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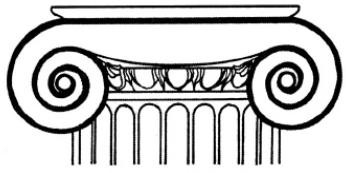

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The Preliminary Report on The Early Iron Studies of The Ayasuluk Excavations and Evaluations on The Early Iron Age of Ephesus

[AYASULUK KAZILARI ERKEN DEMİR ÇAĞI ÇALIŞMALARI ÖN RAPORU VE EPHESOS'UN ERKEN DEMİR ÇAĞI HAKKINDA DEĞERLENDİRMELER

Onur BOZOĞLAN

Anahtar Kelimeler
Ayasuluk, Ephesos, Erken Demir Çağı, Protogeometrik, Göç.

Keywords
Ayasuluk, Ephesus, Early Iron Age, Protogeometric, Migration.

ÖZET

Ayasuluk Tepesi, Bizans Dönemin'de hac merkezi olmuş St Jean bazilikası ile tanınmaktadır. Son yıllarda yapılan kazı çalışmaları ile ilk iskanın Geç Kalkolitik döneme kadar uzandığı ve Geç Tunç Çağı'nda bölgenin önemli bir merkezi olan Apasas'ın Ayasuluk Tepesi olduğuna yönelik bulgular elde edilmiştir. Tepenin eteğinde yer alan Ephesos Artemis tapınağı ile Geç Tunç ve Erken Demir Çağları'na ait ortak buluntular yardımıyla kültün en erken sahiplerinin Ayasuluk Tepesi'nde yaşadığının anlaşılması diğer bir önemli gelişmedir. Söz konusu buluntuların yayınlanmış olanları dışında daha ele alınmamış seramikler olması nedeniyle Erken Demir Çağı çalışmaları kapsamında, geçmiş yıllarda ele geçen seramikleri belgeleme işlemleri ve saha çalışmaları planlanmıştır. Tasnif işlemleri devam ettiği için ön rapor amacıyla ele alınan bu yayın, seramiklerin bir kısmını kapsamaktadır. Çalışmada önceki yayınlarda farklı konuların işlenmesi nedeniyle detaylı bahsedilmeyen seramikler de ele alınmıştır. Seramiklerin yorumlanmasında Artemision'un geçmiş yıllarına ait verileri de göz önünde bulundurularak, Ephesos özelinde, Erken Demir Çağ'ın tartışmalı konuları olan devamlılık ve göç meseleleri hakkında değerlendirmeler yapılmıştır.

ABSTRACT

Ayasuluk Hill is known for the St. John Basilica, which became a pilgrimage centre during the Byzantine period. Recent excavations have revealed evidence suggesting that the first settlement dates back to the Late Chalcolithic period and that Apaša, an essential political centre in the region during the Late Bronze Age, was located at Ayasuluk Hill. Another significant finding of these excavations is that the earliest inhabitants of the cult lived on Ayasuluk Hill, as attested by Late Bronze and Early Iron Ages artefacts found at the Ephesus Artemis Temple on the hillside. Due to the presence of ceramics that need to be studied other than published ones from previous years, documenting these ceramics and fieldwork is planned within the scope of the Early Iron Age studies. As the classification process of the site's ceramics is still ongoing, this paper covers a selection of these ceramics. This preliminary report also examines pieces mentioned but not thoroughly examined in previous publications. Evaluations are made on the issues of continuity and migration in the Early Iron Age of Ephesus based on these interpretations of the ceramics and data from previous years' excavations of the Artemision.

Introduction

Ayasuluk Hill, a mound covering an area of approximately 27 hectares, arises from the centrum of the Selçuk district of Izmir province. The hill's highest point is in the north at an altitude of 66 m and gradually descends towards the south with a steep slope approximately 50 m in length (Fig. 19). The hill, known to have been near the coastline during antiquity, is now located 8 km away from the sea due to the filling of the area from the Belevi Strait onwards by the alluvions

carried from the Küçük Menderes (Kaystros) River.[1] The Medieval castle covers a large part of the hill and houses the tomb and basilica of Agios Ioannis Theologos, a pilgrimage centre during the Byzantine period. There are also some Turkish period structures on the hill. As a modern settlement outside the castle stretches up to Artemision, archaeological data related to the area is obtained from inside and around the castle and from Artemision on the southwest slope of the hill.

Important archaeological sites in the vicinity include Arvalya and Çukuriçi Mound, which date back to the Neolithic period, Artemision, which has been in use since the LBA and whose surroundings were inhabited in the Archaic period, and the Hellenistic and Roman site of Ephesus, located between Panayırdağ (Koressos) and Bülbüldağı (Lepre Akte = Pion), where Late Geometric and Archaic finds were also recovered. The modern settlement at Selçuk developed around Ayasuluk Hill, where finds, including ones from as early as the Late Chalcolithic to as late as the Ottoman period, have been uncovered. Due to the similarity of the name and the fact that it is the only active LBA settlement in the region, except for Bademgediği Hill, situated approximately 20 km to the north and proposed to be Puranda, the ancient settlement at Ayasuluk is thought to be Apaša, the capital of the Arzawa Kingdom.[2] Ayasuluk, along with Artemision bordering the hill from the southwest, was the only active settlement in Ephesus and its environs from the LBA to the 8th century BC and is therefore assumed to have been the site of the first believers of the cult of Artemis Ephesia, whose roots date back to the LBA.[3] Most of the pottery recovered from both the hill and Artemision during the EIA is Greek in character. In addition, archaeometric clay analyses confirmed the presence of Greek mainland pottery, proving the Greek migration to the area mentioned in ancient texts.

The excavation and restoration works at Ayasuluk, which commenced in 1921 and continued intermittently, have been continuing systematically since 2007.[4] EIA ceramics hold a significant value among the artefacts from past years in the excavation storeroom evaluated by the experts. Since 2021, one-fourth of all the ceramics have been classified, and more than three hundred EIA ceramics have been recorded. This publication is a preliminary report on the EIA ceramics from the site, as classification, documentation, and publication of the entire corpus are ongoing. Some of the ceramics that are the subject of this paper were previously published by Mustafa Büyükkolancı and Michael Kerschner. Since Büyükkolancı's publications aimed to discuss a wider set of topics on Ayasuluk, he did not study the ceramics in detail but only shared them as photographs.[5] Kerschner's publications, including the Artemision material, were a detailed examination of the ceramics covering style and form, periods, and even production centres Among the four fragments on which a different argument will be shared within this study, one is discussed in the ceramics section, whereas the other three will be handled in the evaluation.[6] For the first time, the selection of ceramics published in this paper aims to represent finer examples of find groups that demonstrate commonalities in form, style, and period and to provide an idea about the integrity of other unpublished ones. In addition, this study will address the transition from the Late Bronze Age to the Early Iron Age and the issue of migration during that time, as they are essential debates in this field. With the detailed analysis of the ceramics, this study questions the existence of LH IIIC Late, SM, and EPG styles in Ephesus that indicate this transition. Additional attention will be paid to examining the extent to which the ceramics represent narratives of possible Greek migration to Ephesus. Last but not least, an attempt will be made to understand the relationship between Ephesus and its surroundings during this period based on the current ceramic evidence.

1 Kayan 2022: 11, fig. 5, 13-14.

2 Büyükkolancı 2008: 53-54; Kerschner 2006: 368-369.

3 Kerschner 2006: 371-372.

4 The excavation and restorations were carried out intermittently by G.A Sotiriu in 1922, J. Keil and H. Hörmann in 1927-1930, F. Miltner in 1957-1958 and under the Quatmann family sponsorship and headship of the Selçuk Ephesus Museum in 1960-63, 1974-1998 and 1998-2007. See: Gültekin et al. 1962: 49; Büyükkolancı 1999: 19-20.

5 Büyükkolancı 1997; Büyükkolancı 2007; Büyükkolancı 2008.

6 Kerschner 2006: 382, abb. 8; Kerschner 2014: fig. 14 (Kerschner 2003a: 246, taf. 40.1), figs. 16-17.

The Stratigraphy

Although finds from Ayasuluk stretch chronologically from the Late Chalcolithic to the Ottoman period, there are a few hiatuses in the Bronze Age.[7] The ancient sources indicate that Croesus resettled the scattered settlements on the mountain slopes around Artemision (Strabon 14, 1.21; Herodotus 1, 26). The evidence for the approximately one-thousand-year period of occupation from the mid-6th century BC to the construction of the Agios Ioannis Theologos monument at Ayasuluk is not very strong. This may, however, be because the excavations were conducted within limited areas of the site. Due to geological formations and late construction activities, very few homogeneous layers are present at the site, and almost all finds are decontextualized from their original contexts.

No ancient layers have been found beneath the Medieval structures that dominate the citadel, the highest area north of the hill where the bedrock is close to the surface.[8] However, EBA-MBA ceramics found at the bedrock level indicate that life in this area originally dated back to prehistoric times and that the late-period structures have destroyed the layers that existed before them.

Late Chalcolithic and LBA-MBA artefacts were recovered at the bedrock level on the steep slope just below the citadel. The MBA layers at this point were reached below the surface fill in 19 T-U Trenches.[9] In contrast this, in trenches 20-1 R, where the bedrock is closer to the surface, a Medieval layer is all that exists above the bedrock. In Trench 20 S, where the bedrock is deeper, MBA levels were encountered beneath the Medieval building level, and EBA-MBA ceramics and an EBA seal were found in the bedrock levels.[10]

Mixed ceramics from the Bronze to Medieval Ages were found during the excavations of trenches 22 and 23 S, where the foundation of the Hellenistic defense structure and the Byzantine wall line were traced along the slopes of the citadel.[11] EIA ceramics, mostly in the Geometric style, are predominant among the found pottery. Mycenaean and undecorated Bronze Age ceramics are the next most dense group. Finds from the Archaic, Classical, Hellenistic, and Roman periods are relatively scarce. Undecorated Late Bronze Age, Mycenaean, and EIA ceramics gradually increase in numbers, especially within the layers that are stratified close to the bedrock. The EBA-MBA ceramics on the other hand are found at the bedrock level and in cavities. Previously it was thought that this mixed ceramic deposit was formed by the soil sliding down from the settlement above. However, both the thickness of the deposit (reaching up to 3-4 m) and the fact that no cultural layers were ever revealed on top of the hill that would cause such a flow of mixed LBA, EIA, and other Greek period ceramics as were found during the fortification wall line excavations on the northeast slopes of the castle suggest that this argument should be approached with caution. It is reasonable to assume at this point that this mixed fill was formed during the construction of the fortification walls, either due to the disturbance of earlier cultural layers there by the construction itself or the transfer of the fill from the surrounding area to enforce the walls.

In Trench 32-33D, on the outer slope of the western fortification wall, five pits thought to be graves carved into the bedrock and preserved only at the lower levels were unearthed.[12] The mixed ceramics dating from the LBA to the Archaic Period recovered in and around those pits must have flowed from above during or before the construction of the fortification wall.

In summary, the distinguishable architectural layers are the Byzantine and Turkish Medieval structure levels, the Byzantine fortification, and the Hellenistic foundations of this fortification. In addition, no homogeneous stratum has been encountered on the hill except for the MBA stratum on the outskirts of the citadel. Due to both natural and human causes, EIA ceramics are always found mixed with Bronze Age and Greek ceramics. This situation, in the end, does not allow for a clear stratigraphic evaluation of the ceramics that are the subject matter of this study

7 Konakçı 2016: 136-140, fig. 1.

8 Konakçı 2016: 137.

9 Büyükkolancı 2008: 43-44; Konakçı 2012, 48-55; Büyükkolancı 2006: 76-77.

10 Büyükkolancı 2008: 44; Büyükkolancı 2006: 76-77; Erdemgil and Büyükkolancı 1992: 266-277.

11 For 22 S, see: Büyükkolancı 2008: 44-47; Konakçı 2012: 55-56, 375-381. The information about Trench 23 S was provided from the Ayasuluk excavation archive.

12 Büyükkolancı 2008: 51-53; Konakçı 2016: 144-145.

and makes an individual evaluation of each necessary instead; this focused evaluation is the subject of the next title.

The Ceramics

In this section, the ceramics, due to the stratigraphic situation mentioned above, will be handled individually. Each piece will be described in as much detail as possible, followed by a shape and decoration-oriented evaluation. Analogies will be established in every phase of the analysis both to date and contextualize the ceramics.

No. 1 (Fig. 1) is a shoulder fragment, probably from an amphora. The decoration consists of a set of semicircles drawn with a compass, a multi-pointed brush, and a double vertical wavy line placed as a separator between this motif and a possible similar set of other semicircles. A thin and a medium-thick band passes over the circles. A wide painted area extends from the set of circles and covers the area below the shoulder.

The vertical wavy line is known to be used on LH IIIC and SM ceramics.[13] However, it does not separate the main decorative elements and is usually drawn loosely with a thick brush. In the Protogeometric period, it was frequently used as a separator of circle sets in the shoulder decoration of medium and large-sized closed vessels of Attic style.[14] The vertical wavy lines on Group 1 amphorae can be easily distinguished from the Attic style by their careless drawing, composed of groups of three to five and by only separating sets of full circles.[15] The motif is also seen on a group of skyphos from Lefkandi, but these should be kept separate, as they are examples of open vessels.[16] These finds help show that the single or double vertical wavy line on Protogeometric closed vessels is typical of the Attic style.

The use of vertical wavy line(s) as a separator is found on clay-ground vessels in the EPG-MPG phases. On closed vessels such as No. 1, however, the painted lower body stands out as characteristic of the LPG period. In this period, the motif developed and gains sharp and tight curves drawn with a fine brush, called zigzag, and was combined with vertical lines. Due to this, the inconsistent Ayasuluk find should be considered a local production. In addition, the sets of concentric semicircles that overlap the bands delimiting the decoration from below reinforce the argument that it is a local production. For this reason, one should be cautious in drawing parallels with Attic finds for dating the Ayasuluk fragment.

Four similar finds from Miletus, three shoulder fragments from different vessels, and a squat oinochoe, on which vertical wavy lines are drawn with a thick brush, can be included in the analysis as comparanda for No. 1.[17] In its present condition, it is difficult to give a definite style phase for the first shoulder fragment from Miletus, which only shows a partial trace of pendant tongues and a double vertical wavy line. The other three examples, like No.1, show the inconsistency mentioned above in decoration compared to the Attic finds.

13 For some examples of vertical wavy line decoration on amphorae, stirrup jar and lekythoi from the LH IIIC and SM periods, see: Mountjoy 1999: Rhodos: DP2 1067-1068, fig. 437.236 (LH IIIC Middle); Kos: 1118-120, fig. 459. 156-157 (LH IIIC Middle); Argolis: 182-184, fig. 54.410, fig. 55.415 (LH IIIC Late); Phokis: DP2 793-794, fig. 307 (SM); Attica-Kerameikos-Pompeion and Salamis: 631-632, fig. 242.639-642 (SM); Attica-Kerameikos-Pompeion, 629-630, fig.241.629 (SM).

14 By the EPG the wavy lines become tightened and are canonically used as an ancillary motif separating sets of semicircles on lekythoi and full circles on amphorae and oinochoai. See: Kraiker and Kübler 1939: taf 13.494; taf 14.490; taf. 37; taf. 14.516-517; taf 29.522; taf. 65.551; Papadopoulos and Smithson 2017: 749.SB1. In MPG and LPG, wavy lines separate the sets of semicircles, the more tightly drawn curves are usually paired and in some examples combined with vertical line(s). By the end of the LPG, its use is discontinued on amphorae and oinochoai; traced only on lekythoi. See: Kraiker and Kübler 1939: taf. 55, 58.544; taf. 57.565; taf. 68.545; taf. 69.732; Kübler 1943: taf. 5.1069, 906, taf. 13.1070; Papadopoulos and Smithson 2017: 752.28.2, 44.4, 70.2 (MPG); Kübler 1943: taf. 5.2008; taf. 13.1077; taf. 17.2021; taf. 18.2097; taf 35.1172; Papadopoulos and Smithson 2017: 756.48.7, 52.11 (LPG).

15 Catling 1998: 154-166; Lemos 2002: 57; Aytaçlar 2004: 27-29, fig. 4.4.

16 Catling and Lemos 1990: pl. 14, nos.273-277.

17 Hommel 1959/1960: taf. 52.3 (PG shoulder fragment of closed vessel), taf. 53, nos. 1-2 (LPG squat oinochoe); von Graeve 1973/1974: taf. 17, no. 2 (East Greek EG shoulder fragment of an amphora); Niemeier and Niemeier 1997: taf. 215.26 (shoulder fragment of an amphora recovered with EG-SubG pieces). On the oinochoe of Miletus, as in the No. 1, sets of semicircles overlap the bands (Hommel 1959/1960: taf. 53.1). No. 1 differs from the Milesian examples in that the sets are drawn with a fine brush.

The squat oinochoe can be classified as LPG due to the painted lower body. The amphora shoulder fragment with a semicircle set central filling vertical line can be considered East Greek LPG-EG I when compared with the Camiros example.[18] The other shoulder fragment with semicircle sets was found with geometric fragments. As the Milesian finds demonstrate, unlike the Attic ones, the vertical wavy lines drawn with a thick brush were used on the East Greek imitation productions until the beginning of the Geometric period. It would, therefore, be reasonable to suggest a date of the LPG-EG I phase for No.1 from Ayasuluk and Miletus is the strongest candidate for the production site.[19]

No. 2 (Fig. 2) is a shoulder fragment, probably from a belly-handled amphora due to the broken handle below the shoulder zone. A set of concentric semicircles of nine arcs, leaning against a set of thick bands drawn between thin bands, are the main decorations on the shoulder. Similar to No. 1 discussed above, the concentric semicircles overhang the narrow band below. Two or three sets of circles must have been used on the front due to the size of the existing body.

The set of one thin-one thick-one thin band, inherited from LH IIIC and SM styles, became the characteristic band system of the Attic Protogeometric style and was frequently used on closed vessels and rarely on skyphoi until the transition from clay-ground to painted lower body in the LPG.[20] In Attica, belly-handled amphorae such as Ayasuluk No. 2, with a thick band between thin bands combined with the unfilled semicircle sets, are attested from MPG until the LPG, when the painted lower body became fashionable.[21] In East Greek productions, a similar decorative pattern is found on the LPG-EG I dated Camiros, Ialysos, and Kos belly-handled amphorae.[22] It is difficult to make a clear conclusion about No. 2 from Ayasuluk due to its current state of preservation. On the other hand, it should not be forgotten that concentric semicircular sets without motifs in their centres, placed at wide intervals as in the Ayasuluk find, were also encountered in the Cyclades EIA or the MG and even the LG periods.[23]

No. 3 (Fig. 3) comprises two fragments that do not join but reflect common clay and firing characteristics. Due to the full circle set on the belly, these fragments must belong to a belly-handled amphora. On the shoulder, there are two half (?) sets of concentric circles, each with at least 11 arcs, and on the upper part of the belly, at the shoulder transition, one thick and one thin painted band. One or two thin paint bands on the upper part may not be preserved. There is a circle set of at least 11 arcs with a maximum diameter of 10 cm on the belly. A band below the belly can be interpreted as a thick band or the top portion of a wholly painted lower body. The congruence of the number of circles, the aperture of the circles, and the thickness of the brushes on the shoulder and belly fragment support the assumption that both pieces belong to the same vessel.

Most of the belly-handled amphorae have an ancillary motif in the centre of the sets of circles and between the sets. For No. 3, due to its current condition, it can be tentatively hypothesized that

18 Jacopi 1932/1933: 204-205, fig. 244-245 (Bossolino 2018: tav 26.Sporadico.1); Coldstream 1968: 266.

19 An unpublished oinochoe from the Antalya Museum (Inv. no. 46.25.72) has similar decoration. However, unlike the Milesian examples, the foot is not a high conical type.

20 Neck-handled amphora/EPG: Kraiker and Kübler 1939: taf. 29.522; taf. 56.556; taf. 41.59; Kübler 1943: taf. 5.915. MPG: Kraiker and Kübler 1939: taf. 40.585, 557, 594, 558; taf. 57.572, 565; Kübler 1943: taf. 5.906, 1069; taf. 6.1093. LPG: Kraiker and Kübler 1939: taf. 57.573, 571; Kübler 1943: taf. 5.2008; taf. 6.2152. Belly-handled amphora/EPG: Kraiker and Kübler 1939: taf. 54.549; taf 55.589. MPG: taf. 46.857; taf. 55.544. LPG: Kraiker and Kübler 1939: taf. 43.586; Kübler 1943: taf. 11.904, 1098; Papadopoulos and Smithson 2017: 711 T6.1. Hydria/LPG: Kraiker and Kübler 1939: taf. 46.195. Oinochoe/EPG: Kraiker and Kübler 1939: taf. 46.584. MPG: Kübler 1943: taf. 68.545, LPG: Kübler 1943: taf. 13.2091. Skyphos/MPG: Kraiker and Kübler 1939: taf. 68.547; LPG: Kübler 1943: taf. 23.2102.

21 MPG: Kraiker and Kübler 1939: taf. 46.857, taf. 56.560; LPG: Kraiker and Kübler 1939: taf. 56.578; Kübler 1943: taf. 9.918, 1089; taf. 10.1073; taf. 11.902, 904, 1096.

22 Rhodos/Camiros: Jacopi 1932/1933: 119-120, figs. 133-134; 127-128, fig. 144-145 (Bossolino 2018: tav. 19.T.XXXVI(2).1, T.XXXVIII.(4).1; tav. 21.T.XLIII(9).1 (LPG/EG I). Rhodos/Ialysos: D'Acunto 2020: tav. VIII, no. 1. Kos: Morricone 1982: 258, fig. 539 (LPG/EG I). Iasos: Berti 2007: taf. 54.5 (LPG/EG I). Samos: Walter 1968: taf. 2.14 (10th century).

23 Papadopoulos and Smithson 2002: 157, fig. 7 (Athens -Syros?), 166, fig. 11 (Thera), 178, fig. 22 (Donousa). The Samian amphora, classified as LPG by Walter, has a similar implementation (Walter 1968: taf. 2.14).

it does not have any ancillary decorative motif. Although it is difficult to conclude definitively about this aspect of the vessel, it is still possible to offer an interpretation. The full circle set on the belly is seen in *Class I* examples of the Attic style, which Desborough defines as having a high neck and flaring lip.[24] The two MPG-LPG examples[25] in this group and the single MPG amphora[26] from the Lefkandi-Toumba cemetery, probably Attic imitations, are analogous to No. 3 in terms of clay surface decoration, the presence of half circle sets on the shoulder, the largest diameter of the circle set on the belly and the number of circles. However, it should be noted that the mentioned analogous examples partially differ from No. 3 by using at least one thin band under the sets of circles on the belly.

No. 4 (Fig. 4) is probably a shoulder fragment of a neck-handled amphora. This fragment is a clear candidate for local production with its characteristic fabric that includes gold mica and reddish brown paint.[27] The painted neck (?) has a reserved band at the bottom and a paint band at the shoulder transition. The shoulder decoration shows two sets of concentric circles of eight three-quarter arcs and pendant tongues.

Examples of medium and large-sized closed vessels with a full circle set accompanied by pendant tongue groups are evident in the EPG-LPG at Athens and Lefkandi in the MPG and later.[28] Kerschner suggested that No. 4 would be EPG by paralleling it with the earlier examples.[29] However, No. 4 should be distinguished from the examples originating in Greece due to several details, such as the preference for a set of three-quarter circles instead of full circles and short pendant tongues instead of long ones. With the help of the finds from Kos, Camiros, Pedasa, Iasos, and Miletus, it is seen that the three-quarter circle set is an East Greek LPG-EG I feature.[30] In addition, the short hanging tongues resembling brushstrokes are known to be a common motif belonging to the repertoire of Dodekanessos and the Cyclades, especially Kos, where they were used throughout the LPG-LG.[31] Based on these distinctive stylistic characteristics, No. 4 seems to have been decorated in the Eastern Greek LPG-EG I style rather than the Greek EPG-MPG style.

No. 5 (Fig. 5) is a lip and body fragment from a vessel that imitates Attic Type I skyphoi, one of the most common forms of the PG period. It has a paint band that does not cover the entire lip, a thin paint band at the transition to the body, a horizontal zigzag, and a circle set in the handle zone.[32] While Attic forms end with a flat lip, No. 5 ends with a gently out-rounded lip. The semicircle set cutting the horizontal wavy line by resting on the lip instead of being centred on

24 Desborough 1952: 23-26. One example breaks this generalization due to its hybrid appearance. See: Kübler 1943: taf. 9.918.

25 MPG: Kraiker and Kübler 1939: taf. 55.561. Clay-ground, on the belly four sets of 12 circles each with 9 cm average diameter; LPG: Kübler 1943: taf. 9.1089 clay ground, on the belly four sets of 14 circles each with 10 cm diameter.

26 Popham and Lemos 1996: pl. 56.1 (Lemos 2002: pl. 25.1). Three sets of 13 semicircles on the shoulder, the bant group of thin-one thick-one thin, three sets of 15 circles each with 12 cm diameter on the belly, three thin bands, and painted lower body with a reserved band, unlike the Attic examples.

27 See: “Local Ware” title.

28 Kraiker and Kübler 1943: taf. 29.522 (SM/EPG belly-handled amphora); taf. 54.563 (EPG neck-handled amphora); taf. 68.545 (MPG oinochoe); Catling and Lemos 1990: pls. 29, 65-66 nos. 469-472, 477-480 (late MPG/LPG hydria)

29 Kerschner 2006: 367, abb. 8.

30 Coldstream 1968: 266. Morricone 1982: 168, fig. 301 (Kos); Jacopi 1932/1933: 204-205, figs. 244-245 (Bossolino 2018: tav 26.Sporadico.1) (Rhodos/Camiros); Diler 2016, fig. 21 (Pedesa); Levi 1963: 563, fig. 99; Berti 2007: taf. 54.6 (Iasos); Weickert 1957: pl. 36.3 (Miletus)

31 Coldstream 1968: 267; Kos: Morricone 1982: 52, fig.7 (LPG-EG); 76, fig. 61 (EG); 95-97, figs. 103-104, 108; 104, fig. 126 (MG); 155, fig. 266; 198-199, fig. 379, 383-385; 202, figs. 392-393; 208, fig. 405; 224, fig. 449; 284, figs. 602-603 (MG-LG); Rhodos: Jacopi 1932/1933: 204-205, figs. 244-245 (EG) (Bossolino 2018: tav 26.Sporadico.1); Miletus: Hommel 1959/1960: 39, abb. 1 (MG); Dirmil: Özgünel2006: lev. 2c (LPG) (Boysal 1969: pl. 37.3a-b, Bass 1963: pl. 83.15; Bulba 2010, pl. 23.Kr1); Cyclades: Papadopoulos and Smithson 2002: 158, fig. 7 (Atina -Syros?); 166, fig. 11 (Thera).

32 Desborough 1952: 80-82; Lemos 2002: 36-39; Papadopoulos and Smithson 2017: 787-791. Tip I: Plain or slightly outward curved lip, spherical body narrowing towards the base, horizontal handles with round section, conical or slightly flaring high foot. Lip with paint and reserved band respectively, a running horizontal zigzag below. Main body motive is three sets of concentric circles, below this, usually, three thin bands of paint, and the rest of the body and foot painted, the paint normally finishing with a reserved band.

the handle zone further indicates that No. 5 is an imitation product.

The earliest examples of this type of skyphos with two hand-drawn sets of circles date back to the transition phase to the PG period. The Type I examples, in which the style reaches its standard appearance with a horizontal wavy line below the lip and three sets of compass-drawn circles, first emerged during the MPG, became widespread during the LPG, and ended at the beginning of the EG period.[33] Since the distribution of this style outside of Attica begins in the LPG, except for a few examples from Lefkandi-Heroon dated to the end of the MPG, No.5 must not be earlier than the LPG.[34] Imports and imitations around Ephesus were found at Claros, Miletus, Samos, Naxos, Keos, Amargos, Teichiussa, and near Panaztepe.[35] Two imitations from the period of the Turkish excavations at Claros and one from near Panaztepe reflect the closest parallels to No. 5, especially with their out-rounded lips.

No. 6 (Fig. 6) is an Attic Type I skyphos imitation with three sets of five concentric circles in the handle zone and one paint-one reserved-one paint band motif on the lip. It can be easily distinguished from the originals due to the low conical foot, the absence of a horizontal wavy line below the lip, and the reduced number of circles. With these features, it resembles a type common in East Dorian centres and Miletus,[36] which seems closer to Attic Type 1 rather than the Attic imitation skyphoi from Euboia with a ring base and two sets of larger concentric circles that were disproportionately executed.[37]

33 Lemos 2002: 39; Kraiker and Kübler 1943 : taf. 48.518 (EPG); taf. 30.525 (EPG); taf. 68.547 (MPG); taf. 48.608 (MPG/LPG), Kübler 1943: taf. 23.2030, 2032 (end of the LPG); Papadopoulos and Smithson 2017: 787-788.T48.1, T55.2 (LPG/EG I).

34 For Lefkandi late MPG/LPG import examples, see: Catling and Lemos 1990: 87-88, pl. 43.882-884, 886. For the distribution of the other imported examples, see: Papadopoulos and Smithson 2017: 790, the footnote 565: Aigina, Oropos, Corinth, Argolis (Argos, Asine, Tiryns), Delphoi, Crete, Cyclades (Naxsos, Delos, Paros?, Amorgos, Keos), Claros, Samos.

35 Claros: Delattre et al. 2003: 22, 29.1B.13, pl. 4.1 (import); Zunal 2014a: 160.15 (Zunal 2014b: 115, no.4); 161.16; Miletus: Krumme 2015: 584-585, figs. 4-5; Samos: Tsakos 2007: 190, pl. 23.1 (import); Zapheiropoulou 1983: 123-124, fig. 8 (import); Keos: Caskey 1964, 333, pl. 63.a. K.2047 (import); Amorgos: Blanas 2006: 234-235, no. 56, 60 (import); İren 2008: 32, figs. 2.3.5, 2.5.3; Voigtländer 2004: pl. 158.78 (Teichiussa); Samos: Tsakos 2007: 190, taf. 23.1 (Tsakos 2011: 339, 342, no.1).

36 Miletus: Weickert 1957: taf. 36.1 (PG); 37.2 (For EG offer, see: Coldstream 1968: 266, footnote 8); Hommel 1959/1960: taf. 55.3-4, 6 (PG); Kleine 1979: taf. 32.5 (LG); Von Graeve 1973/1974: taf. 17.4 (LG); 22.40 (SubG), von Graeve 1975: 41, 50, taf. 9.40 (SubG) (Krumme 2015: 588.12); von Graeve 1978: 34-35, taf. 12 (LG); Niemeier and Niemeier 1997: 215, abb. 27 (top mid) (with LG pieces); Kerschner 1999: 19-20, fig. 9.21 (SubG); Krumme 2015: 583, fig. 1 (PG); fig. 9-10, 12 (LG); fig. 11 (SubG?); Dirmil: Özgünel 2006: lev. 3 (PG) (Bass 1963: pl. 84.180; Boysal1969: pl. 37.1-2; Bulba 2010: pl. 41.SK1-2); Rhodos/Camiros: Jacopi 1932/1933: 130, fig. 49 (EG) (Bossolino 2018: tav 22.T.XLV(11).5); Rhodos/Ialysos: Pharmakıdou 2004: 167, fig. 3β (EG); 172 fig. 5ε (EG) (D'Acunto 2020 681-684, 877); Rhodos/Lindos: Sørensen and Pentz 1992: 28, fig. 9.A6; 29, fig. 10.A12; Kos: Morricone 1982: 125, fig. 188 (LG? tomb 14); 156, fig. 271 (LG? tomb 19); 170, fig. 306 (EG tomb 22); 181, fig. 333 (LG ? tomb 23); 276, fig. 579-580 (LG ? tomb 64); 315, fig. 676 (LG? Pizzoli Tomb VI); 323, fig. 697 (EG Pizzoli Tomb VIII); 392, fig. 871 (PG-G tomb B); Skerlou 2001: 267, fig. 17.3 (MG-LG Cremation E); 277, fig. 38.1; Bosnakis 2001: 226, fig. 8.4 (EG Vasileíou Cremation 1).

37 Euboean potters, in competition with Attic potters, adapted and imitated Attic Type I skyphos. These skyphoi are widely distributed in the Aegean area from the end of the late MPG/early LPG to the LG II. Standard examples and their large-sized versions display high and low lip types that are parallel to the PSC skyphoi. The rarity of the second band below the lip and the absence of a horizontal zigzag are the most distinctive features. Sets of concentric circles, designed in triplicate as well as the common double are clumsily placed on the decoration zone; the sets are placed close to each other and the borders. They are characterized by a ring foot; rarely a high foot that flares outwards is also seen. See: Lemos 2002: 36-39; Catling and Lemos 1990: 21-22, pl. 5.120 (h); pl. 11.48; pl. 14; pl. 25.392-404 (late MPG/LPG); Popham et al. 1980: 298-299, fig. 8f, pl. 14.33-35; pl. 24.605, 607-608, 614-618; pl. 276.91; Popham and Lemos 1996: pl. 96.c (LPG); Popham et al. 1980: 299-300, pl. 15.95-97, 104-107, 111-113, 116-118, 124-128; pl. 18.297-306, 308-312; pl. 25.664-669, 671-681; pl. 30.15; pl. 31.11; Popham and Lemos 1996: pl. 99.79A3 (SPG); Old Smyrna: Özgünel 2003: pl. 2.1-3; pl. 3.1, 3, 6; pl. 4.4; pl. 5.1-2 (LPG-SPG); Klazomenai: Ersoy 2004: 44, fig. 1.a-b (LPG-SPG); 47, fig. 4.c, 5.a (LG); Erythrai: Akalın Orbay 2021; Samos: Walter 1968: taf. 1.4-6 (PG); Tsakos 2011: 340, 342, fig. 3.Π.1825 (PG); Claros: Jolıvet and Robert 2003: 110-111, figs. 30.12; 31.1; 117, figs. 2-3, 5; Zunal 2014a: 27-30, nos.17-19 (MPG-LPG) (Zunal 2014b, 115, nos. 5-6); Ephesus: Bammer 1990: 142, pl. 15.e (PG) (= Kerschner 2003a: taf. 40.4); Miletus: Hommel 1959/1960: taf. 55.5 (Krumme 2015: 584, fig. 6) (MPG); Krumme 2015: 584, figs. 6-7 (O-LPG); Pedesa: Diler 2016: 460, fig. 23 (LPG); Teichiussa:

The finds vary chronologically between PG-SubG, but it seems questionable that the examples with Protogeometric appearance survived until the 7th century BC without major changes. At Miletus, where EIA levels are difficult to distinguish, the finds from the LG-SubG burnt layers do not seem to differ from the Protogeometric predecessors of the site.[38] In Kos, on the other hand, the situation seems more parseable. The skyphoi recovered from the EG period graves, such as Vasileíou Cremation No. 1, Serraglio Tomb B and 22, and Pizzoli Tomb VIII, resemble the LG examples from Miletus. This type of skyphoi was also found in mixed context in Serraglio Tombs 14, 19, and 23, with MPG-LPG high-footed and SPG I-II/EG flat-based cups and oinochoai with a reserved band group on the body, which are likely imports.[39] The skyphoi from single context LG-SubG tombs of Serraglio 43, 64, and the Pizzoli VI are remarkable for careless design and reduced number of circles drawn with a thick brush. As a result, it is difficult to propose a precise date for No. 6 since the lifespan of these skyphoi in the East Greek region is much longer than in Attica. Considering the Protogeometric appearance of it, however, a date of LPG-EG II seems appropriate for No. 6, especially with the help of Koan skyphoi from mixed contexts containing Protogeometric finds and those recovered from EG graves.

No. 7 (Fig. 7) is another East Greek Attic imitation of skyphos. In addition to the review made for No. 6, it can be stated safely that this piece is a local production based on its characteristic fabric with gold mica and reddish brown paint.

No. 8 (Fig. 8) is a large PSC skyphos fragment with a carinated and everted high lip decorated with two sets of pendant semicircles.[40] The central panel, consisting of a cross-hatched lozenge chain between the vertical lines, is different for this type of skyphos. According to Desborough's classification, which is based on the development of the lip from high to low, No. 8 is compatible with the medium class dated into the SPG I-III range, with its lip height of 1.35 cm.[41] According to Kearsley's classification based on form, lip, decoration, and fabric, No. 8 can be considered within Type 2, which she dated to the period between 900-825/800 (first half of SPG I-SPG III),[42] and which includes examples mostly from Lefkandi but also Thessaly and the northern Aegean. It is possible to narrow this wide date range for No.8. Desborough states that the carinated lip becomes popular in SPG I, contrary to its less occurrence during the LPG period, and the central panel between the sets of circles is mainly, if not entirely, an LPG feature.[43] In addition, the lozenge between vertical lines is present at the beginning of the LPG and the EG as an ancillary element separating concentric circles not only in skyphoi but also in almost every open and closed form. It is, therefore, reasonable to suggest the LPG-SPG I date range for No. 8 due to its distinctive stylistic features. Another point is that the centre panel dividing sets of circles is not a usual trait of decoration for the PSC skyphoi. No. 8 is the second such example after a single specimen from Lefkandi.[44] This specific feature

Voigtländer 2004: taf. 159.79; Rhodos/Lindos: Blinkenberg 1931: pl. 33.821; Sørensen and Pentz 1992: 28, fig. 9.A5; 30, fig. 11.A15; 38, fig. 17.A49.

38 von Graeve 1978: 34-35; Niemeier and Niemeier 1997: 215, fig. 26 (The PG shoulder fragment of an amphora with sets of semicircles separated by a double wavy line was recovered from the same trench with the LG-SubG fragments.); Krumme 2015: 586.

39 Morricone 1982: 105, fig. 127; 126, fig. 189 (Tomb 14, SPG I-II oinochoe with reserved bands and the late MPG/LPG high-footed cup); 151-152, figs. 259-261, (Tomb 19, SPG I-II oinochai with reserved bands); 183, figs. 339-340; 185, fig. 348 (Tomb 23, EG I-II flat-based cups and the LPG-EG I oinochoe with sets of semicircles).

40 PSC skyphoi are characterized by two sets of pendant semicircles between the handles, a high carinated and everted lip (after LPG), and a ring base. With imports and imitations from MPG to LG II, they are widely distributed in the Aegean and Mediterranean. The center of production is Euboia and its ceramic koine, especially Lefkandi. For description, chronology and distribution, see: Desborough 1952: 180-194; Coldstream 1968: 151-157; Popham et al. 1980: 299-301; Catling and Lemos 1990: 22-24, 310-321; Lemos 2002: 44-46; Kearsley 1989. During the LG period, there are almost no examples in Euboea and Koine, while local productions up to LG II are observed in the Eastern Mediterranean. See: Coldstream 1968: 310-321.

41 Desborough, in his classification of these finds recovered from the Lefkandi levels, suggested that 1.5 cm and above as high (LPG), 1-1.4 cm as medium (SPG I-III), and 1 cm and less as short (SPG III). See: Popham et al. 1980: 300-301; Lemos 2002: 45.

42 Kearsley 1989: 80-82 (fabric); 87-93 (shape and distribution); 126-128 (chronology).

43 Popham et al. 1980: 300-301.

44 Popham et al. 1980: 299, pl. 13.29-30.

is essential as it allows for an earlier dating of the fragment to the end of the MPG, when experimental work was carried out at Lefkandi.[45] It also leads us to conclude that the fragment is of Euboean manufacture. According to Irene Lemos' assessment, the piece shows the characteristic production features of Euboea.[46] If the piece is imported, it would be one of the earliest examples of the form with a late MPG/LPG date. If not, the LPG-SPG I date is reasonable.

PSC skyphoi, characterized as a product from Euboea and its ceramic koine, are widely distributed in the Aegean and Mediterranean as imports and imitations.[47] Kerschner listed the imported and imitated PSC skyphoi of the East Greek from the Troad to the East Dorian region and also gave a detailed report of nine examples found in the Artemision and at Ayasuluk Hill.[48] Although no Euboean production is found among these skyphoi, two PG and one LG fragments of different forms show a direct connection with Ephesus and Euboea through fabric analysis.[49] In addition, four local finds, two from Artemision and two from Ayasuluk, should be mentioned as they prove the local PSC skyphos production in Ephesus. Finally, the possibility of No. 8 being an imported fragment due to its fabric should also be noted here.

No. 9 (Fig. 9) is preserved as two fragments from different parts of a crater. The decorative elements are a set of 13 full concentric circles and a cross-hatched lozenge chain between vertical lines. Separating concentric circles with chains of diamonds, triangles, and checkerboards between vertical lines is a feature of the LPG period but is also observed immediately afterward. The examples, however, found in the Heroon of Lefkandi keep open the possibility that this combination was also preferred in the transition to LPG.[50] In the Attic style, except for a few examples, the inside of the lozenge or triangle is wholly painted,[51] whereas cross-hatched is preferred in Euboea and its ceramic koine.[52] In addition to the stylistic similarities, No. 9, with its reddish refined fabric with white grit and very little mica, is probably an imported example of a crater decorated in the Euboean LPG-SPG I style.[53] Parallel examples with painted, cross-hatched, and reserved lozenge chains in vertical lines separating sets of concentric circles have been found at the East Greek region centres of Bayraklı, Miletus, Claros, Dirmil, and Lindos.[54]

No. 10 (Fig. 10) is a body fragment of a closed vessel decorated with a fringed set of concentric circles filled with hatched hourglass or cross motif. Decorating the outlines with fringes comes from Mycenaean pottery decoration, and ceased

45 Previously, it was thought that the first examples were from the LPG period (Popham et al. 1980: 300). It was later discovered that experimental works were carried out earlier on that specific skyphoi as proved by vessels originating from a deposit from the excavations at the necropolis of Lefkandi-Toumba. See: Catling and Lemos 1990: 22, pl. 12, pls. 48-49.155-159; Lemos 2002: 44.

46 Irene Lemos stated that the fabric of the fragment with its reddish color and white grit inclusion resembles Euboean clay. She also pointed out whether the fragment may be MPG/LPG. I thank Irene Lemos for these informations.

47 See: Footnote 28.

48 Kerschner 2014: 109-140; for the other nine example from Ephesus see: 110-117, figs. 2-10; for East Greek examples see: 119-125: Troia (5), Larisa am Hermos (1), Lesbos-Methyma (1), Phokaia (2), Smyrna (4), Klazomenai (15), Chios (6), Miletus (1), Samos (1), Kos (1), Rhodos/Ialysos (1), Rhodos/Vati (2), Sardeis (2), Lesbos/Antissa, Didyma and suspicious pieces from Iasos. For addition to the this list, two pieces from Anaia, see: Türkan 2006, 45-46, lev. 5.18; lev. 6.19.

49 Kerschner 2014: 112-117. Of the four different clay groups identified, "W" (figs. 3-4, 6, 8) is most likely local; "g" (fig. 7) is localized to Kyme or Larisa (Southern Aiolis). "Ul51" (fig. 2) and "Ul52" (fig. 5) have not yet been identified, but the vicinity of Ephesus is a suggestion. For the findings of the Euboea clay group see: Kerschner 2014: 118, figs. 11-13.

50 Catling and Lemos 1990: 28-31.

51 Kraiker and Kübler 1943: taf. 41.568; taf. 49.606; taf. 56.576; Kübler 1943: taf. 10.2027; taf. 13.2091 (LPG); Papadopoulos 2015: 14-23, figs. 1-10 (LPG, "Charitonidis Class" skyphoi, appear as a subgroup of Attic Type II)

52 Euboea/Lefkandi: Popham et al. 1980: pl. 16.156 (pl. 32.1), 163 (SPG I-II); pl. 24.585 (SPG); pl. 26.710, 714 (PG-SPG); pl. 279.1064, 1070; Catling and Lemos 1990: pl. 22.366, 368-369; pl. 24.384-388; pl. 54.327; pl. 59.403; pl. 81.4 (late MPG/LPG); Theselya/Marmariani: Heurtley and Skeat 1930-1931: pl. 10.142-143; pl. 11.144-145, 148 (LPG-EG).

53 I thank Irene Lemos for her comments about the pieces.

54 Bayraklı: Özgünel 2003: taf. 2.9 (LPG); taf. 9.1(EG); Claros: Zunal 2014a: 34, 168.23 (MPG-LPG); Miletus: von Graeve 1973/1974: taf. 17.1 (LPG-EG I), Dirmil: Bass 1963: pl. 83.15 (LPG-EG) (Boysal1969: taf. 37.3; Özgünel2006: taf. 2.b; Bulba 2010, taf. 23.Kr1).

in Attica and the Northern Peloponnesus with the Protogeometric period but continued in Euboea and its ceramic koine. Of these, two fragments from the Lefkandi Heroon are close to No. 10 regarding the filling, fringe, and number of circles.[55] Similar examples span a wide date range, from the end of the MPG to the SPG. Although the popularity of ancillaries, such as the hatched lozenge and an hourglass in the LPG, allows for a partial limiting of the date range, it would be reasonable to cautiously suggest a Euboean origin for No. 10 with a date at late MPG–SPG. The finds of different forms with fringed circles were found in East Greek centres such as Anaia, Miletus, and Klazomenai.[56]

No. 11.1-3 (Fig. 11.1-3) are body fragments of craters and closed vessels on which vertical and wavy line patterns between concentric circles are applied. The earliest examples of this practice are found on hand-drawn semicircles or crescents in Late Minoan and Mycenaean styles.[57] In Greece, the motif continued to exist on kalathos bases, pyxis lids, and flasks, mainly in the Attic Protogeometric and Geometric styles, with different fillings, especially zigzag and gear patterns.[58] In Crete, however, where there are close analogies for No. 11, the practice is frequently seen on the shoulders and bodies of open and closed vessels, in addition to plates, lids, and flasks.[59] In addition to the island-specific motif known as the "sunburst," bars, zigzags, dots, and wavy, vertical, and diagonal lines are also preferred as filling patterns. In the progress of the practice, based on the examples in the Cretan LPG-Orientalizing style, the number of circles decreased, and dots were frequently preferred as fillings. The fact that sets of four or five circles with fillings between them are also seen in the Cycladic and East Greek LG-SubG styles points to the practice spreading from Crete to the surrounding area over time.[60]

The similar examples to No. 11, dated to the Cretan PGB-EG periods, correspond to a dateline of 840-790 BC (Attic MG I - early MG II), since the island follows the Attic chronology with a lag of 75-90 years.[61] The same date range may also be suggested for the Ayasuluk pieces.

No. 12 (Fig. 12) with a height of approximately 16 cm, appears to have been from a single-handled shape, thanks to similar examples.[62] Among handmade burnished pottery, jugs are the most common and longest-used form with such traits. In the development process of the form, as seen in No. 12, the wide concave neck, the globular body, and the smooth transition between these two parts of the vessel stand out as characteristic elements

55 Popham et al. 1980: pl. 16.156, 163, 166 (SPG I-II); pl. 19.354 (LPG-SPG III); pl. 26.720 (LPG-SPG III); pl. 167.T1.1 (SPG I); pl. 191.4.1 (LPG-SPG I); pl. 279.1064 (LPG-SPG III). For Late MPG/LPG examples from Heroon, see: Catling and Lemos 1990: pl. 11.142; pl. 24.389-91; pl. 34.572 (close parallel), 573-5; pl. 61.450; pl. 81.(b).11 (close parallel); pl. 17-188, pl. 54-56; Sıpsie-Eschbach 1991: taf. 3.10.56/24 (LPG-SPG III); taf. 5.56/60 (LPG).

56 For Anaia, see: Türkan 2006: lev. 2.7 (LPG). For Miletus, see: Weickert 1957: taf. 36.4 (mid below) (LPG); von Graeve 1973/74: taf. 17.1 (LPG-EG); For Klazomenai, see: Bakır et al. 2004: 103, res. 4 (SM-EPG); Ersoy and Koparal 2021 (SM-EPG). For Smyrna, see: Özgünel 1998: taf. 9.1 (EG).

57 For some examples, see: Evans 1906: 159-161, fig. 144 (LM II); Mountjoy 1999: 422, fig. 148.77 (Achaea LH IIIC Early); 615, fig. 231.560 (Attika LH IIIC Late), Kraiker and Kübler 1939: taf 39 (TRS?).

58 For some examples, see: Kraiker and Kübler 1943: taf. 71.577, 579; taf. 72.414, 615; Kübler 1943: taf. 25.2034; taf. 36 (top left); Papadopoulos and Smithson 2017: 74.T10-2 (LPG-EG); Smithson 1961: pl. 26.38-9; pl. 28.35; Smithson 1974: pl. 69.d, g; pl. 71.m; Papadopoulos and Smithson 2017: 143.T15-15-6; 192.T18-6, 9 (MG). For the single example seen on a open vessel, see: Kraiker and Kübler 1939: taf. 67.597 (EPG)

59 For similar examples, see: Coldstream 1972: 81, pl. 20.12 (fragment of a pithos or an amphora, contemporary with Attic MG II); Coldstream and Catling 1996: pl. 215.54 (PGB belly crater); Johnston 2005: 319 fig. 5.28 (PGB-EG fragment of an amphora). For other examples, see: Hall 1914: 107, fig. 61; 169, fig.102; Coldstream and Catling 1996: fig.100.44 (PGB); Coldstream and Catling 1996: pl. 50.4-5 (EG); pl. 137.55 (PGB); Callaghan et al. 1996: 229 pl. 4.12.166 (PGB); 231 pl. 4.45.180 (LPG-PGB); Johnston 2005: 316, fig. 3.16 (PGB); 320, fig. 6.35 (LPG-PGB); 329, fig. 10.74 (M-LG); Brock 1957: pl. 117-118 (EO) (dates are according to the Cretan Chronology).

60 Rhodos/Camiros: Jacopi 1932/1933: 197-8 figs. 236-8 (Bossolino 2018: tav 26.T.LXXXII.(2).7) (MG II-LG I); Morricone 1982: 357-8 figs. 774-5 (LG I); Delos: Dugas and Rhomaıos 1934: pl. XVIII (LG I); Miletus: Niemeier and Niemeier 1997: 215, abb. 27; Weickert 1957: taf. 39.2 (LG-SubG). Wells suggested the Cyclades for the amphora fragment with dot-filled pattern from Asine. See: Wells 1983, 37, fig. 13.

61 Coldstream et al. 2001: 22, PGB: 840–810 BC, EG: 810–790 BC.

62 For information in detail on handmade burnished ware (HBW), see: Lemos 2002: 84-87, 97; Reber 1991: 20-57; Lis 2009: 152-163.

of the Protogeometric profile.[63] Protogeometric examples with a similar profile have been found in Athens, Asine, Lefkandi, Kalapodi, Mykenai, and Naxos.[64] Although the tradition of handmade vessels is widespread in the East Greek region, the single-handled jug form with the profile of No.12 is known from only a few examples. A parallel from Ephesus Artemision has been published, but Kerschner stated that many ceramics differing from the Greek examples in terms of production technique were recovered, and the use of local clay in their production was detected by archaeometric clay analysis.[65] In connection to this, two Protogeometric examples from Troia, where local clay was depended, differ in form from the Greek examples.[66] Finally, it is difficult to say anything definitive about an example recovered from a building from Klazomenai, dated to the first half of the 11th century BC, due to its current state of preservation.[67]

Handmade vessels were previously associated with the destruction of Mycenaean palaces and the arrival of the Dorians. The discovery, however, of pre-destruction finds at Tiryns and Mykenai and the variety of clays and forms in different centres weakened the idea that these ceramics were associated with the newcomers and derived from a single origin.[68] Determining the use of local clay in producing handmade vessels from Troia and Ephesus through chemical analysis is important as it contributes to this discussion. The example of Ephesus Artemision should also be mentioned here as it shows that these forms, which we encounter in domestic areas and graves, were also left as offerings in sacred places.

No. 13 (Fig. 13) is a local production with reddish brown paint application on yellowish fabric containing considerable gold mica.[69] The general form is characterized by a flaring and raised lip, a slightly concave high neck, an ovoid body, and a ring base. Elliptical handles emerge from the centre of the neck joint to the shoulder. There are groups of four vertical lines on the outer side of the lip. The metope on the neck is decorated with

63 Handmade jugs first appear in LH IIIB/C. There is no standardized form until the PG period; it becomes widespread with the PG period and reaches a standardized appearance with a wide mouth and neck, globular body, flat or round base and strap handle from belly to rim. In the Geometric period, the height decreases, the transition from neck to body is emphasized, and the neck and handle shorten. With the LG, the form lengthens again and the proportion improves, the lip becomes prominent and flares out, the wall becomes thinner, and fingerprints, knobs, and incisions appear on the surface. See: Reber 1991, 20-57, abb. 10; Lemos 2002: 85-86; Strack 2007: 235; Papadopoulos and Smithson 2017: 881-887.

64 Athens: Kraiker and Kübler 1939: taf. 75.541 (EPG), 754, 768-769 (EPG-MPG), 548 (MPG); Kübler 1943: taf. 28.907, 1184, 1101, 1090, 1078 (LPG); Papadopoulos and Smithson 2017: 885.T28-4 (EPG-MPG), T53-2, T 15.1 (LPG). Asine: Wells 1983: 73, 217, no. 420; 99, 253 nos. 713-714; 275, nos. 917-918. Lefkandi: Catling and Lemos 1990: 59-61, pls. 41, 76.824; LPG: 343, fig. 20.A (MPG-LPG); Popham et al. 1980: 343, fig. 20 B-C, pl. 105.45.5; pl. 168.2.4; pl. 184.28.2; pl. 99.21.1 (SPG II-III). Apart from these, there are also fragments of LPG examples from the settlement. See. Popham et al. 1980: 31, 36, 42, 343. Kalapodi: Felsch 1997: 77, tafs. 20, 45.424. Mykenai: Desborough 1956: 129, pl. 34.a.55-202. Naxos: Lambrinoudakis and Zaphiropoulou 1984: 77, fig.110.

65 Forstenpointner et al. 2008: 34, 36, 44, fig. 14.

66 Aslan et al. 2014: 298-299, fig. 21.

67 Ersoy and Koparal 2021.

68 For those that relate the existence of the pottery to migration, see: Rutter 1975: 17-32; French and Rutter 1977: 111-112; Dietler 2010: 186; Jung 2011, 69–72; Yasur-Landau 2011: 250–253. For those who associate technological change due to economic factors see: Walberg 1976: 186-187; Sandars 1983: 43-68; Strack 2007: 115-152, 229-235; Lis 2009: 159–163. Reber handled these vessels into two groups: light-colored, representing the Argolis and Corinthian regions, and dark-colored, representing Attica. However, the Asine examples have a dark clay and it was later noted that the Athenian ones did not have standardized clay. See: Reber 1991; Wells 1983: 73; Papadopoulos and Smithson 2017: 881-882. For local and imported examples from Lefkandi determined by clay analysis, see: Popham et al. 1980: 342; Jones 1986: 474, 629-631; Catling and Lemos 1990: 60; Lemos 2002: 97. In Delphi, in the same context, a different clay example was found together with the "Leather Ware" typical of Central Greece. By the clay analysis, it was understood that there is a local clay with "Leather Ware" at Kalapodi. See: Felsch 1997: 77; Reber 1991: 45, pl. 8.1; pl. 25.2-3. In Thessaly and Macedonia, the jugs with a cutaway neck, which are typical of these regions, do not have a common clay pattern. See: Popham et al. 1982: 235; Heurtley and Skeat 1930/1931: 13. They are categorized as kitchen pottery, but it is found both in settlements and in graves. Anthropological studies have determined that they are found only in the graves of women and children in Athens, and it is generally accepted that the graves containing these vessels belong to female individuals. See: Papadopoulos and Smithson 2017: 882-884.

69 See: "Local Ware" title. On the neck panel, the wavy line instead of the zigzag also indicates local production.

quadruple horizontal bands at the top and bottom and quadruple horizontal wavy line groups in the centre. There are four sets of quadruple reserved band groups on the body. Thick vertical bands are used on the outer surface of the handles.

The combination of multiple zigzags or meanders bordered by horizontal bands within the metope on the neck and reserved bands on the body is used on amphorae and oinochoai from EG II in Attica to MG II when the window panel on the shoulder was introduced.[70] A similar pattern is seen at Korinth and Argolis, where the Attic influence is strongly felt during the EG-MG.[71]

No.13 can be assigned to the EG II-MG II with the help of its decoration and its elegant ovoid body, and its counterparts in these three styles. However, introducing the metope on the shoulder at the beginning of MG II allows this date range to be narrowed. The differences between the Attic and the Korinth/Argolis styles also allow us to comment securely on the vase. On Attic oinochoai, using multiple zigzag motifs with ancillaries on the neck is common, and only band groups are seen on the body. On amphorae, in contrast, the meander with ancillaries dominates the neck decoration, and unlike oinochoai, reserved band groups are applied after the extra decorative zone between the bands on the shoulder. At Argolis, both forms show multiple zigzags and meander on the neck without seconder motifs. Only band groups are observed on the body without an extra decorative zone. At Korinth, the pattern of both forms is the same; multiple zigzags dominate the neck panel applied without ancillaries and the body shows only band groups. According to these stylistic schemes, No. 13 seems to be more in line with the EG II-MG I tradition of Korinth and Argolis rather than Attica, with the combination of multiple zigzags (like wavy lines) on the neck and band groups on the body without secondary motifs.

It should be remembered that the islands of Korinth, Argolis, and the Cyclades followed the developments and fashions in Attic geometric ceramics, whereas the East Greek world remained apart from these developments until approximately the end of the MG. It is very difficult to speak of a real East Greek EG-MG ceramic tradition or to draw parallels with the Greek mainland. The fact that most of the finds from Iasos had originated from LG grave contexts is meaningful in this respect. In other words, the influences from Attica in the late LPG - early EG continued within the East Greek tradition, almost unchanged, until the early LG. Due to this, it would be appropriate to approach the chronological framework proposed above with caution.

In and around the East Greek region, a similar

70 Coldstream 1968: 14-15, 17-20, 22-25. Oinochoe/EG II: Kübler 1954: taf. 70.2137; taf. 71.927, 2139; Kahane 1940: pl. 17.1-2; Agora: Well C 18:6 no. P 18616; Sotiriadis 1939: 28, fig. 1a; Stavropoullos 1965: pl. 42.a. EG II – MG I: Kübler 1954: taf. 72.2148-9; taf. 73.2145 (Coldstream 1968: pl. 3.n); taf. 74.1253 (Coldstream 1968: pl. 2.d). MG I: Kübler 1954, taf. 72.868, 870 (Coldstream 1968: pl. 3.c); taf. 73.862 (MG I - II); Kahane 1940: pl. 17.3; Papadopoulos and Smithson 2017: 731.T20-1, T20-5; Mylonas 1955: 74, pl. 22.a; Verdelis and Mussche 1965: pl. 106.d; Sotiriadis 1939, 28 fig. 1.d; McDonald 1961: pl. 63.a, c; Theocharis 1951: 120, fig. 38; Vanderpool 1957: pl. 84.8 (left). MG II: Kübler 1954: taf. 71.281; taf. 73.300 (Coldstream 1968: pl. 5.a), 379, taf. 74.880 (MG II - LG I); taf. 75.298; Kahane 1940, pl. 17.4; Agora: Well D 12:3 no. P 8213; Agora: Well 6:2 no. 6409. Amphora/EG II: Kübler 1954: taf. 26.154, 655; taf. 27.925, 2136; Sotiriadis 1939: 28, fig. 1a. EG II-MG I: Kübler 1954: taf. 28.1249, 2140. MG I: Kübler 1954: taf. 29.806, 884, 2155; taf. 30.859 (MG I – II); Kahane 1940: pl. 19.1-2; Vanderpool 1957: pl. 84.8; McDonald 1961: pl. 63.a-b. MG II: taf. 30.242, 236; taf. 31.255, 272, 277; taf. 32.276.

71 Coldstream 1968: 92-98 (Corinth); 117-124 (Argolis). Corinth-oinochoe/EG: Weinberg 1943: pls. 4-6.29 (Coldstream 1968: pl. 16.b), 30-34, Weinberg 1948: pl. 71.B1-2. MG I: Weinberg 1943: pl. 9.54-57 (56: Coldstream 1968: pl. 16.e), pl. 10.67, pl. 11.69-71 (71: Coldstream 1968: pl. 17.a),13674; L 1957: pl. 65.1-4; Charitonides 1957: pl. 65.1-4. MG II: Blegen et al. 1964: pl. 8.18.2 (Coldstream 1968: 18.b); Verdelis and Alexandri 1961-1962: pl. 55.a. Corinth-amphora/EG: Lawrence 1964: pl. 17.M 1. MG I: Weinberg 1943: pl. 10.58; Lawrence 1964: pl. 17.A1; Williams and Fisher 1976: pl. 17.1. MG II: Verdelis and Alexandri 1961-1962: pl. 55.a. Argolis/oinochoe: EG II: Müller and Oelmann 1912: pl. 14.2; Courbin 1966: pl. 17.C 52, 829; pl. 20.C 458; pl. 21.C 459; Desborough 1955: pl. 49.d-e (Coldstream 1968: pl. 23.a); Charitonides 1955a: 234, pl. 83.b. MG I: Courbin 1966: pl. 18.C 53, 2435; pl. 20.C 2476 (MG I –MG II); Charitonides 1954: 235, fig. 4; Coldstream 1968: pl. 24.c-d. MG II: Müller and Oelmann 1912: pl. 14.8 (Coldstream 1968: 24.f); Desborough 1954: pl. 44.53-334; Courbin 1966: pl. 21.C 463. Argolis/amphora/EG II: Courbin 1966: pl. 1.C 51, 63; pl. 2.C 833, Coldstream 1968: pl. 23.b. MG I: Alexandri 1963: pl. 72.d; Courbin 1966: pl. 2.C 834 (MG I –MG II); Verdelis 1961-1962: pl. 57.c. MG II: Müller and Oelmann 1912: 136 fig. 8; Courbin 1966: pl. 3.C 2473 (Coldstream 1968: 24.j); pl. 4.C 28, 30-1; Verdelis 1961-1962: pl. 57.a; Alexandri 1963: pl. 70.a

decorative pattern appears on oinochoai and amphorae from Iasos, Rhodos (Camiros, Ialysos, and Exochi), Naxos, Delos, Rheneia, and Crete.[72] An amphora from Camiros with handles on both neck and belly and two oinochoai from Exochi should be MG II because of the window panel decoration on the shoulder. In all other examples, the body is banded without a decorative belt. With this feature, one amphora from Naxos and Rheneai and two amphorae from Iasos, like No.13, appear close to the Korinth and Argolis styles. It should also be noted that in many of the examples from Naxos, the short edges of the neck metope are bordered with thin bands, a practice not witnessed in Attica but evident in Argolis and Korinth.

No. 14 (Fig. 14) constitutes fragments from different parts of a crater. The state of preservation only allows a partial understanding of the decorative scheme. However, multiple zigzags and diagonally hatched meanders were used in the decoration. Both patterns are used horizontally and vertically on the vase. This scheme is common in the repertoire of the Attic MG II style on forms such as pedestal craters (Type II) and pyxis and is widely seen both in imports and imitations.[73]

The decoration of No. 14 with a fine brush and a thick paint covering is more elaborate and of high quality than the examples from the East Greek region. These attributes suggest that it might be an imported vase. Some details, however, distinguish the vase from examples from mainland Greece. On the upper left side of fragment "a" is a reserved area with a motif (?) and a wide painted area below. Because there are no known examples of those craters existing with a wide painted area within the main decoration zone, this fragment must be from the handle side of the crater. In almost all known examples, bands or an ancillary decoration motif are placed just below the handle, encircling the entire vase. This band or pattern serves to border the decorative area from below. In this sense, it is unusual that the decoration area on the Ayasuluk vase continues below the level of the handle.[74] While the examples from Greece have a space between the meanders and the bordering bands, in the Ayasuluk crater, the meanders rest directly against those bands. While the upper hook is usually open on the right side of the meanders and the lower hook is closed in the examples from Greece, in the meanders of No. 14, the upper hook is closed on the right side, and the lower hook is left open.[75]

Details such as the meanders resting on the bands and the hatchings' direction show parallels with numerous Samian examples dated to the MG-SubG periods.[76] An extra line that is parallel to the main curves within the vertical meander chain near the handle is a trait that is also observed on the craters of Bayraklı, which were dated to the MG.[77] In addition to the distinctive stylistic features discussed above, the reddish fabric with easily dispersed limestone inclusion and the glaze not homogeneously spread along the inner surface are in harmony with the Samian

72 Iasos: Berti 2007: taf. 54.2 (oinochoe); Levi 1972: 472, fig. 12.c (top left) (oinochoe); 474, fig. 14.a, c (amphora). Rhodos/Camiros: Jacopi 1932/1933: 127-128, fig. 144-145 (Bossolino 2018: tav. 30.T.CCIII(6).3 belly and neck-handled amphora). Rhodos/Ialysos: D'Acunto 2020: 779 (amphora). Rhodos/Exochi: Johansen 1958: 54-57, figs. 111-114 (oinochoe) (figs. 111-112: Coldstream 1968: pl. 60.b). Naxos: Kourou 1999: pl. 1.AK 1 MN 496 (amphora); pl. 5.AK 13 MN 6245, AK 14 6246; pl. 6.AK 15 476, AK 16 MN 480; pl. 7 AK 17 MN 460, AK 18 MN 499; pl. 8 AK 19 MN 492, AK 20 MN 6244; pl. 9 AK 21 MN 454, AK 22 MN 6247; pl. 10 AK 23 MN 495, AK 24 MN 498; pl. 11 AK 25 MN 494, AK 26 MN 497 (oinochoe). Delos: Dugas and Rhomaıos 1934: pls. XII-XIII nos. 45-49, 51-53. Rheneia: Desborough 1952: 157-158, pl. 18.A 1456-8, 1960 (oinochoe); pl. 19.A 1451 (amphora); Crete: Coldstream and Catling 1996: fig. 61.95-6; fig. 135.30; pl. 227.67; pl. 236.59, 63, 74.

73 Coldstream 1968: 24, 269-272. For some examples: Kübler 1954: 223, pls. 20-21 (Coldstream 1968: 25-26, pl. 5f); Popham and Lemos 1996: pl. 88, 110 Pyre 14.16 (Attic import); Weinberg 1943: 25ff, no 73, pl. 12 (Coldstream 1968: 95-8, pl. 17f).

74 On a crater from Rhodos/Camiros, the decoration area is extended below the level of the handle (Walter 1968: taf. 51.268, British Museum 1861,0425.51). No reserved area is, however, seen at the handle level.

75 Similar meander drawings are seen in mainland Greece and the Cyclades. Coldstream 1968: pl. 12.d-e (Attica, LG); pl. 25.b (Argos MG II), pl. 26 (Argos LG I); pl. 34.m (Melos MG); pl. 35 (Naksos LG); pl. 39.j (Melos LG).

76 Walter 1968: 16, abb. 3, taf. 3-4.21; abb. 4, taf. 5.22; 17, abb. 5, taf. 5.23; abb. 6, taf. 5.24; abb. 10, taf. 12.60, abb. 11, taf. 11.58 (MG I); taf. 13.70 (MG II); taf. 19.108 (LG); abb. 12, taf. 11.59; abb. 13, taf. 12.62 (Archaic); Niemeier 2022: 23-24, abb. 8-9 (MG II).

77 Özgünel 2003: 77-78, taf. 11.2; taf. 13.1 (Özgünel 1978: 19, pl. II.6, Although Özgünel compares these pieces with Attica and Samos styles, he thinks that they are the work of a local painter named Usta 41).

productions.[78] Therefore, it would be accurate to interpret No.14 as a crater decorated in the Samian technique imitating Attic MG II style.

No. 15 (Fig. 15) is preserved as a shoulder, body, and base fragment from a lekythos. Three thin bands separate three rows of decoration on the shoulder. The upper decoration, which is not well preserved, appears to have a reserved gear pattern. In the centre, there is a diagonally hatched battlement meander, the hatched lines that change direction in the horizontal parts. A series of diagonal lines are visible below this scheme. In addition, four reserved bands are attested in the centre of the painted body. The neck of the vase is not well preserved, so it is unclear whether it belongs to the typology of the neck-ridged lekythos: a common form at Dodekanessos.

Unlike the PG lekythoi, which mostly have conical bases, a new type of lekythoi with a flat base (rarely low ring base), spherical body (rarely oval body), handle attached to the middle of the neck, and flaring lip appears in Dodekannesos and Crete from the beginning of the MG period. Both the presence of imported specimens and its overall form characteristics indicate that this new type was a perfume vessel produced under Phoenician but especially Cypriot influence.[79] It is possible that the ridge where the handle connects to the neck, a trait present in the majority of the examples, was originally a functional detail to strengthen the handle attachment that later became a "trademark". A similar situation is observed in the later Attic "Deianeira" lekythoi as well. The ridging handle attachment on the neck and the wide-opening mouth must have originated from flasks of Near Eastern origin.[80]

The decorating of lekythoi with two/three rows of horizontal bands on the shoulder and at least one set of reserved bands on the belly and the form discussed above are found in the MG-LG repertoire of Dodekannesos, but especially of Kos.[81] According to Coldstream's evaluation of examples from Kos, patterns such as the hatched battlement meander, single and multiple zigzags, gear pattern, dogtooth, dots, cross-hatched lozenge, and diagonal lines are common in the early stage of the MG. From the late MG onwards, while the previous decorative repertoire is preserved, new motifs such as the hatched zigzag and triangular lozenge net appear.

The productions on which the diagonal hatchings change direction only in the horizontal part of the battlement meanders are numerous in both MG and LG graves from Kos.[82] The diagonal line series is usually found in LG graves.[83] A lekythos from Miletus with both the meander type and the diagonal lines should be mentioned here.[84] The Miletus example, which seems to be closest to Ayasuluk No. 15, also includes the hatched zigzag motif, a trait accepted by Coldstream as being introduced in the late MG. When all this data is considered, it seems possible to date the Ayasuluk lekythos somewhere between the late MG-early LG. Considering the rarity of the form outside the Dodecanese in the East Greek region, these vessels are likely imported.

No. 16 (Fig. 16) is a skyphoid-crater fragment with a row of dots between the horizontal stripes on the slightly flared high lip and a hatched meander below. The buff-coloured refined fabric of the vessel containing white sand but almost no mica is reminiscent of the Argolis clay, indicating that

78 Eilmann 1933: 47-48; Technau 1929: 8.

79 For the connections between Phoenicia/Cyprus and the Aegean world and imported examples, see: Kotsonas 2012; Bourogiannis 2018; Bourogiannis 2022.

80 Coldstream 1968: 269; Cook and Dupont 1998: 15-16. For some examples, see: Gjerstad 1948: fig. 8.14; figs. 13.6-7, 9; fig. 14.1; figs. 19.2-4; figs. 22.11-14; figs. 25.6-8; figs. 33.3-13. Crete: Coldstream and Catling 1996: pl. 92.18; 93.30; pl. 97.19-21; pl. 119.43; pl. 206.64. Kos: Morricone 1982: 132, fig. 211.

81 Coldstream 1968: 269-71, (MG), 287-288 (LG). Kos: Morricone 1982: 57ff, figs. 20-30; 81, figs. 72-74; 193, figs. 371-372; 211, figs. 413-415; 288, figs. 612-614 (MG). 108ff, figs. 134, 143-173; 145ff, figs. 241-246; 155, figs. 267-269; 161ff, figs. 279-285; 179ff, figs. 326-331, 355-356; 234, figs. 472-473; 252ff, figs. 518-522; 274ff, figs. 575-577; 304, figs. 648-649; 308, fig. 659; 314, figs. 673-674, 686-689; 333, fig. 717; 335ff, figs. 722-723, 743-752 (LG). Camiros: Jacopi 1932/1933: 45, fig. 38 (LG II); 190, figs. 224-5 (MG) (Bossolino 2018: tav 11.T.VIII.(10).1; tav. 24.T.LXXX.1-2); Ialysos: D'Acunto 2020: tav. XIII.T. LI/393.1 (LG I); tav. LV. T. LXIII/445.1 (LG II). Lindos/Exochi: Johansen 1958: 37.71.

82 Morricone 1982: fig. 914.2, 5-6; 55, figs. 13, 15; 59, fig. 26; 98-99, figs. 109, 111-112; 106, fig. 130; 154, fig. 264; 161, fig. 282; 162 fig. 285; 211, figs. 413, 416; 238, fig. 495; 343-344, figs. 744-745; 345, fig. 750; 376, fig. 821, 398, fig. 895.

83 Morricone 1982: fig. 913.5-6; 118, figs. 161;136-137, fig. 221-222; 180, fig. 331, 182, fig. 337, 234, fig. 473.

84 Weickert 1957: 122-123, abb. 8, pl. 39.1 (bottom left).

No. 16 is likely an imported piece.[85] The row of dots used between the horizontal stripes on open vessels is an Attic origin trait that can be found in many centres from the MG I to the LG I.[86] By the LG II, new types of meanders appear, including ones with perpendicular hatching to their outlines. In the Argolis, however, this practice was widely used from the beginning of the LG.[87] The vessels decorated in this way, especially the LG I skyphos and the kanthoroid crater from Mykenai stand out as the best analogies.[88] Leaning the meander against the boundary bands is also a practice found on pottery from Argolis. Considering the similarity in style and the clay composition, it would be reasonable to suggest that No.16 is an LG I skyphoid-crater from Argolis.[89]

No. 17.1-10 (Fig. 17.1-10) are selected from many monochrome cups and tankards. They differ in form, dimensions, and fabric. The wall reflects a slight narrowing from the plain lip to the handle (with a concave profile in Nos. 17.7 and 17.10) and then turns sharply from the lower handle attachment to the base. This sharp turn has a smoother transition in some examples (Nos. 17.1, 6-7), while in others, it has a sharp angle (Nos. 17.2-3 and 8-9). A flat base is common (Nos. 17.4 and 9), but in some specimen,s the base is emphasized, giving the impression of a ring base (No. 17.5). The oval-sectioned handle is attached from the lip to a point which coincides with the line from where the body narrows sharply. The height of the vessels varies between 8-12 cm, lip diameters are between 10-15 cm, and base diameters between 4-7 cm. Except for the thin reserve band under the lip, and on the bases of some specimens (17.4, 5?, 10), the outside is glazed.[90] Similarly, except for the small reserved tondo on the bottom of the preserved specimens (17.4, 9), the inside is also glazed. Black and dark brown tones (Nos. 17.1-3, 6-9) dominate the colour scheme, while reddish brown (Nos. 17.4-5 and 10) occurs infrequently. The application of the glaze, however, is sketchy; brush traces and tonal differences that give a streaky appearance from the use of a wide brush are seen frequently. Matt and glossy surfaces can be easily distinguished. In the glossy surfaces (No. 17.1-3), the "glaze" is observed to be applied separately from the paint and was not distributed homogeneously. Some have such large inclusions that they can be seen from the surface (Nos. 17.1-5), while others are dense with mica and easily dispersed (Nos. 17.8-9).

This cup form is known to have been used in the East Greek region from the Protogeometric period onwards, albeit infrequently.[91] Coldstream suggests that this form became widespread in the East Greek region from the late MG.[92] Versions of the form are common in the East Dorian region and the nearby islands of the Cyclades, Ionia, and coastal Carian centres during the late MG–SubG.[93] The Samian cups show a chronological

85 The Argolis Geometric clay is normally cold buff in color. White sands are often seen in the clay, but mica is almost absent. Some of the examples found at Asine have a warmer tone than is normal for Argolis, it is orange rather than buff. See: Coldstream 1968: 112.

86 Coldstream 1968: 19, 24, pl. 3.j-k; pl. 5.e-f; pl. 10.e (Attica); pl. 17.f (Corinth); pl. 27.c-d; pl. 28.d; pl. 29.d (Argolis); pl. 42.g (Boeotia); pl. 60.c (Rhodos); Charitonides 1955b: pl. 40.10 (Corinth).

87 Coldstream 1968: 129; Müller and Oelmann 1912: 145, abb. 9; Desborough 1954: pl. 45.53-339 (Coldstream 1968: pl. 27.e); Courbin 1966: pl. 61.C 171 (Coldstream 1968: pl. 28.c); pl. 87.C 241; pl. 6-7. C 928; pl. 11 (Coldstream 1968: pl. 28.d); pl. 26.C 3; pl. 40.C 229; pl. 41.C 210; pl. 43-5 (Coldstream 1968: pl. 30.e); pl. 48.C 239; pl. 83 (Coldstream 1968: pl. 30.c); pl. 118.C 3233; pl. 126.C 1039, C 3633.

88 Desborough 1954: pl. 45.53-337 (Coldstream 1968: pl. 27.d, Kantharoid crater), 53-340 (Coldstream 1968: pl. 27.c, Skyphos).

89 The perpendicular hatching to the outlines of the meanders and the leaning of the meanders against the borders are also seen in Cyclades LG ceramics (For an example, see: Harvard Art Museums, inv.nr. 1956.33, https://hvrd.art/o/291405). The clay of Cycladic ceramics, however, is characterized by its high mica content.

90 For an example in which the transition to the base is not emphasized, but the base is painted, see: Kerschner 2003b: 48, abb. 4.3.

91 For Protogeometric gray ceramics from Smyrna, see: Bayne 2000: 160, figs. 39.5-6. At Sardeis, mostly gray and a few red specimens, which can be considered as prototypes of the form, were recovered from Late Bronze Age-Early Iron Age levels. (Ramage et al. 2021: pl. 5, nos. HoB 21, HoB 23; pl. 9, no. HoB 41). The form with a sharp transition to the base continues in Lydia IV layer, dated to the 9th – mid. 8th century (Ramage et al. 2021: pl. 40, nos. HoB 185-189). In subsequent layers, the sharp transition to the bottom disappears.

92 Coldstream 1968: 290.

93 Kos: Morricone 1982: 127-128, figs. 191-204 (LG I); 148, figs. 250-252 (LG I); 163, figs. 286-289 (late MG); 184, figs. 343-345 (late MG); 189-190, figs. 362-364 (MG); 238, fig. 496 (LG I); 254-255, figs. 525-33 (LG I); 278, figs. 586-590 (LG I); 338, figs. 730-731

sequence from the MG to the late Archaic period. Heights range from 8-12 cm, and the transition to the base is emphasized, similar to Ayasuluk No. 17.5. Ordinarily, the concave turn from lower handle attachment to the base is slight. From the mid-LG onwards, an "S" profile is observed from the handle zone to the lip, as also observed in Ayasuluk Nos. 17.7 and 17.10. Unlike the Ayasuluk finds, using a reserved band under the lip is not generally preferred.[94] Coldstream states that the LG/SubG specimens, especially those from the Heraion votive pit, are always glazed.[95] Eilmann, in his detailed description of the Samian Geometric ceramic technique, mentions large-grained inclusions so coarse as to explode the surface and a grey-black glaze that is not uniformly applied, creating colour transitions.[96] The production of this form seems to have continued until the mid-7th century BC. Then, from the 620s to the late 6th century, a form continued with the "Hera cups," in which the upper part of the body is reserved. In most of the examples, this area contains the dipinto letters of HPH (*eta rho eta*), HP (*eta rho*) or PH (*rho eta*).[97]

Cups recovered from MG-LG graves in Kos and Rhodos from the East Dorian islands can be easily distinguished from the Samian specimens by their height (4-7 cm), flat base, and a reserved band of irregular thickness on the lip. In these examples, the wall never has a sharp turn from the lower handle attachment to the base. In most of the Carian (Mylasa?) examples, the handle is attached at a lower point of the body, and the transition from the handle to the base occurs at a sharp angle just above the base. There are variations in the majority of the examples; in some the transition to the flat base is emphasized, whereas in others, it is not. There are decorative variations in which the whole cup is glazed, a reserved band is on the lip, or one or more reserved bands are used on the body. The Iasos cups are close to those from Caria in those aspects.

The common features of the LG-SubG Milesian cups are the unemphasized transition to the flat base, the reserved band on the lip, and the smooth transition from the lower handle attachment to the base.[98] It is unclear whether the visible thickening of the wall towards the base in some examples has a chronological significance or is instead a preference of the Milesian potters.[99] With their matt/semi-matt appearance, they seem closer to

(LG I). Ialysos: D'Acunto 2020: tav. XXXI, tomba CI/386.4, 6 (LG I); tav XXXII, tomba CIII/388.5 (LG I), tomba CIV/389.3 (LG I); tav. XXXIII, tomba CVI-II/398.3 (LG I); tav. XXXIV, tomba CXI/401.4 (LG II), tomba CIX/399.3 (LG II); tav. XXXVI, tomba CXIII/403.2-3 (LG I-II), tomba CXV/405.2 (LG I-II); tav. XXXVII, tomba CXXXVI/449.2 (LG II), tomba CXXXIX/464.3 (LG II). Camiros: Jacopi 1932/33: 71, fig. 76 (Bossolino 2018: tav. 17.T.XXVI(32).3 (LG II) (The dates of Kos, Ialysos and Camiros tombs, taken from D'acunto 2020: 900-906). Mylasa and its vicinity: Akarca 1971: 16, lev. 28.25; Özgünel 2006: lev. 54; lev. 55.d; lev. 56.a-e; Evren 2000: lev. 6.a-b, f; lev. 7.a; Bulba 2010: taf. 44.T10-14; taf. 45.T15-22; taf. 46.T23-30; taf. 47.T31-38 (LG). Iasos: Levi 1967: 417, 419, abb. 25 (right); Berti 2007: taf. 52.1; taf 55.5 (LG). Miletus: Kleine 1979: 123, 137, taf. 35.22, 25; taf. 36.27-28, 30-31; taf. 38.43-36; Niemeier and Niemeier 1997: 215, abb. 26 (top left), Kerschner 1999, 23-25, abb. 12.46-47 (LG-SubG). Samos: Technau 1929: abb. 25.3; beil. 18.3 (top); Eilmann 1933: abb. 4.e-g; Walter and Vierneisel 1959: 12-13, 18 beil. 12 (the first half of the 9th-8th century BC); beil. 14.1 (the last quarter of the 8th century BC); beil. 34.3-5; beil. 36.1 (late 8th century BC); Furtwängler 1980: abb. 12.I/6-7 (late 8th–mid. 7th century BC); abb. 16.II/1 (the last quarter of the 7th century BC). Anaia: Türkan 2006: lev. 8.27 (875/850-750 BC). Claros: Jolivet and Robert 2003: 104, 114, fig. 34.1; Zunal 2014a: 98-102, no.122 (LG-SubG); Zunal 2016: 188 fig. 5. Klazomenai: Ersoy 2004: 46, fig. 3.k-l; 47, fig. 4.f; 48, fig. 5.g (mid. 8th century BC). Amorgos: Blanas 2006: 295-299, 349, nos. 260-275 (the second half of the 8th century).

94 A reserved band was used in a shorter specimen that is dated around 750 BC. See: Viglaki-Sofianou 2012: 212.

95 Coldstream 1968: 290.

96 Eilmann 1933: 47-8.

97 Walter and Vierneisel 1959: beil. 59.4-7; beil 60.4 (last quarter of the 7th century); Furtwängler 1980: abb. 18.III/1-6 (late 7th - early 6th century BC), abb. 22.IV/1-2 (the mid. 6th century); Isler 1978: taf. 72-73, beil. 20-21; Furtwängler and Kienast 1989: abb. 12-13. For the datings, see: Furtwängler and Kienast 1989: 81-86. For distribution, see: Avramidou 2016.

98 At Miletus a large number of well-preserved cups were found in a (two ?) depot room(s?). There seems to be no agreement on their chronology. J. Kleine, suggests different dates, such as the LG, 8th-7th century and the second half of the 7th century (Kleine 1979: 123, 137), According to W. Voigtländer, they are from the mid. 7th century (Voigtländer 1986: 47), M. Kerschner thinks that they are LG (Kerschner 1999: 23).

99 See: Voigtländer 1986: abb. 17. As discussed above, the chronology of the finds is controversial. The absence, however, of this thickening in the early examples published by Kerschner (Kerschner 1999: abb. 12.46-47) indicates that this change in form probably occurred after the middle of the 7th century.

East Dorian examples than Samian ones.

With the help of this information, No. 17.1-3 appears to be close to the Samian specimens with its shape,[100] large clay inclusions, and remarkable glossy appearance that is not homogeneously traced on the surface. On the other hand No. 17.6-7 appears to be closer to the Milesian and Carian specimens with their profiles and matte/semi-matte appearance. Nos. 17.4-5 and 17.8-9 represent two different clay groups. It is noteworthy that the sharp turn just above the base of No. 17.9 is close to the Carian examples. It is difficult to suggest any other examples that do not match the local clay with the available information. It should be noted that the estimated heights of the Ayasuluk cups are inconsistent with the East Dorian examples. Considering that the cup form with a flat or concave wall and no sharp turn from the lower handle to the base had become fashionable in the East Greek region by the late 8th century BC, it would seem reasonable to consider the Ayasuluk examples as dating to earlier than the second quarter of the same century.[101]

Local Ware (Fig. 18)

Kerschner identified the clay groups Ul51, Ul52, and W used during the LBA-EIA periods at Ephesus by clay analysis.[102] The W group examples can be easily distinguished from the U151 and U152 with their intense gold mica additive and standardized paint colour. During the classification works done in the storeroom of the Ayasuluk excavation, the fabric characteristics of the PSC skyphos lip and body fragment, one of the reference fragments,[103] were observed on many examples from the LBA-EIA. The lip fragment with a paint band known from the open vessels of the LH IIIB2 - LH IIIC Early and Middle phases, and selections. No. 4, 7, and 13 for this publication are some of the many examples showing similar fabric characteristics with the W element pattern found in numerous examples in the excavation deposit. The surfaces are usually weakly clay-slipped, matt yellow and buff-coloured (7.5-10YR6-8/3-8), reminiscent of straw paper. The paint retains the colour standard, with reddish brown tones reminiscent of tile colour (10R4/6-8, 2.5-5YR4/6). The colour of the wall is one or two tones darker than the surface colour (2.5-7.5YR5-8/3-8). Dense gold mica is the most prominent admixture. Other additives are sparse white grits 1-2 mm in size and white, grey and reddish brown particles 0.1-0.5 mm in size.

The Evaluations

In addition to those discussed here, examples presented in previous publications of Artemision that could be considered integral to Ayasuluk in the EIA are included here in the discussion.[104] Along with the relationships of Ephesus with other centres, the ceramics have been evaluated under three headings, taking into account important problems in the EIA, such as the continuity in the transition from the LBA to the EIA and migration issues.

A. The Continuity

It has been mentioned in the "the stratigraphy" section that there are traces of habitation on Ayasuluk Hill from the Late Chalcolithic to the Ottoman period. Within this chronology, various hiatuses occurred during the Bronze Age, as for

100 Unfortunately, the state of preservation of these specimens does not allow one to determine whether the transition to the base was emphasized or not, as observed in the Samian pottery.

101 It is significant that none of the numerous cups (Derin 2014: nos. 134-163; Bilgin and Derin 2013: figs. 5-6) recovered from the Nif Mountain contexts, which contain finds mainly from the late 8th century onwards, share any common formal characteristics with the Ayasuluk cups. A similar situation applies to the finds from the Tetragonian Agora of Ephesus, above the theater, and the excavations on Panayır Mountain (von Miller 2019). From the early 7th century onwards, no cups similar to the Ayasuluk ones were recovered from these sites.

102 Kerschner 2014: 114-117. Reference fragments from these groups have not been recovered from ceramic kilns, but there are indications that this element pattern belongs to Ephesus. Ul51 and Ul52 have so far only been recovered from Ephesus. W has been found at Ephesus and the nearby Bademgedigi Hill (Puranda) and on a tablet from Hattusa. M. Kerschner thinks that the tablet from Hattusa is associated with Apaša, which is presumed to be ancient Ephesus because of the content of the text. At Bademgedigi Tepesi, the EIA findings are poor and only two of the more than a hundred fragments analyzed have been identified as W. On the other hand, the fact that W is the most common clay pattern among the analyzed EIA examples from Ephesus is a strong indication of the localization of this elemental texture to Ephesus.

103 Kerschner 2014: fig. 6.

104 Büyükkolancı 2008; Büyükkolancı 1997; Kerschner 2014; Kerschner 2003a; Kerschner 2006; 367, abb. 8; Forstenpointner et al. 2008, 34-5, abbs. 14-15, 17; Bammer 1990: pl. 15.

the Late Archaic - Byzantine period range, it is not possible to speak about the existence of a hiatus, whereas a scarcity of finds is evident. While sorting ceramics in the excavation storeroom, no examples with Late LH IIIC/SM and EPG stylistic criteria were found. It felt necessary, therefore, to reconsider four ceramics that were dated to these periods by Kerschner.

The open vessel, first assigned to the SM/EPG phase, seems closer to the LH IIIA2 specimens than to the LH IIIC late cups with wavy line decoration due to the non-fluid drawings and the fact that the triple wave line motif is diagonal rather than horizontal.[105] An oinochoe that was thought to be an EPG production has been compared to examples from Lefkandi, which have a reserved area for the transition from the neck to the shoulder and double reserved band groups under the shoulder. The middle-sized vessels, however, dating to the SPG I-II phase, which have three/four reserved band groups under the shoulder or on the belly, should be compared with the Ephesian examples.[106] The SPG I-II dating seems to be supported by the fact that similar vessels are also found in graves with mixed contexts in the LPG-GG range from the Kos-Seraglio cemetery.[107] One of the two closed vessels assigned to the EPG, with the pendant tongue group and set of concentric circle decoration patterns, is reconsidered here as No. 4 and assigned to the East Greek LPG-EG I style phase, as discussed above.[108] There are reasons to assign the other to a later date. This pattern group is found on closed vessels in Athens throughout the Protogeometric period.[109] At Lefkandi, almost all of the examples date from MPG-SPG.[110] The dating of the EPG specimens takes into account components such as short and spherical bodies and the set of full circles consisting of a small number (five) of circles or the set of semicircles with half-moon central filled. At MPG and later on, the bodies of the vases become gradually ovalized; the full circle sets are replaced by sets of semicircles drawn with a multi-tipped fine brush. Therefore, a wider date range is reasonable for the Ephesian example, whose form and circle set cannot be clearly traced. In this case, the earliest examples of the Protogeometric style from Ephesus date to the late MPG/LPG. The other protogeometric ceramics are from the LPG–EG I and SPG I-III. In conclusion, the ceramic data available at Ephesus suggest no continuity in the transition from the LBA to the EIA.

The evidence from the existing pottery indicates that life continued in Ephesus during the Geometric period, considering the protogeometric successors ve the others styles. In early periods, however, ceramics reflecting the mainland Greece styles are not as rich as the ones made in the local style. We see a gradual increase of examples from mainland Greece over time, though the East Greek forms remain prevalent. Nos. 13-14 and 16, related to Attic Geometric style, from the EG II-LG. No. 11, related to Crete, corresponds to MG I-MG II in the Attic chronology. No 15 the lekythos and No. 17 the monochrome cups, known from East Greek centres point to the late MG-SubG.

B. The Regional Styles and Connections

Attic Style: Originated in Athens and its environs. This style influenced the whole of Greece in the Protogeometric period with its imports and imitations. The Argolis and Korinth are the most influenced, and this continued strongly into the Geometric period. Protogeometric fragments published here, Nos. 1-2, 5-7, and two examples from previous publications, one of which is a skyphos with a concentric full-circle set with hourglass central filled and the other a belly-handled amphora fragment with a triple horizontal

105 Kerschner 2014: 116, fig. 16. For Kerschner's parallel examples from SM/EPG, see: Popham et al. 1980: 294, fig. 7.a, pl. 106; Lemos 2002: 27, 33, pl. 12.10. For examples from LH IIIA2, see: Boysal1969: pl. XXII. 2; pl. XXIII.9; Mountjoy 1999: 271, fig. 90.119-21; 524, fig. 187.121.

106 Kerschner 2014: 117, fig. 17. For Kerschner's parallel examples from EPG-MPG, see: Popham et al. 1980: 316-321, pl. 95.12.1 (MPG); pl. 101.32.2 (EPG); pl. 140.22.7 (LPG); Lemos 2002: 67-70, pl. 15.1 (EPG). For examples from SPG I-II, see: Popham et al. 1980: pl. 133.19; pl. 135.18.4; pl. 148.44.1 (SPG I); pl. 150.47.2; pl. 131.12.3 (SPG I-II); pl. 170.4.1; pl. 102.33.9-12 (SPG II).

107 Morricone 1982: 105, fig. 127; 151-152, figs. 259-261.

108 Kerschner 2006: 367, abb. 8 (no. 4); Kerschner 2014: fig. 14.

109 EPG: Kraiker and Kübler 1943 : taf. 29.522; taf. 54.563, 549; taf. 46.584; taf. 66.765; MPG: taf. 55.544; taf. 68.545; LPG: taf. 45. 587; taf. 46.195; Kübler 1943: taf. 10.2027; taf. 14.1076.

110 Popham et al. 1980: 272, pl. 276.983; Catling and Lemos 1990: 41, pls. 29.471-2, 477-80; pl. 71.644.

wave line on the belly, reflect the traits of the Attic style.[111] Except for No. 2, all examples appear to have been locally produced based on their fabric characteristics and they are deviating from canonical decoration. Kerschner, however, also noted the presence of imported examples with the help of chemical analysis. Nonetheless, although Kerschner mentioned many fragments of Athens by archaeometric clay analysis in his 2003 and 2006 publications, he has not yet published any analyzed Attic specimens, except for a single example in his 2008 publication.[112] In addition, it should be noted that no Attic fragments, which we believe to be imported, were identified among more than three hundred specimens during the study of the EIA ceramics in the Ayasuluk. Based on these findings it is clear that proving the existence of imported Attic products in Ephesus requires a more detailed publication. It should, however, be mentioned that the material handled within this paper does show Attic influence on wares produced locally and at other non-Attic production centres.

Nos. 13-4 and 16 are specimens that reflect the Attic Geometric style but refer to different centres. Local amphora No. 13 appears closer to Argolis and Korinth than Attica due to the multiple zigzags on the neck panel without ancillaries and the lack of an extra decorative zone between the bands on the shoulder. No. 15 originates from Attica with the row of dots between the horizontal stripes on the lip and the meander pattern on the body. Nevertheless, thanks to the specific feature of perpendicular hatching to the outlines of meanders and the clay characteristics, it must have been produced in Argolis. The Attic MG II type II crater no. 14, which is a common form both in imports and imitations, points to a Samian origin with its decoration style as well as its fabric characteristics.

Euboean Style

Euboea is the centre of this style, but there are extensive examples in Thessaly, the Northern Cyclades, Boeotia, Phokis, and Lokris. Nos. 8-10 along with an additional nine PSC skyphoi previously published, including local productions, an Attic imitation skyphos, a hydria with pendant tongues on the shoulder, and an oinochoe with a reserved band group on the body, associated with Euboea and its ceramic koine.[113] Apart from these, the LPG-SPG I fragments of a hydria, an oinochoe, and an LG crater fragment are the other examples of this group, which have been identified as Euboian production by archaeometric analysis.[114] Therefore, imported examples and local imitations suggest that Ephesus was in contact with Euboia as well as Attica.

East Greek Style

Besides Nos. 4, 15, and 17, the Attic imitation skyphoi nos. 6-7, represented by numerous examples from different East Greek centres, can also be considered in this group. Due to their abundance and continuity, the monochrome vessels (No. 17) seem to have been produced in Samos, Dodekanessos, coastal Caria, and possibly Miletus. The finds from Ephesus, Anaia, Claros, and Klazomenai, although they do not yet provide clear data on production, contribute to the idea that such vessels are specific to East Greek geography in an inclusive sense. Another group of examples showing the connection between Eastern Dorian and Western Anatolian coasts consists of skyphoi imitating Attica Type 1. In Kos and Rhodos with coastal Caria, Miletus, and Ephesus, the skyphos type is more faithful to the Attic trend, while towards the north, it is gradually replaced by the Euboean Attic imitations and PSC skyphoi. The other common element, the lekythos, which evolved from flasks of Near Eastern origin, is common in Kos and Rhodes; it is represented by one example each at Ephesus (No. 14) and Miletus. Finally, the small pendant tongue groups and the three-quarter circle set are also found on vessels from Miletus, Iasos and Ephesus (No.4), after the East Dorian region, especially Kos. These commonalities are essential in showing that the LBA's communication memory was preserved and the interaction continued in the EIA, in the region between East Dorian centres and the Western Anatolian coast with Miletus as its northern border, which was

111 Forstenpointner et al. 2008: 34, abb. 15; Kerschner 2003a: taf. 40.9

112 Kerschner 2003a: 246; Kerschner 2006: 370; Forstenpointner et al. 2008: 35, abb. 17.

113 Kerschner 2014: figs. 2-10 (fig. 3: Bammer 1990: pl. 15.b); Kerschner 2003a: taf. 40.4 (Bammer 1990: pl. 15.e); Kerschner 2014: fig. 18.

114 Kerschner 2014: 118, figs. 11-13.

named "Lower Interface" by P. Mountjoy.[115] It would, however, be more accurate to say that the site is located in a transitional area since Ephesus also contained Geometric crater fragments (No. 14) and monochrome cups (No. 17. 1-3) related to Samos and PSC skyphoi, such as those from North Ionia.

The Cretan Style

Filling between circles on concentric sets of four to six elements is common in the LG-SubG phase in Crete, the Cyclades, and the East Greek region. Filling between circles in sets of six or more circles, as in the Protogeometric style, is attested only in Crete. Ephesus, with No. 10.1-3 is the second centre where this practice is observed after Crete.

C. The Migration

The majority of modern scholars consider the narratives of the migration from Greece to Western Anatolia unreliable due to the lack of uniformity in the narrative of events, figures, places, and the mythical elements of the stories. The fact that most of the narratives gained momentum after the Persian Wars is accepted as an attempt to legitimize the interventions of Athens, which was an "imperial" power in this period, or, conversely, to link the origins of the local people in Asia to a powerful lineage other than Athens. There are, however, also those who only partially reject migration stories and support their historicity. In addition to the dominance of Greek Protogeometric style ceramics in the Eastern Aegean with the EIA, the presence of the Greek language in the region in the 8th century BC, based on the works of Homer and Hesiod, supports the idea that the migration stories reflect a historical event. Unfortunately, current archaeological data does not allow us to clearly understand when, how, and for how long these migrations took place. Since the basis of researchers are ancient sources, theories containing semi-speculative claims seem relative.[116]

One theory of the historicity of migrations, in the case of the Ionian migration, is that groups of different ethnicities moved at different times and later united under the Ionian identity.[117] In line with this, Ephesus, with its person and place names and archaeological data, coincides with the idea of mixed ethnicity on a micro-scale. Sakellariou points to connections to Boeotia with the name Androclus, the cult of Demeter Eleusinia and the hill of Kerykeion; Arcadia/Azania with the Styx stream; and Korinth and Argolis with the Kenkhrios river that runs near Artemision.[118] The relationship of the Ayasuluk/Ephesus EIA ceramic data with the Attic style, which also had a strong influence in the Northern Peloponnesos; the Euboian style, which included Thessaly, the Northern Cyclades, and partly Boeotia, Phokis and Lokris; and the Argolis, MPG, Cretan, and Eastern Doric styles have been discussed above. In addition, it should be noted that the lion and bear bones recovered from Artemision in the Protogeometric find complex were also found in the sanctuary of Hyampolis Artemis in Kalapodi, Boeotia.[119] The Artemision example must be a late Cretan LBA head and there are indications that it was purposely preserved in later periods.[120]

Sakellariou's study, taking into account the names of people, places, and tribes in ancient texts, and epigraphic and numismatic data, has shown that there are commonalities in Ionia that can be linked to many parts of Greece.[121] In addition, in Miletus, Klazomenai, Claros, Smyrna, and Halicarnassus, which contain evaluable Protogeometric ceramic finds, it is possible to see Eastern Dorian style with Attic, Euboean style ceramics, many of which are probably locally produced. It is true that the existence of different types of ceramics can also be explained by trade. But, the fact that the distribution of the ceramics from Euboea and its koine shows a sharp decline beyond Southern Ionia and that the goods circulating in the Northern Peloponnesus, Dodecanese, Crete, and Cyprus became scarcer beyond the north of Southern Ionia suggests that trade was not only dependent on routes and

115 Mountjoy 1998: 34ff, fig. 1. The same basin also shows a partial "koine" in the Archaic period, as indicated by the co-production of Ionian kylixes and "Miletus-type" commercial amphorae.

116 For the attitudes of modern researchers regarding the concept of migration mentioned in ancient texts, see: Rose 2008: 401-406; Mac Sweeney 2017: 382; Kerschner 2006: 365-366; Aslan et al. 2014: 280-283.

117 Mac Sweeney 2017; Lemos 2007; Sakellariou 1958.

118 Sakellariou 1958: 141-146.

119 Forstenpointner et al. 2008: 36

120 Dewailly and Muss 2008: 317, res. 1-2; Forstenpointner et al. 2008: 38.

121 Sakellariou 1958.

geographical conditions but also on the settlers' efforts to interact with the places from which they came.

Ephesus contains elements that differ from other Ionian cities, which can be explained by the presence of a possible strong local population alongside Greek immigrants of mixed origin. Traditional accounts about the Ionian migration point to the sons and relatives of Codrus, king of Athens, as the movement's leaders and founders of many Ionian cities. The centre of the union, the Panionion, is the temple of Poseidon Helikonios on Cape Mykale, tended by priests from Priene (Strabon 14.1.3, 20; Pausanias 7.2.1-4; Herodotus 1.142-3, 148). In the foundation myths of Ephesus, the leader of the Ionian colonization and the site's founder appears as Androclus, son of Codrus. The royal residence (?) of the Ionians is located in Ephesus, and the king also appears as the chieftain of the cult of Demeter Eleusinia (Strabon 14.1.3). Ephesus is also unique in that it is one of only two Ionian cities, Kolophon being the other one, that did not celebrate the Apatouria (Herodotus 1.147). Should this situation be explained only by the identity of Lycia or Lydia? Moreover, although the goddess dating back to the Bronze Age seems to have been Hellenized with the name Artemis, her depictions resemble the gods and goddesses of different centres of Anatolia rather than the Greek Artemis.[122] To summarize, the evidence pointing to a possible local population may not be convincing since it dates to the 5th century BC and, later, long after the migrations. A great number, however, of East Greek Protogeometric ceramics, including locally produced ones, and the overall picture formed by these indicators also suggest an extension of a much earlier socio-political view in which the local population was superior to outsiders.

Conclusions

Apart from a limited number of imported ceramics of Attic and Euboean origin, most of the ceramics evaluated are imitations done in either the Attic or Euboean style. These are imitations produced locally or in the "vicinity", which we can indicate as the East Greek region. The term "vicinity" here mostly refers to Miletus and Dodekanessos to the south of the city and the island of Samos. Although there are similarities with the north of Ionia, it is difficult to speak of clear communication between the groups at this time. Practices known from Crete, apart from mainland Greece and regional styles, are not usual for the Western Anatolian coast in the EIA. Indications from the sanctuary pointing to a connection with the island give meaning to the Cretan fragments in question.

As discussed above, there is a hiatus in the finds between the latest phase of the LBA and the late MPG-LPG. Undoubtedly, this discontinuity is based on observations of "Greek" pottery styles. In other words, it is not clear if the settlement was actually abandoned during the period in question since the local people's own EIA ceramics could not be recognized. Perhaps the settlement continued to be inhabited, but the "Greek" ceramics that we were able to distinguish arrived and/or were produced at a later period. Leaving speculations aside, one has to admit that life was not going on in Ayasuluk at the time of the possible "migration" and in this sense, there were no "Carians and Lelegs". We can, however, hypothesize that local people lived in the neighborhood and were part of the rebuilt Ephesus, both demographically and culturally. Or, based on the support of the earliest EIA ceramics dating to the late MPG/LPG, an alternative and speculative suggestion would be that the migrants arrived much later than previously thought. It should be kept in mind, however, that all these conclusions are based only on a small number of ceramics and a few other finds. For this reason, it is necessary to be cautious. Perhaps we can speak with a little more certainty after the finalization of all ceramic sorting processes and the execution of the planned fieldwork, which will hopefully uncover a homogeneous stratum or undisturbed grave contexts.

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122 Fleischer 2008: 45-61. Especially the relief of Zeus Labraundos and the statue of Cybele are remarkable for the bull testicles on their bodies. See: Fleischer 2008: 50-51, figs. 10-11.

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Abbreviations

EBA – Early Bronz Age

MBA - Middle Bronze Age

LBA - Late Bronze Age

LH - Late Helladic

EIA - Early Iron Age

PG - Protogeometric

EPG - Early Protogeometric

MPG - Middle Protogeometric

LPG - Late Protogeomctric

SPG - Subprotogeometric

EG - Early Geometric

MG - Middle Geometric

LG - Late Geometric

SubG - Subgeometric

PSC - Pendent Semicircles

SM – Submycenaean

Catalogue

No. 1. Shoulder fragment of an amphora. Fig. 1

Inv: AYA 2021/0022.1

Find Spot/Year: 23S, 2021

Measure: h: 11.5; w: 5.5 cm; th: 0.7 cm

Fabric: surface: clay slip, 10YR8/3 very pale yellow; paint: 7.5 YR2 .5/1 black; breakage: 7.5YR6/4 light brown; mica, white grits, white and gray particles.

No. 2. Shoulder fragment of an amphora or hydria. Fig. 2

Inv: AYA 245

Find Spot/Year: 32D, 2002

Measure: h: 9.4 cm; w: 21,5 cm; th: 0.8 cm

Fabric: surface, clay slip, 10YR7/3 very pale brown; paint: 5YR2.5/1-2 black-dark reddish brown;breakage: 10R4/8 red; silver mica, white grits, sparse white and dark particles.

No. 3. Belly fragment of a belly-handled amphora. Fig. 3

Inv: AYA 032

Find Spot: 22S, 1996

Measure: h:17; w:17.5 cm; th: 0.8-1 cm

Fabric: surface: clay slip, 5YR7/6 - 7.5YR7/4 reddish yellow - pink; paint: 2.5YR2.5/1 - 5YR2.5/1 reddish black – black; breakage: 2.5YR4/8 red; gold mica, white grits, white and gray particles.

Publish: Büyükkolancı 2008: 47-48, figs. 17, 20; Büyükkolancı 2007; taf. 6.5

No. 4. Shoulder fragment of an amphora. Fig. 4

Inv: AYA 030

Find Spot: 22S, 1996

Measure: a) h: 8.5 cm; w: 13 cm; th: 0.7-05 cm. b) h: 4.5 cm; w: 7.2 cm; th: 0.5 cm

Fabric: surface: clay slip, 7.5YR7/6 reddish yellow, paint: 10R4/8 - 2.5 YR4/8 red; breakage: 2.5YR6/8 light red; dense gold mica, white grits, white, reddish brown, and gray particles.

Publish: Büyükkolancı 1997, 36, fig. 4; Büyükkolancı 2007; taf. 6.5; Büyükkolancı 2008: 47, fig. 20; Kerschner 2006: 367, fig. 8.

No. 5. Lip and body fragment of a skyphos. Fig. 5

Inv: AFU 2092

Find Spot/Year: 32D, 2006

Measure: w: 4.8 cm; h: 5.2 cm; th: 0.5 cm (body); 0.8 cm (lip); d: 20.5 cm

Fabric: surface: thick clay slip, 7.5YR6/4 light brown; paint: 10R4/6-8 red (outside), 10R4/8 (inside); breakage: 2.5YR6/6 light red; mica, white and gray particles.

No. 6. Skyphos. Fig. 6

Inv: AYA 01/01

Find Spot/Year: 32D, 2001

Measure: h: 9.8 cm; d: 18 cm (lip), 6 cm (foot); w: 5.5 cm (handle); th:0.35 cm (lip), 0.4 (below the lip), 0.8 cm (above the foot), 1 cm (handle);

Fabric: surface: very light slip 10YR7/3 very pale brown; paint: 7.5YR2.5/1-2 black-very dark brown (outside), 2.5YR2.5/1 black (inside); breakage: 7.5YR5/4 brown; mica, white particles.

Publish: Büyükkolancı 2008, 50, fig. 28.

No. 7. Lip and body fragment of a skyphos. Fig. 7

Find Spot/Year: 22S.a, 1999

Measure: h: 4 cm; w: 2.5 cm; th: 0.5 cm

Fabric: surface: clay slip, 7.5YR6/6 reddish yellow, paint: 10R4/8 - 2.5 YR4/8 red (outside and inside); breakage: 2.5YR6/8 light red; dense gold mica, white and

reddish brown grits, white and gray particles.

No. 8. Lip and body fragment of a skyphos. Fig. 8

Inv: AYA 2021/0022.1

Find Spot/Year: 23S, 2021

Measure: h: 5.3 cm; w: 11.3 cm; th: 0.5 cm; d: 17 cm

Fabric: surface: thick slip, 10YR7/3 very pale yellow; paint: 2.5YR2.5/1 reddish black (outside), 10YR2/2 very dark brown -bright- (inside); breakage: 5YR5/6 yellowish red; sparse mica; white and reddish brown grits, sparse white and reddish brown particles.

No. 9. Body fragment of a crater. Fig. 9

Inv: AYA 99/01

Find Spot/Year: 22S.a, 1999

Measure: a) h: 8.2 cm; w: 6.8 cm; th: 1.5 cm (upper part), 1.1 cm (lower part) b) w: 7 cm; h: 4.7 cm; th: 0.7 cm

Fabric: surface: clay slip, 2.5YR5/6 red; paint: 10R4-5/6-8 red (outside), 2.5YR2.5/1 reddish black -matt- (inside); breakage: 5YR5/6 yellowish red; quite sparse mica, white and reddish brown and gray grits, white particles in sparse.

No. 10. Body fragment of a closed vessel Fig. 10

Inv: AAB 883

Find Spot/Year: 32D, 2006

Measure: h: 5.9 cm; w: 6.5 cm; th: 0.7 cm

Fabric: surface: clay slip, 10YR7/4 very pale brown; paint: 7.5YR2.5/2 very dark brown; breakage: 2.5YR5/8 red; mica, white grits, white and dark particles.

No. 11.1 Body fragment of a crater. Fig. 11

AYA 02/284

Find Spot/Year: 32D, 2002

Measure: h: 5 cm; w: 4.5 cm; th: 0.8 cm

Fabric: surface: clay slip, 5YR6/6 reddish yellow; paint: 5YR23/4 dark reddish brown (outside); 10R2.5/2 very dusky red (inside); breakage: 5YR5/6-8 yellowish red; mica, white, brown, and gray particles.

No. 11.2. Body fragment of a crater. Fig. 11

Inv: AFU 2093

Find Spot/Year: 32D, 30.11.2006

Measure: h: 6.4 cm; w: 4.1 cm; th: 0.8 cm

Fabric: surface: clay slip, 5YR7 reddish yellow; paint 5YR4/4 reddish brown (outside), 10R2.5/2 very dusky red (inside); breakage: 5YR5/6-8 yellowish red; mica, gray and black grains, white and brown particles.

No. 11.3. Body fragment of a closed vessel. Fig. 11

Find Spot/Year: 22S.c, 16.12.1998

Measure: h: 7.3 cm; w: 4.6 cm; th: 0.5 cm

Fabric: surface: light slip, 10YR8/3-4 very pale yellow; paint: 2.5YR3/4 dark reddish brown; breakage: 2.5YR4/6 red; mica, large dark grains (2-3 mm), brown, gray, and white particles.

No. 12 Lip, handle, and body fragments of a jug. Fig. 12

Inv: AYA 00/003

Find Spot/Year: 32 D, 2000

Measure: h:13.5 cm; w: 9 cm; th: 0.7-8 cm

Fabric: surface: burnished, 2.5YR4/6-8 red; breakage: large dense mica, coarse grits, black, and brown, dark sands.

No. 13. Neck-handled amphora. Fig. 13

Find Spot/Year: 32D, 2001

Measure: h: 42 cm; w: 22.5 cm; th: 0,4-5 cm; d: 15.2 cm (lip); 10,5 cm (foot)

Fabric: surface: clay slip, 7.5YR7/6 reddish yellow, paint: 10R4/8 - 2.5 YR4/8 red; breakage: 5YR7/8 reddish yellow; dense gold mica, white and reddish brown grits, white, reddish brown and gray particles.

Publish: Büyükkolancı 2008: 50, fig. 27.

No. 14 Body fragments of a crater. Fig. 14

AYA 99/03

Find Spot/Year: 22S, 1996

Measure: a) h: 9.1 cm; w: 14.3 cm; th: 0.8-1.1 cm. b1) h: 8.5 cm; w: 10.8 cm; th: 0.85-0.95 cm. b2) h: 5.8 cm; w: 5.3 cm; th: 1-1.1 cm

Fabric: surface: thick slip, 5YR6/6 reddish yellow; paint: 5YR2.5/2 black (outside), 5YR3/2 dark reddish brown (inside), lead-black glaze which does not spread homogeneously; breakage: 10R4-5/8 red (edges), 10YR5/3 yellowish brown (core); over-firing and easy-crumbling clay, dense mica and sands, large white grits, white, gray and reddish brown particles.

Publish: Büyükkolancı 1997: 37, fig. 6; Büyükkolancı 2007: taf. 6.5; Büyükkolancı 2008: 47-48, figs. 17, 19-20.

No. 15 Body and base fragments of a lekythos. Fig. 15

Inv: AYA 01/002

Find Spot/Year: 32D, 2001

Measure: h: 9.8 cm; w: 9.3 cm; th: 0.8 cm; d: 4.5 cm (base)

Fabric: surface: very light slip 10YR7/3 very pale brown; paint: 7.5YR2.5/1-2 black-very dark brown; breakage: 7.5YR4/6 strong brown; sparse mica, white grits, white and gray particles.

Publish: Büyükkolancı 2008: 50, fig. 28

No. 16. Lip and body fragments of a crater or skyphoid crater. Fig. 16

AYA 99/07

Find Spot/Year: 22S.a, 1999

Measure: h: 5 cm; th: 1 cm; d: 21 cm

Fabric: surface: light slip 5YR7/6-8 reddish yellow; paint: 5YR3/2 dark reddish yellow and 2.5YR4/6-8 red (outside), 2.5YR3/2 dusky red (inside); breakage: 7.5YR8/6 reddish yellow; sparse white sand, white and gray particles.

Publish: Büyükkolancı 1997: 36, fig. 5; Büyükkolancı 2007: taf. 6.5; Büyükkolancı 2008: 47-48, figs. 17, 19-20.

No. 17.1. One-handled cup. Fig. 17.1

AYA 037

Find Spot/Year: 22S, 1996

Measure: h: 8.3 cm; th: 04-0.7 cm; d: 14 cm

Fabric: surface: 10YR2/1-2 black-very dark brown (outside and inside); leaden varnish which does not spread homogeneously; breakage: 7.5YR6/6 reddish yellow; silver mica, large white grits, white and dark particles.

Publish: Büyükkolancı 2007: taf. 6.4; Büyükkolancı 2008: 47, fig. 17.

No. 17.2. One-handled cup. Fig. 17.2

AYA 039

Find Spot/Year: 22S, 1996

Measure: h: 8.4 cm; th: 0.4-0.7 cm; d: 12 cm

Fabric: surface: 10YR2/1-2 black-very dark brown (outside and inside); lead-black glaze that does not spread homogeneously; breakage: 7.5YR6/6 reddish yellow; silver mica, large white grits, white and gray particles.

Publish: Büyükkolancı 2007; taf. 6.4; Büyükkolancı 2008: 47, fig. 17.

No. 17.3. One-handled cup. Fig. 17.3

Inv: AYA 045

Find Spot/Year: 22S.b, 1997

Measure: h: 8.4 cm; th:0.3-0.5 cm; d: 12 cm

Fabric: surface: 2.5YR3/2 dark reddish brown – 2.5YR4/8 red (outside), leaden varnish which does not spread homogeneously; 2.5YR6/8 light red -matt- (inside); breakage: 10R5/8 red; few mica, white and dark particles in sparse.

7.5YR7/6 reddish yellow

No. 17.4. Body and base fragments of a one-handled cup. Fig. 17.4

Find Spot/Year: 22S, 1996

Measure: h: 2.1 cm; th: 0.4 cm; d: 4 cm

Fabric: surface:2.5YR3/4-6 dark reddish brown-dark red (outside and inside); breakage: 2.5YR5/8 red. sparse silver mica, sparse white grits and particles

No. 17.5. Body and base fragments of a one-handled cup. Fig. 17.5

Find Spot/Year: 22S, 1996

Measure: h: 2.1 cm; th: 0.45 cm; d: 7 cm

Fabric: surface: 10R4/6 red – 10R4/8 red (outside and inside); breakage: 2.5YR5/8 red; less mica, white grits and particles in sparse.

No. 17.6 Lip and body fragments of a one-handled cup. Fig. 17.6

Inv: AYA 02/334

Find Spot/Year: 32D, 2002

Measure: h: 8.2 cm; th: 0.3-0.5 cm; d: 12 cm

Fabric: surface: 7.5YR2/1-2 black-very dark brown (outside and inside); breakage: 7.5YR6/6 reddish yellow; sparse silver mica, white and dark grits.

No. 17.7. Lip and body fragments of a one-handled cup. Fig. 17.7

Inv: AYA 035

Find Spot/Year: 22S.a, 1996

Measure: h: 9.1 cm; th:0.3-08 cm; d: 10 cm

Fabric: surface: 7.5YR2/1-2 black-very dark brown (outside and inside); breakage: 5.5YR5/6 reddish yellow; sparse silver mica, white and dark grits.

Publish: Büyükkolancı 2007: taf. 6.4, Büyükkolancı 2008: 47, fig. 17.8

No. 17.8. Lip and body fragments of a one-handled cup. Fig. 17

Inv: AYA 046

Find Spot/Year: 22S.b, 1997

Measure: h: 8.9 cm; th: 0.4-0.7 cm; d: 12 cm

Fabric: surface: 5YR3/3 dark reddish brown (outside and inside), rough surface; breakage: 2.5YR4/8 red; easy-crumbling clay; dense mica, white and dark grits.

No. 17.9. Body and base fragments of a one-handled cup. Fig. 17.9

Inv: AYA 02/333

Find Spot/Year: 32D, 2002

Measure: h: 10.1 cm; th: 0.4-0.7 cm; d: 5.6 cm

Fabric: surface: 7.5YR3/1 brown (outside and inside), rough surface; breakage: 7.5YR6/6 reddish yellow; mica, white and dark grits.

No. 17.910 Lip, body and base fragments of a one-handled cup. Fig. 17.10

Inv: AYA 96/077

Find Spot/Year: 22S, 1996

Measure: h: 10.1 cm; th: 0.4-7 cm; d: 14 (lip); 7 cm (base)

Fabric: surface: 5YR4/6 yellowish red (outside), 5YR6/8 reddish yellow (inside); breakage: 2.5YR5/8; dense gold mica, large white grits, white and gray particles.

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Fig. 1

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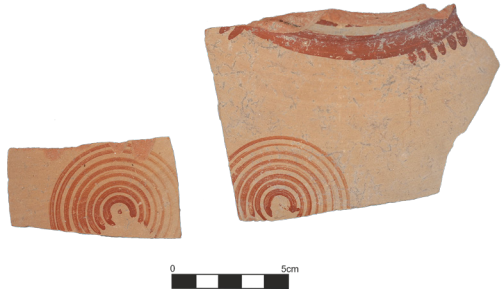
Fig. 3



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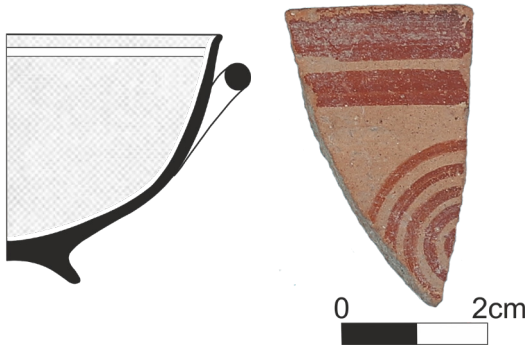

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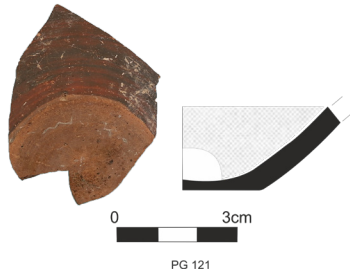

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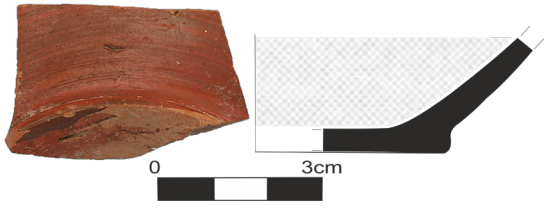

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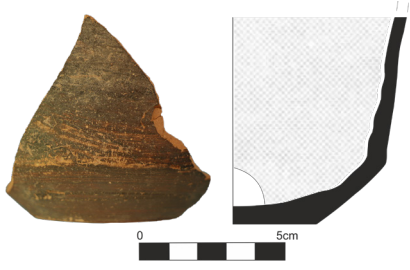

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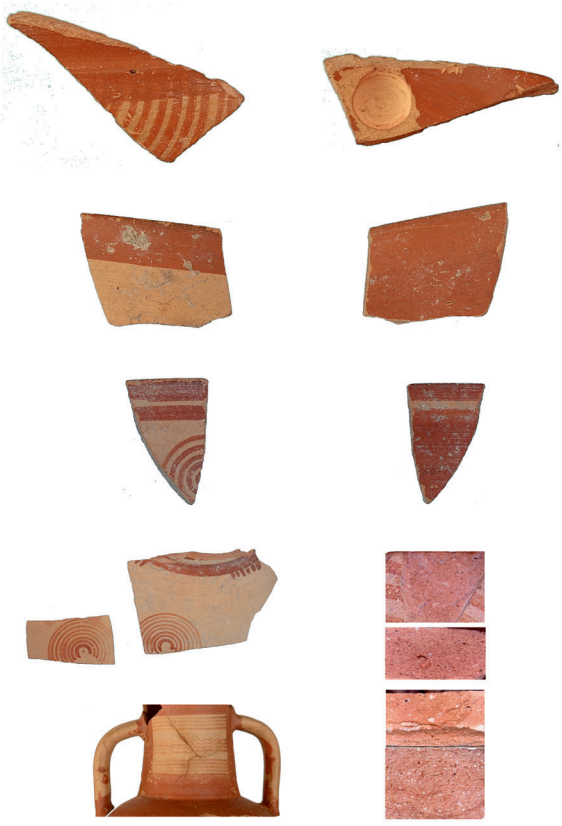

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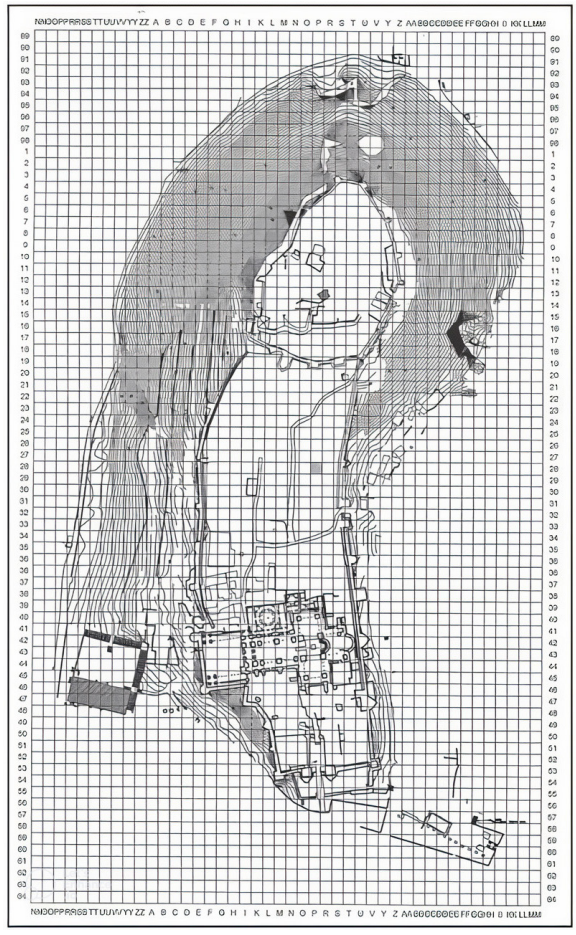

Fig.19