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A BULLET CORE SPECIMEN FROM NE BULGARIA

ABSTRACT

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The paper discusses the first find of a bullet core from the territory of Bulgaria. This core fills in a gap in the occurrence of this technology in between the Marmara Sea basin and the north-western part of the Pontic region. Because the core from the vicinity of Varna is a surface find it is difficult to determine its chronological position.

Key words: Epipaleolithic; Mesolithic; Neolithic; Pontic region, Marmara Sea basin pressure technique, bullet cores

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I. INTRODUCTION

The subject of the present publication is a find of a bullet core discovered in the surface survey conducted by Hermenegild and Karel Škorpil at the beginning of the 20th century in NE Bulgaria on the Arven Plateau about 10–12 km north of Varna. The core is now stored in the collection of the Archaeological Museum in Varna (Inv. No 1253) and was made available for the publication by the kind permission of Chief. Assist. Prof. V. Slavchev.

The above mentioned specimen presents a core blades and bladelets with a single blow prepared rounded platform which size is smaller in comparison with the maximum width of the item. The blades and bladelets production was linked with the use of pressure technique applied by short or long tool with the help of hand, shoulder or abdomen (Balci 2011, 3). Dimensions of the core are: length of 47 mm and width and thickness respectively 15 mm and 10 mm. The width of the scars varied between 7 mm and 10 mm (Fig. 1). This specimen was made of flint and the origin of the raw material can be determined with certainty after the relevant research.

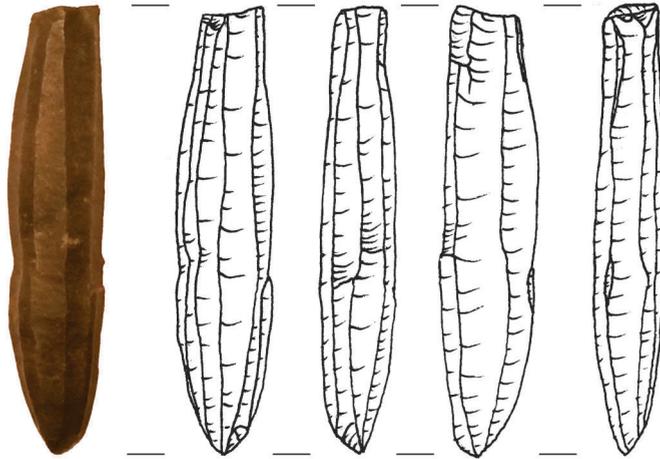


Fig. 1. Flint bullet core from the region of Varna; drawing by P. Nedelcheva

II. EPIPALAEO-LITHIC/MESOLITHIC/NEOLITHIC IN WEST PONTIC REGION FOREST AND COASTAL STEPS OF NORTHWESTERN BLACK SEA

The core is the first artifact in the territory of present day Bulgaria that confirms the mastery of the technique of blade production from bullet cores.

Bullet cores were used from the beginning of the Final Palaeolithic till the Late Neolithic. In the territory of Bulgaria pre-Neolithic sites are very few and mostly surface sites such as e.g. Dikilitash (Pobite Kamani) in the vicinity of Varna (Gatsov 1982, 111–130). However, the materials from these site did not contain either bullet cores or regular bladelets obtained by pressure technique. Gurova and Bonsall (2014) believe that the trapezes from Dikilitash made on regular blades are a Middle Neolithic admixture (Lichardus *et al.* 2000, 1–12). But in our opinion these has not been unequivocally determined. It should be emphasized that trapezes occur in the latest Epigravettian assemblages e.g. at the site of Breg in Slovenia (Kozłowski 2009, 278). Trapezes are also found at Mesolithic sites that are ascribed to the Epigravettian/Castelnovian in the south-east Balkans (in Greece and in the Aegean islands e.g. Chalki–Sampson, Kozłowski, Kaczanowska 2016). But from these sites the bullet core technique is not known.

In the Forest and Coastal steps of northwestern Black sea area two key sites (Thissen, Reingruber 2017, 124, Fig. 10:1) which present unbiased 14C data, deserve special attention. These are the settlement of Ghirzhevo, Khadzhybeisky liman located in the coastal step area, and Mirnoe, Kiliskyi region, both in the Odessa district. The first one is related to the Mesolithic and could be placed between 6400–6100 cal BC and 6010–5880 cal BC (Biagi, Kiosak

2010, 21–41; Thissen, Reingruber 2017, 171). The second, Mirnoe was linked with Mesolithic too. The new absolute dates indicate that the beginning of the period is related to the end of the 9th millennium BC (Biagi, Stanko, Kiosak, 2008, 35; Gatsov 2013, 86). The lithic assemblages are characterized by conical and bullet specimens from which fine, regular bladelets were produced by means of pressure techniques. As far the retouched tools are concerned they are characterized by dominance of circular and semi-circular end scrapers, mostly micro specimens - with length less than 25 mm, backed blades and backed bladelets; geometric microliths in the shape of isosceles and rectangular trapezes. Those assemblages express clear connection with the Mesolithic Kukrek culture from the Crimean Peninsula (Stanko 1982).

From the Forest and Coastal steps of northwestern Black sea area the Erbiceni and Ripiceni sites in Romanian Moldova provide information on conical and bullet core technology (Păunescu 1990, 228; Boroneanț 2002, 17–46). The absolute dates from Erbiceni are related to the very end of 8 mill BC to the mid of first half of 7 mill BC — 7040–6500 (Thissen, Reingruber 2017, 166).

As a whole the situation is very well summarized “Moreover, according to Berciu the microliths from Dobrogea bear strong similarities with those from the Crimean Peninsula” (Berciu 1966, 45). This opinion is shared by Al. Păunescu who identified striking resemblances of the material culture in “Tardenoisian” sites in the Dobrogea and Moldova to the inventories from east of the Prut valley (Reingruber 2017, 103).

In the Neolithic period bullet cores are found on the western side of the Black Sea in the Dobrogea and on the Turkish Black Sea coast south and east of the Marmara Basin. The two regions are separated by the Bulgarian Black Sea coast where bullet cores have not been recorded as yet. In the Marmara Sea basin and the Bosphorus finds of bullet cores are associated with the sites of the Fikirtepe Culture. Cores of this type were also found in Dobrogea at the sites of the early phase of the Hamangia Culture (e.g. Trgusov–Păunescu 1970, Fig. 29:11). Romanian researchers (Hașotti 1997) emphasize the presence of microlithic component in the Hamangia Culture that derive from the local Mesolithic.

The bullet core from the vicinity of Varna was, thus, found in between the two above mentioned zones of the occurrence of this technology which makes us inclined to associate this artifact with the Neolithic. At the moment the working hypothesis is that the Bulgarian bullet core could be linked with the northern influences of the Hamangia Culture that extended to the territory of northern Bulgaria. Nevertheless, it is not excluded those specimens to be related to the Epipalaeolithic/Mesolithic period as well.

The adoption of the bullet core technique by Neolithic populations is a broad phenomenon. It spread as well in the eastern peripheries of the distribution of the Western Linear Culture evidenced, for example, by the presence of bullet cores at the site of Glavanesti Vechi (Păunescu 1970) in north-eastern Romania.

III. EPIPALAEOLITHIC/MESOLITHIC/NEOLITHIC IN THE MARMARA REGION

On the Turkish Black Sea coast cores knapped by pressure mode of detachment are known in the Epipalaeolithic/Mesolithic Ağaçlı group. Here it should be pointed out that the smallest size core specimens are on the border between conical and bullet ones. Additionally this group is represented by the surface collections including perforators and drills, micro end-scrapers, flat circular and semi-circular end-scrapers from the sites of Ağaçlı, Gümüşdere and Domali (Gatsov, Özdoğan 1994). Those are typical for the Marmara region Neolithic and Chalcolithic chipped stone assemblages mention further down.

As far as the Neolithic is concerned bullet cores have been attested at the settlements east, south and west of the Marmara Sea. On the one hand these are coastal settlements such as Fikirtepe and Pendik and on the other hand such pieces were recorded at inland sites such as Ilıpınar, Menteşe, Barcın Höyük and Aktopraklık (Özdoğan 1999, 203–224; 2010, 883–897; 2014, 33–49; Gatsov 2007, 119–127; Balci 2011, 1–11; Karul 2011, 57–65; Karul, Avcı 2011, 1–15). Up to now the earliest occurrence of this technology confirmed by absolute dates is associated with the Barcın Höyük settlement, while the latest in Phase VB of Ilıpınar (Thissen, Reingruber 2017, 123, 124, 126, 127). In other words, the conical and bullet core technology was used in the Marmara region from the second half of 7 mill BC. till mid of 6 mill BC. according to the absolute dates. In all assemblages which were investigated these type of cores co-occur with blade perforators and alternate perforators, flat circular and semicircular end scrapers on cortical flakes, trapezes, but without burins.

Moreover, thanks to the research of B.C. Düring and V. Klinkenberg in the frame of Cide Archaeological project (CAP) there is a new evidence for bullet core technology in Northern Turkey and especially in the region of Cide-Şenpazar. “In Cide-Şenpazar region we found lithic artefacts that have parallels in both Neolithic sites in south central Anatolia and others that appeared similar to those found in the Ağaçlı Mesolithic and Marmara region” (Düring, Klinkenberg 2015, 104).

IV. CONCLUSION

Despite the lack of context and the accidental character of the Bulgarian find, this suggests that conical and bullet core technology existed in the Bulgarian Black Sea coast. The lack of such cores and corresponding bladelets could be due to lack of adequate investigation. The recent discoveries of bullet specimens in NE Bulgaria and their appearance in Northern Turkey make it clear that the this technology covers vast territories on the Black sea coast, including West Pontic region, coastal steps on the northwestern Black sea area, the Crimean Peninsula, the Caucasus (Narimanishvili, Nedelcheva, Gatsov unpublished), part

of the Turkish Black sea coast, the Marmara region (Fig. 2). Conical and bullet cores for blades and bladelets were associated with different periods, different cultures and different environments reflecting “that of interaction, of co-existence, of multi-directional influences and of the exchange of innovative achievements” (Reingruber 2017, 106).

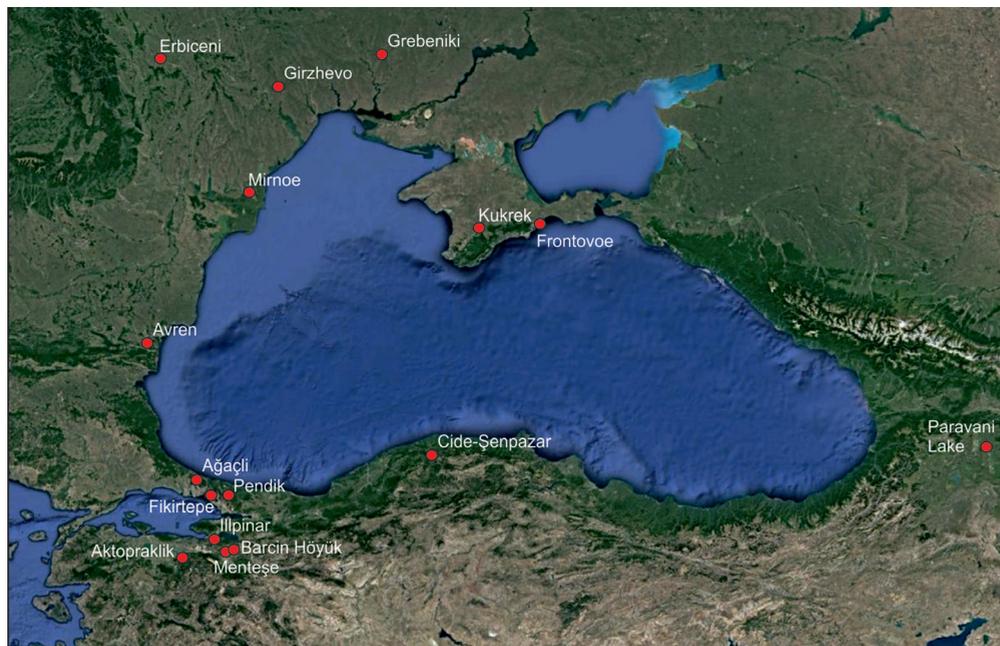


Fig. 2. Map of more important sites with conical and bullet core technology around the Black and Marmara Seas; drawing by authors, maps Google Earth

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