PREHISTORIC SITES IN THE GELIBOLU PENINSULA

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Due to its strategic location along the Dardanelles, the Gelibolu peninsula has been a military restricted zone since the end of the First World War. It has, therefore, been closed to archaeological research till, as late as 1980; it was only then, that following a proposal by the late Prof. Alkim, the State High Commission for the Preservation of Monuments, declared the whole of the peninsula a «natural-historical-archaeological site zone». I feel deeply honored to be able to contribute to this volume, dedicated to the memory of Prof. Alkim, and to be able to expose here, the results of a survey carried out in the Gelibolu peninsula. Without his efforts, the area would not have been accessible.

I would like to acknowledge my thanks to Mr. Alpaslan Koyunlu, assistant director of İstanbul Anıtlar ve Röleve Müdürlüğü, for his patience in encouraging the realization of this study, and also to Mr. Hasan Polat, acting director of the Gelibolu National Park, as well as to Mr. Orhan Beceren and to Mr. Ertuğrul Özen for their friendly support.

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The surface survey of the peninsula took place between July 8 and August 4, 1982. It was supported financially by the National Geographic Society. The survey team, headed by Dr. Mehmet Özdoğan, consisted of Harun Taşkıran, Murat Akman and Mete Savaş. The main objective of the survey was to register all kinds of archaeological remains as a basis for future regional planning of the peninsula. Accordingly, besides the prehistoric sites, historical

sites and monuments were also registered; a total of 57 sites and monuments were recovered during the survey, 17 of them have revealed prehistoric material. The following will be a brief description of the prehistoric sites with some remarks on the prehistoric sequence of the region as revealed by the preliminary analysis of the collected material.

The survey of the Gelibolu peninsula has been carried out within the framework of a major project, initiated in 1979 by the Prehistory Section, University of Istanbul, with the purpose of locating prehistoric and early historic sites in Northwestern Turkey. The main objective of this project was to find material evidence for correlating early Balkan and Anatolian cultural sequences. Extensive field surveys have been carried out with this aim in a number of locations in Thrace and more than 150 prehistoric sites have already been documented1. Even though the evaluation of the collected surface material is still in process, certain facts concerning the cultural history of the region have emerged and one of the outstanding facts is the contrast between the Anatolian and Balkan prehistoric assemblages. This seemed hardly conceivable, not only because the Bosphorus or the Dardanelles, nor the Sea of Marmara cannot be considered natural barriers, but also because they provide the easiest access between Asia and Europe. Thrace seemed to be a land-bridge, presumably exposed to a continuous flow of concepts and of peoples. However, as things stand now, even a brief inspection of the pottery is sufficient to indicate the difference between the Anatolian and Thracian assemblages from the earliest pottery using cultures up to the Iron Age, with few exceptional cases. The most explicit example of such a case is the Early Bronze Age Troy I culture, an assemblage common to both the Thracian and Anatolian coasts of the Sea of Marmara.

In the artifactual sequences of Anatolia and Thrace, there are also traces of intervening episodes of invasion, originating from the remote parts of Balkans and in time affecting events in Anatolia. However, after each instance both sides of the Sea of Marmara are

¹ For a description of the project and a brief description of the finds, see Özdoğan 1980, Özdoğan 1982a, Özdoğan 1982b.

segregated again, at least as far as the cultural assemblages are concerned. In the case of Thrace, most surprisingly, there is a quick revival of traditional artifact types. The tendency for a cultural traditionalism lasting through several millennia is strongly evidenced among the survey material, thus making the dating of surface material very difficult. Accordingly, its strategic location on what seems to be the easiest threshold between Asia and Europe and also its position on the main maritime route connecting the Mediterranean with the Black Sea, made the Gelibolu peninsula indispensable for verifying the outcomes of the project.

Description of the Field Work

During a month's time of surveying in the Gelibolu peninsula, most of the areas suitable for ancient settlements have been covered; heavily forested and rugged areas have largely been omitted (fig. 1). A vehicle, kindly provided by the Canakkale Museum, was used for transportation, but in the most promising areas the survey was done by walking. The survey has been more intensive along the coasts of the Dardanelles and in the flood plains of the major rivers. However, in a number of areas it was not possible to make a thorough survey due to natural or artificial obstacles. For example, the flood plain of the Kilye stream, one of the most promising areas of the peninsula, was in process of intensive excavation in view of draining the plain; the course of the river, as well as its tributaries, had already been altered. Also, on the upper course of the Tayfur stream, the biggest perennial stream in the peninsula, a big dam was under construction, and the lower valley of Tayfur was covered with marshes and cultivated fields. Any collecting in and around the Gelibolu town was also impossible due to urban cover; a major mound could, however, be distinguished from topography of the modern town. The plateau around Ortaköy, ancient Lyzimachia, could not be surveyed due to military restrictions.

It should also be taken into consideration that the peninsula was the scene of a fierce battle during the l st World War, known as the Gallipoli War. Heavy artillery fire and extensive trench digging during the war must have resulted in the total destruction

of some sites. As there is no pre-war archaeological documentation, it is impossible to determine what has been lost; but most of the known Classical and Medieval ruins, such as the Maydos castle, have been completely destroyed.

Description of the Prehistoric Sites in the Gelibolu Peninsula²

Karaağaçtepe (Site no. H 1/2); also known as «Protésilas»). A medium sized mound, ca. 3 km. north-northeast of Seddülbahir village, 1 km inland from the Morto Bay, on the right bank of the Kirte stream. The main cone of the mound is 100 m. wide and 8 m. high, and it is surrounded by two low and narrow terraces. Excavations in 1882 by Schliemann and in 1921/1923 by the French Occupation Forces3 have revealed 11,5 m. archaeological deposit. The upper three phases of which are contemporary with Kumtepe Ib, Troy I and II. The earliest level, preceeding Kumtepe I b horizon, is 4,5 m. thick, but unfortunately very little of this material has been published. Some of this material is in the Istanbul archaeological Museum and we could collect anew during the survey. However, as the earlier layers have been burried since 1923, it was not possible to find pre-Kumtepe I b pottery in sufficient amounts. Nevertheless, some of the sherds indicate the existence of a Late Neolithic or Eary Chalcolithic occupation layer and a number of obsidian and flint micro bladelets also support this view. It is of interest to note the presence of at least 9 examples of Depas among the material of the uppermost prehistoric level (Demangel 1926, fig. 76-78).

It seems evident that during the 3 rd millennium B.C. the Morto bay penetrated further inland and the mound stood, probably on a natural rise, on or very near the coast, at the confluence of the Kirte stream. Today the earlier layers are below the level of the plain.

² Sites have been numbered according to a site numeration system devised by the Prehistory Section and described in all previous survey reports of the Department.

³ Demangel 1926, and see also Özdoğan 1983, p. 26-27.

⁴ I would like to express my thanks to Prof. M. Mellink for drawing my attention to this group of material.

Kilisetepe (Site no. H 2/1); also known as Maydos Kale. A big mound located on a natural rise within the town of Eceabat; the lower terraces of the mound are completely built over. The main cone of the mound is ca. 250 m. wide and its height, excluding the terraces, is 25-30 m. There is a fresh water spring, known as Ayazma, on the northwest end of the mound. On top of the mound there are the remains of a Medieval (?) fortress which was almost completely destroyed during the War of the Dardanelles. The surface finds indicate an uninterrupted sequence from Kumtepe I b to Late Troy VI; there is also early Greek, Hellenistic and Roman pottery. The earliest occupation of the mound seems to be confined mainly to its southern edge. In a long section on the west, there are at least 3 m. of Troy III-V layers with stone architecture.

Kilisetepe, evidently the keystone of the region during the Bronze Age, is not only the biggest prehistoric mound on the peninsula, but its location is also very significant, being near a well protected natural harbour at the enterance of the Dardanelles coming from the Aegean. On the mound, no material earlier than Kumtepe I b has been found; however, in the fertile valley lying behind the mound some flint flakes, that are reminiscent of earlier periods, have been collected.

Maltepe (Site No. H 2/3). Surface scatter of prehistoric sherds and chipped stone, ca. 5 km. north of Eceabat, 3 km south of Kocadam village, 2,5 km. inland from the Dardanelles, on the terraces along the northern edge of Kilye plain. The ancient topography of this heavily planted valley has been disturbed due to a new irrigation system; late classical and medieval material is found over a large area along the southern slopes of Maltepe. Some prehistoric sherds, probably dating to the Early Bronze Age, and undiagnostic fragments of chipped stone can be found on the eroded slopes of the valley. Probably the prehistoric site in the valley is either completely destroyed or it was overlooked during the survey.

Kilye: The find place of the so called «Kilye type of marble figurines» could not be located during the survey; whether it is the

⁵ The Kilye (Kilia) figurines have been recently described by Höckmann (Höckmann 1977, p. 176-177, n. 14-15) as «standing figures of marble.. these

same place as the Maltepe Site, or another place, is impossible to determine. A big tumulus that stood at the peak of the Maltepe hill (Gouffier 1809/1822, pl. 54, 56) has also disappeared.

Değirmenlik Mevkii (Site no. H 2/12). A heavy concentration of flint and obsidian implements, 8 km east of Eceabat, 100 m. south of Akbaş Şehitliği, in an area of 100×50 m. on the inland slope of a rocky rise by the sea. The industry consists mainly of microblades, rounded scrapers and a few geometrics; typologically it is similar to the Epi-Paleolithic industries of the Marmara region.

Akbaş Şehitliği (Site no. H 2/17). A destroyed settlement previously published by D. French (French 1964, p. 37). 100 m. north of H 2/12, within the area of Akbaş military cemetery. During the survey only Troy I type of sherds were found; sherds published by French are evidently earlier.

Baştepe (Site no. H 2/15). Small mound, 2 km. northwest of Akbaş Şehitliği, 50 m. north of the main highway, on the right bank of Yaluva stream. The mound measures $150 \times 60 \times 7$ m. and there are two terraces. The main mound has been disturbed due to illicit digging. Most of the material is of the Troy I period, but the whole sequence from Kumtepe I b to Troy V is present.

Ören Mevkii (Site no. G 2/1). Random scatter of flint artifacts, possibly of Epi-Paleolithic types, in the plain 3 km. northwest of Kücük Anafartalar, 60 m. north of the path leading to Azmak Köprü.

Asartepe (Site no. G 2/6). Small mound on a natural rise, 5 km. southeast of Ilgardere village, next to the new bridge on the east side of the Ilgardere stream. A part of the mound has been burried by earth accumulated during the construction of the highway. Besides Hellenistic and Roman pottery, Kumtepe I b, Troy I-V types are also present. D. French (French 1964, p. 37) also mentiones pottery of Troy VI types.

Tepecik (Site no. G 2/7). A flat settlement around the foot of a natural rise, 2 km. west of G 2/6, on the west end of the Ilgardere

are small and extremely stylized, with flipper-like arms, relatively narrow neck and disproportionately large, often backward tilting head with small sculptured ears». Two intact figurines of this type have been found, early in this century by Calvert (Calvert 1901).

valley, near the Highway recreation camp. Most of the pottery is of Kumtepe I b and Troy I types, but some might be earlier. Evidently most of the site was eroded.

Musaltepe (Site no. G 2/12). A settlement on a slope, 3 km. northwest of Turşun village, on the west side of a path leading to Küçük Anafartalar, near a fresh water spring. Most of the pottery is Medieval, but, mainly near the spring, there are also some Troy I type of sherds.

Kaynarca Mevkii (Site no. G 3/1). Small mound, 8 km. southwest of Gelibolu, on a low terrace overlooking the flood plain of the Münipbey stream; ca. 400 m. south of the main highway, 50 m. south of Kaynarca fountain. Besides a scatter of late pottery, the prehistoric material concentrates in an area of 50×50 m. The site is now 2 km. inland, but probably it stood much nearer to the coast, surmising that the present day delta of the Münipbey stream was, originally a gulf. The pottery is similar in ware and shape to the Fikirtepe material; however no decorated sherds were found. There are also a fair amount of flint and obsidian implements, with numerous micro-blades and a few geometrics.

Kalanuro Tepesi (Site no. G 3/2). Small mound on natural rise, 1,5 km. northeast of G 3/1, at the left of the confluence of Münipbey stream, 50 m. from the sea. There are two fresh water springs at the foot of the hill. Classical and late antique settlement covers a considerable area; prehistoric pottery, mainly of Kumtepe I b, Troy I and possibly early Iron Age types, is confined only to the summit of the hill overlooking the sea.

Maltepe (Site no. G 4/1). A medium size mound on a calcerous hill by the sea, 4 km. southeast of Bolayır and 3 km. south-southwest of Demirtepe village, on the left of the confluence of Şabandere stream. The prehistoric mound, $100 \times 60 \times 8$ m. in size yields only Kumtepe I b and Troy I types of pottery; late antique and medieval pottery is found in a large area.

Güneyli Limanı (Site no. F 3/1). Small mound, almost completely destroyed; 3 km. northeast of Güneyli village, on a small promontary on the west end of the Güneyli bay. Besides late material, Troy I and possibly earlier sherds were found.

Kartaltepe (Site no. F 4/2). Small mound on natural rise, 1,5 km. northeast of Kavak village, immediately to the north of Şarköy road, near Paslıçeşme. Besides late material, prehistoric sherds, mainly of Troy I shapes, are fund on eroded gulleys along the slope.

Name unknown (Site no. F 4/3). Small mound, partly destroyed, measuring $50 \times 30 \times 3$ m., on the right bank of the confluence of Kamberdere stream, north of Koruköy. Only Troy I type of material was found.

Buruneren Çiftliği (Site no. F 4/4). Flat settlement, 7 km. southeast of Kavak village, on the north of a path leading to Kızılcaterzi, on the left terrace of the Kazanağzı stream. The area is partly planted, partly covered with recent sand dunes. A few, rather undiagnostic sherds were found, however, a stone axe, now in the Ankara Museum, was found here (Kurtoğlu 1936, p. 17).

Gelibolu (Site no. G 3/9). Mound in the center of modern Gelibolu, completely built over, and earlier levels are obviously sealed. Just to the northeast of the town, on the hill near the city dump, some early Iron Age pottery was found.

A Synopsis of the Archaeological Evidence

Due to the lack of excavated sites, it is not yet possible to set forth a complete cultural sequence for the Gelibolu peninsula. The stratigraphic evidence of Karaağaçtepe, the only excavated site of the peninsula, is not reliable as it was excavated under conditions prevailing during the war; and there are apparent confusions in the sequence of the artifact assemblages. Nevertheless, with its 11 m. of prehistoric deposit, the evidence of Karaağaçtepe is still inspiring. The Bronze Age sequence of Gelibolu peninsula is less problematical due to its direct association with Kumtepe and Troy cultural assemblages. What is difficult to trace at Gelibolu are the cultural happenings of pre-Kumtepe I b period. As there is no stratigraphic evidence for this period, the material from Gelibolu can only be compared to other surface finds from Thrace.

Artifacts reminiscent of the Paleolithic period are almost absent in the Gelibolu peninsula; only a few and rather dubious flakes

from the neighbourhood of Eceabat and Anafartalar might be taken as a possible indication of that period. However, considering the rather recent geomorphological changes and the high rate of alluviation in the peninsula, the absence of evidence for the Paleolithic period is not surprising.

The earliest clear evidence for occupation in the Gelibolu peninsula are the lithic assemblages with micro-blade industries. At least one site, Değirmenlik Mevkii, has yielded a convincing amount of material of this type with no associated pottery finds. It is interesting to note that at Değirmenlik, like most of the other contemporary sites in the Marmara region, flint pebbles have been preferred as raw material, and there is also some obsidian. A similar chipped stone industry was also recovered, in the peninsula, in two other sites, Kaynarca and Karaağaçtepe; however, in these sites it was in association with pottery. Accordingly, the transition from Epi-Paleolithic to neolithic with pottery in the Gelibolu peninsula, seems to have a similar trend to that of the Eastern Marmara region. In the Eastern Marmara region, blade industries with prevailing Eastern Gravettian features of the Final Paleolithic period, have seemingly survived into the neolithic period bearing pottery, the latter being characterized by the Fikirtepe type of pottery (Özdoğan 1983 b). It is also worth noting that, neither the Epi-Paleolithic nor the Neolithic sites, that are so numerous in the region of the East Marmara and the Bosphorus, were not recovered along the southern shores of Thrace. Whatever this may signify, a cultural trait, a geomorphological phenomenon or a lack of preservation of the evidence, the regions around the Bosphorus and the Dardanelles, the two narrow necks of the Sea of Marmara, display a similar development, not observed in other parts of the region.

In one of the sites, at Tepecik, a very crude and rather primitive looking type of pottery was found together with some flint implements. The pottery somewhat recalls the Ağaçlı type of wares, which we, with some reserve, surmise to be the earliest pottery of the region. Unfortunately the archaeological deposit of Tepecik has been almost completely eroded and there are also traces of an Early Bronze Age occupation on the site. Accordingly, whether or not the Tepecik pottery is early or whether it is a coarse variety of Early

Bronze Age wares, is hard to say. On the other hand, on site, Kaynarca, has yielded a pottery assemblage that is clearly analogous, both in ware and shape, to the Fikirtepe pottery of the Eastern Marmara. As was mentioned above, the chipped stone industry, characteristic for the assemblages of the Fikirtepe horizon, was also found on this site. The significant incised decoration of the Fikirtepe pottery was not found at Kaynarca, but this might be the shortcome of the surface collection, as even at Fikirtepe, the decorated sherds comprise only 5 % of the assemblage.

The existence of Fikirtepe type of pottery on the Gelibolu peninsula is of great significance, because until now, this type of pottery was known only from the Asiatic side of the Sea of Marmara. None of the sites recovered in Thrace, have yielded any material that is even reminiscent of Fikirtepe pottery. On the other hand, as also evidenced by the recent finds at Demircihöyük, Fikirtepe type of pottery has a wide distribution on the Anatolian side. Whether or not the Kaynarca site signifies a westward expansion of this culture along the coast, is impossible to say for the time being.

Kaynarca. like all other sites of the Fikirtepe culture that are located along the shores of the Sea of Marmara, seems to have been abandoned at a certain stage of this culture. On the other hand, there is now growing evidence that the Fikirtepe sites located further inland, have developed into a more sophisticated stage. Until now, neither in the Gelibolu peninsula nor anywhere else along the coasts of the Sea of Marmara, it has not been possible to recover any material that would be the possible proceeder of Fikirtepe culture. This seems to further verify our previous assumption that, during the Fikirtepe horizon, the coastal areas along the Sea of Marmara became uninhabitable as a consequence of very late salinization of this sea (fig. 4).

The material evidences for periods that are expected to follow the Fikirtepe horizon, are conspiciously absent in the Gelibolu peninsula. The inland sections of Thrace, on the contrary, are ev-

⁶ We are aware of the fact that the rate of alluvial accumulation in the flood-plains near the coast is very high and most of the early sites can be buried under this fill.

idently occupied by pottery using agricultural communities, not coming from Anatolia, but penetrating into the region through the foothills of the Istranca mountains from the western and northern Balkans (Özdoğan 1982 a). The evidence from the Gelibolu peninsula is very insufficient yet to make any generalized statements; however, some of the sherds found at Karaağaçtepe, located at the tip of the peninsula, thus being more exposed to the Aegean, indicate some kind of a relation with the south. On the other hand, the Late Chalcolithic pottery of Karaağaçtepe, that is earlier than Kumtepe I b, displays (see especially Demangel 1926 fig. 26) some dominant Balkan elements, analogous to the Tilkiburnu assemblage of central Thrace (Özdoğan 1982 c, fig. 5:1, 6:7).

Beginning of the Early Bronze Age in the Gelibolu peninsula is evidenced by a number of settlements yielding Kumtepe I b type of pottery. During the following period, Troy I, there is a remarkable increase in the number of settlements. The pottery of this period is almost identical to that of Troy; however, bowls with thickened rims, a shape so common in Troy I (Blegen 1950, shape A) is rather rare in the Gelibolu peninsula, and it seems to be replaced by a certain type of bowl decorated on its exterior surface (e.g. fig. 2: 22-24).

A similar development seems to have taken place all around the Sea of Marmara during the Troy I phase. The coastal areas that were either sparsely inhabited or completely uninhabited during the Chalcolithic Period now flourish with numerous sites, all of which have yielded typical Troy I pottery. All of Troy I sites, both in the Gelibolu or in the other coastal areas of Thrace, show a clear mound formation. The existence of mounds strongly contrasts to the flat settlements that are found in the other parts of Thrace. The use of more substantial building material instead of the traditional wattle and daub technique of the Balkans, seems to be an Anatolian trait.

The other Early Bronze Age sites of Thrace that are located further inland, display a different kind of assemblage; here, in spite of some similarities to Troy I shapes, the wares and the general appearance of the pottery is more «Balkan». The only exception to this is the area around Keşan; the sites in this area, one of them a major mound in the town of Keşan, have all yielded Troy I type of assemblages. Accordingly, it can be postulated that the Troy I cul-

ture was confined only to the coastal areas of Thrace along the Sea of Marmara, where as it spread more inland along the northern coasts of the Aegean.

Pottery similar to that of Troy II-V was found on a number of sites in the Gelibolu peninsula; however, there is a distinct decrease in the number of settlements. The main site of this period seems to be Kilisetepe; in this large mound Troy III-V layers are represented by a thick deposit. With the exception of sites in the Gelibolu peninsula, all the other sites along the coast of Marmara have been abandoned or repleaced by Balkan type of assemblages following the Troy I period. The recession of Anatolian elements from Thrace must be due to a new influx of people coming down from the northern Balkans. Only the Gelibolu peninsula seems to be able to hold out this wave of invasion, probably due to the easily defendable topography of the peninsula.

The 2 nd millennium of Thrace, as well as of the Gelibolu peninsula, is rather obscure; there are evidently some sites in the peninsula with typical Troy VI gray ware, but none of these sites indicate a flourishing development. In none of these sites we have been able to recover Mycenean or Anatolian type of pottery. This is rather interesting because the former is relatively common in Troy itself and because the sea route from the Aegean Sea, throught the Dardanelles, into the Black Sea is known to have been active at that time. It is also significant that pottery typical to the other parts of Thrace is also missing at Gelibolu. Accordingly it seems possible that the Gelibolu peninsula acted as a buffer zone for the Troas, against the growing pressure of the Thracian tribes, all through the 2 nd millennium. When this stronghold gave away, is hard to tell, but considering the crowded appearance of Troy VII a, and the lack of evidence for that period in Gelibolu, one can guess that the peninsula was no longer able to resist the northern tribes by the end of the period of Troy VI. What happened in the peninsula by the beginning of the Iron Age, is impossible to tell. There is no evidence of early Iron Age settlement in any part of the peninsula; neither the characteristic cord-impressed, black burnished pottery of that period which is found in abundance all over the Meric-Ergene basins, nor the «knobbed ware» of Troy VII b was recovered here. The only exception is a single, isolated sherd found near the town of Gelibolu (fig. 3: 53). Of the preceding stage all through our survey, we could not find a settlement that could be dated to a period earlier than the 6 th century B.C., and therefore, either the peninsula was uninhabited or inhabited by nomadic tribes. Here, we would like to mention two interesting finds, which are on display at Gelibolu; one of them (fig. 5 a) an orthostat, found near Evreşe, and the other a fragment of a sarcophagus with Egyptian hierogliphic inscription (fig. 5 b), belonging to the time of 30 th Dynasty, Nektanebos I⁷. The latter is said to be found at Lapseki, on the other side of the Dardanelles.

As already mentioned, this synopsis of the archaeological sequence of the peninsula is based on facts derived from a surface survey, and not on extensive excavations. Accordingly, many of the questions concerning the cultural history of the region are left unanswered and some are speculative. However, the surface material can be taken as the first material evidence from this important region, that had remained unreachable until now, to show what there is and what there is not. We hope that this material will help to formulate proper questions, which can only be answered through excavation.

Some Remarks on the Topography and Geomorphology of the Gelibolu Peninsula

The Gelibolu peninsula displays certain topographical features that have a direct impact on its cultural history. The peninsula, which is a very narrow and long piece of land, is connected to Thrace by an istmus that is only 7 km. in width. Today, most of the istmus, near the village of Kavak, is occupied by swamps and marshes and it is dissected by two perrennial streams: Kavaksuyu and Kazanağzı. On the other hand, the peninsula runs parallel to Anatolia, at a distance of only a kilometer, for a total length of 70 km. Along the coast of the peninsula looking towards Anatolia, there are a number of well protected harbours and a long coastal

⁷ I owe thanks to Prof D. Wildung for the date and identification of this piece.

plain. The other side of the peninsula, facing the Aegean, is rather steep. Accordingly, it is not only a coincidence that the prehistoric cultures of the peninsula display Anatolian types of assemblages and are in strong contrast with those of Thrace.

The Gelibolu peninsula forms a natural boundary between two distinct bodies of water, the Aegean and the Sea of Marmara. As the connection between these two seas are through a narrow and shallow channel, the Dardanelles, they are easily disconnected during the regression periods of the sea. It is obvious that a narrow and long peninsula such as that of Gelibolu, would undergo major environmental changes when the water tables on either side of the peninsula differ. Even though there is still much to be learned, there is now a growing amount of knowledge concerning the recent geo-morphology of the Dardanelles and the post-glacial coast-lines of the Aegean8. As will be seen from the tentative map of post-glacial coast-lines (fig. 4), there is no information concerning the Sea of Marmara; however, it can be postulated that, during the time of low sea levels, the level of the Sea of Marmara must be much lower than, both the Aegean and the Black Sea, because, during these times, there was no water input into the Sea of Marmara from the Black Sea. Accordingly, the area covered by the Gelibolu peninsula must have been considerably larger towards Marmara up to about 5500 B.C., when the Strait of Dardanelles became fully active.

Another major environmental factor is the transition of the Sea of Marmara from brackish to saline conditions during the later stages of post glacial period (fig. 4). The implications of this process has already been mentioned above.

A rather recent study of the Karamenderes plain near Troy (Rapp and Gifford 1982) has shown that the rate of alluvial accumulation near the mouth of rivers has been considerable during the last 5000 years. The present evidence indicates that a similar phenomenon took place in the Gelibolu peninsula and that, there were bays that penetrated deep inland. Sites like Karaağaçtepe, Baştepe, Kaynarca, that are a kilometer inland now, must have been located

⁸ See especially Ering 1978, Erol 1976, Erol 1980, Stanley and Blanpied 1980, Rapp and Gifford 1982, Kraft, Kayan and Erol 1980.

either on the shore or very near it. It is also possible that during the 4th millennium B.C., when the water table was about 2-3 meters higher than today, there was another connection between the Aegean and the Sea of Marmara thorugh the valley by Eceabat.

We anticipate that it will be possible to make a more extensive study of the Marmara basin in the future and more concrete facts on the geomorphology of the region will then be available.

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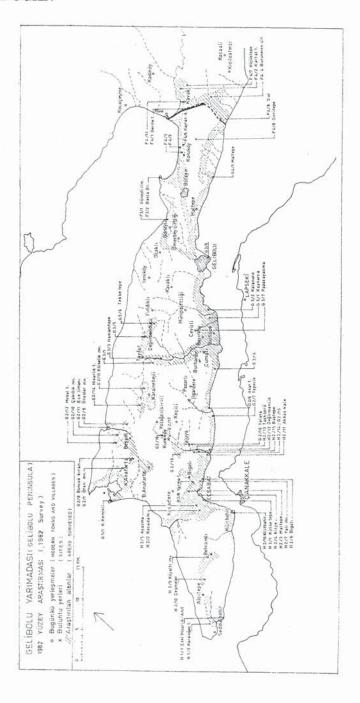
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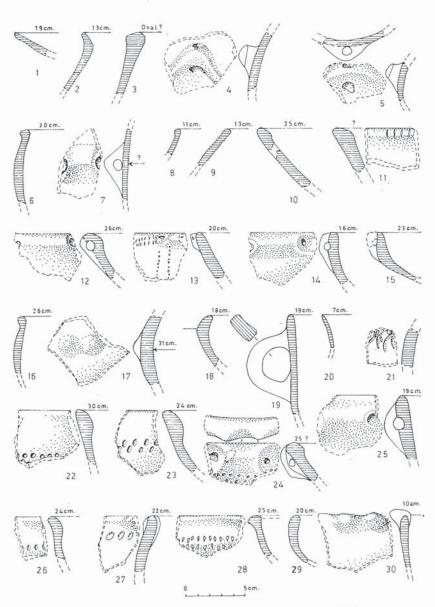
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Anadolu Araştırmaları F. 5

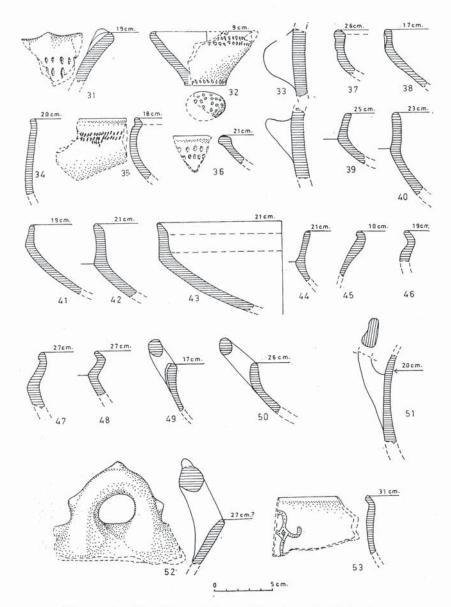
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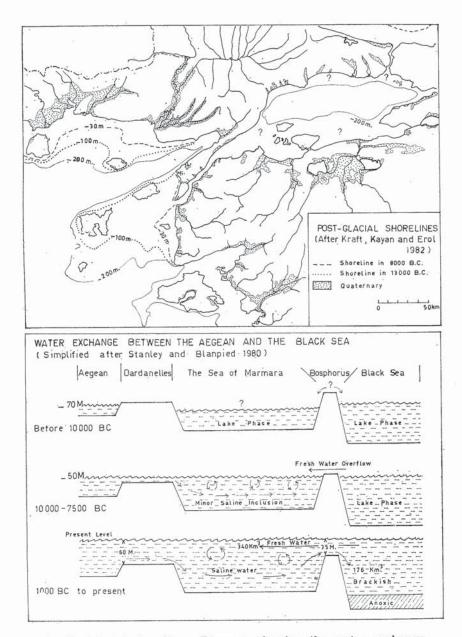
Pl. II M. ÖZDOĞAN



2 : No. 1 - 5 Kaynarca; 6 - 17 Karaağaçtepe; 18 - 20 Kalanuro; 21 G 3/2; 22 - 30 Maltepe.



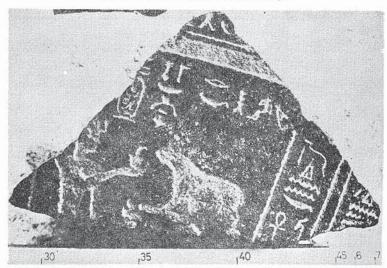
3: No. 31-33 Maltepe; 34-52 Kilisetepe; 53 Gelibolu.



4: Postglacial shorelines; Diagram showing the water exchange between the Aegean and the Black Sea.



5. a: An orthostat from Evreşe.



5. b: Fragment of a sarcophagus from Lapseki.