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CONTENTS

STUDIES

ANCIENT HISTORY	ARCHAEOLOGICAL MATERIAL				
Stanislav GRIGORIEV ORIGINS OF THE GREEKS AND GREEK DIALECTS 5	Cătălin BORANGIC, Vitalie JOSANU A GREEK CORINTHIAN HELMET ACCIDENTALLY DISCOVERED IN IAȘI COUNTY, ROMANIA				
Anna LAZAROU, Ioannis LIRITZIS GORGONEION AND GORGON-MEDUSA: A CRITICAL RESEARCH REVIEW	Manolis I. STEFANAKIS, Stella SPANTIDAKI, Ioannis MPARDANIS HISTIA: NAVAL HISTORY AND TEXTILE ARCHAEOLOGY. INVESTIGATING THE SAILS OF THE ANCIENT RHODIAN NAVY				
PERICLES, CLEON AND THE ANDRAGATHIZOMENOI	Andronike MAKRES, Adele SCAFURO ARCHAIC INSCRIBED VOTIVES ON THE ATHENIAN ACROPOLIS: DATING THE DEDICATIONS OF ORDINARY MEN AND WOMEN				
Denver GRANINGER ENVIRONMENTAL CHANGE IN A SACRED LANDSCAPE: THE THESSALIAN PELORIA	Stefan VASILACHE A SARMATIAN HORSE-RIDER AT THE COURT OF THE DACIAN KINGS. THE TYPOLOGY (I)				
NUMISMATICS Cristian GĂZDAC, Dan MATEI THE ROMAN IMPERIAL HOARD POTAISSA III (ROMAN DACIA) OR WHEN WE ALL MAKE BOTH PERFORMANCE AND MISTAKES! The peculiar coins	Laurențiu-Marian ANGHELUȚĂ, Ovidiu ȚENTEA, Luminița GHERVASE, Ioana Maria CORTEA, Monica DINU, Lucian Cristian RATOIU, Anca Constantina PÂRĂU INTEGRATED MULTI-ANALYTICAL STUDY OF THE BRONZE VESSEL FROM MĂLĂIEȘTI ROMAN FORT				
ARCHAEOLOGY	CULTURAL HERITAGE PROTECTION				
Akiko MOROO KEEPING THE SACRED LANDSCAPE BEAUTIFUL AND ELABORATE: MAINTENANCE OF SANCTUARIES IN ANCIENT GREECE	Tiberiu MOLDOVAN TERRORISM FUNDING AND ANCIENT ARTIFACTS, PARTNERSHIP FOR PROFIT				
Lucrețiu MIHAILESCU-BÎRLIBA ROMAN ARMY AND SALT EXPLOITATION IN SÂNPAUL-MĂRTINIȘ-OCLAND AREA	Li YONGBIN, Li RONG A NEW INTERACTIVE PARADIGM FOR THE STUDY OF ANCIENT CIVILIZATIONS				

REVIEWS

Sofia ANDREEVA

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ANCIENT HISTORY

ORIGINS OF THE GREEKS AND GREEK DIALECTS

Abstract: The coming of the Greeks is associated with one of the major transformations: at the beginning of the Neolithic (when the Indo-Europeans appeared there, from which the Greeks separated), at the beginning of EH, in EH II/III, and at the beginning of LH I. With the exception of the first hypothesis, the others try to associate these transformations with migrants from the steppe. In fact, in none of these periods there is material comparable to the steppe. The Greeks came in EH IIB from northwestern Anatolia and slowly spread across the south of the Balkan Peninsula. The Anatolian origin of the Greeks is indicated by many features in Greek mythology, as well as by archaeological and linguistic evidences. In Greece, the aliens found a Luwian substrate, whose assimilation took a long time. An important feature of the process was that it was not one-time migration, but a prolonged colonization with the establishment of strong and extensive trade relations.

Keywords: Greek origins, dialects, Early Helladic II.

1. INTRODUCTION

reece is the most important region for the Indo-European problem. And, at first glance, its solution should not cause serious difficulties, since in the archaeological sense it is one of the most studied regions of the world with many excavated sites, analytical and generalizing works. On the other hand, here already in the 14th century BC the Linear B Script appeared, written in Greek, and there is a rich literary tradition from the Classical period, reflecting the legends created in the Bronze Age. There are also many linguistic works on the Greek language. Against this background, the paradox is that over the years several main theories of the Greeks origin have been created, and all of them still have their supporters. It is impossible to describe the historiography of this problem in an article, and it is difficult even in a monograph¹. Therefore, here I will only indicate the existing hypotheses. It is quite obvious that the appearance of the Greeks must have occurred before the 14th century BC, and it should be accompanied by significant changes in material culture. There were four such changes: 1) during the transition to the Neolithic, 2) between the Neolithic and the Bronze Age, 3) during Early Helladic II, III, and 4) during the transition to Late Helladic I². And, each of them was associated with the Greek migration. Any approach must somehow be explained within the framework of the problem of the origins of Indo-Europeans in general. Since the dominant theory was

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for more details, see ALRAM-STERN 2004, 524–528.

² Further in the text will be used abbreviations for archaeological periods: The Early Bronze Age

 ⁻ EBA, Middle Bronze Age - MBA, Late Bronze Age - LBA; for mainland Greece: Early Helladic
 - EH, respectively MH and LH, for the Cyclades - EC, MC and LC, and the Minoan periods of

Crete – EM, MM and LM.

and remains that about their origins in the Ponto-Caspian steppes, all researchers of the Greek problem were forced to take this into account.

The theory of the connection between the origin of the Greeks and the emergence of the Neolithic complex was proposed by C. Renfrew, and continues to have its supporters. It is based on the fair opinion that the Neolithization of Greece, like the rest of Europe, was carried out from Anatolia, thus it is included in the theory of the Anatolian homeland of the Indo-Europeans. The second postulate is that subsequent cultural transformations took place on a local basis. It is assumed that in Greece, speakers of the Greek language in the south, and of the Italic and Illyrian in the north, sepatared from this substrate already in the Neolithic³. But, there were some significant cultural transformations after that. In addition, it is difficult to imagine how this can be included into the scheme and chronology of the dialectal division of the IE languages.

S. Hiller drew attention to the significant changes that took place in Greece at the very beginning of the Bronze Age, and these changes were associated with impulses from the Northern Balkans⁴. Detailed justification was offered by J.E. Coleman. Moreover, all his explanations were based on objective facts that are difficult to dispute. He rejected the possibility of the coming of the Greeks at the beginning of LH and the connection of this with the appearance of chariots, since during the transition from MH to LH, the culture of Greece did not change significantly. He also argued against the point of view that the Greeks came in EH III. The reason for these doubts was that the features that were formed in EH III were already present in EH II, and the influence of the Cetina culture from the North-Western Balkans extended only to Western Greece. He believed that during the transition from the Neolithic to EH there was a depopulation and people came from the north of the Balkans. The cultural break with the Neolithic was manifested not only in ceramics, but in the appearance of metal and a change in obsidian processing technology. Therefore, the cultural break stimulated by the northern impulses is indeed quite obvious. At this time, a related cultural complex spread from southern Hungary to Albania and Anatolia, including such phenomena as Baden, Cernavoda III, Coţofeni, Junatsite and Troy. This movement to Greece and Anatolia was caused by climate change, which manifested itself in Bulgaria in a rise in sea level, flooding of some territories, deterioration of soils in other places. And this is quite consistent with the "kurgan theory" of M. Gimbutas⁵. In fact, these climatic events significantly preceded the formation of the EBA in Greece, but the cultural break with the Neolithic was really significant, and taking into account the fact that a similar cultural complex spread to Anatolia, this may well mark the coming of the Indo-Europeans. But what is the evidence that this coming of people from the Northern Balkans means the coming of the proto-Greeks, and not some other peoples? Such an assumption would be valid only in the absence of later impulses. The criticism of migration in EH III is quite

fair, but we can admit migration in EH II. Nevertheless, this theory fits well with the basic concept of Indo-European studies on migration from the steppe.

J.L. Caskey⁶, after excavations at Lerna, drew attention to the cultural break between EH II and EH III, which, given the subsequent smooth internal development of Greek culture, suggested that this break marked the coming of Indo-Europeans. The appearance of a mound above the layer of destruction, apse structures, battle axes, burials in stone boxes and clay anchors indicated migration from the north and fit into the "kurgan theory". Therefore, in the Indo-European studies, it is this hypothesis that is most widely used, since it corresponds to the basic theory and has no chronological contradictions with the scheme of dialectal division of the Indo-European languages. As we will see below, not all of Caskey's arguments are correct, and the signs from this list actually appeared in the south of the Balkans at different times. For example, stone axes are known in the Rachmani culture as early as the Eneolithic, as well as in EH II in northern Greece, and their shape and context indicate that these were working tools⁷. The situation is similar with clay anchors, which are interpreted as cult objects or objects for textile production; they appeared first (EBA I, EH I) in the northeastern Aegeans (Poliochni, Troy, Myrina), in central Macedonia in EH I (Kristina), and in Greece in EH II, moreover, they are rare and widely distributed in EH III, possibly from Boeotia, but it is impossible to reliably determine this. In any case, they do not indicate northern steppe impulses8. But there were indeed migrations from the north at this time. The question remains: were these migrants Greeks?

J. Mellaart discovered the similarity of the Minyan pottery, typical of MH period, with pottery in northwestern Anatolia, and suggested the migration of Greeks from there⁹. Subsequent studies made many additions to the archaeological part of the problem, confirming the presence of Anatolian impulses, displacing them into EH II, but not accepting Mellart's conclusion about the migration of the Greeks. Too this was at odds with the basic theory of their northern homeland. Therefore, the appearance of fortifications with prototype in the northeastern Aegean in EH II is explained not by migration, but by long-term conflicts caused by climate change, droughts and soil exhaustion¹⁰, and other cultural features by trade¹¹. However, the number of these borrowings is so great that sometimes a conclusion is made about migration, but the Greeks are not mentioned¹².

J. Bouzek had already taken into account both points of view and discussed two waves of destruction: at the end of EH II (with the appearance of Proto-Minyan ware) and in EH III. He connected the coming of the Greeks with the latter, focusing on corded ware, barrows, clay anchors, seeing their prototypes in the Northern Balkans and Hungary, where the people had previously come from the steppe of

³ RENFREW 1987, 159–161; BINTLIFF 2012, 92.

⁴ HILLER 1982.

⁵ CORTIS 1988, 60; COLEMAN 2000, 104–108, 116, 133–137.

⁶ CASKEY 1960.

⁷ MARAN 1998, 4, 287, 288.

⁸ MARAN 1998, 112, 290; ALRAM-STERN 2004, 395, 396, 501.

⁹ MELLAART 1971, 686, 699, 700.

¹⁰ BINTLIFF 2012, 92.

 $^{^{\}scriptscriptstyle{11}}\,$ MARAN 1998, 274, 304, 432, 454; RAHMSTORF 2015, 166.

¹² ALRAM-STERN 2004, 519.

Eastern Europe. For a part of ware (MH Ib in Lerna V and Kirrha), similarities are proposed in the Catacomb culture complexes, and this circle of parallels is completed with hammer-headed pins, Mycenaean disc-shaped cheekpieces, compared with Sintashta ones, and boar-tusk helmets. The latter are compared with the Chalcolithic Mariupol artifacts made of wild boar tusks, and Mycenaean cheekpieces with their Sintashta parallels are also added here¹³. The last group of parallels belongs to different eras, and the ware, in my opinion, has no analogies in the Catacomb culture, it is more productive to look for its parallels in the Northern Balkans. In addition, at this time, the Catacomb culture was just being replaced by the Babino culture. J. Maran also allowed the coming of the Greeks at the beginning of EH III, which was associated with the appearance in the Peloponnese of ceramics and funeral rites characteristic of the north-west of the Balkans, but he noted that this complex did not penetrate beyond the Peloponnese. Therefore, one should either look for some additional related impulse to northern and central Greece from the Central Balkans, or assume that the Greeks were already present in the south of the Balkans by this time¹⁴.

Finally, S. Penner and R. Drews proposed the latest version of the coming of the Greeks during the transition from MH to LH I¹⁵. This is based on the presence of chariots and cheekpieces of the steppe type, weapons and Carpatho-Mycenaean ornaments in the Mycenaean Shaft Graves, on the Indo-European terminology for wheel in Greek, and on the idea of a sharp break with the previous cultural tradition. But, if Penner suggests the coming directly from Eastern Europe, Drews supposes it necessary to involve the Trialeti complexes of the South Caucasus in the discussion. Clay masks of the Catacomb culture are sometimes added to the steppe cheekpieces, which is considered a parallel to the Mycenaean gold masks, and it is assumed that the Greeks migrated in different streams¹⁶. A certain variation of this position is the point of view of J. Makkay, who, however, believed that the Greeks had came in EH, but the formation of the Mycenaean culture was caused by the coming of the Indo-Iranians from the steppe, which was supported by a large list of parallels (contracted burials, vertical stones around the mounds, steles, mats, a vessel with ocher, decorations from boar tusks, several burials under a mound, sacrificial animals, bow and arrows, spearheads with open socket; copper rings with spiral ends and diadems, clay masks of Catacomb burials and golden masks of Mycenae, comparison of animal images with the steppe animal style that appeared in the steppe only in Scythian time, the use of drugs by the Greeks, as well as by the Scythians, cheekpieces, bone details of whips or sceptres with carved Carpatho-Mycenaean ornaments¹⁷).

This hypothesis has already been criticized¹⁸. Briefly, it can be summarized as follows: 1) there was no sharp

break in the cultural tradition between MH and LH, as there were no penetrations into Greece of some steppe people, 2) Mycenaean weapons had Minoan, not Trialeti prototypes, 3) comparison of Mycenaean Shaft Graves with Sintashta ones is absolutely incorrect, 4) Makkay's parallels are not reliable, and are scattered from the Eneolithic to the Scythian period, 5) ornaments of the Carpatho-Mycenaean style appeared in the Carpathians earlier than in Mycenae and steppe Eurasia, 6) the designs of chariots and their images in Mycenae are comparable to the Near Eastern, and not to the steppe ones, 7) chariots on Crete appeared simultaneously with Mycenae (MM IIIB / LM IA), 8) cheekpieces in the Carpathians appeared earlier than in Greece, simultaneously with the steppe, 9) typologically Mycenaean cheekpieces are comparable to the Carpathian ones, and not to those in the steppe. Therefore, chariots were brought to Europe from the Near East as a result of contacts and exchanges, although some components could be brought from the steppe¹⁹, or migrations from the Near East to the Carpathians and steppe Eurasia, and from the Carpathians to Mycenae²⁰. Therefore, there are few grounds for this hypothesis, but it can also be included into the basic theory of the Indo-European origins without any problems.

This abundance of theories, the understanding that Greece was not the homeland of the Indo-Europeans, and they should have come there, as well as the lack of solid grounds for hypotheses about migrations, led to the pessimistic conclusion that "there was no 'coming of the Greeks' in any meaningful sense, and when and how the Indo-European language that was to become Greek arrived in the Aegean remains a mystery that it may be impossible to answer satisfactorily"21.

Needless to say, the solution to the problem of origin of any language cannot contradict the linguistic material. But the spread of the language must have a significant demographic base. Sometimes material culture can be transformed under the influence of a local substrate, and the genetic profile of aliens gradually dissolves, but their traces must be present both in the genetic profile and in material culture. Therefore, any solution to the problem must take into account the evidences of linguistics, archeology and paleogenetics, and if it contradicts the evidences of one of these disciplines, it is false. The use of this approach to the Indo-European problem demonstrated that any evidence on the penetration of language, culture and genes from the north into the areas inhabited by southern Indo-Europeans, including Greece, are completely absent. On the contrary, over a long period from the Neolithic to the Bronze Age, we see a constant spread of culture, genes and language from south to north, which indicates the Near Eastern homeland of the Indo-Europeans²². This makes possible a more detailed study of individual blocks of this problem, and the most important of them is the origin of the Greeks, especially since the state of the research base here is readiest for such detailed studies. Therefore, in this article I was relieved of the need to find parallels in other territories myself or to

¹³ BOUZEK 1985, 25-27.

¹⁴ MARAN 1998, 456, 457.

¹⁵ PENNER 1998; DREWS 2017.

¹⁶ ANTHONY 2007, 369.

¹⁷ MAKKAY 2000, 14, 16, 48, 49, 56, 60, 62.

DICKINSON 2016, 11-17; MARAN 2020, 506-511, 516, 519; GRIGORIEV 2021a, 170.

¹⁹ MARAN 2020, 511, 520.

GRIGORIEV 2021a.

²¹ DICKINSON 2016, 7, 18.

²² GRIGORIEV 2021b.

Table 1. Periodization of the Aegean Bronze Age

C14 (BC)	Greece	Cyclades	Crete	Thessalian, N. Balkan	Balkan-Carpathians	S. Germany	Anatolia	Historical chronology (BC)
1200 1400	LH III	LC III	LM III	LBA	Urnfield culture	D	LB 2 Troy VIIa/ VIg-h	
1490/1470	LH IIb	LC IIb	LM II	LBA	Tumulus	С	LB 1 Troy VI	
1580	LH IIa	LC IIa	LM Ib	LBA	Tumulus	В	LB 1 Troy VI	
1675/1650	LH I	LC I	LM Ia	LBA	Tumulus Věteřov, Maďarovce	B A2c A2b	LB 1 Troy VI	1560 1630/10
1800/1700	MH III	MC III	MM III	MBA	Věteřov, Maďarovce	A2b	MB 2 Troy VI	1750
2000/1900	MH II	MC II	MM II	MBA	Únětice	A2a A1c	MB 1 Troy V	1876–1820*
2050/2000	MH I	MC I	MM I	MBA	Únětice	A1b	MB 1 Troy V	
2200/2150	EH III	EC III	EM III	MBA, Cetina	Hatvan, Maros, Nitra, Nagyrév	A Ia	EB 3b Troy IV	1850–1730
2200/2150	EH II/ III	EC II	EM II	Proto-Cetina, EBA III	Early Nagyrév, Post- Vučedol	Bell Beaker	EB 3a Troy III	2157–1962*
2450/2400	EH IIb	EC II	EM II	EBA II		Bell Beaker	EB 3a Troy III Troy II	24 c. BC
2650	EH IIa	EC II	EM II	EBA II	Vučedol		EB 2 Troy II	
3100/3000	EH I	EC I EM I	FM I	EBA I	Vučedol	Corded ware	EB 1 Troy I	
			T141 1		Kostolač	Horgen	Kumtepe IB	

^{*} Dates are obtained using Bayesian radiocarbon dates (Brunner et alii 2020; Maczkowski et alii 2021).

interpret archaeological material. I have used the points of view and assessments of the material that are generally accepted in the archeology of Greece, and the following text could have been written much more skillfully by many colleagues studying the region. This was hampered by the false initial postulate about the steppe homeland of the Indo-Europeans, and to solve the problem it was enough to change the focus of its consideration.

2. CHRONOLOGY

In this discussion, it will be impossible to avoid questions of chronology, which have objective difficulties. There is a notorious break between the historical chronology of the Near East and radiocarbon dates. But reading the literature of different years, it is difficult not to pay attention to the difference in dates. For example, the beginning of MH can be determined ca. 2000 BC²³, 2000/1900 BC²⁴ or ca. 1800 BC²⁵. Partly the latter is caused by a desire to bring chronology closer to historical dates, but partly because there is an obvious trend: with the introduction of AMS

dates intervals have become younger. With the use of the AMS dates and Bayesian statistics, dates have become close to historical dates. In some cases, as, for example, when dating the beginning of the XVIII Dynasty in Egypt, Kültepe in Anatolia or the Late Shang tablets in China, they became identical to the historical ones²⁶.

The historical dates of the Near East and China are also quite comparable²⁷. An important marker that allows us to see this is the Santorini eruption, which occurred during the reign of Ahmose I. Its consequences were also noted in China, during the replacement of the Xia Dynasty with the Shang Dynasty²⁸. Based on the Bamboo Annals, the first year of the Shang can be dated to 1558/1554 BC. There is also a so-called Yin Li chronology (the 4th century BC) that dated the first Shang year 1579 BC²⁹. Bristlecone dendrochronology in California reveals the annual rings reflecting severe cold events in 1560, 1546, and 1544 BC. But the first is the most significant, and it is considered

²³ MARAN 1998, Taf. 80.

²⁴ BINTLIFF 2012, 155.

²⁵ WIENER 2020, 279.

²⁶ BRONK RAMSEY *et alii* 2010, 1554–1556; BARJAMOVIC/HERTEL/ LARSEN 2012, 29, 34, fig. 11; MANNING *et alii* 2016, 6, 7, 16, 17, 20, 21; LIU *et alii* 2020

²⁷ GRIGORIEV 2020.

²⁸ FOSTER/RITNER/FOSTER 1996, 9.

²⁹ KEIGHTLEY 1999, 232, 248; NIVISON 1999, 10, 12, 15.

the most promising for identification with this eruption³⁰. The new radiocarbon calibration curve allows this eruption to be dated to ca. earlier-mid 16th century BC31, which corresponds to this date 1560 BC. Accordingly, this date can be regarded as the date of the end of LM 1A. As a result, I am convinced that over time we will get dates close to the Near Eastern 'Middle chronology'. However, cross-dating is also not a reliable method, since the existence of a type can be long or even different in different areas, but the connections of complexes in Greece and the Near East are still based on a limited set of types. The most significant work on the synchronization of various complexes within and outside Greece was done by J. Maran³², and most of the authors are based on this work. However, it must be taken into account that the absolute dates there are given according to the state of radiocarbon studies in the mid-90s of the last century.

We are, of course, still far from solving the problem. The use of the Bayesian statistics and AMS dates of the complexes, which can be reliably attributed to certain periods of P. Reinecke, makes it possible to date the A1/ A2 transition in the interval of 1876–1820 BC³³, which is earlier than possible historical dates, but in this case the dating of tree rings was not used. However, the use of this method at the Sovjan settlement in Albania made it possible to date the end of the EBA between 2157 and 1962 BC34. But, according to historical parallels, the beginning of the Balkan-Carpathian MBA falls in the interval 1850–1730 BC³⁵ or between 2200 and 1750 BC^{36} . The period EH IIB, which is extremely interesting for our work, corresponds to the end of Early Dynastic III period in Mesopotamia, falling, respectively, in the 24th century BC³⁷.

Therefore, for the orientation of readers who are less familiar with the periodization and chronology of the Aegean, I have compiled a chronological Table 1 based on some works³⁸. It gives the most probable radiocarbon dates, but I perfectly understand their conventional character. This table is provided only for the purpose of giving the reader an idea of the synchronization of materials from different territories mentioned in the text.

3. TRANSITION FROM THE NEOLITHIC TO THE EBA

The Neolithic in Greece was formed as a result of migrations from the Near East, in several waves, starting from the Pre-Pottery Neolithic (ca. 7000 BC). In the Middle Neolithic, the first fortifications appeared, but the concentric walls of Dimini are not high, they are the retaining walls of the tell's terraces, and in Sesklo the acropolis may not served as a defensive structure either (see map in Fig. 1). Real defenses appeared in the final Neolithic of southern Greece and the

- 30 PEARSON et alii 2018, 4, 5.
- MANNING et alii 2020, 8.
- 32 MARAN 1998.
- 33 BRUNNER et alii 2020, Fig. 7.
- ³⁴ MACZKOWSKI et alii 2021, 1, 9.
- ³⁵ GRIGORIEV 2021a, 182.
- 36 LEŠTAKOV 2016, 53.
- 37 ALRAM-STERN 2004, 215.
- 38 MARAN, 1998; ALRAM-STERN, 2004, 169-215; KOUKA 2009a, Tab. 1; PAVUK, 2015, Fig. 1.

Cyclades³⁹. In Lerna in the Peloponnese, this time is marked by the appearance of materials such as Thessalian Larissa and Rahmani, and the types of fortified settlements are very similar⁴⁰. Nowadays, this period is also called Chalcolithic and is dated to the 4th millennium BC. It has many similarities, in particular the Rachmani culture in Thessaly is comparable to the cultures of central and southern Greece, especially Attika-Kephala⁴¹. At the end of this period, in many parts of Greece elements of the North Balkan and Central European cultures (the Baden horizon, Cernavoda III - Boleraz, Kostolac, Bodrogkeresztúr-Balaton): types of metal objects, fortifications, ceramics, including characteristic cups of the Bratislava type. There are some connections with Kumtepe I in the Troas, common to Greece and Thrace. As a result, from southern Hungary to Greece and Anatolia (Troy I) ca. 3100/3000 BC a similar cultural complex was formed⁴². Some of its elements (curvilinear incised decoration) appeared in the Cyclades, but in general, there and in Crete the culture developed from the local Neolithic. Cycladic influences are also recorded in Attica⁴³. This process was not rapid, for example, in the Peloponnese, the Eneolithic traditions were replaced by those of EH I somewhat later than in eastern Greece, but eventually this happened everywhere⁴⁴.

Thus, the formation of EBA fits into the same process of impulses from Central Europe, which caused the displacement of a part of the North Balkan population to Anatolia, which is explained by migrations of speakers of Anatolian dialects (Hittite, Luwian, and Palaic)⁴⁵.

The subsequent transition between EH I and EH II was quite smooth, and the development of the ceramic complex leaded to the development of a specific set of the first half of EH II, represented by lacquered bowls and "sauce boats", amphorae with a collar neck, askoi, and jugs⁴⁶. Some of these types are included in subsequent ceramic complexes (Fig. 2).

Therefore, it can be assumed that this northern impulse of the beginning of the EBA was really associated with the coming of the Greeks, which can be considered within the hypothesis about the steppe homeland of the Indo-Europeans. But real steppe components did not appear in the culture of Greece at this time; there are not even minimal signs of it. We can assume that they were reworked under the influence of the North Balkan substrate, as a result of which the Proto-Greeks came to the south with the Balkan culture.

But we do not see this in the Northern Balkans either. In Upper Thrace, the EBA begins ca. 3200 BC, simultaneously with EH I. The emergence of large settlements with acropolis surrounded by stone walls or palisades with moats is significant. Basically, the agricultural culture is preserved, but there are also signs of steppe cultures: burials under mounds, with contracted inhumations on the back or side,

- ³⁹ BINTLIFF 2012, 47–50, 58–60.
- ⁴⁰ CASKEY 1971, 774–785.
- ⁴¹ MARAN 1998, 39.
- ⁴² MARAN 1998, 157, 428; ALRAM-STERN 2004, 154, 155; ALRAM-STERN 2014.
- 43 COLEMAN 2000, 124, 127, 128, 132, 133; ALRAM-STERN 2004, 338-343, 500; KOUKA 2009a, 32.
- MARAN 1998, 7, 8,
- ⁴⁵ GRIGORIEV 2002, 352–354, 356; GRIGORIEV 2021a.
- ⁴⁶ MARAN, 1998, 10; ALRAM-STERN 2004, 346–348, 513.

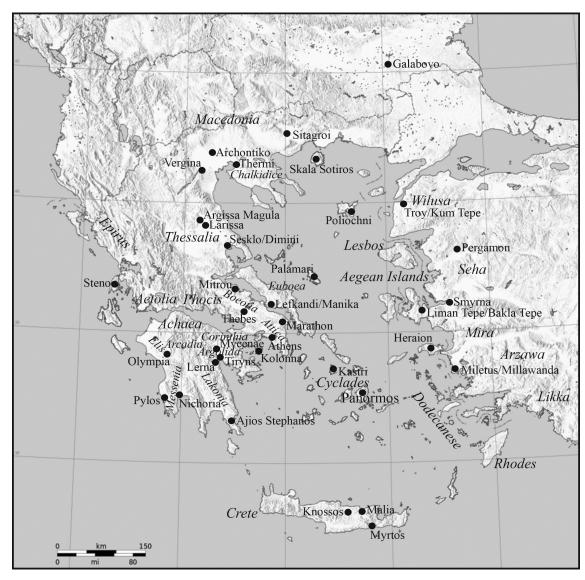


Fig. 1. Historical areas and main archaeological sites of the Aegean mentioned in the text.

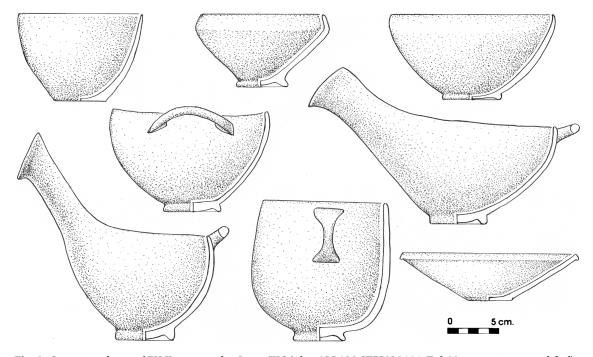


Fig. 2. Ceramic tradition of EH II, preserved in Lerna IIIC (after ALRAM-STERN 2004, Taf. 23, source image modified).

colored with ocher; but ceramic forms have little in common with steppe ones⁴⁷. Therefore, it seems that the formation of the EBA of the Northern Balkans was a rather complex phenomenon, with Central European and steppe influences, and the steppe cultural component was not so important. In general, the idea of a massive steppe invasion of steppe nomads with ocher burials in Bulgaria is greatly exaggerated. The early Eneolithic group is represented by only three burials in the northeast. It is difficult to date them, but perhaps they belong to the Novodanilovka group on the Dnieper. The culture is based on the agricultural traditions of southeastern Europe, and the idea that some newcomers destroyed old settlements does not correspond to reality, since the traces of destruction belong to different times within the Chalcolithic. There are later Yamnaya burials in Bulgaria, but they are usually accompanied by local ware⁴⁸. Many Yamnaya burials have been found in Hungary and Romania. In total, ca. 500 burial mounds are attributed to the Yamnaya culture, but in all the ceramics are represented by local forms⁴⁹. The culture of this region continues local agricultural traditions, and has nothing similar to Yamnaya. Therefore, these impulses did not have a significant impact on the formation of the EBA in the Northern Balkans. The paleogenetic study of EBA samples from Bulgaria showed their intermediate position between Early Neolithic farmers and Late Neolithic-Bronze Age steppe pastoralists. Therefore, it was concluded that the Thracians were formed as a result of contacts of European or Mediterranean and Eastern European populations⁵⁰. As we will see below, the Thracians appeared in the Northern Balkans at the beginning of MBA, but these data are quite applicable to the events of the beginning of the EBA, fixing the influx of populations from Eastern Europe.

In Greece, the steppe impilses are completely absent. It is also significant that in Greece, in contrast to the Balkans and Europe, genes comparable to steppe genes do not appear⁵¹. Therefore, there are no possibilities to discuss the coming of the Greeks at the beginning of EH. The only thing we can admit is that the Yamnaya migration caused an outflow of part of the North Balkan populations to the south and southeast, which led to this large-scale process that formed a similar cultural complex of the Aegean. And, that is in line with the Greek material. But there are problems with the Yamnaya migration to Europe itself. The idea of its formation from the Ponto-Caspian steppes has not yet been reliably proven. In the northwestern Black Sea region, the Yamnaya Budzhak group does not have inclusions of ware characteristic of the Yamnaya culture in the eastern areas, but just this group interacted with the Carpatho-Danubian cultures, and this was an interaction in both directions. Paleogenetic substantiation of the Yamnaya migration also raises a number of questions, and the archaeological traces of such a massive migration are simply absent. The processes were more complex; there were penetrations of the Budzhak Yamnaya people to the west, but on this basis it is impossible

to show the formation of the Corded Ware cultures⁵². However, the presence in Europe of East European genes points to impulses from this region that could culminate in the penetration of some Indo-European language.

archaeological situation in the corresponds exactly to the linguistic data. After the work of Palmer⁵³, the generally accepted point of view is that there was no non-Indo-European substratum in Greece, and the toponyms with the endings -ss-, -nth- and -nd-, identified in Greece, Thessaly, Thrace, Macedonia (up to part of Hungary) and Southwestern Anatolia reflect the presence of speakers of the Anatolian language group, close to Luwian. It was the pre-Greek substratum there. Similar suffixes are found in the Greek cultural vocabulary⁵⁴. In Crete, this Luwian substratum persists during the Minoan Civilization, as evidenced by the possible identification with this language of the Linear Script of Class A found in Crete, Cyclades and Peloponnese. This script is dated to 1750-1450 BC (LM IIIA1–2) and predated the Greek Linear B of the Mycenaean Civilization⁵⁵. It is significant that in the Cyclades and Crete the cultural tradition was not interrupted since the Neolithic, and in Crete there are no traces of migration until LM II, when the Mycenaeans came there from mainland Greece, and the tablets with the Minoan Linear A were replaced by the tablets with the Mycenaean Linear B⁵⁶.

C. Renfrew explains the presence of these toponyms, as well as the obvious borrowing of cultural terms from Linear A to Linear B, by the unconditional influence that the Minoan Civilization had on the Mycenaean, believing that most of the terms in the Greek language that are considered as substrata are adstrata⁵⁷. Such a possibility for many cultural terms is quite permissible, and it is absolutely impossible for any non-Greek term to be considered as a sign of the previous presence of speakers of some language group in Greece. But the borrowing of place names is already less likely, they mark the noticeable presence of speakers. Therefore, the presence of the pre-Greek Anatolian substrate is obvious. R. Crossland, considered the opinion of Palmer more reasonable, and admitted that these regions were earlier inhabited by Luwians. At the same time, he pointed out that in the Greek language there are no borrowings from Luwian, only toponyms have been preserved, therefore, it is impossible to talk about direct contacts. According to

⁴⁷ LESHCHAKOV 2006, 155, 165, 168, 170, 173, 176.

⁴⁸ IVANOVA 2008, 141–150, 163–167.

⁴⁹ HEYD 2012, 535, 536, 539, 540.

⁵⁰ MODI *et alii* 2019.

⁵¹ CLEMENTE et alii 2021, 7.

see IVANOVA/NIKITIN/KIOSAK 2018 for more details.

⁵³ PALMER 1958.

⁵⁴ GINDIN 1967, 57, 60–64, 71–74; KATIČIĆ 1976, 40–55; COLEMAN 2000, 139; ALRAM-STERN 2004, 523; FINKELBERG 1997, 14; FINKELBERG 2005, 5, 6, 42-48, 51,

⁵⁵ PALMER 1958; FINKELBERG 2000, 99; FINKELBERG 2005, 52, 58–61. $^{\rm 56}\,$ At this time, part of the former palaces was destroyed or abandoned, Knossos became the center; Mycenaean types of burial structures appeared: shaft tombs, tholoi with long dromos, chamber tombs. But at many

cemeteries (Mavro Spelio and Gypsadhes) Minoan burial traditions were preserved. Consequently, even after the Mycenaean invasion, a pre-Greek substrate remained there. During the same period, the destruction of Minoan centers in the Cyclades and along the Anatolian coast was recorded (COLEMAN 2000, 132, 141, 182; BINTLIFF 2012, 93; WIENER 2020, 300-302). It is significant that in the rich archives of Knossos of this time there is no mention of places in the east of the island where the former Minoan population preserved, the Eteocretans ('true Cretans'), mentioned in the Odyssey, who lived until the 4th century BC there (FINKELBERG 2005, 156; WIENER 2020, 306). But their language is still difficult to attribute to any

specific group. RENFREW 1998; WIENER 2020, 296.

linguistic data, we may discuss relations with the Phrygians and the presence of Illyrians in Greece⁵⁸ (below we will talk about the opposite point of view).

Coleman is inclined to attribute this toponymic layer to the Neolithic, which suggests that the first Indo-Europeans appeared in Greece ca. 4500/4400 BC, and consider the following EH culture (ca. 3200 BC) as Proto-Greeks. This is supported by the similarity of the Neolithic of the Cyclades to the Late Neolithic of mainland Greece and the culture of Anatolia of the Kumtepe IA period. The spread of the Balkan-Danubian complex into the Troas at the beginning of the Troy I period makes it possible to admit the penetration of the Proto-Greeks into Northwestern Anatolia⁵⁹. But the attribution of this toponymic layer to the Neolithic is impossible for the reason that the Neolithic complex of Greece did not penetrate into Southwestern Anatolia.

According to L. Gindin, the situation is not as homogeneous and straightforward as described by Palmer, and there was no single pre-Greek substratum, the appearance of the Greeks was preceded by two successive strata: 1) non-Indo-European, 2) Indo-European Anatolian, although the existence of a third Pelasgian stratum is not excluded, which meant the Phrygians⁶⁰. In principle, we can assume that the Neolithic population was non-Indo-European, as in most of Europe, being speakers of languages close to the Dene-Caucasian language family⁶¹. However, there is no reliable data on this. Nevertheless, if we can connect the beginning of the EBA in the south of the Balkans with the coming of the Indo-Europeans, then the previous Neolithic and Eneolithic layer could well have been pre-Indo-European.

In addition, the presence of this Luwian substratum refutes Renfrew's theory of the settling of Europe and Greece by Indo-Europeans from Anatolia. For the formation of specific features of the Anatolian languages, it was necessary for their speakers to live separately from the Indo-Europeans for thousands of years. And the identified linguistic Luwian stratum could not have been the basis for the formation of Greek. For the same reason, M. Gimbutas's theory does not work. The only way is to combine the two theories, when a wave of Greeks from the north came in the area inhabited by the post-Neolithic Anatolian substrate of immigrants from Asia Minor⁶². Indeed, Anatolian languages have many fundamental differences from Indo-European, which makes it possible to consider them even as an individual group that separated before the formation of Indo-European languages from the earlier Proto-Indo-Hittite language⁶³. This exactly corresponds to the situation reconstructed on the basis of archaeological material. The separation of Anatolian languages occurs as a result of the Neolithization of Europe from Asia Minor. Speakers of the Dene-Caucasian languages (before separation of the North Caucasian) were mainly involved in this process, but in Bulgaria there are also inclusions of East Anatolian features, and, in my opinion, this last region was the homeland of the Indo-Europeans⁶⁴. Thus, the speakers of Anatolian languages were isolated in the Balkans from the Indo-Europeans for thousands of years.

In addition, J. Mellaart demonstrated the spread of culture from Europe in two waves: at the stages of Kumtepe I, and Troy II. It is the latter wave that spread over southwestern Anatolia and it corresponds to the toponyms under discussion⁶⁵. And it is this wave is associated with the formation of EBA in Greece. Subsequent studies have shown that the pre-Trojan complexes of Demircihöyük, Kumtepe I, Beyçesultan XXV-XVIII/XXIX-XXXIV, Ikiztepe, Yarikkaya, Gelveri-Güzelyurt, Büyük Güllücek, Ilipinar, and Alişar have analogies in Varna, Gumelnitsa, Salcuţa, Maritsa, Veselinovo, Cucuteni A, and other sites in the northeastern Balkans, although there are some parallels with Vinča⁶⁶. This line of development continued in Troy I, but radical changes took place in Troy II, and its culture became identical to that of Thrace, which led to a conclusion that these areas were inhabited by the same population⁶⁷. Since the first wave extend to Transcaucasia, and the second was limited to the south-west of Anatolia, it can be assumed that initially speakers of the Proto-Hittite language came to Asia Minor, and the Proto-Luwian did it with the second wave⁶⁸. In addition, significant cultural transformations took place in Greece in EH IIB - EH III. Accordingly, it is more reasonably to associate the coming of the Greeks with them, and the previous population of EH I – EH II-early with this Luwian substratum. As a result, a significant part of the Balkan Peninsula and Western Anatolia was inhabited by related populations, which contributed to the establishment of relations between these regions, reflected in trade. Some Asia Minor and even Mesopotamian imports began to penetrate into Greece, and there were trade relations along the Adriatic coast⁶⁹.

It is impossible to confirm this by paleogenetic studies. In Anatolia, as elsewhere in the Near East, there are no traces of genetic presence of immigrants from Europe or steppe Eurasia, although admixtures of Iranian and Caucasian genes appeared and increased in the Eneolithic and EBA⁷⁰. This is probably explained by the fact that the migrants of the beginning of the EBA originated from the northeastern Balkans, where, after the Neolithic migrations from Asia Minor, the genetic profile of the population was identical.

CROSSLAND 1971, 846-850.

⁵⁹ COLEMAN 2000, 139–144.

⁶⁰ GINDIN 1967, 82, 94, 165-170.

GRIGORIEV 2021b. See also the opinion that there was no non-Indo-European substratum west of Asia Minor, as ideas about it were based on these Luwian endings (FINKELBERG 1997, 8; FINKELBERG 2005, 51). However, there are some non-Indo-European words in Greek that are isolated from these suffixes, allowing a probability of this earliest non-Indo-European substratum. In particular, there are not too reliable parallels with Etruscan, nevertheless, they can be discussed (KATIČIĆ 1976, 56-62). But these words could have been introduced by the Greeks later from another area, so they do not testify in favor of the substratum. It is unrealistic to show this reliably, since it is possible to admit some rare remnants of the Neolithic vocabulary that survived before the appearance of the North Balkan complex here at the beginning of the EBA. And this vocabulary was, most likely, not Indo-European, but Dene-Caucasian.

⁶² FINKELBERG 1997, 17–19.

⁶³ KLOEKHORST 2016, 213, 229, 232.

GRIGORIEV 2021b.

MELLAART 1971, 371-386.

⁶⁶ PARZINGER 1993, 264–266, ÖZDOGAN 1991, 218–220; YAKAR 1991, 248, 253,

MERPERT 1988, 29-31; KATINČAROV 1991, 98, 99.

 $^{^{68}\,}$ GRIGORIEV 2002, 352–354, 356; GRIGORIEV 2021a.

MARAN 1998, 437; MARAN 2007, 10, 11.

 $^{^{70}\,}$ MATHIESON et alii 2017, 13; DAMGAARD et alii 2018, 6; SKOURTANIOTI

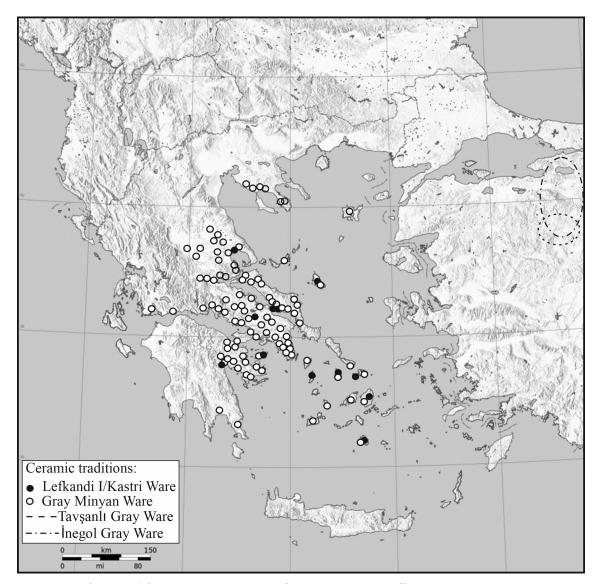


Fig. 3. Distribution of the Gray Minyan Ware and its prototypes in Hellas.

4. CULTURAL TRANSFORMATIONS OF THE EH II, III

4.1. Ceramics

It is clear that the most significant changes in Greece took place at the end of EH II71. The so-called "Minyan Ware" was typical for the MH period in Greece. It is a dark polished well-fired pottery that H. Schliemann discovered in Orchomenos and named after the legendary ruler of this city⁷². In Kolonna (Aegina) it was already present in EH III, but is still rare in MH, on Euboea in EH III, in the Peloponnese and in Thessaly during the transition to MH. Probably, it appeared already in the transitional period EH II/III, but it is difficult to determine an exact place of origins of this ware⁷³. The predecessors of this ware were initially found in the EH III layers in the Peloponnese (Lerna IV, Olympia, Tiryns, Kolonna on Aegina) and other sites in southern and central Greece. It was fine gray-burnished pottery, represented by some new forms: tankard, kantharos, bass bowl, depa, and two-thirds of this pottery was made on a potter's wheel that

had not previously been used in Greece⁷⁴. Now the appearance of these ceramics are classified as belonging to developed and late EH II and EC II/III75. It had no predecessors in local EH II pottery; its early forms are found in the anatolianising Lefkandi I / Kastri complex in Boeotia, Euboea and the Cyclades (islands of Keos, Syros, Delos, Siphnos, and Naxos). These ceramics are presented by a small set of shapes (plates and shallow bowls, one-handled tankards, two-handled cups, depa, beaked jugs, incised pyxides), made on a potter's wheel, and they have not gray, but black, brown, red and buff burnished surface⁷⁶ (**Figs. 3, 4**).

Analogs in Western Anatolia appeared during EB 2b, and widely distributed in the EB 3a period, as well as the first appearance in Greece of potter's wheel and new methods of firing, made it possible to create the idea that this could not be an accident and could be explained by migration from there through the Aegean to the northern and central Cyclades, Euboea, inner Boeotia, eastern Attica, Aegina and coastal Thessaly in the developed and late EH

⁷¹ MARAN 1998, 3, 299; DICKINSON 2016, 8, 9.

⁷² BINTLIFF 2012, 164.

⁷³ MARAN 1998, 19, 24, 36, 52, 100, 275, 278, 279.

⁷⁴ RUTTER 1983, 327–335, 338–341.

⁷⁵ MARAN 1998, 98; ALRAM-STERN 2004, 152, 153, 157-160.

⁷⁶ RUTTER 1979, 1–6; RUTTER 1983, 344–347.

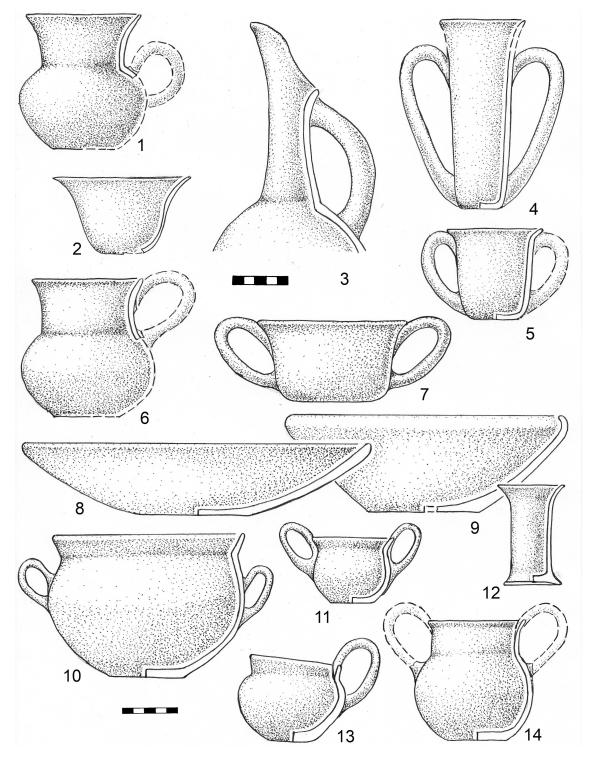


Fig. 4. Lefkandi I / Kastri ceramic complex: 1, 2, 6-9 – Lefkandi I, 3-5 – Kastri, 10-14 – Lerna IV. (after RUTTER, 1979, figs. 1-4, 6, source image modified).

II. This tradition penetrated deep into Thessaly only during the period corresponding to EH III, and it did not appear in Central and Eastern Macedonia. The latter region was part of the Northern Balkan cultural space for a very long time. In Tiryns, EH II layer with traces of destruction is covered by a transitional layer to EH III containing this ware. At the beginning of EH III, methods of firing changed, the pottery became gray, and it spread to Argolis, along with some forms of pottery from Attica and Boeotia. The tradition that was formed in Argolis at the beginning of MH penetrates into

Messinia. It is also significant that the spread of the potter's wheel goes along with the spread of this ceramic tradition: in EH IIB in eastern Greece and in EH III in Argolis. This process was quite complex and was accompanied by interaction with local ceramic traditions. It was a direct predecessor of the Gray Minyan ware of MH period, in which it reaches its peak and then gradually disappears in MH77. These Proto-

RUTTER 1979, 1, 8-15; RUTTER 1983, 335, 347-353; MARAN 1998, 14, 24, 33-36, 49, 52-54, 57, 60, 73, 98-101, 108, 109, 140-142, 417; ALRAM-STERN 2004, 158, 167, 168, 186–189, 359, 360, 364, 367, 374; PAVÚK

Minyan ceramics are both hand-made and wheel-made. The wheel-made ware was produced in Attica, Boeotia, Euboea, Phthiotis and Thessaly, while it was exported to the Cyclades, Argolis and Chalkidiki, and only hand-made ware was produced locally⁷⁸. This area of the wheel-made ware rather closely corresponds to the area of the Aeolic dialects. It is possible that at the same time the Ionic dialect began to spread in the Cyclades. It is significant that at this time in Attica, ware with painted geometric patterns, characteristic of the Cyclades, appeared. And, in the subsequent time, it was Attica that was most closely associated with the Cyclades, and the Attic dialect was the closest to Ionic. In MH, Euboea (Pevkakia-Magula) shows more relations with the Eastern Aegean than with Central Greece⁷⁹. This suggests that the Ionic dialect began to spread there only at this time.

Anatolian prototypes of Lefkandi I ceramics are located 300 km off the coast of northwestern Anatolia, in the area of the city of Kutahya: Tavşanlı Gray Ware and İnegol Gray Ware. The first type is usually hand-made, while the second is often wheel-made and is very similar to the Greek Minyan ware. These are mainly collections from the surface, dated to the Troy V period, which corresponds to MH I, II. Tankards belonging to this group and found on Chios, and by analogies in Beycesultan IX are dated to Anatolian EB 3a or Aegean EBA 3, and by analogs in Troy, they are synchronized with EH IIB – EH III⁸⁰. A broader comparison made it possible to synchronize the complexes of early Lefkandi I (developed EH II) with the end of the Anatolian EB 2b, Poliochni-red, Beycesultan XIII, Karataş V, and late Lefkandi I (late EH II and EH III) with EB 3a, Troy II-late and III, Poliochni-yellow. EH III is synchronized with EB 3b⁸¹.

The peculiarities of this process are well manifested in the analysis of other ceramic types of this time. Painted ceramics with geometric patterns play an important role in the subsequent formation of EH III traditions. It had no prototypes in Anatolia, but was common in the Keros-Syros culture in the Cyclades, reflecting inclusion in the migration of the Cycladic population along the way. Initially, this group settled in Attica, and only in EH III began the spread of the tradition to other parts of Greece with the development of two main styles: dark-on-light (in the northern Peloponnese) and light-on-dark (in Phocis, Locris and Boeotia). The original area of formation of the tradition was between Boeotia and Argolis, and this is a mixture of earlier local and Cycladic traditions. At the same time, this ware does not present in the MH period82. But it is likely that in the northeastern Peloponnese, in Lerna, Cycladic pottery of both these styles appeared before the penetration of anatolianising pottery of layer IV there: it is present in layer IIIC, synchronous to phase Lefkandi I / Kastri and Thebes B83. Therefore, it can be assumed that the appearance of immigrants from the east in the Cyclades drove out part of the population from there to the mainland, including to the northeast of the Peloponnese.

2010, 933; DICKINSON 2016, 10; ALRAM-STERN/HOREJS 2018, 15.

At the same time, in the Cyclades themselves, the local population was not absolutely swept away. Prior to this, the Cycladic culture gradually developed from the Eneolithic group Pelos to the Kampos group of the EC I / II, which is synchronous with the late EH I, and further to the groups Syros, Aplomata, Chalandriani of the EC IIA period. But in EC IIB (Kastri-Chalandriani phase), partially anatolianising forms appeared, and fortifications with bastions of the East Aegean types. Since that time, the intensity of relations with the northeastern Aegean has sharply increased⁸⁴.

In inner Thessaly, the layer with traces of fire (Argissa III) corresponds to the time of Lefkandi I. However, at this stage, anatolianising or Cycladic forms do not appear there (with the exception of a small amount of painted ceramics), but southern Greek influences are present in the form of the appearance of sauce boats and askoi, characteristic of the early phase of EH II. With the appearance of anatolianising forms there in EH III, ceramics appear, painted dark-onlight and also light-on-dark85. One gets the feeling that in EH IIB the former population shifted from the south, and in EH III a population with Anatolian and Cycladic roots came there, which corresponds to the beginning of the Thessalian MBA. In Coastal Thessaly (Pevkakia-Magula), the Lefkandi I forms and bastion fortifications appeared a little earlier, but there, as throughout Thessaly, destruction or devastation of settlements is recorded during the transition to the MBA⁸⁶. It is possible that this was caused by the penetration of a new population from Anatolia and the formation of cultures of the Carpathian MBA. However, this population did not remain in Thessaly.

In some areas of the northern Peloponnese, the EH III ceramic complex (upper part of the layer Lerna IV) contains inclusions of ware with incised ornaments, occasionally with cord, filled with white paste (**Fig. 5/4-9**)⁸⁷. In MH, number of this ware in Lerna increased, and it penetrated also into Messinia (Nichoria and mound in Voidokilia)88. J. Maran studied this issue in more detail. This ware has direct analogs in Dalmatia and adjacent regions of Bosnia and Western Serbia, in the culture of Cetina (in some publications it is therefore called "Adriatic"), and the population is supposed to come from there. At the same time, there are parallels to this pottery in the Nagyrév culture in the Carpathians, as well as in southeastern Italy, Sicily and Malta (**Fig. 5/1–3; 6**)89. In this period, similar ware appeared in western Macedonia at the Archontiko settlement, as well as an already insignificant admixture in Agia Marina (Boeotia) and Kolonna (Aegina)90. In Thebes, in the layer of the beginning of EH III, a shafthole axe was found with analogs in the Northern Balkans, corresponding to the first half of the Romanian MBA and the Central European EBA, which allows synchronizing these periods, and, on the other hand, is evidence of possible northern impulses⁹¹.

⁷⁸ PAVÚK 2012, 15, 18.

⁷⁹ ALRAM-STERN 2004, 370.

⁸⁰ FRENCH 1967; PAVÚK 2010, 933, 934, 940.

⁸¹ MARAN 1998, 419-421.

⁸² RUTTER 1979, 13, 14, 16; RUTTER 1982, 459, 460; MARAN 1998, 14, 18, 20, 25, 140, 280,

⁸³ ALRAM-STERN 2004, 164–166, 229–231.

⁸⁴ ALRAM-STERN 2004, 179–182, 498, 499, 510.

ALRAM-STERN 2004, 162, 167, 168.

MARAN 1998, 47, 48, 54, 281, 300.

RUTTER 1982; MARAN 1998, 14, 19, 23, 24.

MARAN 1998, 24; ALRAM-STERN 2014, 367.

MARAN 1987, 77-81; MARAN 1998, 315, 325-327.

⁹⁰ ALRAM-STERN 2004, 184, 211.

⁹¹ MARAN 1989, 130-132; MARAN 1998, 311.

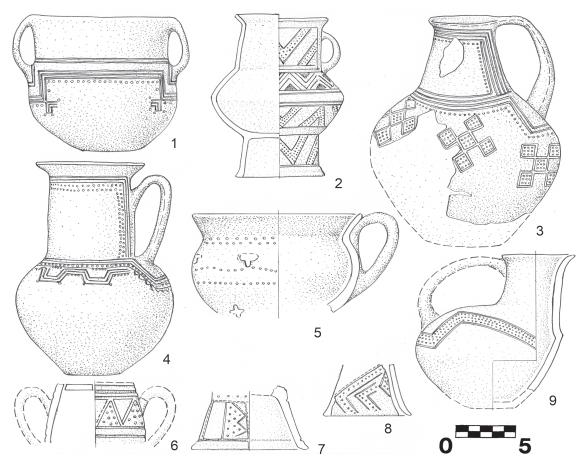


Fig. 5. Adriatic ware in Western Greece (4–9) and the culture of Cetina in Serbia (1–3): 1– Bajagič, 2 – Čitluk, 3 – Ražana, 4 – Olympia, 5–9 – Lerna IV. (1–4 – after MARAN 1987, Abb. 2, 3; 5–9 – after RUTTER 1982, figs. 1, 2, source image modified).

This ware did not have an impact on the subsequent tradition, and it hardly spread beyond western Greece. At the same time, the simultaneous distribution of violin-shaped idols and apse structures (see below) with these ceramics made it possible to assume the migration of people from the northwestern Balkans, but this forced one to assume some other impulse, not fixed by archaeological sources, due to which the Greeks appeared in the central and northern Greece⁹². In my opinion, the absence of traces of migration into these parts of Greece, as well as the absence of a continuation of this tradition in the Peloponnese, makes the connection of these ceramics with the coming of the Greeks impossible. More real is the connection with the coming of the Illyrians. This is indicated by both the original area and the similarity of ceramics, which appeared at that time in Apulia in southeastern Italy, where Mesapi lived in Classical times, who spoke a language close to Illyrian. These ceramics in the EH III layers have parallels in the ware of the first and second stages of the Cetina culture, which made it possible to synchronize a part of EH III with a part of the Reinecke's stage A1, and date these periods to the last centuries of the 3rd millennium BC93. One can also note the interaction of this tradition with the proto-Minyan one: occasionally the presence of incised or stamped decorations on the latter (Olympia and Pelikata, but possibly also in Lefkandi and Pefkakia)94.

This led to the cultural and trade contacts of the Peloponnese with the Adriatic and southeastern Italy in EH III, which weakened in MH, probably due to the assimilation of the Illyrians by the Greeks. Through this region, these connections spread to the northwestern areas of Europe, since bone toggles (rod pendants with swollen ends), and stone wrist guards with two holes were discovered in the Peloponnese⁹⁵.

Researchers, pointing out the close relations of southeastern Italy and Sicily in this period with the Balkans, admit that this was caused by the coming of people from there⁹⁶. But, most likely, this was caused by the large-scale migrations from the Carpatho-Danubian basin at the beginning of EH III, and it was not limited to the western Balkans and southeastern Italy. The Polada culture in northeastern Italy is synchronous with Lerna IV-late⁹⁷. This culture is formed by impulses from Central Europe; and in the lower Po, the cultural tradition is further developed on this basis98. Subsequently, the area was inhabited by the Veneti who spoke the Indo-European language, which is still difficult to assign to any specific group⁹⁹. These migrations were realized at that time not only to the south, but also to the east, which led to the formation of Babino and Abashevo

MARAN 1998, 277, 278, 296-298, 300, 453-457.

⁹³ MARAN 1987, 81, 82.

⁹⁴ RUTTER 1983, 342.

MARAN 2007, 13-16; RAHMSTORF 2015, 153, 161.

HEYD 2013, 59.

MARAN 1998, 375; ALRAM-STERN 2004, 212; NICOLIS 2013, 694.

MONTANARI et alii 1996, 58; SESTIERI 2010, 21, 47; SESTIERI 2013, 635

⁹⁹ WALLACE 2004.

cultures in Eastern Europe, and was stimulated, probably, by the coming of the Thracians, which marked the beginning of MBA in the region¹⁰⁰.

Thus, the leading process that formed the subsequent ceramic traditions of Greece was the emergence of the Lefkandi I / Kastri ceramic complex from Anatolia in EH IIB, and the process of mixing with local ceramic traditions began. This led to the displacement of part of the Cycladic population to the mainland, where painted ceramics appeared. At the very beginning of EH III, from the northwest of the Balkans, people with Adriatic ware penetrated into Western Greece, and this is synchronous with the beginning of the formation of MBA in the Danube region. But the last two types did not have a significant impact on subsequent development. If we assume that the spread of Proto-Minyan ware reflects the spread of the Greeks, then they appeared in EH IIB in Boeotia, Attica, coastal Thessaly, Euboea and northern Cyclades, and at the beginning of EH III they moved to Argolis and southern Thessaly.

4.2. Burials

Supporters of the northern origins of the Greeks mention the EH burials under mounds and in stone boxes as evidence, or compare the Sintashta chariot burials with the Shaft Graves of the Mycenaean time, but this has no serious

For the EBA in Greece and the Cyclades, as well as for the entire Balkan-Anatolian region, contracted burials on the side are characteristic, which cannot be associated with steppe influences. There are two features: the presence in the Cyclades and Attica of secondary burials (including in ossuaries) and repeated, when the bones of the buried were displaced during subsequent burials. Cremation is a special rite, but it is common in EH II only in the Ionian Islands, Western Greece, and Macedonia. In other places, this rite is rare. Before the beginning of the Lefkandi I / Kastri phase in the Cyclades and Attica, the typical form of burial structures were tombs with dromos in the form of rock tombs, dome or shaft structures. In the same place, starting from the Eneolithic, stone boxes, sometimes of rather complex shapes, are widespread. Simpler structures are known in EH IIB and EH III in Thessaly, Macedonia (Xeropigado Koiladas) and on the Ionian Islands, and such their distribution allows us to assume that their appearance in Attica is associated with the influence of the Cyclades, and in Western and Central Greece with that of Northern Greece. However, it is difficult to trace the changes during the transition to EH III, since very few burials of this time have been studied¹⁰¹. It is significant that the appearance of simple stone boxes coincides in time with the transformations that take place at this time in the ceramic complex in Western Greece.

A popular topic in substantiating the steppe origins of the Indo-Europeans is the spread of mounds. For Greece, in this regard, a tumulus in Lerna IV of the EH III period, erected over the burnt buildings of the previous time, and other, later tumuli, are usually discussed. In fact, tumuli have

spread in Greece mainly from MH period. The EH III tumuli in Lerna, Olympia (Altis) and Thebes are places of worship with foundations paved with slabs or pebbles. Some burial mounds of EH II, III were found in Central Macedonia in the cemeteries of Xeropigado Koiladas and Kriaritzi in Halkidiki, Loutraki in Akarnania, Steno in Levkas, Olympia in Elis, Orchomenos in Arcadia and possibly in Pellana in Laconia. The mound in Steno is a stone hill surrounded by a stone ring, covered with soil. These mounds are also associated with burials in stone boxes and pythos, sometimes with cremation. Subsequently, in MH, burials in pithos became typical of tumuli. The spread of this tradition from Western Greece, where the "Adriatic" ware was spreading at that time, made it possible to draw a conclusion about the Western Balkan roots of this tradition, although in the Cetina culture, from where the ceramic tradition came at that time, there is a mound, but there are no burials in pithoi. The earliest are the mounds in Steno, which probably belong to the developed EH II, although a later date was proposed for them in the framework of EH III too. In any case, at the end of EH II, this necropolis functioned exactly. And, no connection with the steppe tradition can be traced¹⁰². It should be noted that reliable EH III complexes are unknown on Levkas¹⁰³. Therefore, it is possible that the problem is not so much in chronology, but in the longer preservation of old cultural traditions.

Stone cists in Central Europe are well represented in the Globular Amphorae and Corded Ware cultures. But for the Carpatho-Danubian Basin, they are not so typical and are known mainly in its eastern part, on the territory of modern Romania: in the cultures of Schneckenberg-Glina, Costişa, Monteoru and Noua, in the 3rd-2nd millennia BC¹⁰⁴. Cists are common in the EBA of Anatolia, including its western part¹⁰⁵. Cists are not typical for the Yamnaya culture. North of Greece, only 13 cists are known, identified as Yamnaya, although their identification is difficult, and some of them are possibly later. In Bulgaria, in two cists (Kalugerica and Tărnava), cremations and vessels of the Coţofeni culture were found, which falls into the Yamnaya horizon, but the uncharacteristic burial custom and ware are strange. Cists were found in the steppe only in the pre-Yamnaya time in the cultures of the lower level of the Mikhailovka settlement, Kemi-Oba, and Usatovo. Therefore, it is allowed that the North Balkan cists were borrowed from the cultures of Globular Amphorae or Schneckenberg¹⁰⁶.

The ritual of cremation in urns has its roots in the Carpatho-Danubian region, where cremations appeared in the Baden and Cotofeni cultures, then in the Schneckenberg group, but they were rare. From there, the rite appeared in the Makó, Nyírség, Nagyrév and Hatvan cultures, where cremations in urns are combined with inhumations, but in some cultures (Nagyrév) they are dominant rite. Two urn cremations were found in the Vučedol culture (Croatia), and then in the late Vučedol/Zók group they are quite

¹⁰⁰ GRIGORIEV 2019: GRIGORIEV 2021a.

¹⁰¹ MARAN 1998, 225–227; ALRAM-STERN 2004, 281–290, 299–302.

MARAN 1998, 21, 102, 103, 228-231, 333-335; ALRAM-STERN 2004, 281, 292-296.

¹⁰³ MARAN 1998, 106.

¹⁰⁴ MOTZOI-CHICIDEANU 2011, 33, 47, 48, 51, 52, 83, 109, 139.

¹⁰⁵ SELOVER/DURGUN 2019, 275.

¹⁰⁶ MOTZOI-CHICIDEANU 2011, 37.

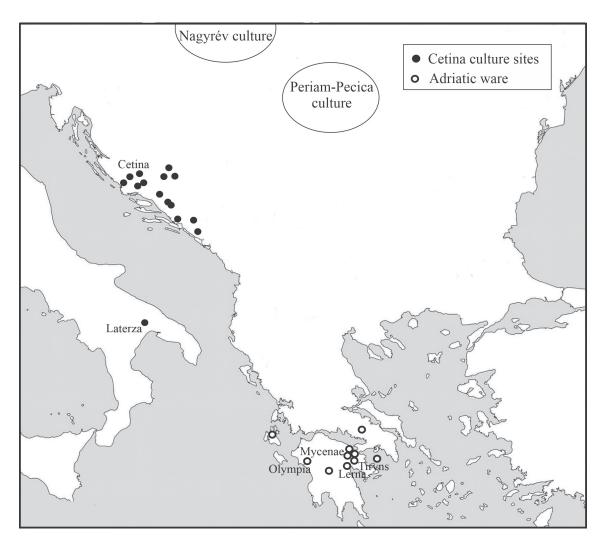


Fig. 6. Map of the Adriatic pottery in Greece and the Cetina culture. (after MARAN 1987, Abb. 1, source image modified).

common. In the MBA, cremations (often in urns) are not typical for Monteoru (3.7%), but typical for Witenberg in the north (92%), Verbicioara/Govora and Gârla Mare in the west. In Otomani, initially there are few cremations, this is a borrowing, but then their number increases. At a later time, cremations in urns are found in the Noua culture. If we speak in chronological terms, this rite appears in the EBA Ib (3400-3000 BC) and MBA IIa (3000-2500 BC), but is widely distributed in the MBA IIb (2500-2200 BC), which is synchronous with the Lefkandi I phase in Greece¹⁰⁷. Thus, throughout its existence, this rite is more characteristic of the Middle Danube and northwestern Balkans than of the northeastern Balkans, and was well represented there during the time preceding the EH III. Cremation occurs in Anatolia in the EBA, but is rare; its importance grew rapidly only in the 2nd millennium BC^{108} . Therefore, the appearance of cremations in Western Greece is associated with the northwestern Balkans.

Several pythos burials in Transylvania are found only in the Periam-Pecica culture (2500-2200 BC)¹⁰⁹, and then in the later complexes of the Carpatho-Danubian region:

Otomani, Maďarovce, late Únětice and Věteřov¹¹⁰, which begin to form in a period synchronous with the EH III. Pythos burials are not typical for most regions of the Near East. This is a distinctive feature of Anatolia, mainly in its western and central parts, where these burials are combined with burials in cists and pits. On some western sites, pythos burials dominate. In the pithos, people were buried in a contracted position; cremations are rare¹¹¹. Therefore, such a specific custom is likely to penetrate into the Balkans from there, and two phases of this penetration can be admitted: in the period synchronous to the time of Lefkandi I (Periam-Pecica), and more intensive at the beginning of EH III. From there, this rite penetrates, together with the bearers of "Adriatic" ware, to the west of Greece.

Thus, the use of barrows and cists to substantiate the penetration of Indo-Europeans into Greece has no basis. First, the Greek tumuli have nothing common with the steppe earthen mounds. In the Yamnaya time, these traditions do not penetrate into Greece; moreover, cists are not characteristic of the Yamnaya culture. The funeral rite on the mainland and the Cyclades developed, in general, on a local basis. It was only at the beginning of EH III that a

¹⁰⁷ MOTZOI-CHICIDEANU 2011, 21, 46, 69, 80, 84, 88, 90, 100, 108, 109.

¹⁰⁸ SELOVER/DURGUN 2019, 274.

¹⁰⁹ MOTZOI-CHICIDEANU 2011, 65.

¹¹⁰ BOUZEK 1985, 79.

¹¹¹ SELOVER/DURGUN 2019, 273-275.

complex of mixed features began to spread through Western Greece: mounds, cremations and contracted burials, pythos burials and cists. This mixing reflects Western Anatolian and Northwest Balkan traditions. Probably under the influence of the new Anatolian component, which appeared at that time in the Carpatho-Danubian Basin, some of the groups with "Adriatic" ware from the north-west of the Balkans moved to the west of Greece, as shown by J. Maran. It is impossible to search for some Yamnaya features for chronological reasons; this is the time of the late Catacomb culture, and when discussing the coming of the Greeks at this time from the steppe, we must discuss the catacomb burial rite. But even in Moldova, only two catacombs (Cândești and Sărata Monteoru) are known from the time of Monteoru Ic4-Ic2¹¹², which coincides with the beginning of EH III. In addition, no features of the Catacomb culture appeared in Greece.

4.3. Architecture

Significant changes happened in architecture, primarily in fortification. Fortifications in the region are already present in EC I (e.g. Markiani in the Cyclades), but have been widespread since the time of EH IIB and EH III. In some cases, they are characterized by the presence of horseshoe-shaped bastions, herringbone masonry, filling the foundations of the walls from two rows of large stones with small stones (Fig. 7/1-3) (Kastri (Syros), Panormos (Naxos), Palamari (Skyros), Skala Sotiros (Thasos), Aegina and Lerna). A wall of clay blocks rests on this foundation. It is significant that at this stage it does not appear in Thessaly and Macedonia, where Balkan traditions are preserved, and where anatolianising pottery has not yet penetrated. Earlier (from EBA 1) parallels to these building principles are known in the northeastern Aegean (Poliochni, Myrina, Thermi IIIA, and Heraion) and in coastal western Anatolia (Liman Tepe, Bakla Tepe). An important innovation is the corridor houses, long rectangular two-storey buildings with a longitudinal corridor and narrow rooms separated by transverse walls (Fig. 7/2,4,5). They, as in Asia Minor, are sometimes associated with defensive walls (or located close to them, and not in the center), and were prestigious buildings, possibly of a pre-palace type. It is indicative that, despite the dense building on the settlement, these houses are isolated and surrounded by free space. The discovery of seal impressions in them suggested an administrative function and a place of storage of goods, although they were clearly used for the life of some elite group. The appearance of public wells is also interesting. The roots of all these innovations were probably in the east, and this was caused by the coming of a new population. Here we can add one more fact: portable decorated hearths are connected with the corridor houses, which were possibly used for cult purposes¹¹³. Various types of portable cult hearths were widespread in the Transcaucasus, Anatolia and Crete, where they come from Anatolia¹¹⁴. Unique is the round building in Tiryns EH IIB, which is often considered as a warehouse for grain, but analogues of the 3rd millennium BC in Iraq and later in Palestine suggest that this was a defensive tower, although grain could also be stored in it¹¹⁵.

The apse buildings, after their discovery in Lerna in the EH III layer, are usually associated with the coming of the Indo-Europeans (Fig. 7/6,7). But they are known in Thessaly already in the Eneolithic, and from the beginning of the EBA in Poliochni-azzurro and in Sitagroi in Macedonia. In EH II, they are already found in different regions of Greece. In particular, three apse houses appear in Boeotia in the Thebes B layer, in which the ceramics of the Lefkandi I complex first appeared, and they are more typical for EH III. There are different ideas about their origins: The Balkans or the northeastern Aegean. But the connection with the Balkans is questioned for the reason that they had the usual residential function there, while in Greece these are socially significant structures. The building technique is also different: in the north, including Macedonia, they are made on a frame coated with clay, and in Central and Southern Greece from clay blocks on a stone foundation¹¹⁶. But in Lerna, this horizon is connected, in my opinion, with the northern Balkans, because there are a series of neighboring houses, they are made according to the North Balkan technology, and the local building technique is being restored a little later. The appearance in Lerna IV of these buildings is accompanied by the appearance of "Adriatic" and anatolianising ware. Therefore, this is probably caused by the processes of diffusion of other innovations from the northern Balkans, which have been discussed above.

4.4. Crafts and trade

Bintliff believes that these changes were associated not with migration, but with diffusion, although the mechanism is unclear¹¹⁷. J. Maran, and after him L. Ramstorf explain this phenomenon by the established trade relations with the East, conditioned by the increased demand of the region for tin. In doing so, Ramstorf compiled an extensive list of innovations that indicate significant technological changes. One of these was the innovation in weaving, reflected in the spindle whorls. At this time, in Greece, in the areas of Lefkandi I ceramics distribution, in Thrace, the Cyclades and Cyprus (from the Philia phase), biconical decorated spindle whorls (**Fig. 8/4,11**), characteristic of the EB 1 and 2 in Western Anatolia, have been spread. In Greece, the convex-sided or hemispherical undecorated spindle whorls were previously used, while in the Cyclades they were flat, disc-shaped and also undecorated. It is assumed that this new type of spindle whorls was more convenient for spinning wool of fine-wooled sheep, which in the 4th -3rd millennia BC began to spread from the Near East. At the same time, crescent-shaped loom weights began to spread in the Aegean (Fig. 8/1,2), also with earlier prototypes in Anatolia (from the early 3rd millennium BC). It is significant that in the Peloponnese they appear a little later, at the end of EH II - EH III, which corresponds to the spread of the

¹¹² MOTZOI-CHICIDEANU 2011, 44–46, 71.

¹¹³ MARAN 1998, 31, 35, 36, 47, 143, 193–197, 202-204, 220, 221, 232– 237, 239, 293; ALRAM-STERN 2004, 230, 231, 238-242, 251-258, 265, 518, 519,

¹¹⁴ DIAMANT/RUTTER 1969.

¹¹⁵ MARAN 1998, 197–199.

¹¹⁶ MARAN 1998, 124, 199-201; ALRAM-STERN 2004, 160, 246-250; ALRAM-STERN 2014, 310.

¹¹⁷ BINTLIFF 2012, 86.

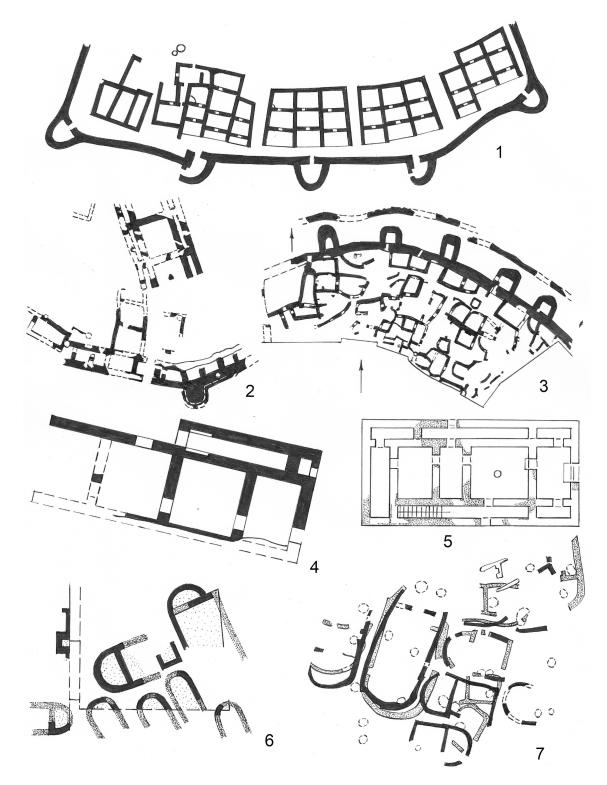


Fig. 7. Bastion fortifications (1–3), corridor (2, 4, 5) and apse (6, 7) buildings of the EH II, III periods: 1 – Aigina, 2 – Lerna IIIC-late, 3 – Chalandriani (Syros), 4 – Thebes, 5 – Aigina, 6 – Tiryns, 7 – Lerna IV. (1, 2, 4–7 – after ALRAM-STERN 2004, Taf. 4, 7, 12, 17, 42; 3 – after BINTLIFF 2012, p. 109, fig. 4.11, source images modified).

Proto-Minyan ware there. These weights made it possible to obtain textile with a more complex weaving of threads, twill weaving. The distribution of pins with spherical head is also very indicative (Fig. 8/10), which was known in Anatolia since the end of the Eneolithic, and in Greece they appear precisely in those regions where anatolianising ware is spread, and are often found in its context. These pins go back to the gold pins from Ur, and in Greece they are always made from bronze, rare in this period, which has a golden shade. From this it is concluded that there was a spread of Anatolian fashion along with Anatolian textile and costume. Bone tubes for paint also belong to this group of parallels, although they are found mainly in the Cyclades (Fig. 8/3). The spread of silver production is essential. This is a complex technology. Silver was extracted from lead ore by the method of cupellation: initially it was fired in an oxidizing

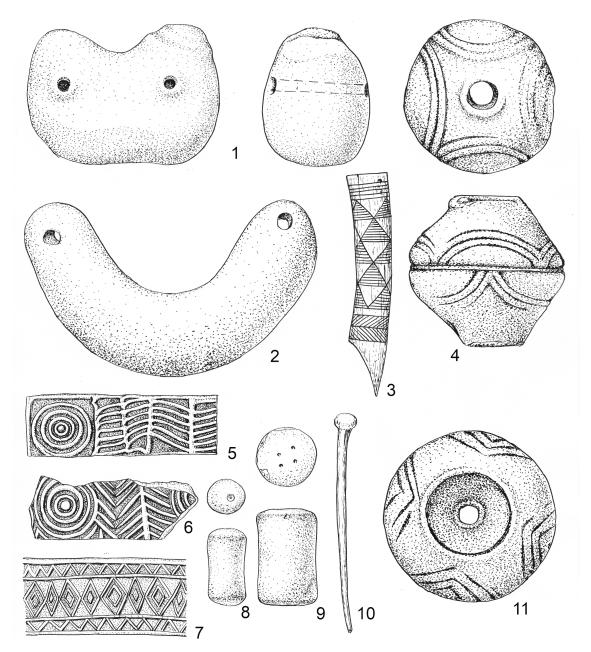


Fig. 8. Loom weights (1, 2), bone tube (3), spindle whorls (4, 11), seal impressions (5-7), stone weights (8, 9), pin (10): 1 - Geraki, 2 - Tiryns, 3 - Chalandriani, 4, 10 - Dhaskalia, 5 - Lerna, 6-9 - Tiryns, 11 -Lerna. (1, 2, 4, 10, 11 – after RAHMSTORF 2015, figs. 4, 5; 3, 5–9 – after RAHMSTORF 2006, figs. 6, 8, 13, source image modified).

atmosphere to obtain lead oxide, and then this oxide was evaporated to obtain silver. This production was occasionally known in the Aegean since 4000 BC, but early mining is justified mainly by the discovery of ceramic pieces on the surface of sites, in addition, before EH II, no finds of objects made of lead and silver are known. Only in the Lefkandi I / Kasti stage did it become widespread, and is often associated with the corresponding ceramics. Finds that mark intense trade relations include Indian etched carnelian beads. The distribution of seal impressions (Fig. 8/5-7), weights (Fig. **8/8,9**) and the emergence of the Syrian system of measures and weights are also associated with trade operations. But finds of seal impressions are known mainly in the Argolis, they are absent in the areas of the primary distribution of the Lefkandi I complex in eastern Greece. It is also indicative that parallels to these impressions are known in

Syro-Palestine and Cilicia; in Anatolia, such finds are rare. Therefore, it was brought in by trade from Lycia or Cilicia together with the Near Eastern system of administration. Since the diffusion of all these technological innovations was impossible through simple borrowing, migration of groups of traders and artisans is supposed, although the migration of large populations is denied. Attention is drawn to the fact that there were very few real eastern imports in Greece at this time. It is almost exclusively innovation and local production¹¹⁸. But there are treasures of objects made of precious metals and exotic stones, which reflect distant trade relations, up to Mesopotamia¹¹⁹.

The principal change was the appearance of tin ¹¹⁸ MARAN 1998, 238, 239, 260–263, 291, 292, 421–424; RAHMSTORF 2006; RAHMSTORF 2015, 153-161, 164-166. 119 ALRAM-STERN 2004, 451-457, 496.

bronzes. Single finds are known in Greece before, but the context is not always reliable, with the exception of two objects from EH I layer at Sitagroi¹²⁰. It is significant that this was not just a change in the use of arsenic copper by tin bronze. Even copper was originally, judging by isotopic analyzes, not of Cycladic origin, it is comparable to the copper of the northeastern Aegean, where bronze was used already in the EBA 1; and the types of metal correspond to this region and Anatolia (e.g. spearheads with slits on the blade). At the same time, the change was quite sharp: in Kastri, 69% of the metal is bronze. In this case, we are not talking about imports, as casting moulds were found there 121. This indicates that craftsmen have come with certain technological skills and ties to raw materials. On this basis, colonies of immigrants from Asia Minor were even supposed in the Cyclades, but this was disputed on the grounds that the source of this metal was also unknown there, although it was recognized that this was connected with the spread of tin bronzes¹²².

Some of these innovations may indeed have been introduced as a result of being included in the Eastern Mediterranean trade network (seals, system of weights and measures, tubes for paint). But given the extreme rarity of real imports and significant transformations of the rest of the culture, we should talk about migrations of relatively large groups.

4.5. Ethnocultural and socio-economic processes in EH IIB, EH III

Thus, fundamental changes in EH IIB happened not only in ceramics, but also in architecture, funeral rites and the entire complex of material culture, as well as in social life. They were stimulated by migration from Western Anatolia to the east of Central Greece, Euboea and the Cyclades, and there was an interaction of this tradition with the local mainland and Cycladic ones. At the beginning of EH III, we observe a second process: migration from the northwestern Balkans to western Greece, and the penetration there of a tradition that is emerging in eastern Greece. Chronologically, this coincides with the beginning of the Carpatho-Danubian MBA, where chariots have appeared since that time¹²³. It is significant that the first single horse bones appear in Greece only in EH III (Tiryns, Kastanas, Mesimeriani, possibly a tooth from Lerna IV), and donkey bones (Lerna III, and Pentapolis) appear simultaneously with them. In Macedonia, horse bones were found in layers 22 (EH III) and 25 (possibly the end of EH II), and in Thessaly in the MBA (Argissa, Pevkakia), which begins synchronously with EH III¹²⁴. The appearance of horse at the same time as the donkey does not allow looking for the source of these animals in the steppe Eurasia, the Near East is more preferable. Consequently, the episode with the penetration of the horse is due to the formation of the cultures in the Carpathians, but its use did not become widespread in Greece for a long time.

The period of Lefkandi I is characterized by intensive interregional contacts, which is explained, first of all, by those changes and interregional displacements that were caused by the migrations of the newcomers. In Greece, anatolianising forms appear step by step. The emergence of new forms was not always accompanied by destruction, so sometimes this can be explained by contacts and trade. Moreover, judging by the different-temporal parallels in the northeastern Aegean and the fact that new forms appear parallel to their appearance in Anatolia, this resettlement was not a one-time act, it was a long multiphase process, synchronous in Anatolia to EBA 2b and EBA 3b, before Troy IIc and to Troy IIg-III. Depas in Greece did not appear during the first phase of the penetration of anatolianising complex, and in Anatolia they are dated from the EB 3a, depas on a stand and with a conical body in Anatolia are dated from the EB 3b, and in Greece from the EH III. In the late EH III, bowls with high handles appeared, also having Anatolian parallels125.

The interaction of the newcomer Greeks with the local population is well manifested in the ceramic complex. In Central Greece and on the islands until the end of EH II, local ceramic traditions are preserved and partly transformed. Complete replacement occurs only in that group of ceramics, which is intended for eating, drinking or pouring liquids, which is even considered as a certain change in the cultural code. The same thing happens in Lerna at the transitional period EH II/III, where the old large ceramic forms are preserved. The replacement, therefore, concerns, first of all, those ware that is associated with ritual feasts aimed at maintaining the identification of the collective and strengthening the collective bonds. Only during EH III does the transformation affect other forms. In some areas (for example, Messinia and Laconia), already mixed forms appear, which indicates a relatively late nature of this process, and for a considerable time in the framework of EH III, the traditions of EH II have been preserved there 126. Somewhat later than in neighboring regions, this process took place in eastern Attica, where the Cycladic tradition of painted ware had penetrated before. An interesting fact is that the primary forms of Lefkandi I are mostly made on a potter's wheel, but in EH III the proportion of this pottery decreases, increasing again only in MH¹²⁷. This perfectly reflects the fact that the formation of a relatively homogeneous ethnic picture continued throughout the periods of EH II-III. This picture of the very slow spread of the new ceramic tradition from Anatolia, as well as its best presence in eastern Greece, led to the conclusion that this was

MARAN 1998, 267-269.

 $^{^{121}\,}$ ALRAM-STERN 2004, 403–408, 421–423, 442–446.

¹²² MARAN 1998, 269.

GRIGORIEV 2021a.

¹²⁴ MARAN 1998, 241, 242, 244, 247, 256; COLEMAN 2000, 123; DREWS 2017, 181; ALRAM-STERN 2004, 224, 225.

MARAN 1998, 418-420; ALRAM-STERN 2004, 164, 172, 202, 361.

 $^{^{\}rm 126}\,$ This creates an impression that the Peloponnese at this time became depopulated, and at first the population is recovering in EH II, III in Argolis and at the very end of EH III in the south of Argolis, but the coastal regions of the western Peloponnese remained deserted until the second half of MH (ZAVADIL 2010). In part, the thesis about a lower population density is probably true, and in EH II and MH the number of settlements decreased. But this is also explained by the low level of knowledge, as well as by the fact that the period of EH III is much shorter, and its ceramics are less characteristic than the ceramics of EH II, which ultimately affects the number of settlements estimated according to the results of field survey (RAHMSTORF 2015, 152).

RUTTER 1979, 8-12, 15, 16; MARAN 1998, 149, 152, 273, 276; ALRAM-STERN/HOREJS 2018, 15.

due not to migration, but to trade relations¹²⁸. An analysis of the layers of fires in settlements of this period led to the same conclusion. After the discovery of such a layer in Lerna IIID during the EH II/III transition, this began to be perceived as a sign of mass migration. However, such destructions are present in different layers of EH II, although they are more numerous in late EH II and at the transition of EH II/III. But in any case, this does not reflect the picture of an invasion during a short time¹²⁹. As a result, the opinion was formed that this was not associated with an invasion from the outside, but was caused by internal conflicts, which contributed to the emergence of defensive walls around the settlements¹³⁰. But this process was so extended that these conflicts, indeed, may be regarded as internal, although they began with migrations. And, I would not underestimate the change in tableware, although this is interpreted only as a borrowing through the trade of new customs of eating and drinking, although the Greek diet in the form of wine, bread and olive oil existed already in EH II^{131} . Feasts in archaic societies often had a ritual character, marking the unity of the collective and ethnic identity¹³².

In the Cyclades, this process had some peculiarities. There was no desolation of settlements, but the pottery was changed, the Cycladic idols typical of the previous time disappeared (which indicates a change in ideology), and instead of many small trade centers there is one large, Phylakopi. At the same time, unlike Argolis, large corridor houses reflecting social differentiation are not known here ¹³³.

The nature of the EH IIB materials suggests that at this time a hierarchical society and elite that controlled trade and economy appeared for the first time on the mainland, and even small states are discussed for Argolis¹³⁴. In EH III, the social structure is somewhat simplified: powerful defensive walls and large socially significant buildings, such as corridor houses, disappeared. The only exception is Aegina, through which trade with the Aegean islands was carried out¹³⁵. All these processes are usually explained by the development of the economy as a result of changes at the beginning of EH I, which led to the formation of early developed societies. But then, as a result of soil erosion and climate worsening, a crisis and degradation of the former social structures began 136. This is a common situation in case of invasion of another population, which begins to dominate. But then, with the assimilation of local people, ethnic differences ceased to play the role of a dividing factor, and a gradual fading of the more developed social structures brought from Anatolia took place. It is significant that the ceramic koine that developed in the first half of EH II (the result of the unification of what had arisen in EH I) was destroyed with the appearance of anatolianising forms, and processes of regionalization are well visible in Greece. Five main regional groups were formed in EH III: 1) Western Peloponnese, 2) Northeastern Peloponnese - Aegina, 3) Boeotia - Central Greece, 4) Euboea-Magnesia, and 5) Phylakopi I in the Cyclades. The preservation of relations with Asia Minor discussed above is characteristic mainly of the Euboea-Magnesia group on Euboea and on the shores of the Pagasitikos Gulf, and to some extent for the Phylakopi I group, and these relations become even more intense than in the previous period. At this time, we see a final rejection of the previous set of ware (bowls and sauce boats). On the other hand, some of the Peloponnesian ceramic traditions penetrate Euboea (Lefkandi II), contributing to the general unification of the situation. Thus, at this time, a new koine is being formed (Macedonia remains within the Balkan cultural zone, and the Eastern Aegean in the Anatolian one)137, which indicates the completion of the processes of cultural genesis.

Climate is also seen as a factor that led to the migration of people from the northwestern Balkans to western Greece. The second motive was the control of sea routes in the Adriatic, and the opportunity for this migration was provided by the decline of the small states in western Greece by the beginning of EH III, which created a power vacuum there¹³⁸. In my opinion, an important factor that influenced the EH III processes was the formation in the Northern Balkans and the Carpathians of the MBA cultures. Chronologically, these periods coincide¹³⁹. These cultures also have a number of Anatolian parallels, many of which, unfortunately, have not been published (Mihalich, Tell Altan Tepe, Cherna Gora), however, at the Galabovo settlement, in layers 1a-4, at the transition to the MBA, hand- and wheel-made ware with plastic decoration and Anatolian parallels was found. Parallels to this ware in Anatolia are very widespread, both in space and time: from Troy to Tarsus and from EB 3 to MB, but some of the ware have a narrower chronological framework, which allows us to link these layers with the end of EB 3 - the beginning of the transitional to the MB period in Anatolia and date it in the system of historical chronology to the 18th century BC. At the same time, the most accurate dates are provided by finds of pilgrim flasks, which were probably even made in Anatolia¹⁴⁰. It is indicative that in the coastal regions of northwestern Anatolia at this time there are no such ware, it is present in the more eastern areas 141. Very interesting parallels in the Karum Kanish Ib layer, which is dated from ca. 1850-1750 BC, and contains ornaments that appear in the Carpathians. This made it possible to assume that at this time the Thracians migrated from Anatolia to

MARAN 1998, 274, 275, 432, 454.

MARAN 1998, 58, 72, 73, 161–193, 222, 223.

¹³⁰ BINTLIFF 2012, 91, 165, 166.

MARAN 1998, 251-256, 274, 304, 454.

It was very widespread in the ancient world. In this sense, the sets of lacquered ware of the Shang and Zhou periods, which are widely presented in Chinese museums, are very indicative. The Shang rulers constantly made tours of their possessions, performed rituals and libations. But this tradition has deeper roots. At the excavations of the fortified Neolithic city of Shijiahe in the Yangtze basin, I was most shocked by an area filled with fragments of absolutely identical ceramic drinking cups, which created the impression of a highly specialized ceramic production, which is unbelievable for this time. Most likely, this reflects some kind of collective rituals, accompanied by the joint drinking.

¹³³ MARAN 1998, 295, 301.

¹³⁴ MARAN 1998, 302, 432, 439-442.

¹³⁵ ALRAM-STERN 2004, 275–278, 520.

¹³⁶ MARAN 1998, 303, 304, 452.

¹³⁷ MARAN 1998, 271, 272, 282, 283, 301, 420; ALRAM-STERN 2004, 344, 345, 363, 364, 369.

¹³⁸ MARAN 1998, 305, 433, 434, 455.

¹³⁹ MARAN 1998, 309–311.

¹⁴⁰ LESHTAKOV 2002; LESHTAKOV 2006, 181, 182. Subsequently, a wider interval was given for most of the vessels. The time was also defined as the transition from the Anatolian EB to the MB, and the dates to 2200-1800 BC (LEŠTAKOV 2016, 53). But it seems to me that the lower date is too early for this transition, if to be based on historical chronology.

¹⁴¹ PAVÚK 2008, 8.

the Balkan-Carpathian region, which led to the formation of the MBA cultures in the Carpathian basin¹⁴². Only since that time traces of social stratification appeared in Thrace¹⁴³. It is also interesting that some round structures of EBA III (Drama and Cherna Gora I) are typologically different from the Eneolithic fortified settlements with a circular layout, and are identified as sanctuaries¹⁴⁴. Therefore, they are not associated with the Eneolithic tradition. They were used until the 4th-3rd centuries BC and are considered as a sign of the emergence of the Thracian religion¹⁴⁵.

4.6. Paleogenetics

It should be understood that the genetic profile of populations does not fully reflect the processes of language spread. Unfortunately, few genetic tests have been done for Greece. This is largely due to the poor preservation of DNA in hot climates¹⁴⁶. The Neolithic populations of Greece and Western Anatolia are almost indistinguishable, which corresponds to the Neolithization of the Balkans from Anatolia. The EBA population (4 samples from Attica, Euboea and Cyclades) is based on this one, retains unity with western Anatolia, but in it, as in Anatolia, an admixture of ancestors from the east appears. This Iran Neolithic / Caucasus HG-related component composes for 17%–27% of the population. And at this time there are no traces of the influx of population from the steppe. Therefore, "changes from Neolithic to EBA were mostly associated with increases in IranN/CHG-like ancestry in the Aegean and Anatolia, whereas the Balkans and the rest of Europe were mostly associated with increases in EHG-like ancestry... little influence of populations related to EHG during the EBA in the Aegean, further implying that the Caucasus component arrived in the Aegean independently... The EBA genomes drew their ancestry mainly from local Aegean farmers and from populations related to the CHG". In principle, this completely disproves a possibility of migration from the steppe zone and may indicate migration from Anatolia in EH IIB^{147} .

4.7. Language and mythology

The Asia Minor origin of the Greeks, which can be substantiated on archaeological and paleogenetic data, should also be reflected in linguistic materials. On this topic, there were opposite statements: about a certain number of borrowings into Greek from Anatolian¹⁴⁸ and about their absence or minimal number: there are only mutual borrowings between the languages of the Greeks of Asia Minor and Carian, Lydian and Lycian, which is explained by later contacts¹⁴⁹. This marks the absence of early contacts, so any similarity in phraseology and mythology should be sought in "generic or typological similarity, common

142 GRIGORIEV 2021a, 177–179.

heritage or common cultural experience"150. This implies an area where this experience could circulate. Even the existence of the Greek-Anatolian Sprachbund has been suggested¹⁵¹. Based on the above archaeological reconstruction, the search for this area should be in Anatolia. And there is a large list of place names common to Greece, Crete and Anatolia, for example, Parnassus, Ida, etc. 152. Taking into account the previous Luwian substratum in Greece, these toponyms may have a substratum origin, but some could have already been brought by the Greeks. This is probably not possible to find out reliably. But the direction of Greek migration from Anatolia is marked by the presence of separate toponyms of Hurrian origins: Πΰρανθος in Crete and Πΰρασος in Thessaly¹⁵³.

It is common knowledge that many gods of the Greek pantheon are of non-Greek origins: "Zeus, Athena, Dionysus, and the Delphic cult of Apollo and Demeter, together with the mysteries of Demeter at Eleusis, have no Greek etymological roots and may have come from Crete"154. Some of these gods (Zeús, Pótnia, Diwíā, Poseidáōn, etc.) are already present in the Mycenaean tablets. Several pre-Greek names, Athena and Artemis, have been deeply adopted by the Greek language¹⁵⁵. The authors also point to the absence of some gods in the Mycenaean tablets (Apollo, Demeter, Aphrodite and Athena) and admit that the formation of the Greek religion was carried out in the Mycenaean and also in the subsequent periods¹⁵⁶. Therefore, we can admit this idea of Wiener, but it is possible that some of the gods are simply not reflected in the sources. We do not have exact data on the Minoan gods. In addition, the Minoans probably also spoke Luwian. However, the borrowing of the pantheon of gods from the Minoan religion through intensive trade contacts at the beginning of the Mycenaean era is unlikely. It is significant that Apollo is absent in the Mycenaean tablets, but appears in the Trojan War on the side of the Trojans, and this is the Asia Minor god¹⁵⁷. The cult of Dionysus was widespread in the northwest of Asia Minor, and one of his epithets, Priapos, has an Anatolian basis¹⁵⁸. There is an opinion that the cults of Ares and Dionysus are Thracian, probably the mythological characters Orpheus, Tamiris and Eumolpus too 159 , and below we will discuss the Anatolian origin of the Thracians, as well as the incorporation of the Thracians into the Mycenaean elite. Therefore, historically, such an introduction of precisely these cults and myths by representatives of the military elite is quite understandable.

There are parallels to the figures of Achilles, Hermes, Poseidon, Pegasus, Zeus and his father Kronos in the Hittite-Hurrian epic cycle about Kumarbi and his monstrous son, Ullikummi. But the primary source of this cycle is Hurrian.

¹⁴³ IVANOVA 2008, 153, 154.

¹⁴⁴ IVANOVA 2008, 160

¹⁴⁵ LESHCHAKOV 2006, 192.

¹⁴⁶ CHILVERS et alii 2008, 2707.

CLEMENTE et alii 2021, 1, 4, 6, 7, 12, fig. 1B.

¹⁴⁸ GAMKRELIDZE/IVANOV 1995, 797–799; FILOS 2014.

¹⁴⁹ GINDIN 1967, 32; 1993, 155; ORESHKO 2018, 93–96, 98, 103–113.

¹⁵⁰ ORESHKO 2018, 114.

¹⁵¹ ROMAGNO 2015, 440.

¹⁵² GINDIN 1967, 102-163.

¹⁵³ GINDIN 1981, 151, 152, 158–160.

¹⁵⁴ WIENER 2020, 287.

¹⁵⁵ FILOS 2014.

¹⁵⁶ DICKINSON 2016, 18.

 $^{^{\}rm 157}\,$ In the Iliad, Zeus and Hades take a neutral position in relation to the opposing sides; the gods of Greek origins, Hera and Athena, help the Achaeans, and the gods of Asia Minor or Thracian origins (Artemis, Apollo, Aphrodite, Ares, Poseidon) help the Trojans.

¹⁵⁸ GINDIN 1981, 57–61.

¹⁵⁹ KATIČIĆ 1976, 129.

It is assumed that the transfer of these mythological systems occurred at a later time through the Mycenaean trade and Ionian colonies in Asia Minor and Greek mercenaries in the Near East¹⁶⁰. T. Bryce, discussing the similarity of Hesiod's Theogony with the Kumarbi poetry cycle and episodes of Homer's poems with the epic of Gilgamesh, explaines this by Homer's Ionian origin and familiarity with the Near Eastern tradition¹⁶¹. In this case, should we explain the acquaintance of Hesiod with this tradition by the Aeolian origin of his father?

T.V. Gamkrelidze and V.V. Ivanov showed that the Greek myth of the Mysian king Telephos (Telephanes) coincides thematically and in the name of the hero with the Hittite (but originally Hattian) myth of Telepinus; and the cycle of Greek theogonic myths with a series of Sumero-Akkadian parallels entered Greek mythology through the Hurrians¹⁶². These Hattian and Hurrian connections clearly indicate the spread of these borrowings from the central and eastern areas of Anatolia.

In Greece, many toponyms are either transferred from Anatolia, or are consonant with Anatolian and have an Anatolian basis (Parnassus, Pergamos, mountain *Ida in Crete)163. But this may well be explained by the Luwian substrate. However, I am more inclined to trust those authors who suppose that the Greek-Anatolian Sprachbund should not be discussed. There are about 160 words that have came into Greek from Anatolian, but if we exclude from consideration the words found among the Greeks of Asia Minor, toponyms, terms associated with religion, unreliable, then only 30 probably borrowed words, mainly cultural terms, will remain. Their number may increase, but their distribution is interesting: very few borrowings from Hittite, more from some dialect of Luwian in northwestern Anatolia and from Proto-Carian in the west, and it is assumed that this may reflect the presence of Greeks in western Anatolia in the LBA 164 . But if these borrowings are absent in the Greek dialects of Asia Minor, then this should reflect the early appearance of the mainland Greeks from there.

Of fundamental importance, in my opinion, is the presence of borrowings from Kartvelian and back borrowings from Greek to Kartvelian (although in the latter case it is sometimes difficult to distinguish them from Proto-Indo-European), and the Kartvelian roots of the myth about the Argonauts¹⁶⁵. All of this is consistent with the presence of Caucasian genes in Greece. In addition, Greek should have formed in an area close to the areas of formation of Indo-Iranian, Armenian, and Phrygian¹⁶⁶.

Thus, the following conclusions can be drawn from the above facts. The mythological and theogonic system of the Greeks belonged to the Asia Minor and Mesopotamian circle. The formation of the Greek language took place in an area close to Kartvelian (i.e., to the South Caucasus), but in isolation from the Anatolian languages. Since the movement

of the Greeks to the west began after the middle of the 3rd millennium BC and long before the 17th century BC, when the Hittites had not yet came to Central Anatolia, they could contact only with speakers of some Luwian dialects in Western Anatolia. If the assumptions about contact with the people spoke Proto-Carian are correct, then this could be an area somewhere in the coastal Asia Minor, between Troad and Miletus. Such localization may explain the paradox of their migration to mainland Greece not through the Hellespont and Northern Greece, but through the Cyclades.

Before the beginning of its dialectal division, the Greek language went through two stages preceding the Mycenaean period: Proto-Greek and Common Greek, although it is possible that the latter was not a homogeneous language, but a series of closely related dialects¹⁶⁷. In this case, the first stage probably corresponds to the linguistic state in northeastern Anatolia, and the second to the beginning of the colonization of Greece within the EH period, where they found another, non-Greek population, which we will discuss below.

4.8. Greco-Thracian-Phrygian relations

We discussed above that the available archaeological and linguistic evidence indicates that in the early EBA the population of Greece spoke the Luwian language. And, this is exactly the layer that the Greek migration found in EH IIB. According to ancient tradition, Greece before the Greeks was inhabited primarily by the Pelasgians, as well as the Leleges, Carians and Lycians. The king of the Pelasgians lived in Larissa, they lived in Thessaly, Epirus, Attica, northern Peloponnese, Crete, Troy, Halkidiki, on the Asia Minor coast and islands. The Pelasgians coexisted with the Greeks for a long time, but information about them is very contradictory¹⁶⁸. Most likely, the Carians and Lycians (although these languages were not yet separated from Luwian at that time) reflect the presence of Luwianspeaking tribes in Greece, perhaps the Leleges too, since they are constantly mentioned in the context of Crete and Asia Minor, and sometimes identified with Carians¹⁶⁹. Thus, they can be relics of the Luwian massif that lived in Greece in the EBA. There are no reliable grounds for identifying the Pelasgians, therefore opinions vary from their belonging to the Anatolian language group, to Thracian or Phrygian.

The possibility of a connection between the Pelasgians and the Phrygians is indicated by the names of some kings, individual place names, borrowed by the Greeks from the cults of Demeter and Cybele¹⁷⁰. But in the Greek language, except for a couple of terms associated with the cult of Cybele, there are no borrowings from Phrygian, there are borrowings from Greek to Phrygian, but later, came from the Greeks of Asia Minor¹⁷¹. Phrygians are also absent in Greek genealogies (the possible presence of kings with Phrygian names does not contradict this, taking into account what is discussed below in relation to the Mycenaean royal power)¹⁷².

¹⁶⁰ PETROPOULOS 2018, 499, 504–513.

¹⁶¹ BRYCE 2006, 22.

¹⁶² GAMKRELIDZE/IVANOV 1995, 798, 799.

¹⁶³ GINDIN 1981, 98, 110–115.

¹⁶⁴ SIMON 2018, 377-382.

¹⁶⁵ GAMKRELIDZE/IVANOV 1995, 799–804.

¹⁶⁶ FILOS 2014.

¹⁶⁷ FILOS 2014.

¹⁶⁸ GINDIN 1967, 43–48; KATIČIĆ 1976, 20–22; WOUDHUIZEN 2018, 91,

¹⁶⁹ KATIČIĆ 1976, 22–24.

¹⁷⁰ WOUDHUIZEN 2018, 35-41.

¹⁷¹ ORESHKO 2018, 98, 99.

¹⁷² FINKELBERG 2005, 31, 39.

According to ancient authors, the Phrygian language was connected with Thracian, but in reality, it is closer to Greek, although there are practically no common words. At the same time, it is difficult to say what this relationship reflects: genetic relationship or areal vicinity. According to Herodotus, the Phrygians were neighbors of the Macedonians, and Macedonian was a Greek dialect. The presence of a common term for the king among the Phrygians (vanaktei) and the Mycenaeans (wanaks-) indicates an areal vicinity. There are statements about the proximity of the Phrygian to the Armenian, but most likely this is caused by the vicinity of the formation area; at the same time, the Armenian phonetics is close to the Kartvelian one¹⁷³. In fact, the Phrygian language is reliably fixed in the west of Asia Minor, in Phrygia, which from the 8th century BC was a powerful political force with its capital in Gordion, and it is believed that the Phrygians came from the Balkans (where, according to Herodotus, they were called *Briges*) ca. 1200 BC, during the collapse of the Hittite Empire. It is quite probable that in Near Eastern sources the Phrygians appear as Mushkis, since the Assyrian chronicles mention Mushki king, Mita, between 717 and 709 BC, at the time when Midas II ruled in Gordion. Tiglathpilesar I of Assur (1112–1072 BC) described a battle against Mushkis far from western Anatolia, somewhere on the upper Tigris¹⁷⁴. Even before the Trojan War, Priam came to the aid of his Phrygian allies Otreus and Mygdon, and in the north of Central Anatolia there is Phrygian onomastics and toponymy, which can be dated back to the 3rd millennium BC^{175} . However, the identification of the Phrygians with the Balkan Βρύγες is present only in Herodotus. According to other ancient authors, Βρύγες lived mainly on the islands of the northern Adriatic, and possibly in some places in Macedonia¹⁷⁶. But such ethnic definitions are extremely unreliable. An example is another ethnic group of the Balkans, the Paeoians, whom Herodotus mentions on Strymon, where the Thracians lived, compares with the Teukras, but he and Thucyditis distinguish them from the Thracians; Strabo calls them Thracians, and in another place Phrygians, there were also other opinions. Therefore, linguists consider them Greeks, Thracians, Phrygians or Illyrians¹⁷⁷. Therefore, it is difficult to say who the Briges were. In an Illyrian cemetery near the Greek colony of Dyrrhachium in present-day Albania, a series of names have been found on steles, among which there are 'Breigos' and 'Brykos'. Appian describes them in Epidamnus in Illyria¹⁷⁸. Given their localization also in the northern Adriatic, their identification with the Illyrians is more likely. Assumptions about the presence of the Phrygians in the Balkans, except for this mention of Herodotus, has no base. Therefore, there are no serious reasons to assume that there was a previous Phrygian stratum in Greece, although one can admit their limited presence in the Balkans and the incorporation of some Phrygians into the ruling clans of Mycenaean Greece. In general, the Phrygians are Asia Minor people.

It is more legitimate to look for connections between Greek and the Thracian and Illyrian languages, which are reliably localized in the northern part of the Balkan Peninsula (Thracians north of Thessaly to the Danube and on the islands of Samothrace, Thasos, Lemnos, and Illyrians along the Adriatic from central Albania to the southeastern Alps). Unfortunately, there is extremely little data on these languages, they are limited to single short texts written in the Greek alphabet, personal names, names of tribes and toponyms. Illyrian probably made a great contribution to the later Albanian, but this issue has not been resolved. In the north, the Illyrian area merges with the area of the Veneti, who lived in northeastern Italy and part of modern Slovenia. Despite the opinions of some ancient authors, their language, belonging to the centum group, differed from satem Illyrian. Whether these Veneti were related to the later Veneti of Eastern Europe or Brittany is not clear. Finally, a Mesapian language, very close to Illyrian, has been identified in Apulia, suggesting a migration of Illyrians to southeastern Italy¹⁷⁹.

However, despite the geographical proximity, the influence of Illyrian and Thracian on Greek is also absent. Only the terminology for '(a sort of) barley beer', 'wine', 'large, broad sword', 'sword, knife', '(a sort of) pot' was borrowed from Thracian 180. The presence of the Illyrians in the northwest of the Balkans is well reflected in ancient sources; these are Indo-Europeans, judging by their names and place names, but due to the paucity of information, it is difficult to assign their language to any group¹⁸¹. Archaeologically, the influence of the Illyrians is clearly visible in western Greece. Therefore, some connections are not excluded, but their identification is hindered by a limited knowledge of Illyrian. Below we will discuss the likely incorporation of the Thracians into the Mycenaean clans. Common for the Greeks and Thracians was the cult of Cabiri, which, possibly, was among the Phrygians, but its probable source is the tribes that spoke Anatolian languages¹⁸². It should be said that the Anatolian connections of the Thracians are numerous and perfectly illustrated by L. Gindin, who, in explaining them, proceeded from the ideas of the steppe homeland of the Indo-Europeans and from contacts of the Thracians with the Hittites in the northeastern Balkans¹⁸³. Therefore, we will try to give only facts.

In the Thracian area, there are many toponyms, names of gods and tribes (e.g. Costobo and Saboces, or Μαιδοβιθυνοί in Asia Minor and Μαιδοί on the Strimon) with Anatolian parallels, and there is a series of personal Thracian names with an Anatolian theophoric basis¹⁸⁴. However, this fact can be interpreted as evidence of migrations from Anatolia to the Balkans, and in the opposite direction, which is usually done¹⁸⁵. However, there are some Thracian names that indicate migration from Anatolia. These are $E\pi \tau \eta - \pi o \nu \varsigma$ (female) and $E\pi\tau\alpha$ - $\pi\alpha$ (male), which go back to the Anatolian

¹⁷³ BRIXHE 2004, 780; CLACKSON 2004, 922; MARTIROSYAN 2013; OBRADOR-CURSACH 2019, 238, 240, 242, 243; KIM 2018.

¹⁷⁴ BRIXHE 2004, 777.

¹⁷⁵ WOUDHUIZEN 2018, 41, 44–46.

¹⁷⁶ KATIČIĆ 1976, 130.

¹⁷⁷ KATIČIĆ 1976, 116–119.

¹⁷⁸ WILKES 1992, 72, 112.

Tre KATIČIĆ 1976, 132–146, 154–157, 163, 166, 175, 184–187; WILKES, 1992, 68-80, 87, 183.

¹⁸⁰ ORESHKO 2018, 98.

¹⁸¹ WOODARD 2004a, 11, 12.

¹⁸² GINDIN 1981, 53, 54.

¹⁸³ GINDIN 1981, 25, 29, 169, 185–187; GINDIN 1993, 140, 144, 165.

¹⁸⁴ GINDIN 1981, 33–40, 52, 66, 72, 81–84, 89–96, 99–105.

¹⁸⁵ GINDIN/TSYMBURSKY 1995, 33.

goddess with the spelling Μήτηο Είπτα, which is the late Anatolian version of the Hurrian goddess Hebat. Indicative is the mother goddess Ma, whose cult was characteristic of the eastern regions of Asia Minor, especially Cappadocia. The names with the theophoric base *Tarhu*, corresponding to the Hittite god of weather and thunderstorms, are also noteworthy. Parallels to the name are known in the Apennines, where they are common as the names of Etruscan cities (Tarquini), whose founder, according to ancient tradition, was the Lydian hero Tarkov¹⁸⁶. There is an ancient tradition of the Asia Minor origin of the Etruscans, an opinion about the possible belonging of their language to the North Caucasian, the similarity of the bronzes of Etruria and Urartu, the Near Eastern cosmogony and custom of devination, and paleogenetic data indicating links with the Near East¹⁸⁷. Therefore, these Thracian names testify in favor of their Anatolian origin.

Additional evidences of the Thracian presence in Asia Minor is provided by the analysis of the Iliad carried out by L. Gindin. There are no Greek names in the toponyms of the Troas, it is not Hittite-Luwian, but has a series of parallels in the Thracian area (Σκαιοί, Ξάνθιοι, Κεβρήνιοι), and a number of toponyms come from Anatolian languages: Πέργαμος (citadel of Troy), mountain Ιδα, city Κελλαι. The most interesting among them are Troy (Τροία) and Ilion (Iλιος)¹⁸⁸, corresponding to the Hittite Taruiša and Wiluša. These words are not Greek or Hittite. In Hittite documents, Wiluša appears from the late 14th century BC, but there is one mention in the reign of Labarna I, therefore, according to L. Gindin, the Thracians were present there already at the beginning of the 17th century BC, before the beginning of Troy VI¹⁸⁹.

Trojan names are represented by Greek and Anatolian ones. But in the Greek epic, undoubted non-Greeks often receive Greek names, so the lists of killed Trojans with Greek names, according to L.A. Gindin and V.A. Tsymbursky, can be ignored. However, some of the names are definitely Greek. First of all, this is Αλέξανδρος, which has a correspondence in Hittite documents (Alakšanduš, king in Ilion-Wiluša at the turn of the 14th–13th centuries BC and the prototype of Alexander Paris). The Mycenaean equivalents of this time (a-re-ka-sa-da-ra) are known, and tradition knows Alexander, the son of the Mycenaean king Eurystheus in Tiryns. Cassandra and Castianeira belong to the same type of names 190. At the same time, the names Priam, Paris, a number of others, are Thracian, but with Anatolian base¹⁹¹. There are tribes who, according to the description, came from Thrace (e.g. Κεβοήνιοι). The Thracian king Ρήσος, who came to Troy in the last year of the siege from the Strimon valley, is indicative, and similar toponyms are known in Thrace,

but are absent in Anatolia¹⁹². Other allies of the Trojans are mentioned: Phrygians, Pelasgians, probably some Anatolian peoples. This situation received the following explanation: a part of the Greeks came to Troy ca. 2300 BC, but was later assimilated by the Thracians, as indicated by the dominance of Thracian toponymy¹⁹³. However, during this period, archaeological data indicate migrations in the opposite direction. And it is very difficult to archeologically show the migration of the Thracians to the Troas before the 17th century BC. Therefore, this explanation seems to be problematic. I suppose that the Troas was indeed inhabited at that time by the Thracians, like the lands on the other side of the Hellespont, and there was close interaction between them. But somewhere in the neighborhood lived Greeks and Phrygians. Therefore, a king with a Greek name in Ilion can only indicate marital relations, since the tradition of maternal inheritance was typical not only of the Mycenaean Greeks, but also of the Hittites, and, probably, other peoples of Asia Minor.

The chronology of the Trojan War is not a solved problem. Basing on Greek tradition, it can be placed between 1334 and 1184 BC, so scholars try to associate it with traces of fires or destruction found in the layers of Troy. But such traces are present in many layers from the late 14th to the late 10th centuries BC: VIh, VIIa, VIIb, etc. The Iliad is not a strict source, it is composed of songs transmitted in the oral tradition, but it is obvious that many of its realities reflect Mycenaean Greece, and therefore the events described in the poem must took place before the destruction of the Mycenaean palaces, although the most likely date is 1190/1180 BC, i.e. the end of Troy VIIa¹⁹⁴.

There is one episode with the appearance in layer VIIb, of hand-made "Barbarian" ware, which is presented more widely in phase VIIb, (but local forms continue to dominate); there is also weapon with parallels in southeastern Europe. In Greek chronology, this corresponds to EH IIIC-early, or 12th century BC; it is explained by the movements of the "Sea Peoples", in extreme cases, by migration of the Thracians or Phrygians, since in Gordion at this time there are some changes in ceramics¹⁹⁵. But this is not connected with the Trojan War, since the collapse of the Mycenaean Civilization had already occurred, and Agamemnon could not return to his palace to fall at the hands of his own wife. The Thracians lived in the Troas before the Trojan War.

It seems to me that the key to understanding the situation is the Trojan plot about Teukras. Herodotus and Lycophron write that they crossed the Bosphorus from the Troas, conquered Thrace, and reached the Ionian Sea. Their leader was Il, who gave the name to Ilion. Moreover, Teukr (Τευκρος) was the first Trojan king. His daughter Βατίεια (Illyrian name) was married to Δάρδανος, the head of a Thracian tribe. This corresponds to the historical area Δαρδανία, located in the upper reaches of the river Axios in Moesia, between Thrace and Illyria, i.e. Macedonia of the classical period¹⁹⁶, but this also corresponds to the name

¹⁸⁶ GINDIN 1981, 36–40, 52, 64.

¹⁸⁷ IVANOV 1988; ELYNITSKII 1977; VERNESI et alii 2004; ACHILLI et alii

 $^{^{188}}$ The word 'Ilion' has parallels in northwestern Anatolia, but also in Northern and Central Greece and the Peloponnese (GINDIN 1967, 32; GINDIN 1981, 117, 130, 132, 138-165, 184; GINDIN 1993, 16, 18-20; 32, 33, 38).

GINDIN 1981, 139.

¹⁹⁰ GINDIN/TSYMBURSKY 1994, 19, 20, 29–31.

¹⁹¹ GINDIN 1981, 63, 106–110.

¹⁹² GINDIN 1981, 119, 122–125; GINDIN 1993, 17.

¹⁹³ GINDIN/TSYMBURSKY 1995, 34.

¹⁹⁴ BENZI 2002, 343-347; PAVEL 2014, 11, 34-46.

 $^{^{195}\;}$ BENZI 2002, 410; PAVÚK 2002, 61; PAVEL 2014, 38.

¹⁹⁶ GINDIN 1993, 18–21, 37.

of the Dardanelles and the later city in this area. In Balkan Dardinia, onomastics indicate both Thracian and Illyrian presences. Ancient authors were inclined to explain this paradox by the coming of Trojans to the Balkans, while modern researchers believe that the Dardani came in the opposite direction during the epoch of the Sea Peoples migration¹⁹⁷.

In fact, this campaign of Teukras is reflected in the migration of the Thracians from Anatolia to the Balkan-Carpathian region, which led to the movement of the Illyrian tribes that appeared in western Greece in EH III. Thus, the migrations of this period were a more complex phenomenon than the complete resettlement of people to a new place. A part could remain in place, and then a wide area of interaction was formed. It is possible that small groups of the Mysians were also involved in this migration. In any case, in the description of Herodotus (VII.20) it is said that they participated in this campaign together with the Teukras, and Mysia is an area adjacent to the Troas in the east 198 . In addition to northwestern Anatolia, the ancient authors placed the Mysians on the Danube, north of the Balkan Mountains, thus they lived in the Thracian area, and are described in the Iliad as Thracians, although their language was somewhat different from Thracian. Some authors distinguish the Daco-Mysian area, north of the Thracian proper¹⁹⁹.

The number of relations between the Thracians and Phrygians with Asia Minor is quite large. In the north of Central Anatolia, the Thracian and Phrygian presence can be attributed at least to the late 3rd - early 2nd millennia BC^{200} . This was one of the reasons for the reconstruction of the Thracian migration from this region²⁰¹. Therefore, the probable homeland of these tribes was the north of Central Anatolia, from where the Thracians went to Northwestern Anatolia, where some remained, and some crossed over to the Balkans. Some small part of the Phrygians, perhaps, also participated in this movement. Some Thraco-Phrygian parallels are precisely explained not by kinship, but by joint migrations²⁰². And Priam, long before the Trojan War, helped his Phrygian allies, probably somewhere in Asia Minor. But there is no reason to consider these tribes as a pre-Greek substratum. Therefore, the Pelasgians were probably also some tribes who spoke the Luwian dialect, as well as two other groups designated as Carians and Lycians.

There is one more argument in addition to the above linguistic considerations. As we will see below, there is a big problem in showing the coming of the Aeolian Greeks to the northwest of Asia Minor using archaeological material. But, if we proceed from the Balkan homeland, we must somehow "resettle" there also the Thracians, Phrygians and Armenians²⁰³, and we must do this before the Trojan War, i.e.,

KATIČIĆ 1976, 181; WILKES 1992, 85, 86, 144, 145.

the appearance in the layer of Troy VIIb, of the "Barbarian Ware" won't help us in it. It is also necessary to explain the absence in Anatolia of an influx of genes from the outside, as well as to place all these tribes somewhere in the Balkans, where their areal contacts would be ensured. Therefore, the more promising region seems to me to be the northeastern part of Anatolia.

5. MIDDLE HELLADIC PERIOD

The transition from EH to MH was quite smooth, which suggests that the population remained the same²⁰⁴. But only a small part of Greece was Hellenized, and this is clearly seen in the distribution of Minyan Ware (Fig. 3). By the beginning of the period, "Adriatic" pottery was prevalent in Elis in the Peloponnese, while Minyan pottery was present in the form of small inclusions marking imports. Hand-made ware, similar to the Minyan, appeared there and in Achaia only in MH. In Messenia (Nichoria), this ware appeared in some quantity at the beginning of MH. In Laconia, it is initially absent, but in the MH II layer in Ajios Stephanos its amount reaches 28-40%. North of the entrance to the Gulf of Corinth, in Aetolia, Minyan ware appears at the very end of MH, and influences in Halkidiki are recorded at the beginning of LH²⁰⁵. From this, it can be assumed that during the MH the Greeks penetrated into Elis and Achaia, then into Messinia and Laconia, at the end of MH did into Aetolia, and at the beginning of LH into Halkidiki. The process was very slow. At the end of MH, relations with southern Italy are strengthened: Gray Minyan Ware of local production appears there, initially in Broglio di Trebisacce and Porto Perone at the developed stage of the Italian MBA, but then its diffusion occurs, and this process intensifies. In Greek chronology, this corresponds to MH III / LH I – LH IIIA2²⁰⁶. It is possible that in this case the process of colonization can be assumed.

The simplification of social structures that took place in EH III is preserved in MH. Rather simple settlements are everywhere, there are no elite burials and non-functional objects²⁰⁷. Burials in pithos and stone boxes are characteristic of MH, and only in a few cases may we speak of burials under a mound²⁰⁸. Elite burials in tholos also appear, in particular, in

KIM 2018, 247-249). Armenia is definitely recorded by Persian sources of the 6th century BC (CLACKSON 2008, 125). Most scholars believe that in earlier sources the Armenians hide under the name of the country Hayasa, whose first mention is contained in the documents of the Hittite king Tudhaliya III (1360-1344 BC). This country is located in the Upper Euphrates, east of Hatti (PETROSYAN 2007; GHAZARYAN 2015, 16). I.M. Dyakonov objects to such an identification, and believes that Armenians and Phrygians were ethnically close, and in early Near Eastern sources both peoples are called Mushkis. Moreover, he proceeds from the idea that both of these peoples came ca. 1200 BC from the Balkans. But from the 12th century BC he localizes the Armenians in the same region of the upper Euphrates (DYAKONOV 1968, 75, 104, 152, 154-156, 159, 161). Thus, with any interpretation of the name Hayasa, we must show the coming of Armenians in the upper reaches of the Euphrates from the Balkans.

¹⁹⁸ GINDIN 1995, 34.

¹⁹⁹ KATIČIĆ 1976, 130, 131, 149, 150.

WOUDHUIZEN 2018, 44-46.

GRIGORIEV 2021a, 178-180.

²⁰² GINDIN/TSYMBURSKY 1995, 25.

After separation from Indo-European, Proto-Armenian, Proto-Greek, Proto-Thracian and Proto-Phrygian had to exist for a long time in one region. But the ancestors of the Indo-Iranians and, possibly, of the Balto-Slavic peoples lived in a nearby region (MARTIROSYAN 2013, 85, 122, 126;

²⁰⁴ BOUZEK 1985, 25.

²⁰⁵ PAVÚK 2012, 15, 30–36.

²⁰⁶ GUGLIELMINO 2013, 177, 183, 186.

 $^{^{\}rm 207}\,$ DICKINSON 2016, 15; WIENER 2020, 280.

 $^{^{\}rm 208}\,$ In Lerna and Asine in Argolis, in MH, burials are oriented men's burials were laid with head to north, but women's with head to south (DICKINSON et alii 2012, 22). Such bipolar burials are characteristic of post-Bell-Beaker cultures of Central Europe (LUTTEROPP 2009, 328, 330, 336, 339-348, 355, 358). This probably reflects the impulses of EH III from the

Marathon in Attica of the MH II period, which in LH become typical for the mainland Greece. The earliest burials in tholos are known in the EM period of Crete, and are rarely found in the LM period. In the Peloponnese, the earliest tholoi appear in Messenia, which was closer to Crete, then spread to Argolis and coastal Attica. It is possible that they were also elite burials, and everywhere they have many details that bring them closer to the Minoan ones. The appearance at the end of MH of elite shaft burials and burials in tholos cannot be associated with northern impulses, but rather with local processes of strengthening the elite and the formation of early statehood. It is significant that initially the tholoi are found in different places in the Peloponnese, but then only in Mycenae, which reflects a certain centralization of power²⁰⁹. Therefore, the spread of this type of structure in Greece may be associated with the growth of relations with Crete after the formation of the Eastern Mediterranean trade network. And this was an important factor in Greek cultural genesis, necessary for understanding subsequent events.

Initially, the Cyclades played the leading role in the trading operations of the Aegean. In the Neolithic, it was a relatively limited trade in obsidian, but in the EBA the volume of trade is constantly increasing. In the important trading station of Kolonna (Aegina Island), Cycladic ceramics appeared already in EH I, and in EH II it was also recorded in a number of settlements of mainland Greece $^{\!210}\!.$ Since EC IIB, when ceramics of the Lefkandi I / Kastri type appear, trade relations with the northeastern Aegean are very strong²¹¹. This is a completely natural process, since migrants from Western Anatolia were connected with regions familiar to them, where, possibly, representatives of the same ethnic group remained.

An indicative situation is observed in Crete. In the EM period, Cycladic objects, steles, specific types of chamber and dome tombs (Agia Photia) appear in Crete, which suggests even the presence of Cycladic colonies in the northeast of Crete, while Minoan materials are presented in the center and in the south. In EM II, the situation changes: Cycladic imports are present, domed tombs are widespread, but the settlements become purely Minoan, and since EM IIB (that is, from the Kastri phase in the Cyclades) contacts are sharply reduced. This was caused by that the Minoans themselves began to organize trade with the Cyclades and the mainland (primarily with Lerna), where they were interested in metals. It was at this time that similar types of fortifications (Myrtos) and herringbone masonry appeared in Crete, which is typical for the Lefkandi I / Kastri complexes²¹². Therefore, it is possible that the primary impuls was the destruction of the system, caused by the appearance in the Cyclades of the population with anatolianising ware and economic orientation of the Cyclades towards the northeastern Aegean. This could have contributed to significant social changes in Crete. It was previously thought that palaces there originate in MM IIB, but recent work in the Malia Palace has revealed its early phase within EM III

northwestern Balkans.

- MM IA, but underneath there is a large building with an open courtyard from the EM II period, a simplified version of the palaces. Similar structures are known elsewhere. Thus, this is an internal development, due to the inclusion in the colossal trade network that formed at that time in the Eastern Mediterranean. Therefore, the change in the trading system of this region ca. 2000 BC led to the formation of the Palace Civilization²¹³. Based on historical chronology, this occurs in the 18th century BC, when, due to a change of the political situation in the Near East in the Old Babylonian period, the tin supply routes changed, and it began to flow through Sippar to Mari, and from there to the Levant²¹⁴. This causes Crete to flourish, and strong Minoan influences on the Cyclades and mainland Greece, primarily to Messenia, where they were already felt in MH²¹⁵.

Important changes happen also in Northwest Anatolia. As we discussed above, the predecessors of the Proto-Minyan pottery have been found in its inland regions. But in the coastal zone, Gray Ware appears only at the time corresponding to the transition from MH II to MH III: Liman Tepe in the region of Izmir and Troy VI. At Liman Tepe, these are Anatolian Gray Ware and Greek (locally produced) forms, accompanied by Anatolian monochrome pottery. In Troy, these are originally Greek forms, and relative to standard Anatolian pottery, their proportion grows from 10 to 30%. But by the beginning of LH I, this ware disappeared and was replaced by Anatolian forms of Gray Ware. Along the entire coastline between Troy and Izmir, on the basis of the Aegean and Anatolian forms, Gray Ware is gradually unificating, it becomes typical, and in some places dominant for the LBA, when its analogs in Greece disappear. Moreover, this ware is based mainly on Anatolian prototypes. Only a few finds have been recorded on the adjacent islands, with the exception of Lesbos, where this pottery, in its Anatolian version, is represented in layers corresponding to MH III and LH III²¹⁶. The area of distribution of this pottery corresponds, thus, to the area of distribution of the Aeolian dialects. It is significant that in Troy VI (ca. 1750-1300 BC) further local development of ceramics is quite obvious: during the transition from the previous period of Troy V, as well as to the first phase of the next period of Troy VIIa (ca. 1300-1190/80 BC) pottery is hardly distinguishable. There is only a smooth transformation on a local basis. This suggested that the population did not change during all this time²¹⁷. In this regard, it is possible that the bearers of Anatolian Gray Ware moved from the inland areas, and their contacts with the population that was making the Minyan Gray Ware are visible. Whether these were migrations from Greece or cultural influences, we cannot say.

6. MYCENAEAN GREECE

In MH III, the vector of development in many regions of mainland Greece is changing. Fortifications appear in Kolonna on the island of Aegina and the first tholoi in

²⁰⁹ BINTLIFF 2012, 97, 100, 167, 168, 174, 177, 181, 193; WIENER 2020, 280, 287.

²¹⁰ MARAN 1998, 31.

²¹¹ ALRAM-STERN 2004, 470, 485, 486.

²¹² ALRAM-STERN 2004, 490-496.

²¹³ BINTLIFF 2012, 94, 96, 97, 123, 124.

²¹⁴ MUHLY 1973, 293, 294, 301.

²¹⁵ MARAN 1998, 30; WIENER 2020, 281, 284, 285.

²¹⁶ PAVÚK 2010, 933–935, 938–941.

²¹⁷ PAVÚK 2002, 57–59; PAVÚK/RIGTER 2006, 232–237.

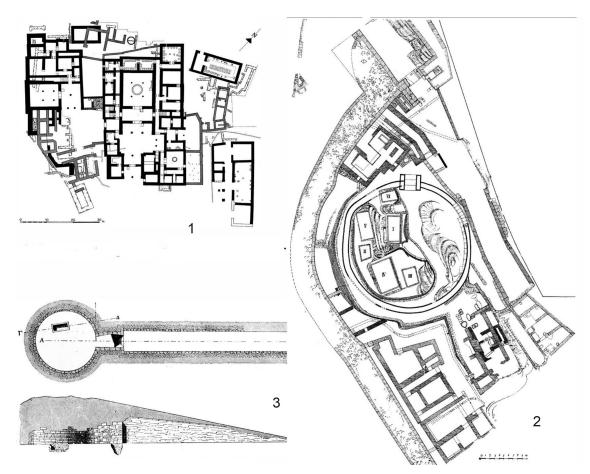


Fig. 9. Mycenaean culture: 1 – Pylos, the palace of Nestor; 2 – Mycenae, Circle A area; 3 – Vapheio, Tolos. (after WIENER, 2020, figs. 1–3, source image modified).

Messinia and Marathon, that is, in those areas with which Crete interacted in the first place. Northern Greece was not affected by this process. The most intensive development is taking place in the Peloponnese, and traditional relations with the Cyclades prevail in Attica. As a result, several centers are formed in Argolis, with large buildings, defensive walls and elite tombs (Fig. 9). Initially, the largest center in Argolis was Argos with its harbor at Lerna, then the rapid rise of Mycenae and the gradual decline of other centers occurs. Rich Shaft Graves of Circle B (MH III) and Circle A (LH I) appear, which partially coexist, and their material culture reflects the development of MH traditions²¹⁸. The transition to LH I is marked by the appearance of new ceramics (lustrous iron-rich paint), stimulated by the Minoan influence²¹⁹. This was not the borrowing of all forms and styles, but the most convenient for certain needs, and the local development of this style went on. New types have evolved as a result of a complex interaction of traditions, imports and changes in social conditions. The spread of some kind of ceramic type ceased to reflect the spread of people²²⁰. We may assume that as a result of these processes, traces of hypothetical "newcomers from the north" are lost, because the Mycenaean military culture cannot be derived from the Minoan culture, just as it cannot be derived from the previous mainland traditions²²¹. First of all, hypotheses about the coming of the Greeks from the steppe during this period and talk about the burials of some people different from the rest of the population are associated with this culture and with chariots. As already discussed in the introduction, there are no real facts indicating the bringing of chariots from the steppe. In Mycenae, they appear in the later tombs of Circle A at the beginning of LH I, thus, the phenomenon of Shaft Graves is in no way connected with the appearance of chariots. The first evidence of the use of chariots in Crete is from the same period: an impression of a seal from the LM IA layer destroyed by the eruption of Santorini²²².

It is interesting that in Greek the word πείρινθα (basket of a chariot) was borrowed from the Anatolian languages²²³, although it is possible that this borrowing was carried out through Thracian. The source of chariots in mainland Greece was the Carpathian region, where chariots appear simultaneously with the chariots of the steppe or even slightly earlier. In the settlement of Mitrou on the shores of the Gulf of Euboe, at the beginning of LH I, elite buildings appeared and the streets have been changed and reconstructed, they have become adapted for riding chariots. A rod-shaped cheekpiece of the Carpatho-Danubian form and ornamentation is found in this layer, but judging by the details of the ornamentation, it was not imported from the Carpathians, but was made in Greece²²⁴. In addition, discshaped cheekpieces are closer to the Carpathian types than

²¹⁸ ALRAM-STERN 2004, 532, 533; BINTLIFF 2012, 174, 175; DICKINSON, 2016, 13, 15; WIENER 2020, 280, 281, 286, 289, 290, 307; PHILIPPA-TOUCHAIS/TOUCHAIS/BALITSARI 2021, 463, 465, 470.

BINTLIFF 2012, 181.

²²⁰ DICKINSON 2021.

²²¹ BINTLIFF 2012, 173.

²²² WIENER 2020, 291, 297, 298.

²²³ KATIČIĆ, 1976, 53.

²²⁴ MARAN/VAN DE MOORTEL 2014; MARAN 2020, 512.

to cheekpieces from steppe Eurasia²²⁵. Moreover, the steppe burial rite did not penetrate into Greece at the beginning of LH I, and any comparisons of the Sintashta burial mounds with the Shaft Graves are groundless. The Mycenaean culture was formed on a local basis, but the presence of Anatolian and Balkan features in it suggestes that some Mycenaean rulers were of foreign origins, although there was no mass migration²²⁶. In my opinion, these were immigrants from the Carpathians, and their appearance was reflected only in the elite culture (chariots and Carpatho-Mycenaean ornaments). They were the Thracians who appeared in the Carpathians and the northeastern Balkans as a result of migration from Anatolia at the beginning of the MBA, which corresponds to the beginning of EH III²²⁷.

Analyzes of bones from these tombs do not provide strong evidence to support this. Genetic analyzes of earlier burials in Circle B have shown that some women are elite by birthright rather than marital ties²²⁸. There is some ritual difference between the burials in Circles B and A. The Circle A burials almost all had an east - west orientation, which is also found in Circle B, but in general it is characterized by a south - north orientation. Taking into account all other details made it possible to conclude that the ruling faction of Mycenae involved outsiders, who contributed to its strengthening. And there were two such groups who buried their dead separately. For two generations, burials were carried out in Circles B and A. Then the younger group A won this competition (perhaps due to this attraction of aliens). Its leadership persisted until LH III, as at this time the city's defensive wall was expanded and Circle A was included in it. Thus, it was not a royal power, but a 'collective leadership'229. Probably, true kingdoms appear only since LH II, as well as a system with large palaces (Mycenae, Pylos, Thebes), Linear B script and a system of administration borrowed from Crete, since LH IIIA (1450–1300 BC). And, this transformation was driven by internal development, not the coming of a new population²³⁰.

This Shaft Graves phenomenon is well explained on the basis of Greek legends and linguistics. Analysis of the legendary genealogy of Greece shows that the inheritance of royal power in the "Heroic Age" was carried out along the female line, and the kings were of different origins²³¹. In addition, Thracian and Phrygian names are present in Mycenaean and Theban royal genealogies, and there are some inclusions of cultural terms²³². Therefore, we can assume that this elite group A ensured its leadership by integrating some Thracian groups of chariot warriors, and this affected the subsequent close relations of Mycenae with the Carpathians²³³. It is possible that this practice was then repeated several times, depending on the specific political situation. It cannot be ruled out that small clans of people from the Carpathians lived in some places at that time.

But this practice did not affect the main part of Greece. From the point of view of Greek ethnogenesis, these were small episodes that could not change the language even in Mycenae, although this could contribute to the Greco-Thracian linguistic relations and limited mutual borrowings. Therefore, during the transition to LH, archaeological materials do not indicate processes that could reflect the coming of the Greeks. The culture of this time developed on a local basis with influences primarily from Crete and, to a much lesser extent, the Carpathians.

During this period, the expansion of the Greek oikouménē continued. In LH IIB, the Mycenaean culture spreads throughout Thessaly²³⁴. In Crete, in LM 1B (ca. 1550 BC), all the palaces, except for Knossos, were destroyed. Now this is no longer associated with the Santorini eruption, which happened before that in LM 1A, but with the invasion. But the eruption had undermined Minoan trade, mainland trade was growing in the Cyclades, and it is often controlled by the Mycenaeans. In LH II, they gradually occupied all the Minoan colonies on the Cyclades, Dodecanese and the coast of Asia Minor, and began to trade themselves with Egypt and the Near East. It made Crete weaker and made it possible to conquer it. A centralized state formed in Crete with a center in Knossos with a developed bureaucracy that controlled the production and storage of textile, weapons, wine, the cultivation of grain and raising sheep, and the trade in metals. The tablets contain records of 200-250 chariots with all the necessary equipment. The Mycenaeans also inherited the Minoan maritime trade. After the destruction of Knossos in LM IIIA ca. 1350/40 BC, a period of decentralization begins, and the relations of Mycenaean Greece with the Troas begin to grow²³⁵.

Thus, as a result of these processes, the Greeks spread to Northern Greece, to Crete, to Southern Italy, and finally occupy all the Aegean islands. Therefore, by this time, the population of Greece was finally formed. And it was based on genetically similar groups of the previous population and migrants from Anatolia. But there are two problems.

The first of them is associated with paleogenetics, which shows that the Greeks of the EH and LH differ from the modern population of Greece, which is comparable to the MH population of the Northern Greece²³⁶. In my opinion, the actual situation is more complicated there, and this is explained, first of all, by the small number of analyzed samples. For the reconstruction, two samples from Logkas in Northern Greece have been used, dated ca. 1900 BC, and slightly different results have been obtained using different statistical procedures. In general, the basis of the Logkas population is those components that characterize the EBA population: Aegean Neolithic and Iran Neolithic / Caucasus HG-related ancestry. But the last component is higher, and its proportion is the same as in Steppe_EMBA, so it is not associated with a new inflow from the Caucasus. This can be modeled in two ways: 1) Anatolia_N (_53%) and Steppe_EMBA (_47%), or 2) Anatolia_N (_38%) and

GRIGORIEV 2021a.

²²⁶ BOUZEK 1985, 25.

²²⁷ GRIGORIEV 2021a.

BOUWMAN et alii 2008, 2585.

²²⁹ BINTLIFF 2012, 166, 168, 170, 171; DICKINSON et alii 2012, 21–26.

BINTLIFF 2012, 182; VOURSAKI 2021, 423, 424; WIENER 2020, 287.

FINKELBERG 2005, 33-37, 65-108.

²³² WOUDHUIZEN 2018, 30, 34–40.

²³³ GRIGORIEV 2021a, 178, 179.

²³⁴ WIENER 2020, 297.

²³⁵ BINTLIFF 2012, 124, 141, 181, 182; WIENER 2020, 299–302, 307, 310, 311, 314, 315,

²³⁶ CLEMENTE et alii 2021.

Steppe_MLBA (_62%), consistent with a strong genetic contribution from the Steppe. It is assumed that the steppe component should have appeared there as early as 2300 BC. But it could be as a result of direct migration from the steppe, and indirectly, through the previous North Balkan and European populations as a result of Yamnaya migration to this area. Moreover, in contrast to the EBA population, the Logkas population is very similar to the modern population of Greece, and both differ from the Mycenaean LBA population. As a result, at this stage, genetic studies can support both the hypothesis of the migration of Greeks from Anatolia and from the steppe²³⁷. In my opinion, the option with the participation of the Steppe_MLBA component in the formation of the Logkas population can be excluded. At that moment, it was just beginning to form, and one of the sources of this formation was impulse from Central Europe. This explains its rapprochement with the Logkas population. If we exclude this group from the multidimensional scaling analysis (MDS)238, we see that the Logkas population is situated between the populations of the Aegean EBA and Anatolian Eneolithic on the one hand, and the European Late Neolithic to Bronze Age, on another. Therefore, the modeling of the steppe component in it can be explained only by the earlier Yamnaya contribution to the North Balkan population. At the same time, there are no impulses from Northern Greece to the south in MH, which is well manifested in the paleogenetics of the LBA: the ancestors of the Mycenaeans and Minoans were three-quarters of the Neolithic farmers of the Aegean and Anatolia, and a quarter of IranN / CHG-like ancestry, not related to steppe, judging by the analysis of Y-chromosomes. But the Mycenaeans are distinguished by an admixture of 4-16% ancestors from Eastern Europe and Siberia²³⁹.

It is also fundamental that the Mycenaean population differs from the Logkas population: "they carry a lower European-HG-like component... and do not share significantly more alleles with Iran_N/CHG or EHG compared to Anatolia_N". It occupies a position between the populations of Logkas and the Aegean EBA²⁴⁰, or between the Aegean EBA and the EBA of the Balkans²⁴¹. In my opinion, this is explained by its formation on the basis of the Greek populations of MH, and active interaction with the populations of the Carpatho-Danubian Basin. This is partly explained by the participation of people from the Carpathians in the formation of the Shaft Graves of Circle A, and by previous penetration to the Carpathians of the Seima-Turbino tradition, covering vast areas from Southern Siberia to Eastern Europe²⁴², which was the reason for the appearance of Siberian genes. An additional factor was the penetration into the Peloponnese in EH III of both the population with anatolianising ware from Eastern Greece and the population from the North-Western Balkans with "Adriatic" ware. The similarity of population in the North-Eastern Greece with modern Greeks can be explained by

Dorian migration and some other later processes. Therefore, the data of paleogenetics are quite concordant with the processes that are reconstructed on the basis of archaeology, and indicate the coming of the Greeks from Anatolia.

The second problem is associated with the Aeolian Greeks in Asia Minor. For the first time, Hesiod mentions the Aeolians in the northeastern Aegean, but he does not write about colonization from mainland Greece. Herodotus in the 6th century BC mentions the Aeolians in the region of Pergamon and Smyrna, and Strabo in the 4th century BC does in the western Troas. And only he has a description of the Aeolian migration from Boeotia 60 years after the Trojan War, four generations before the migration of the Ionians, but there is no archaeological evidence of such migrations, including in the early Iron Age, and this cannot be ignored²⁴³. Above, we discussed that on the western coast of Asia Minor, local Anatolian Gray Ware, similar to the Minyan one, was spreading already in MH III; in Troy, the continuity of ceramic traditions up to Troy VIIa was preserved, which suggests that there was no change in population. In LH III, Mycenaean decorated ware and indigenous non-decorated ware imitating Mycenaean forms, including Anatolian Gray Ware, are spread on the coast and on neighboring islands²⁴⁴. Therefore, one might assume that Mycenaean ceramics mark the distribution of the Aeolians, but their number is small. This ware first appeared in the middle part of the Troy VI layer (ca. 1590–1430 BC), but even in the later part of this layer (1400-1300 BC) the number of painted Mycenaean ware is no more than 2-3%²⁴⁵. Later, in layer VIIb3, painted Protogeometric sherds appear, but it is only 3% of the ware, and it was produced in Lokris or southeast Thessaly. There are amphorae with parallels in Euboea and Macedonia. All other ware is local²⁴⁶. Therefore, these facts mark the formation of a wide network of contacts of the Mycenaean Civilization, but not a migration. Based on archaeological evidence, the Greeks lived in coastal Asia Minor since MH III. The contradiction here is that Troas was inhabited by the Thracians during the Trojan War, and it is possible that this population was present there already before Troy VI, and the archaeological evidence does not indicate a change in population. At the same time, judging by the presence of Greek names among the Trojans, it is possible to assume the existence of a Greek population nearby. To the south of Troas, Gray Ware was spreading in the previous time, but it is difficult to say whether it is possible to associate it with the Greeks, as well as the presence of this pottery in Troy by increasing contacts with the Greeks.

7. AHHIYAWA

In the period preceding the Trojan War, we can assume the presence of Greeks in the region, which is evident in the well-known problem of Ahhiyawa, repeatedly mentioned by Hittite sources. It is believed that the presence of Ahhiyawa in Asia Minor is evidence of the Asia Minor

CLEMENTE et alii 2021, 10–12, fig. 1B.

²³⁸ CLEMENTE et alii 2021, fig. 2.

²³⁹ LAZARIDIS et alii 2017, 214–216.

CLEMENTE et alii 2021, 10.

 $^{^{241}\,}$ see CLEMENTE et alii 2021, fig. 2.

²⁴² GRIGORIEV 2018.

²⁴³ ROSE 2008, 401–403, 405, 414, 420, 421.

²⁴⁴ PAVÚK 2010, 941.

²⁴⁵ PAVÚK/RIGTER 2006, 235.

²⁴⁶ ROSE 2008, 412.

origin of the Greeks²⁴⁷. But the question is not so simple. In Hittite documents, the first data about Ahhiyawa appear ca. 1430 BC, after Crete was captured by the Mycenaeans, and in Miletus Minoan pottery was replaced by Mycenaean pottery. The latest data refer to 1240–1215 BC. A fairly general point in most discussions is the idea that during this time interval there were numerous conflicts between Ahhiyawa and the Hittites, and Ahhiyawa was a serious political force in the region²⁴⁸.

There is a problem with the localization of Ahhiyawa, as the lands of western Asia Minor are well known (Lukka, Millawanda, Arzawa, Seha, and Wilusa), and there is no space for it (Fig. 1). There was a Mycenaean culture in Miletus at that time, and it is considered as a Mycenaean colony, but there is a description of the escape of the Hittite dissident Piyamaradu from Miletus to Ahhiyawa by sea, there are joint references to Ahhiyawa and Milawata, and in the "Tawagalawa Letter" a conflict with it because of Troy (Wilusa) is mentioned. These cities may be excluded from the list of possible contenders. Therefore, the search for Ahhiyawa was turned to mainland Greece and most authors believe that it was a conglomerate of Mycenaean kingdoms²⁴⁹.

There is a draft of the letter of the Hittite king Tudhaliya IV to Shaushgamuwa in Ammur, which lists the kings equal to him: Egypt, Babylonia, Assyria and Ahhiyawa, but the name of the king of Ahhiyawa was then deleted; it is assumed that something happened to it. In the "Milawata Letter", a Hittite king, possibly Tudhaliya IV, writes to Tarkasnawa, the ruler of Mira in western Anatolia, that Milawata (Miletus) has been taken over by the Hittites and no longer belongs to the Ahhiyawa king, and Cline believes that this is why it ceased to be equal and was deleted from the list²⁵⁰. Such a coincidence of a historical event with the writing of a rare document is doubtful; most likely, this is a correction of a scribe's mistake $^{251}\!.$ Nevertheless, this gave rise to the search for the center of Ahhiyawa, although for the Aegean we have no evidence on the existence of a large unified power. According to K. Georgakopoulos²⁵², it could have been Crete, moreover, starting from the Minoan period, it was the leading state in the Eastern Mediterranean. Rhodes was also allowed, since Ahhiyawa should be located near Anatolia, and some of the adjacent islands are more likely²⁵³. But there was no large center in Rhodes; and Knossos, after its destruction in LM IIIA2, was not so significant. In addition, it is not clear from the documents what is meant by Ahhiyawa, a territorial union, a people or a general ethnogeographic concept, although it was ruled by a king. In Greece at that time there were two large centers, Thebes and Mycenae, but the leadership of the latter is reflected in the Homeric epic, so it is more likely that the center of Ahhiyawa was Mycenae, although this does not mean that the Mycenaean king ruled over all of Ahhiyawa²⁵⁴.

In my opinion, a very balanced approach to this problem was published by A. Ünal, who cited all the available texts. In fact, these are only 25 documents over 200 years, which is incomparably less than the many references to other kingdoms and even Miletus. Therefore, the political significance of Ahhiyawa is exaggerated. The localization of Ahhiyawa in Greece is very doubtful, since such a term is absent in numerous tablets of Linear B. There is only one document from Knossos, which describes the sending of 50 sheep and goats to Ahhiyawa (A-ka-wi-ja), and it is doubtful that the destination was mainland Greece, rather, it was some local point. The territorial context of all references is quite specific: the south-west of Asia Minor (together with Tarhuntassa, Mira, Arzawa, and Millawanda), moreover, one can assume a coastal location, since Tuthaliya IV, in correspondence with Ammuru, is seeking a ban on accepting ships from Ahhiyawa with goods for Assyria. The situation with the escape of Piyamaradu from Miletus does not point to the Aegean islands or mainland Greece, as it was possible to sail along the coast. And this situation is indicative, since the question of his arrival to Hatti and a possible return to Ahhiyawa with the aim of settling there is being discussed. Mursili II sent somebody into banishment to Ahhiyawa. Therefore, Ahhiyawa is located in Anatolia, but the exact localization is difficult. In many texts about the Hittite campaigns to the west of Asia Minor or about the events there, there is no description of Ahhiyawa. The amount of Mycenaean pottery on the Asia Minor coast is greatly exaggerated. In the Levant, this pottery was found in 111 settlements, but the texts lack Aegean place names, so these finds reflect trade²⁵⁵.

In my opinion, there is one more problem: we do not know if the meaning of this term is identical in all documents during all these 200 years. Our knowledge of the political geography of the west of Asia Minor during this period does not allow us to assume the existence of a stable strong kingdom there. Therefore, in some cases it may be an ethnonym, and in some it may be some kind of territorial association. It is likely that this term extended to some Mycenaean Greeks who settled on the Asia Minor coast, or sailed from the mainland or the Aegean islands, but it should have been based on some kind of local substrate, especially since we may not associate Miletus with Ahhiyawa, although it could have been subordinate to it or in alliance with it prior to the capture of the Hittites. All this uncertainty does not allow using this fact as a solid basis for the Asia Minor origin of the Greeks. However, the term marks the presence of this ethnic group in a period long before the Ionian colonization. It is possible that this possibility is also indicated by the presence of Greek names in the Iliad, as well as the spread of Gray Ware in the area between the Troas and Miletus.

O. Carruba 256 believed that the term Ahhiya is associated with the Indo-European word *akwa ('water'), and it denoted the entire area of the Aegean Sea (Αίγαίον), where the corresponding place names (Αχαία, Αίγιον, Αίγινα) were found everywhere. The term Ahhiyawa is also associated

GAMKRELIDZE/IVANOV 1995, 797.

²⁴⁸ NIEMEIER 2012, 161-166; WIENER 2020, 307.

²⁴⁹ BENZI 2002, 357–359; ROSE 2008, 407; NIEMEIER 2012, 157, 166; PAVEL 2014, 19, 20, 26, 27.

²⁵⁰ CLINE 2021, 94.

²⁵¹ ÜNAL 1991, 21.

GEORGAKOPOULOS 2012.

²⁵³ BENZI 2002, 360, 364-367, 376.

²⁵⁴ WIENER 2009; WIENER 2020, 313.

²⁵⁵ ÜNAL 1991, 17–20, 23–38.

²⁵⁶ CARRUBA 1964; CARRUBA 1995.

with this, as indicated by the Anatolian suffix -wa²⁵⁷. The name of the Aeolian Greeks (Αἰολεῖς) is also associated with this term, and this name appeared in western Asia Minor in the later region Aeolis. After Carruba, taken together, this reflects the origin of the Greeks from Anatolia, and their migration to Greece along with the Minyan pottery. In my opinion, the Luwian suffix is irrelevant to the problem, since the term Ahhiyawa is present exclusively in Hittite sources and reflects the presence of bearers of the ethnonym Ahhiya in this region. But in any case, this could mean that the Greeks lived south of the Troas at least in the middle of the 2nd millennium BC.

According to Strabo, the Aeolians were the earliest Greek settlers in Asia Minor, and the majority of researchers assume their coming from the Balkans. Time estimates of their appearance differ. The first option assumes migration of tribes of steppe origin in the late 3rd millennium BC, which is marked by the Greek ethnonym $\Delta \alpha v \bar{\alpha} o i$, associated with the Iranian names of the Don, Dniester and Dnieper rivers, and the appearance of the hydronym "Apidan" in the Troas. The archaeological expression of this is the İnegol Gray Ware. Already in Anatolia, the Greeks adopted the local names (Achaeans and Aeolians), which they spread in Greece, penetrating soon there²⁵⁸. However, there is no evidence of previous migration from the steppe. Proto-Minyan ware has broad Anatolian parallels.

The second variant assumes that the Aeolians came to Asia Minor from Greece as a result of the Dorian invasion, but they retained relations with their homeland, which contributed to the preservation of the similarity of the Asia Minor Lesbian dialect with other Aeolic dialects, Thessalian and Boeotian²⁵⁹. There are, however, objections: The Aeolian migration to the northeastern Aegean has no linguistic support, since Lesbian and Thessalian are the most conservative dialects, and Boiotian already has many similarities with western Greek²⁶⁰. Besides, during the entire period between the possible time of the Trojan War and the reliably fixed Aeolian settlements of Asia Minor, there are no archaeological traces of this migration²⁶¹. In my opinion, all these problems are caused by the fact that not only archaeologists, but also linguists are trying to fit the available material into the Procrustean bed of the "kurgan hypothesis". But if we reject it, the situation becomes easier. Probably, it was the Aeolians who were the main component that formed the Greek ethnos at an early stage (but this does not mean that their language was Aeolic - see below). This is confirmed by Greek genealogies. The descendants of Aiolos are associated with many major centers in different regions of Mycenaean Greece: Iolkos in Thessaly, Pylos in Messinia, Amyclae in Laconia, etc. This is the most ramified stemma²⁶².

8. DORIANS

The obvious fact is that the Dorians came from the north, probably from Epirus. And although the Greeks considered them as barbarians, but only in a cultural sense, not in an ethnic one²⁶³. Their coming coincides with significant changes recorded on archaeological sites. In LH IIIB, LH IIIC for a relatively long period (1200-1130 BC) in Mycenaean Greece, the destruction of palaces (Mycenae, Midea, Pylos, Thebes, Dimini, Orchomenos, Tiryns, and elsewhere in Greece) is fixed, and desolation of many settlements. This was not a one-step process, and not all of these destructions led to the end of the settlement. The reasons for this are probably complex: a certain climate crisis, a decline in trade, as a result of the collapse of the palace system, but the final mechanism is the migration of the Dorians²⁶⁴. This could have caused an outflow of the population from the Peloponnese and Crete, which explains the presence of speakers of the Arcado-Cypriot dialect in Cyprus. It is assumed that this stimulated Greek migrations to Syro-Palestine, Pamphylia, Sicily, Italy and the Adriatic²⁶⁵.

The situation in Cyprus is indicative. Initially, impulses from the Levant are recorded on this island. But then, within the Philia phase (2400-2300 BC), there were significant impulses from Anatolia, manifested in the appearance of the corresponding architecture, metallurgy, chamber tombs, burials in pythos, new technologies and types of ceramics, textiles, plow, cattle. This is usually explained by migrations from southwestern and western Anatolia, at least of elite groups. And this direction of connections persisted throughout most of the Bronze Age²⁶⁶. Then, during the Protohistoric Bronze Age 3 period (ca. 1200-1050 BC), we see destruction of many settlements (Enkomi, Kition, Kouklia Palaipaphos, Myrtou Pigadhes, Maroni Vournes, Kalavasos Ayios Dhimitrios, and Alassa Paleotaverna) and the desolation of others, although the process was quite complicated, and the Hittites were clearly to blame for some destructions. There is no evidence that it was Mycenaean colonization. Aegean colonists appeared there, but the scale was not so great²⁶⁷. However, this is consistent with the studies of Y-chromosome haplogroups of the modern population of Cyprus. Against the background of a huge contribution of Greek culture and language, it includes the following components: Anatolian - 66%, Levantine - 24%, Balkan – 13%, reflecting, thus, mainly local Neolithic roots, migration from Anatolia in the EBA and this more limited migration in the late 2nd millennium BC^{268} .

9. GREEK DIALECTS

There are slightly different classifications of the Greek dialects. In the most general form, they can be divided into

 $[\]overline{^{257}}$ Other linguists also recognized the connection of the term Axx10í with Ahhiyawa, but they explained this by the migration of Greeks from the north in two waves: the Achaean (Άχαιοί, originally ΆχαιFοί) around 1950 BC, and the Dorian (Δωριεις) around 1200 BC (KATIČIĆ 1976, 98).

GINDIN/TSYMBURSKY 1994, 18-21; GINDIN/TSYMBURSKY 1995, 14, 23-25, 33.

²⁵⁹ FINKELBERG 2005, 160.

PARKER 2008.

²⁶¹ ROSE 2008, 406.

²⁶² FINKELBERG 2005, 27, 32, fig. 1.

²⁶³ DICKINSON 2016, 6.

²⁶⁴ BINTLIFF 2012, 183, 184; KNAPP/MANNING 2016, 123, 136, 137; CLINE 2021, 123-126. The appearance of hand-made ware, discussed earlier as a marker of the Dorian invasion, is probably not always legitimate. Its analysis shows that in many cases we must talk about a crisis in pottery caused by a crisis in the palace economy (LIS 2018).

²⁶⁵ FINKELBERG 2005, 144, 150-153.

²⁶⁶ KOUKA 2009a, 34–38.

²⁶⁷ KNAPP/MANNING 2016, 132–134; CLINE 2021, 127, 128.

²⁶⁸ VOSKARIDES et alii 2016, 7, 12.

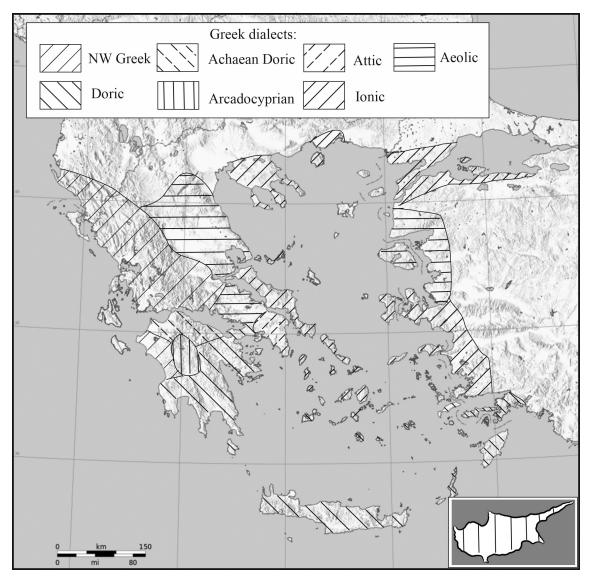


Fig. 10. Map of Greek dialects.

eastern (Arcado-Cypriot, Aeolic and Attic-Ionic) and western (Doric and Northwest Greek). The Greeks named Doric, Ionic and Aeolian as the primary dialects, linking them with the progenitors of Dorus, Xanthus, and Aeolus. The Arcado-Cypriot dialect was widespread in the mountains of the central Peloponnese and in Cyprus; close to it is Mycenaean, as well as Pamphylian in southern Anatolia, which also has some similarities with Western dialects. Aeolic dialects are classified as Lesbian in northwestern Anatolia, Thessalian, and Boeotian. Close to the Attic dialect, Ionic are divided into western (Euboea), central (Cyclades) and eastern (Asia Minor). Northwest Greek occupied Elis in the northwest of the Peloponnese, western and eastern Locris and Phocis in central Greece, and Epirus in the northwest. The Doric dialect is localized in the remaining northern, southern and eastern parts of the Peloponnese, in Corinthia, as well as on the islands of Crete, Rhodes, Thera and Melos²⁶⁹. Thus, this peculiar distribution has always forced scholars to believe that this linguistic picture was formed as a result of migrations (Fig. 10). It is also obvious that this is complicated by multiple repeated migrations and micro-migrations within ²⁶⁹ WOODARD 2004b, 650, 651.

Recently, however, the point of view has become firmly established that the separation of dialects from Common Greek took place already in Greece. M. Finkelberg analyzed

the region, and complex late interactions. As a result, none of these dialects can be considered "pure". All of them are mixed to one degree or another²⁷⁰. Taking into account the ancient tradition of the Dorian invasion from the north, the hypothesis of the Eastern European origins of the Indo-Europeans and ideas about the late Greek colonization of the coast of Asia Minor, the history of the formation of this dialectal picture was based on the idea of invasion from the north. All this group of factors explained some features of individual dialects. At the same time, from the earliest stages of existence of the problem, it was assumed that there were three successive waves of migrations of already separated dialect groups: 1) speakers of Attic-Ionic dialects ca. 2000 BC, 2) Achaeans with Arcado-Cypriot and Aeolic dialects ca. 1700-1600 BC, which led to the formation of the Mycenaean Civilization, 3) Doric ca. 1200 BC. Then the first two waves were combined into one²⁷¹.

²⁷⁰ FINKELBERG 2014.

²⁷¹ DEL BARRIO 2014a, 297.

the linguistic connections between individual dialects, and proposed a primary continuum map that explains their contacts: Ionic – in the East (Euboea, Attica, the Argolic Akte); Arcado-Cyprian - the Peloponnese (West Argos, Sparta, Messenia, Arcadia, Achaea); Lesbian - Boeotia; Thessalian - the northwestern Peloponnese (Elis), Aetolia (Pleuron, Calydon), Phocis, Locris and South Thessaly; Boeotian – West Thessaly; Doric in Northern Thessaly; NW Greek in Epirus. The changes in the primary localization were caused by the Dorian invasion, which led to the spread of speakers of various dialects to the Aegean Islands and Asia Minor²⁷². However, this hypothesis was based on the idea of primary migration from the north. We will try, therefore, to take only the facts and see how they relate to the picture of migrations that has been discussed above on archaeological materials.

Aeolic dialects cause great difficulties. On the one hand, their relationship is obvious, and it is possible that before the migration that caused the division, Lesbian and Thessalian were indistinguishable. But Lesbian is closest to Ionic, which is usually explained by late intense contacts or possible initial areal proximity, although this is the subject of debate and sometimes the role of Ionic influence on Lesbian is estimated as exaggerated. On the other hand, only two mainland dialects share features of both Lesbian and Ionic: Thessalian and Mycenaean/Arcadian. Finally, Thessalian and Boeotian contain a number of elements of Western dialects, due to the influence of the Dorians²⁷³. But, since there are no archaeological traces of Aeolian migration to Anatolia, it is likely that Common Aeolic was the language of the Greeks of the west of Asia Minor, including Ahhiyawa and the Mycenaean colonies, from where the migration of the Aeolians to the Balkans in the early Iron Age is assumed, which led to the formation of the Boeotian and Thessalian, which have absorbed western features. The Lesbian language that remained in place has retained its conservatism²⁷⁴.

Ionic dialects (Euboean, Cycladic, and Asia Minor) contain archaic features from Proto-Greek and Common Greek, some of which are also inherent in Arcado-Cypriot and Pamphylian. The similarities with Lesbian are explained by influences of Ionic to Lesbian, but some of these features are common to Eastern Greeks. There are similarities between Euboean and Aeolic Boeotian, as well as Euboean and Attic, which are absent in other Ionic languages, and they formed before the Attic influence on the Ionic languages during the period of Classical Greece²⁷⁵.

It seems to me that these paradoxes are well explained by the archaeological model discussed above. In the course of migration from Asia Minor in EH IIB, the Greeks settled in the Cyclades, Euboea and the east of Boeotia. It is difficult to assume that at the beginning of this process, a division into Ionic and Aeolic had already taken place. Moreover, it is unlikely that we have the ability to derive Mycenaean from one of these dialects. Therefore, Greeks landed on the mainland and in the Cyclades, speaking Common Greek. At the same time, judging by the duration of this process and

²⁷² FINKELBERG 2005, 109–133, 140–143.

the emergence of later archaeological innovations from Asia Minor, as well as the intensive relations that were established between mainland Greece and the northeastern Aegean, two areas were formed, corresponding to the most intense relations due to geography: Boeotia and Euboea with the coast of Asia Minor between the Troas and Smyrna, and the Cyclades with an area between Smyrna and Miletus. As a result, a gradual division into Proto-Aeolic and Proto-Ionic dialects begins, although at that time their difference from Common Greek was still small. This explains the archaisms in these dialects. Speakers of the Proto-Aeolic dialect, which was probably quite close to Lesbian, penetrate into Southern Thessaly in EH III, which well reflects the appearance of the corresponding ceramic complex. At the same time, very close relaitions with Asia Minor remain, which, as discussed above, is typical at this time for the Euboea-Magnesia group, whose formation probably reflects the beginning of these dialects separation. The subsequent retention of relations can be shown by the presence of Gray Minyan and Mycenean Ware in Asia Minor. At the same time, painted ware with Cycladic parallels appeared in Attica, and from that time Attica was closely connected with the Cyclades. Therefore, it is possible that this reflects the beginning of the formation of Attic dialect. Perhaps at this time the Proto-Ionic dialect penetrates Euboea, in any case, the ceramic traditions slightly change there.

The appearance of Common Greek in Argolis occured at the beginning of EH III, and its advancement across the Peloponnese was very slow. As a result, during MH in the eastern and central Peloponnese, the Arcadian/Mycenaean dialect separated. In LM1B, speakers of this dialect appeared

It is possible that in MH on the isolated north-west of the peninsula, in Elis and Achaea, the formation of Northwest dialects began, which at the end of MH spread north to Aetolia, and then further, up to Epirus, although it is also possible that it came from Central Greece along the northern coast of the Gulf of Corinth. During LH I, II, the Dorian is separated in northwestern Greece, and the invasion of the Dorians began in LH IIIB. It can be assumed that it was carried out mainly through Achaea to Argolis, Corinthia, Laconia and Messinia, as a result of which the Dorian dialect formed there, but it did not affect Elis, where Northwest Greek was preserved. Part of the former Mycenaean population remained in the central mountainous regions of the Peloponnese, where the Arcadian-Cypriot dialect is subsequently recorded. In addition, the Dorians invaded the Mycenaean possessions in Crete, seize some of the southern Cyclades islands and Rhodes. Part of the Mycenaean population from Crete (and possibly from the mainland) migrated to Cyprus. Part settled in southern Anatolia, where the Pamphylian dialect appeared. But this group was in active contact with the Dorians or speakers of the Northwest dialects. At the same time, and within the framework of the same processes, speakers of the Northwest dialect penetrate into Locris, thereby dividing the mainland Aeolic dialects, and providing the presence of corresponding inclusions in Thessalian and Boeotian.

DEL BARRIO 2014a, 298, 299; FINKELBERG 2018.

²⁷⁴ WOODARD 2019.

²⁷⁵ DEL BARRIO 2014b, 261, 264–267.

10. MACEDONIANS

Later, in LH IIIC, and in already altered forms, Gray Ware, going back to the Minyan one, appeared in Macedonia²⁷⁶. Since this phase is dated to ca. 12th-11th centuries BC, it fits well with the process of the origin of the Macedonians, described in detail by S. Pabst. In the 11th century BC up to Macedonia (Vergina) and southern Albania, new types of weapon and women's jewelry penetrated from the northwest of the Balkans and the southwest of Pannonia. The aliens were numerically inferior to the local population, but they started to take a dominant position. Further in the region, there was a cultural continuity up to the 7th century BC when Hesiod placed the Macedonians there. A very curious observation is that the alien component had cloak fasteners on only one shoulder, and the local population since at least LH IIB (14/13 centuries BC) wore cloaks that were fastened on both sides, i.e. the characteristic Dorian peplos, which spread in Greece with the Dorian migration. Herodotus wrote about the connection between the Macedonians and the Dorians, and their similar name is important: Μακεδνοί (Dorians) and Μακεδόνες (Macedonians). The legend about the founding of Macedonia, told by Herodotus (Hdt. 8, 137 f.) is also indicative: three brothers from the Temenos family fled from Argos (which is, perhaps, a later politically motivated fiction) to the Illyrians, and from there went to Macedonia, to the region of the mountains Vermion, where the dynasty was founded. In Dalmatia, in addition to the Illyrian tribes Iapodes, Delmatae and Pannonii of Roman sources, the tribe Ylloi is mentioned, and Ylleís was one of the three Phyles of Doric Lacedaemonians. But this tribe was localized somewhat north of the Illyrians, and the ethnic border with them is visible in the distribution of different types of fibulae. Thus, they come from the Dalmatian-Pannonian language region. Before the Trojan War, the Thracians lived in Macedonia, and the Dorian invasion took place two generations after it²⁷⁷.

All this is quite corresponded to the Greek genealogical tradition, which did not consider the Graikoi lived in Epirus, the Macedonians and the Aetolians as Hellenes, but only as "cousins". Macedonians were included in the descendants of Hellen later²⁷⁸.

This is consistent with linguistic data. Until recently, it was assumed that Macedonian belongs to the Thraco-Phrygian group, or it is some Indo-European language close to Greek. Despite the fact that the Greeks did not consider the Macedonians as Hellenes, and even denied them participation in the Olympic Games for a long time, most ancient authors believed that their language was Greek, although very specific. This is probably due to the fact that they lived in isolation from the Greeks, which led to a strong difference in their dialect. However, there is very little data on the Macedonian language, they are limited to a series of names, mostly Greek, close to the Thessalian tradition; in the Aliakmon valley, from where the Macedonian power spread, toponyms are mostly Greek. But there is also a series of non-Greek

toponyms, possibly Thracian, Illyrian or Phrygian²⁷⁹. It is now established that the Macedonian language is Doric, which corresponds to the ideas of ancient authors that this language was close to the languages of Epirus and Aetolia. At the same time, Macedonian contains certain archaisms and features of Lesbian, Boeotian and Thessalian²⁸⁰. An archaeological reflection of the formation of the Northwest dialects may be the spread of the ceramic tradition to Aetolia at the end of EH III, as well as the later appearance of Gray Ware in Macedonia in LH IIIC, where speakers of the Aeolic dialects could first appear. Then, in the 11th century BC, pressure of some tribes from Pannonia caused a movement to the south of part of the Dorians and, possibly, Illyrians, who settled in Macedonia²⁸¹.

11. GREEK ETHNOGENESIS

Usually, imagining the spread of an ethnic group, we discuss its coming as a one-time migration and a relatively rapid assimilation or displacement of the former population. But the situation in Greece shows us a completely different picture. Even the initial phase of Greek ethnogenesis (Lefkandi I) lasted for about 250 years²⁸². If we add here the EH III period, then we get the duration of this process in several hundred years, not even for the whole of Greece. With the transition to historical chronology, this process will be reduced to about 150-250 years, but in any case it was very long, even in this small area. There is another peculiarity of this initial phase: in Greece, during it, ceramic types are appearing, which have appeared in Asia Minor, and from that time strong trade relations are formed with this region, which testifies to the existence of intensive communications. Strictly speaking, this creates an impression not so much of migration as of colonization with the constant expansion of the territory and active interaction with the metropolis. These relations were provided by the presence of rowing boats, which, judging by the images, reached 19 m and could contain 25 people. Starting from EM III - MM I, sailing boats appeared, which contributed to both intensive trade and subsequent migrations²⁸³.

Greek sources give us a number of other facts that allow us to assume completely different forms of ethnogenesis than those that we usually use in relation to archaeological materials, and, probably, these forms were quite universal. We are talking about the long coexistence of different ethnic groups, even in a small area. Despite the coming of the Greeks in the 3rd millennium BC, other ethnic groups persisted in Greece up to the 1st millennium BC,

²⁷⁶ PAVÚK 2008, 3, 4.

²⁷⁷ PABST 2010.

²⁷⁸ FINKELBERG 2005, 27–29.

KATIČIĆ 1976, 101-114.

DOSUNA 2012, 133, 134, 141.

 $^{^{\}rm 281}$ In Western Macedonia, at the Archontiko settlement in phase 2 (between 2120 and 1985 BC), traces of fires were revealed, and pottery with incised, paste-filled ornaments appeared, the main forms of which are small bowls with bifurcated handles, amphorae, and kantharos (ALRAM-STERN 2004, 184). This probably reflects the emergence of the same component from the northwest of the Balkans that appeared at the beginning of EH III in Lerna IV-3. In principle, this will also correspond to the Macedonian genealogical legend, but it is doubtful that it persisted for so long. The Pabst's reconstruction seems to be more legitimate.

KOUKA 2009b. 147.

²⁸³ MARAN, 1998, 437, 444; MARAN 2007, 7, 18; ALRAM-STERN 2004,

and from different sources we see the constant movement and contacts of different groups. Even for relatively small Crete, Homer in the Odyssey describes six ethnic groups: The Eteocritians, the three Dorian clans, the Achaeans and the Kydones²⁸⁴. This process was not fully completed even in the Classical period, when, despite a common language, culture and association with the later concept of "Hellenes", understanding of non-Greek origin was retained in specific genealogies. One of the important non-Greek components (not Hellen stemma) were the descendants of Inachos, who gave rise to a very ramified stemma. Since the river in the Peloponnese has the same name, it was a local population, whose descendants survived in Athens and Thebes in the 5th century BC. The stemma of Kadmos existed in Thebes, and that of Danaos in the Peloponnese. They retained the memory of their origins even in Classical times. The Athenians of Ionian origin could not participate in their cult of Demeter Achaea, although they had common language and culture. According to Greek legends, the descendants of Inachos inhabited western Anatolia, and their geographic horizon spread widely in the eastern Mediterranean, as far as Lycia, Crete, Cilicia, Canaan and Egypt. All this points to the active participation of the Luwian substrate in Greek ethnogenesis²⁸⁵. There is a widespread belief that one of the Greek self-names, the Danaoi, is associated with the Iranian word 'don-' (water), reflected in the names of a number of Eastern European rivers: Don, Dnieper, Dniester. And, this name marks the coming of the Greeks from the northeastern Balkans, adjacent to the steppe zone²⁸⁶. In fact, it probably goes back to this Luwian substrate.

Our standard understanding of ethnogenesis is connected with the idea that aliens subjugate the local population, become the ruling elite and, thus, gradually introduce their language. But Greek genealogies show another process. Although the inheritance of royal power was carried out strictly along the female line, the origin was determined by the paternal, and the kings were usually chosen in turn from different families, not necessarily with original Greek roots. In Thebes, these were the local clans and descendants of Kadmos. In Mycenae, clans of the Perseids and the Pelopids replaced each other. So they saw themselves as the 'Aiolids', the 'Perseids', the 'Pelopids' rather than the 'Thebans' or the 'Mycenaeans'. This provided stability of these differences, the process of ethnogenesis took a long time, and many elements of this persisted until the Hellenistic time. Even during the Ionian colonization of Italy, people were sometimes not considered Greek if they were born from non-Greek women. Of course, this was actual, first of all, for aristocratic families, and the mixing of the majority of the population took place faster²⁸⁷.

In the Heroic Age, Greece was inhabited by people

of different origins. For example, in Athens, the Pelasgians became fellow citizens of the Greeks, and thus became Hellenes, mixed families appeared. The sunoikia institute was typical. As a result, there was no identification as Hellenes; they were 'Argives', 'Danaoi' and above all 'Achaeans'. But even the last term reflects, rather, this multi-ethnic mixture, and not a specific ethnic group. And, probably, this is generally characteristic of ethnogenesis in antiquity. Only with the introduction of a common cult of Olympian Zeus and Olympic Games, the differences began to be smoothed out. Homer's Iliad also played a large role in this. The Hellenes are thus a late creation. It is a mixture of peoples of different origins, the population was heterogeneous even in the early Iron Age, and many differences persisted until the end of Classical Greece²⁸⁸.

12. CONCLUSIONS

In no period of cultural transformations in Greece there are signs of a steppe presence. There is no evidence that there was a mass migration of the Yamnaya culture to Central Europe, which led to a change in the language, while the old cultural traditions are preserved throughout the Balkan-Carpathian region. The demographic factor must also be taken into account. The population of agricultural areas is more numerous. Even if the entire population of the steppe zone moved to Europe, this would not be enough for its successful Indo-Europeanization. And the infiltration of individual groups does not solve the problem. It is indicative that against the background of the general conviction in this migration, it and subsequent cultural transformations have not been shown so far on massive archaeological material with impeccable typological series. However, paleogenetic studies and the presence of burial mounds allow this possibility, but it is difficult to say what these languages were. Above we discussed that in Europe the early Dene-Caucasian substratum was transformed by some kind of Indo-European one. And this hydronymy has some Illyrian features²⁸⁹. Therefore, it is possible that the tribes that penetrated into Europe from the steppes of Eastern Europe in the EBA were bearers of proto-Illyrian and proto-Venetic dialects.

In Greece, all the cited facts indicating a connection with the steppe are fictitious. When substantiating the theory of the coming of the Proto-Greeks from the steppe, analogies from chronologically different contexts are almost always used: from the Eneolithic Mariupol to the Mycenaean time. An example is the arguments about the spread of burial mounds and stone boxes in Greece in EH II, III. At this time, the Catacomb culture was widespread in the Northern Black Sea region, and stone boxes are found there only in the Chalcolithic and LBA. The second problem in this line of reasoning is the use of the meaningless expression "kurgan culture" instead of normal archaeological nomenclature, specific cultures or sites. It is only this dubious approach that makes these broad parallels possible. If we approach the matter more strictly from the point of view of chronology

 $[\]overline{\ ^{284}}$ It is possible that pre-Indo-European substrates could have been preserved for a long time in some areas. An example is the Lemnos stele of the 6th century BC, on which the text is written in Greek letters in a language close to Etruscan. Ancient sources mention Tyrsenians, whose name is consonant with the self-name of the Etruscans. They lived on the islands of Samothrace, Lemnos and Imbros, in the small town of Creston in Thrace, in the city of Anthandros in Anatolian Mysia (KATIČIĆ 1976, 26, 96).

FINKELBERG 2005, 33, 35-41, 62, 63.

²⁸⁶ GINDIN 1993, 168.

²⁸⁷ FINKELBERG 2005, 36, 86–93, 103–107.

²⁸⁸ FINKELBERG 2005, 30, 35-41, 107, 168, 172-176.

²⁸⁹ KATIČIĆ, 1976, 177.

and designation of analogies, then we will see in relation to any period of hypothetical penetration of the Greeks that any real fact of their coming from the steppe is absent, even in a strongly transformed form. We see significant impulses from the Northern Balkans at the beginning of EH, and more limited in EH III. In both cases, steppe features are absent. Due to the insignificance of this impulse and its connection with the cultures of the northwestern Balkans, the possibility of coming from the steppe in EH III may be rejected, and at the beginning of EH noticeable changes really take place, and similar cultural stereotypes are being developed in the Balkans in a close time. An undoubted fact is the penetration of groups of the Yamnaya people to the north of the Balkans from the east. But it was limited, and did not have a significant impact on the culture even there. Thus, we must admit that the Balkan population was instantly assimilated by a small group of migrants, and already speakers of proto-Greek dialects penetrated to the south from there. It would be more fair to conclude that there are no strict archaeological facts about the steppe invasion of Greece. Any discussion of this problem is possible only after appearance of publications where such facts will be presented not in a general hypothetical, but in a strict scientific form with specific parallels connected to a strict (or, at least a single) chronological system; although I suppose it is impossible to do.

Significant transformations that shaped the entire subsequent cultural tradition of Hellas begin in EH IIB, and they are associated with the penetration of the Lefkandi I/Kastri complex into the Cyclades and some areas of eastern Greece, brought by people came from western Asia Minor. This process was quite long; in addition, strong relations were established with Asia Minor. As a result, it gives the impression not even of resettlement, but of slow colonization. The newcomers probably spoke Common Greek, and it was only in Greece that a gradual division into Aeolic and Ionic dialects began.

Then, during EH III and MH, this tradition gradually spreads to other regions of Greece, primarily to Argolis, where the Arcadian/Mycenaean dialect begins to form. In EH III, we see three processes: 1) the further spread of the traditions of anatolianasing ware to the Peloponnese, 2) the penetration of "Adriatic" ware, tumuli, stone boxes, violin-shaped idols, and pythos burials from the northwest Balkans, 3) the interaction of these traditions and spread of the traditions of Western Greece in MH to the east. The second process was caused by the movement of the Thracians from Anatolia, who formed the MBA cultures of the Balkan-Carpathian region. This stimulated the movement of the Illyrians from Dalmatia to Western Greece. During the MH period, there was a further expansion of the Greek area, including into Northwestern Greece.

Subsequent transformations were stimulated by changes in Near Eastern trade, which caused the rapid development of Crete and the beginning of Cretan influences in mainland Greece. This launched the processes of socio-economic changes, culminating in MH III with the formation of the Mycenaean Civilization. At the beginning of LH I, the Thracian areas in the north were included in the sphere of interaction of this civilization, from where a limited complex of elite culture (chariots and Carpatho-Mycenaean ornaments) came to Greece, but in general, all this development was carried out on a local basis. During this time, there was a further expansion of the Greek oikouménē to Crete, and the former Cretan colonies in the Aegean. At the same time, in Asia Minor, we can assume the preservation of the Greek substrate, which actively interacted during this time with mainland Greece. But this question requires additional argumentation. Finally, ca. 1200 BC as a result of the Dorian migration from the north in the Peloponnese and Crete, the Dorian dialect appears, and the speakers of the Arcado-Cypriot remain in the center of the peninsula and reach Cyprus.

The primordial area of origin of the Greeks should be sought in northeastern Anatolia, from where they moved westward in the second half of the 3rd millennium BC, but a detailed justification of this issue can only be made on Anatolian materials.

From the point of view of archeology, this picture may not cause serious objections, but the evidences of linguistics and paleogenetics do not contradict it either. In contrast, it is impossible to show the spread of the Greeks from the steppe based on any of these disciplines.

The features of this process seem very important to me. It was very slow even in such a small area as Greece. Ethnogenesis involved various local populations, and in its final form, this process was completed only in the Classical Greece. Probably, this model is quite applicable to all other regions, but there we are not able to show it, due to the lack of early written sources.

Another important feature was that it was carried out by sea, in the form of colonization and the creation of large trade networks. And this process was not interrupted during the whole subsequent Greek history. The participation of a large number of substrate population in cultural genesis led to the transformation of traditional tribal structures. As a result, private artisans and traders often acted as agents of economic and social activities. These fators, ultimately, affected the subsequent rapid development of Greece, its civilization and art. Thus, already at the stage of formation, the Greek cultural code was formed, which existed for a long time.

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