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Submerged Prehistoric Settlements along the Western Black Sea Coast: the Problem of Situation¹

PRESLAV PEEV

Along the Western Black Sea coast, eighteen submerged prehistoric settlements are known with confidence, dating from the Eneolithic period and the Early Bronze Age. Since all of them have been damaged by construction work and none have been investigated with the methodology of underwater archaeology, the scientific analysis of these sites has been limited to the determination of cultural belonging and chronological synchrony. The character and function of these sites has hardly been studied, and when it has, the scientific literature has identified them as “lake-dwellings”.

Detailed analysis of the results from previous investigations and new data reveal that all of the settlements were once situated on the first river terrace, and not on wooden platforms. The cultural layers at some sites (for example at Sozopol) have been found at depths such as 1.45 m. This would have been impossible if the settlements had not been situated on land.

However, artefacts are being found along the shoreline. Geomorphological analysis indicates that during their existence these were river settlements situated in the lower river valleys. This has also been proven by the fluctuation curves of the Black Sea water levels between 6500–4000 BP. Therefore, these settlements were protected from the gales of the Black Sea and thus presented reliable trade centres.

Introduction

A number of submerged prehistoric settlements are known along the western coast of the Black Sea, and they have been defined in the scientific literature as “lake-dwellings”. Recently, some publications have made some timid attempts to revise this categorisation. The first mention of these sites in the archaeological literature was by H. and K. Shkorpil in 1921 (H. SHKORPIL – K. SHKORPIL 1921), when the first settlement in Lake Varna was found. On the analogy of other

¹ This work was supported by the project Nz 1207 MES-SE.

known lake dwellings in France and Switzerland, the Lake Varna settlement was automatically fixed as such. This opinion has predominated up to the present, but the data presented here will be in contradiction to this thesis.

Eighteen submerged prehistoric settlements are known with confidence along the western coast of the Black Sea (*Fig. 1*). Chronologically, they belong to the second phase of the Eneolithic Period and the Early Bronze Age (EAB). Since all of these sites have been damaged by construction work and none have been investigated with the methodology of underwater archaeology, the scientific analysis of these settlements has been limited to the determination of their cultural context and their chronological synchrony. The character and function of the sites have almost never been studied.

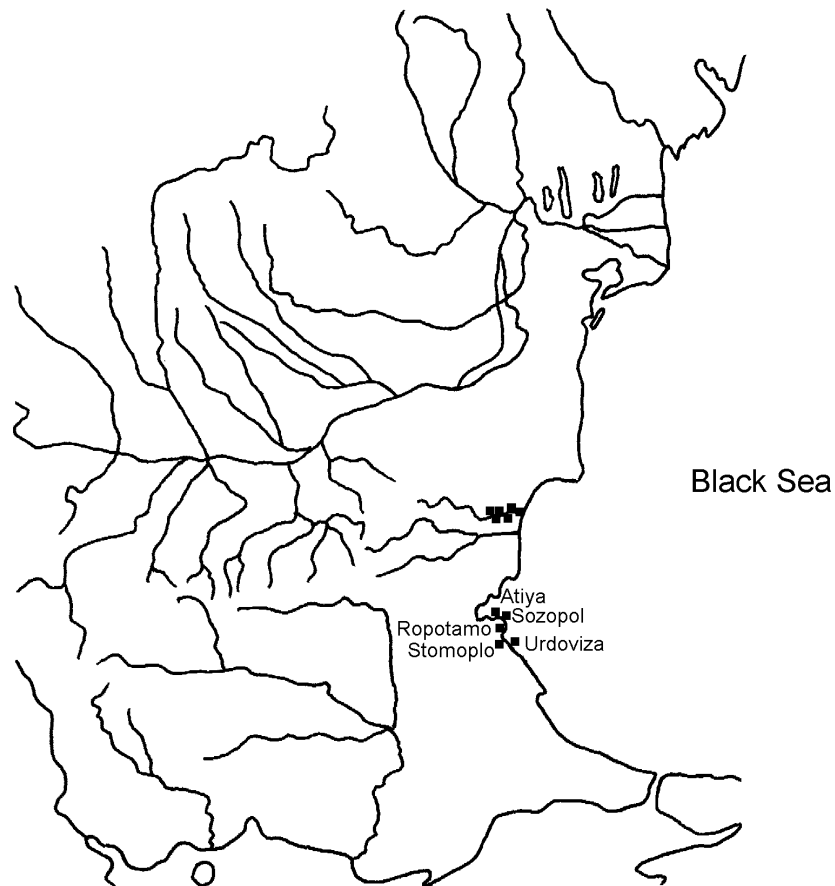


Fig. 1. Map of the submerged prehistoric settlements along the Western Black Sea coast.

8. Ladjata – EBA;
9. Strashimirovo I – Eneolithic and EBA;
10. Strashimirovo II – EBA;
11. Beloslav – Eneolithic and EBA;
12. Poveyanovo – Eneolithic and EBA;
13. Baltata – EBA.

The remaining five submerged settlements are located along the Southern Bulgarian coast. Chronologically they belong to the Eneolithic period and to the EBA, and they coincide with the sites mentioned above. Specifically, these five sites are located west of Cape Atiya (EBA) (LAZAROV 1971), Sozopol (Eneolithic and EBA) (LAZAROV ET AL. 1991; DRAGANOV 1995), Ropotamo (EBA) (LAZAROV 1996), Stomoplo (EBA) (LAZAROV 1975) and Urdoviza (EBA) (DRAGANOV 1995). All eighteen settlements found to date are situated 6–9 m below sea level.

The detailed analysis of existing results and new data show that all of these settlements were situated on the first unflooded river terraces, and not on wooden platforms or on pilots. This conclusion, to a great degree, determines the very characteristic of the habitations. Unfortunately, more sites have been destroyed during building and trawling work, which has presented difficulties for the excavators. But despite these challenges, the first excavators of the submerged settlements were entirely correct in identifying the presence of four stratigraphical

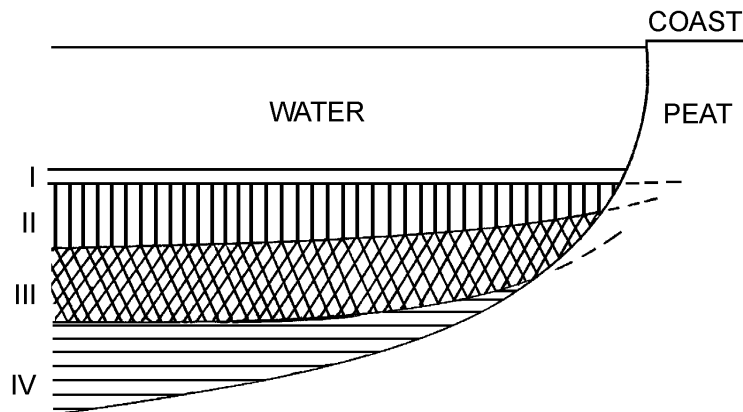


Fig. 3. Stratigraphy of the lake bottom (after MARGOS – TONCHEVA 1962).
 Layer I: contemporary lake sediments; Layer II: Early Bronze Age materials, valves, clay, sands; Layer III: hiatus rich with sea mollusks; Layer IV: Eneolithic pottery, house beams and animal bones, clay.

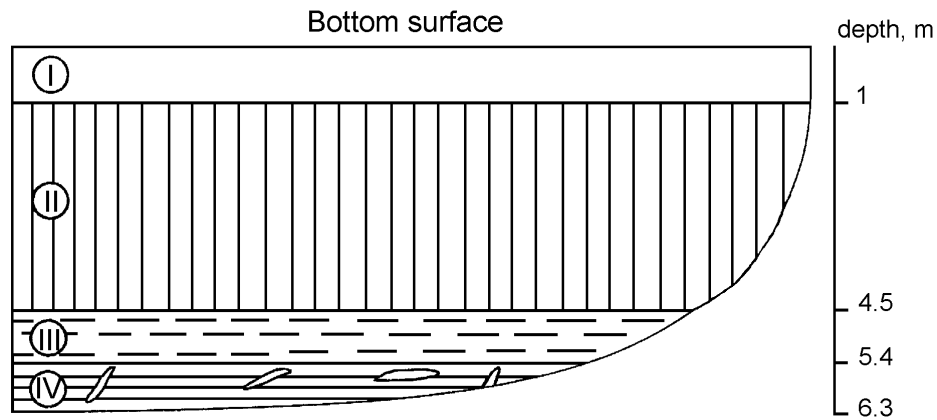


Fig. 4. Stratigraphy of Arsenala prehistoric settlement.

layers, as shown in *Figure 3* (MARGOS – TONCHEVA 1962). Later, excavations using the methods of underwater archaeology confirmed these observations.

From the Varna-Beloslav firth, only the Arsenala site has undergone underwater investigations, on a small area of 25 m² (*Fig. 4*) (IVANOV 1987). The major result of these studies was the identification of two cultural layers (the Eneolithic and the EBA) without fixed house horizons, as determined from the cultural stratifications on land. This is a result of the fast rise in sea levels, as shown in *Figure 5*. The beams of the houses remained *in situ* and this led to the wrong conclusion that these beams were part of a wooden platform on which the

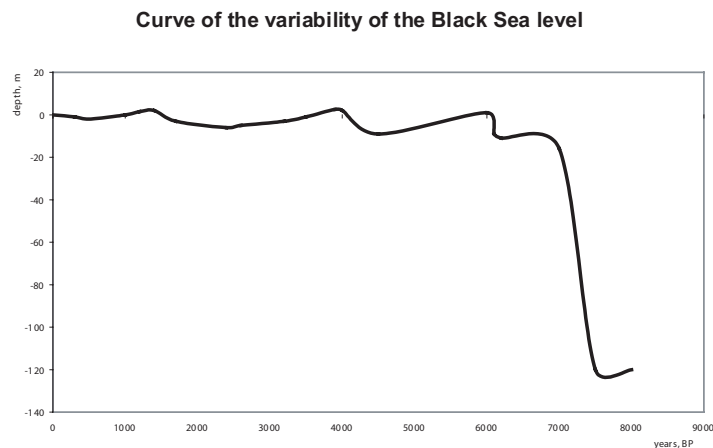
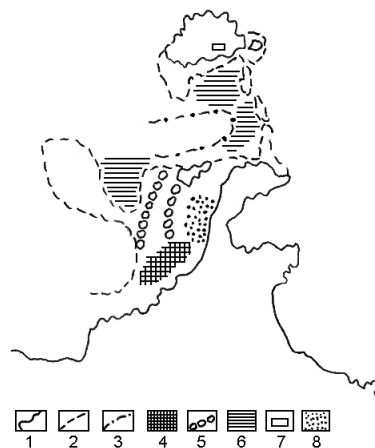


Fig. 5. Black Sea level curve during the Holocene.

ancient houses were built. Typical feature of the Arsenalna site is the massive EBA layer, which reaches a thickness of 3.5 m. Below this, an approximately 0.9 m layer is situated, which is rich in sea mollusks. No archaeological artefacts were found in this layer. However, the lower layer contained Eneolithic pottery, house beams and animal bones. The thickness of this lower layer is also around 0.9 m.

Unlike Lake Varna-Beloslav, two of the sunken prehistoric settlements have been investigated along the Southern Bulgarian coast with relative success: one at the aquatory of the harbour of **Sozopol** (LAZAROV ET AL. 1991; DRAGANOV 1995) and one at **Cape Urdoviza** (DRAGANOV 1995). At the former site (*Fig. 6*), two overlapping settlements from the Eneolithic and the EBA have been found.

The total thickness of the cultural deposits is between 2.1–2.3 m, spanning the end of the Eneolithic epoch and the EBA. From the investigation of seven quadrants (of a 5×5 m dimension), it was noticed that in quadrants D and G, it is the Eneolithic layer which exhibits the greatest thickness (2.1 m), unlike the rest, where EBA finds prevail. The thickness of the Early Bronze Age deposits is, on average, about 0.7 m. Interestingly, an approximately 0.7 m thick hiatus is also present between the Eneolithic and the EBA settlements; this is found at the submerged settlements of the Varna-Beloslav firth. Chronologically, the Eneolithic site from Sozopol corresponds to the Kodzhadermen-Gumelnitza-Karanovo VI cultural complex and the Early Bronze Age site at the layers VI–V of the Ezero tell.



*Fig. 6. Principal changes in the coastline at Sozopol (after ORACHEV 1990).
 Layer I: contemporary sediments from the Karaagach river; Layer II: materials from
 Antiquity and Medieval Ages, beams from EBA settlement; Layer III: upper part of the
 site, highly affected by wave action; Layer IV: best-preserved part of the site;
 Layer V: sterile layer.*

During the excavations of the Urdoviza site (*Fig. 7*), five stratigraphical layers have been located, with ceramic material from the Early Bronze Age discovered in layers III and IV. In Layer II (20 cm), traces from Antiquity and the Medieval Ages have been found, as well as beams from the EBA settlement. Layer III (55 cm) is at the upper part of the site and it has been highly affected by wave action since the flooding of the settlement. From this layer only Early Bronze Age shards have come to light. The lower layer, Layer IV (20 cm), is the best-preserved part of the site. It contains vessels and sediments rich with organic material. Horizontal wooden structures have also been excavated as those observed at Sozopol (which also gave basis for the “wooden platform” theories of some excavators). Layer V is sterile and has been studied to a depth of 2.9 m, without reaching its bottom.

The pottery identified from Urdoviza is typical for the Ezero tell and is related to layers VIII–V. Eighteen radiocarbon samples date the Kiten site (Urdoviza) to the second phase of the Early Bronze Age together with the Ezerovo II site and the Ezero culture, the Mihalich phase in Thracia. According to ¹⁴C data, the settlement existed between 4160–4000 BP. More detailed investigations of the pottery (and its similarity with finds from Lake Varna) have identified the Urdoviza site with the Cherna Voda II culture.

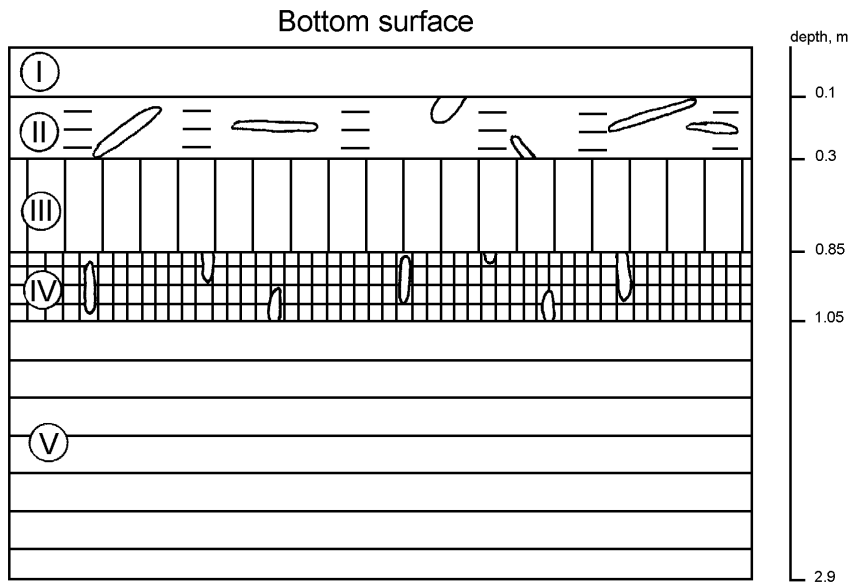


Fig. 7. Stratigraphy of Urdoviza Early Bronze Age settlement.

It is time to revise the assertion that the submerged prehistoric settlements along the Western Black Sea coast are lake dwellings, which were built on wooden platforms or pilots. The massive cultural deposits of the sites could not have been formed in a water environment but only on land. The 2.1 m thick cultural sediments from the Eneolithic Sozopol settlement could only have formed on dry land. And if the thickness of the Early Bronze Age settlements along the Southern Black Sea coast is not large enough (0.7–0.95 m), the 3.5 m layer from Arsenalna is ample evidence that the settlements from the second phase of the Early Bronze Age were situated on land. Further proof is provided by the fluctuations in the levels of the Black Sea during the discussed periods (*Fig. 6*).

During the present investigation, significant data have been taken from interdisciplinary observations at some of the sites. For example, investigations on the settlement near Cape Urdoviza determined that the site was along the banks of the ancient valley of the Karaagach river, approximately 800–900 m from the present coastline, close to the ancient mouth of the river (GEORGIEV ET AL. 1994). The late Eneolithic and the Early Bronze Age settlements at Sozopol were located in what was at the time a river valley, on a high terrace some 70–80 m westward and on a 5–6% slope northwest to southwest. The Early Bronze Age sites are closer to the ancient river channel. The geophysical and geological investigations of the area around Lake Varna-Beloslav show that all of the settlements were situated on the first unflooded terrace of the ancient valley of the Provadiiska river.

Conclusion

Although prehistoric settlements are found nowadays along the shoreline, geomorphologic and stratigraphic analyses indicate that during their existence they were river settlements, situated at the mouth of lower river valleys. This is proved by the fluctuation curves of the Black Sea levels between 6500–4000 BP as well. Since this position protected the settlements from the gales of the Black Sea, they presented reliable trade centres for the exchange of articles through sea trade with the inland areas. This underlines the fact that during these far-off times, people feared the storms of the sea and could not build structures that could protect them. Only the well-preserved estuaries of the rivers provided safety for Prehistoric man, and thus he took shelter in the calmer and deeper inland gulfs.

References

- DRAGANOV, V. 1995
Submerged coastal settlements from the Final Eneolithic and the Early Bronze Age in the sea around Sozopol and Urdoviza Bay near Kiten. In: Bailey, D. W., Panayotov, I. (eds.), *Prehistoric Bulgaria*. Madison. Prehistory Press, 225–241.
- GEORGIEV, M. – PETKKOV, A. – STOEV, D. – VELKOVSKI, K. 1994.
Geophysical prospecting of the aquatoria of the Southern Black Sea coast aimed at reconstructing of the palaeorelief. *Thracia Pontica V*, 317–328.
- IVANOV, I. 1987
Podvodni arheologicheski prouchvania na selishte “Arsenala”. *Arheologicheski otkritiya i razkopki prez 1986*, 281–283.
- IVANOV, I. 1993
A la question de la localization et des études des sites submergés dans les lacs de Varna. *Pontica XXVI*, 19–26.
- LAZAROV, M. 1971
Arheologicheskite razkopki i prouchvaniya v Burgaski okrug. Rezultati, problemi i zadachi. *Izvestiya na Bulgarskite Muzei I*, 3–20.
- LAZAROV, M. 1975
Potunalata flotiliya. Varna. Georgi Bakalov.
- LAZAROV, M. 1996
Potunalite selishta po zapadnoto Chernomorie v konteksta na Pontiiskata i Sredizemnomorskata istoria. *Istoria 1*, 48–61.
- LAZAROV, M. – ANGELOVA, H. – DRAGANOV, V. 1991
Podvodni arheologicheski prouchvania na kraibrezhnoto selishte ot finala na kusnia eneolit v akvatoriata na pristanishte Sozopol. *Arheologicheski otkritia i razkopki za 1990*, 36–39.
- MARGOS, A. – TONCHEVA, G. 1962
Praistoricheskoto nakolno selishte pri s. Ezerovo, Varnensko. *Izvestiya na varnenskoto arheologicheskoto druzhestvo XIII*, 1–16.
- ORACHEV, A. 1990
Prinosi kum paleogeografiata na Dobrudjanskoto kraibrezhie. *Dobrudja 7*, 32–49.
- SHKORPIL, H. – SHKORPIL, K. 1921
Nakolni postroiки v ezeroto. *Izvestiya na varnenskoto arheologicheskoto druzhestvo VII*, 79–XX.