⁶¹³ Neeft 1987, 343. Although Neeft associates the Cerstedra type with his early and first half of the middle ovoid period, subgroup G seems to be going down into the late ovoid period (Neeft 1987, 343 fig. 186). The subgroup G also contains the rays and the bichrome décor and due to the state of preservation the exact subgroup of the pieces from Al Mina cannot be identified so that a broader dating frame is used here. Fragment **667** is uncertain since the typical alternating points from the belly are not preserved but **667** may even be from the same vessel as **668** although the pieces are not joining. All preserved features may suggest an assignment to the Cerstedra type including the size, which speaks against the Delcore type. Another possibility would be the Walton type but even if **667** belongs to this group, the date is not much different (Walton type belongs to the period 665-640 BC). See Neeft 1987, 329.

contains a zone with alternating dots.⁶¹⁴ The Cerstedra type shares these features with the Delcore type but the latter is larger and from the preservation of the fragments one can deduce that they rather fit with the Cerstedra type.⁶¹⁵

669 consists of two fragments, of which one is marked with level VI-VII and one with VI only. The wall fragment **672** can be either assigned to the Cerstedra or Delcore type. The thin encircling lines that follow immediately on top of the painted zone speak in favour for the Cerstedra type while the size may better fit with the Delcore type.⁶¹⁶ **673** and **674** are badly preserved. **673** partly preserves the base. It contains rays on the base, thin encircling lines followed by a painted zone with encircling lines in added red. These are features that can be found on the Walton-, Cerstedra and Delcore type.⁶¹⁷ The size speaks in favour for the first two. The state of preservation does not allow being more specific. **673** may therefore be dated only broadly into the MPC period and the same can be said about **674**. **675** is the latest of the Corinthian aryballoi found in level VI-VII. It possibly belongs to the so-called Utrecht group.⁶¹⁸ The Utrecht group is close to the Albertinum- Banditaccia- and Delcore type, of which the latter is also found at Al Mina level VI-VII.⁶¹⁹ Significant for assigning **675** to the Utrecht groups is the decoration on the shoulder and on the belly in combination with the bands in added red. Although the decoration is not well preserved, traces of circles and rosettes or parts of sigmas can be made out. According to the size of the fragment, the aryballos must have

⁶¹⁴ Neeft 1987, 223 fig. 131.

⁶¹⁵ The Walton type contains similar features but the zone with alternating dots is placed on the shoulder and not on the belly as in the case of our pieces. Walton type see Neeft 1987, 118 fig. 44.

⁶¹⁶ The whole fragment is very similar to another aryballos base fragment (Dm 2.1 cm) from level V that belongs to the Delcore type (**925**). It may be assumed that **671** is of the same type despite minor divergence from the standard decoration.

⁶¹⁷ Walton type see Neeft 1987, 118 fig. 44. 329; Cerstedra type: Neeft 1987, 223 fig. 131. 342-343; Delcore type Neeft 1987, 229 fig. 132. 343.

⁶¹⁸ Neeft 1987, 229-230 fig. 133.

⁶¹⁹ Neeft 1987, 230. Only the Utrecht groups bears a decoration on the middle of the belly made out of rosettes and sigmas.

belonged to a larger type, which is in accordance with the characteristics of the Utrecht group. The group is dated by Neef to the late ovoid period and continues into the EC period.⁶²⁰

3. 9. 12 Summary

With a total number of 298 fragments, which could be dated, and in the majority of the cases assigned to a particular region, level VI-VII is certainly the largest assemblage from Al Mina. Not included in this number are 76 fragments that can be broadly dated to the 7th century but which are so badly preserved that they were not taken into consideration in the catalogue.⁶²¹ A further 19 fragments marked level VI-VII are non-diagnostic. 198 pieces are open while 107 pieces are of closed shapes. Although the assemblage covers two levels, some important observations concerning the chronology can be made. The presence of bird kotyle fragments of early 7th century BC date together with the earliest class of bird bowls dating to the same period, underline the continuity of the trading relations between Asia Minor and the East. They also confirm the continuity in the occupation of the settlement. Interestingly, the earliest types of bird kotylai dated by Kerschner from 750-715 BC are missing.⁶²² The presence of early cups with everted rim suggests a similar conclusion. Unmistakable LG material (dated only to the second half of the 8th century BC) is restricted (36 fragments) and clearly outnumbered by material dated to the early 7th century BC. In the previous chapter I suggested that level VIII continued into the 1st quarter of the 7th century BC and ended probably at some point around 675 BC. Sherds marked with level VI-VII seem to pick

⁶²⁰ Neef 1987, 344. 379 fig. 186.

⁶²¹ They are however included in the statistical analysis.

⁶²² Kerschner 1995, 12.

up exactly at the point where level VIII stopped. This confirms the proposed end for level VIII at around 675 BC and at the same time it provides a *terminus post quem* for the beginning of level VII.

Noteworthy is also the considerably large number of late 7th century material. In total 28 fragments can be assigned to the last quarter of the 7th century BC including ten pieces dating to the last decade. Although it cannot be proven, it seems more likely to assume that these fragments belong to level VI rather than to VII. In comparison to the total assemblage, these 28 fragments cannot be considered as residual.⁶²³ Assuming that the high number is not accidental, the end of level VI or the beginning of level V must be around 610 BC. The statistical analysis of the assemblage on the other hand illustrates that the core of the material falls into the period between 700-640/630 BC (pl. 164). A date closer to around 610 BC would fit better with the results gained from level VII although this previous result was based only on 32 fragments. Like in earlier levels one has to recall that the material dated to 610 BC cannot be considered as the *terminus post quem* of the layout of level VI. The levels do not present clearly distinct layers that would allow distinguishing between different building activities. The latest pieces have to be seen as representing the end of the level VI houses or even as levelling material of the succeeding level V. The date of the layout of level VI has to remain open at this point.

3.10 Level VI

⁶²³ In this respect one has to recall that one example of late 7th century BC date also turned up among finds marked with level VII only.

The preserved diagnostic fragments from level VI amount to 121 fragments. Not included in this figures are 21 pieces that were too fragmented and were therefore not taken into consideration.⁶²⁴ It is a considerably large assemblage of dateable fragments and its analysis is important for the chronology of the 7th century BC at Al Mina. The majority of fragments from the 7th century BC are either marked VI-VII or V-VI. Pieces marked as coming from level VII are few and apparently contaminated with material from later levels. Therefore this assemblage is crucial to define the *terminus ante quem* for level VII and additionally provides information about the *terminus post quem* for level V.

3. 10. 1 Drinking vessels

Already during the discussion of the level VI-VII it became clear that the LG material from Greece was replaced by East Greek imports. This tendency becomes even clearer in level VI. Fragments marked with level VI, assignable to the LG period, and which can be attributed to Greece, amount to only three fragments **683-684** and **686**. (pl. 75. 83).⁶²⁵ To this number one can add the two Euboean kotylai **691-692** (pl. 83) with soldier bird decoration, which date to LG II but their appearance in level VI may suggest that the production of the type continued perhaps into the early 7th century BC.⁶²⁶ Corinthian kotylai were also still imported during the 7th century BC. Level VI contains eight Corinthian kotyle fragments. Besides examples with “sloppy” chevron decoration, level VI includes a unique EPC fragment with horizontal hourglass motif

⁶²⁴ Despite the fact that the 20 non-diagnostic fragments were not included in the catalogue, they were included in the statistics.

⁶²⁵ Unclear remains the origin and date of **755** and the date of **802**, which could also be of early 7th century BC.

⁶²⁶ See the discussion in the Appendix 2, 4. 1 (level VIII).

and a handle decoration with a row of dots between lines (pl. 75. **693**).⁶²⁷ The latest fragments are the kotyle **695**, **699**⁶²⁸ and **700**, which are all LPC or perhaps even EC in date (pl. 75. 83). Level VI contains also Corinthian Sub-Geometric skyphoi, which appeared for the first time in the level VI-VII.⁶²⁹ While their number is with three pieces (**687-689**) much smaller than the number from level VI-VII, level VI also contains one fragment of possible EC date (pl. 83. **689**) and proves that Corinthian imports reached Al Mina throughout the whole 7th century BC.

3. 10. 2 Bird Kotylai and Bird Bowls

Two pieces from level VI belong to the bird kotyle type **701-702** (pl. 76. 83). While **702** is not well preserved, **701** belongs to a type, which is dated from 720-675 BC.⁶³⁰

The quantity of bird bowls in level VI is with 14 pieces much higher than the kotylai. The range of types is similar to the one already encountered in level VI-VII but a slightly shift in the distribution of the types can be observed. Fragments dated to the second half of the 7th century BC are equal in numbers to earlier types, a situation quite different from level VI-VII where the earliest types of this class outnumbered pieces of later date. The fragments assigned to the third quarter (**710-711**) or even to the last third of the 7th century BC (**712-715**) are characterized by the brightening up of the lower part of the body (pl. 76. **711**) or by the typical void rays that cover the wall above the

⁶²⁷ According to Coldstream GGP, 106, handles bear dots between horizontal lines during the stage of the production of the soldier bird kotylai. The hourglass motif on the other hand appears at the end of LG. See Coldstream: Coldstream GGP, 101. One example with the same motif and dotted handles can be found on a hemispherical kotyle from Aetos and is dated to LG: Benton1953, pl. 43, 676.

⁶²⁸ LPC to EC. See Corinth XV 3, 261 no. 1443. A comparable kotyle comes from Tarsus: Tarsus III, fig. 147. 1524. For the date see also Jacobsen and Handberg 2010, 227.

⁶²⁹ See chapter III 3. 9. 1.

⁶³⁰ Kerschner 1995, 14-15. See also chapter III 3. 9. 2.

base.⁶³¹ The group of bird bowls from level VI is homogeneous and with the exception of **710**, all fragments probably derive from the bird kotyle workshop.

Exceptional is **709** (pl. 76), which contains a solid painted quatrefoil in a metope next to the bird. It is the only fragment of this type from Al Mina. Another interesting piece is **710**, which bears two groups of two opposed incised diagonals on the underside of the base (pl. 84). The incisions might be interpreted as a batch or owners mark. Outstanding from the rest is also the wall fragment **716**. It is slightly thicker than the majority of the bird bowls (pl. 77). The decoration of the main zone remains unclear but the two diagonals could derive from the legs of a bird. The piece may belong either to a large bird bowl or a bird bowl-krater.⁶³² The fabric is similar to the majority of the bird bowls, which suggests also a north Ionian production for **716**. Unusual among the bowls is the base **720** (pl. 88). The shape is comparable to bird bowls but the decoration of the underside of the base is unique. Perhaps it belonged to an orientalisising bird bowl type, of which some wall and rim fragments were discovered at Al Mina.⁶³³

3. 10. 3 Cups with Everted Rim

Ionian cups with everted rim cover, like in level VI-VII, the whole 7th century BC. The earliest type, cups with a zigzag band on top of the rim, is represented in level VI with three fragments (pl. 84. **721**. 77. **722-3**). The majority of Ionian cups belong to a type that can be dated to the second half of the 7th century BC. Among them one can find

⁶³¹ See discussion under chapter level III 3. 9. 2.

⁶³² Problematical with this observation is that the wall fragment is comparable flat and therefore must be situated on the lower part of the vessel. This would exclude a bird-bowl krater where the main decoration would sit higher up on the wall.

⁶³³ For the class see Kerschner 1995.

cups with a completely painted lip (pl. 77. **725**) as well as cups decorated with multiple horizontal bands (pl. 84. **726-730**). Important for the chronology of level VI are the base fragments **736** (pl. 78), **735** (pl. 85) and the two almost completely preserved cups in the museum at Antakya.⁶³⁴ The latter two as well as the base **735** belong to the delicate bichrome type, of which one piece was also encountered in level VI-VII (pl. 68, **522**).⁶³⁵ The base fragment **736** lacks the bichrome bands but the thinness of the wall together with the splaying foot suggest a date for this piece in the last third of the 7th century BC.⁶³⁶ The fabric and the surface appearance together with the paint are homogeneous and all pieces in the catalogue may come from Ionia. Fragments **721-723** and **726-729** are so close that they even may come from the same production centre with Samos and Miletus the most likely candidates. Like in level VI-VII, the relation between south Ionian cups and north Ionian bowls is fairly balanced with the cups with everted rim slightly prevailing.

3. 10. 4 One-handled Cups

Five fragments belong to cups with vertical handles. The shape of the rim fragment **737** is similar to types from level VI-VII dating to the first half of the 7th century BC (see **537-538**) but it stands out in its horizontal band decoration, which is applied with added white (pl. 78). Cups of comparable shape and with a decoration of added white are known from Emporio on Chios, although the published examples bear a more elaborate

⁶³⁴ Clairmont 1955, 108 no. 88. 90.

⁶³⁵ For the type see chapter III 3. 9. 3.

⁶³⁶ Furtwängler 1980, 164.

decoration than **737**.⁶³⁷ The base fragment with straight or slight convex wall covers the early to late 7th century BC.

739 seems to be slightly different from the majority of the cups (pl. 78). Its base has a pronounced ridge, which finds comparable parallels at Didyma dated to the 6th century BC.⁶³⁸ Although an early 6th century date cannot be excluded for our piece, the rest of the assemblage speaks rather in favour for a late 7th century date. Perhaps **739** provides evidence that this type of cup with pronounced ridge came into use at some point during the last quarter of the 7th century BC.⁶³⁹

One-handed cups with an offset lip were also exported to Al Mina. **740** and **741** are two fragments of this class. Fabric and shape of **740** is similar to East Greek examples found on Samos (pl. 78). Their rarity among cups at Al Mina is mirrored by their obvious less common use in Ionia itself.⁶⁴⁰ Eilmann, who thought they belong to the 7th century BC, took their absence in Geometric contexts as evidence for their Sub-Geometric character although the type also appears in pits that are possibly earlier.⁶⁴¹ Another possible cup of this type is **741**. The angled shoulder finds a parallel in a cup from the Agora at

⁶³⁷ *Emporio*, 123.

⁶³⁸ Schattner 2007, fig. 364 103, Be B3.

⁶³⁹ For the type see Schattner 2007, 363-364. Chronology and lifetime of this type needs still to be worked out. The parallels listed by Schattner are only a few pieces and as mentioned by Schattner, the chronology of this type needs to be confirmed by stratified material so that an introduction of this type already during the late 7th century BC cannot be excluded.

⁶⁴⁰ Eilmann 1932/33, 60.

⁶⁴¹ Eilmann 1932/33, 60. Walter however suggested that similar cups were also Geometric in date. See Walter 1957, 40 pl. 52. 3. Among the examples published by Kopcke only one fragment comes from the "Langer Graben", which was dated to the second half of the 8th century BC while the majority derives from the pre-Rhoikian contexts that also contained EC material. See Kopcke 1968, 271. For the two different contexts, the "Langer Graben" and the pre-Rhoikian layer, and their dating see Kopcke 1968, 303-304. 304-307. For the Corinthian pottery see Kopcke 1968, 281. To a 7th century BC date point also the cups published by Vierneisel and Walter, which were found in the "Bothros" dated to the last quarter of the 7th century BC. Vierneisel and Walter 1958/59, 27-28.

Athens dated to the third quarter of the 7th century BC but the fabric of **741** is not Attic.⁶⁴²

The small wall fragment **742** is painted on the interior and therefore belongs to an open vessel. The thin wall points to a drinking vessel. The broken dotted cable is a pattern found frequently in different regions during the 7th century BC but the combination of thin lines and the fine white slip recalls cups or chalices from Chios dating from the first to the third quarter of the 7th century BC.⁶⁴³

3. 10. 5 Dishes

Four fragments from level VI can be identified as dishes. The two wall fragments **744** and **745** (pl. 79) are both decorated with a star pattern in the centre.⁶⁴⁴ The rim **746** with horizontal bands on the outside, cable pattern on top of the rim and with a spool-shaped handle probably belongs to a dish with a face-pattern on the interior. Noteworthy are also the dot rosettes in the interior decoration zone. Several dish wall fragments, among them pieces labelled with level V (**880**), with a mask, simple dot rosettes as filling motifs and similar rim shape belong to one dish.⁶⁴⁵ **746** probably goes with the same dish that belongs to a class of the late 7th century BC.⁶⁴⁶

743 is a flat wall fragment and must come from a plate as well. The decoration on the outside does not match any examples from Ionia. A comparable decoration on the

⁶⁴² Agora VIII, 53.

⁶⁴³ *Emporio*, 120. On cups the broken dotted cable appears slightly earlier (Emporio period I/II): *Emporio*, 123.

⁶⁴⁴ For the pattern see Kardara 1963, 171, fig. 143. 3. 5; Kalaitzoglou 2008, 131-132.

⁶⁴⁵ Villing 1999, 197 no. 3.

⁶⁴⁶ Since the fragment from level V is stored in the Ashmolean museum and **746** is in the British Museum, it was not possible to verify whether the two pieces join together.

underside can be found on Rhodian examples like on a dish found at Tocra dated to the late 7th century BC.⁶⁴⁷ The bad preservation of **743** does not allow a firm attribution but if it is a fragment from a Rhodian plate then it is one of the rare imports from this island.

3. 10. 6 Kraters and Dinoi

The earliest fragment is **747**, which bears an inscribed wavy line just below the rim (pl. 79). The same technique can also be found on the rim fragment **748** (pl. 79). This decoration technique is characteristic for fragments found on Samos dated to the late 8th and early 7th century BC.⁶⁴⁸ The profiles of both kraters find parallels on Samos that were dated by Walter into the first half of the 7th century BC.⁶⁴⁹ While **747** certainly does not belong to the second half of the 7th century BC, the case of **748** is less clear. The rim profile may well go into the second half and perhaps proves that incisions were used as a decoration feature much longer than thought hitherto.

The small wall fragment **751** should be mentioned here since it bears an unusual decoration for a large open vessel (pl. 85). The combination of horizontal decoration zones, which are divided into metopes and decorated with multiple chevrons, can be found on a series of large closed vessels from Delos, which are perhaps Cycladic products.

⁶⁴⁷ Tocra I, 43. 49 no. 607.

⁶⁴⁸ Samos V, 33; Eilmann 1932/33, 49-50.

⁶⁴⁹ Samos V, 52-53 fig. 33. a-b; Eilmann on the other hand dates kraters comparable to **747** into the LG period and denotes that the missing incisions points to a deterioration of the Geometric style: Eilmann 1932/33, 74.

The dinos **753** is an elaborately decorated piece (pl. 80). The shoulder bears a panther in a frontal position with one of its legs resting on a central ornament. A panther painted with a comparable frontal face is shown on a SiA Ib oinochoe from Temir Gora (Russia)⁶⁵⁰ and on another oinochoe from the Vlastos collection.⁶⁵¹ Schiering discussed the stylistic relation between the piece from Al Mina and the two oinochoai in detail and assigned the piece from Al Mina to his early Vlastos group and thought that it is contemporary with the oinochoe from this collection.⁶⁵²

Schiering's Vlastos group is now attributed to north Ionia.⁶⁵³ There remain some stylistic differences between the panther on the oinochoe from the Vlastos collection and **753**: the shape of the head is more rectangular, the triangle above the eyebrows is not painted in double outline but contains a dot; the eyes are larger and the wrinkles below the eyes are missing on the panther from Al Mina. Another difference is the rendering of the fur: the earlier SiA Ia example combines small dots with larger solid circles while the panther from the Vlastos group is painted with a dotted neck but the rest of the body bears small unfilled circles. The neck of the panther from Al Mina has the dotted neck but the body is decorated with solid circles as shown by the front leg. The slight variations between the panther on the dinos from Al Mina and the Vlastos oinochoe call for a careful consideration of the origin of **753**. If it is north Ionian then it belongs to the NiA Ic period, which is perhaps contemporary with the SiA Ic vase painting as shown by finds from Clazomenai.⁶⁵⁴

⁶⁵⁰ Samos V, pl. 95; Kerschner and Schlotzhauer 2005, 17 no. 22.

⁶⁵¹ Schiering 1957, pl. 4-5.

⁶⁵² Schiering 1957, 53. 101.

⁶⁵³ Wild Goat Style, 90.

⁶⁵⁴ Wild Goat Style, 91; Hürmüzlü 2004, 84.

Two further dinoi fragments decorated in the Wild Goat style are found in level VI. **752** is a wall fragment with a dotted chequerboard, probably dated to EA Ia-b and the second fragment, **754**, is perhaps from an EA Ic dinos or krater as indicated by the combination of cable and hatched meander (pl. 85).⁶⁵⁵

The last piece from an open vessel is **755**. Its decoration on the outside together with the shape does not have any parallel. The surface is covered with a thick whitish slip and red paint. The interior is fully painted and contains horizontal bands in added white (pl. 80). The underside of the base is decorated with a star motif. The shape and the interior slip suggest an open vase, perhaps a bowl or a krater. The chain of lozenges and the subdivision of long friezes recall products from Laconia of LG and 7th century BC.⁶⁵⁶

One LG Laconian bowl from the Artemis Orthia sanctuary has a similar shape but a total different interior decoration.⁶⁵⁷ The fabric is close to the best of Attic or Euboean examples with a brick light red sherd and only a few white rounded inclusions. Robertson assumed that **755** comes from a large Cycladic krater.⁶⁵⁸ Cycladic kraters with similar decoration or shape that would match **755** have not been identified so far.

⁶⁵⁵ Dotted chequerboard is very often found on closed vases of SiA Ia and are rare in Si A Ib: Kerschner and Schlotzhauer 2005, 16. 24; On Chios chequers appear during all periods but one cannot exclude that the two examples from Emporio (period III and IV) are residual: *Emporio*, 108; See also Eilmann 1932/33, 107.

One has to note here that Kardara assigned **754** to his “υστερος ανατολιζων ρυθμος”, which corresponds partly with Kerschner and Schlotzhauers SiA Ib: Kardara 1963, 67; Kerschner and Schlotzhauer 2005, 17. Note further that Kardara believed the fragment belongs to an oinochoe, which has to be rejected due to the glazed interior.

⁶⁵⁶ Margreiter 1988, 76 pl. 46. 541. 546.

⁶⁵⁷ Margreiter 1988, fig. 19 pl. 45. 528.

⁶⁵⁸ Robertson 1940, 8.

3. 10. 7 Closed vessels

The range of closed vessels from level VI is close to the level VI-VII. Among them one can find large closed vessel such as amphorae or hydria. **756** (pl. 85) comes perhaps from Chios like the two closed vessels **776-777**, (pl. 81) and the shoulder **778** (pl. 86) decorated with multiple zigzag pattern. The walls of the latter three are thinner and therefore belong to jugs. **757** and **758** are two further transport vessels or hydriai (pl. 85). The first one most likely comes from a transport amphora of Chian origin. The whitish slip, the bands on the neck and around the handle, are typical characteristics of this type. The second one belongs to the popular wavy band amphora/hydria of East Greek manufacture.⁶⁵⁹

The majority of the closed vessels belong to jugs. The typical north Ionian bird oinochoeai are represented with three pieces (**759-761**) and come from the bird kotyle workshop (pl. 85). South Ionian jugs can also be found in level VI with their typical decoration of cross-hatched triangles and lozenges (pl. 80. **763**. 86. **764-769**).

Remarkable is **764** that probably depicts a part of a crab. Another piece with similar decoration was encountered already in level VII (pl. 41. **363**).⁶⁶⁰ An additional fragment with a parallel in level VI-VII is **769** (pl. 86).⁶⁶¹

⁶⁵⁹ Cook and Dupont 1998, 146 fig. 23. 1, a. Judging from the distance between lower and upper band it seems that the neck was probably rather squat and therefore belongs to the earliest type of the white slipped amphorae. Clazomenian amphorae, another group with similar band decoration, lack the typical thick whitish slip and can therefore be excluded. See Sezgin 2004, 170.

⁶⁶⁰ For the discussion of the piece and the relationship between Samian and Euboean vase painting see chapter III 3. 8. 2.

⁶⁶¹ See pl. 59. **618**. The two pieces do not join but are perhaps from the same vessel.

771 and **772** belong to the same vessel. The vertical strap handle indicates that the two pieces come either from a jug or a small neck handle amphora (pl. 81. 86). Robertson assigned the pieces to a Cycladic workshop.⁶⁶² Although comparisons, which combine both patterns – sigmas on the belly and the volutes on the shoulder – are missing, a comparable pattern of volutes can be found on a neck handle amphora from Delos.⁶⁶³ Despite the lack of a clear parallel, the two fragments might be associated with the Cyclades where volutes or floral ornaments were popular during the orientalisising style.⁶⁶⁴ **782** is probably another fragment of Cycladic provenance. It combines suspended rays on the shoulder with a row of dashes on the belly (pl. 87).

The only example of a small East Greek juglet, so numerous in level VI-VII, is the base fragment **799** (pl. 82). The low number in level VI suggests that the shape was only exported to Al Mina for a relatively short period, which might be related to a stop of the production of this type during the first half of the 7th century BC. In theory, some of the pieces from level VI-VII could belong to level VI, which is somehow suggested by **799**.

3. 10. 8 Wild Goat Style

Jugs decorated in the Wild Goat style are quite frequent. The fragments range from the early 7th- to the end of the 7th century BC. The three fragments **783-785** possibly fit to the earliest phase of the Wild Goat style (EA Ia). The latter two (pl. 82. 87) perhaps belong to the same vessel. The neck of **783** has a thickened, slightly bevelled rim

⁶⁶² Robertson 1940, 8.

⁶⁶³ The example from Delos cited in the catalogue combines both features but the shoulder carries also figural decoration, which was not the case on **771-772**.

⁶⁶⁴ Delos XVII, 35.

pointing to a late stage in SiA Ia.⁶⁶⁵ A third fragment (**625**) marked with level VI-VII may also go with the two fragments from level VI. The dotted chequerboard with the broken cable on **783** is a typical neck decoration of SiA Ia but may date to early in SiA Ib (pl. 87).⁶⁶⁶ The rim fragment **786** with loop pattern and squares with diagonals is a piece of EA Ib date (pl. 87).⁶⁶⁷ The square with diagonal cross, also seen on **773-774** (pl. 81. 86), is a pattern frequently found on vessels from Samos and may indicate a south Ionian origin of **786**.⁶⁶⁸ The profile of **786** and **787** is still of the lipless shape and suggests that both fragments belong to an early stage of EA Ib.⁶⁶⁹ The same might be true for **787**, which combines loop pattern and squares on the neck (pl. 82). To divide the decoration on the neck into horizontal zones is typical for EA Ia. The wall fragment **788** falls into a late stage of SiA Ib (pl. 87). The dog, which is part of a hunting scene, is more commonly found during SiA Ib and the decoration of the lower part of the jug with a chain of lotus flowers and buds, appears for the first time during the same phase.⁶⁷⁰

To the latest phase belong the three fragments **794-796**. The first one can be assigned to EA Ic-d due to its horizontal bands with added red (pl. 87).⁶⁷¹ The shoulder fragment **795** bears a sort of ray, which can be found on a jug now in Turin and attributed to NiA Ic-d.⁶⁷² Two fragments from level VII, **368-369** (pl. 43) probably come from a jug of the same type and it cannot be excluded that the three fragments belong to the same vase.⁶⁷³

⁶⁶⁵ Kerschner 2006, 79.

⁶⁶⁶ Kerschner and Schlotzhauer 2005, 16. Vase with similar neck decoration of possible SiA Ib: Samos V, pl. 87. 492 (from Rhodes).

⁶⁶⁷ Loop pattern appears for the first time in SiA Ib: Kerschner and Schlotzhauer 2005, 24.

⁶⁶⁸ The squares with diagonal decoration is not very common on wild goat style vases but can be found on jugs from Samos e.g.: *Samos V*, pl. 99. 520.

⁶⁶⁹ Kerschner 2006, 79.

⁶⁷⁰ Kerschner and Schlotzhauer 2005, 24.

⁶⁷¹ Kerschner and Schlotzhauer 2005, 32.

⁶⁷² Wild Goat Style, 89.

⁶⁷³ For the discussion of this type of vase see chapter III 3. 8. 2.

The latest fragment is perhaps **796** with a part of an elongated wild goat preserved on the shoulder next to the handle (pl. 88).⁶⁷⁴ The neck was separated from the shoulder by an encircling line and a half roundel is visible over the back of the goat. The fabric is unusual for the south Ionian production and the fragment also lacks the typical beige or very pale brown slip. The fragment seems to come from a large closed vessel, a jug or an amphora. The two diagonal bands that are running from the handle down the shoulder, and which are usually not found on jugs, speak for an amphora.

Several fragments of the so-called Borysthenes group that also produced amphorae decorated in a Wild Goat style, turned up at Sukas and this north Ionian workshop also exported its products to other regions.⁶⁷⁵ The elongated diagonal body of the goat is a typical trait found on north Ionian vases.⁶⁷⁶ The absence of the typical beige slip on the other hand speaks against such a classification. Unfortunately, the fragment does not preserve any secondary ornaments, thus an attribution to the Borysthenes group remains uncertain.

3. 10. 9 Corinthian Imports

Corinthian imports come only to three pieces.⁶⁷⁷ Among them are two joining wall fragments from an aryballos (**800**) can be found (pl. 88). They come perhaps from the same type as **670** from level VI-VII, maybe even from the same vessel. Another rim

⁶⁷⁴ Kerschner and Schlotzhauer 2005, 45.

⁶⁷⁵ Ploug 1973, pl. 9-11. Example from Tocra see Samos VI 1, pl. 113. 921. 929. One example of north Ionian provenance close to the pieces from Tocra comes from Amathus on Cyprus. The date assigned to the piece by Gjerstad (575-550 BC) is certainly too late: Gjerstad 1977, 36 no. 57. For a discussion of the group see Kerschner 2006, 113.

⁶⁷⁶ Wild Goat Style, 90.

⁶⁷⁷ A fourth piece (Ash 1954.454/2) of a Corinthian closed vessel, either an aryballos or an alabastron was marked with level VI. The fragment is so small and the preserved decoration cannot be deciphered. Judging from the preserved part, the piece does not date before the EC period.

fragment of an aryballos or an alabastron (**801**) of Corinthian production probably dates to EC (pl. 88).⁶⁷⁸ A similar piece comes from Zincirli and was found in the lower palace.⁶⁷⁹

One jug fragment of Corinthian fabric is the last of the Corinthian imports to be discussed here (**798**). It is painted in black colour and bears two encircling lines in purple red just below the handles (pl. 82). Such bands in added red appear with the beginning of the LPC period.⁶⁸⁰

The last pieces discussed here are two singular finds among the imports from Al Mina. The first, **802**, is an askos, a shape otherwise not attested in North Syria and the Levant. It is perhaps of East Greek origin.⁶⁸¹ Its decoration is in a Sub-Geometric style. Similar pieces were discovered in significant numbers in the Heraion on Delos.⁶⁸² The combination of opposing diagonal lines and cross-hatched triangles, is rare though.

Ephesos seemed to be a prolific source of askoi while the shape obviously did not enjoy the same popularity in other Ionian cities.⁶⁸³ The appearance of **802** in level VI confirms

⁶⁷⁸ Petals on top of the rim is a very common decoration pattern of Corinthian vase painting and appears from Transitional to end of Corinthian vase painting.

⁶⁷⁹ Sindschirli V, 45-46. The Corinthian fragments derive from the "lower palace". Only for the fragment pl. 22. f (S 2192) a findspot is given (2,8 m below the outer edge of the older wall east of the Hilani II): Sindschirli V, 151.

⁶⁸⁰ Payne 1931, 19. Decoration in added red is not confined to the LPC period but continues at least until MC. See e.g. Corinth VII 1, 81 pl. 44. 371. Usually the red bands are accompanied by band in added white. The latter usually do not adhere well to the surface and their absence might be due to depositional reasons.

⁶⁸¹ Northern Ionia has been proposed as the centre of the production of this type Cook and Dupont 1998, 134. Kalaitzoglou 2008, 256-257 suggested that the Dodecanese should not be ruled out as a source of origin.

⁶⁸² Delos X, 37-38.

⁶⁸³ Kerschner 2007, 225. Few pieces are known from the Heraion on Samos. See Eilmann 1932/33, 140. One piece is reported to come from Clazomenae: Bakir and Ersoy 1998, 74 fig. 6.

the long lifetime of the Sub-Geometric askos with cross-hatched triangle decoration, which covers almost the whole 7th century BC.⁶⁸⁴

Finally, level VI revealed another category of Greek imports otherwise unknown in the whole Near East (**803**). It is a rim fragment from a small hand-made oinochoe (pl. 88). It belongs to a class of fine hand made vessels discussed by several scholars and is called “Argive monochrome” or simply “Helle Ware”.⁶⁸⁵ The class goes back into the Protogeometric period but was also produced until the 6th century BC.⁶⁸⁶ The decorated categories were produced in several regions and also widely exported.⁶⁸⁷ Our piece comes from a production centre situated on the Peloponnese.⁶⁸⁸ The preservation of the piece does not allow a precise date. Most closely in shape with a short conical neck, is perhaps a fragment from Corinth found in a well of LPC to TR date.⁶⁸⁹ Although the hand made ware of Argive monochrome class has a wide distribution, examples in the Near East are missing so far.⁶⁹⁰ One piece similar to **803** was exported to the Hera sanctuary on Samos.⁶⁹¹ Another peculiarity about the piece from Al Mina is that it was found in a settlement context. The majority of this class can usually be associated with graves or sanctuary contexts.⁶⁹² The oinochoe certainly was not exported due to its content and the singularity of this class at Al Mina together with the total absence of the

⁶⁸⁴ Kerschner 2007, 225-226. The long lifetime is also supported by two fragments found in the Athena sanctuary of Assesos Kalaitzoglou 2008, 256-257.

⁶⁸⁵ For the term and the characteristics of this class see Pfuhl 1923, 82; Courbin 1966, 29-30.

⁶⁸⁶ Reber 1991, 77-78. 92.

⁶⁸⁷ Kourou 1987, 32-50; Kourou 1988, 315.

⁶⁸⁸ The piece has been sampled for NAA analysis by Mommsen. The result revealed a centre in the northern Peloponnese and will be published in a separate article.

⁶⁸⁹ Williams and Fischer 1971, 28-29. Another close parallel comes from Corinth: Corinth VII 1, pl. 37, 301 which has also a similar double band handle.

⁶⁹⁰ Kourou 1988, 315.

⁶⁹¹ Stampolidis 2003, 359 no. 500.

⁶⁹² Kourou 1988, 320.

Argive monochrome ware in the East strongly indicate that the object may have travelled as a personal belonging to Al Mina and not as a traded good.⁶⁹³

3. 10. 10 Summary

The level VI assemblage seems to be of a mixed character and contains sherds that can be dated from the second half of the 8th to the end of the 7th century BC. This situation can be explained through frequent building activities in the settlement. The second factor, which contributed to the mixed nature of the levels, is the excavation method. Nevertheless, some important developments can be observed, which have consequences for the date of the assemblage.

LG imports are reduced to a few examples. Compared to level VI-VII, the percentage of bird bowls as well as cups with everted rim of the second half of the 7th century BC is much higher. A comparison between jugs painted in Wild Goat style and jugs decorated in a Sub-Geometric style illustrates a similar shift. Further, juglets, so frequent in assemblage VI-VII, are almost absent in level VI.

Cups with everted rim and bichrome decoration (733-735) are probably appearing for the first time in level VI. Based on this, one may assume that the only fragment of this type marked level VI-VII (522) belongs to level VI rather than to VII.⁶⁹⁴ Another type

⁶⁹³ Although I do not agree with Kourou 1988, 320 that the quality of the Argive monochrome ware is inferior to the wheel made ware and thus has to be considered as “insignificant” and was only traded because of its contents, the rarity of this class in the East shows that there was no demand for the Argive monochrome ware in the Near East. On the quality see also L  derrey 2007, 267.

⁶⁹⁴ This assumption is based on the absence of this type among sherds marked with level VII and the relatively frequency of this type in level VI. In this respect it is worth stressing that the assemblage VI-VII is much larger than VI. If the type had appeared already in level VII one would expect more fragments in level VI-VII.

making its debut in level VI is the LPC kotyle **699**. Until level VI-VII the group of Corinthian kotylai consists predominantly of types with chevron decoration, multiple thin lines and rays on the lower body part. Hard to interpret are the Corinthian aryballoi, which are absent in level VII but frequent in level VI-VII. In level VI only one piece can be found (**800**), which is of the same type as **669-670** from assemblage VI-VII. Also noteworthy is that the only aryballos/alabastron fragment dated to EC or later comes from level VI (**801**).

The absence of EC kotylai, and perhaps cups with everted rims dating to the last third of the 7th century BC among finds from level VII and VI-VII together with the appearance of these type in level VI perhaps suggests that level VII ended before these types were produced. Thus, the *terminus ante quem* for the end of level VII would be around 630/620 BC. Such an argument *ex silentio* is not without problems and the frequency of EA Id fragments found in the assemblage VI-VII and in level VI exemplify the mixed character of the assemblages. Another problem is that it remains unclear to what extent the level VI assemblage is representative for the finds deposited in level VI, in particular since assemblage VI-VII contains more than twice as many sherds than level VI. Thus the presented results have to be treated carefully and cannot be considered as definitive.

The class of East Greek pottery, which can be dated within smaller margins than any other category from that region, is the Wild Goat style pottery. It appears frequently in level VI-VII and VI. Level VI contains fragments from EA Ia to d, thus covering the whole production period of this class. The majority falls into EA Ib-c (650-610 BC) while only two fragments, the plate **746** and the jug fragment **795** are definitely of EA Id date (610-580 BC). Not included here are the two plate fragments **743-744** because

they are badly preserved and their date has to remain open. They too perhaps belong to EA Id.

Several further EA Id fragments can be found in level VI-VII. Their number is too high to interpret them as residual. Although it cannot be proven, they probably belong to level VI rather than to VII.⁶⁹⁵ They either come from the last phase of level VI or from the beginning of level V.⁶⁹⁶ Thus, the end of level VI or the beginning of level V has to be set around 610 BC.

The results gained from discussion of level VI have to be treated carefully and a final conclusion about the date of the levels VII to V cannot be reached until the statistical analysis has been carried out.

3. 11 Level V

3. 11. 1 Skyphos

Skyphoi are limited to six fragments (**804-809**). Apart from **804** (pl. 98), which may be of LG date, the rest belongs to LG II or even to the first half of the 7th century BC (pl. 89. 98). The decoration of two diagonal crosses in a metope on **804** (pl. 98) can be observed on fragments of the so- called Al Mina ware (e.g. **254**) and on Euboean skyphoi alike.⁶⁹⁷ **806** is decorated with scribbles or chevrons attached to the upper line of the decoration zone while **808** bears sloppy chevrons in a metope (pl. 89). The

⁶⁹⁵ The only EA Id fragment marked level VII (**372**) is probably residual.

⁶⁹⁶ See also discussion in chapter III 3. 9. 12 (summary).

⁶⁹⁷ For the motif in Euboean vase painting see Eretria XX, 80.

profiles of both fragments speak in favour of a date towards the end of the 8th century BC, or in the case of **808** even an early 7th century BC date is possible. The fabric of **806** is close to Euboean clay while for **808** an East Greek source cannot be excluded. **805** is fragmented but the fabric also points to a Euboean source. The decoration of this piece puts it perhaps also towards the end of the 8th century BC although scribbles appear already at the end of MG II in Geometric vase painting in some regions.⁶⁹⁸

807 can be grouped with a rare class of LG II conical bichrome skyphoi with a wavy band on the rim. Unfortunately, the evidence from Al Mina concerning this type is scarce. The type appears in level VIII-IX (**179-180**) and two further fragments come from level VIII (**269. 271**). **807** is the only fragment of this type from Al Mina decorated with a wavy band on the rim. All other rim sherds contain vertical dashes. This might be of chronological significance, suggesting that the type with wavy band is slightly later than the type with vertical dashes.

Unfortunately, the piece from level V is out of its original context since no available evidence points to the persistence of this type until the end of the 7th century BC.⁶⁹⁹ The rarity of this skyphos type at Al Mina is reflected by the few examples found on Euboea where it was obviously not popular.⁷⁰⁰ A similar situation can be observed in the western colonies, where the type is not found at all.

809 is the only fragment of Al Mina ware originating from level V (pl. 98). No piece of this class was found in level VI and only three fragments were marked level VI-VII. Given the scarcity of marked sherds from level VI onwards, one can assume that its

⁶⁹⁸ Coldstream GGP, 123 pl. 25. b-e; 170 pl. 34. f.

⁶⁹⁹ In this respect one has to mention that evidence from 7th century BC Euboea is very limited.

⁷⁰⁰ Eretria XX, 83.

production or the export of this class came to an end around the middle of the 7th century BC at the latest.⁷⁰¹

Three Corinthian skyphoi (**810-812**) of the Sub-Geometric class already encountered in previous levels (level VI-VII), are also part of the assemblage. The latest example is **812**, which dates to EC (pl. 89).⁷⁰² As already mentioned, the high number of Corinthian imports encountered among the different levels points to a constant flow of Corinthian products to Al Mina, even at the end of the 7th century BC, and it further demonstrates that links to Greece never ceased completely.

3. 11. 2 Corinthian- and Euboean Kotylai

Kotylai from Euboea and Corinth are also represented in level V. While the chevron kotyle with vestigial lip **818** is perhaps of LG I date, the soldier bird kotyle **819** dates to LG II (pl. 89). The latter one belongs to the largest group of Euboean kotylai types exported to Al Mina. The four Corinthian kotyle fragments (pl. 98. **813-816**) all belong to types already encountered in earlier levels. All of them show signs of misfiring, which was obviously no handicap for their export.

3. 11. 3 Cups

The cup fragment **820** is a rare example among the whole corpus of Greek imports. It belongs to a distinctive LG Euboean cup type although similar cups were also produced

⁷⁰¹ The lack of Al Mina ware fragments marked with level V-VI further supports this assumption.

⁷⁰² See also no. **689** (pl. 83) from level VI.

in other centres such as Boeotia.⁷⁰³ The shape resembles LG I examples but this cup was produced during the whole second half of the 8th century BC and the production probably even lasted into the Archaic period.⁷⁰⁴ Our example belongs to the subtype with a fully painted base, a feature that, according to Boardman, can be found on examples from Chalcis, in Boeotia on Ischia.⁷⁰⁵ **820** is the only piece attested so far at Al Mina. Previous levels did not produce any examples. Since level V contains also LG material, it has to remain open whether **820** is of LG date or whether this type of cup was produced until the end of the 7th century BC as the context of level V seems to suggest.⁷⁰⁶

The interpretation of this cup at a site like Al Mina leaves us with several possibilities. Cups of this type appear frequently in tombs.⁷⁰⁷ Child burials are a particularly prolific source of these cups. That they are not limited to these contexts is attested by finds from the settlements of Eretria and Lefkandi, although compared to monochrome cups, they were less popular.⁷⁰⁸ It seems hard to understand this group of finds as a standard trading good given the lack of one-handled cups discovered in the East and at Al Mina before the 7th century BC.⁷⁰⁹

⁷⁰³ Lefkandi I, 67 with no. 56 (according to Andreiomenou the cups from tomb 14 are of Eretrian manufacture); Eretria XX, 72-73.

⁷⁰⁴ Eretria XX, 73.

⁷⁰⁵ Lefkandi I, 67.

⁷⁰⁶ Descoedres 1976, 49 with a reference to a late 7th century tomb from Rhitsona suggested that the type was produced until late in the Archaic period.

⁷⁰⁷ Eretria XVII, pl. 92. T11, 1-6. 95, T12, 3. 105, 3. 106, T19, 2-4.

⁷⁰⁸ A quantitative comparison is provided by the results from Eretria, where apart from two assemblages (pit 254 and pit 53), the cups with vertical lines rarely exceed 10 % of the total amount of retrieved cups in the assemblage: Eretria XX, pl. 76-86; Lefkandi I, 67 pl. 62. 216.

⁷⁰⁹ The same questions may apply to cups of East Greek provenance but in this respect one has to concede that cups are more numerous during the 7th century BC, which has an impact on the interpretation of the finds. The increasing amount of one-handled cups may point to a growing interest in this shape.

3. 11. 4 Bird Kotylai and Bird Bowls

The only piece of a bird kotyle is so badly preserved that an assignment to a particular type is not possible (pl. 98. **821**). It is of the standard fabric and therefore belongs to the so-called “bird kotyle workshop” that can be located in north Ionia.

Bird bowls amount to 22 fragments.⁷¹⁰ Fragment **822-825** can be dated only generally to 675-610/590 BC. The majority belongs to the second half of the 7th century BC. **826-829** can be dated to around 640-620/610 BC. The rest, **830-843**, falls within 630-590 BC. The bird bowls from level V belong to types already encountered in level VI-VII and VI. Among them one can find examples that already show signs of the new deep bowl shape that contains a thicker wall and a lipless rim (pl. 90, **836**). This type appears at around 625 BC.⁷¹¹ Other characteristic later bird bowl types are **826** and **829** where the lower painted zone is brightened up by a reserved band (pl. 98. 99).⁷¹² Another typical feature of later bird bowls are the void rays on the lower part of the wall as seen on **830-831** and **841** (pl. 99).

The majority of the bird bowl fragments are similar to the standard fabric and perhaps derive from a north Ionian source. The exceptions are **706, 713, 715, 717** and **719-720**. For these fragments another source cannot be eliminated.

⁷¹⁰ Fragment **831** and **841** could also be from rosette bowls. They are listed under a bird bowl. One additional fragment dating to the period 640-590 BC may perhaps come from level V (BM 1995.8.24.52) but the mark on the sherd is badly preserved and the question of whether it belongs to level V or (?) VII has to remain open. The piece is therefore omitted here.

⁷¹¹ For the characteristics of bird bowl type V see Kerschner 1995, 21; Kerschner 1997, 190.

⁷¹² Kerschner 1997, 190.

One rosette bowl was found in level V and it marks the appearance of this type at Al Mina (**844**). These bowls emerge during the late 7th- and continue into the early second half of the 6th century BC.⁷¹³ Unfortunately, only the rim is preserved and the base, an important distinctive marker to distinguish between early and late forms, is missing (pl. 90). The relatively thick wall and what seems to be a rather deep hemispherical shape, recalls the late bird bowls types; thus **844** most likely belongs to the early type similar to examples found at Tocra and associated with the late 7th century BC.⁷¹⁴ A later feature is the band beneath the rosette, which can also be found on later types but as the evidence from Tocra shows, this type may also appear at around 600 BC.⁷¹⁵ In this respect the evidence from Al Mina confirms the general chronological picture concerning this type. The origin has to remain an open question. Chemical analysis of the clay composition of rosette bowls found at Smyrna highlighted that this bowl type was produced in several production centres.⁷¹⁶

845 is a bowl with a plain band on the rim (pl. 90) and has either one or two handles.⁷¹⁷ Like the rosette bowls, several examples were found on Cyprus and further pieces are known from Tel Ri fa'at, Ras Shamra, Tel Sukas and now the type is also attested for Al Mina.⁷¹⁸ For these cups a late 7th century BC date has been suggested although it seems that the type continued into the first half of the 6th century BC, which would agree with level V.⁷¹⁹

⁷¹³ Tocra I, 44-46 (earliest types appear in deposit I, which is of late 7th century date); *Emporio*, 133-134. 170; Cook and Dupont 1998, 26-27; Töpferzentren, 71.

⁷¹⁴ Tocra I, 46.

⁷¹⁵ For the type see Tocra I, 56 fig. 28, 734; Date: Tocra II, 20.

⁷¹⁶ Töpferzentren, 71-72.

⁷¹⁷ Examples of identical shape found on Cyprus prove that this type of cup existed in a one handled- and a two handled version. See Gjerstad 1977, pl. 12. 2-7.

⁷¹⁸ Lehmann 1996, pl. 24. 153/1-6.

⁷¹⁹ Ploug 1973, 40. Tarsus III, 285.

846 and **847** are two other bowl types appearing for the first time at Al Mina in level V (pl. 91). Local production is one possibility or may be they were imported from East Greece or from the southern Levant.

3. 11. 5 Cups with Everted Rim

Cups with everted rims amount to 21 pieces. Apart from **849**, all belong to types that were produced until the end of the 7th century BC (pl. 99). The type with multiple horizontal bands on the rim dominates the spectrum. The two examples **850-851** (pl. 100) have a straighter rim and a deeper bowl than the rest of the cups of the same type and may perhaps be slightly earlier (pl. 91. **854, 856**. pl. 99. **852-853**. pl. 100. **855**). Of similar shape but with completely painted rim is **857** (pl. 91). All of these types were already encountered in earlier levels (VI-VII). The same is true of the delicate type with bichrome decoration, of which seven fragments come from level V (**859-865**). The rim **859** (pl. 92.), the two rim fragments **860-861**, the wall **862** (pl. 100) and the almost complete examples **863-864**, all preserve the typical bichrome decoration. The base **865** is only black glazed but has the typical shape of the late 7th century cups with everted rims like **735** from level VI. Of similar shape but less carefully potted is the base **858**, which is therefore assigned to the end of the 7th century BC (pl. 100).

Not encountered in earlier levels is the cup type **866** (pl. 92) that belongs to Villard and Vallet's type B 1, which appears during the last quarter of the 7th- and lasts until the early 6th century BC.⁷²⁰ Cups of this type were recovered from the Athena sanctuary at Assesos in large numbers, which was destroyed during the last decade of the 7th century

⁷²⁰ Villard and Vallet 1955, 25 fig. 4 (form B1). 29; Tocra I, 112 (type V); Kalaitzoglou 2008, 86-87.

BC.⁷²¹ Another fragment of similar type but coarser production is **867** (pl. 100), of which large parts of the decoration are worn off. The fabric and appearance of the cups from level V are fairly identical and apart from **867** all fragments most likely come from south Ionia, perhaps from Samos or Miletus.

3. 11. 6 Dishes

Dishes are quite frequent in level V (11 examples). They appear in three different shapes: a lipless version (**872. 874-875**), a rectangular rim with flat top (**873**), and a dish with a slight trapezoidal rim (**878. 880**). Dishes with a lipless rim are known from south Ionia where they emerge in two versions: they contain either a stemmed foot, and are therefore also called fruitstands, or a low ring base.⁷²² Dishes with this rim shape are already known from level VI-VII (**552**). The dish type with trapezoidal rim appeared at Al Mina in level VI (**746**) and one fragment is marked with level VI-VII (**553**). Based on the distribution one may suggest that the latter one rather goes with level VI.

The dish type **873** appears at Al Mina for the first time in level V (pl. 92). Dishes with similar shape are known as a stemmed variation and have a low ring base.⁷²³ Given the bad preservation of the fragment, it is impossible to determine to which type our fragment belongs. The lip decoration consisting of standing solid rays is peculiar. Both, the rays and the bichrome decoration, suggest a date within the last decade of the 7th

⁷²¹ An attribution to one of Kalaitzoglou's types is not useful since his types are based on the base and on the shape of the body but judging from the orientation of the wall **866** probably belongs to his type B. Kalaitzoglou 2008, 71. 83.

⁷²² Kalaitzoglou 2008, 117-118.

⁷²³ For the discussion of this type see Kalaitzoglou 2008, 121-123. 130.

century BC. A similar plate was found at Miletus in a mixed context containing material from the 8th to the 5th century BC.⁷²⁴

The lipless version **872** is decorated on both sides with simple bands, a common decoration for this type (pl. 93).⁷²⁵ Band decoration is more frequent on stemmed dishes than on the variant with low ring base.⁷²⁶ **872** therefore probably belongs to the former group. The stemmed dish seems to emerge at Ionia around 640/30 BC, an observation that cannot be contested by the results obtained from Al Mina.⁷²⁷ The version decorated with simple bands perhaps dates to the last quarter of the 7th century BC.⁷²⁸

Of similar shape but of different decoration is **874** (pl. 93). The main decoration zone, which is divided into metopes by descendent solid rays, is painted with one major ornament.⁷²⁹ Another plate with a related design but lipless rim comes from level VI-VII (**552**). Metope dishes with such a decoration are typical for the latest Wild Goat style in south Ionia (SiA Id).⁷³⁰

The wall fragment **876** derives also from a stemmed dish. It is the only piece of this decoration type recovered at Al Mina. The bichrome bands and the frieze of alternating pendent and standing meander hooks are both features that come up towards the end of

⁷²⁴ Kerschner 1999, 33. The plate from Miletus shows already stylistic features of the early 6th century BC.

⁷²⁵ Kalaitzoglou 2008, 132.

⁷²⁶ Kalaitzoglou 2008, 132. In this respect one has to note that the version with a low ring base is not well known since this shape was probably not as popular as the stemmed ones.

⁷²⁷ Cook and Dupont 1998, 39. See in particular the discussion in Kalaitzoglou 2008, 141-142; Kerschner and Schlotzhauer 2005, 23 fig. 18 list one dish dated to SiA Ib (650-630 BC).

⁷²⁸ Kalaitzoglou 2008, 143.

⁷²⁹ For the group see: Kardara 1963, 122- 124 (group ζ: dishes with metopes with large ornaments); Kalaitzoglou 2008, 137 (group IIc2).

⁷³⁰ Kerschner and Schlotzhauer 2005, 44.

the 7th century BC in south Ionian vase painting (SiA Id).⁷³¹ A dish with similar decoration is known from Ras el Bassit.⁷³²

877 is a small piece but the main motifs can be observed. It belongs to a metope dish of the late 7th century BC with wild goat protomes in the metopes (pl. 100). Only a part of the horn is preserved from the wild goat, which encircles the dotted concentric circles as on a plate found on Samos.⁷³³ Human and animal protomes are frequently found on dishes and on oinochoai of the SiA Id phase.⁷³⁴

The best-preserved example is **880**.⁷³⁵ It belongs to the popular type of dishes that bear a representation of a mask in the metope (pl. 93). Similar vessels are known from several places in Ionia, among them Samos, Miletus, and Ephesos. Dishes with this decoration were widely exported.⁷³⁶ **880** stands out from other published plates with mask decoration in several respects: the solid rays are upright rather than hanging and their number (12) is unusually high. Another interesting difference is that two carnassial teeth are rising from the painted zone, a peculiarity, which cannot be observed on any other published dish of similar decoration. This, together with the several wrinkles of the nose, gives the face a demon-like expression like a Gorgon or representations of the demi-god Besh.

Whether the stylistic differences just reflect a particular Ionian workshop or even a different region, has to remain open.⁷³⁷ The second fragment of this type (**878**) comes from another piece as shown by the lip decoration and the triangle between the

⁷³¹ Kerschner and Schlotzhauer 2005, 45.

⁷³² Courbin 1976, 41.

⁷³³ *Samos VI*, 11 fig. 13.

⁷³⁴ Kerschner and Schlotzhauer 2005, 45.

⁷³⁵ **879** belongs to the same vessel although missing in the list of Villing 1999, 197, no. 33.

⁷³⁶ *Samos VI* 1, pl. 25. 192. Ephesos: Kerschner 1997, 142 pl. 9. 65.

⁷³⁷ Villing 1999, 197 considered the clay composition of the plate from Al Mina close to the Milesian pieces.

eyebrows (pl. 100). Further examples, with similar triangle above the eyebrows were found in level VI-VII (**554-555**). One rim fragment from level VI (**746**) perhaps even belongs to the same vessel as **880**. The two pieces marked VI-VII are certainly from different vases as suggested by their stylistic differences. As already mentioned, the dishes with face-decoration in the metope belong to the late 7th century BC (SiA Id).⁷³⁸ Finally, it is worth noting that all dishes recovered at Al Mina that bear a mask in metopes come from dishes with trapezoidal rim.

3. 11. 7 Dinoi

Kraters and dinoi are limited to eight fragments in level V. **882-883** are both dinoi types already encountered in earlier levels. **882** is probably from a dinos close to **561** (pl. 57) from level VI-VII. **296** from level VIII is close to **883** (pl. 94). They share the shape, the decoration, and the unpainted interior. Since level V also contains earlier material, it is difficult to say whether this type continued until the end of the 7th century as suggested by the rest of the finds.

The shape of the dinos **884** is different from the rest of the examples recovered at Al Mina. Like many other dinoi, it is unpainted inside. The rim contains two small grooves on the outside and the exterior decoration consists of encircling bands (pl. 94). The greatest diameter is low down the body comparable to one example from Chios.⁷³⁹ The fabric of **884** is quite different from the rest of the recovered dinoi.

⁷³⁸ Late 7th century BC: Kerschner 1997, 186; Villing 1999, 197. Middle 7th century BC: Samos V, 71; Samos VI 1, 13.

⁷³⁹ *Emporio*, 115 fig. 70. 140.

3. 11. 8 Kraters

Four kraters come from level V. The shape of **885** is still in a Geometric tradition, in particular the rim and the neck. On the other hand, the decoration with a simple wavy line on the body point to a later period (pl. 94).⁷⁴⁰ It belongs to a type of krater that has a wall tapering towards the base with the biggest diameter relatively high up the wall.⁷⁴¹ Similar kraters were found in Ionia at Samos or at Assesos although the examples from Assesos all contain different rim shapes, which might be of chronological significance.⁷⁴² One piece, which is close to **885**, was discovered at Mesad Hashavyahu, a site that was only briefly occupied, possibly during the last decade of the 7th century BC (see Appendix 3). It is hard to tell when this type was introduced, but it goes perhaps back to the middle of the 7th century BC. The problem is that kraters of this type probably went out of use at Miletus while they were still produced on Samos.⁷⁴³ Kraters with simple wavy line decoration appear on Samos already in the last third of the 7th century BC.⁷⁴⁴ The lack of any interior glaze apart from an encircling band on the rim, a feature common to the majority of the dinoi and kraters discovered at Al Mina dated to the 7th century BC, is another indication of an East Greek origin of **885**.⁷⁴⁵

Fragments **887** and **888** belong to a class of kraters, of which the latter fragment was analysed chemically (NAA-analysis) and identified as an import, perhaps from around

⁷⁴⁰ Wavy line decoration is a typical ornament frequently found on this type of krater. See Kalaitzoglou 2008, 191.

⁷⁴¹ The similarity of this krater type with a certain type of cup with everted rim lead Kalaitzoglou to call it “mastoide” type: Kalaitzoglou 2008, 185-186 fig. 7.

⁷⁴² Kalaitzoglou 2008, 194.

⁷⁴³ Kalaitzoglou 2008, 194 with no. 865.

⁷⁴⁴ See e.g. Furtwängler 1980, 208 fig. 16, II/10.

⁷⁴⁵ See for instance the dinoi and krater fragments from the Artemis kithone sanctuary from Miletus, which are all undecorated on the interior except for an encircling band on the rim: Kerschner 1999, 16 fig. 7. 2-4. 6-7; 29 fig. 16. 74-75. Further Kalaitzoglou 2008, pl. 96-107.

Miletus (pl. 95).⁷⁴⁶ The same analysis showed that this class was also imitated in the region, and several fragments of these imitations were also found at Al Mina. Kraters with similar decoration and close morphological resemblance are known from Tarsus, Mersin and Sukas but the rim of **888** is quite different from the piece from Sukas and Tarsus and **888** also contains a much higher neck than the Tarsian examples.⁷⁴⁷ Other parallels for kraters with similar decoration and related profile were discovered on Samos and dated to the first half of the 6th century BC.⁷⁴⁸

Schattner, ignoring the evidence from Al Mina, discussed a type that has a similar shape as **888**, and which has a long lifetime ranging from the 9th to the 5th centuries BC.⁷⁴⁹ He considered a broad range of possible sources with an origin in Anatolia.⁷⁵⁰ Judging from the evidence from Al Mina where the type does not appear before level V, kraters of comparable shape and decoration may belong to the end of the 7th- and perhaps to the second half of the 6th century BC. A rather long lifetime for this type of krater is further supported by examples originating at Al Mina in level IV-II.⁷⁵¹

3. 11. 9 Storage Vessels

A total number of 40 fragments come from closed vessels. These include transport amphorae of the sos-type (pl. 101. **890**), a rim fragment with zigzag decoration (pl. 95. **893**) and a handle, both either from an amphora or a hydria (pl. 95. **895**). **891** and **892** are two further pieces, probably from a large storage vessel (pl. 101). The former finds a

⁷⁴⁶ Ashton and Hughes 2005, 95 tab. 1. 97. The krater **888** belongs to Hughes group B.

⁷⁴⁷ See e.g. Tarsus III, fig. 149. 1571.

⁷⁴⁸ Samos IV, 157 Beil. 18, 577-578.

⁷⁴⁹ Schattner 2007, fig. 81 Kr B9.

⁷⁵⁰ Schattner 2007, 289.

⁷⁵¹ Ashton and Hughes 2005, fig. 2 (1996.6-21.16).

parallel in an example from level VI-VII (**591**). Amphorae or hydriai with zigzag decoration on the neck appear at Al Mina in level VII (**358**) and continue until level V, confirming the suspected long lifetime of this type.⁷⁵²

896 stands out from the whole corpus of pottery finds recovered at Al Mina. The fragment comes from a large storage vessel as indicated by the size of the handle and the thickness of the wall (pl. 96). Similar handles can be observed on hand-made amphorae and on pithoi from Corinth. Comparable examples of probably Corinthian origin were also found at Megara Hyblaea, Cumae and Syracuse. In all three cases the fragments were interpreted as pithoi-handles and the piece from Cumae belongs to a context that also contained finds from the late 7th and early 6th century BC.⁷⁵³ The relatively straight wall may speak in favour of a pithos but one cannot be certain.

If **896** comes from a Corinthian pithos one wonders why it was sold at Al Mina. It recalls the large storage vessels/pithoi found on the Uluburun shipwreck that were perhaps used to store other goods.⁷⁵⁴ If **896** had a similar function, its appearance at Al Mina can be explained through unexpected circumstances rather than by an organized trade in pithoi. Perhaps additional space was needed on board a ship and therefore the large pithos was sold at Al Mina. That Corinthian pithoi were sometimes sold as goods is proven by finds from the West but they appear in Greek settlements and their number is negligible. Furthermore, **896** is the only example so far discovered in the East. If this interpretation is correct one may also speculate on which ship the pithos travelled to Al

⁷⁵² Note that **358** not only has a different rim shape but its fabric is also different to that of **893**, suggesting different production centres for amphora or hydria with zigzag decoration on the neck.

⁷⁵³ Cumae 2009, 28.

⁷⁵⁴ One large pithos from the Uluburun ship wreck contained vessels that have been packed inside each other: Wachsmann 1998, 306 no. 34 with further references.

Mina. If it was part of the ship's furniture I tend to give preference to a Corinthian ship rather than another origin.

3. 11. 10 Jugs

The largest group of closed vessels can be assigned to jugs (24 fragments). A few pieces, **897-899** are still of Sub-Geometric style (pl. 101). **897** is a shoulder of a north Ionian bird oinochoai, which is close to a fragment from level VI (**759**) while **898** with its white slip points to an south Ionian centre (pl. 101). **899** is badly preserved but its white slip and red paint is close to Chian fabrics (pl. 101).

901 is a shoulder fragment of a closed vessel, probably from a jug judging from the wall thickness. It is peculiar in its decoration; in particular the row of dots between bands is a new feature not encountered before level V, while the rest of the shoulder was obviously not decorated (pl. 101). The fabric, with its fine burnished surface and the thick black glaze are two further attributes not seen before level V.

3. 11. 11 Wild Goat Style- Jugs

The largest group consists of Wild Goat style fragments (17). 12 of them date to the period 630-590 BC with five fragments certainly belonging to SiA Id (610-580 BC).⁷⁵⁵

919 carries the typical ornament of the so-called "Gürtelbandkannen" surrounded by alternating black and red bands (pl. 97) frequently found on jugs of SiA Id date and

⁷⁵⁵ Three fragments, **911-913**, although not joining, possibly belong to the same vessel.

already encountered on **643** from level VI-VII.⁷⁵⁶ A late date for **917-918** is suggested because of the large lotus and flower frieze and the bichrome bands on top of it, both characteristics of the SiA Id.⁷⁵⁷

914 is dated to SiA Id because of its stylistic similarity to another piece from Al Mina, which is also decorated with a deer and additionally carries the suspended triangle with a dotted loop at its apex, an ornament typical for the late 7th century BC.⁷⁵⁸ The fragment **915** bears a large dog on the shoulder that fills almost the whole decoration zone leaving not much space between the dog's head and the neck of the vessel. The neck is decorated with a broken cable pattern. Also interesting are the groups of tongues pending from the neck and the small standing triangle underneath the foreleg of the dog. Similar groups of tongues can be found on two other pieces from Al Mina in level VII, which are perhaps related to a north Ionian workshop (**368- 369**).⁷⁵⁹ All these features can be found on vessels from north Ionian workshops.⁷⁶⁰ Schiering considered **915** as early in his Vlastos style.⁷⁶¹ As already mentioned during the discussion of level VI, the Vlastos style is now associated with a north Ionian production centre.⁷⁶² Another indicator of a north Ionian origin is the intentional red colour that can also be found on Aeolian products.⁷⁶³

⁷⁵⁶ Kerschner and Schlotzhauer 2005, 44-45; Kalaitzoglou 2008, 172. The piece was assigned to a closed vessel because of the missing paint on the interior. Examples from Assesos e.g. show that also kraters with similar décor and unpainted interior existed: Kalaitzoglou 2008, pl. 108.

⁷⁵⁷ Kerschner and Schlotzhauer 2005, 45.

⁷⁵⁸ Kerschner and Schlotzhauer 2005, 45.

⁷⁵⁹ See the discussion in chapter III 3. 8. 2.

⁷⁶⁰ Rows of tongues: Schiering 1968, 85; Iren 2003, 117 fig. 59. a. Ireen rightly noted that they are not confined to north Ionian products only. Broken cable: Wild Goat Style, 88; Iren 2003, 33. 114; Kerschner and Mommsen 2009, 93 fig. 4.

⁷⁶¹ Schiering 1968, 51.

⁷⁶² Wild Goat Style, 90.

⁷⁶³ Larisa am Hermos, pl. 39; Kerschner 2006, 123 fig. 7; Ashkelon 3, 281-282.

The decoration of **910** is also outstanding since it is the only piece with a similar motif. The belly was decorated with several encircling bands while the shoulder bears a frieze of flowers, of which one dotted leaf is partly preserved (pl. 102). Jugs with comparable decoration were found on Samos.

The rest of the Wild Goat style fragments ranges from SiA Ia-b (pl. 102. **903**) to SiA Ic-pieces (pl. 96. **912**. pl. 102. **909-911**. **913-914**). Few fragments fall into the period of SiA Ib-c (pl. 102. **905**. 96. **907**). One piece, **904**, decorated with a running dog and a cable pattern underneath, finds a close parallel in a sherd from level VI (**788**), which is stylistically so close that it must come from the same vessel (pl. 102).

3. 11. 12 Corinthian Jugs

One fragment of a closed vessel comes from Corinth (pl. 103, **920**). It is the lower part of the body as indicated by the solid rays and bears further encircling lines in black and red paint. The small piece does not allow any further conclusions other than that the fragment comes from Corinth and its date does not contradict a late 7th century BC context.

3. 11. 13 Jugs of Unknown Provenance

The three fragments **921-923** are from three further closed vessels although one cannot say whether they belong to jugs, amphora or perhaps to a hydria. The fragments stand out in their decoration as well as in their fabric and surface treatment, which may point to a North Syrian or Cilician production centre. The rows of tongues on **922-923** can be

found on table amphorae, which are considered as local products that usually appear in Persian contexts.⁷⁶⁴ Closed vessels with rows of tongues or festoons on the shoulder and the neck come from Cyprus and are associated with the 6th century BC.⁷⁶⁵ The shoulder fragment **921** with a vertical handle is decorated with a wavy band on top of two horizontal lines. Similar decoration appears on small juglets and amphorae from the Persian period.⁷⁶⁶ Fragments with a comparable decoration were analysed (NAA) and considered as local products.⁷⁶⁷

3. 11. 14 Juglet

The only juglet from level V is **924**. While the shape is not much different from the juglets of level VI-VII, the decoration has changed markedly. Instead of being fully painted with a reserved band on the belly, the body is left blank while three thin encircling lines occupy the belly with another thin line below the rim. Similar jugs are known from Samos and Chios. The Chian examples appear in period IV (650-630 BC) but the shape is more squat while the piece from Al Mina is slender and the neck and rim splays outwards less severely.⁷⁶⁸ One comparable juglet comes from the well G from the Heraion on Samos. This vessel antedates 640 BC but the system of the band decoration varies slightly from our piece.⁷⁶⁹ The morphological differences may indicate that **924** is later than the Chian example, perhaps from the last decade of the 7th

⁷⁶⁴ Lehmann 2005, 76-77.

⁷⁶⁵ Gjerstad 1977, pl. 19. 6; 21. 4 (both pieces are dated by Gjerstad into the 6th century BC); Thalmann 1977, pl. 5. 11.

⁷⁶⁶ Lehmann 1996, pl. 60. 359a/2; Lehmann 2005, 77 fig. 10. 4.

⁷⁶⁷ Ashton and Hughes 2005, 95 tab. 1. fig. 7.

⁷⁶⁸ *Emporio*, 145 fig. 595.

⁷⁶⁹ See Vierneisel and Walter 1958/59, 19. The piece is dated between 670 and 650 BC, which is based on stylistic assumptions and not on the context. Whether the different band system is of chronological significance cannot be answered since closed contexts containing similar jugs are rare.

century BC.⁷⁷⁰ This type with comparable decoration appears on Samos in contexts of the late 7th and 6th century BC.⁷⁷¹

3. 11. 15 Aryballoi and Alabastra

Four fragments belong to small perfume vessels. **925-927** are certainly of Corinthian production. The fabric of **928** is different from the Corinthian products so that one has to consider another source for it. **921** and **925** are both aryballoi. The former dates to around 635-625 BC while the latter, which has a parallel in level VI (**801**), possibly dates to the EC period.

927 is a base fragment decorated with palmettes and the wall is painted with bands with a zone of a chequerboard above. The slim shape points to an alabastron similar to a type found at Smyrna. Further parallels found in the region come from Cyprus. **928** is either a shoulder or belongs to the lower part of the body. The rest of the preserved decoration is not easy to recognize thus a date based on the stylistic classification cannot be obtained. It is dated according to the context to the late 7th century BC.

3. 11. 16 Unidentified

The discussion comes to an end with the rim fragment **929**, a peculiar piece that has no parallel at Al Mina (pl. 97). It is of considerable size and the interior is unpainted, thus it may be assigned to a closed vessel like a lekanis. The nicked rim probably carried a lid.

⁷⁷⁰ See also *Emporio*, 144.

⁷⁷¹ See Furtwängler 1980, 176. Earliest examples with encircling lines appear in phase II, which is dated to the 30's of the 7th century BC. For the date of phase II see Furtwängler 1980, 158.

Only one small piece preserved parts of the decoration, including a horizontal line with at least three vertical solid rays. Similar rays can be found frequently on the interior decoration of plates. Given the small piece one cannot exclude that **929** is a lid rather than a vessel although comparable examples of late 7th century date are not known to me.⁷⁷²

3. 11. 17 Summary

As already mentioned, level VI came to an end towards the end of the 7th century BC, probably around 620/610 BC. The number of SiA Id fragments is certainly a significant indicator for the date of level V. Although level V contained also earlier sherds ranging from EA Ia to d, the total number of 12 fragments that can be assigned to the latest phase of Wild Goat style is the highest found in any level so far. An additional piece, **902**, perhaps also belongs to the latest phase of Wild Goat style (pl. 95).⁷⁷³ The relative later date of level V compared to level VI is further supported by the appearance of pottery types missing in previous levels. Among them is the rosette bowl, which makes its appearance at Al Mina in level V (**844**). Further new types are the East Greek bowl with band decoration (**845**) and the cup with everted lip of Villard and Vallet type's B 1 (**866**). The juglet **924** as well as the krater **885** are both novelties not seen before level V. Parallels for both types occur outside of Al Mina in contexts dating to the late 7th century BC.

⁷⁷² See e.g. the lid in Kalaitzoglou 2008, pl. 146. 634. The orientation as well as the missing extension above the lid rim speak against a lid.

⁷⁷³ **902** preserved only solid painted suspended rays, a typical decoration feature of SiA Id but not limited to this phase.

Moreover, the kraters **887** and **888** appear for the first time but comparable material from securely dated contexts from Ionia are missing so far or are not published. Thus the present state of research does not allow for specificity about their date or their life span, even more so since level V also contained material predating the last decade of the 7th century BC. Having said this, one has to note that despite the frequent appearance of kraters among the previous levels, similar types were absent. Therefore **887** and **888** were possibly introduced into the stock of East Greek vessels towards the end of the 7th century BC but the exact date has to remain open.

As another argument for a date to the end of the 7th century BC one may mention the 14 fragments of bird bowls that date from 630-590 BC or later, compared to the five fragments from level VI.⁷⁷⁴ The same can be said about the delicate cups with everted rims and bichrome decoration that amount to a total of seven pieces as compared to the three fragments from level VI. Interestingly, two of them were almost completely preserved. Given the rarity of such a good preservation, additional information about their precise find situation would be interesting.

The comparison between the numbers of similar vase types is not only an argument for the relative later date of level V compared to level VI. The distribution of similar types in level VI and V at the same time demonstrates their chronologically proximity. A further indication for this is provided by the dispersion of fragments originally belonging to the same vessel but which were recovered in different levels such as **880** (level V) and **746** (level VI), **904** (level V) and **788** (level VI) or perhaps also **897** (level

⁷⁷⁴ In this respect one has to note that the absolute numbers of bird bowls in level VI is with 17 fragments slightly lower than the amount from level V (22).

V) and 759 (level VI). Additionally, three fragments (495, 549, 568) are marked with level number VI-VII and V.⁷⁷⁵

Taking all the evidence together, including the results from the analysis of level VI, one has to come to the following conclusions:

Level V closely followed level VI, a suggestion that is not contested by the architectural remains. The high number of SiA Id fragments and other types of East Greek imports that can be associated with the late 7th and early 6th century BC suggests that the layout of level V falls within the last decade of the 7th century BC. The end of level V, on the other hand, is harder to define. In this respect, the absence of some important East Greek pottery types is significant. Although an argument *ex silentio* is always problematic, it cannot be dismissed. Interestingly, cups with everted rims that do not appear in Ionia before the beginning of the 6th century BC are missing.⁷⁷⁶ Since they were imported at other sites such as Tarsus or on Cyprus, their absence cannot be explained through interrupted connections between Ionia and Al Mina or through cultural factors.⁷⁷⁷ The same is true for the dishes of north Ionian provenance with meander decoration on the rim. Plates of this type were widely exported in the Aegean and the Black sea region and they date to the first half of the 6th century BC.⁷⁷⁸ They are absent at Al Mina despite the large number of plate imports in level VII to V. At the same time they appear at Salamis on Cyprus, at Tarsus and at Sukas.⁷⁷⁹ The only

⁷⁷⁵ This might be an indication that the three fragments come from level VI.

⁷⁷⁶ For the type see Tocra I, 113 (type IX) “type IX goes back to 600 BC”; Furtwängler 1980, 166 fig. 18. III/8-9; Schlotzhauer and Villing 2006, 61 fig. 28 (Type 9); Cook and Dupont 1998, fig. 18.1c. Cook dates this type to the last quarter of the 7th century BC, which seems to be too early for this type. Note that Cook and Dupont’s type fig. 18.1, d assigned to the 6th century BC, is missing at Al Mina as well: Cook and Dupont 1998, 131.

⁷⁷⁷ See e.g. Tarsus III, fig. 145. 1402; Yon and Calvet 1977, pl. 8. 75.

⁷⁷⁸ Kerschner 2008, 47 pl. 14. 46; 44. 2-3; Paspalas 2006, 97 no. 66 with further reference; Kerschner 2006, 113.

⁷⁷⁹ Tarsus III, fig. 101. 1497-1498; Ploug 1973, 68-69 pl. 15 no. 296- 298. 301-303; Calvet and Yon 1978, 45 pl. 20. fig. 2. Having said this, it is important to note that the evidence from Assesos demonstrates that

fragments that can probably be associated with the beginning of the 6th century are 921-923 but it cannot be excluded that their production started already at the end of the 7th century BC.

Ignoring the historical circumstances in the region, and considering only the archaeological record, one has to come to the conclusion that the occupation at Al Mina must have come to an end around the beginning of the 6th century BC, thus confirming Woolley's suggested occupation gap between level V and IV.⁷⁸⁰ The data obtained from the Greek imports corresponds well with Lehmann's result gained from the study of the local material from Al Mina. Through comparison with other Palestinian sites he suggested a date for the end of level V at around 600-580 BC.⁷⁸¹

East Greek products dominate the spectrum of imports at Al Mina since level VII. In this respect level V is not different. Imports from Greece come mainly from Corinth, and despite their low number, they demonstrate quite a range of shapes: level V contains the typical kotylai, Sub-Geometric skyphoi, one jug fragment, a possible pithos and three perfume vessels.

The other source of imports from Greece is Attica with two sos-amphora fragments but no fine ware. Among the East Greek imports, the majority comes from Ionia with an equal distribution between south- and north Ionian wares.⁷⁸² Among the south Ionian imports one may expect Samos and Miletus to have been the two major players within

in south Ionia this type of plate was introduced before the destruction of the Athena Assesia sanctuary. See Kalaitzoglou 2008, pl. 64. 353. The examples from Tarsus could also be of south Ionian production and therefore still belong to the 7th century BC.

⁷⁸⁰ Woolley 1937, 8; Woolley 1938, 152.

⁷⁸¹ Lehmann 2005, 82-83 fig. 18.

⁷⁸² Only fragments that could be assigned with some degree of certainty to one or the other group have been counted. The preservation of the majority of the fragments unfortunately, did not allow a clear distinction between south and north Ionian imports.

the contacts between Al Mina and Ionia.⁷⁸³ Two fragments come from Chios: one drinking cup (chalice) and a jug. Chian imports were recovered in all levels starting with level VIII-IX (206) and Al Mina continuously received imports from the island throughout the whole 7th century BC.

Attention should also be drawn to the few fragments of storage jars discovered in level V. Two pieces of Attic amphorae are among them as well as a handle fragment of another trade amphora and the rim with zigzag decoration. The latter is not the only example recovered from Al Mina. It is unclear whether it belongs, to a hydria or to an amphora. The exportation of hydriai to Al Mina is proven by the unmarked piece that is almost completely preserved and now in the Ashmolean Museum at Oxford on display.

IV. The Greek Pottery from Near Eastern Sites

1. Opening Remarks

The discussion of the Greek pottery from selected sites in the Near East has been undertaken before by several scholars and many sites discussed here have been in the focus of past scholarship. Nevertheless, the defined research questions of this study can only be addressed by a contextual analysis of Greek pottery from other sites in the Levant, which have been better excavated than Al Mina.

⁷⁸³ This is only true if we assume that the Greek imports discovered at Al Mina reflect direct contacts between two regions, which is not necessarily the case. For a different view concerning the Samian pottery production and its role within Samian economy see Kerschner and Mommsen 2009, 85.

Clairmont was the first to compile a catalogue of Greek imports in the Near East without providing any detailed analysis of the find contexts.⁷⁸⁴ In his doctoral thesis Crielaard studied in particular Euboean Protogeometric and Geometric pottery from the Levant and Cyprus.⁷⁸⁵ Recently Luke gathered Protogeometric and Geometric material from a number of sites in the Levant, including Phoenicia, Israel, Judah, Philistia and Mesopotamia.⁷⁸⁶

The 7th century BC material, however, was only treated cursorily by Waldbaum and has not yet been subjected to a detailed analysis.⁷⁸⁷ The present study analyses in particular those sites, which are contemporary with Al Mina. Other sites are also taken into consideration in order to highlight regional variations and different developments. Besides settlements on the Levantine littoral, Cilicia is also included in the discussion.

The analysis does not try to compile a complete record of Greek imports in the East. Such an undertaking would exceed the word limit of this study. Only sites, which can contribute to the questions laid out in the introduction, are considered in the discussion. Unfortunately, the site of Ashkelon, which revealed a large amount of 7th century BC material, and which was thoroughly excavated, could not be included in the discussion since the volume appeared too late to include a thorough analysis of the site in the present study. However, the most important results were taken into consideration and are an important addition to the available evidence.

⁷⁸⁴ Clairmont 1955.

⁷⁸⁵ Crielaard 1996. His results have been published in several articles. See e.g. Crielaard 1993; Crielaard 1999.

⁷⁸⁶ Luke 2003, 31-41.

⁷⁸⁷ Waldbaum 1994; Waldbaum 1997.

As in the previous sections, the discussion entails only the most important information from each site. For a more detailed discussion and an overview of the historical background of each site, the reader should consult Appendix no. 3. The appendix not only includes the discussion of the sites but also a catalogue of the Greek imports collected from each settlement.

The provision of appendices is intended to enable the reader to gain an overview of the material evidence and a more thoroughly insight into the archaeological problems of the different settlements that revealed Greek imports. Repetitions between the Appendix and the text are kept to a minimum but could not be avoided completely. The main reason for this is to keep the Appendix as reader friendly as possible. In particular the Appendix 3 has to be considered as a more detailed discussion of the sites, which provides similar conclusions but only in a more detailed way.

2. Greek Pottery from Inland Elite Centres

Tell Tayinat in the Amuq, the capital Hama, and the two Israelite cities Samaria and Megiddo are sites with architectural features that can be connected with the ruling elite. All of them revealed Greek Geometric pottery that comes from the palaces or the area of the royal quarter. Two further sites at which Greek pottery dating to the late 7th century BC was found can be added to this list. One of them is Ekron, situated in Philistia, and the other site is Zincirli, ancient Sam'al, which is located on the Amuq plain.⁷⁸⁸

⁷⁸⁸ For the latest results see Schloen and Fink 2006. For an overview of the political history of the city-state see Wartke 2005, 57-66. For the location of the Greek finds see Sendschirli V, 46.

The cities in the Amuq are of particular importance. At least by the beginning of the 8th century BC, Tayinat, ancient Kinalua, became the capital of Unqi.⁷⁸⁹ In 738 BC Unqi was converted into an Assyrian province.⁷⁹⁰ The Greek pottery is confined to the royal quarter, which occupied the whole Tell; however, the lower city that contains the non-elite quarters has not yet been excavated.⁷⁹¹ The Greek pottery from the site is limited to 86 pieces.⁷⁹² Saltz stated that “the range of types and imported shapes from the Amuq are extremely similar to those of Al Mina level X-V”.⁷⁹³ This statement does not apply for Tayinat. With the beginning of the 7th century BC, Greek imports seem to disappear completely from Tayinat.⁷⁹⁴ Furthermore, the majority of imports dates to before 750 BC.⁷⁹⁵ Zincirli did not reveal any Greek imports dating prior to the end of the 7th century BC.⁷⁹⁶

The record may be explained by the Assyrian occupation of Unqi in 738 BC. Perhaps the newly arriving Assyrian elites introduced new fashions that resulted in a complete abandonment of Greek shapes.

At Zincirli a similar picture emerges, although Greek Geometric pottery is missing and the same is true for the 7th century BC.⁷⁹⁷ Perhaps the absence of Greek imports before the late 7th century BC can be explained through similar mechanisms. Sam'al had close ties with Assyria, extending back to long before it was incorporated into the Assyrian

⁷⁸⁹ Harrison 2001, 119-120.

⁷⁹⁰ Hawkins 2000a, 362.

⁷⁹¹ For the architectural remains of the Tell revealed by the old excavations of the University of Chicago see Haines 1971, 59-60. For the evidence of the lower town see Batiuk 2007, 54-55.

⁷⁹² Osborne 2001, 69.

⁷⁹³ Saltz 1978, 81.

⁷⁹⁴ One piece may belong to an East Greek banded bowl of the late 7th century BC.

⁷⁹⁵ Osborne 2011, 69. In total 61 fragments of psc-skyphoi were found. From the 19 pieces published by Osborne, only one belongs to Kearsley's type 6 while the rest is of her type 5. The majority of the psc-skyphoi from Al Mina belong to Kearsley's type 6.

⁷⁹⁶ Osborne 2011, 13.

⁷⁹⁷ Lehmann 1994, 118.

empire.⁷⁹⁸ As at Tayinat, it is possible that these close ties are also reflected in fashions and drinking customs that were more oriented towards the Assyrian court. Limited access to foreign trading goods can be excluded since Sam'al was situated on an important east-west route through the Amanus mountains.⁷⁹⁹

This record also suggests that it is unlikely that the pottery from Al Mina dating to the 7th century BC was predominately destined for the centres in the Amuq. The Greek imports at Al Mina are better understood as commodities that were acquired for local consumption.

The other centres – Hama, Samaria and Megiddo – all became part of the Assyrian empire towards the end of the 8th century BC.⁸⁰⁰ They all revealed only few fragments of Greek pottery ranging from the MG to the LG period but the majority seems to belong to the 9th century BC.⁸⁰¹

From the total of 11 Greek imports found at Hama, nine come from the Royal Quarter. Only two of them have a proper context. One is a psc-skyphos found in the 720 BC destruction context immediately to the west of building II. Fugmann suggested that the piece comes from building II and was deposited during its evacuation.⁸⁰² The square west of building II probably contained a sanctuary with two platforms.⁸⁰³ One skyphos was found at the south-west corner of the southern platform.⁸⁰⁴ Both platforms most likely served a cultic function and, as an alternative to Fugmann's suggestion, the psc-

⁷⁹⁸ Wartke 2005, 57-66; Schloen and Fink 2009, 8.

⁷⁹⁹ Schloen and Fink 2009, 1.

⁸⁰⁰ Samaria: Tappy 2001, 559-561. Hama: Riis and Buhl 1990, 14-15. Megiddo: *CAH III 2*, 336.

⁷⁹⁹ See Appendix 3, catalogue Hama no. 2. Fugmann 1958, 232.

⁸⁰² Fugmann 1958, 232.

⁸⁰³ Fugmann 1958, 231-232.

⁸⁰⁴ Fugmann 1958, 234 fig. 308 no. 2.

skyphos was interpreted as a votive offering in a sanctuary situated between complex II and IV.⁸⁰⁵

The precise nature of the sanctuary remains open but there is no reason to assume that it was a cult place of more “private” character frequented only by court functionaries and the royal guard, as has been suggested by Riis.⁸⁰⁶ This is because its proximity to the palace (building II) cannot exclude the participation of cultic activities of any group that had access to the royal quarters.⁸⁰⁷ The discovery of locally made closed vessels, kraters, bowls and cups in the vicinity of the southern platform also points to eating and drinking rites performed in the sanctuary. Other activities probably included libations and the burning of incense as suggested by the presence of “fruit bowls”.⁸⁰⁸ The psc-skyphos is the only foreign object among the pottery in the sanctuary and it was perhaps precisely its unique exotic appearance that made it suitable as a diacritical symbol used in the ritual activities.⁸⁰⁹ It is better understood in this context as an object separating special cultic activities from daily consumption than as a diacritical marker for social distinction.

⁸⁰⁵ Riis 1970, 148; Niemeier 2001, 13. The basalt “tripod” found on the northern platform and the Astarte figurines discovered at the southern platform confirm the cultic function of the two rectangular platforms. See Fugmann 1958, 231 fig. 307. 232. 234 fig. 308. The relatively well preserved psc-skyphos suggests that the piece was not disturbed after its deposition and therefore supports the excavator’s belief that it belongs to the destruction context.

⁸⁰⁶ Riis 1970, 150.

⁸⁰⁷ Luke 2003, 37 interprets the imports circulating primarily in an elite environment.

⁸⁰⁸ For the range of objects discovered in the sanctuary and their precise location see Fugmann 1958, 234 fig. 308. 236 fig. 310. For the role of ‘fruit- bowls’ in cultic activities see Appendix 3. 9 (Sukas).

⁸⁰⁹ This is only true if we accept that what has been found on the square comprises the full pottery assemblage used in the sanctuary and that nothing was taken away during the course of the Assyrian conquest.

The second piece consists of several fragments of an Attic MG II krater.⁸¹⁰ One fragment (6A380) comes from the destruction context in front of building III while the rest is residual and scattered over an area between building II and III.⁸¹¹ If the interpretation of building III as a temple is correct and the krater can be associated with it, then we could interpret the vessel as an offering or as part of a drinking set used during cultic activities carried out in building III.⁸¹²

Two psc-skyphoi were discovered in the cemetery of Hama belonging to period IV.⁸¹³ One of the two skyphoi was found inside an urn.⁸¹⁴ Although one can only speculate about the owner of grave G XXX 38, one can exclude an association with the ruling elite of Hama. The evidence from the cemetery illustrates that access to Greek imports was not restricted to the elite and obviously available and affordable for people of lesser socio-economic status. Having said this, one can also notice that kraters are usually only found in elite contexts during the 9th century BC. This is true for Hama, Tayinat and Samaria. Although pottery was perhaps available for all residents of Hama, certain categories such as the kraters, were only circulating among the top of the elite.

The find contexts of the Greek imports from Megiddo are obscure but they can be perhaps related to the building 338, which was interpreted as a private residence of an

⁸¹⁰ Appendix 3, catalogue Hama no. 9. Interestingly, the fragment is missing in the account provided by Luke 2003, 35 tab. 8. On the other hand Luke lists one piece twice: once as an amphora/jug and a second time as one of two kraters: See Luke 2003, 35 tab. 8 no. 102-103.

⁸¹¹ For the find context of 6A380 see Fugmann 1958, 179. 190; Coldstream GGP, 311; Riis and Buhl 1990, 186.

⁸¹² Crielaard 1996, 167 e.g. suggested that building III had a more public function without clarifying what “public” in this respect entails. For the suggestion that the krater was a votive offering to a deity or a gift to the king deposited by him in the sanctuary see Riis 1970, 154.

⁸¹³ Appendix 3, catalogue Hama no. 10-11. For the correlation of the strata of the Tell and the cemetery see Riis and Buhl 1990, 18.

⁸¹⁴ Appendix 3 catalogue Hama no. 11. See Riis 1948, 113; Riis 1970, 150.

important person, perhaps a commander of the city.⁸¹⁵ Only drinking vessels are known from Megiddo.⁸¹⁶

In area AA a building was uncovered which contained several rooms.⁸¹⁷ In room 2081 Cypriot imports were recovered, together with two stone altars.⁸¹⁸ The imports included Cypriot drinking vessels. Although the precise function of the building remains unclear, its size and other objects recovered from it, such as four seals, suggest that the owner was a wealthy person.⁸¹⁹ As in the case of Hama, the foreign vessels served as markers for cultic ceremonies. The limited amount of circulating Greek imports might be an indication for restricted access to these goods. The case of the building from area AA with the cultic assemblage demonstrates, however, that access was not limited to the royal court. Since Megiddo was situated on an important trading route and enjoyed easy access to the Mediterranean via the harbour at Tell Abu Hawam, it seems that the few Greek imports cannot be explained by inadequate access to the Mediterranean during the 9th- 8th centuries BC. The low numbers are better explained by limited demand for Greek imports at Megiddo.

The 12 fragments of Greek imports from Samaria come from the royal quarter although their precise context remains uncertain.⁸²⁰ All buildings uncovered so far suggest that the summit of Samaria became a “strictly administrative centre” during the 9th century BC.⁸²¹ We may conclude therefore that the vessels were used by the elite if not by the

⁸¹⁵ *Megiddo I*, 58-59; Ussishkin 1989, 162.

⁸¹⁶ See Appendix 3, catalogue Megiddo.

⁸¹⁷ *Megiddo II*, fig. 388.

⁸¹⁸ *Megiddo II*, 45 fig. 101-102.

⁸¹⁹ Kempinsky 1989, 187; Ussishkin 1989, 170-172.

⁸²⁰ For the palace see Reisner et al. 1924, 60-61.

⁸²¹ Franklin 2004, 201; Franklin 2008, 46.

king himself. Perhaps the kraters were sent as gifts to Samaria, an explanation that could also apply to the piece from Hama.⁸²²

The usage of krater(s) in the ritual banquet known also as *marzeah*, a custom that can be traced back to 14th century Ugarit, is one possibility.⁸²³ As suggested by Forsberg, the custom may have been introduced to Samaria during the reign of king Ahab, who was married to Jezebel, the daughter of the king of Tyre and Sidon.⁸²⁴ Despite the expulsion of Phoenician cults with the revolt by Jehu, there is some evidence that the custom of the *marzeah* was still practiced in the following 8th century BC.⁸²⁵ The so-called “Ivory house” of king Ahab, which included ivory couches, seems to be the proper environment in which such banquets could have taken place.⁸²⁶ The few fragments of Greek imports point to their exotic character, which makes them a suitable commodity used in banqueting at the Samaritan court where feasting in a luxurious environment is attested in written sources.⁸²⁷

Unfortunately, we do not possess enough information from the ordinary houses of the site at the moment. Therefore, the question of whether access to Greek imports was restricted to the elite cannot be answered conclusively.

⁸²² Coldstream GGP, 480 suggested that the kraters could have been sent as gifts during the reign of Jeroboam II (788-749 BC).

⁸²³ For the *marzeah* see Greenfield 1974. King and Stager 2001, 355-356.

⁸²⁴ Forsberg 1995, 34.

⁸²⁵ Greenfield 1974, 453. For the brutal revolt and the expulsion of Phoenician cults see II Kgs. 9-10.

⁸²⁶ Forsberg 1995, 34. For a recent discussion of the ivories discovered at Samaria and their stratigraphic details as well as their historical interpretation see Tappy 2001, 443-495; Forsberg 1995, 31-33 proposes several different possibilities for the historical interpretation of the ivory finds at Samaria.

⁸²⁷ Amos 3:9-15.

Interestingly, no Greek imports are reported for the period after 750 BC, excluding one piece of uncertain date.⁸²⁸ The majority of the finds date to between 850 and 750 BC and therefore span a long period of time. In principle it is possible that all imports fall into the period shortly after 850 BC, which would coincide with the *coup d'état* by Jehu in 841 BC.⁸²⁹ Jehu's revolt led to the annihilation of the descendants of the phoenicophile house of Omri and to a massacre of the Baal priests and workers at Samaria.⁸³⁰ Although it is only a hypothesis, the possible absence of Greek imports at Samaria and Megiddo could be explained by Jehu's rise to power, which was certainly accompanied by a renunciation of Phoenician cult practices, and perhaps even followed by the abandonment of Phoenician or foreign cultural practices. Against this background, Greek vessels were probably perceived as exotic foreign objects deriving from the Phoenician ports, which after Jehu's accession to power was considered an inappropriate foreign luxury.

Evidence for 7th century BC elite contexts from an inland site comes from Ekron. The site is located in Philistia on the border to Judah.⁸³¹

The central zone was occupied by the monumental building 650 that consists of an Assyrian-type open courtyard enclosed by a portico and surrounded by several rooms.⁸³² The long narrow room immediately to the west was interpreted as the "throne room". Further to the west, perpendicular to the throne room, is another elongated room with two rows of four columns and a platform at its western end, which was partly stone-paved. The two rooms O and P situated to the south of the cella can be connected with

⁸²⁸ Appendix 3, catalogue Samaria no. 4.

⁸²⁹ *CAH III 1*, 485-487.

⁸³⁰ *CAH III 1*, 487.

⁸³¹ For the identification of the site see Nahve 1958, 166-169.

⁸³² Gitin 1997, 92.

olive oil production, perhaps for ritual ceremonies as suggested by the olive oil press in room o. Jewellery, ivory objects and a silver hoard from the building further highlight the elite character of the complex.⁸³³ Final evidence for ritual and administrative activities associated with the building is provided by a series of dedicatory inscriptions on storage jars found on the south side of complex 650.⁸³⁴ Besides its ritual character, the complex also had some form of administrative function as suggested by the finds of several inscriptions and by the concentration of holemouth jars discovered in the complex.⁸³⁵ An inscription found in the cella of the sanctuary provides evidence for the person who founded the sanctuary (the Ekronite ruler *kys* or Ikausu known from Assyrian inscriptions from 667 BC) and the deity of the sanctuary, a goddess of non-Semitic origin.⁸³⁶

Objects recovered from building 650 or its surroundings are confined to drinking cups, an oinochoe decorated in the Wild Goat style, and one mortarium of probably Cypriot provenance similar to the mortaria found at places such as Mesad Hashavyahu, Tel Keisan, Tell Qasile, Ashdod, Tel Batash, En Gedi, and Gezer.⁸³⁷

One aryballos found in field I perhaps indicates that other social classes from Ekron also had access to foreign Greek imports but in this respect it is important to recall that one of the many silver hoards recovered from the site was found in field I.⁸³⁸

⁸³³ Gitin 1997, 98-103; Gitin et al. 1997, 7-8.

⁸³⁴ Gitin 1993, 250-253 fig. 4; Gitin 2003, 288-289; Gitin and Cogan 1999, 193-197.

⁸³⁵ Gitin 1997, 92. 8; Gitin et al. 1997, 7.

⁸³⁶ Gitin et al. 1997, 9-11.

⁸³⁷ Fantalkin 2001, 82; Mazar a 2001, 51.

⁸³⁸ For a thorough discussion of the silver hoards including hoard no. 4 from field I see Gitin and Golani 2001, 33-34.

3. Greek Pottery from Inland Non-elite Contexts

Unfortunately not many sites are well excavated therefore a detailed contextual analysis can only produce limited results. One interesting context comes from Tell Hadar where one PG lebes was collected from a large building, which was divided into two functional wings: an elongated tripartite complex with two column rows and a second wing consisting of square rooms with elevated doors or windows.⁸³⁹ The latter is interpreted as a granary while the columned long hall served as a storage room, which contained at least 120 complete vessels before its destruction.⁸⁴⁰ The Greek lebes comes from the latter part of the complex.⁸⁴¹ Several explanations have been put forward for this building type but the meticulous discussion by Kochavi does not allow any other interpretation.⁸⁴² Such buildings are known from other parts of Israel and usually sit on major trading routes, one of them at the port of Tell Abu Hawam.⁸⁴³ If Kochavi is right and the building can be defined as an “entrepot”, a storehouse, commercial centre for import and export and collection and distribution, the lebes may also be interpreted as a trading good. Among the finds recovered from the building, a total of 15% are imports, which underlines the commercial purpose of the structure.⁸⁴⁴

There remains the question of the control or owner of the building. Was it under the authority of the local king or did it belong to a private entrepreneur or a group of merchants? Perhaps it was a public building under the control of the local authority. In such a case we cannot exclude that the stored goods, including the Greek lebes, could

⁸³⁹ For the Euboean lebes see Coldstream 1998b, 357-358 pl. 1. For the building see: Kochavi 1991, 182; Kochavi 1998, 470 fig. 2.

⁸⁴⁰ Kochavi 1998, 471.

⁸⁴¹ Kochavi 1998, 471.

⁸⁴² Kochavi 1998, 471-476 with further reference.

⁸⁴³ Kochavi 1998, 476.

⁸⁴⁴ Kochavi 1998, 471.

have been under influence of the ruler and his administration. This is important in order to define the potential consumer of early Greek imports at inland sites and their social milieu. Coldstream inferred from the peculiar shape of the lebes that it was inspired by bronze cauldron originals, implying an elite connotation for the vessel. Even if the building and its contents were subject to restricted access, we cannot automatically assume that the goods were only sold to a particular class or the elite. To answer this question, further contexts that provide information about the socio-economic status of the consumers at Tell Hadar are needed. The find context of the lebes, however, allows us to conclude that the vessel did not reach the site as a personal gift or as a Greek merchant's personal belonging otherwise it would not have ended up in a storage room with other commodities.

Other early imports come from Tel Rehov, which is located in the Beth-Shean valley.⁸⁴⁵ The Greek imports include a krater, three skyphoi and one pyxis.⁸⁴⁶ The pieces were distributed over a wide area and cannot be connected with a particular building.⁸⁴⁷ However, all of them were found in an area where no signs of elite architecture could be detected. The krater was found near a cult place but cannot be securely linked with the sanctuary.⁸⁴⁸ The import of the pyxis has been interpreted as an *ad hominem* gift by Coldstream and given the rare nature of the pyxis in the East, such an interpretation cannot be excluded.⁸⁴⁹ The contexts however, speak against such a view.

A site that can function as a type-site for a contextual analysis is Timnah. It is close to Ekron in Philistia and during the 7th century BC it probably came under the control of

⁸⁴⁵ For the identification of the site see Mazar 1999, 4.

⁸⁴⁶ Appendix 3, catalogue Tel Rehov.

⁸⁴⁷ Coldstream and Mazar 2003, 34.

⁸⁴⁸ Mazar 1999, 25-26.

⁸⁴⁹ Coldstream and Mazar 2003, 39.

Ekron.⁸⁵⁰ The Greek pottery comes from a well-excavated site and destruction contexts of the late 7th century BC.⁸⁵¹

The pottery derives from several buildings of various sizes that can be connected with different socio-economic levels of the society. In order to identify the socio-economic status of the owners, the buildings have been classified into several classes.

Whenever the imports were recovered from buildings, the buildings were classified in different types: public, sanctuary, elite, middle class and lower class dwellings. The middle class has been subdivided into three groups: high, middle and low. The average house size and the average vessel number encountered in each of the dwelling places provide the basis for the subdivision. The question of possible second storeys, which would increase the space dramatically, are not included in the calculations, but whenever evidence for a second floor is available, it will be considered in the discussion. Houses that are below average size are considered as low, around average as middle and above average as high. Other find categories, like ivory, metal finds etc., which would allow further inferences about the social status of the inhabitants, were additionally considered.⁸⁵² Since this classification is based on only four examples, the division has to be considered only as a preliminary attempt to outline the criteria for the classification. There remain severe doubts about the extent to which the quantitative differences of retrieved vessels from the individual households reflect the socioeconomic stratification within the town since several factors may account for a

⁸⁵⁰ Timnah I, 8; Na'aman 2003, 83.

⁸⁵¹ All finds discussed here come from stratum II that is associated with the Babylonian attack on Timnah. See Timnah I, 148.

⁸⁵² The removal of other artefacts, in particular those which can be considered as status relevant, may have been removed by the inhabitants before the final onslaught against the city and therefore may not be represented in the archaeological record. Concerning this phenomenon see Geva 1989, 63; Faust 1999, 181.

particular pottery assemblage at individual sites.⁸⁵³ Status might have an effect on the variability and quantity of pottery vessels, but it is not the only one.⁸⁵⁴ Although Vickers and Gill, for instance, do not see pottery as a luxury item and therefore as an indication of wealth, the number of storage vessels may indirectly indicate the quantity of agricultural products, which in itself is certainly indicative for the economic status.⁸⁵⁵ Finally, the unique living conditions of people in a city during a siege must be taken into consideration. This perhaps includes an increase in the population with all its consequences for human behavioural patterns such as food storage etc. All these factors have an impact on the shape of pottery assemblages, both on the variability and the quantity.⁸⁵⁶ What the few examples demonstrate, however is the obvious relation between domestic space and retrieved vessel quantity.⁸⁵⁷

The buildings that revealed pottery are:

Building No.	Square meter	Amount of vessels	Classification
743	51	98	middle class
950	95,4	126	high middle class
F608	42,2	67	lower middle class?
F607	32,4	62	lower middle class?

Tab. 1 Average size: 56,25 sq. meters.

Average vessel number: 88,25

⁸⁵³ For a general discussion of the problem see Rice 1987, 294-296.

⁸⁵⁴ Rice 1987, 300-301. There are different ethno-archaeological results concerning the relationship between status and quantity. See e.g. David and Hennig 1972, 17; Miller 1985, 74. No relation was attested by DeBoer and Lathrap 1979, 124.

⁸⁵⁵ Vickers and Gill 1994, 77. 85-88. See also discussion of Iron Age I house at Megiddo by Gadot and Yasur-Landau: Megiddo IV, 594.

⁸⁵⁶ Geva 1989, 5-7; Timnah II, 173-175. This can be considered as one factor in what has been termed "formation process" of assemblages, which can be divided into habitation, abandonment and post-abandonment. Looting of the houses falls into the last category. For the term see LaMotta and Schiffer 1999, 20.

⁸⁵⁷ See also Mazar, who, based on the evidence from Beth-Shean and other sites, concluded that the vessel number per m² might be an indication of wealth: Beth-Shean I, 274.

Additional data of house sizes from other sites in the region further support the above classification.⁸⁵⁸ Only a few houses exceed 100 m² and the average house size of other town dwellings ranges between 40-60 m², thus confirming the exceptional status of building 950 and the rather small size of building F608 and F607.⁸⁵⁹ The correlation between domestic space and the owner's wealth remains a problematic matter.⁸⁶⁰ According to Schloen, domestic space in the Levant does not reflect socioeconomic status but social structure. In his view, larger houses are occupied by extended families while smaller buildings are inhabited by nuclear families.⁸⁶¹ Moreover, sometimes the house size reflects past wealth and not the status of the last inhabitants.⁸⁶² In this respect the distribution of vessel types among the buildings from Timnah is interesting: while some types – bowls, cooking pots or jugs – are represented among the buildings without major differences in number, thus speaking against a higher number of inhabitants in the larger buildings, the storage vessels in building 950 clearly stand out from the other buildings.⁸⁶³ It is clear that this can be interpreted as a greater storage capacity of agricultural products, indicating a higher economic status of the owner.⁸⁶⁴ To define the gap in wealth between the inhabitants of building 950 and the other buildings of the area is not easy but the difference was perhaps not significantly. A hint might be provided by the distribution of serving and food preparation vessels. Their relationship is considered as an indicator of economic status since elites tend to be involved in visible

⁸⁵⁸ For a comprehensive corpus of Iron Age house architecture in the Levant see Braemer 1982. For a similar approach using house size an indicator for economic status see Panitz- Cohen 2001, 95-96.

⁸⁵⁹ See the discussion in Beth-Shean I, 270-272 with Tab. 8.3; Schloen 2001, 147.

⁸⁶⁰ See the discussion in Panitz- Cohen 2011, 93-96.

⁸⁶¹ Schloen 2001, 181; *Contrary Mazar: Beth-Shean I*, 273.

⁸⁶² David and Kramer 2001, 296.

⁸⁶³ Timnah II, 163 Tab. 29. However, this table provides only a minimum number of storage facilities. Non-ceramic containers were perhaps in use as well.

⁸⁶⁴ For the connection between status and quantities of food see Turkon 2004, 227 with further references. Note, however, that the number of cooking pots may not necessarily indicate the number of occupants. There are several strategies to compensate for the higher number of occupants: either by using the same vessels more often or by using larger vessels. In both cases the archaeological record would not reflect the number of persons. For other interpretations of quantities of vessels see Panitz- Cohen 2011, 96-97.

consumption, and if possible, participate less in food preparation.⁸⁶⁵ The quantitative relationship between vessels for food preparation and serving vessels from Timnah seems to indicate similar consumption patterns in all households.⁸⁶⁶

Apart from chytrai, all shapes are also represented at Al Mina. Greek and Cypriot imports are distributed among the whole city.⁸⁶⁷ A significant accumulation of Greek and Cypriot vessels was only encountered in area F, which stands out from the rest. Nothing from the buildings, apart from the Greek pottery, suggests the presence of Greeks. Furthermore, no historical written sources attest their presence, either as traders or as mercenaries. Greek graffiti have not been discovered either.⁸⁶⁸

The contextual analysis demonstrates that the local population used the Greek imports, including the cooking pots.⁸⁶⁹ Concerning the social class of the users of Greek pottery, one may carefully argue, bearing in mind the few available examples allowing a more detailed analysis, that the material characteristics of the buildings as well as their size and their multi-purpose function, point to a middle class engaged in the production of goods probably intended for export. As argued by Mazar and Panitz-Cohen, the Samian amphora from building F608 might be an indication that the owner was a wealthy man who was involved in trade.⁸⁷⁰ In this respect one has to point out that it is impossible to define the wealth of these inhabitants precisely since we are missing the whole picture of the city. Despite this, it might be possible to say that the buildings containing Greek imports did not belong to the top of the local hierarchy.

⁸⁶⁵ Turkon 2004, 227.

⁸⁶⁶ For the distribution of serving and cooking bowls see Timnah II, 163 tab. 20.

⁸⁶⁷ For a more detailed discussion of all contexts see the Appendix 3, chapter 29.

⁸⁶⁸ For a summary of the material characteristics of houses that revealed Greek pottery see Appendix 3, chapter 29.

⁸⁶⁹ A similar result can be gained from the study of the contexts from Ashkelon. See Ashkelon 3, 136-137.

⁸⁷⁰ Timnah II, 171.

Interestingly, the two smallest houses revealed the largest number of Greek and Cypriot imports, which suggests that there is no obvious relation between wealth and access to imported Greek pottery. In this respect, the situation at Timnah is quite contrary to Tel Miqne-Ekron, where all published imports come from the elite complex 650.⁸⁷¹ Since a similar building complex is missing so far at Timnah, we do not know whether there is a relation between wealth and status and quantity of Greek imports.

Other inland sites revealed similar results. For example, the Greek pottery from Tarsus in Cilicia comes from several areas of the city (see tab. 2 below).⁸⁷² Greek imports can be found in almost all sectors although post-depositional factors might be responsible for the distribution. The record of imports from Tarsus is similar to Al Mina but the selective publication record from Tarsus hampers any statistical comparison between the two sites.⁸⁷³ The Greek imports played only a minor role at Tarsus and it is not before the beginning of the 6th century BC that the amount of imports began to rise to about 20%.⁸⁷⁴ The influx in Greek imports might be directly related to the break-down of the Greek imports at Al Mina towards the end of the 7th century BC.

The record from Tell Keisan, which is situated in the Akko plain, shows a similar picture.⁸⁷⁵ The Greek finds, which date to the second half of the 7th century BC, come exclusively from areas of the city with non-elite architecture. This included a complex perhaps used for grain storage where cups and a jug were discovered.⁸⁷⁶ The whole area

⁸⁷¹ This situation may change with the full publication of the finds from Tel Miqne-Ekron.

⁸⁷² For a detailed analysis see Appendix 3, chapter 3.

⁸⁷³ Tarsus III, 282. 291. 295. 299. 305. 308. 310. 311-313.

⁸⁷⁴ Tarsus III, 33 tab. II.

⁸⁷⁵ For the location see Briand and Humbert 1980, pl. 1; Lehmann 2001, 67-69 fig. 3. 1.

⁸⁷⁶ Salles 1980, 135.

that revealed the Greek pottery functioned as an industrial quarter during level 4, which is dated from 650-580 BC.⁸⁷⁷

Unit (in area B)	Number of sherds
H	23
J	7
K	4
P	1
X	16
Y	1
Z	10
Area A	1
Total	63

Tab. 2 Distribution of Greek pottery at Tarsus

The other sites such as Sirkeli Höyük in Cilicia and Tell Qiri, revealed only a few pieces of Greek imports. Tell Qiri is the only site in the southern Levant where an Euboean Sub-Geometric dinos was found. Sirkeli Höyük on the other hand demonstrates that few pieces of Greek imports were channelled to inland sites in Cilicia.⁸⁷⁸

⁸⁷⁷ Industrial quarter: Salles 1980, 136. For the date of level 4 see Salles 1980, 131. 136. 151.

⁸⁷⁸ Novak and Kozal 2010, 43 fig. 1. The piece comes from Area 18/1. For the location see Hrouda et al. 1997, 93 fig. 1.

4. Greek Pottery from Ports in Cilicia and from the Levantine Coast

The list of ports that revealed Greek pottery is substantial. Generally, Greek imports are much more numerous at these harbour sites than at the inland centres.

In Cilicia, the ports at Mersin and Kinet Höyük are the most notable sites. Mersin is a site that has been excavated from 1937-1939 and from 1946 to 1947.⁸⁷⁹ The Greek pottery recorded here derives only from these old excavations. The architectural remains are badly preserved but nothing indicates elite architecture. The finds from Mersin are similar to the record from Tarsus. Slight variations can be observed, which might indicate certain regulations of specific products that were of higher quality such as the bird oinochoai but different pattern could also be caused by limited archaeological investigations at Mersin.⁸⁸⁰ The record from Mersin is similar to Al Mina and shows a comparable range of imports, which span a longer period from the PG period to the early 6th century BC. The record from Mersin underlines the importance of the harbour for the inland site at Tarsus.

Kinet Höyük, located in the Gulf of Iskenderun, is another port in Cilicia. The situation of Kinet Höyük is therefore similar to Al Mina, which is only a few kilometres further to the south. The only differences are that the occupation at Kinet Höyük goes back beyond the Iron Age and, given the preserved remains of both sites, Kinet Höyük must

⁸⁷⁹ Garstang 1953, 3-4.

⁸⁸⁰ See discussion in Appendix 3, chapter 4.

have been significantly larger than Al Mina.⁸⁸¹ The published Greek pottery amount to 26 fragments but they do not constitute the whole retrieved assemblage.⁸⁸²

The majority of the published fragments derived from an industrial/domestic quarter on the northeast edge of the mound (OP A and OP AII) occupied during periods 8 to 6. Several kilns have been detected in this industrial zone.⁸⁸³ A similar quarter was found on the western edge of the mound (OP E/H), which revealed some bird bowl fragments and perhaps one LG Greek skyphos.⁸⁸⁴

Neo-Assyrian cylinder seals, found in the vicinity of another monumental building of the succeeding period in the western sector OP E/H, further highlight the importance of the area and may even point to the presence of Assyrian officials at the site during the late 9th or 8th century BC.⁸⁸⁵ The building is situated at the western edge of the mound and belongs to period 9.⁸⁸⁶ The purpose of the building is not yet clear but finds retained from a nearby pit illustrate the connections with the Aegean and, according to the excavator, even included a unique Greek terracotta figurine of Euboean manufacture dated to the 8th century BC.⁸⁸⁷

⁸⁸¹ The mound of Al Mina is approximately 2-5 metres high and site covers ca. 1.6 ha while Kinet Höyük rises to 26 m and covers an area of 3.3 ha.

⁸⁸² Appendix 3, catalogue Kinet Höyük.

⁸⁸³ Gates 1999, 262-264; Gates 1999a, 308; Gates 2000, 197-198. 201; Gates 2001, 208 (jewellery workshop).

⁸⁸⁴ Appendix 3, catalogue Kinet Höyük no. 6. 10. Gates 2003, 284-285 fig. 3. 9. The piece on the bottom right is a skyphos rather than a bird bowl.

⁸⁸⁵ Gates 2008, 289; Gates 2004, 407. 413 fig. 6.

⁸⁸⁶ Gates 2004, 407-408. The excavator concluded that the absence of bones and burnt remains indicate that the pit, in which the vessels were found, was not filled with usual refuse but the contents were instead buried as a “discrete collection of items”.

⁸⁸⁷ Gates 2005, 166. 173 fig. 12 (KNH-1331). Period 9 is currently dated to ca. 740-720 BC: Gates 2005, 165.

The interpretation of the terracotta figure is extremely problematical but it has to be pointed out that it is the only terracotta figurine of Greek manufacture of such an early date found in the Near East. Its find spot, in the vicinity of a building of monumental size, suggests that it cannot be considered as an ordinary trading good. The scarcity of such Greek clay figurines underlines this assumption.

Al Mina certainly attracted the bulk of the long distance trade while Kinet Höyük was engaged to a greater degree in regional affairs. Greek pottery reached the site only in small numbers because other harbours already absorbed the majority of them, either for local use or for resale at other places where they would attract higher profits. Kinet may be best interpreted as the classical relay-harbour that functioned more as a regional hub, but which was only rarely the initial target of long distance trade.⁸⁸⁸

The Greek imports of the 7th century BC, including both tableware and transport amphorae, come almost exclusively from the domestic/industrial area of the site. The context from Kinet Höyük, like the context from all the other sites in Cilicia investigated so far, speak against the use of the foreign Greek imports in a primarily aristocratic milieu.⁸⁸⁹

The other harbours such as Ras el Bassit, Ras Ibn Hani and Sukas and Tabbat al Hammam closely resemble the situation at Kinet Höyük. The later site revealed only one psc-skyphos fragment. Ras Ibn Hani and Ras el Bassit are both comparable ports.

⁸⁸⁸ For a similar argumentation without considering the rather regional function of Kinet Höyük see Hodos et al. 2005, 81. For the relay-harbours see Höckmann 1985, 83.

⁸⁸⁹ See for instance Jasink and Bombardieri 2008, 43 who interpreted the pottery of the 8th century BC as exotic goods acquired by the elite to be displayed on social occasions.

They share a similar range of imports although Ras el Bassit also revealed Protogeometric amphorae, which were found in archaic contexts.⁸⁹⁰

Despite the quite frequent Greek imports that span a considerable period of time at Bassit, local as well as Cypriot imports apparently outnumbered the Greek imports, which seemed to increase slightly during the second half of the 8th century BC.⁸⁹¹ For the LG and early 7th century BC, Euboean- and Corinthian skyphoi are reported. One example even bears an early inscription on it.⁸⁹² The same can be said about Ras Ibn Hani. The record from Bassit is richer than that from Ibn Hani and includes a larger variety of shapes and imports from different regions.

Bassit also brought a Greek inscription to light that has been dated to the late 7th or early 6th century BC.⁸⁹³ It was inscribed on a local amphora. It possibly reads: “ΦΙΝΟΣ ΗΜ [Ι]” and according to Courbin it attests the presence of Greeks at the site towards the late 7th or early 6th century BC. However, some scholars suggest that the inscription rather dates to the late 6th century BC.⁸⁹⁴

⁸⁹⁰ Courbin 1993a, 98.

⁸⁹¹ Courbin 1986, 193.

⁸⁹² Courbin 1986, 194 fig. 20. Perreault 1993, 71 interprets the inscription only as an indication of visitors.

⁸⁹³ Courbin 1986, 199 fig. 31.

⁸⁹⁴ Courbin 1986, 199. In this respect it is important to mention that the origin of the vase is uncertain, and it remains unclear when the graffito was inscribed. It is possible, although very unlikely, that the inscription was applied on the pot a long time before it was shipped to Bassit. If the pot turns out to be of local manufacture, such a scenario can be excluded. Furthermore, no information about the find context is given, thus the date of the undecorated piece is open. Perreault 1993, 71 believes that the piece is of local manufacture and that it indicates the presence of East Greeks at Bassit. The “H” on the inscription is still of the closed variety and according to Jeffery 1961, 328, the open “H” was already in use in East Greece by the second quarter of the 6th century BC. Jeffery and Johnston 1990, 476-477 pl. 79: Johnston considers the script of Rhodian origin and dates it to the late 6th century BC.

One burial from Bassit contained almost exclusively Greek pottery while in contemporary burials Greek imports were missing. This, together with the inscription, is a strong indication that Greeks were resident at Bassit by the later 7th century BC.

As at other port sites, early 7th century BC Greek imports seem to be absent at Ras Ibn Hani and at Bassit. Ras Ibn Hani is a typical example for a Levantine port, which received only sporadic Greek imports. Like Kinet Höyük or Tell Abu Hawam, the port perhaps functioned as a relay-harbour, which was never the primary “target” of ships involved in long-distance trade between the Levant and the Aegean, at least not during the 8th and 7th century BC. Bassit seems to be best compared with Sukas, which has a similar record.

Sukas is a port site with Greek imports coming from the settlement, a sanctuary and a cemetery. It is located in the Gubla plain south of Latakia.⁸⁹⁵ Together with Bassit Ras Ibn Hani and Tabbat al Hammam it belonged to the kingdom of Hama.⁸⁹⁶ Here I can only comment on the most important results. For the detailed discussion see the Appendix 3, 10.

Few architectural remains survived. One building from squ. G 11 NW is with 67 m² of considerable size, and shows that at least some of Sukas inhabitant's were relatively wealthy although the economic status of the owner of this house is hard to define due to missing comparisons from elsewhere within the site.⁸⁹⁷

⁸⁹⁵ Riis 1970, 7. 9 fig. 2.

⁸⁹⁶ Kessler 1975-1976, 59-63; Buhl 1983, 117-118.

⁸⁹⁷ Lund 1986, 12. For the type of the house see Braemer 1982, 55. 58. 60-16 (type II A 3 or II B 1) depending on the presence of columns in room 9.

Square	Sherd number
E8 NE	4
E8 SW	1
F5 SE	10
F5 w- slope	2
F8 NW	1
G12 SE	1
G10 NE	4
G10 SE	5
G11 NW	2
G11 SE	18
G11 SW	30
G12 SE	2
G12 SW	2
G19	2
G5	1
G5 NE	15
G5 NW	2
G5 SE	12
G5 SW	3
G7 SE	11
G8 NW	3
G8 SE	11
G8 SW	25
H10 NE	4
H10 SE	1
H11 NE	6
H11 NW	14
H11 SE	4
H 12	3
H5 NE	10
H5 SE	5
J13	1
J13 NE	6
J13 SE	1
J15	1
J8 SE	10
L8 SE	16
P11	1
P11 NW	23
P11 SE	1
P11 SW	12
Total	286

Tab. 3

The distribution of Greek finds in the settlement illustrates that despite some concentrations in squ. G 11 and H 11, Greek pottery was spread all over the habitation quarter and apparently in use in many parts of the Tell (see tab. 3). This undermines previous assumptions that certain sectors at the periphery constituted special living quarters for foreigners because Greek pottery was found there more frequently.⁸⁹⁸ Table 3 illustrates that concentrations of Greek pottery are not confined to the edges of the Tell.⁸⁹⁹

The distribution of the specific vessel types indicates that all vessel types were in use in several parts of the Tell, and the combination of specific types suggest that the pottery was used at Sukas and not stored in warehouses to be re-distributed to other places (pl. 166 fig. 1).⁹⁰⁰ The shape with the widest distribution is the plate. This is interesting since the plate is almost absent in the sanctuary of the north-eastern sector (pl. 166 fig. 2).

The comparison between habitation quarter and sanctuary shows that drinking played an important part in cultic activities while consumption of food was less important. The record from the sanctuary of the north-eastern sector also highlights changes in consumption patterns during cultic activities as shown by a comparison with the area of the LBA deposit at the southern harbour.⁹⁰¹ Greek open vessels play a more prominent role during the 7th century BC while during the LBA closed vessels, in particular stirrup jars, indicate signs for a diacritical feast. The Greek pottery of the 7th century BC has

⁸⁹⁸ Lund 1986, 190.

⁸⁹⁹ Unfortunately, no evidence which would support this important observation of concentrations of Greek imports is presented. The published data alone do not support this. From 291 fragments, 103 come from the periphery (E 7- F 7, E 8- F 8, F 8- H 8, F 5, G 5, H 5, P 11). The rest originate from other parts of the Tell.

⁹⁰⁰ In the table only late 7th century BC fragments have been included. Squares that did not contain a significant sample have been omitted.

⁹⁰¹ For a detailed discussion see the Appendix 3, 9 (The sanctuary at the southern harbour).

such a wide distribution in the settlement that it is difficult to interpret the imports as exotic commodities used as diacritical markers.

In total nine burials can be associated with Greek pottery (tab. 4). Imports were found among inhumations and cremations.

Burial types	Urn burial	Inhumation	Sacrificial pyre	
Tomb No.	2	24	13	
Tomb No.	10	29		
Tomb No.	12	30		
Tomb No.	26			
Tomb No.	27?			
	Total: 5	Total:3	Total :1	Total burials: 9

Tab. 4

Cups, jugs and amphorae are the most frequent types but the sample is too small to be statistically significant (tab. 5). However, there seems to be no correlation between the Greek imports and the burial types. Burial 29, which contained three Greek imports, also contained a grave stele. Stones surrounding the burial perhaps indicate a small tumulus.

Vessel type	Cup	Krater	Jug	Aryballos/Lekythos	Askos	Amphora
Urn burial						
No. 2					x	x
No. 10			x			x
No. 12			x	x		
No. 26	x					x
No. 27			x			x
Inhumation						
No. 24			x			
No. 29	xx		x			
No. 30	x			x		
Sacrificial Pyre						
No. 13		x				
Total	4	1	5		2	4

Tab. 5

Burials 29 and 30 contained fragments of tiles, which were considered to indicate that the deceased were Greeks because “tile burials” are known from Greek cemeteries.⁹⁰² A closer assessment reveals that the roof tiles either derive from just below the surface or were stray finds that cannot be directly associated with the burials.⁹⁰³ Further, only small fragments of the tiles survived and Riis does not provide any explanation as to the current location of the tiles used to cover the deceased.⁹⁰⁴ One fragment was even associated with urn burial 3. Roof tiles were usually used to cover and protect the body of the deceased, a practice, which has no function in the case of a cremation.⁹⁰⁵ One has to remember that the burials are located in the same area as the later sanctuary, where a small naiskos and an altar enclosure were found. Both were possibly covered with roof tiles. The tiles may therefore be associated with these later buildings and the tiles ended up in earlier contexts through later grave digging.⁹⁰⁶ Therefore, there seems to be nothing about the cemetery that can be connected exclusively with Greek practices.⁹⁰⁷

Notably, all drinking cups discovered in the burials were of Greek origin.⁹⁰⁸ On the other hand burials 12 and 27, both of which contained Greek jugs, also included jugs of Phoenician origin.⁹⁰⁹ It has to be left open whether the vessels were used during drinking ceremonies or whether they were personal belongings of the deceased.

⁹⁰² Riis 1979, 31; Kurtz and Boardman 1971, 97. The cited examples by Riis are of the late Archaic period and so far no late 7th or early 6th century “tile-graves” are known.

⁹⁰³ Tile fragments were also associated with burials 3, 4, 7 and 22.

⁹⁰⁴ Some of the inhumations are well preserved and it needs to be explained why the bones are preserved perfectly while the supposed cover of roof tiles is absent. We cannot expect that gravediggers uncovered the tombs, removed the tiles while leaving the bodies in place, and covered the burials again with soil. One has to mention though that inhumation burial 30, for instance, was only badly preserved and at least in this case it could be possible that the remains of the deceased had been removed together with the tiles. For burial 30 see Riis 1979, 27 fig. 84.

⁹⁰⁵ For the urn burial 3 see Riis 1979, 10.

⁹⁰⁶ For the altar enclosure and naiskos or “chapel” see Riis 1979, 64-65 pl. 3. This seems in particular very likely for burial 4 and 7, which contained tiles as well and which are located in G 7, the same area as the altar enclosure and the small naiskos of the later sanctuary.

⁹⁰⁷ Note Perreault 1993, 79, who accepted Riis’ explanation that the tiles belong to the burials.

⁹⁰⁸ Riis 1979, 32.

⁹⁰⁹ Riis 1979, 12-13 (burial 12). 22 (burial 27).

Burials 24, 27 and 30 are interesting. Closed vessels filled with burnt remains were found in all burials. In the case of burial 24 the vessel is an East Greek jug.⁹¹⁰ In burial 27 the burnt remains were deposited in a possibly Phoenician or local juglet.⁹¹¹ In burial 30 a Corinthian lekythos was filled with burnt material.⁹¹² The burnt remains can perhaps best be interpreted as offerings that were burnt and then placed into a closed vessel in order to protect them.⁹¹³ Perhaps the burnt remains are the dead's share from the *περιδειπνον* (*perideipnon*), the feast for the dead.⁹¹⁴ The object's variation (jug, juglet, lekythos) as well as the different origin of the vases (Greek, Phoenician) suggests that neither the origin nor the vessel type was important. A similar custom could already be observed at the LBA/EIA "deposit field" at the southern harbour, where some of the closed vases (amphorae) contained the remains of burnt material. Such a practice is unknown from Greek cemeteries. We can probably observe here the use of foreign Greek vases, which were used in local cult practice after their original intended use had become obsolete. As at the LBA/EIA "deposit field", the container itself did not matter as long as the offerings were protected.

Tyre is different to the above-discussed sites. A large corpus of Greek imports has been discovered here. The chronological range as well as the quantity sets Tyre apart from all other ports except Al Mina. The 108 pieces published so far do not represent the entire assemblage.⁹¹⁵ Compared to local pottery, Greek imports played only a minor role at Tyre. The finds come from all those parts of the city outside the supposedly royal

⁹¹⁰ Riis 1979, 18-19 fig. 43.

⁹¹¹ Riis 1979, 22. The tomb was considered by Riis to date to the 7th century BC, although the majority of the finds are of the 6th century BC: Riis 1979, 30.

⁹¹² Riis 1979, 28.

⁹¹³ For the custom of burning food offerings see Kurtz and Boardman 1971, 215.

⁹¹⁴ For the Greek custom of burning food for the dead, also called *enagizein*, see Burkert 1985, 194.

⁹¹⁵ Coldstream 1988, 37.

quarter. A similar situation can be observed in the cemeteries in Phoenicia. None of the Greek finds can be associated with elite contexts.⁹¹⁶ Psc-plates were in particular demand in Phoenicia as can be seen by the quantity recovered in the settlements at Tyre and by their appearance in the necropoleis of Tyre-Al Bass, Rachidieh and Sidon.⁹¹⁷

Evidence for trade comes from Berytus where an Attic sos-amphora was found in a warehouse.⁹¹⁸ SOS-amphorae are reported from several sites in the Levant, among them Al Mina, Kinet Höyük and Tel Kabri. Apart from the amphora, five Al Mina ware fragments come from a fill context on top of the Glacis II.⁹¹⁹

Judging from the present record, Greek imports seem to decrease with the beginning of the late Geometric period in Phoenicia and are almost absent during the 7th century BC. Some fragments are known from Tyre. One later 7th century BC cup with everted rim comes from a tomb at Akhziv.⁹²⁰ Sarepta only produced sherds from the 8th century BC. The Corinthian aryballos is too fragmented to be dated more precisely than from late 7th- to 6th century BC. The cups with everted rim come exclusively from the 6th century BC.⁹²¹

From the cemetery of Tambourit comes a pyxis of Argive provenance dated to the EG II or beginning of the MG I period.⁹²² Interestingly, the shape of the pyxis is quite similar to the other urns found in the tomb. This similarity might explain why it was used as an

⁹¹⁶ The non-elite contexts of Tyre means refer to those excavated sections not belonging to the palace area, which was located in the southwest of the island: see Katzenstein 1973, 16. For the excavated area see Bikai 1978, pl. 59.

⁹¹⁷ See the discussion in the Appendix 3.

⁹¹⁸ Badre 1997, 76. For the location of the warehouse see Finkbeiner and Sader 1997, 122 fig. 2.

⁹¹⁹ Badre 1997, 63 fig. 31. a; 72.

⁹²⁰ Dayagi-Mendels 2002, 67 fig. 4.14, 21.

⁹²¹ See Appendix 3, catalogue Sarepta.

⁹²² Courbin 1977, 157.

urn. A similar phenomenon can be observed in the case of the Cypriot kraters used in the Tyre-Al Bass cemetery.

The only port where Greek pottery could be connected to an elite-infrastructure was Yavneh-Yam, which lies ca. 1 km north of Mesad Hashvyahu.⁹²³

The building is constructed in a ‘header and stretcher’ technique of elaborately hewn ashlar.⁹²⁴ The excavator described the technique as being typical for royal buildings of the region.⁹²⁵ The excavated remains however, are so limited that any suggestion about the function of the building can be no more than mere speculation. Cooking pots found inside the building suggest that it was a dwelling place for a member of the local elite.⁹²⁶

5. Mesad Hashavyahu-Tel Kabri

The sites have both been interpreted as two fortresses and a large amount of Greek imports have been found at both sites. The range of the shapes is remarkable and includes Greek fine ware, amphorae and even cooking pots. The chronological range of the Greek imports is also comparable. Both sites contain Greek imports of the late 7th century BC. An interesting aspect of the composition of the Greek assemblage at both sites is the presence of types of high quality products such as the Wild Goat style jugs in the context of a military fortress. At Mesad Hashvyahu the garrison was able to perform

⁹²³ For the identification of the site and for references in ancient sources see Fischer 2003, 241-242. For the location and history of Yavneh see Kletter et al. 2010, 1-5. For more detailed information about the history of the site and past and current archaeological projects see Fischer and Taxel 2007.

⁹²⁴ Fischer 2002, 51 fig. 4.

⁹²⁵ Fischer 2002, 50 with references.

⁹²⁶ Fischer 2003, 243.

a full-fledged Greek symposium. Even Greek wine was imported to both sites unless the amphorae had a secondary purpose.

In particular the Greek cooking pots have been interpreted as sign for Greek mercenaries either in the pay of the Egyptians or of Judah.⁹²⁷ The evidence from Timnah and also Ashkelon, however, has shown that Greek cooking pots became a commodity during the course of the 7th century BC and were also used by the local inhabitants. Cooking pots alone are therefore an insufficient indicator for the identification of ethnic groups in the archaeological record. Additionally, other factors such as the archaeological context and the historical situation have to be considered.

Considered all together, the suggestion that Greek mercenaries were present at Kabri and Mesad Hashvyahus is convincing.⁹²⁸ In this case one has to note that the general assumption of the record from Al Mina or other sites in the East speaking against Greek presence (since the Greek pots found in these site mainly consist of drinking vessels) is a bad argument. The supposedly Greek mercenaries at Kabri and Mesad Hashvyahu did not carry any shapes with them other than drinking vessels. The only difference is the presence of cooking pots. However, the majority of the sites, including Al Mina, were excavated at a time where coarse ware was not well studied and therefore discarded and even today it is hard to distinguish Greek cooking pots from, for instance, Cypriot cooking pots, if only the wall fragments are preserved.

⁹²⁷ For a detailed discussion of the problem see Appendix 3, chapter 28.

⁹²⁸ Navch 1962b, 99; Niemeier 2001, 22; Fantalkin 2001, 139-141.

V. The Statistical Analysis of the Greek Pottery Imports from Al Mina

1. Purpose of the Study

The statistical information provided for the different assemblages serves primarily three main purposes: the first is concerned with the frequently mentioned remarks about the limited validity of the recovered pottery assemblage from Al Mina caused by the selective sampling strategies employed by the excavator.⁹²⁹ This suspicion arose due to the near absence of coarse ware vessels among published reports, a situation that has not much changed over the past years.⁹³⁰ Although statistical data on the local and coarse ware pottery is still lacking, the published record as well as the observed quantities in the various museums by the present author seem to confirm the claims made by previous researchers.⁹³¹ Important for the present study in this respect is the question whether the fine painted pottery underwent a similar selection process or whether it represents the retrieved record from Al Mina. Clearly, a study considering only sherds, which can be contextualised, would be of limited value since only 34 % were marked (pl. 157 fig. 1).⁹³² Thus the quantitative analysis of the single assemblage is accompanied by a comparison between the marked sherds and the total assemblage from Al Mina in order to assess to what degree the single level units reflect general characteristics of the total retrieved pottery assemblage. Important in this respect is the

⁹²⁹ See i.e. Descoedres 2002, 54; Hodos 2008, 59.

⁹³⁰ Doubts about the usefulness of the application of quantitative methods remain even after the publication of the report on progress on the local and Phoenician ware from Al Mina by Lehmann in 2005, which contained also coarse ware and cooking pots.

⁹³¹ See in particular Waldbaum 1994, 5-6; Waldbaum 1997b, 6; Descoedres 2002, 54-55; Hodos 2008, 59. 63.

⁹³² As stated already elsewhere Boardman 1999, 138 counted only 20 %.

information regarding the distribution of diagnostic sherds (rim, body, handle, base), relation between open and closed vessels and vessel type frequencies.

Several attempts have been undertaken by past scholarship to demonstrate the outstanding amount of Greek pottery at Al Mina through comparisons with other sites but the numbers used by scholars vary significantly.⁹³³ It is difficult to understand the significance of the Greek pottery since we lack information about their relationship to the local fabrics. While this holds true, I argue that the data provided here also sheds some light on changing patterns within the imported assemblage, which provides useful information about the changing economical situation in the region and the Mediterranean.

The second purpose is to study the nature of the pottery exchange and the volume of trade in fine painted pottery between Greece and the Near East. The aim is to reveal certain developments within the composition of the various assemblages throughout the centuries. This includes the composition of the pottery assemblage and the quantitative relationship between various vessel categories and different imports. Possible changes in the composition of ceramic assemblages might be connected to changing drinking and eating habits and may indicate how deeply Greek pottery “infiltrated” local material culture and practices in various periods. This may help to define the role of local customers and their potential influence on the composition of the assemblage of imported pottery.

⁹³³ For a summary of the debate see Hodos 2008, 61-65; Boardman 1990, 169-190; Boardman 2002a, 315-331; Descoedres 2002, 49-72.

While it is almost impossible to calculate the absolute volume of Greek imports from the available evidence, a diachronic look at the assemblage certainly allows one to identify relative changes within the assemblage, which provides information about possible changes in the frequency of contacts between the Aegean and Al Mina and may shed some light on the overall development of the economical situation at Al Mina and in northern Syria.

Finally, the third reason to provide a statistical picture is caused by the sheer quantity of Greek imports. The record of the Greek pottery alone comprises 4880 fragments, a number that is far too large to provide a detailed catalogue description for every single retrieved piece in the present study. The catalogue has therefore been restricted to the fragments with contextual information and to a limited number of unmarked fragments in order to provide a complete picture of the ceramic record. For the rest of the assemblage, detailed information concerning the type, origin and quantity is given, which will allow the reader to follow the conclusions drawn from the pottery record. The only exception concerns sherds labelled as coming from assemblage V-VI. As has been shown by assemblage VIII-IX and VI-VII, the analysis of mixed assemblages is only of limited value and can only be used as additional information. In the case of the levels VIII-IX and VI-VII, the inclusion in the catalogue supplemented the otherwise small sample size of level VIII, and in particular that of level VII, mainly in order to enlarge the corpus of dateable fragments. For the levels V and VI, enough dateable examples were available, which renders the integration of the assemblage V-VI into the catalogue unnecessary for the present purpose. Nevertheless, quantitative information about assemblage V-VI is provided and a detailed overview can be obtained from it.

2. Presentation of the Material

Different strategies have been employed in archaeology to provide quantitative information about pottery assemblages. Usually, the methods vary with the purpose of the study and partly depend on the composition and size of the assemblage. Sherd and weight counts are one frequently applied tool to provide an overview of the retrieved sherd frequencies of any given site. Sherd counts are biased toward vessels with large surface area and categories with a thin wall resulting in a high breakage rate. Further, small shapes with thin walls usually break into smaller pieces, which skews the numbers as well. The life span of a vessel, and therefore its breakage rate, varies with the function of a jar and has to be considered too.⁹³⁴ Cups and drinking vessels used for daily consumption have a shorter life span and are more likely to be overrepresented in an assemblage than vessels, which are less often used. The same applies for bigger vessels with thicker walls such as large storage jars, amphorae or kraters, or for pots, which are only used presumably during special occasions. Another factor, which is of particular importance since the assemblage consists predominantly of fine tableware, is the impact of high replacement costs on the use life of pottery.⁹³⁵

Weight counts, although usually more accurate in providing statistical results by overcoming some of the above mentioned factors such as different breakage rates, are considered as a useful supplementary to sherd counts.⁹³⁶ Weight counts could not be obtained for the present study.⁹³⁷ This is mainly because of the specific handle

⁹³⁴ Concerning this phenomenon see e.g. Schiffer 1987, 5-7; DeBoer and Lathrap 1979, 102-138; Orton 1993, 178-180; Shott 1996.

⁹³⁵ Shott 1996, 465.

⁹³⁶ Strack 2011, 46.

⁹³⁷ For weight counts and the problems related to sherds counts only see Orton et al. 1993, 196.

requirements of the museums, which did not allow the weighing of the sherds within a reasonable time limit.⁹³⁸ Therefore, only a sherd count of each assemblage is given.

Sherd and weight counts however, cannot be equated with the actual number of pots found in an assemblage.⁹³⁹ In order to shed light on past behavioural practices and discard patterns at Al Mina, an estimate for the relative abundance of each sherd class would be desirable but such an estimate is hard to determine. Several different approaches can be used to determine the actual vessel number of an assemblage. One methodological approach would be to establish the estimated vessel equivalent (EVE) for each assemblage by summing up the preserved fraction of the rim (in %) of the retrieved sherds and calculating it against the total rim circumference.⁹⁴⁰ Unfortunately, to obtain the EVE rate for the different assemblages, the average sample size seems to be too small. Regarding the total record, unfortunately in some instances the necessary information could not be obtained, which would distort the results gained from such an attempt.⁹⁴¹ It is also questionable how much information such a time-consuming analysis will provide in particular since similar information from other sites in the region as well as from site in Greece and Asia Minor is missing.⁹⁴² Additionally, due to the reasons mentioned above, the minimum number of individuals (MNI) accompanies the analysis.⁹⁴³ In principle, the minimum numbers of individuals is based on the rim, base and handle count, walls are neglected. In the present study, the MNI is restricted to

⁹³⁸ The application of this method would only been possible if sherds would have been weighted separately. Given the sample size an impossible undertaking.

⁹³⁹ Orton 1982, 172-173.

⁹⁴⁰ For the method see Orton 1993, 17

⁹⁴¹ This is mainly because also already published pieces, to which the author did not have access, were incorporated into the study whenever possible in order to increase the sample size, and for which the needed data was not provided.

⁹⁴² This is only true for the present stage of research. The missing EVE data set is a gap that should be filled in by the author after the missing information can be obtained.

⁹⁴³ For the method and its problems see in particular Orton 1989, 94-97; Orton 1993, 168-175; Raux, 1998, 11-16. Critical assessment of the method see Strack 2011, 49.

the count of rims only. This is mainly to allow for a better comparison with important sites such as Eretria, where a similar strategy was employed.⁹⁴⁴

The statistical information is provided in tables in such a way that the sherd count as well as the MNI's can be obtained for every type identified in the archaeological record. Numbers are given in absolute numbers as well as in % of the assemblage. The different skyphos types are classified according to the scheme developed in the latest Eretria publication on Greek Geometric pottery.⁹⁴⁵ The reason is simply the overwhelming amount of Euboean imports. Where no clear parallels for Greek Geometric types were found, the type is briefly described and accompanied by an example given in the catalogue in order to allow the reader the identification of the morphological and decorative characteristics of the specific types. For the East Greek imports I follow Kerschners typology of East Greek kotyle and bowls.⁹⁴⁶ The cups with everted rims are classified according to their shape and decoration. All other types are briefly described and where an example was available in the catalogue, the catalogue number is provided next to the type.

Besides providing the sherd counts for the assemblage, the technique also known as Kernel Density Estimation (KDE) has been applied in order to visualize the quantitative development of the imports throughout the period under consideration on a continuous axis rather than on an ordinal axis found in a bar chart.⁹⁴⁷ The method allows the combination of a large dataset of relatively fine dated material such as the Wild Goat style i.e. and sherds that can be only dated to longer periods like the bulk of the banded

⁹⁴⁴ Eretria XX, 36-37.

⁹⁴⁵ Eretria XX, 87-98.

⁹⁴⁶ Kerschner 1995.

⁹⁴⁷ Concerning the method see Mitchell and Lemos 2011, 79.

ware. Mitchell and Lemos used this method to date single deposits at Lefkandi but this method seemed to me even better applied to create chronological profiles for the imports at Al Mina enabling a better understanding of the changes occurring at the site during the 8th and 7th centuries BC.⁹⁴⁸

3. Further Notes

The size of the excavated area is an important factor that has an impact on the ceramic assemblage formation. It has been suggested that at least 40 to 50 % needs to be excavated in order to recover a full sample of material remains from an archaeological site.⁹⁴⁹ This number seems to be quite high and does not account for variations in occupation continuity, variable occupation density patterns of sites, and differences in artefact productivity as well as different discard patterns of distinct societies during different periods. Dissimilar discard patterns are a problem that concerns also Al Mina, and it has been stated that relative ceramic density patterns may vary according to the location of the deposits.⁹⁵⁰ It is certainly almost impossible to estimate the percentage of the excavated size of every level at Al Mina, in particular since it is even hard to define the size of the site itself. All fragments come from an area of the settlement that does not show any variation in the house features, which seem to indicate different activity zones (pottery workshops, storage facilities etc.). They also do not show variations in the social structure of the occupants (elite zone, habitation zone, administration centre etc.), which would produce an uneven ceramic density record within the settlement. Thus, the present analysis is based on the hypothesis that the pottery was equally

⁹⁴⁸ I am most grateful to Dr. Mitchell who shared not only his knowledge but also his software with me.

⁹⁴⁹ O' Neil 1993, 527-528.

⁹⁵⁰ Hodos 2008, 67-68.

distributed within the settlement with a limited degree of sherd density variation. Concerning the problem regarding the size of the assemblages and their relation to each other, the size of the various preserved remains from the distinct levels certainly poses a problem for the interpretation of possible changes within the assemblages throughout the periods.⁹⁵¹ Any conclusions drawn from the change in absolute numbers between the different assemblages therefore seems to be useless, perhaps even more so, since only one third of the total retrieved pottery was marked and it remains unclear how this affects the different assemblages.⁹⁵² The minimum sample size needed to make relatively accurate statements regarding certain vessel categories is unpredictable and may differ from site to site and according to vessel category.⁹⁵³ In this respect the sample size of the majority of the assemblages must be considered as low.

4. General Observations

The different levels show a high degree of variation concerning the relation between feature sherds (rims, handles, foot, body) (pl. 161 fig. 5-6). Except for level V, handles show always the lowest amount followed by bases. This is also true for the complete assemblage, where 250 handles are recorded. The low amount of handles is surprising given the large amount of drinking vessels, which in the majority of the cases have two horizontal handles. At Kalapodi, where statistical information regarding the

⁹⁵¹ For the different sherd density measurements per squ. metre see Boardman 1990, 171-172. 175 tab. 1; Boardman 2006, 279-282.

⁹⁵² It remains unclear whether the 55 % of unmarked vessels can be distributed equally among the assemblages or whether some of them are affected more than others. Given the frequent building activities and the expected moving of soil and pottery that comes along with it, it is also not helpful to divide the unmarked sherds among the assemblages according to their date in order to assess the percentage of the relationship of marked and unmarked sherds per level.

⁹⁵³ For the various views on that matter see the discussion in Strack 2011, 52.

composition of assemblages has been published recently, handles of small wheelmade open vessel outnumber the bases and the total assemblage shows a similar result.⁹⁵⁴

A comparison between the feature sherds of the total assemblage from Al Mina with the separate levels highlights the selection process by the excavator. The total assemblage shows a different record than the separate levels but also among the total figure, handles and bases are noticeably low and body sherds also seem to be much lower in comparison to rim fragments compared against other sites.⁹⁵⁵ It seems therefore that handles and bases were perhaps not recorded with such a care as rims and the same might be true for wall fragments. The only problem is that for comparison only native Greek settlements were available, which have a different composition of vessel types. For a useful comparison statistical information of other trading ports or emporia with a similar record (predominantly drinking ware) is needed.

A comparison between the MNI's and the total sherd count for each level highlights that the numbers are significantly different between the group of levels IX-VIII, and levels VII-V (pl. 161 fig. 1). The sample size of level X, VII and VII-VIII are too small and are not relevant. They make up only 0.2 % (X), 0.3 % (VII-VIII) and 0.7 % (VII) of the total assemblage. The difference between the two groups is mainly caused by an increase in closed vessels from level VII onwards. Although the numbers of closed vessels are slightly decreasing with level VI, they are still much higher than among levels IX-VIII. The increase of closed vessels can be observed in the total sherd count and in the MNI's and reflects therefore a real increase relatively to the previous

⁹⁵⁴ Strack 2011, 56 fig. 2.

⁹⁵⁵ Strack 2011, 56 fig. 2.

assemblages and is not caused by a different breakage rate (pl. 161 fig. 2).⁹⁵⁶ The increase affects also the absolute numbers and not only the relation between closed vessels to open jars. Interesting in this respect is the relation between assemblage VI and V-VI because relatively, closed vessels are decreasing (from 45.7 % in level VI to 33.6 % in V-VI), while the absolute numbers indicate an increase (pl. 161 fig. 2. 4).⁹⁵⁷

The number of closed vessels is also reflected in the changing ratios between total sherd count and rims (pl. 161 fig. 1). Levels IX-VIII are similar and so are levels VII-V. The changing ratio in level V (wall fragments decrease) could be the result of changing breakage rate. There was a considerable gap between level V and IV. Deposits of level V were less likely to be moved due to building activities than assemblages from level X-VI.

Looking at level VI and assemblage V-VI, one can notice that the numbers of drinking vessels rises sharply. In the case of the MNI's the increase amounts to only 3.5 %. In the total count the numbers rise from 44.7 to 55 % (pl. 161 fig. 3). Drinking vessels are increasing disproportionate to closed vessels, which results in a decrease of closed vessels relative to the whole assemblage despite their increase in absolute numbers. This highlights that the interpretation of the figures is not always straightforward and several data sets need to be considered to draw solid conclusions. The increase of closed vessels can also be seen in the ratio between Total to MNI numbers. Starting with level VII an increasing number of body-, handle- and base sherds are marked in comparison to rim fragments, which is caused by an increase in closed vessels, which tend to have a higher amount of marked body fragments than rim sherds (pl. 161 fig. 5).

⁹⁵⁶ The increase can also be observed in the absolute amount and not only in the relation to other shapes.

⁹⁵⁷ Compare the numbers of closed vessel on pl. 124 and pl. 134.

About 33 % of the vessels were marked (pl. 157 fig. 1). There is no obvious relation between the frequency of a certain vessel category within the total assemblage and the marking rate. Also the preservation of the sherd did not play any role since some poorly preserved pieces were marked as well. Therefore one can exclude the possibility that the excavators preferred to mark vessel types that appeared more often than others. Another interesting observation can be made by looking at the percentage of marked fragments according to different types. Closed and large vessels have been marked more frequently than open small drinking vessels (pl. 156 fig. 1). Further, rim fragments of open and closed vessels bear more often a level mark than wall fragments. Interestingly, although wall fragments are usually more frequent among closed vessels, the marking rate of rim fragments of closed jars is still higher. The only exceptions to this rule are the bird bowls, drinking vessels, amphora/hydria and indeterminate open vessels. The last three categories do not represent distinct vessel types and have to be excluded. In other words it seems that rims preferably received a level mark no matter whether they were from an open or closed vessel and secondly, large wall fragments from amphorae or jugs but also kraters and dinoi were more likely to be noticed and marked by the excavator.

Before discussing the evidence according to the separate levels it is important to point out that any result gained from the analysis is based on a small basis. Considering the percentage of marked fragments per each assemblage in comparison to the complete assemblage, it becomes clear that only a small percentage was really marked. The MNI-record provides always a better marking rate than the Total-record (pl. 156 fig. 2). In the case of level X, assemblage VII-VIII and level VII, the percentage of marked fragments is below 1 %. They are excluded in the discussion and only referred to if necessary. The

highest rates can be found in assemblage VI-VII (7.6 %) and V-VI (6.6 %). The single levels are never above 5 %, which clearly highlights the problems related to this study.

5. Level IX

The level IX assemblage contains 105 fragments in total while the minimum number of individuals (MNI) amounts only to 59. This is a rate of 1.8:1 between Total and MNI. The average of the whole assemblage is 2.2:1. The finds come to only 2.2 % of the total assemblage, which significantly reduces the credibility of the results and the same can be said about all the other assemblages. As can be seen in the pl. 161, the comparisons between the different assemblages reveals a growing gap between total number of retrieved fragments and MNI with the advancing of the 7th century BC. The reason for this phenomenon can be found in the growing number of closed vessels exported to Al Mina during the 7th century BC.

The shape that dominates the spectrum is the skyphos. It comes to 75.2% of the fragments from level IX and to 81.4 % considering only the rim fragments (pl. 105).⁹⁵⁸ Bearing in mind the complete assemblage, where the skyphos amounts to 30.3 % (MNI) and 23.8 (Total), skyphoi are overrepresented in level IX. The reason for this is that during the 7th century BC (level VII-V) the shape variability increases and closed vessels also increase in numbers.

⁹⁵⁸ Included in these figures are also the Al Mina ware fragments, which consist only of skyphoi.

The skyphos is the shape that is also dominant at assemblages excavated at Lefkandi or at Eretria.⁹⁵⁹ In this respect Al Mina resembles the record in native settlements in Greece. However, only at Al Mina does the assemblage consist almost entirely of skyphoi. The disproportion is primarily due to the fact that level IX makes only 3.7 % out of the total assemblage from Al Mina (pl 156 fig. 2). The majority is unmarked. Other shapes can also be found but they only make up a tiny portion among the retrieved sherds. Among the other types one can find dishes, kraters and jugs. No storage vessels, amphorae or cooking pots are known from level IX.

Looking at the distribution of vessel types according to their function, it becomes clear that the Greek imports from level IX consist mainly of drinking vessels (pl. 105). Considering only the MNI, they come to almost 97 %. The figures are not much different taking all fragments into consideration (93.4 %). Considering the number of drinking vessels in the whole assemblage, which come to 85 % (pl. 154 fig. 1), drinking vessels are overrepresented in level IX.

The quantitative distribution of decoration patterns does not indicate certain preferences in level IX. Skyphoi with horizontal band-decoration were apparently the most popular type. One can also find concentric circles, dashes/dots and row of lozenges, but their number is limited to a few fragments. In this respect level IX is similar to the total assemblage where skyphoi with band decoration come to 74 % taking only rims into consideration while it is still 34 % looking at the whole skyphos assemblage. The finds from level IX do not differ much from the MG-LG assemblages from Eretria or from the LG finds from the Xeropolis settlement at Lefkandi.⁹⁶⁰ On the main decoration zone

⁹⁵⁹ Lefkandi I, 62; Eretria XX, 26. 73.

⁹⁶⁰ Lefkandi I, 62; Eretria XX, 74.

the cross-hatched motifs stand slightly out from the rest, but the overall size of the assemblage is too small to relate this to possible preferable fashions at Al Mina. Pseudo-skyphoi come only to two pieces. This suggests that the heyday of this type was already over when the first Euboean imports reached Al Mina.

Also interesting is the number of skyphoi that were decorated only with simple scribble-decoration. This motif was prominent on the so-called Al Mina ware. Bird-skyphoi, popular on Euboea, are limited to one piece only. Besides Euboean skyphoi, level IX revealed also three fragments of Euboean kotylai. Interestingly, although also Corinthian kotylai were exported to Al Mina starting with level IX, they are slightly fewer than their Euboean counterparts. This situation remains unchanged until level VI-VII when they start to outnumber the Euboean products. Stylistically, the earliest fragment comes from Euboea and was found in level IX.⁹⁶¹

Al Mina ware appears in level IX in two variants: bichrome and monochrome. The distribution of the MNI- and the total figures shows that the monochrome type (16.9 %) amounts to almost twice as much as the bichrome class (8.5 %). Within the Al Mina ware, different variants with respect to the interior decoration exist: one category is fully painted, and the second one is decorated with encircling bands. In level IX all fragments are decorated with encircling bands on the interior except for two monochrome and one bichrome fragment. The former type was also called Cypriot-Levantine class, while the latter one is considered as Euboea-Levantine ware.⁹⁶²

⁹⁶¹ **Cat.no. 31.**

⁹⁶² Boardman 1999, 148; Boardman 2002, 319.

The distribution of imports shows that Euboean pottery clearly stands out from the rest. They make up 54 % of the imports followed by the Al Mina ware and by East Greek imports. From the latter, only one piece may be assigned to level IX. The other fragments might be residual. The graph therefore does not reflect the actual distribution with regards to the East Greek imports. Obviously some contacts existed to East Greece already during the early stage of the site. Having said this, it is important to recall that among the East Greek kotylai recovered from Al Mina, no example can be assigned to the earliest types of this class. From this one may deduce that contacts between East Greece and Al Mina were only established after some constant connection with the Greek mainland existed. This is only true if we accept that the recovered pottery reflects the external connection of Al Mina to some degree. The possibility that contacts with East Greece, or even with other regions, existed which did not leave any traces in the archaeological record, cannot be excluded.

Cycladic imports come only to 4 %. Attic and Corinthian imports are also negligible during the first phase of the site. This is interesting since from the Protogeometric period onwards and until the first half of the 8th century BC, Attic imports are the most frequent ones recovered in the East.⁹⁶³ This picture suggests that towards the ends of the first half of the 8th century BC Attic imports were subsequently replaced by Euboean products. Whether this means that connections between Al Mina and Attica ceased to exist, cannot be answered by the record from Al Mina alone. In this respect it is also interesting, that other regions, like Euboea e.g. stopped receiving pottery imports from Attica with the end of Attic MG I (around 800 BC) while they were continuously exported to the East as suggested by finds from Cyprus, Tyre, Hama, Samaria and

⁹⁶³ Tyre: Coldstream 1988b, 40-41; Hama: Riis and Buhl 1990, 184; Samaria: Reisner et al. 1924, 281-282 fig. 157 no. 9a; Crowfoot et al. 1957, 210, nos. 1-6. fig. 34, 1-3. fig. 34a. pl. 17. 1-2; Coldstream GGP, 304; Coldstream 1977, 94.

Ekron.⁹⁶⁴ With the second half of the 8th century BC the Attic pottery also vanished completely from the surface in the East.⁹⁶⁵

The KDE of the finds from level IX shows a picture, which is characteristic for the majority of the assemblages before level VII but some fine differences between these assemblages can be observed as well (pl. 163): interestingly, according to the graph, level IX starts later than the supposedly later level VIII. This is because the earlier finds were deposited in later levels (VIII-IX). The graph indicates a rapid increase of imports around 750 BC and an equally sudden decrease at 700 BC. Between these two dates the distribution is steady, which is caused by the fact that the majority of the finds could only be dated roughly from 750-700 BC. The sherd density is with two sherds per annum almost the same in all three assemblages (IX-VIII). The similarity of levels IX and VIII and assemblage IX-VIII is also illustrated by the distribution of vessel types per assemblage, which is almost identical (pl. 157 fig. 2). This not only reflects the close chronological proximity but also the fact that the major supplier for Greek pottery did not change during this period. The KDE of level IX and VIII are close to the total assemblage, an indication that they reflect the actual situation to some extent despite the small sample size.

⁹⁶⁴ Lefkandi I, 364.

⁹⁶⁵ A similar situation can be observed on Cyprus. See Crielaard 1996, 338-339.

6. Assemblage VIII-IX

The assemblage marked with level number VIII-IX does not constitute a separate layer and therefore it does not seem to be useful to discuss it separately. The assemblage is a mix out of level IX and VIII, which can be seen on pl. 163. It comes to 55 rim fragments (MNI) and 97 pieces in total, which is a rate of 1.7:1 between Total and MNI (pl. 161 fig. 1). The assemblage makes only 2 % of the total assemblage (pl.156 fig. 2).

The chronologic distribution of the sherds marked VIII-IX indicates a wider chronologic spread, from ca. 800-680 BC (pl. 163). The majority however, seem to appear at 750 BC and the graph shows a similar sharp increase around that time as in level IX. Although imports decreased rapidly at the same time as in level IX (700 BC), they do not drop to almost zero before 650 BC. In this respect the assemblage is much closer to VIII than to IX. The slight decrease in sherds per annum around 735 BC, despite a relative increase of LG II fragments is caused by the longer LG II period (35 years) as opposed to LG I, which lasts only from 750 to 735 BC (15 years).⁹⁶⁶). A similar situation can be observed in level VIII. Thus, it may indicate that the amount of imports from Greece started to decrease slightly already at around 735/30 BC.

7. Level VIII

Finds marked with level VIII amount to 2.5 % of the assemblage. The composition of Level VIII does not differ much from level IX (pl. 157 fig. 2). One difference to the two

⁹⁶⁶ Thus, if the beginning of the LG II period is set around 720 BC, imports would show an increase during the last quarter of the 8th century BC rather than a decrease.

previous assemblages is the increase in the shape variety, although other types than skyphoi are still restricted to few examples (pl. 112). Drinking vessels make 73 % (MNI) of the assemblage compared to 93 % in level IX (pl. 112). Nevertheless, a tankard, dinos, amphora and lekanis are all types missing in previous level IX (pl. 110). Certain skyphoi types, like the psc-skyphos are also missing in level IX while they are present in level VIII and in assemblage VIII-IX. This might be an indication that they were still produced in the LG period, although one has to consider that production and deposition are not necessarily two contemporary actions. Among the mixing bowls, kraters are more frequent than dinoi, a situation also found in later assemblages. Amphorae are predominantly of Attic sos-type while jugs mainly come from East Greece.

The amount of Euboean imports is slightly lower than in level IX and in assemblage VIII-IX. Given the fact that the unidentified category is with 29.2 % slightly larger than among the other assemblages and some groups like “Possible Attic, Euboean/Attic, Euboean/Cycladic, Euboean/Corinthian, Euboean/East Greek” come to about 10.8 % (pl. 113) we can assume that the proportions of Euboean imports remained equal through out the 8th century BC. The same can be said about East Greek and Cycladic imports. Corinthian imports rise from 1 % in level IX to 2.5 % in level VIII. The biggest change can be observed among the Al Mina ware. They drop substantially from 20 % in level IX to 5.8 % in level VIII. Their number remains at a comparable level in level VII while Al Mina ware seems to be almost absent in assemblage VI-VII before it disappears in level VI. Considering that the marked fragments from the whole Al Mina ware assemblage make only 23 % (Total) it becomes clear that the larger part of the unmarked fragments can change the observation significantly.

The KDE from level VIII is closer to assemblage VIII-IX than to IX showing a similar drop at around 735 BC as in assemblage VIII-IX (pl. 163).⁹⁶⁷ The sharp drop in number around 700 BC can also be seen in level VIII, which indicates that it is not a phenomenon restricted to a single assemblage. The drop in numbers is a real one as can also be observed when looking at the total assemblage.

8. Level VII and VI

Level VII and VI should be discussed together since first, level VII consists of 32 fragments, which is only 0.7 % of the total assemblage while almost twice as many fragments are assigned to assemblage VI-VII than to VII and VI together. The latter comes only to 2.9 % of the total assemblage while assemblage VII-VI makes about 7.7 %, the highest rate among levels X-V (pl. 156 fig. 2). Interestingly, starting with level VII, the skyphos makes up only a small percentage of the whole assemblage, dropping to below 10 % (Total), which is still larger than any other single drinking vessel category in assemblage VII and VI-VII (pl. 117). Their relatively high number in comparison to other drinking cups suggests that despite the sharp drop, the skyphos was still in use during the early 7th century BC while the few examples found in assemblages VI and later levels are rather residual. A similar case can be made about the Al Mina ware. Other shapes were now more frequent among the drinking cups. In particular East Greek bird bowls and cups with everted rims appear in large amounts. Euboean and Corinthian kotyle come to a similar distribution pointing to a continuing relationship between Al Mina and the mainland of Greece during the early 7th century BC, although

⁹⁶⁷ For the reasons see discussion above.

on a reduced scale. While Corinthian kotylai still appear in considerable amounts in level VI, 5.6 % (Total) and 7.8 % (MNI), Euboean kotylai drop significantly with assemblage VI-V and VI. It seems that their import stopped with level VII by the latest. Even though Corinthian imports cannot be neglected their number is far too low to postulate a “Corinthian coup”.⁹⁶⁸

Corinthian and Euboean kotylai are with 15.8 % roughly half of the amount of East Greek bowls and cups, which amount to 31.5 % (pl. 117). Comparing north Ionian bowls with south Ionian cups it seems that cups outnumber the north Ionian products. Taking the north Ionian bird kotyle into consideration as well, south Ionian cups and north Ionian bowls show a similar distribution.⁹⁶⁹ An analogue picture can be obtained from the jugs. South Ionian bird oinochoai are outnumbering the north Ionian products.⁹⁷⁰ For this picture one can perhaps infer that south Ionian products were either more popular at Al Mina or contacts with the southern part of Ionia were more intense than with the North. During the whole 7th century BC south Ionian imports are more numerous than products from north Ionia (see below).

Geometric patterns are still the most prominent decorative patterns among finds from Al Mina. Interestingly, monochrome one-handled cups appear in considerable amounts as well as other drinking vessels. Together with monochrome cups with everted rims, these make up a large proportion of the decorated drinking vessels (24 % MNI, 13.7 % Total). The total assemblage indicates that monochrome skyphoi constitute only a small

⁹⁶⁸ Tandy 1997, 65.

⁹⁶⁹ In this respect it is important to point out that the rate of marked Ionian cups is much lower than East Greek bowls.

⁹⁷⁰ A similar result can be obtained from the complete assemblage where south Ionian jugs clearly outnumber north Ionian products. This shows again that the results obtained from the different assemblages cannot be dismissed.

minority among the LG finds, and as will be shown later, this might be due to consumer preferences. The sudden appearance of large numbers of monochrome vessels is interesting. That it correlates with a sudden change from mainly Euboean to East Greek products indicates that the change was not due to a change in fashion. Local inhabitants had only a restricted impact within a certain stock of available items. A similar assumption can be drawn from the sudden change from skyphoi to bowls and cups with everted rims although one has to concede that the change was not a dramatic one: bird bowls still carry the geometric designs while cups with everted rims share many morphological features with the skyphos.

Most significant is the appearance of relatively large numbers of jugs, juglets, and to some extent, amphorae/hydriai. Wild goat examples appear already in level VII, which are partly residual considering that EA Id examples are among them. In assemblage VIVII the juglets come to about 4.5 % (Total) while in all other assemblages their number is insignificant. It seems that their import was restricted to the period covered by level VI and VII. In level V they are absent. Chian imports stand out among amphorae/hydriai. Further, a considerable number of aryballoi can be found among level VI-VII and VI. With one exception they come from Corinth and belong to the MPC period. Corinthian examples appear also at Tarsus and Zincirli, although in the case of the latter, they are limited to the end of the 7th and beginning of the 6th century BC. The dish is another category that can be found in assemblage VI-VII and VI perhaps illustrating that fragments from VI-VII come originally from level VI, which would agree better with the common chronology of East Greek plates.

The relation between drinking vessels and other types changes slightly looking at the MNI while a glance to the total figures indicates a significant shift from open vessels to

other categories (pl. 122). Jugs in particular appear in increasing numbers. Considering only the Total record, their figures increase by four as compared to level VIII.⁹⁷¹ Interestingly, about 51 % of the rims of jugs and about 38 % of the jugs (Total) are marked giving the observed rise in the numbers some sense of credibility (pl. 156 fig. 2).

The KDE from level VII, VI-VII and VI reveals the problem of dating level VII (pl. 164). Assemblage VI-VII covers almost the whole period from 750 to 580 BC and the sherd density rate is constantly higher than in level VII and VI, which makes it hard to define clear distinctions between VII and VI. Interestingly, at around 620 BC the number of dated sherds from assemblage VI-VII sinks below the amount from level V suggesting that level V began around this time. At around 655/50 BC the numbers increase in level VI before they start to drop at ca. 620 BC. In level VII the distribution indicates a rise at 675 BC while by 640 BC the number sinks below 0.15. One has to bear in mind that the problem with such an approach is that it is not known how many of the unmarked sherds belong to VII, VI and V. Therefore the change in quantity at a specific time might be caused by the selective recording of the sherds. On the other hand the chronological profile of level VI and V is distinct from the mixed assemblage VI-VII suggesting that at least these two levels provide relatively secure data.

The change in the composition of the assemblage observed at the beginning of level VII goes hand in hand with a change in the supplier of Greek pottery. Already in level VII East Greek products dominate while Euboean imports shrink to around 10-12 % (pl. 116. c. pl. 123. a). East Greek imports on the other hand rise from 6.7 % in level VIII to

⁹⁷¹ MNI numbers increase from 0 to 5,8 %.

59 % in level VII and 66 % in level VI. Here the development agrees with the results gained from the total assemblage. The record from assemblage VI-VII reveals a similar result confirming the observation based on the smaller assemblages VII and VI. Corinthian vessels are absent in level VII but with 10.8 % quite frequent in assemblage VI-VII and imports from Corinth remain steady in VI with 11.5 %. Euboean imports on the other hand drop off sharply in level VI suggesting that their import stopped at around 650 BC by the latest, if not earlier. Al Mina ware is almost missing in assemblage VI-VII and absent in level VI indicating the cessation of imports with level VII at the latest. Other categories of imports are reduced to insignificant numbers.

Among the East Greek imports, north- and south Ionian imports come roughly to the same amount although one must bear in mind that about 42 % could not be assigned to any particular region because of the fragmentation of the material. Nevertheless, among the unidentified East Greek material the majority comes from Ionia as well. This situation does not change much with the beginning of level VI. About 8 % of the East Greek imports can be assigned to Chios, which exported primarily large closed containers, either amphorae or hydriai. Although the preservation of the material does not allow for the division of the south Ionian imports into specific production centres, the majority of the Wild Goat style jugs, in particular the fragments belonging to SiA Ia-c, probably come from Miletos, an important Ionian production centre of pottery at that time.

9. Level V

Level V should be discussed together with assemblage V-VI. Some minor changes can be observed in the composition while certain trends from previous assemblages become more pronounced towards the end of the 7th century BC. Among the drinking vessels, south- and north Ionian jars were imported in similar amounts although the complete assemblage indicates a prevalence of south Ionian cups, which suggests that the results obtained from the levels are slightly distorted. In level V north Ionian bowls are slightly more numerous than cups with everted rims (pl. 130. a-b). Including also assemblage V-VI where bird bowls come to 38 % (MNI) and banded bowls to 21 % (MNI), we can observe a tremendous increase of north Ionian bowls towards the end of the 7th century BC (pl. 134). Apart from this, we have to consider that of the Ionian cups only 18.7 % (MNI) were marked as opposed to 39.2 % of the bird bowls. In particular of the late 7th century Ionian cups (cups with bichrome decoration) only a limited amount have been marked (14 % MNI, 8.1 % Total). Taking only into consideration those cups with bichrome decoration, which amount to 135 fragments and comparing them with the bowls from level V-VI, which amount to 158 fragments, bowls are more frequent than cups.⁹⁷²

Looking at the MNI numbers, the bowls are slightly higher (75), while cups come to 56. Finally, one must also consider that of the unmarked cups, not only bichrome variants belong to the last quarter of the 7th century BC. Other types may have also been found originally in level V and assemblage V-VI. From this we may assume that north Ionian bowls were slightly more frequent but the difference is certainly not enough to postulate

⁹⁷² Level V: 23 bird bowl fragments; Level V-VI: 87 bird bowl fragments; 48 banded- and other bowl fragments. Bichrome Ionian cups see pl. 146. b. Bowl level V-VI see pl. 135. b-c.

changes in trading patterns from south to north Ionia. It seems therefore that roughly the same amount of north- and south Ionian drinking vessels were imported to Al Mina throughout the whole 7th century BC. A comparison with other sites reveals the unique situation at Al Mina. At Ashkelon, for instance, Ionian cups were much more numerous than north Ionian bowls and a similar situation can be observed at Tell Sukas, although in the case of the latter we have to remember the incomplete publication status.⁹⁷³

The large number of banded bowls has chronological causes. Their appearance in assemblage V-VI is an important chronological anchor for the date of level V-VI. The majority belongs to Kerschners type I, which dates from 620-590 BC. From the discussion of level VI-VII I suggested that the end of level VI and the beginning of level V can be set around 620 BC. Having this in mind, I tend to interpret the masses of banded bowls as belonging to level V but one cannot exclude that they come from level VI. In this case level VI did not start before 620 BC, which would mean that level VI and V covered only 25 to 30 years while level VII would fall between 670 and 620 BC, which seems unlikely.

A different picture can be obtained from the closed jugs. The majority seem to belong to fabrics of south Ionian origin (see below), a trend already observed in previous assemblages. Only two fragments of north Ionian origin can be identified. Despite the fragmented state of the material, the white slip on Sub-Geometric jugs as well as the preserved patterns on Wild Goat style oinochoai suggest that the majority derive from south Ionia. In other words, the composition of drinking vessels indicates a different pattern than the composition of pouring vessels. Either north Ionian jugs were not

⁹⁷³ Ashkelon 3, 130. Appendix 3, catalogue Sukas.

available in the same quantities as south Ionian imports or consumers preferred the south Ionian products.

In this respect the evidence from Sukas is important since it proves that north Ionian closed vessels were generally available in the region. The almost complete absence of north Ionian closed vases has therefore nothing to do with a lack of availability. Perhaps the south Ionian products were considered qualitatively better products and thus imported in larger amounts. Tarsus on the other hand has a analogous record in this respect although it is hard to interpret the figures due to the selective character of the publication.⁹⁷⁴ At late 7th century BC Ashkelon the predominance of south Ionian cups is mirrored by the large body of south Ionian jugs. Nine north Ionian jugs oppose to 126 south Ionian products.⁹⁷⁵ The absence of north Ionian bowls at Ashkelon can hardly be understood without considering the record of the Greek pottery from Naukratis. The available evidence suggests however that north Ionian bowls were rare in the southern Levant as well as in Ashkelon, which may point to a different distribution mechanism. Alternatively, we may see some evidence for a system in which the high quality products, among them north Ionian bowls and south Ionian jugs were completely absorbed by Al Mina and the lower quality products or vessels which were produced in higher quantities like the south Ionian drinking cups, were exported to “secondary” harbours like Tell Sukas.⁹⁷⁶ Indeed, during the late 7th century BC, north Ionian products seem to dominate the market as can also be observed in the central Aegean.⁹⁷⁷

⁹⁷⁴ See the comments in Appendix 3, chapter 3.

⁹⁷⁵ Waldbaum 2011, 244. 280.

⁹⁷⁶ The assumption that Sukas, Ras el Bassit, Ras Ibn Hani and Tabat al Hammam are harbours of only secondary importance, is only based on the amount of Greek pottery recovered at these sites. It is important to bear in mind that not all traded goods are necessarily visible in the archaeological record.

⁹⁷⁷ Kerschner 2000, 487.

Having said this, one has to remember that the end of level V can be dated at around 600/580 BC. Perhaps the absence of north Ionian jugs at Al Mina is another hint that the occupation of the site ended before the production of north Ionian jugs started. However, this would entail a considerable gap between SiA Id and NiA Id products. In this case the end of level V might be around 600 BC or even slightly earlier.

In general, there seems to be no dramatic change in the composition considering the vessel types. The only noticeable difference is the considerable number of plates, which seem to be more frequent in level V than in any other assemblage, both in absolute numbers and in percentage of the assemblage (10.4 % MNI, 8.2 % Total). The reasons for this can be explained with the production at Ionia where plates were particular popular towards the end of the 7th century BC.⁹⁷⁸ The increase in Ionian production led to an increase in the demand at Al Mina and the northern Levant in general. No preference for a particular type can be observed nor does the fragmented material allow for the determination of whether the dishes belonged to the stemmed type or to plates with a ring base.

The composition of the assemblage indicates that the percentage of drinking vessels is slightly lower than in previous levels. A glance at the total figures reveals a comparable reduction of drinking vessels from level VI to V when looking at the MNI record. The Total amount decreases from 44.7 to 45.1 % while the MNI sinks from 74.6 to 73.2 % (pl. 127. b. pl. 132. b). We can assume therefore that the decrease is an actual one and not the result of an increase in the breakage rate of closed vessels. Although jugs decline in level V compared to level VI, other shapes like amphora/hydriai and plates increase.

⁹⁷⁸ A similar situation can be observed at Tell Sukas or Tarsus e.g. For the diversification in south Ionian vase painting see Kerschner and Schlotzhauer 2005, 32. 36.

The amount of East Greek products is in level V with 67 % close to the 66 % of level VI. Likewise noteworthy is the almost complete absence of Euboean kotylai while Corinthian imports remain stable. As already mentioned, the large quantities of south Ionian jugs results in a higher amount of south Ionian products. They come to about 37 % (pl. 133. b) as opposed to 28 % of north Ionian imports. Apart from Corinthian imports, other wares are insignificant.

The chronologic distribution of fragments from level V shows a clear picture (pl. 164). The curve shows the profile one would expect to see from a well-excavated settlement stratum. Despite a relatively broad distribution of finds ranging from ca. 750 to 580 BC the amount of fragments dateable to before 650 is small and remains stable. Only after that date the amount increases significantly suggesting that the date of level V must be after 650 BC. As already mentioned, at around 620 BC the amount of dateable sherds is higher than in any other level, which is important for the dating of level V. At around 600 BC the numbers drop sharply and after the 580 BC the imports drop to almost zero. The end of level V must be at around 600/580 BC.

10. The Total Assemblage

The whole assemblage of Greek imports illustrates the high shape variability at Al Mina (pl. 139. a). No other site in the East has a similar rate. Despite this, the table recording the MNI also clearly indicates that only a few shapes amount to a significant number. Skyphoi, kotylai, East Greek bowls and cups with everted rim are the only categories that come to more than 10 %. East Greek kotylai, one-handled cups, plates, dinoi,

kraters and jugs come to about 2- 5 %. The rest is around 1 % or lower. The situation is not much different when looking at the total sherd count: only jugs reach to around 15 % and the percentage of skyphoi is even higher than 40 % (pl. 155 fig. 2).

Drinking cups were the main imported category throughout the whole period under consideration. Their significant status becomes even more obvious by grouping the imports according to their function (pl. 154). Drinking vessels amount to 85 % when considering only the MNI while the total distribution illustrates that they still come to 66 %. The relationship between the main categories changes slightly according to the used figures. As has been stated earlier, the jugs and closed vessels are overrepresented among the total sherd count but the stylistic analysis also shows that the MNI does not represent the actual amount of closed vessels either. Since the difference between mixing bowls and pouring jars comes only to 0.9 % among the MNI record, I think that it is safe to assume that jugs were imported to Al Mina in larger amounts than dinoi or kraters.

pl. 157 fig. 3 shows the relationship between the different categories. Interestingly, the relation between drinking and mixing bowls is about 20:1, no matter if one takes the MNI or Total figures. The ratio of serving vessels to mixing bowls is roughly 1:2 and again this relationship is independent of the counting method.⁹⁷⁹ From this, one may carefully infer that the relation between these categories is reliable. Completely unclear is the role of jugs, which show a wide discrepancy between MNI and total figures. As has been already noted in the discussion above, several factors shape the pottery assemblage at any given site. The relation between the different categories does not

⁹⁷⁹ In this respect one has to note that numbers were rounded up.

reflect actual usage at Al Mina since different vessels have diverging life cycles and breakage rates. Since we have neither information about local drinking and eating behaviours nor do we possess reliable data about the consistency of the standard local household pottery assemblage, it is hard to determine whether the relation of vessel types at Al Mina, which is apparently quite different from LG Eretria i.e. (see below), is a product of different consumption pattern, related to a change in the life expectation of imported pottery or simply a product of post-depositional factors.

As will be shown below, it seems that there is no reason to assume that the excavator selectively recorded i.e. large open or closed vessels. Similarly, nothing points to different discarding strategies that affected only skyphoi. Even if this were the case, the relation between drinking, and mixing bowls would be even higher than at Eretria. Thus, it seems that the higher amount of skyphoi is rather a product of the particular demand of this shape, with its low transport costs while the relatively smaller amount of large mixing bowls might also be affected by the problems related to the transport of these vessels and their price.

The value of the presented data is limited due to missing comparisons. For the period before 700 BC the Euboean settlement of Eretria provides useful data suitable for comparison. The assessment of the record of Al Mina and Eretria shows a considerable discrepancy between a Greek settlement and Al Mina (pl. 160 fig. 1). While at Eretria skyphoi come to about 40 % of the whole assemblage, their amount at Al Mina reaches almost 70 %. Nevertheless, in both settlements skyphoi are the dominant drinking vessel. Kotylai are also much more prominent at Al Mina than at Eretria.⁹⁸⁰ The

⁹⁸⁰ Note that in the case of Al Mina all kotyle fragments dating from 750 to the early 7th century BC have been included in the figures.

difference between kraters is about 4 %, while the kantharos was apparently not a popular shape during the late 8th century BC at both sites. If we leave the jugs aside due to the problems related to their actual amount, the biggest differences can be observed among one-handed cups, the amphora/hydria and the lekane.⁹⁸¹ At Eretria the latter shape comes to about 5.8 % while at Al Mina their number is confined to one piece (MNI). The low number of lekane in the East – Al Mina is currently the only place where this form has been recovered – suggests that this shape was not traded on a regular basis. Its appearance at Al Mina has either to be interpreted as a rare curiosity or as the personal possession of a single Greek merchant.

Although one-handed cups were not absent at Al Mina, their amount does not even come close to the numbers from Eretria, which make about 21 % of that assemblage. The reason for this might be their monochrome decoration (see discussion below) and perhaps a functional one: since plates are generally scarce in Greek settlements during the LG period one may conclude that other vessels were used for food consumption. The one-handed cup was perhaps used in such a way, which may explain their absence in the Levant where plates were used on a wide scale.⁹⁸² The storage containers consist of amphorae and one possible pithos, perhaps of Corinthian origin. None of the amphorae belongs to the fine tableware. The record of the total sherd count from 8th century Al Mina also illustrates that some vessel categories missing among the MNI record are simply due to the counting method. Examples of jugs i.e. were apparently part of the LG stock of ceramics at LG Al Mina as well as plates (pl. 160 fig. 2). Even one Euboean aryballos is among the LG imports.

⁹⁸¹ The same conclusion can be reached through recently published results from Lefkandi that highlight the importance of one-handle cups and the frequency of amphorae. See Mitchell and Lemos 2011, 88 fig. 19-21. Note also, that the record from Lefkandi also illustrates the variation between various assemblages.

⁹⁸² The skyphos is also considered as a multifunctional vessel used for drinking and eating. Doumet-Serhal et al. 2008, 42. For the local plates from Al Mina see Lehmann 2005, 64.

This discussion highlights the differences and common patterns between a MG-LG Greek settlement and Al Mina. It showed that some categories previously thought to be absent at Al Mina were definitely recovered at the site.⁹⁸³ In particular Descoedres rejected any possible Greek presence at Al Mina drawing on the composition of the Greek imports, which, according to him, differed clearly from Greek native settlements.

The problem with his approach is first that he drew only on the published material from Kearsley, which is with 252 fragments limited.⁹⁸⁴ My own count for the phase covered by level X-VIII is 1478 (pl. 160 fig 2). In other words, Decoeudres sample comprises only about 17 % of the available evidence. Secondly, as a comparison he analysed the settlement of Megara Hyblaea founded during the late 8th century BC according to the conventional chronology.⁹⁸⁵ His comparison indicates that pyxides, hydriai, aryballoi, lekanides, plates and amphorae comprise only a few pieces, quite similar to the record from Al Mina (pl. 158 fig. 1).⁹⁸⁶ The relatively frequent aryballoi, which he takes to indicate Greek presence, may simply be due to chronologic factors: the earliest examples of the published pieces from Megara Hyblaea belong to EPC aryballoi, which are dated according to the conventional chronology to around 720-690 BC. In theory they could all date to the 7th century BC.

The numbers of kraters and dinoi at 14 % is also considerably higher at Megara Hyblaea. This might be explained through the presence of dinoi, which are absent at Al Mina during the 8th century BC. It cannot be excluded, however, that the majority of

⁹⁸³ Descoedres 2002, 56-57.

⁹⁸⁴ Descoedres 2002, 56.

⁹⁸⁵ Descoedres 2002, 57.

⁹⁸⁶ Descoedres 2002, 57. Note that at Megara Hyblaea obviously only the painted amphora fragments were published. A similar situation seems to have occurred at Al Mina.

dinoi from Megara Hyblaea also belongs to the 7th century BC. On the other hand, the record from Al Mina also revealed early aryballois, among them even one Euboean example perhaps dating from the end of the 8th century BC. The question remains as to the significance of the presence or absence of the Greek aryballois for the identification of resident Greeks. Scented oil was not locally produced during that time in the Magna Grecia, which means that the majority had to be imported. In the East, however, costly perfumes were available and produced at many different sites. A Greek inhabitant could easily obtain oil from another, closer, and perhaps even cheaper, source.⁹⁸⁷ In particular Cyprus has to be considered as a main supplier of scented oil during the Iron Age period.⁹⁸⁸ Two other important centres were located on Cos and Rhodes.⁹⁸⁹ Thirdly, the record from Eretria shows that aryballois were even rare in LG native Greek settlements.⁹⁹⁰

The KDE of the whole assemblage provides an overview of the development of Greek imports from the 9th to the end of the 7th century BC (pl. 162). The graph shows vividly the rapid increase in Greek imports around 750 BC.⁹⁹¹ During the whole second half of the 8th century BC the imports seem to rise until ca. 720 BC. According to the KDE, the conquest of the capital of Unqi in 738 BC did not impact the amount of imports. The problem with this interpretation is that theoretically the majority of the sherds dated broadly to LG (750-700 BC) could all belong to before or after 738 BC. The graph allocates them evenly along the time axis. A look at the distribution of sherds dated to before 750 BC reveals that a total amount of LG I fragments is 24 while LG II sherds

⁹⁸⁷ See the good overview in Schreiber 2003, 70-72. In particular 72.

⁹⁸⁸ Schreiber 2003, 81.

⁹⁸⁹ Coldstream 1998a, 258-260.

⁹⁹⁰ See also Lefkandi I, 72. Interestingly, while aryballois are relatively frequent in graves at Pithecoussai, they are absent in the pottery hoard from the acropolis, which consisted mainly of symposium vessels. See Luke 2003, 62 tab. 11; Coldstream 1995.

⁹⁹¹ According to Boardman 1996, 157 this increase occurred during the second quarter of the 8th century BC.

come to 151. This may indicate that imports after 735 BC were more numerous than before, which would confirm the general trend illustrated by the KDE. However, 545 fragments date to 750-700 BC, which is about 37 % of the sherds dated to before 750 BC. This calls for a careful interpretation of the graph.⁹⁹² Nevertheless, the considerable amount of LG II fragments suggests that the port was active even after the Assyrian intervention and before 700 BC. Thus, if the conquest of Unqi in 738 BC had an impact on the trading activities at Al Mina, it could not have been severe nor is it likely that it led to a complete interruption over a longer period of time.

Imports peak at 700 BC and at the same time the imports drop sharply from ca. 25 sherds per year to about 10 per year, which is a decrease of about 50 %. The sudden drop coincides with the decline of Euboean imports and the sudden increase in East Greek imports. Even though the imports recover consistently from 675 BC onwards, they never resume the same high levels they achieved during the 8th century BC. The largest amount of Greek imports during the 7th century BC occurs around 630/625 BC, the beginning of SiA Ic. From that time onwards the imports decrease until 580 BC. The drop in imports is not as rapid as it was at around 700 BC, which suggests a continuous decrease in trade during the last quarter of the 7th century BC.

Judging from the imports of Greek fine ware, we have to assume that the port's busiest period in term of its Aegean trade was during the second half of the 8th century BC. Although the harbour remained an important node in the East West trade it seems that during the 7th century the port was less frequented. But to what degree can such a view be based merely on the rate of fine painted pottery?

⁹⁹² In total 1478 pieces have been assigned to the period before 750/675 BC. The 24 LG I fragments account for 1,6 % and the 151 LG II fragments for about 10 %.

Fulford suggested that a low level of ceramic imports indicates growing prosperity since it also means that the elites had chosen to import other commodities like silver and metal instead, which are invisible in the archaeological record.⁹⁹³ This would mean that the decline in fine Greek tableware actually means the opposite of the proposed view: increasing prosperity instead of decline. Alternatively, increase in numbers of fine painted pottery may not reflect an actual increase in the port's prosperity or an increase in the frequency of contact between Al Mina and the Aegean, but could indicate instead changes in taxation rates.⁹⁹⁴ In particular, the sharp drop of imports at Al Mina at 700 BC could be seen as a result of changes in taxation connected with the incorporation of the harbour into the Assyrian empire. Perhaps pottery was of lesser importance for the Assyrians, which resulted in lowering taxes on pottery.⁹⁹⁵ The few reported numbers of Greek imports of the 7th century BC found at inland sites such as Tell Tayinat may point in this direction. The only problem with this theory is that the drop occurred considerably later than 738 BC. Only if we assert that the majority of sherds dated from 750-700 BC actually belong to before 738 BC can such a scenario be upheld. Against this theory speaks also the sudden change in the fabric of the imports, which can hardly be attributed to different taxation laws. While the sudden decline must have been caused by other factors, the low number of Greek imports recovered during the 7th century BC could still be a result of changes to taxation.

Clearly, although some differences could be observed, the pottery assemblage from Al Mina allowed the local inhabitants to consume wine à la grecque. Judging from the

⁹⁹³ Fulford 1983, 12.

⁹⁹⁴ Vickers and Gill 1994, 103.

⁹⁹⁵ An example for taxes paid for pottery can be seen in the Ahiquar scroll, a tax list of the year 475 BC. See Yardeni, 1994.

whole assemblage, the arguments against interpreting the majority of Greek vessels as evidence for Greek presence are mainly the low number of one-handled cups together with the total absence of monochrome skyphoi. Further, the lekaniis, a popular shape on Euboea since SPG II, seems to be an important shape at LG Eretria but whether this situation also applies to other sites during this period, still needs to be answered.⁹⁹⁶ At Al Mina, the small number of lekanides suggests that the inhabitants did not have any use for this vessel. Having said this, since the few fragments speak against widespread trade in this vessel type, the small number of examples of this shape might be accounted for by assigning them to the personal possessions of Greek traders. A similar explanation might apply for the pyxis.

The evidence shows that Boardman's view concerning Euboean dominance among the imports can be confirmed.⁹⁹⁷ The total assemblage mirrors the results gained from the separate levels.

10. 1 Skyphoi

The skyphos is with 30.3 % (MNI) or 23.8 % (Total) by far the most common vessel found at Al Mina. In this respect Al Mina does not differ from the Euboean cities of the second half of the 8th century BC.⁹⁹⁸ Several different skyphos types could be identified (pl. 140-143). The dominant shape is the shallow type with low splaying rim, which is a successor of the typical MG skyphos.⁹⁹⁹ Skyphoi with such a rim amount to 66,3 %

⁹⁹⁶ For the lekaniis at Lefkandi see Lefkandi I, 303. Given the available evidence from LG Lefkandi, the lekaniis was not as popular in every settlement as at Eretria during the LG period.

⁹⁹⁷ Boardman 1996, 157.

⁹⁹⁸ Lefkandi I, 62.

⁹⁹⁹ Coldstream GGP, 18. 170.

(MNI) or 29.8 % of the total amount of retrieved skyphoi from Al Mina. Among them, banded rims are the most common examples with roughly 90 % (MNI and Total).

A similar situation can be observed on Euboea where skyphoi with low splaying rims are the most common examples during LG I and skyphoi with banded rims seem to be a Euboeo-Cycladic characteristic during the LG period.¹⁰⁰⁰ Other rim decoration patterns are only of secondary importance. The main zone of SK2 skyphoi from Al Mina is decorated with a variety of motifs. Only a few types stand out from an otherwise homogeneous distribution of motifs. The most frequent pattern are multiple vertical scribbles, which amount to 13.6 % (MNI) of the SK2 assemblage and to 9.1 % (MNI) of the total record. Looking at the total count of the whole skyphos assemblage, it is the third most popular motif. Of the skyphoi with scribble decoration, 36 rim fragments belong to the Al Mina ware. It is therefore not only the most important skyphos motif but also the most popular pattern of the Al Mina ware. Also en vogue was the skyphos with horizontal zigzag decoration and with cross-hatched lozenge, a typical Euboean LG II pattern. Skyphoi with bird decoration also stand out slightly from the rest with 2.8 % (MNI) of the SK2 assemblage. The low amount of skyphoi with meander decoration (0.8 % MNI of total skyphos assemblage) reflects the rather sporadic contacts between Al Mina and Greece before 750 BC since this motif is a typical MG pattern.¹⁰⁰¹ The same conclusion can be drawn from the rather sporadic appearance of SK2 rims decorated with a row of dots.¹⁰⁰² Monochrome skyphoi, are limited to 1.5 % (MNI) of

¹⁰⁰⁰ Eretria XX, 73; Lefkandi I, 63.

¹⁰⁰¹ Meander pattern can also be found in Euboean LG I but one cannot exclude an earlier date. If the contacts between Al Mina and Greece would have been on a regular basis, one would expect this type to be more dominant providing that Al Mina's contacts would be with Attica, like in the rest of the East, and that the fine painted pottery really reflect the frequencies of contacts between regions.

¹⁰⁰² Coldstream GGP, 19 (introduced in MG I).

the SK2 assemblage. Indeed, their number might even be lower since it cannot be excluded that they are rather one-handled cups.¹⁰⁰³

SK3 skyphoi come only to 1 % (MNI) of the total retrieved skyphoi. The SK3 variant with wave line decoration could also be listed under the SK2 depending on the shape of the body, which is not fully preserved in any of the examples. Skyphoi with such a wave line décor are unusual and also the fabric distinguishes this type from all the other imports at Al Mina. The source of origin thus must to be left open at this point. Examples with wave line decoration are known from Eretria where they appear in two variants. The category with wave line in a free field is associated with LG II.¹⁰⁰⁴ Caution is necessary due to the difference in fabric between the wave line skyphoi and the rest of Euboean imports. Comparable examples are also known from Francavilla Marittima and are believed to be local products.¹⁰⁰⁵ The example with opposed diagonals or group with vertical lines and painted rim can be securely attributed to SK3.¹⁰⁰⁶

The conical skyphos type SK5-7 that appears at Al Mina for the first time either in level IX or VIII, and which comes in several variants, constitutes only a small fraction of the skyphos assemblage (2.6 % MNI). Despite their few numbers, their import at Al Mina is remarkable since this type was not even exported to the colonies in the West.

¹⁰⁰³ The monochrome rim fragments have been allocated to their respective groups according to their diameter, which is generally smaller in the case of cups, and on the bases of wall thickness, which is slightly thinner in the case of the cups.

¹⁰⁰⁴ My thanx to S. Verdan who provided useful information in this respect.

¹⁰⁰⁵ Jacobsen and Handberg 2010, 23-24 fig. 8. B. The type from the Timpone della Motta with an interior rim decoration, which contains a reserved band with a group of dashes, differs from the Al Mina fragments. Although Eretria examples of skyphoi with similar decoration exist, they differ slightly in decoration and importantly, their fabric is quite different from the examples found at Al Mina: See Eretria XX, pl. 42. 173.

¹⁰⁰⁶ For a comparable example with slightly different decoration see Eretria XX, pl. 22. 79.

The typical Euboean skyphos with high rim (SK8-9) is more frequent and so is the psc-skyphos. Of the psc-skyphoi, two types can be identified. Kearsley's type 5 and 6 are both among the finds from Al Mina with the latter clearly outnumbering the former type. Although about 32 psc-skyphos fragments could be identified, they make only 4.3 % (MNI) of the total skyphos assemblage. The zenith of this type must have already past when the export of Euboean pottery reached its height in the second half of the 8th century BC. 2.3 % of the SK8-9 skyphoi were decorated with concentric circles, apparently the most frequent SK8-9 variant. It is a popular Euboean type and their appearance at Al Mina is by no means a surprise.¹⁰⁰⁷ Unfortunately, only a few examples preserved the decoration zone.

Two other skyphos types discovered at Al Mina are the Corinthian Sub-Geometric- and the Thapsos class skyphoi, which appear for the first time in level VII.¹⁰⁰⁸ The former Corinthian skyphos is decorated either with sigmas or dashes, with no motif standing out. Of the 25 pieces only one fragment belongs to the shallow type. The other examples contain a deep body. The majority of the Thapsos class carries simple bands (72.2 %) while the Panel type is restricted to only 27.8 %. Thapsos class skyphoi appear at Al Mina in several fabrics, which suggests that different regions were involved in the export of this type to Al Mina.

Since the majority of the imports from Al Mina dating to the second half of the 8th century BC come from Euboea, the assemblage can be compared with Eretria, for which a large corpus of material is available for analysis.¹⁰⁰⁹ This comparison reveals some

¹⁰⁰⁷ Lefkandi I, 63.

¹⁰⁰⁸ Fragments marked with level VII are missing but the type can found among the finds marked with level VI-VII.

¹⁰⁰⁹ For the date used for this study see Eretria XX, pl. 77-86.

interesting differences (pl. 159 fig. 1): the assemblages from Eretria demonstrate that apparently the SK3 type was the most popular skyphos variant at Eretria during the second half of the 8th century BC followed by SK2, SK5 and SK8b. At Al Mina a completely different picture emerges: the assemblage is dominated by the SK2 skyphos (83 %). SK3 is almost entirely missing and so is SK5. Only SK8b is found in such an amount that reflects its popularity at Eretria to some extent (6 %). Also significant is the relatively large number of the psc-skyphos type 6 at Al Mina compared to Eretria where this type is almost absent (0.1 %).

Several different explanations can be offered for the discrepancy between the two sites: one reason could be that the majority of Euboean imports from Al Mina do not derive from Eretria but from another city with a different pattern during the 8th century BC. Unfortunately, a similar thorough statistical analysis of the LG pottery from other Euboean sites is missing and currently we lack statistical data illustrating possible variations within Euboea. This hypothesis also implies that the Greek imports from Al Mina derive from only one city, which is unlikely. One also has to consider slight variations due to imports from other Greek, non-Euboean cities. Another factor that could account for the variations might be morphologic or stylistic. The absence of the SK3 type can be explained in such a way. The data from Eretria suggests that one third of SK3 skyphoi from Eretria are monochrome while only a third carried a decorative pattern (pl. 159. fig 4).¹⁰¹⁰ This is further supported by the fact that the few SK3 skyphoi discovered at Al Mina all belong to decorated types (non-monochrome). Further, monochrome skyphoi were popular at Eretria during the MG and LG period.¹⁰¹¹ About

¹⁰¹⁰ In the case of one third the decoration is unknown. Of those 180 pieces more than 90 have a monochrome rim decoration suggesting that a large percentage may be ascribed to monochrome types as well.

¹⁰¹¹ Eretria XX, 75. Compare also the number given on Eretria XX, pl. 76- 86.

251 pieces out of 1211, which is 20.7 %, belong to this class at Eretria. At Al Mina, monochrome skyphoi come only to 6 pieces (MNI), which is 1.2 %. It seems that simple monochrome skyphoi were completely ignored at Al Mina. Likewise, simple monochrome cups are also few during the LG period, which is in sharp contrast to the situation known from Eretria during the 8th century BC.¹⁰¹² As has been noted briefly above, it is necessary to remember that the record is not necessarily similar at each Euboean city. Indeed, the available information indicates that monochrome skyphoi did not enjoy the same popularity at Lefkandi. Whether this intra-Euboean discrepancy is related to chronology or reflects consumer choices has to be left open at this point.¹⁰¹³

A look at the distribution of other motifs does not point to any other selection mechanism. There seems to be a wide range of motifs without any pattern standing out from the rest, which is similar to the record from Al Mina. The relatively large corpus of meander skyphoi at Eretria (MNI 48 pieces, 4 %) can be explained through the large body of MG II fragments. Other motifs also represented at Al Mina are evenly distributed at Eretria: scribble 0.2 %, quatrefoil 0.4 %, birds 1.5 %, chevrons 1.8 %, psc 2.1 %, lozenges 2.3 %. Others, like the vertical bands, which come to 3.6 % at Eretria, play only a minor role at Al Mina (1.2 %). These are the most common patterns, other motifs appear in much smaller amounts.

The three most popular motifs at Al Mina during the second half of the 8th century BC were the scribbles (10.5 %) followed by psc-decoration (4.3 %) and the cross-hatched

¹⁰¹² Eretria XX, 26.

¹⁰¹³ Lefkandi I, 65. Important in this respect is that no statistical information about the retrieved assemblage from Lefkandi is available and that the majority of the settlement material belongs to the LG period, thus slightly later than level IX.

lozenges/squares (3.1 %).¹⁰¹⁴ Bird-decoration is ranked in fourth place (1.8 %). Apart from the skyphoi with scribble decoration, one cannot observe any tendency toward a demand for specific decoration schemes at Al Mina. The motifs show the diversity of decoration patterns found in Greece. The few numbers of skyphoi with scribble decoration known from Euboea and the large amount of skyphoi from Al Mina painted with this motif, suggests that perhaps a source other than Euboea is responsible for the dissemination of this pattern on Cyprus.¹⁰¹⁵

Thus, decoration played a role only in as much as it seemed important for the customers that the vessels were decorated. This point is also significant for the discussion of the 7th century BC imports, in particular for the relatively large corpus of Ionian cups, which were all monochrome except for a reserved band on the belly. As a final point one may highlight the remarkable absence of the SK8 type decorated on the rim with a net of lozenges and the low number of examples decorated with tangential dashes/dots. At Eretria, they are not the most popular rim motifs but nevertheless they appear frequently (pl. 159 fig 5). Both types are usually associated with the LG II period.¹⁰¹⁶ The absence of these variants cannot be explained by chronologic factors since Euboean LG II types are present at Al Mina. Perhaps these types were produced in a particular workshop, which did not export its products to Al Mina.

¹⁰¹⁴ This is only true if one is willing to accept that the type 6 psc-skyphos belongs only to the second half of the 8th century BC.

¹⁰¹⁵ Again, this implies that the record from Eretria resembles the pattern in other Euboean cities. Recent clay analysis (NAA) conducted by the author and Dr. Mommsen proves that the Al Mina ware was produced on Cyprus.

¹⁰¹⁶ Lefkandi I, 64 (middle or late range of LG); Eretria XX, 84.

10. 2 Kantharos

Kantharoi are remarkably few at Al Mina. Skyphoi were more popular and obviously considered the Greek drinking cup par excellence. At Eretria kantharoi range from a minimum of 0.8 % to a maximum of 9.6 % per assemblage, which means an average of 3.9 % (MNI). Obviously, kantharoi never achieved the same popularity as the skyphos. In this respect one must note that the distinction between the kantharos and skyphos with a high lip is not always clear, even more so since both types bear similar rim decorations. The low number at Al Mina could also be due to their lower visibility in the record. One can only speculate about the few kantharoi exported to the East. Beside problems related to storage on a ship – the high vertical handles may prevented large stacks of kantharoi – its deep shape made for a large consumption of wine contradicts with eastern drinking behaviours and might be responsible for the absence of this drinking cup.¹⁰¹⁷

10. 3 Kotyle

Kotylai form another large group (12.4 % MNI). Looking at the complete assemblage, Corinthian imports are more frequent than Euboean ones. The reason for this might be that they have been imported over a longer period of time, in principle throughout the whole 7th century BC. Both types appear: vessels with vestigial lip as well as the lipless variety. The latter type is much more popular than the previous one. Among Euboean kotylai, the soldier bird decoration is at 12.1 % the most frequent while among Corinthian imports kotylai with sigma pattern are the most popular types. If Boardman

¹⁰¹⁷ For Near Eastern drinking behaviours see the discussion by Boardman 2002b.

is right with his assumption that the soldier bird kotyle is an Eretrian speciality, this type proves the connections between Eretria and Al Mina towards the late 8th century BC.¹⁰¹⁸

10. 4 East Greek Kotyle

The East Greek kotyle amounts to only 2.9 %. Bird bowls are much more numerous. Their low number can easily explained because the production of the type had already reached its heyday before they were exported to Al Mina. Their preservation status does not allow any clear distinction between certain types but it seems that the earliest examples with frieze decoration were absent. This observation is important since it suggests that East Greek imports appear only after the first appearance of other Greek imports at Al Mina. Among the usual types with bird decoration one can also find more peculiar types like simple monochrome vessels, which were also decorated with bands in added white. The number of the zigzag metope kotyle, all dating to after 700 BC, is at 15.2 % also significantly high.

10. 5 East Greek Bowl

Bird bowl types are frequent at Al Mina. They make come to 11 % (MNI) or 8 % (Total) of the total assemblage. Only skyphoi or cups with everted rims were more popular. The distribution shows that almost every type produced in Ionia was also imported at Al Mina (pl. 145. b). Types dating to the first half of the 7th century BC

¹⁰¹⁸ Boardman 1996, 156. Note however, that soldier bird kotylai are almost complete missing from the recently published LG assemblages from Eretria, which seems to be odd if this type was a Eretrian speciality. Perhaps they were destined for export and were therefore missing within the local assemblages. An assemblage from the excavated houses at Oropos reveals the percentage of kotylai, which are quite similar to the record from Al Mina. See Vlachou 2011, 96 fig. 6-7.

(Total 44 %) number slightly less than types dating to the second half (56 %).¹⁰¹⁹ This picture coincides with a general increase of imports during the course of the 7th century BC.

Other bowl types like rosette or meander bowls can also be found but only in small amounts (pl. 146. a). Banded bowls come to about 60 % within the East Greek bowl types other than bird bowls and are the only bowl type that was imported at Al Mina in relatively large numbers. Nevertheless, their number does not exceed 3 %, a comparatively low rate. Since meander bowls and rosette bowls were produced slightly later than the bird bowls, their low number suggests that level V came to an end before their production had reached a significant level in Asia Minor or that this type was produced in significantly lower numbers.¹⁰²⁰

10. 6 Cup with Everted Rim

Ionian cups are with 19.4 % (MNI) the most common drinking vessels after the skyphos (pl. 155). Like in the case of the bird bowls, all types produced in Ionia during the 7th century BC, were exported to Al Mina. Interestingly, the earliest type, which appeared at around 675 BC (KT 5), is with 16 % the most frequent cup. This reflects its long production period, currently believed to run from 675 to 625 BC, but it also shows that

¹⁰¹⁹ The MNI record shows a slightly different division: 41 to 59 %. Since the Total sherd record revealed a higher percentage of marked fragments than the MNI record (53 % marked fragments as opposed to 39 %) I choose to compare the Total record, which has a higher reliability.

¹⁰²⁰ Unfortunately, statistical information from Ionian cities, which would confirm or reject this assumption, are missing.

its import coincides with the beginning of its production at Ionia.¹⁰²¹ This type is, apart from Tarsus, lacking at any other site in the Levant.

Like the bird bowls the vast majority dates to the second half of the 7th century BC. The fabric of the imports is homogeneous, suggesting the involvement of only one or a few workshops, perhaps all situated in the same city. Miletos and or Samos are certainly the best candidates for such a production centre. The large amount of cups with bichrome decoration also indicates that they were shipped to Al Mina until the end of the 7th century BC. Perhaps one example comes from a Rhodian workshop.

10. 7 One-handed Cup and Other Drinking Vessels

One-handed cups are not many, but in this respect one has to consider the possibility further one-handed cups could be hidden among open unidentified vessels and among the drinking vessels. In particular, among the monochrome fragments one can expect some further one-handed cups. Nevertheless, their number never reached significant levels. The reasons for this might be functional. It has been suggested that skyphoi served both needs in Greece, eating and drinking.¹⁰²² In the East however, the plate was a common shape and appeared also at Al Mina. It is missing in the East because the plates filled in its function.¹⁰²³ In this respect the absence of the one-handed cup might be better understood.

¹⁰²¹ This is confirmed by the appearance of this type in assemblage VI-VII, level VI and level V. In the latter level only one piece was found. The majority comes from assemblage VI-VII.

¹⁰²² Coldstream 1998a, 305-306.

¹⁰²³ That perhaps explains also that it had only one handle. The other hand was perhaps used for a wooden spoon or a piece of bread.

Another reason might be its decoration. One-handled cups are overwhelmingly monochrome. As has been suggested, monochrome vessels were perhaps more subject to selection than other vessels. Among the one-handled cups, East Greek monochrome lipless cups are the most common group. One-handled cups appeared at Al Mina in similar amounts as the juglets, suggesting that both types were sold as sets. Although some of the cups may belong to before 700 BC or even earlier, the majority date from the second to the third quarter of the 7th century BC. Other types of East Greek cups with richer decoration, like meander patterns or bichrome bands, are rare. Interesting are Sub-Geometric cups, probably imported from Greece, among them the Phaleron type and one monochrome example with parallels from Attica. Both types are absent in the rest of the Near East.

The category of drinking vessels is a comparatively large group. Within this group one can find a large number of fragments with a rim profile similar to the SK2 skyphos and monochrome decoration. They either belong to monochrome skyphoi or one-handled cups. The fragments found in this group are usually badly preserved and it is impossible to say whether they belong to skyphoi, cups, kantharoi or other types of vessels. Thus, the largest group with over 70 % belongs to unidentified fragments.

10. 8 Plates

Plates come to about 1.3 % (Total) of the assemblage. Considering that the majority were imported at the end of the 7th century BC, this amount is not as low as it may seem. Apart from the few LG or Sub-Geometric imports (three fragments), the majority are of East Greek provenance with south Ionian products dominating the spectrum.

Only one piece derives from Rhodes while the rest, including two pieces with black monochrome paint and bands in added red, come from Ionia. Among the more elaborate decorated pieces (e.g. plates decorated with a face-pattern) some stylistic differences can be observed, which may indicate different production centres.

South Ionian plates are the most frequent. They consist of various types with different rim profiles, which can also be encountered in Ionia itself. Lipless rims are the most frequent category. The majority of the plates belong to the metope dishes and date therefore to the period from 610-580 BC. Also popular were dishes decorated with simple bands. The fragmentation of the material does not allow distinguishing between stemmed and ringed base dishes.

An important feature about the imported plates is their age. All the plates belong to the end of the 7th century BC. Earlier examples are few, and before 700 BC, they are limited to two fragments. In contrast, psc-plates are totally missing, despite the frequency with which they turned up on Cyprus, Tarsus, Kinet Höyük, Ras el Bassit or Phoenicia.¹⁰²⁴ So far, also no psc-plates have been reported from the sites in the Amuq. Their absence requires an explanation. One possible reason might be that their production ended before Al Mina received Euboean imports, although evidence from Eretria may indicate that their production continued into the LG period.¹⁰²⁵ Chronological factors might be excluded, if one takes into consideration the evidence from Tell Tayinat, where psc-plates are missing as well despite a large corpus of SPG III psc-skyphoi. Plates

¹⁰²⁴ For Salamis on Cyprus see Dikaios 1963, 174-198; Coldstream 1963, 199-204; Desborough 1963, 204-207. For Amathus see Coldstream 1995, 192-194, 200-202.

¹⁰²⁵ Eretria XX, 70. Strong evidence that would support a production “jusqu’ à l’aube du GR” as suggested, is missing so far.

constituted one of the most frequent types in North Syria during the 8th century BC and several, perhaps local, examples turned up at Al Mina.¹⁰²⁶

Two explanations for the absence can be offered: either their decoration or form did not meet the specific requirements in North Syria, or plates were in such a high demand at other places, in particularly on Cyprus and at Phoenicia, that Greek plates barely made their way to other sites. The abundance of plates at Cyprus and Phoenicia and the few psc-plates at sites such as Ras el Bassit favour the latter theory. The limited amount of plates dating to the period before the end of the 7th century BC can be explained through limited supply since plates dating to before the last third of the 7th century BC are rare at Ionia itself.¹⁰²⁷

10. 9 Dinos, Krater, Krateriskos, Stamnos

Looking at the total number of dinoi and kraters, it seems that kraters are more frequent than dinoi, although MNI numbers are almost similar suggesting that no shape was more popular than the other (pl. 139). 56 % of dinoi are marked while ca. 74 % of the kraters, which is the highest frequency (pl. 156). The kernel density estimates of dinoi and kraters show that from 750 to 700/680 BC kraters were the only mixing bowl type, dinoi were restricted to a few numbers (pl. 165). The kraters have a similar development in the total assemblage.¹⁰²⁸ At the beginning of the 7th century BC the relationship is reversed. From that point on, the dinos outnumbers the krater and this situation remains constant until ca. 630 BC when the kraters regain their popularity. The pattern is

¹⁰²⁶ Lehmann 2005, 64.

¹⁰²⁷ For the chronology of Ionian plates see Kalaitzoglou 2008, 141-144.

¹⁰²⁸ Cf. pl. 165. Sharp increase at 750 and rapid drop at around 700 BC. Numbers of kraters are continuously increasing during the 7th century BC until ca. 630 BC when the start to decrease.

interesting because it shows that both shapes are not equally important throughout the period but they complement each other. The increase of kraters towards the end of the 7th century is reflected by the popularity of the type in 7th century BC Asia Minor as shown by the sanctuary of Athena Assesia (see below).¹⁰²⁹

While kraters appeared in considerable numbers during the 9th and early 8th century BC in the whole Aegean, the dinos or lebes is a form that was not so popular in Greece judging from the published material.¹⁰³⁰ Having said this, it remains to say that the shape was probably introduced in Greece during the archaic period around 700 BC and pottery from Greece of the first half of the 7th century BC is unfortunately underrepresented in the archaeological record.¹⁰³¹ In particular the pottery of the regions that exported their pots to Al Mina during the 8th and early 7th century BC – Euboea, the Cyclades, to a lesser extent Corinth and Athens – is less known during the early archaic period.¹⁰³² Further, the morphological relationship between bronze and clay dinoi was close and bronze vessels appear in Greece already during the last quarter of the 8th century BC as shown by the bronze vessel found in the west gate area at Eretria.¹⁰³³

It is also important to mention that the early bronze cauldrons of the 7th century BC were exported from North Syria to Greece.¹⁰³⁴ The dinos itself derives from the bronze cauldron, which originated in the East.¹⁰³⁵

¹⁰²⁹ This needs to be confirmed by evidence from settlements.

¹⁰³⁰ Schattner 2007, 297.

¹⁰³¹ Descoedres 1976, 40; Sakowski 1999, 4 with no. 17. 24.

¹⁰³² This is not true for centres such as Corinth and Athens although the majority of the publications focussed on the fine painted pottery. Less elaborately decorated pottery did not receive the same attention as the fine painted ware.

¹⁰³³ Gauer 1991, 18; Eretria III, 22-23. For the morphological relation compare Gauer 1991, 21 fig. 5-6.

¹⁰³⁴ Gauer 1991, 168; Sakowski 1999, 2 with no. 7. 20-22.

¹⁰³⁵ See i.e. Kalaitzoglou 2008, 207-208.

In East Greece the dinos or lebes was obviously much more popular although a thorough examination of this shape and its stylistic development is missing so far. Published finds are mainly restricted to places such as Samos, Miletos, Didyma and Ephesos.

The dinos or cauldron was an essential requirement for the Near Eastern banquet and bronze examples have a wide distribution in the Aegean.¹⁰³⁶ It was used to store wine and possibly the wine was mixed with water.¹⁰³⁷ That dinoi appear more frequently during the 7th century BC might be explained by local preferences, as populations may have been more attracted to the familiar shape of the dinos. Another possible reason may have been that the compact shape of the dinos made it more suitable for transport than the LG kraters. The later 7th century kraters are also more compact than their Geometric predecessors and this might be one reason why their numbers increase towards the end of the 7th century BC. The relationship between the mixing bowls and the drinking vessels is about 1:20 (see above). At LG Eretria the relation between drinking vessels and kraters is 1:9. Interestingly, a similar difference can be observed in the relation of cups to jugs: at Al Mina the ratio between drinking vessels and jugs lies around 1:24. At Eretria the relation is about 1:13. Both types are underrepresented at Al Mina. Either both shapes were less frequently exported or certain behaviour patterns at Al Mina caused the differences. One reason could be that the cost for the shipping of larger shapes was higher.¹⁰³⁸ Although large open vases were often used as storage containers for smaller jars, the dinos has a comparatively smaller diameter and its shape

¹⁰³⁶ Moorey 1980, 192. Note one well preserved example from Zincirli: Sendschirli V, pl. 57.

¹⁰³⁷ Moorey 1980, 192.

¹⁰³⁸ Generally, large clay vessels seemed to be more expensive than smaller ones. See i.e. Amyx 1958, 277.

is not ideal for the storage of drinking vessels.¹⁰³⁹ Whatever the reasons was, the record from Al Mina indicates that the proportion of mixing bowls to other pottery shapes was different in Greek settlements.¹⁰⁴⁰

Among the dinoi, Sub-Geometric patterns or simple wave lines dominate. Wild Goat style products are restricted to two pieces. The origin of the majority of the dinoi is not clear. They may have been imported from Asia Minor, but at the present the precise region cannot be identified with certainty yet. Judging from the fabric, it seems that the majority come from the same production centre. Dinoi with similar patterns are as yet unknown at major centres like Samos or Miletos; however, it is necessary to remember the insufficient publication status of the region. We may also have to consider hitherto unknown workshops that can be perhaps located somewhere between the Ionian cities and Cilicia or the northern Levant. The limited spectrum of mixing bowls and the fact that presumably they all come from one specific production centre might be a hint that their production was not a widespread phenomenon and among the Greek cities in Asia Minor – the possibly the main source of dinoi found at Al Mina – kraters were the preferred vessel for storing wine and water for the symposium.¹⁰⁴¹ The evidence from the late 7th- century context from the Athena sanctuary of Assesos seems to confirm this statement. At Assesos kraters are more common than dinoi.¹⁰⁴² Unfortunately, accounts of the relation between krater and dinos in Greek settlements from Asia Minor are missing. If this hypothesis turns out to be true, we have another reason for the varying

¹⁰³⁹ A similar explanation was used by Vickers and Gill to explain the relatively high price for earthen hydriai. See Vickers and Gill 1994, 85.

¹⁰⁴⁰ Problematic remains that as a available comparison only Eretria is available while Al Mina covers also the 7th century BC. It cannot be excluded therefore, that the observable difference are related to changes, which occurred in East Greece during the 7th century BC.

¹⁰⁴¹ Kalaitzoglou 2008, 206.

¹⁰⁴² 35 kraters and 8 lebetes were recovered from the Athena sanctuary from Assesos. See Kalaitzoglou 2008, 185. 206.

relation between mixing bowls and drinking vessels: the underrepresentation of the bowls could be the result of a lack in supply of the popular dinos shape.

Kraters are not confined to the LG period or to the late 7th century BC but between 690 and 620 BC their number is lower than the dinoi. The gap between MNI (35) and Total count (101) is a result of their shape, which is usually much larger than dinoi, and because of their morphologic characteristics – high pedestalled foot – they are more likely to break than dinoi. The group related to the Cesnola painter has already been discussed elsewhere. It must be noted that Wild Goat style kraters are comparatively rare among finds from Al Mina. Kraters belonging to the 7th century BC usually also bear simple motifs like wave lines, which amount to 28.6 % (MNI). Apart from this, the decoration of the Geometric examples reflects the range that can be found in Greek settlements.

One piece belongs to a stamnos. It comes from assemblage V-VI and is perhaps of East Greek provenance. It belongs to a few types, which occur only as a single piece.

Dinoi and kraters are by no means two shapes that are to be expected at a site with larger numbers of Greek imports. Even though the record from other sites in North Syria like Tarsus or Sukas¹⁰⁴³ suggests that other sites also imported dinoi and kraters, the lack of mixing bowls at Ashkelon, where drinking vessels were imported in a considerable number, demonstrate that the import of drinking cups did not automatically result in import of mixing bowls. The absence of dinoi and kraters at Ashkelon could also be interpreted as a sign of different trading networks. The supplier of dinoi and

¹⁰⁴³ Notably, the amount of dinoi is considerably lower than kraters.

kraters to Al Mina obviously did not export its products to southern Palestine or Naukratis, a possible supplier of Greek pottery for Ashkelon.

10. 10. Jug, Juglet

The interpretation of the jugs recovered from Al Mina and, associated with it, their function, is a complex matter. The reason for this can be found in the large gap between MNI (3.4 %) and the total amount (13.7 %). It is the only vessel category where MNI and Total numbers are separated by about 10 %. The next closest discrepancy can be found among skyphoi where MNI and Total differ by 6.5 %. In the rest of the cases the variation is not larger than 2 %. Other closed vessels like amphorae or hydriai show a less clear difference and this is related to their thicker walls, which results in a lower breakage rate. Although the higher breakage rate is certainly one factor that shaped the assemblage, the various decorative styles and motifs as well as different colours used suggest that considerable more jugs must have been imported than indicated by the MNI.

The development of the quantities of jug imports at Al Mina indicates a constant increase from the second half of the 8th century BC until 650/640 BC. The constant increase of jug imports is interesting given the suggestion that jugs did not play an important role in Near Eastern banquet practices as suggested by some scholars.¹⁰⁴⁴

The problem with this hypothesis is that it rests only on Attic imports from the 5th century BC and on a limited corpus of visual representations of banquet scenes from the

¹⁰⁴⁴ Luke 2003, 55-56; de Vries 1977.

Near East date to the EIA. Luke e.g. ignores evidence that undermine here results like a probable North Syrian bronze bowl from Lefkandi, which depicts a scene that includes musicians, a cauldron possibly filled with food and a table with two jugs and an amphora on top of it.¹⁰⁴⁵ The whole scene suggests a festive activity, which included the consumption of psychoactive liquids. This is only one example that depicts a scene where jugs were involved in rituals. Certainly more evidence is needed in order to understand which role certain vessel categories played in the Near Eastern banquet.¹⁰⁴⁶ Apart from this, it remains totally unclear whether the traditions and habits of the elite depicted on the banquet scene of Assurbanipal from Niniveh and cited by Luke accurately reflect the customs carried out by other social classes. Another matter is whether the visual representations reflect actual behaviour. The evidence from Al Mina seems to contradict the results gained by Luke's and de Vries' study. At least at Al Mina, jugs were an important part of the local population's stock of vessels and visual representations on bronze bowls of the 8th century confirm that a large variety of vessels were used during these banquets. The constant increase of jugs at Al Mina is a product of the general increase of Greek imports to the port.

Another reason for the rise in jug imports can be found in the fact that the jug was one of the most popular shapes decorated in the Ionian Wild Goat style. The growing numbers might be directly related to the appearance of fine decorated high quality-jugs. In this respect it is also necessary to remember that the motif of wild goats derives from

¹⁰⁴⁵ Lefkandi III, pl. 134, 145. Other examples can be cited as well. See i.e. one bronze bowl from New York Metropolitan Museum: Lefkandi III, pl. 158. Also Mattäus 1999-2000, 49 fig. 10; 51 fig. 13.

¹⁰⁴⁶ The term Near Eastern banquet is certainly a problematical one since we have to assume that a broad variety of different customs existed. Moorey 1980, 197 e.g. suggested that in Mesopotamia small handled buckets served as dispensers for wine instead of jugs. In the royal burial at Gordion on the other hand, jugs were found in frequent numbers. See Young 1958, 150.

North Syrian and Phoenician art.¹⁰⁴⁷ On the other hand, the discussion of the pottery assemblages from level X-V already highlighted the fact that along with the fine painted categories simpler painted examples also made their way to Al Mina, among them monochrome jugs or jars decorated with no more than simple bands. Taken together, they come to a much higher number than the Wild Goat style imports, which make 14.6 % of the jug imports (Total). Jugs with horizontal bands come to ca. 10 % while monochrome decorated jars occasionally painted with bands in added red or white amount to 16 % (pl. 151).¹⁰⁴⁸

The Greek jugs at Al Mina therefore reflect a wide spectrum of available Greek products probably targeted at different consumer demands of various socio-economic backgrounds. This diversification together with the outstanding high quality of the Wild Goat style jars, may have triggered a growing demand for jugs during the 7th century BC that cannot be found anywhere else in the Levant before the last quarter of the 7th century BC.¹⁰⁴⁹ Even after that time, simple jugs other than Wild Goat style examples are almost absent at other sites in the Levant. The possibility that the jugs and cups of lesser quality belong to the personal belongings of Ionian traders cannot be proven but should not be rejected too easily at this point.

Likewise remarkable, the finds at Al Mina feature a high number of jugs already during the 8th century BC. Among the imports of the 8th and first quarter of the 7th century BC, one can find two major categories: south- and north Ionian imports. The majority

¹⁰⁴⁷ Matthäus 1999-2000, 54. For a discussion of several possible sources including Iran see Muscarella 1972.

¹⁰⁴⁸ Among the indeterminate closed vessels fragments with horizontal bands come to about 58 %. The group of banded ware therefore was perhaps even larger. Indeterminate monochrome fragments come to 2 % (see below).

¹⁰⁴⁹ A vivid example for another port with large amounts of closed decorated vessels in Wild Goat style is Tell Sukas.

belongs to south Ionian jugs, which appear as early as level IX.¹⁰⁵⁰ About 16 % belong to south- and only 1.9 % to north Ionian bird oinochoai. This is interesting, as we did not observe such a discrepancy between south- and north Ionian drinking vessels. In other words south Ionian jugs were more appreciated by consumers at Al Mina, or their home production was considerably higher than the production of their north Ionian counterparts. Further, Al Mina is also the only site in the East that revealed fragments of SiA Ia date.¹⁰⁵¹ Recently, one fragment of SiA Ia period has been found in the sanctuary at Francavilla Maritima in Italy.¹⁰⁵² Wild Goat style vases of this early stage are extremely rare at Ionia as well.¹⁰⁵³ At this early period they were apparently exceptional objects, perhaps even subject to restricted access. Although it is hard to interpret by what means they arrived at Al Mina, it is difficult to see them as ordinary trading goods like the skyphoi e.g. Whether their appearance can be seen as an indication for close relations between Al Mina and the southern Ionian centre from which they probably derive cannot be answered conclusively, but such an interpretation is likely.

SiA Ia jugs are e.g. absent at Tarsus where some earlier bird oinochoai turned up together with other early 7th century BC East Greek imports. Apart from one example from Kameiros on Rhodes, this vase category cannot be found at any other place outside Ionia, which suggests that the jars were acquired directly from the production centre and not through an intermediary.¹⁰⁵⁴ The identification of the production place of SiA Ia products was thought to be on Samos and or at Miletos, where some pieces have been

¹⁰⁵⁰ As already mentioned the few cup fragments of south Ionian production of the 7th century BC found in the same level is problematic in this respect since we cannot exclude that the jugs were residual as well.

¹⁰⁵¹ See e.g. cat.no. **366. 367. 625. 783. 784. 785. 786.** Kerschner 2000, 490.

¹⁰⁵² Jacobsen and Handberg 2010, 295 B1.

¹⁰⁵³ Kerschner and Schlotzhauer 2005, 9. 16.

¹⁰⁵⁴ For a list of SiA Ia vessels see Kerschner and Schlotzhauer 2005, 10.

found.¹⁰⁵⁵ A recent find of a SiA Ib dinos made in Ephesos, however, highlights the possibility of other production centres in Ionia.¹⁰⁵⁶ It has been suggested that it was not before the middle of the 7th century BC or slightly later that the export of south Ionian Wild Goat style vases reached a certain amount and showed a wide distribution reaching from the Black Sea region to the western Aegean, the Levant and Naukratis in Egypt.¹⁰⁵⁷ On the other hand, already towards the end of the 7th and at the beginning of the 6th century BC, north Ionian products replaced south Ionian jars.¹⁰⁵⁸ North Ionian jugs are missing at Al Mina. Jug imports are decreasing at around 630 BC (SiA Ic), which perhaps explains the absence of north Ionian types.

In total 14.6 % of the jugs imported to Al Mina belong to Wild Goat style vases but the number must be significantly higher. Among the many unidentified pieces a considerable proportion presumably belongs to them as well. Among the monochrome jugs a few are decorated with band in added white and red, a group perhaps originating in the Aeolis. Apparently Al Mina attracted products of various regions of Asia Minor.

Finally, the small monochrome juglets make up 1.3 % of the total assemblage. They are absent at any other place in the Levant. Only at Tell Sukas two fragments of the later 7th century BC type turned up. The juglet is a shape that seems to appear for the first time in Greece and Asia Minor at the beginning of the 7th century BC.¹⁰⁵⁹ Its morphologic characteristics put the type close to the so-called dippers that can be found frequently in

¹⁰⁵⁵ Samos V, 58; Dupont 1983, 37; Cook and Dupont 1998, 36.

¹⁰⁵⁶ Kerschner et al. 2002, 201-203.

¹⁰⁵⁷ Kerschner et al. 2002, 202.

¹⁰⁵⁸ Kerschner 2000, 487.

¹⁰⁵⁹ See comments in Agora VIII, 37 no. 63-64. Protogeometric examples of similar types are e.g. known from Lefkandi but are missing in succeeding periods Lefkandi III, pl. 59. 1. 16.

the Near East. Most likely they were used to scoop wine out of the mixing bowls.¹⁰⁶⁰ A banquet scene depicted on the wall of the Tomba della Cacci e Pesce at Tarquinia shows the use of such a juglet to scoop wine out of a krater.¹⁰⁶¹

Kalaitzoglou suggested that the homogeneity of comparable juglets from the Athena sanctuary at Assesos indicates the special role of these vessels during cultic activities. They were used to determine a specific amount of wine.¹⁰⁶² Such a use for cultic purposes can be rejected for the examples from Al Mina. Having said this, the juglets are small and seem to have a standard volume suitable for one cup-fill. It would be interesting to see how their volume relates to the volume of the cups with everted rim. Dippers are found quite frequently at Levantine sites suggesting that they were a common vessel perhaps used as a cheap alternative to bronze ladles.¹⁰⁶³ One might even speculate whether the Near Eastern counterparts inspired the East Greek examples.

The decoration of the juglets is similar to the one-handled cups and to the cups with everted rim. Perhaps this similarity implies that they were sold as drinking sets destined for a specific purpose. The almost equal numbers of one-handled cups and juglets points in the same direction. Further, the lipless one-handled cups and juglets of East Greek provenance appear only at Al Mina in such numbers during a specific period (ca. 675-625 BC). After 625 BC the imports to the region are confined to one piece at Al Mina and the two fragments mentioned from Sukas.

¹⁰⁶⁰ See e.g. Tyre-Al Bass, 324.

¹⁰⁶¹ Lesky 2000, 432 fig. 314; Weber-Lehmann 1985, 34 pl. 12. 2-3. The small jug or olpe depicted in the Tomba della Caccia e Pesca is certainly a bronze variant.

¹⁰⁶² Kalaitzoglou 2008, 180-182.

¹⁰⁶³ See e.g. Bikai 1978, 41-43.

Corinthian jugs can also be found at Al Mina and they are with 5.6 % a relatively large group. Like in the case of the other jugs, it remains open how many vessels are really presented by the wall fragments since no rim fragments are preserved. The vast majority of Corinthian jugs belong to the last third of the 7th century BC.

Chian jugs constitute the smallest group (1.1 %). However, given the fact that the application of white slip was also in use on Chios, it is possible that a considerable group of the supposedly south Ionian jugs come from Chios instead of south Ionia. Bird oinochoai with a trefoil rim, a Chian peculiarity, could not be identified among the assemblage.

10. 11 Amphora, Hydria, Pithos

Amphorae are hard to distinguish from hydriai if there are no clear indications given by the decoration or the handle attachments. Fine tableware amphorae have as yet not been identified with certainty. Together the group amounts to 1.7 % (Total). The MNI is about 1 %. The low number might best be explained by the difficulty of identifying undecorated wall fragments. The recorded fragments are all decorated, which also suggests that we can assume that no undecorated Greek amphora piece was thrown away including the sos-amphorae. With this in mind the testimony of trading amphorae provides some information about the nature and quantity of the main cargo involved in long distance trade between the Aegean and Al Mina. Despite their relatively large number within the amphora assemblage (58 % Total), within the whole assemblage their number is even lower than the aryballoi e.g.

Next to the sos-amphorae and the wave line containers, Chian imports are the most frequent. They come to about 14 % among the amphora/hydria and to 6 % about the amphora fragments (pl. 152). Chian wine was famous in antiquity and prices from 5th century Athens indicate that Chian wine was three times more expensive than the Attic local wine.¹⁰⁶⁴ Chian amphorae are easily to distinguished by their white slip and their paint, which is perhaps also the reason why they have been kept in larger numbers. The record of the amphorae has therefore to be treated carefully since we have to assume that the bulk of the undecorated fragments have been discarded. On the other hand, rim fragments of Greek amphorae are quite distinct from Near Eastern ones and would have stood out clearly from the rest of the finds. That no undecorated rim was recovered is surprising if we believe that the bulk of long distance trade was in staple or agricultural products.¹⁰⁶⁵

Among the imports one can find one rim fragment with a decoration and morphological features, which are similar to the so- called grave amphorae from Eretria.¹⁰⁶⁶ Grave amphorae come primarily from tombs, hence their name.¹⁰⁶⁷ A few fragments are known from the settlement at Lefkandi.¹⁰⁶⁸ Another piece has a similar rectangular rim shape but the decoration on the outside of the rim may also point to a sos-amphora or another neck-handled amphora.¹⁰⁶⁹

¹⁰⁶⁴ Amyx 1958, 176.

¹⁰⁶⁵ Vickers and Gill 1994, 90-91.

¹⁰⁶⁶ Boardman 1952, pl. 4. B2. B6.

¹⁰⁶⁷ Boardman 1952; Eretria XX, 102 no. 686 with further reference.

¹⁰⁶⁸ Lefkandi I, 71.

¹⁰⁶⁹ Personal communication with S. Verdan.

One amphora rim from Chalcis demonstrates that rectangular rims are not uncommon among early sos-amphorae.¹⁰⁷⁰ Unfortunately, the fragment is not preserved well enough to determine its diameter. Grave amphorae typically have larger diameters and are not useful to transport any goods in them. Thus, we cannot exclude the possibility that both rims belong to neck-amphora types. Their fabric is close to Euboean products and unrelated to the question of the type we have two Euboean amphorae at Al Mina.

One of the biggest groups is the amphora/hydria type with wave line decoration (18.1 %).¹⁰⁷¹ Their distribution is confined to Cilicia and northern Syria.¹⁰⁷² Its absence at other Levantine sites correlates to the absence of East Greek pottery during the 7th century BC and points to similar distribution networks for wave line pottery and East Greek fine tableware. One fragment perhaps belongs to a regional workshop, probably originating at Kinet Höyük where the local fabrication of wavy line ware in the manner of the East Greek originals has been postulated.¹⁰⁷³ Another possible production centre could be Tarsus where similar ware has been found made in a fabric quite distinct from the East Greek products and where kilns have been detected.¹⁰⁷⁴ The majority of the finds from Al Mina, however, probably come from a centre in Asia Minor as already discussed. One piece is exceptionally well preserved and certainly belongs to a hydria.¹⁰⁷⁵ Apparently, even hydriai were sold to Al Mina. In the Near Eastern pottery repertoire, a similar shape with two horizontal and one vertical handle, is not known.¹⁰⁷⁶

¹⁰⁷⁰ Andreiomenou 1996, 120. 16 fig. 4. 92. This is the closest non-grave amphora example in stylistic and morphologic terms but the comparison also highlights the differences.

¹⁰⁷¹ Not included in these figures are three pieces assigned to hydriai.

¹⁰⁷² Lehmann 1996, 479- 480 (form G25).

¹⁰⁷³ See e.g. Hodos 2000, 148 with reference to Songu 1997 (unpublished M.A. thesis which I have not seen).

¹⁰⁷⁴ For possible local wave line pottery see Tarsus III, 324. For the kilns see Tarsus III, 14-17.

¹⁰⁷⁵ The piece is on display in the Ashmolean museum and the author was not able to get access to it. The fragment is published in Lehmann 1996, pl. 9. G25a/2.

¹⁰⁷⁶ My information in this respect derives from Lehmann 1996 where a similar shape is not listed among the large corpus of local north Syrian pottery.

It is hard to define the relationship between amphorae and hydriai fragments but it seems that hydriai were also not sold in large numbers. That such large vessels were shipped just for the sake of the container is not impossible but one may also speculate whether hydriai were occasionally used as transport containers because of the lack of amphorae.

Amphorae are not absent at Al Mina but their number is not high. Judging from the present body of evidence, it seems that the majority come from East Greek sources. Regional imitations, perhaps from nearby Kinet Höyük or another Cilician source (Tarsus?) were also imported, but they were even of less importance than the Greek imports. Attic and Euboean containers were recovered only in few numbers despite their decoration, which made them clearly distinguishable as Greek imports suggesting that they were not discarded by the excavator. The Attic sos- amphorae from Al Mina cover the 8th as well as the 7th century BC.

The relative absence of Attic fine ware is interesting in this respect and highlights the selective character of the Greek imports at Al Mina. A similar case can be made about the difference in Chian storage jars and drinking vessels. The latter are represented by few pieces only. If fine tableware is a simple expression of trade in other commodities, Attic and Chian fine ware should be considerably higher. For the 8th century BC the Attic imports are the only attested examples known so far. Like the fine ware, East Greek imports in amphorae started only during the 7th century BC. If agricultural products like wine or oil were exported in large amounts from Greece or Asia Minor to

Al Mina during the 8th and 7th century BC, then this must have taken place in containers that did not leave any trace in the archaeological record at the port.¹⁰⁷⁷

This stands in contrast to the generally accepted view that trade amphorae formed the bulk of ancient cargoes in antiquity.¹⁰⁷⁸ This does not mean that no amphorae were transported to Al Mina at all or that no containers were shipped from Al Mina to the Aegean or the Levant. We also have to bear in mind that many goods shipped to Al Mina were either further transported along the Orontes to the large cities in the Amuq or distributed along the Levantine coast, a scenario which is not necessarily true for the tableware. The latter was partly used at Al Mina itself. Since generally only a few undecorated pieces were recorded at Al Mina and the situation is not much better at the inland sites, one can only speculate about the nature and volume of trade in agricultural products. However, considering the present evidence, it seems that luxury goods, not subsistence goods formed the basic trade between Al Mina and other regions.¹⁰⁷⁹

The Corinthian pithos and the amphora with their characteristic handles have already been mentioned. Another example of this type is reported from Tell Sukas.¹⁰⁸⁰ The amphora from Al Mina comes from a level V floor discovered in squ. E7. The amphora was sunk into the clay floor together with two other amphorae, and all were surrounded by rubble.¹⁰⁸¹ Their obviously good preservation together with Woolley's comments

¹⁰⁷⁷ Foxhall argues for a trade in commodities such as metal ores or textiles, which formed the basis of maritime trade and which is poorly preserved in the archaeological record. Foxhall 1997. For an overview of other containers used to transport agricultural products see Baika and Kamarinou 2005/06, 6.

¹⁰⁷⁸ Parker 1992, 192. 231. 332.

¹⁰⁷⁹ Tandy 1997, 65.

¹⁰⁸⁰ Lund 1986, 70 no. 80.

¹⁰⁸¹ Woolley 1938, 152. For the location see the map level 5 & 6.

suggests that the amphorae were used as storage vessels in the house and was not for sale in a storehouse or magazine.¹⁰⁸²

This rare example of a documented in situ find demonstrates that Greek amphorae imported at Al Mina were apparently used at the port itself and not just stored to channel it to the hinterland or other cities. Having said this, we should not exclude the possibility that the Corinthian amphora was originally imported to Al Mina together with the aryballoi, which were only filled with the costly oil after their arrival at the port before they were sold in the region. After being emptied the amphora was used in the house as a storage jar. Both, the pithos and the amphora prove that undecorated amphorae of foreign production were noticed and recorded. The amphora further illustrates trade in agricultural products between Corinth and the Levant although the question of scale has to remain open.

10. 12 Aryballos, Alabastra, Askos, Indeterminate Perfume Vessels

Aryballoi and other perfume vessels make about 1 % of the total assemblage. Despite their low number they confirm that export of these fine oil containers to the East. Three main imports can be distinguished: Euboean, East Greek and Corinthian. The two former are represented by one fragment each. The majority is of Corinthian origin, which amount to 57 % (pl. 153. a). As already mentioned, their import begins at the end of the 8th century BC and continues until the end of the 7th century BC. The Corinthian kotylai have a similar record. Both types prove that contact between Al Mina and Greece did not cease after the end of the 8th century BC.

¹⁰⁸² As suggested by Woolley 1938, 154. The secondary use of vessels is a common phenomenon in pre-modern households. See the discussion in Schiffer 1996, 25-46.

Al Mina is not the only place where Corinthian aryballoi have been found. Tarsus, Mersin, Kinet Höyük, Tell Sukas, Zincirli, Tell Keisan, Sarepta, Mesad Hashavyahu and Ashkelon revealed Corinthian aryballoi.¹⁰⁸³ Although not yet published the sites in the Amuq plain also revealed Corinthian aryballoi.¹⁰⁸⁴ The majority of the aryballoi recovered in the East date to the last quarter of the 7th century BC and later. Apart from Al Mina, one earlier specimen is known from Tell Sukas.¹⁰⁸⁵ Euboean aryballoi are merely known from Al Mina while one possible East Greek aryballos has been found at Tel Miqne Ekron.¹⁰⁸⁶

The scarcity of Corinthian aryballoi at sites along the Levantine coast is not surprising given the fact that Greek imports are generally rare in the East during the 7th century BC. At Al Mina their low number is more striking considering that Corinthian aryballoi constituted one of Corinth's most popular export commodities to the western colonies. The small but homogeneous group of the Corinthian aryballoi from Al Mina suggest that they were all exported to the port roughly at the same time but some fragments obviously reached the port slightly earlier.¹⁰⁸⁷ The few fragments found at Al Mina might be an indication for the difficulties Greeks were facing on the Near eastern market, where there was no shortage of fine scented oil. Alternatively, their low number together with their limited distribution, might be also a hint that they did not arrive at Al Mina as a commodity but rather as personal chattel of Greek merchants.

¹⁰⁸³ For the references see the catalogue concerned with each site in chapter IV.

¹⁰⁸⁴ Personal communication with M. Pucci.

¹⁰⁸⁵ Appendix 3, catalogue Sukas no. 1. 8.

¹⁰⁸⁶ Appendix 3, catalogue Ekron no. 6.

¹⁰⁸⁷ See also the almost complete example published by Robertson 1940, pl. 4. a. Another unmarked fragment is listed by Robertson 1940, pl. 4. b, which belongs to the MPC-LPC period and is of a complete different type.

Other perfume vessels like alabastra are restricted to few pieces.¹⁰⁸⁸ Alabastra are even more rare than aryballoi and are usually confined to the end of the 7th century BC as also be shown by the finds from Ashkelon.¹⁰⁸⁹ The same can be said about askoi. Nevertheless, their presence further highlights the diverse range of Greek imports.

10. 13 Pyxis, Lekanis

The pyxis is a rare shape (0.1 % Total) and the few pieces mainly come from Corinth (pl. 153. b). One rim fragment probably derives from Euboea. The few imports to the East together with the limited distribution raise again the question whether these containers are better understood in the context of personal belongings of travelling people rather than trading goods although we cannot exclude that Greeks also tried to promote other shapes on the international market. Judging by the retrieved fragments we may conclude that such possible attempts were not successful. One lekani fragment with psc-decoration has been identified by Kearsley but this piece could also be a psc-plate.¹⁰⁹⁰

10. 14. Indeterminate Vessels

This class comprises together 11.2 % of the full assemblage from Al Mina and is considerably large. Among them, closed jars dominate with 8.1 % (pl. 153. c). Naturally, rim fragments are restricted to few pieces. Within the closed indeterminate vessels, jars decorated with bands come to 58 %. In the majority of the cases the

¹⁰⁸⁸ In particular the two rim fragments can either be attributed to aryballoi or to alabastra.

¹⁰⁸⁹ Waldbaum 2011, 147-149.

¹⁰⁹⁰ Kearsley 1989, pl. 9. c.

preservation and wall thickness does not allow to distinguish between jug or amphora/hydria, which is the main reason why these pieces are listed among this group.

One Fikellura fragment is listed among this group. It is unmarked and could be either from an amphora or a jug. It is not the only Fikellura vessel known from Al Mina. Robertson published a second piece in 1946, which dates to the second half of the 6th century BC.¹⁰⁹¹ The piece is marked with level II-IV. The unmarked piece perhaps also belongs to level IV or later. Both pieces demonstrate that the port resumed its activities already during the 6th century BC as suggested by Robertson although one may ask whether two pieces are enough to support his argument.¹⁰⁹²

VI. Conclusions

Various questions concerning the site of Al Mina have been debated by past scholarship and many of them are still a matter of controversy. Given the bad preservation of the archaeological record and due to the poor documentation of the site, it seems that some of the most heatedly debated issues will never be solved. The contribution to the “Al Mina debate” by the present study is confined to those aspects that can be answered by the study of the Greek imports. These include the re-evaluation of the relative and absolute chronology of the site, which is of imminent importance for the regional chronologies in Cilicia, northern Syria and Phoenicia. The present contribution further

¹⁰⁹¹ Robertson 1946, 125.

¹⁰⁹² Robertson 1946, 125. Previously Robertson stated that the earliest Attic imports started at 520 BC and the gap at the port lasted for about 80 years: Robertson 1940, 21.

provides a detailed record of the Greek imports, which enable us to understand shifts in the regional economy and changing trading patterns. The last point is related to the range of Al Mina's external contacts and changes in the commodities traded between Al Mina and the Aegean. Further, the record of Greek imports can be followed from the beginning of the 8th until the end of the 7th century BC and therefore provides a unique opportunity to study the consumption pattern of a local trading port in North Syria.

In order to answer these questions, the Greek imports have been statistically analysed, an undertaking that has not been employed so far by previous studies. Former works rested on small samples and did not provide any statistically relevant results. Additionally, a contextual analysis of the specific sites located in the Levant supplements the examination of the Greek imports at Al Mina in order to highlight similarities and differences between the port and other sites in the Near East. Since Al Mina, apart from a few examples, did not provide any contextual information, such an approach seemed to be inevitable.

Particular questions that have been debated extensively by past scholarship, such as the interpretation of the site as "port of trade" by Luke e.g., have not been re-examined since the study of the pottery does not allow any different conclusions nor does it provide any evidence, which would result in a contrary explanation. The same can be said about the topic of possible Greek traders residing at Al Mina or not. I have confined myself to raise this issue only when it was necessary.

Finally, previous contributions to the discussion completely ignored the record of the 7th century BC, which comprises twice as many Greek imports from various areas of the Aegean and Asia Minor as the period belonging to the 8th century BC. These Greek

finds are presented here in order to shed some light on the economical development of the port and the region as a whole during the 7th century BC.

1. Chronology

The discussion of the different assemblages demonstrated that the information for the chronology have to be digested with some caution due to the partly mixed character of the assemblages. Nevertheless, considering the composition of the different assemblages and taken also into consideration the statistical results, a new chronologic system could be established (pl. 167). The earliest finds suggest that Greek imports reached the port already by the end of the 9th or early 8th century BC. This stands in contrast to Kearsley's result, who suggested that the Greek imports did not reach the site before 750 BC.¹⁰⁹³ Her main arguments are the date of the psc-skyphos, which belong to the LG period, and the fact that the pottery from level X and IX does not differ from level VIII.¹⁰⁹⁴

The assemblages however, show slight variations that cannot be ignored. Although not many in numbers, Al Mina revealed some Greek imports, which according to the conventional chronology, date to before 750 BC with two fragments even to around 825/800 BC. Their low number can be explained with the small exposed area of levels X and IX. Their final deposition does not necessarily correspond with the date of their import or with the time when they were originally deposited. The fact that they were discovered in LG layers should not be surprising at a settlement where constant rebuilding activities took place. As already stated, the standard longevity of small

¹⁰⁹³ Kearsley 1995a, 67-68.

¹⁰⁹⁴ Kearsley 1995a, 68.

drinking cups speaks against a long period between production and deposition. Either Cycladic MG II cups were produced much longer than thought hitherto, at least until 780-760 BC, or they must have reached the site before 750 BC.

The local and Phoenician pottery of the site provides additional information. Since Taylor's study of the Phoenician and Syrian pottery from Al Mina, significant progress has been made.¹⁰⁹⁵ For example, the recent study of the local and Phoenician pottery by Lehmann seems to support a late 9th- or early 8th century BC date for the site.¹⁰⁹⁶ Although few in numbers, the earliest pieces from level IX still belong to the 9th century BC.¹⁰⁹⁷ One may conclude therefore that level X was founded before or at around 800 BC and continued until 750 BC.

Level IX contains MG II late-LG I fragments, which would allow to date the beginning of level IX at around 750 BC. Judging from the finds, the beginning of level IX could in principle be also later, even close to the beginning of LG II. That means we have to think about a longer period for level X and shorter periods for level IX and VIII. The absence of Euboean bichrome skyphoi and soldier bird kotylai are the main argument to conclude that level IX must have ended before 738/720 BC.¹⁰⁹⁸

The record of level VIII questions previous assumptions about the history of the site in connection with the destruction of Hama in 720 BC by Sargon II. Lehmann concluded that level VIII must have come to an end by 720 BC since the local pottery is similar to

¹⁰⁹⁵ Lehmann 2005, 62. Kearsley 1995a, 68-69 rightly pointed to the problems with Taylor's study.

¹⁰⁹⁶ Lehmann 2005, 81.

¹⁰⁹⁷ Lehmann 2005, 63. Like in the case of the Greek imports local pottery and Phoenician imports of late 9th to early 8th century BC were only few in numbers, which can be related to the limited exposure of level X and IX.

¹⁰⁹⁸ Clearly, such an argument *ex silentio* is always problematical, but considering the available evidence this seems to be the only possibility to separate level IX from VIII.

that of the destruction levels of Tell Rifa and at Hama Str. E.¹⁰⁹⁹ This suggests that all finds from level VIII must antedate 720 BC. As a consequence the Corinthian soldier bird kotyle, the Corinthian kotyle with solid rays, the Euboean kotyle imitations and the Euboean bichrome skyphos all belong to the period before 720 BC, which agrees with Neef's conclusion that the soldier bird kotyle belongs to before 730 BC.¹¹⁰⁰

The LG II fragments from level VIII, however, are too many to explain their appearance as residual, which speaks against Lehmann's assumptions. The appearance of early Orientalising pieces is much harder to interpret. One can always see them as belonging to the next level and only accidentally mixed up with material from level VIII. But if there was really a break, the chance that material was mixed up is much lower than between two succeeding periods. The 7th century BC finds are only few pieces but there remains the fact that level VIII also contains material that belongs to the last quarter of the 8th or early 7th century BC according to the traditional chronology, so that we can observe a continuous flow of imports from the last quarter of the 8th until the first quarter of the 7th century BC. The only possible solution to adopt Lehmann's system would be to raise the end of the LG period by about a quarter of a century.

Having said this, it remains open how and why the destruction of inland Hama by the Assyrians should have affected the port on the Orontes. Al Mina was already part of an Assyrian province by that time. Rather, one has to think about a possible continuation of local pottery production that resembles pre-Assyrian destruction assemblages from Hama until the first quarter of the 7th century BC. In fact Lehmann's own analysis seems to confirm limited continuation between level VIII and VII, a situation, which would agree with the results from the Greek pottery without any need to raise the

¹⁰⁹⁹ Lehmann 2005, 82.

¹¹⁰⁰ See discussion above.

existing absolute chronology.¹¹⁰¹ If we want to connect a possible interruption at the site with a historical incident, then the Assyrian occupation of Uniq in 738 BC certainly provides the better explanation. J. Osborne recently suggested that the building period 2 at Tayinat ended with the destruction in 738 BC.¹¹⁰² The material from building period 2 at Tayinat is similar to material from level VIII.¹¹⁰³ This however would not only imply to raise the end of the LG period but also to raise the end of LG I slightly to about 740 BC.

It has to be noted in this respect that Al Mina played an important role for Coldstream's absolute chronology of Greek pottery. He mainly used Taylor's date to correlate the Greek finds with the local chronology. Taylor dated the end of level VIII to 720 BC.¹¹⁰⁴ This date is important for the beginning of EPC since Coldstream assumed that the soldier bird kotyle fragment from level VIII is an intermediate between LG and EPC.¹¹⁰⁵ According to him the evidence from the West seemed to fit with the record from Al Mina.¹¹⁰⁶

Unlike the Thucydidean information regarding the foundation dates of the early colonies in Italy and Sicily, the literary sources of the Near East provide a relatively secure absolute chronological framework. Relating level VIII with a possible destruction would mean that EPC was already introduced by 738 BC. While raising the beginning of LG II by about five years is less of a problem, raising the beginning of EPC to ca. 740 BC would result in a short LG II phase at Corinth and may also cause

¹¹⁰¹ Lehmann 2005, 81 fig. 15. About 38 % of the pottery from level VIII continues into level VII suggesting limited continuity between those two strata.

¹¹⁰² Osborne 2011, 140. 142.

¹¹⁰³ Osborne 2011, 139.

¹¹⁰⁴ Taylor 1959, 91.

¹¹⁰⁵ Coldstream GGP, 316.

¹¹⁰⁶ Coldstream GGP, 324. 327.

raising the beginning of LG in general.¹¹⁰⁷ To move up the absolute date of the Greek sequence would also explain the correlation of 9th century North Syrian/Phoenician material and Greek LG imports in similar levels at Al Mina. The only problem with this interpretation is that by raising the beginning of LG to 800 BC we also have to acknowledge that according to the record from Al Mina, LG pottery must have circulated for about 75 to 100 years, otherwise one can hardly explain the occurrence of LG material side by side with local and Phoenician pottery in level X-VII.¹¹⁰⁸

Given the few more or less secured contexts from the East that would allow us to define the beginning of LG with more precision, such a scenario cannot be excluded but it remains doubtful whether the evidence from Al Mina can be considered as a secure anchor to change the general established absolute chronology. Too many question marks remain but considering the results from radiocarbon data from the West, a general raise of the absolute dates needs to be considered seriously.¹¹⁰⁹

All the possible implications mentioned above have to take into consideration the quality of the excavation and whether we can be absolutely sure that the finds associated with level VIII really come from this level. As the discussion of the stratigraphy has shown, this is not the case. Signs of destruction of the level VIII settlement are few and it has been suggested that level VIII consisted probably of two phases: a first phase that contained destroyed remains and an ash layer, and a succeeding phase, which cannot be

¹¹⁰⁷ Trachsel 2008, 68 came to a very similar conclusion by re-evaluating the evidence from the West. The study has many methodological mistakes and unfortunately here is not the place to comment on them. The results from Nijboer and van der Pflucht 2008, 113-115 however, also suggest raising the end of the LG period.

¹¹⁰⁸ By adapting the chronology established by Lehmann, which puts level X-VIII from about 825/50 to 720 BC the life cycle of LG pottery is about 100 years. Considering that some LG fragments even turned up in level VII, the lifetime increases to even more than 100 years! For the date of level X-VIII see Lehmann 2005, 82.

¹¹⁰⁹ Nijboer and van der Pflucht 2008. Unfortunately, this is not the place to discuss this further. Data from the East however, would not contradict an earlier end of the MG and LG period.

related with any violent activities or destruction. This does not necessarily speak against an association of level VIII with the Assyrian campaign in 738 BC. There are only no arguments, which would support such a theory.

Level VII to V cover the 7th century BC according to the conventional chronology. Lehmann dated level VII in between 720 and 700/680 BC but this ignores that the majority of Greek finds from level VII and assemblage VI-VII belong to the 7th century BC.¹¹¹⁰ Although the evidence from the Greek imports cannot exclude that level VII started already in the 8th century BC, it certainly rejects an end of level VII at around 700 BC.

Given the large number of East Greek imports dating to the period after 670 BC, an end after 670 BC would better fit the record from the Greek imports. The composition of level VI, which covers the period 650/30 to 620/10 BC would also favour a later date for level VII.

The end of level V can be best explained with the collapse of the Assyrian empire. The military operations in the region – Nebuchadnezzar defeated an Egyptian army at Carchemish in 605 BC and later the Egyptians suffered another defeat at Hama – lead to a destabilization of the region, which must have also affected Al Mina.¹¹¹¹ Moreover, Syria saw several Babylonian military campaigns after 605 BC.¹¹¹² Since there are no indications that level V was violently destroyed, life at the port did not come to a sudden end by a violent destruction. Rather we have to assume that the constant military campaigns slowly affected the economical situation of North Syria and the trading

¹¹¹⁰ Lehmann 2005, 83.

¹¹¹¹ Kuhrt 1995, 590. 643.

¹¹¹² Kuhrt 1995, 590-591.

business at Al Mina. This agrees well with the archaeological record. Greek imports seem to decline slowly and come to an end at around 580 BC by the latest (pl. 162).¹¹¹³

The record of the Greek- as well as the North Syrian and Phoenician imports do not indicate significant interruptions in the port's life from the end of the 9th to the end of the 7th century BC. If there were gaps in the occupation, they could not have been for a long time and they are not visible in the archaeological material. The importance of the port for the kingdom of Unqi and later for the Assyrian empire, speaks against an abandonment of the site for a longer period. Neither the destruction of Hama in 720 BC nor the Assyrian campaigns against Tarsus in 696 BC had an affect on the trade in the region.

2. The Pottery and its Interpretation

2. 1 Commodity or Gift?

As outlined in the introduction, the study was aimed to identify the role of Greek pottery within the long-distance trading networks. In particular the general assumption that the exchange of pottery before the 7th century BC differs from the previous periods should be re-evaluated by a contextual analysis of Greek pottery discovered in the Levant and through statistical examination of the pottery record from Al Mina. It is important to bear in mind not only the fluidity of various economical systems operating side by side but we also have to consider the consequences for the interpretation of the archaeological record: since gift-exchange mechanisms and market exchange may have operated side by side, we cannot expect to find one interpretation, which is valid in

¹¹¹³ The date of level VI and V more or less confirm Lehmann's chronology. Lehmann 2005, 83.

every region of the Levant. Secondly, the social status of objects, which do not generate their prestigious status through their material value, is more fluid from region to region and dependent on factors such as the general availability and their specific role within society.

The two basic arguments generally used to distinguish between gift-exchange and commodity trade in the archaeological record are the quantity of circulating objects and their distribution.¹¹¹⁴ Looking at the quantity we can observe that the numbers of retrieved pieces from Al Mina from the period before 700 BC is much higher than after that time.¹¹¹⁵

As outlined in the statistical examination, the retrieved fragments do not correspond with the actual amount of objects produced or imported at a site. Different breakage rates affect the number of retrieved fragments. Large closed vessels, in particular jugs and also amphorae, are more affected by variations due to breakage rates than smaller drinking vessels. Since the number of closed vessels is much higher during the 7th century BC, we have to assume that the difference between retrieved fragments and actual vessel frequency must be higher among the later periods. The conclusion is that even considering post-depositional factors, the 8th century BC saw a larger amount of Greek imports arriving at Al Mina than the following century. A similar picture can be obtained from the record of other sites, where no indication in a substantial increase in the volume of Greek pottery trade can be observed, which would allow us to identify differences in its nature.

¹¹¹⁴ See the discussion in chapter II 2. 5. This assumption is not only based on the record from the East. Greek pottery enjoys an increasing popularity in the whole Mediterranean after 700 BC.

¹¹¹⁵ The actual number of 8th century imports is lower than imports from the 7th century BC but the Greek Geometric imports cover only half a century while the 7th century imports almost 100 years. This holds only true if one accepts the traditional chronology for Greek pottery (see discussion above).

It is not before the last quarter of the 7th century BC that Greek imports begin to rise in the Levant. Either quantity is a bad indicator for the nature of trade or we have to assume that the frequency of contacts and the nature of the trade (low bulk high value or trade in agricultural products) during the 8th century BC was not much different from the ensuing period.

The social value of Greek pottery, and therefore its capacity to act as a gift, is bound to its exotic appearance and to its limited availability. Both aspects are undermined by an increase of objects circulating within society, the main reason for imposing sumptuary laws on certain goods by the aristocracy. The large amount of Greek imports at Al Mina speaks against certain restrictions imposed on pottery trade and at the same time the volume of Greek imports is too high to call Greek pots an exotic object available only to a few people. We have to assume therefore that Greek pottery had already acquired the status of a commodity at Al Mina in the second half of the 8th century BC.

The different composition of the record between the 8th- and the 7th century BC can also be explained by a change in the character of the trade but this is related to a change in the nature of the commodity trade and not by a transformation from gift- to commodity exchange. The second argument – distribution of Greek imports – relates to the range of consumers and should be discussed in the next chapter. The question remains whether it is possible to identify certain pieces as gifts despite the general high number of Greek objects at Al Mina. As criterion for the identification of gifts, it is necessary to look at specific vessel categories, which are only present in small quantities at Al Mina, have only a limited distribution in the Levant and can thus be connected primarily with social

contexts of the upper class.¹¹¹⁶ Considering the second half of the 8th century BC, these criteria do not apply to any of the shapes recovered at Al Mina.

Greek kraters imported during the MG period can be associated with elite contexts and they are limited to few numbers.¹¹¹⁷ They occurred at Tell Tayinat, Hama, Samaria, Tell Abu Hawam, Tyre and Tell Rehov.¹¹¹⁸ The fragments from Tell Rehov occurred in non-elite contexts as far as one can judge by the preserved architectural remains but the pieces from the site are few and the appearance of a pyxis, a rare shape at this time – otherwise only attested at Tyre – suggests that the Greek vessels reached the site perhaps as gifts and not as a commodities. Whether the receiver of these gifts belonged to the elite of Rehov is hard to tell judging from the available evidence.

The limited distribution of kraters, their association with elite contexts – at Tayinat, Hama and Samaria they can be connected with the royal court – their almost absence in non-elite contexts as well as few circulating objects, are all factors, which taken together, allow us to interpret kraters as prestigious objects that were used in gift exchange.¹¹¹⁹

The lebes from Tell Hadar is more difficult to interpret. Coldstream pointed to the fact that the dinos is a rare shape on Euboea and that the piece may be a ceramic imitation of

¹¹¹⁶ The latter criterion is only valid if one accepts that the defining criteria between barter and gift-exchange is the social sphere in which these transactions are performed. This however is not necessarily the case as has been outlined somewhere else. Gift-exchange can also take place on a lower social scale and it is the social implications of the gift-exchange, which separates it from barter.

¹¹¹⁷ The only exception is Tyre where kraters appear perhaps already in the 10th century BC in non-elite contexts.

¹¹¹⁸ The fragment from Tel Abu Hawam could also be of LG date. Krater fragments are also reported from Chatal Höyük and Tell Judeidah although their date is not known. Since LG krater fragments are known from Tell Tayinat, the krater pieces from the other Amuq sites could belong either to the SPG/MG- or the LG period.

¹¹¹⁹ Similar conclusions can be drawn from contexts on Cyprus where kraters are primarily associated with the top of the elite. See Crielaard 1996, 337-338.

a bronze cauldron and can therefore be associated with the elite.¹¹²⁰ The find context, a storage room, close to the gate – where also the market place in the Near East can be found – which contained also other goods such as amphorae, suggests that the piece reached Tell Hadar as a commodity. The exceptionality of the pieces cannot be ignored, however, and Kopcke even suggested that the shape was imitated to satisfy local eastern preferences.¹¹²¹ Luke concluded that this could be understood as a sign for “market oriented production”.¹¹²²

A similar piece comes perhaps from Tyre and the example from Tell Hadar was probably imported through this Phoenician harbour.¹¹²³ If Kopcke and Luke are right with their interpretation of a “market oriented production”, the lebes is better understood as a commodity. Gifts, like the large pedestalled Greek kraters, accumulate a certain value because they look foreign and exotic. Any effort to imitate local Near Eastern shapes can only be seen as a sign to target different consumer groups, which are usually not attracted by Greek shapes. The case of the lebetes from Hadar and Tyre can be compared with the psc-plates, which turned up at several sites in the Levant such as Tarsus, Kinet Höyük, Ras el Bassit, perhaps at Sarepta and Tyre. In none of these sites we were able to associate the Greek imports with contexts of the social elite.

Interestingly, in all of the contexts that could be associated with the royal court, psc-plates are missing. This indicates that signs for market oriented production can only be understood as a phenomenon which tries to widen the consumer range, a process that stands in stark contrast to keep the social prestige of these goods high by limiting their

¹¹²⁰ Coldstream 1998b, 357.

¹¹²¹ Kopcke 2002, 113-114.

¹¹²² Luke 2003, 55.

¹¹²³ Appendix 3, chapter Tyre no. 1. 3.

availability. A final example that highlights this process can be added: the Al Mina ware, which “imitates” Greek skyphoi, never appears in Cypriot contexts together with Greek original imports. Since access to Greek imports was confined to the elite as shown by Crielaard, the Al Mina ware has to be understood as a local substitute. It was produced for a non-elite milieu, for locals, who did not have access to Greek imports. The fact that it was exported to Al Mina in large numbers, where the amount of Greek imports was generally high, just underlines the its character of a relatively cheap commodity.

By the LG period kraters also appear in other context as the evidence from Mersin, Tarsus, Sukas, Ras el Bassit, Ras Ibn Hani and Al Mina shows. With this wide distribution in contexts of lower social significance, it is hard to interpret kraters of the LG period as high valuable gifts.¹¹²⁴ This however does not exclude that they could have served as gifts exchanged between members of lower social standing.

Other Greek imports arriving in low numbers during the 8th century BC are the tankard, the pyxis, the lekanis and perhaps one Euboean cut-away neck jug.¹¹²⁵ The problem is that these vessels could also be interpreted as personal possessions of travelling Greek merchants. Methodologically, it is impossible to distinguish between gifts and personal belongings if they appear only in low amounts and if their distribution is limited. Perhaps the fact that similar shapes are almost absent in native contexts in Italy e.g. and that they are never mentioned in written sources as *doron*, suggests that they never

¹¹²⁴ One can never exclude that objects changed hands several times. The above-mentioned assumptions are based on the fact that no redistribution mechanisms were at play at these sites.

¹¹²⁵ cat.no. **209**, from assemblage IX-VIII.

played any role in gift-exchange where preference is usually given to vessels that can be associated with the symposium.¹¹²⁶

Finally, since we could attest that the Greek pottery was exchanged at Al Mina as a commodity we have to ask whether we are able to determine when a possible transformation in exchange modalities occurred. The record from Al Mina however, is not helpful to answer this question so that we have to turn to other contexts in the Near East.

2. 2 Range of Consumers

One of the aims of this thesis is to define the range of people who bought Greek pottery during the periods of the 9th and 7th century BC. Furthermore, given the general notion that the function of Greek pottery within the trade before 700 BC and after that date changed, it is important to see whether we can observe also changes in the behaviour patterns.¹¹²⁷ While defining the range of consumers entails different aspects, I confine myself here to the socio-economic spectrum of the consumers.

Greek pottery appeared in elite contexts at Kinet Höyük, Tell Tayinat, Hama, Megiddo, Samaria, Zincirli, Yavneh-Yam and Tell Mique-Ekron. The latter three sites revealed only pottery from the late 7th century BC. At Kinet Höyük, Hama and Ekron, Greek pottery could also be identified in contexts of lower social status. At all three sites the contexts revealing Greek pottery suggest that Greek imports were circulating in elite

¹¹²⁶ Crielaard 1996, 215. See also

¹¹²⁷ This has been discussed in the part II of the thesis. After 700 BC Greek pottery is considered as a commodity while before scholars tend to associate it with gifts.

and non-elite contexts at the same time. The assumption from this distribution would be that access to Greek imports was not restricted. We may further conclude that the diacritical potential of Greek imports is limited due to their occurrence in contexts of lower social significance. As mentioned in the introduction, we cannot exclude however, that certain redistribution mechanisms were at play that regulated the flow of certain goods from elite to sub-elite households. Such a mechanism can probably be excluded for Kinet Höyük. Against it speaks the fact that the majority of the finds comes from non-elite contexts (domestic and industrial areas) and that the finds are distributed in different parts of the Tell.¹¹²⁸ Despite the use of Greek pottery in non-elite households, we can still find a limited amount of Greek pottery in contexts associated with the elite. The distribution among broad segments of the society at Kinet did not cause the elite to abandon Greek vessels.¹¹²⁹ This phenomenon raises the question of the potential of Greek pottery to act as a diacritical tool. Greek finds recovered from the open sanctuary at Hama and Cypriot drinking vessels at Megiddo found in cult-contexts were interpreted as objects used to mark special occasions from daily consumption. Perhaps the Greek imports at Kinet Höyük can be interpreted similarly.

Re-distribution from elite to sub-elite contexts cannot be excluded in the case of Hama since the majority comes from the royal quarter while only two Greek skyphoi derive from the cemetery. At Hama, the Greek imports, in particular the kraters, may have served in diacritical feasts but the cups found in the open sanctuary near building 2 were

¹¹²⁸ The wide distribution would be an argument against the assumption that the Greek pots could have been used in a elite context and made it only later into layers associated with non-elite buildings. It is also necessary to keep in mind that deposition context is not necessary the same as use context. All the conclusions drawn here are based on the assumption that the pieces were not moved far away from their original use-context.

¹¹²⁹ It is also necessary to mention that “elite” in this respect refers to an elite class that cannot be compared to the royal court at Hama or Samaria e.g. The building at Kinet Höyük might have served administrative purposes, perhaps for an Assyrian official.

rather used to mark a special ritual feast since we cannot exclude that other inhabitants of the city with access to the royal quarter took part in cultic activities in these areas.

The problem with the sites such as Yavneh-Yam and Ekron is that the absence of Greek imports in non-elite contexts could simply be a reflection of limited archaeological excavations. In the case of Tayinat, previous excavations have been focussing on the citadel, which housed the cultic and administrative centre. The lower town, which contained the Iron Age domestic areas, has not been explored at all. What can be said with certainty is that Greek pottery was used at these elite centres. It has to remain open whether the absence of Geometric finds at Zincirli is due to the lack of archaeological excavations or whether this reflects limited access to Greek imports during the previous periods or different fashions.

In the case of the other sites, Greek imports can be connected with non-elite contexts, which is unrelated to the chronological spread of the imports. Among these sites we find inland settlements like Tarsus, Sirkeli Höyük, Tel Kabri, Tell Hadar, Tell Qiri, Tell Rehov, Timnah and seaports like Mersin, Ras el Bassit, Ras Ibn Hani, Sukas, Tabbat al Hammam, Tell Keisan, the Phoenician cities and the fortresses at Tel Kabri and Mesad Hashavyahu. The location had only an effect on the amount of imports but apparently not on the range of consumers. While the few numbers of Greek pottery finds at inland sites pose always a problem for the interpretation – the few finds could have made their way into non-elite contexts through post-depositional factors – the large number in some of the port sites are a good indicator that pottery was in use on a relatively large scale. The intra-site distribution at Sukas e.g. has shown that pottery was not confined to a particular district of the city. We can therefore exclude that the objects were used by a specific segment of the society such as certain groups of foreign inhabitants. The few

preserved architectural remains at Sukas, but also at the other port sites, speak against a complex social stratification of their inhabitants although some indications of considerable wealthy inhabitants could be observed.¹¹³⁰ In this respect the harbours along the Levantine coast, with the exception of Ashkelon and the large Phoenician trading cities, resemble closely the record from Al Mina where the architectural remains do not indicate any buildings that would set themselves apart from the majority. In other words, the inhabitants of the majority of the ports belonged to the same social level judging by the architectural remains. This entails that the circulating Greek objects played only a limited part in strategies to establish social order within these harbour settlements.

At the same time the evidence suggests that Greek pottery was not a commodity marketed at a small elite segment of the Near Eastern society. Rather it seems that particular local residents of the middle and lower socio-economic levels were practising an international lifestyle that included a variety of low cost products. That Greek pottery was affordable also by the lower social classes can be seen by the evidence from Timnah where Greek pottery and even an amphora was discovered in a one-room house of relatively small size. Finally, not all inhabitants of the Near East had equal access to Greek imports. Inland sites were cut off from the supply chain either by restriction imposed by the ruling elite or because Greek pottery did not enjoy the same appreciation as in the harbour cities. Thus, the class that can be associated with the consumption of foreign materials of low material value are the merchants living at the sea and supposedly being in close contacts with foreigners from the whole of the Aegean. The location at the sea does not automatically include that access to foreign

¹¹³⁰ See discussion in chapter IV 4 and Appendix 3, chapter Sukas.

goods, including pottery, was guaranteed as shown by the absence of Greek imports along the Levantine coast during the 7th century BC.

The few numbers of Greek imports at Tayinat is surprising. Quantitative inter-site comparisons are always difficult but given the scale of excavations, the low amount cannot be explained by limited work conducted in the elite zones of the site. If the Greek imports at Al Mina have to be interpreted primarily as commodity channelled to the cities in the Amuq and beyond, it is unclear to which places the material has been traded.¹¹³¹ There still remains the record from Tell Judeidah and Chatal Höyük, two other large centres located in the Amuq plain. The Greek pottery from these two sites remains unpublished and the few remarks related to the imports by Saltz and Swift do not allow to comment any further.¹¹³² However, it is clear that the quantity of the imports cannot be much higher than the Greek imports at Tayinat.

While during the LG period few imports have reached the site, the 7th century BC saw a total absence of Greek imports and this might be explained through the Assyrian occupation of Unqi in 738 BC. Apparently the new administrative Assyrian elite preferred different tastes and looked eastwards in their fashion rather than to the West. Perhaps the increase of silver and the growing prosperity in Assyria resulted in an increasing use of metal ware for drinking cups, which affected also the use of Greek pots in the centres administered by the Assyrian elite.¹¹³³ At Samaria, and perhaps at

¹¹³¹ According to Lehmann 2005, 82 “Whatever pottery was found at Al Mina is what broke and did not find its way to the markets it was destined for”.

¹¹³² Saltz 1978, 80-81; Swift 1958, 153.

¹¹³³ According to Radner 1999, 129 silver replace bronze as official currency during the 7th century BC related by her to the destruction of Carchemish and the enormous amounts of silver that were taken as booty.

Megiddo, new elites introduced new fashions, which could affect the social significance of Greek pottery in certain levels of the society, in particular among the aristocracy.

Given the few numbers found at Tayinat, it seems more likely to interpret the finds from Al Mina as goods purchased by the inhabitants of the port. This must have been certainly the case during the 7th century BC, which saw a total absence of Greek imports at Tayinat. The situation is not much different at other sites of the Levant where Greek imports are almost totally missing from the beginning- until the last quarter of the 7th century BC.

While I do not want to reject the possibility of interpreting some of the Greek pots as *doron* exchanged within *xenia*, and I also agree that banqueting perhaps played an important part in establishing guest-relationships that in the end lead to exchange of goods, it remains unexplained why we do not observe traces of similar “international” practices in Greece?¹¹³⁴ Why have no Phoenician or Cypriot drinking vessels turned up so far in Greece that were used as similar preliminary gifts or in banquets? As has been argued elsewhere, the value of an object lies partly in the fact that it is foreign and the argument, Greek pots are superior in quality, does not explain the absence of foreign vessels in this respect. Further, if Near Easterners were used to receive pottery as gift from Greeks, would it not be the obvious thing to return a pot as well during similar encounters in Greece?

¹¹³⁴ The same question can be raised about the distribution of Euboean pottery in the West, which was also an important playground for Euboean colonization. The nature of these western ventures was different from commercial activities practised by the Phoenician i.e. and may explain the absence of large amount of preliminary gifts in the west but the earliest colony was on Pithekoussai and was more a trading post by character. Why, one may ask, are Euboean pots so few in native context of Italy? Can the difference be explained simply through the scale of contacts? For the character of Euboean activities in the west see Crielaard 1995; Crielaard 1996, 215: “the earliest Greek voyages to the central Mediterranean were not large organized expeditions of merchants shipping loads of pots, but rather individual travellers who paid occasional visits to certain regions in the west”.

Finally, open remains also who offers the preliminary gift: the visitor or the host? If the preliminary gift was intended to result in trade or in other commodities is it not more likely that the visitor offers a gift rather than the other way round? Luke for instance suggested that a jar with the friendship inscription from Ithaca was perhaps a gift from host to travelling *xenos*.¹¹³⁵ Jeffery noted the use of Euboic lambda on the inscription and a peculiar iota and both letters do not appear in this form in later Ithakesian.¹¹³⁶ The pot was apparently not made on Ithaca and since the inscription was painted, it is clear that from the beginning the jar was intended to be a gift for a friend. Thus it cannot be excluded that the pot travelled e.g. from Euboea to Ithaca as a gift to a friend residing at Ithaca.

The already mentioned passage of the silver mixing bowl set up by Phoenicians in the harbour of Thoas highlights several characteristics of early exchange: the mixing bowl was handed over by Phoenicians to Thoas in order to get access to his market. The silver bowl perhaps best qualifies as a preliminary gift. It is, like other gifts exchanged between guest-friends, a highly valuable item. Pots, if they qualify as a *doron* or preliminary gift, are perhaps better understood as a sign for gift-exchange within lower social classes. The pot from Ithaca might be such an example.

I have suggested interpreting the Greek pottery at Al Mina primarily as a commodity sold to various classes of consumers. And the same applies for the majority of the other Greek pots found in site in the Levant. The rarity of some specific categories, among them the SiA Ia jug fragments however, which are so rare at Ionia itself, have to be

¹¹³⁵ Luke 2003, 53.

¹¹³⁶ Jeffery 1990, 230.

understood as a product aimed either at consumers of higher status or they were given as a gift to trading partners. The assumption that they are more valuable items, is solely based on the scarcity of this class at Al Min and Ionia itself. Note however, that fine painted jugs turned up in the royal burial at Gordion.¹¹³⁷ Jugs of this type must therefore have been of certain value. The argument that they are cheaper surrogates for valuable silver ware for which they were placed in the tombs, has to be rejected since silver jugs were found side by side with painted jugs.¹¹³⁸

Besides these more valuable pots, a large group of jugs imported at Al Mina consists of simple painted banded ware or monochrome jugs. They were intended for another social group of consumers and therefore also appear in a larger amount. That inhabitants of Al Mina used them is perhaps shown by a few pieces that have been recovered from a well or pit where they were thrown in after they have been broken. Another indication for local consumption is the in situ find of a Corinthian amphora from level V. The diversification of merchandise suitable for various consumer levels has also been suggested for the ivory production by Winter. She suggested that many ivory finds discovered outside elite context, which are usually described as provincial and or later in date, should rather be understood as goods targeted at specific markets and audiences.¹¹³⁹ While Winter explicitly refers solely to the more complex Phoenician economy, the Greek pottery may indicate that similar mechanisms were already at play in Greece and Asia Minor.¹¹⁴⁰ Within the same framework we have to interpret the

¹¹³⁷ Young 1958, 139-154.

¹¹³⁸ Gill and Vickers 1990, 28.

¹¹³⁹ Winter 2010, 610-611. One class of artefact perhaps destined of “lower income” are the Lyre player group. This class has been attributed by Boardman to an Aramaean workshop. See Boardman 1990a, 1-17. This view has not been generally accepted. Winter considers them to be of possible Phoenician provenance due to stylistic similarities and as yet another indication for diversification of production. Winter 2010, 611 no. 39. No matter if one agrees with Winter, the argument for a lower quality production for different consumers is not related to the question of origin.

¹¹⁴⁰ Winter 2012, 612.

Cypriot milk bowls on board of the Uluburun shipwreck. If this is true then we can see similar practices already emerging towards the end of the LBA.¹¹⁴¹

2. 3 Changing Consumption Patterns

That Greek pots were used as commodities, traded and targeted at an increasing group of consumers, is a process which according to Sherratt, began already at the end of the second millennium BC.¹¹⁴² The difference in the composition of the Greek pottery record between the 8th and the 7th century BC can be understood as the logical consequence of this process. A growing corpus of Greek shapes was circulating in the Levant during the 7th century BC. The diversification in traded products affects not only the range of shapes but also the variety in quality. High quality products like the Wild Goat style jugs, dinoi and kraters, appear side by side with products of lesser quality. That the former class of pottery can be considered as a more valuable product becomes clear by the low amount of recovered fragments as compared to other products like simple wave line- or monochrome pottery.

Diversification can also be seen in the increasing amount of different products from various regions of the Greek world, which reached Al Mina: from Asia Minor imports arrived from the Aeolis, Chios, North Ionia, South Ionia – perhaps from Miletus and Samos –, Rhodes, Corinth and Attica. Among them only a few production centres also exported amphorae to Al Mina. Interestingly, two of the three biggest suppliers in agricultural goods to Al Mina, Attica and Chios, only rarely exported their fine painted tableware to Al Mina. This highlights that trade in painted ware did not necessarily

¹¹⁴¹ See also Sherratt 1999; Winter 2010, 613.

¹¹⁴² Sherratt 2003, 48. 53.

follow the trade in other commodities at Al Mina. The growing number of amphora imports also indicates that trade in agricultural goods between Al Mina and the Aegean was growing.

A similar picture can be obtained from the other sites in the Levant, which saw an influx of East Greek amphorae imported from Samos, Miletos and Chios at the end of the 7th century BC. During the 8th century BC and before, amphorae of predominantly Attic and Euboean examples, were restricted to a few places among them Tyre, Ras el Bassit, Al Mina and perhaps Kinet Höyük. The diversification in pottery trade culminates in the beginning of the trade in vessel categories such as mortaria and even cooking pots, which appear in settlements in the Levant. Mortaria are found at Al Mina, Mersin, Megiddo, Tell Keisan, Mesad Hashavyahu, Timnah, Ekron and Ashkelon.¹¹⁴³ Chytrai appeared in Mesad Hashavyahu, Yavne-Yam, Kabri, Timnah, Mikhmoret, Shiqmona and Ashkelon.¹¹⁴⁴ While their interpretation at Kabri and Mesad Hashavyahu as belongings of mercenaries is convincing, the context of Timnah suggests that the cooking pots were acquired by a locals.

The concentration of cooking pots in what has been interpreted as a marketplace at Ashkelon, suggests that they were sold at the local market.¹¹⁴⁵ Cooking pots too have acquired the status of a commodity perhaps due to their material superiority. This is not surprising given the fact that Aeginatian cooking pots e.g. were famous in antiquity. Aegina was even called “κυτροπολις”.¹¹⁴⁶ At least by the late 7th century BC cooking

¹¹⁴³ Ashkelon 3, 306.

¹¹⁴⁴ For Mikhmoret see Waldbaum 1997, 8 fig. 6. For Shiqmona see Wenning 1991, 212; Ashkelon 3, 293-305.

¹¹⁴⁵ Ashkelon 3, 127 tab. 10.1; 129 fig. 10.2. 52. Cooking pots come from grid 50, which has been identified as marketplace.

¹¹⁴⁶ Kerschner 2001, 89.

pots were traded as commodities and their appearance alone cannot be taken as evidence for Greek residents.

2. 4 Local Consumption Patterns

Only few observations for local consumption patterns could be suggested. As has been noted, decoration did not play an important role for acquiring a vessel although monochrome cups were apparently not popular. Specific shapes like the one-handled cup were not circulating in large amounts and I have interpreted their absence with a functional reason: they served perhaps a similar purpose as the plates and were therefore not adopted by local inhabitants at Al Mina. Dinoi were on particular demand from the first- until the third quarter of the 7th century BC, which might be due to the familiarity of the cauldron in the East. The same may apply for the small juglets, which find a ceramic counterpart in the East. Jugs enjoyed an increasing popularity at Al Mina during the 7th century BC and the record stands in stark contrast to what has been proposed by Luke and de Vries who suggested that jugs were not imported in larger amounts since they do not feature the same important role in a Near Eastern banquet as in a Greek symposium. Judging from the record from Al Mina we have to assume that the local residents either adapted this shape to their local customs, or the jugs can be seen as a sign for following Greek drinking habits, or jugs were not so unimportant in local banquets as suggested by Luke.

The rather restricted influence by the consumer can be seen in various ways: they had no impact at all on the changing ceramic repertoire at the beginning of the 7th century BC. Likewise, in the case of the dinoi, we could observe that they have been replaced

by kraters in the last quarter of the 7th century BC, which by that time were more numerous at Ionia judging from the finds at Assesos.

2. 5 Foreigners and Local Markets

Access to markets was strictly regulated in the Near East but foreigners could take part in economical activities in foreign states. This becomes clear through several sources. After a decisive loss King Ben Haddad from Damascus asked king Ahab for peace and in return he offered access to his markets.¹¹⁴⁷ This right was apparently so important that it qualified as an appropriate offer to avoid further military actions.

In a treaty, Esarhaddon granted Tyrian ships access to Assyrian-controlled harbours against taxes and under certain regulations.¹¹⁴⁸ Apparently access to Assyrian markets was subject to regulations and observed through treaties. Tyre had to pay an annual tribute to Assyria and Radner suggested that by paying tribute to the Assyrian king the Cypriots gained also access to Assyrian markets.¹¹⁴⁹ The tribute not only acknowledges Assyrian over lordship but has also to be considered as a form of preliminary gift in order to gain certain trading rights.

Behind this well-established, highly regulated market with juridical regulations, administrators, an economic tradition of market exchange that goes back to the Bronze Age, it seems difficult to interpret Greek pots as preliminary gifts. We have to remember that gifts in the world of Odysseus, no matter what the actual value was, had

¹¹⁴⁷ I Kgs. 20: 34.

¹¹⁴⁸ Yamada 2005, 7-12.

¹¹⁴⁹ Radner 2004.

a purpose that was of real value. Besides getting access to exchange, with a *xenos* abroad one had an effective protector, representative and ally.¹¹⁵⁰

In the absence of any other regulations this was an important prerequisite to carry out any further sort of exchange. In the East such a system does not become obsolete but it did not have the same importance within economical transactions as in Greece and the Aegean.

According to the treaty between Esarhaddon and the king of Baal, the Phoenicians had to stay on their ships during their visits to Assyrian- controlled harbours.¹¹⁵¹ Whether this has to be understood literally or only means that they were not allowed to leave the harbour is not quite clear but the Wenamun story may suggest that this could be understood quite literally.¹¹⁵²

That the treaty between Esarhaddon and the king of Tyre made an explicit reference to the fact that the Tyrian traders have to stay on board of their ships could also be understood as an indication that this regulation was not a common practice otherwise it does not make any sense to mention it. On the other hand, the taxes are mentioned as well and we cannot assume that Tyrians or any other group of traders were exempted from paying taxes before Esarhaddons reign. Either it was mentioned because these limitations were only referring to Tyre, which previously enjoyed certain trading rights,

¹¹⁵⁰ Herman 1987, 74.

¹¹⁵¹ For the treaty see discussion in Yamada 2005, 7-12.

¹¹⁵² Wachsmann 1998, 324-325. Wenamun got robbed on board of his ship. After the incident he applied to the king of Byblos for help. The king himself however, pointed to the fact that a foreign crewmember travelling on board of the same ship as Wenamun committed the theft. The incident happened on board of a ship and therefore he did not consider himself as responsible. These two juridical spheres only make sense if there was a real separation between city and ships or at least between harbour and city. On the other hand, Wenamun was only able to appeal to the king by leaving his ship, which also demonstrates that under particular circumstances, certain foreigners like envoys of kings, could have access to the city.

among them free access to the ports, or these regulations have to be understood as a general change in Assyrian trading policy. Since it is the only available document of that time that provided information about restriction imposed on foreigners visiting Assyrian harbours, we may have to take into consideration that similar restriction applied also for other parties conducting trade with the Assyrian empire. Thus, at least during the 7th century BC, access to ports within the realm of the Assyrian empire was controlled and we may have to assume that only few foreigners, if at all, were permanent residents at Al Mina. Given such limitations imposed on traders during their visits in Assyrian harbours, it seems doubtful that the contacts between foreigners and locals in such port locations could also lead to a cultural transmission of certain cultural traditions, among them drinking customs.

3. Al Mina and its External Contacts

The earliest Greek imports from Al Mina derive from the Cyclades. Cycladic imports have been recognized before but their relevance for the general historical development for the establishment of the long-distance trade between Al Mina and the Aegean has not been considered. Euboean imports play only a dominant role at the beginning of the second half of the 8th century BC. If the Greek finds from Al Mina are taken to represent the history of the port's external relation, we have to conclude that the Cyclades were among the first to get in contact with the port at the mouth of the Orontes. Such a picture would be a simplistic view given the amount of Attic and Euboean pottery, which had been exported to the Levant since the Protogeometric period.

It is not before the second half of the 8th century BC that the port enjoyed more regular visits by ships sailing to the Aegean and back. Although Euboean imports are not the only ones arriving at the port, they are certainly the most dominant group. Euboean imports continue to arrive at the port until the early 7th century BC but they must have stopped at around 675/70 BC.

The connection between Al Mina and the Greek cities in Asia Minor is certainly established by the onset of the 2nd quarter of the 7th century BC. Open however remains the question when this relationship exactly starts. The earliest East Greek import comes from level IX and is identified as a south Ionian bird oinochoe fragment.¹¹⁵³ The chronology of this class is not well known yet. What can be said is that this category was produced until the 7th century BC but the beginning of its production is not quite clear. Interestingly, early bird kotyle fragments with a continuing frieze are missing, a sign that East Greek imports started later than Cycladic and Euboean ones.

The question of the beginning of East Greek imports and the question of how this route got established is also interesting in respect to Euboean LG finds at Aeolian Kyme. The Euboean finds from Kyme consist of a similar range also encountered at Al Mina. Among them are imitations of Aetos 666 kotylai, skyphoi with concentric circle decoration on the rim and a few krater fragments.¹¹⁵⁴ Kyme revealed also a few pieces of LG Corinthian imports.¹¹⁵⁵ As an alternative to a probable route from Euboea to Kyme, one could link the finds at Kyme with Al Mina. In the p.d. of the year 1936 Woolley noted two bucchero pieces (MN 263 and 264). They are said to be from level

¹¹⁵³ Since East Greek cups with everted rim appeared in level IX as well one cannot rule out that the bird oinochoe is residual.

¹¹⁵⁴ Frasca 1998, 277 fig. 9-15.

¹¹⁵⁵ Frasca 1998, 275 fig. 5-6.

VI. One of these two pieces can be seen in the Anatakya museum (fig. 5). While the exact place of origin is not known one might be safe to attribute the piece to an Aeolian source.¹¹⁵⁶ Whether Euboean, Phoenician, Cypriot or North Syrian merchants were involved in establishing this new north-south route is hard to tell but Phoenician and Cypriot pottery is missing at Kyme.

Another indication for an early connection between North Syria, Asia Minor and Euboea comes from Samos. Two front-pieces, one with a booty inscription of king



Fig. 5 Aeolian buccher from Al Mina level VI (MN 264).

Hazael of Damascus were found in a layer dated to the early 6th century BC.¹¹⁵⁷ Two additional bronze blinkers were found in the Apollo sanctuary at Eretria.¹¹⁵⁸ One piece comes from a context from the last quarter of the 8th century BC while the other one is

¹¹⁵⁶ It seems that grey bucchero ware was produced in different regions in the eastern Aegean. See Kerschner 2001, 88. For grey bucchero ware from Kyme see Frasca 1998, 275 fig. 3. A parallel, although not a close one, can be found at Antissa. The bucchero from Antissa however must be considerably later than the example from Al Mina. The example from Antissa is slender, and does not contain the s-profile of the kantharos from Al Mina. The Antissa example is dated to the 6th century BC based on the grafitto on it. See Lamb 1930-31, 178; Lamb 1931-32, 54 pl. 20. 3.

¹¹⁵⁷ Kyrieleis and Röellig 1988, 35 pl. 9. For the inscription see also Eph'al and Naveh 1989.

¹¹⁵⁸ Charbonnet 1986; Winter 2010, 376 fig. 4.

non-stratified.¹¹⁵⁹ The latter one bears an identical inscription as the front-piece from Samos.¹¹⁶⁰ The inscription refers to Hazael, which might be identical with the king Hazael of Damaskus and it seems that the front-pieces are booty taken from Unqi.¹¹⁶¹ It too bears an inscription of king Hazael who perhaps died shortly before or after 800 BC.¹¹⁶² Both pieces probably originally belonged to one and the same horse-harness.¹¹⁶³ Other examples of bronze blinkers turned up at Miletos.¹¹⁶⁴ All of them have been attributed to a North Syrian workshop.¹¹⁶⁵ Winter suggested that they reached Asia Minor on a possible inland trade route via Gordion, a hypothesis that is certainly attractive.¹¹⁶⁶ At the same time it seems possible to interpret these votives as signs for ritual propitiation after surviving the dangerous journey across the sea.¹¹⁶⁷ How long they have been circulating before the got deposited at Samos and Eretria remains unclear.¹¹⁶⁸ Further, the ethnic origin of the person who dedicated the piece is another open issue. Kyrieleis' argument, it must have been a Greek person otherwise the inscription would have been erased, is not convincing.¹¹⁶⁹

¹¹⁵⁹ Charbonnet 1986, 121.

¹¹⁶⁰ Kyrieleis and Röllig 1988, 70. The inscription is hard to read and in this respect I follow Röllig without being able to verify his conclusion.

¹¹⁶¹ For the translation see Eph'al and Naveh 1989, 193 fig. 1. For an alternative see Kyrieleis and Röllig 1988, 62. In particular the parallels of other booty inscriptions known to derive from King Hazael are a strong argument for Eph'al and Naveh's reading. See Eph'al and Naveh 1989, 197. For a discussion of the identification of Hazael see Kyrieleis and Röllig 1998, 71-75.

¹¹⁶² Kyrieleis and Röllig 1988, 75.

¹¹⁶³ Kyrieleis and Röllig 1988, 50.

¹¹⁶⁴ Kyrieleis and Röllig 1988, 42 no 11; Winter 2010, 341.

¹¹⁶⁵ Winter 2010, 341.

¹¹⁶⁶ Winter 2010, 363.

¹¹⁶⁷ Lane Fox 2008, 117-118. His suggestion that horse-expert perhaps had joined the Assyrian army does not seem to be very likely. Evidence for Greek mercenaries at that time is missing. More likely is that they have been acquired by merchants from soldiers or perhaps these bronze pieces served as currency. Alternatively one could imagine that these pieces also qualified as a gift. Gift: Kyrieleis and Röllig 1988, 56-57; Acquired by trade: Eph'al and Naveh 1989, 200.

¹¹⁶⁸ Kyrieleis and Röllig 1988, 56-57. Suggested that the pieces came into Greek hands early, certainly before the 6th century BC.

¹¹⁶⁹ Kyrieleis and Röllig 1988, 56. If the piece was a gift by king Hadad to a North Syrian trader for instance, the inscription with the reference to King Hadad would only make the piece even more prestigious. The same applies if it was given to a Greek. However, since we do not know whether the piece was part of booty or a gift it remains pure speculation about who dedicated the piece in the sanctuary.

The distribution of North Syrian and Phoenician Ivories follows a similar pattern with attested finds at Al Mina, Lindos and Camiros, Samos and Ephesus.¹¹⁷⁰ While high quality ivories of North Syrian or Phoenician production are missing so far, ivory seals of the lyre playing group from the sacred area north of the sanctuary of Apollo attest the connection between Euboea, Asia Minor and Al Mina also in this respect.¹¹⁷¹ The appearance of ivory votive offerings at Ephesus can perhaps be linked directly to the presence of traders from the Levant. Bammer suggested that the remains of donkey bones in the sanctuary of Artemis are associated with Phoenician sacrificial rites.¹¹⁷² The piece of Ephesus is also intriguing since the site also revealed Euboean psc-skyphoi and one LG II bichrome sherd.¹¹⁷³

Euboean LG sherds are also attested from the Heraion on Samos.¹¹⁷⁴ In the light of the absence of East Greek finds dating to the 8th century BC on Euboea, Euboean imports reached the East Greek cities via Al Mina rather than direct from Euboea.¹¹⁷⁵ Despite evidence for contacts between the East Greek cities and the Levant during the late 8th century BC, more regular contacts only occurred after the beginning of the 2nd quarter of the 7th century BC and remained stable throughout the whole 7th century BC.

The change from primarily Euboean imports to East Greek fabrics is hard to explain. What can be said though is, that the East-West traffic never came to a hold as can be seen by number of Corinthian pottery that reached Al Mina throughout the 7th century

¹¹⁷⁰ Winter 1976, 12 fig. 1-2.

¹¹⁷¹ Eretria XIV, 91 pl. 49. O 188-192. One piece was also found at Lefkandi: Lefkandi I, pl. 67. u.

¹¹⁷² Bammer 1985, 106-107. The author admits that the custom of donkey sacrifices is not necessarily confined to Phoenicia but to the whole Levant and Mesopotamia.

¹¹⁷³ Personal communication with M. Kerschner. The piece is unpublished.

¹¹⁷⁴ Samos V, pl. 49. 282-289.

¹¹⁷⁵ In this respect it is perhaps important to mention that one amphora fragment found in LG context turned out to be of East Greek provenance. The results were presented in a round table conference at Athens April 2010 and are unpublished.

BC. At the same time no obvious longer gap in the occupation of the port could be observed which would point to local economical decline resulting an abandoning old trading routes. We therefore have to assume that the disappearance of Euboean pottery has to be related with a change in Euboean pottery production. Further, Euboea with its harbour Geraistos at Karystos served as an important stop for ships sailing from east to west and north to south as can be deduced from several written sources.¹¹⁷⁶

The 7th BC century is not well known on Euboea and we do not know what might have caused the sudden disappearance of Euboean pottery in the East. Perhaps we should also not totally ignore the affects of a growing trade in East Greek pottery, which was considered better and which replaced Euboean pottery as soon as it appeared on the market.

It has been stated that fine painted pottery only follows trade in other commodities. Agricultural goods were only of secondary importance within the trade between Al Mina and the Aegean and trade in precious metals such as copper, tin or iron was the primary reason for the importance of the harbour at the Orontes. The true reason might be that starting with the 7th century BC other additional sources were exploited that shifted the focus from the east to the western Mediterranean.

The interpretation of the changing Greek pottery record cannot be properly understood without considering Greek activities in the western Aegean and the Magna Grecia. Perhaps the evidence from Al Mina allows us to understand the development of colonial activities in Italy much better. Taking the absence of Euboean imports at Al Mina at

¹¹⁷⁶ Eurip. Cycl. 295; Hom. Od. 3, 177; Pindar Ol. 13, 159; Callimachos 4, 199.

around 700 BC could also be interpreted in such a way that it was not before 700 BC that Greek activities in the West reached such an substantial scale that it became also visible in the East.

Although this is the topic for another thesis, one may conclude that by the end of the 8th century BC the connectivity between the various parts in the Mediterranean had reached such a scale that local changes could have an impact on the whole Mediterranean including Al Mina on the Orontes.

4. Outlook for Future Research

Many question remain open or could only be cursorily treated. On of the basic questions for future research is how deep Greek drinking practices penetrated into local consumption patterns. The work done by previous scholars such as Luke cannot be considered as a thorough analysis since the material basis considered by her was too small.

Important for a better understanding would be a more detailed analysis of the different fabrics to distinguish better between North and South Ionian workshops. So far we are only in the position to distinguish regional styles but we do not know which cities where involved in the trade with the Levant. It also remains unclear, what exactly triggered the sudden appearance of East Greek products at Al Mina. North Syrian or Phoenician imports in Ionian are only a few although it remains uncertain whether this is only a question of limited archaeological excavations or even limited interest in these imports.

IN order to understand the record from Al Mina a detailed study of Levantine imports into Ionia is needed. Only after that we will be able to understand how the trading patterns between Asia Minor and North Syria started to evolve.

The present study could only take a few other find contexts into consideration. Many more await their study. The thesis however, provides a solid basis for future research since the basic work and statistical analysis has been undertaken.

Another interesting question for the future is how the regional “metal market” in the Assyrian empire affected trade between North Syria and Greece. What we need is a detailed account of evidence for changing values of metals such as silver, copper and tin. This perhaps would allow us to correlate the developments on the “raw metal market” with the record of Greek imports at Al Mina and perhaps this would provide us with a better understanding of the scale of connectivity of the Aegean during the Early Iron Age.

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Fig. 1: Map of Northern Levant including the Orontes Delta and the Amuq plain. After Yener 2005, fig. 3.1.

Fig. 2: Surveyed and excavated area of Al Mina. After Yener 2005, fig. 3. 10. a.

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