

# BRONZE AGE BARROW GRAVES IN UPPER THRACE

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Alongside tells, barrows (burial mounds) are the most expressive monuments of the Upper Thrace Bronze Age. Fifty five years after the first excavations of a Bronze Age barrow there (Getov 1965) and almost thirty years after I. Panayotov's monograph on the Yamnaya Culture in Bulgarian lands (Panayotov 1989) the "barrow problematic" raises more and more questions and arguments. While only four barrows south of the Balkan range have been discussed in 1989, the database available today is considerably larger, providing a good chance to answer some of the old questions asked as back as 1989 as well as to discuss some new problems connected to the history of the northern Balkans in the fourth - second millennia BC.

## Geographical and chronological background.

Upper Thrace, as a geographic term used by historians, is a region, part of present day South-East Bulgaria situated between Balkan range and Rhodope Mountains. It includes the watershed areas of the Upper and Middle Maritsa (*Hebros*) and Tundzha (*Tonzos*) rivers and the Black sea region; covering both flat (Pazardzik-Plovdiv plain and Stara Zagora plains) and more hilly areas (the Tundzha/*Tonzos* river area and the Black sea one). In order to make it easier to work with this large territory of Upper Thrace I shall apply an internal geographic division into three smaller ones (Fig. 1) - the region between the Black sea coast and Tundzha/*Tonzos* watershed area (called further East-1 region); the region between that area and the line formed by Blatnitsa-Sazliyka Rivers (called further East-2 region) and, the region west of that line (called further West region).

Since the middle of 20<sup>th</sup> century and most of all, since the excavations of Ezero tell (Georgiev *et alii* 1979), the Bronze Age (BA) chronology and periodization in Upper Thrace were connected to the Aegean-Anatolian one. Further excavations in tell Nova Zagora – with 8 Early Bronze Age (EBA) building levels (Kancheva-Ruseva, Leshtakov 2008), tell Dyadovo - with 17 EBA building levels (Kamuro 2015), tell Yunatsite – with 17 EBA building levels (Yunatsite 2007) and tell Galabovo - with minimum 13 EBA/MBA building levels (Panayotov et al. 1991) added even more stratigraphic data allowing three phases in the EBA sequence to be outlined: EBA-1 ("Ezero" phase), with some even earlier recent materials synchronous to Cernavodă III – Boleráz; EBA-2 ("Mihalić" phase) and EBA-3 ("Sveti Kirilovo" phase), while the Middle Bronze Age (MBA) is presented in quite a few sites, the core one being tell Galabovo. The absolute dating of both periods is secured by more than 200 radiocarbon dates from Ezero, Dyadovo, Yunatsite (Görsdorf, Boyadzhiev 1996), Drama (Gleser, Thomas 2012, p. 283-294), Karanovo (Nikolov, Petrova 2016), Dabene (Hristov 2016), Galabovo, Tatul, Chokoba, the enclosures at Cherna gora and Bikovo (Leshtakov, Tsirtsoni 2016) etc., that cover the chronological timespan between 3500 and 1500 BC. The Late Bronze Age (LBA) covers the period between the middle of 2<sup>nd</sup> mill. BC and 1200/1100 BC with still uncertain internal periodization (Fig. 2).

At present, 53 Bronze Age barrows with a total number of 325 mortuary complexes have been investigated in Upper Thrace (Fig. 1) as shown in geographical order from East to West on Table 1. Geographically, 45 barrows (84,9 %) with 288 graves investigated (88,61 %) are located east of the line formed by Blatnitsa and Sazliyka rivers; 8 barrows (15,1 %) with 37 graves (11,39 %) only are known west of that line (Fig. 3). Two barrows only (Benkovski) are located in Stara Zagora plain while in Plovdiv-Pazardzik plain there are no BA barrow graves known so far. Based on mortuary practices, stratigraphic data, grave inventory and <sup>14</sup>C dates (Table 2)<sup>1</sup>, 1 grave has been dated to the “transitional period” to the Bronze Age; 237 graves - to the EBA and 87 - to MBA/LBA periods (Fig. 4) presenting the following characteristics:

### **Mortuary practices.**

#### **Early Bronze Age.**

***Barrow necropolises and their relation to the settlements.*** The EBA barrows in Upper Thrace are usually situated on ridges or top of hills; that topographic position making them well visible from distance. Their dimensions vary from 0.20 m to 6 m in height and, from 10 m to 50 m in diameter. Usually, they form necropolises composed of up to 6 barrows (Pl. 1). In the East-1 region most of the barrows had been used during the entire EBA timespan or at least in two EBA phases, presenting a primary grave with barrow fill and secondary graves dug into it with or without additional fill added (Kamen, Boyanovo, Popovo). Only Golyama Detelina, “The big barrow” follows that pattern in the East-2 region, while the other barrows here presented several graves under a barrow fill with quite a few EBA graves dug into the already existing one. West of Blatnitsa – Sazliyka rivers the graves lied under a single small barrow fill; the barrows themselves being piled and used in one EBA phase only (eight EBA-2 graves at Benkovski, barrow 2 and seven EBA-3 graves at Bratya Daskalovi, „Malkata momina” barrow).

Although the relations barrow necropolis – settlement have rarely been discussed (Gaydarska 2007) it seems that during the EBA-1 the barrows were grouped around a single settlement. The barrows from Zimnitsa, Drazovo, Mogila, Kamen seem to be arranged around Veselinovo tell settled in EBA-1 period (Leshtakov 1992, p. 58-64). The barrows near Ovcharitsa, Kovachevo, Targovishte are close to the Ovcharitsa II site with defense enclosures (Kanchev, Kancheva-Ruseva 1996; Leshtakov *et alii* 2001, p. 20-21). Similar site and enclosures have recently been investigated near Simeonovgrad (Boyadziev *et alii* 2015). It is quite possible the barrows surrounding it as well as the ones near tell Sokol (Leshtakov *et alii* 2015) to have the same date suggested by the re-dated into EBA barrow grave from Sokol (Kancheva-Ruseva 1999, p. 16) so, confirming the existence of such necropolis – settlement pattern. That pattern seems changed in EBA-2 and EBA-3 with the emergence of new settlements: only in Radnevo region during this EBA phases Ovcharitsa II, Golyama Detelina and Znamenosets open sites as well as Madrets and Polski Gradets tells have been settled (Leshtakov *et alii* 2001, p. 20-28) and, the reduced number of barrows with synchronous graves known so far.

***Method of disposal*** (Pl. 2). At 230 EBA graves (97,44 %) the method of disposal is inhumation - in anatomical arrangement (of single, double or multiple individuals) or just parts of the body buried, at 3 graves only (1,28 %) - cremation (Drazovo – 2 graves and Merichleri – 1

<sup>1</sup> The AMS dating of the graves from Beli bryag, Troyanovo and Mednikarovo, barrow 2 are results of an ongoing research project of NAIM-BAS and IEMPAM-BAS with prof. Johannes Krause from the Max-Planck Institute for the Science of Human History (Jena) and prof. Philipp Stockhammer from Ludwig-Maximilians-University Munich. The samples have been proceeded in CEZ Mannheim.

grave). Three complexes (1,28 %) have been argued as being „*cenotaphs*“ (Popovo, “The big barrow”, Mednikarovo, barrow 3, Beli bryag, barrow № 5).

With the exception of two hocker inhumations, all the other single inhumations in anatomical order in East-1 region were in supine position with flexed legs; the vast majority of those graves presented signs of red ochre spread over the body; with some data for wrapping it with organic matter as well. More than 50 % of the grave pits here had been covered with wooden planks; in most of the cases – with organic cover of the pit’s bottom. In five of the barrows investigated (Straldza-1, Zimnitsa, Mogila, Popovo, Boyanovo, “Lozyanska” barrow) the primary graves presented the same pattern. In two other barrows (Sinapovo and Straldza-2) the primary graves were in supine position with flexed legs in uncovered pits, while in the rest of the barrows the primary graves being double or multiple inhumations with/without ochre and with/without wooden cover – Kamen, “Gabrova” barrow, grave 30 - with 4 individuals and 2 skulls in the pit buried (grave 24 here – secondary, presented bones from 7 individuals); Kamen, “Shekerdza” barrow, grave 10 – with 2 individuals and a child beneath them; Boyanovo Baylar Kairak, barrow 1 and barrow 2 – each with 3 individuals one above the other, Irechekovo and Drazvevo – with at least 3 individuals each.

From all the EBA graves with secure position of the deceased in East-2 region, 41 single inhumations were in supine position with flexed legs, 22 – in hocker position, 5 – in semi-supine position; 3 – in extended one. Nine graves were double (Troyanovo, “The big barrow” – 4 graves; Mednikarovo, barrow 1 – 1 grave; Beli bryag – 1 grave; Ovchartsı, “The big barrow: - 2 graves and Ovchartsı, barrow 2 - 1 grave); in 2 graves - Ovchartsı, barrow 2, only parts of the body were buried. Currently, there are no data from that region for wrapping the body with organic matter. Nine grave-pits had been covered with wooden planks; at 16 pits the floor had been covered with organic matter; red ochre was found in 45 graves. Five graves only presented combination of red ochre, floor and pit covering; only 3 of them being primary graves (Pet mogili, Golyama Detelina “The small barrow” and Troynovo, “Kangalova” barrow). With the exception of Tvarditsa and Ovchartsı, barrow 2 – semi-supine inhumations, the primary graves in the remaining 18 barrows presented inhumations in supine position with flexed legs in an uncovered pit. Securely dated EBA-3 graves here had no pit-cover or red ochre. All the single inhumations<sup>2</sup> in western region are in supine position with flexed legs. One grave is double (Dolno sahrane, barrow 3), one – multiple (Bratya Daskalovi - 2 males and 2 infans). None of the grave pits here had cover on the top or at the floor; red ochre was found in 4 graves at Bratya Daskalovi, “Malkata momina” barrow only.

**Grave inventory** (Fig. 6; Pl.s 3-5, 6/2,4). Copper, silver and, rarely golden hair-rings and beads have been found in some of the graves east of Blatnitsa – Sazliyka Rivers. Some other graves there (Kamen, “Gabrova” barrow; Mogila, barrow 1 etc.) provided metal tools and weapons as well. Troyanovo, “Chernyova” barrow, grave 6 (male) - with a necklace composed of 84 silver beads and two pairs of massive gold and silver hair-rings (Fig. 6/9) appeared to be the “richest” EBA barrow graves south of the Danube so far. Mednikarovo, barrow 4, grave 1 (female) - with a necklace of 14 silver beads (Fig. 6/7), with <sup>14</sup>C date between 3338-3024 cal. BC (Table 2) provided currently the earliest silver jewelry in Upper Thrace. The number of vessels discovered in the grave pits – up to 4-5, even 10 in Golyama detelina, “The big barrow”, grave 29 (female and a child) is also

<sup>2</sup> The Merichleri BA barrow graves will be excluded from the discussion here; the publication of the excavations’ results is forthcoming.

impressive. The vessels have all the characteristic of the EBA pottery in Upper Thrace (Pl.s 3-6). While almost equal in numbers (96 to 106 graves), the percentage of the graves with vessels in the East-1 region is twice smaller than the one in East-2 region; the most eastern graves lacking vessels at all. Almost 20% of the graves in East-1 region had metal hair-rings or beads; at East-2 region – approximately 10 %, while none have been found in the graves west of Blatnitsa - Sazliyka Rivers; the grave inventory there consisting of 5 vessels and fragments of several more only (Fig. 5).

### **Middle and Late Bronze Age.**

***Barrow necropolises and their relation to the settlements.*** Currently, nineteen barrows with a total number of 87 MBA/LBA graves are known from Upper Thrace. Twelve barrows with 64 graves are located in the East-1 region; 6 barrows with 22 graves – in East-2, while in the western region there is one MBA barrow grave only (Table 1). Eight barrows had been piled during that period, with one or several (up to 10) graves placed under a single barrow fill. The barrows themselves were small in size; at Debelt and Malomirovo only, there are some data suggesting that they form necropolises of several barrows. Sixty seven MBA/LBA graves had been dug into the fills of 11 EBA barrows without adding additional fill. Usually, they form groups of up to 20 graves dug into a particular sector of the already existing barrow. The lack of investigations in the respective micro-regions makes it impossible a relation barrow necropolis – settlement to be established so far.

***Method of disposal.*** In seventy six MBA/LBA graves the deceased laid in hocker position. The grave pits if present, are oval in shape lacking top and bottom cover. Wrapping the body and ochre are missing from the ritual as well. Four graves presented supine position with flexed legs in deep, rectangular/oval pits (Ovchartsı, “The big barrow” -1 grave, Kamen, “Shekerdza” barrow -3 graves), two were multiple graves (Malomirovo) and five (Izvorovo - 2 graves and Golyama detelina “The small barrow” - 3 graves) – cremations outside the barrow fill with part of the burnt bones placed into the grave-pit. In the most eastern area only hocker inhumations or multiple graves are presented; in East-2 and Western regions – both inhumations and cremation graves were discovered.

### ***Grave inventory.***

Almost every third hocker grave had an inventory – usually a vessel placed between the arms and the head of the deceased (Pl. 6/1,3,6-8). All three cremation graves from Golyama detelina (securely dated in the LBA) had as inventory clay vessels, metal weapons and tools (Pl. 8). Three graves dated in the middle of the 2<sup>nd</sup> millennium BC should be outlined here. In the first one - Kamen “Shekerdza” barrow, grave 1 (25-30 years old male; supine position with flexed legs) two carved-bone figures of imperial eagles and bronze bell-rivets (near the right arm) have been found (Pl. 7/13); in the second one – Ovchartsı, “The big barrow”, grave 7 (65+ years old female; supine position with flexed legs) - 12 golden ornaments, wheel-made vessel, bronze bell-rivets (around the right arm), and a bronze needle in front of the right femur (Pl. 7/2-12,15,17,20); in the third one – Izvorovo (cremation, probably mail) - necklace of 344 golden beads; 2 golden spindle-whorls; gold and silver Pl.; silver ring; bronze razor and whetstone; hand-made amphora and clay spindle-whorl had been placed (Pl. 7/1,16,18-19; Borislavov 2010).

### **Barrow graves and the Bronze Age in the Upper Thrace.**

It can be positively argued that the earliest barrow grave in Upper Thrace so far is grave No.1 from “Gonova” barrow near Targovishte (extended inhumation), dated according to the

obsidian “*long blade*” to the so called “transitional period” to the Bronze Age (Kanchev 1991, p. 45-46, fig. 5/B). Chronologically, next in line are the primary graves (inhumations in supine position with flexed legs, no ochre; no pit cover) from Mednikarovo, barrow 4 and Beli bryag (Pl. 2/4) dated between 3338-3022 cal. BC (Table 2). Probably, similar date have the features from Golyama Detelina, barrow 4 as well as the semi-supine inhumations from Ovchartsii, barrow 2, grave 1 (Pl. 2/1) and Tvarditsa (both graves lacking pit cover or red ochre). Currently, two settlements from Upper Thrace provided similar dates – Karanovo tell and Drama. The lifespan of the EBA-1 layer in Karanovo is placed between 3310 – 3100 cal. BC (Nikolov, Petrova 2016, 136-139) while Drama <sup>14</sup>C dates related to Cernavodă I - III transition period and Cernavodă III horizon, fall into 3700 - 3100 cal. BC period (Gleser, Thomas 2012, p. 283-294). The existence of Cernavodă III materials at Dragantsi, Devetak and Bada bunar - Karnobat region, to the east (Hristova R. 2009; Gergova *et alii* 2010; Agre, Agre 2010) as well as Yazdach - Chirpan region, to the west (Panayotova *et alii* 2004) places the beginning of the EBA in Upper Thrace in Cernavodă III context, so should be the barrow graves discussed. The arguments are ongoing but some relations of Golyama Detelina, barrow 4 pottery to Late Usatovo one worth to be mentioned. Therefore, if that connection is correct, the appearance of more barrow graves with such chronological position is to be expected in the regions where Cernavodă type materials have already been attested.

While four barrows only could be positively related to that initial period of the Bronze Age in Upper Thrace so far, at least 30 barrows (from the Black sea region to the east to Blatnitsa - Sazliyka Rivers to the west) date between 3100 – 2900 cal. BC. In the eastern part of that “primary” area of barrow graves presence (East-1 region), a particular mortuary pattern is to be observed: primary grave with a barrow fill and secondary graves with (rarely without) additional/secondary fills added; rectangular pits covered with wooden planks; single inhumation in supine position with flexed legs/double or multiple inhumations/parts of the body buried; use of red ochre and, rarely wrapping the body with organic matter. That pattern (with some exceptions – Golyama detelina, “The big barrow”) seems changed in the western part of that area (East-2 region): with several “primary” graves placed under a single barrow fill; with quite a few secondary graves dug into it; the wooden cover of the pit as well as the organic cover of the bottom and red ochre being rarely used compared to the East-1 region. The method of disposal here includes supine position with flexed legs, „*relaxed*“ hockers, hockers, double graves; lacking multiple graves and wrapping the body with organic matter. The grave inventory in both areas includes metal tools and weapons as well as copper and silver hair-rings and beads; the percentage of the graves with such inventory decreasing from east to west as well as pottery; on the contrary, the percentage of the graves with vessels increasing from east to west (Fig. 5).

This chronological period corresponds to the EBA-1 or “Ezero” phase in Upper Thrace, dated with AMS dates from Dydovo tell between 3200/3100 - 2900 cal. BC (Semmoto, Kamuro 2015). In the eastern part of the region discussed (East-1 and East-2) “open enclosures” (Ovcharitsa, Simeonovgrad) as well as tells (Veselinovo, Sokol) have been settled, with barrows grouped around them. In the western part, tells with defense structures were settled (Ezero, Dyadovo etc.). The mortuary practices here include intramural graves as well as inhumation in flat necropolises (no pit cover, no bottom cover; no metal hair-rings) - near Bereketska tell and Zagortsi (Kalčev 2002; Hristova, Uzunov 2012). The AMS dating of the Zagortsi flat grave is virtually identical with grave No.10 from Ovchartsii, “The big barrow” (Alexandrov, Kaiser 2016, p. 364; Kaiser, Winger 2015, Table 1). The pottery complex is identical in both regions; with the so called “*channeled ware*” appearing in Ovcharitsa II and Ezero A1 (Leshtakov 2006, p. 170-173).

During the EBA-2 barrow graves appear in Stara Zagora plain, reaching in EBA-3 the Chirpan-hills region. Here, they show a different mortuary pattern with 3-8 graves placed under a single barrow fill; uncovered grave-pits and almost no grave inventory or use of red ochre. It should be noted that so far, the only EBA-2 and EBA-3 extramural graves in the area from the Black sea to the east to Stara Zagora plane to the west are the barrow graves discussed here. Their number is considerably smaller compared to both the EBA-1 barrow- and flat graves in the same area and the number of contemporary sites investigated there such as: Drama, Konevo and Cherna gora enclosures; Michalić, Asara, Veselinovo-, Bikovo-, Polski gradets- Karanovo-, Ezero-, Dyadovo-, Galabovo-, Sveti Kirilovo-, Kazanlak tells etc. A change in mortuary practices during the second half of the 3<sup>rd</sup> millennium BC is not to be excluded for this region but the problem is far from being resolved.

The limited number of <sup>14</sup>C dates (only 2) as well as the lack of detailed publications of the graves do not allow a precise chronological attribution of all the 2<sup>nd</sup> millennium BC barrow graves to the Middle or Late Bronze Age respectively, which is the reason to discuss them in general. However, based on the securely dated graves, it seems that single hocker inhumation in/under a barrow fill is the specific MBA mortuary practice for the East-1 and East-2 regions. In the most eastern parts (Black sea region) the MBA graves form necropolises of small barrows with up to 1-10 graves under a single barrow fill. West of the Black sea region they form groups of up to 20 graves dug into a particular sector of the already existing EBA barrow fill without adding additional one. The grave pits were relatively shallow, oval in shape; with no traces of covering their upper or bottom parts. There are no signs of red ochre used in the ritual; if present, the grave inventory usually consist of a hand-made vessel placed in front of the face of the buried individual.

Therefore, the hocker barrow graves are a characteristic feature of the MBA in the eastern part of the Upper Thrace. Alongside them, there are at least two more flat graves investigated – the hocker inhumation from Drama with inventory (a clay cup) related to Tei and Monteoru Cultures (Lichardus *et alii* 2001, p. 172-174) as well as the grave from Radnevo (extended position, male), dated with two <sup>14</sup>C samples between 1870-1680 cal BC (Savatinov 1995; Leshtakov, Tsirtsoni 2016). It is possible that the graves from the flat necropolis Ovcharitsa II, dated to the LBA (Kancheva-Ruseva 2000) to actually date, based on the pottery illustrated, to the MBA as well. Besides those grave complexes, quite a few other sites have been excavated there - Devetak (Agre, Agre 2010), Malenovo, dated between 2202 – 1773 cal. BC,<sup>3</sup> Chokoba (Petrova, Kazarov 2010) and Bikovo (Hristova, Ivanov 2010), the last two dated between 2190 – 1620 cal BC (Leshtakov, Tsirtsoni 2016). The three sites mentioned have recently been investigated and remain yet, unpublished. In other words, the nature and characteristics of the first half of the 2<sup>nd</sup> millennium BC in the eastern part of the Upper Thrace is still arguable, with no settlement structures being investigated in its southern parts so far; Galabovo tell remaining the only settlement with clear MBA stratigraphic sequence. However, the four graves with a possible date around the middle of the 2<sup>nd</sup> millennium BC: the already mentioned graves with extraordinary inventory from Ovchartsii (with AMS date between 1528 – 1436 cal. BC); Kamen, “Shekerdza” barrow and Izvorovo could be interpreted as „*élite*“ graves (male and female ones) suggesting a possible “*Chiefdom*” type of the MBA society at least in the regions discussed.

The three cremation graves from Golyama detelina, “The small barrow” (Pl. 8) as well as the destroyed cremation graves from Eastern Sakar mountain near Kolarovo (Stoyanov, Nikov

<sup>3</sup> Excavations directed by Dr. A. Bozkova and the author in 2105-2016.

1997, p. 230, fig. 49/1,a) and Levka (Borislovov 2010, p. 11) are currently, the only securely dated in the second half of the 2<sup>nd</sup> millennium BC barrow graves in the region discussed; all of them located on the south-western border of the eastern part of the Upper Thracian. Some of the hocker barrow graves discussed above (Popovo, Malomirovo, Malka Detelina, “Manchova” barrow, Golyama Detelina, “The big barrow”) was dated to the LBA but, in my opinion that date still needs additional arguments. At least six flat necropolises with hocker inhumations are known from the eastern part of Upper Thracian – Vratitsa, associated with a settlement; Zavoi, Drama, Kermen, Nova Zagora, Polski Gradets (Hristova R. 2010 with a map). It seems that inhumation in hocker position in flat necropolises is the main mortuary practice during the second half of the 2<sup>nd</sup> millennium BC in the eastern part of the Upper Thracian while in the western part there are no LBA graves investigated so far. The five cremations discussed could be eventually linked to the Rhodope Mountains LBA mortuary practices (Kisiov 2009, p. 17-29).

### **Barrow Graves in the Upper Thracian and the Bronze Age in Northern Balkans.**

It is a common belief that the questions of the appearance and spread of “*barrow mortuary practices*” in Upper Thracian should be asked and answered not only in “*Thracian*” but in a much larger context. As already stated, the earliest barrow graves in Balkans so far come from the eastern part of the Lower Danube region: Coslogeni, Polsko Kosovo etc., dating back to the first half of the 4<sup>th</sup> mill. BC (Alexandrov 2011). Another barrow graves lot there dates to Late Usatovo - Cernavodă III period: Ariceștii Rachivani, barrow IV: 3370 - 3090 cal. BC; Păulești, barrow II: 3320 - 2910 cal. BC (Frînculeasa *et alii* 2015, p. 18-19). However, as in Upper Thracian the “compact” barrow graves presence in the Lower Danube is in 3100 - 2500 cal. BC period (Frînculeasa *et alii* 2013; Alexandrov, Kaiser 2016). Similar situation is to be observed in Eastern Hungary as well. There, the compact presence of barrow graves is around and after 3100 cal. BC (Heyd 2011, p. 540-541). As in Lower Danube and Upper Thracian, quite a few barrow graves there are earlier – Sárretudvari-Órhalom: 3361 - 3097 cal BC for example (Dani, Nepper 2006, 48; Gerling *et al.* 2012, table 1); their date corresponding to Boleráz: 3325 - 3027 cal. BC (Horváth *et alii* 2008) or post-Boleráz - early classical Baden: 3350 - 3100/3000 BC (Horváth, Svingor 2015, p. 33-35) in the Middle Danube area. Then, some barrow graves appear in the first half of the 4<sup>th</sup> millennium BC in Lower Danube and Upper Thracian; being presented there and in eastern Hungary around and after 3300 cal. BC as well – a chronological position that is earlier than or, corresponds to Boleráz - Cernavodă III phenomenon. The relatively small number of such graves do not allow a positive solution of the questions related to their appearance in the regions discussed. Such possible solutions could be argued for the next chronological period and, most of all for the eastern part of the Lower Danube region. It is quite obvious that the existence of more than 300 barrow graves here (up to 2015) that date to 3100 – 2500 cal. BC period; more of them – with mortuary practices that are identical to those of the North Pontic “*Yamnaya/Yamnaya Culture*” is not a coincidence. That identity made most of the specialists to accept the idea of a migration/s around 3100 BC and after of “*Yamnaya population*” from the North-Pontic steppes into the Lower Danube area; even suggesting the name “*Lower-Danubian variant of the Yamnaya/Yamnaya Culture*” (for the 20<sup>th</sup> century - Panayotov 1989 and the discussion there; after that: Nikolova 2000; Burtănescu 2002, p. 214-276; Menkova 2006; Motzoi-Chicideanu 2011, p. 225-279; Heyd 2011; Kaiser, Winger 2015; Frînculeasa *et alii* 2015; Alexandrov, Kaiser 2016). The hocker end extended barrow graves from that period have been connected to the population of the so called „Vântatori-Bolotești” and „Alexandrovka” groups located between Seret and Prut Rivers, supposedly migrated with the

Yamnaya population into the Lower Danube area (Burtănescu 2002, p. 393-396; Brudiu 2003, p. 54-59).

But, the archaeological picture around 3100 BC here is much more colorful. Alongside Danube River, at The Black Sea coast, in the Sub-Carpathian and Balkan range areas settlements like Celei (Nica 1982), Cernavoda (Roman 2001), the Varna lakes (Roman 1992) etc. existed; flat necropolises and single graves being connected to them as well: Cernavodă (Berciu *et alii* 1973, p. 395-396), Brălița (Harțuche 2002), Zimnicea (Alexandrescu 1974), Batin (Stanchev 1989), Smyadovo, the three graves from there dated to 3328/3332 - 3015/3025, 3094 – 2918 and 3006 - 2885 cal. BC (Chohadzhiev, Mihaylova 2014, p. 21-22). Most of those settlements and flat graves (presenting metal hair-rings as well) have been connected to Zimnicea – Celei phenomenon which, on the other hand, has been related to Cernavodă III one and, as such should represent the local population. If that assumption is correct than, the barrow graves should represent a foreign mortuary tradition. That tradition is identical to the “Yamnaya/Yamnaya” one and, should reflect a migration of such population into the Lower Danube (Kaiser, Winger 2015, p. 130-132 and esp. notes 87-88). The arguments against such a migration (Georgieva 1991; Leshtakov 2011) even not lacking reasons are, in my opinion, more or less theoretically based and “a priori” rejecting the migrationalism. One, even distant example to support such a migration are the Bulgarians than settled exact the same region of the Lower Danube in the 7<sup>th</sup> century AD.

Getting back to the Upper Thrace, we find quite similar archaeological picture: Several barrow graves east of Blatnitsa – Sazliyka rivers date before 3100 BC. Their direct connection to the mortuary practices of the so called “transitional period” to the Bronze Age here (first half of the 4<sup>th</sup> mill. BC) is hard to be proved, at least one flat necropolises with extended or supine inhumations from that period being investigated so far - Chernomorets “Akladi Cheiri” at the Black Sea (Leshtakov, Klasnakov 2010). Considering this, the appearance of those early barrow graves should be sought in the nature and mechanisms of the appearance and development of Boleráz - Cernavodă III phenomena, their spread to the East/South-East and connections to Usatovo group. The following period here (EBA “Ezero phase”) is connected to “fortified” settlements (Ovchartsii II) and barrow graves with: supine position with flexed legs, wooden cover of the grave-pit, red ochre and metal hair-rings. Then, the appearance of those barrow graves could be a result of: 1) continuity with the mortuary practices from the previous period (it is not to be excluded but hard to be proved for now because of the limited number of such graves investigated so far); 2) migration of population with such mortuary practices (and metal hair-rings) from the nearest region – present day North-East Bulgaria. Such scenario has been supported by most of the authors referred to above; 3) change in the social and religion beliefs related to common European cultural and religious horizon starting with 4<sup>th</sup> millennium BC (Leshtakov 2011, p. 568).

The first two hypotheses relate the appearance of the barrow graves in Upper Thrace to a migration/s of populations, most probably from the North in 3300-3100 BC or 3100-2900 BC while the third one relates them to the common social and religious processes that started as early as 4<sup>th</sup> mill BC in Central and Eastern Europe and Asia Minor. All three hypotheses (not excluding each other) are based on subjective evaluation of facts and affinity of different authors to different theoretical approaches for analyzing this particular phenomenon. In my opinion, the data discussed above and most of all, the identity of most of the EBA barrow graves in Upper Thrace (especially those from the region between the Black see coast and Tundzha River area) to the Yamnaya/Yamnaya ones as far as the North-Pontic area support the second or combination of the first two scenarios. The isotopic analyses do not exclude them as well (Gerling 2015).

The difference between the EBA-1 barrow graves in the eastern part of Upper Thrace and North-East Bulgaria is mainly in the large quantity of pottery in the southern graves, considered to be of local origin. For example, in two Upper Thrace barrows only - Golyama Detelina, “The big barrow” and Ovchartsi, “The big barrow” 26 and 17 complete vessels respectively, have been found, while not more than dozen vessels are known from all the north-eastern set barrow graves. That difference has been clearly shown by E. Kaiser and K. Winger (Kaiser, Winger 2015, fig. 6). In 1989 I. Panayotov, arguing the same situation for the North-East and North-West Bulgarian EBA barrow graves suggested that this situation reflects the co-existence of Yamnaya and local populations in different micro-regions (Panayotov 1989, p. 48-51). In my opinion, that suggestion is to be applied for the South-East Bulgarian EBA-1 barrow graves as well.

The intensification of the Upper Thrace contacts with the Aegean – Anatolian civilizations, starting around the middle of the 2<sup>nd</sup> millennium BC coincides with the decreasing number of the barrow graves there. Those contacts, shown (for example) by the imported wheel-made pottery or its imitations (Leshtakov 2016) led to the integration of some parts of Upper Thrace in the Aegean – Anatolian cultural and economic circle during the second half of the 3<sup>rd</sup> – first half of the 2<sup>nd</sup> millennia BC; allowing some authors to include those regions into the trade routes known as „The Great Caravan Route“ as well as to argue about the existence of trade colonies there - Mihalić, Asara/Simeonovgrad, Galabovo (Leshtakov 1996; Heyd et al. 2016). The emanation of those processes during the EBA-3 is to be seen in Dabene flat cremation necropolis (west region); its exquisite precious metals production showing influences from Aegean – Anatolian jewelry transmitted as far northwest as Central Europe (Hristov 2016). While kind of “isolated” from these processes during the EBA-3, during the MBA “barrow graves population” seem to actively joined them. It is to be seen in the “ordinary” hocker graves with Danubian Tei-Culture cups (Hristova T. 2010 and the discussion there) as well as in the „*élite*“ graves from Izvorovo, Ovchartsi and Kamen. Their graves inventory presented Transilvaniam/Central European golden “*Kreisförmige Lockenringe mit zurückgebogenen Ende*” and “*Spiralrörhen*” and northern bronze razors (Pl. 7/2-13; Borislavov 2010, p. 13-14) as well as Aegean – Anatolian imperial eagle representations, necklace of golden beads and wheel-made vessels (Pl. 7/13,16,20). Together with the North Bulgarian Valchitran and Svishtov hoards, those finds probably mark a trade axis in the first half of the 2<sup>nd</sup> millennium BC that connected Aegean – Anatolian world to the rich in gold sources Transylvania. The main routes of that trade crossed the eastern part of the Balkan Peninsula; the “barrow population” from the eastern part of Upper Thrace being actively involved in it.

Somewhere around the middle of the 2<sup>nd</sup> millennium BC the nature of those trade routes changed to ox-hide trading (Leshtakov 2007). That could be related to the growing Mycenaean dominance in the Eastern Mediterranean and, the beginning of the exploitation of the gold resources in the Eastern Rhodope Mountains, like Ada tepe for example (Popov et al. 2015). During the second half of the 2<sup>nd</sup> millennium BC East Rhodope Mountains became principle source of gold for the Mycenaean Society that led to the re-directing of the main Upper Thrace contacts with the Aegean world through those regions where now, the LBA *élite*“ barrow graves appeared (Leshtakov 2008).

### **Some concluding remarks.**

The last thirty years of investigations showed that barrow graves are a characteristic mortuary practice of the Early and Middle Bronze Age societies from the eastern part of the Upper Thrace. During those periods they tend to have, with different intensity, closed connections with the

regions north of the Balkan range. While the nature of the appearance of the earliest barrow graves here (before 3100 BC) is still uncertain, Ivan Panayotov's suggestions for a migration of Yamnaya population from the north; the newcomers playing as well certain role as a "transmitting milieu" for the local populations seem quite possible around 3100 BC and later. However, new questions arise such as:

1. What is the nature of the "barrow graves population" society and economy and, do they differ from the society and economy of the people that lived in tells?
2. Why, compared to EBA-1, the number of EBA-2 and EBA-3 barrow graves is reduced and, what are the mechanisms of the appearance of the barrow graves during those periods west of Blatnitsa-Sazliyka Rivers?
3. Are there any connections between the EBA and MBA barrow graves?
4. What is the nature of the change from barrow- to flat graves during the LBA?
5. What is the place of those "barrow graves populations" in the largely discussed lately processes of Indo-Europeanization of Central and South-East Europe?

In my opinion those questions are not to be answered by simply applying certain theoretical approaches. Using anthropological, isotopic, aDNA analyses and comparing them to the archaeological data could only give the opportunity to answer those as many others questions the "barrow graves" problematic asks.

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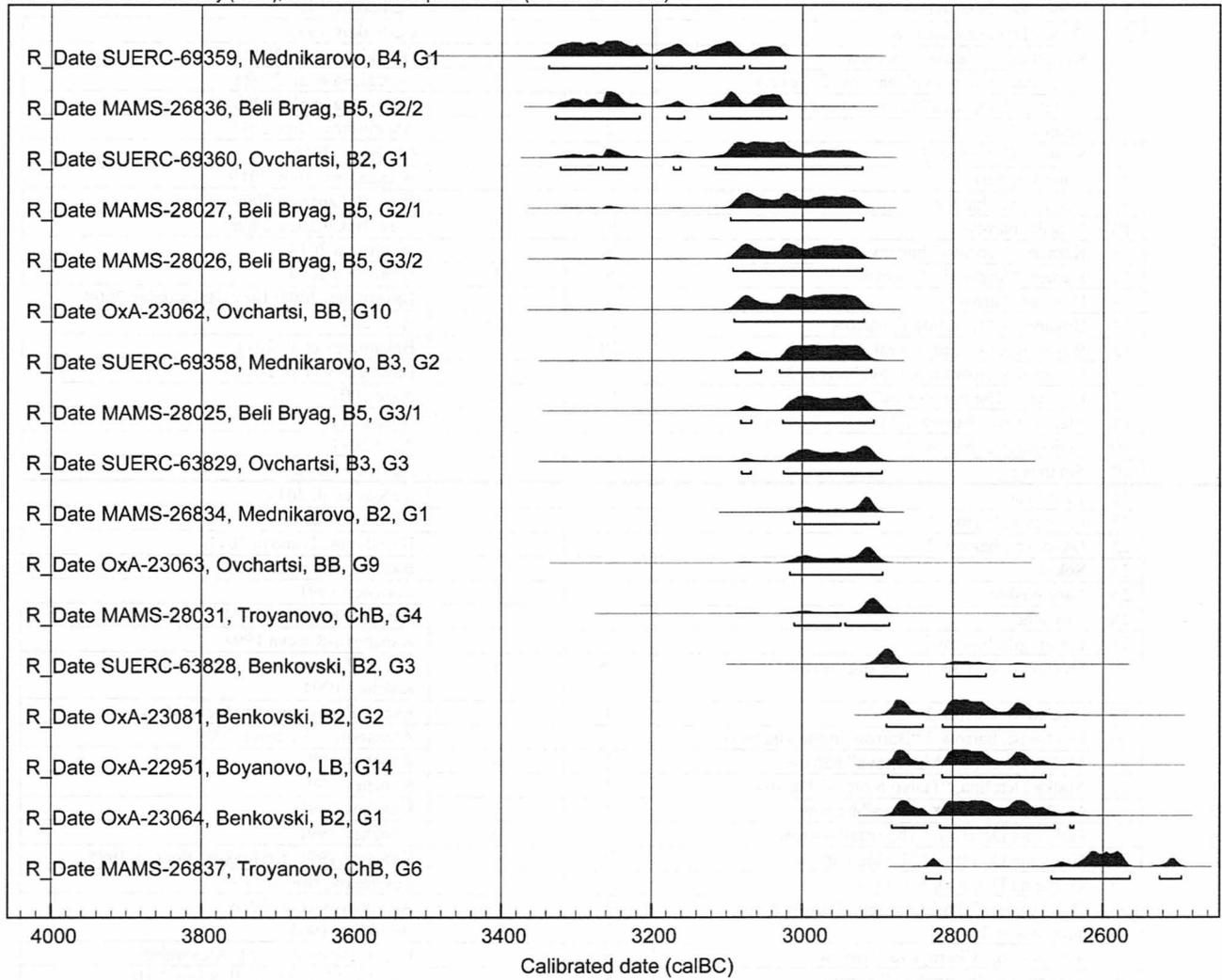
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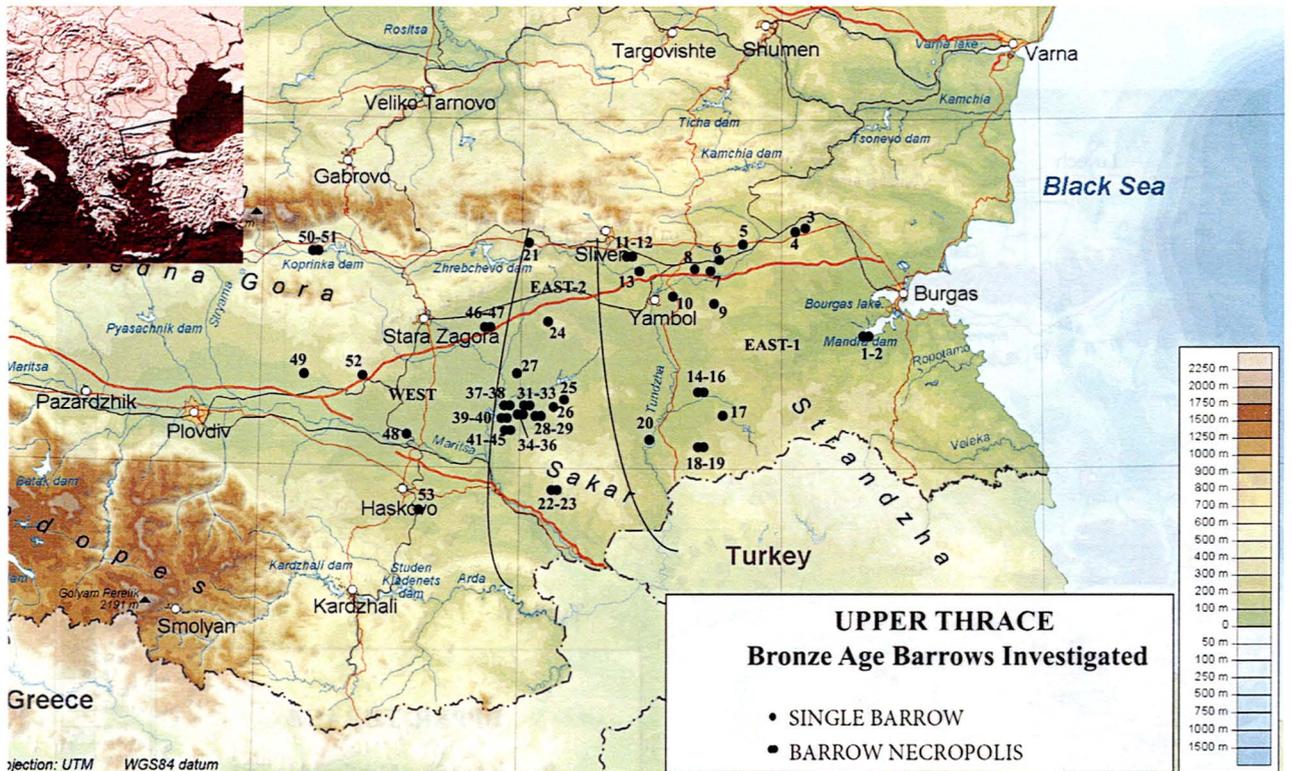
**Table 1. Upper Thrace. Bronze Age Barrow Graves Investigated.**

| region                    | BARROW  | GRAVES     |                                   | REFERENCE                                       |
|---------------------------|---|------------|-----------------------------------|---|
|                           |   | EBA        | MBA/LBA                           |   |
| EAST-1                    | 1. Debelt/Deultum, barrow 1                     |            | 1                                 | Leshtakov 1995                                  |
|                           | 2. Debelt/Deultum, barrow 2                     |            | 1                                 | Leshtakov 1995                                  |
|                           | 3. Karnobat, "Gyaurska" barrow                  |            | 10                                | Georgieva et al. 2006                           |
|                           | 4. Karnobat, "Chatalevo" barrow (2/3 exc.)      |            | 2                                 | Georgieva et al. 2008a                          |
|                           | 5. Venets, "Tonchova" barrow (1/3 exc.)         | 3          |                                   | Georgieva et al. 2008b                          |
|                           | 6. Straldza I, barrow 1                         | 2          |                                   | Alexandrov, Iliev 2016                          |
|                           | 7. Straldza II, barrow 3                        | 1          |                                   | Cholakov 2016                                   |
|                           | 8. Zimmitsa, barrow 1                           | 4          |                                   | Alexandrov, Iliev 2010                          |
|                           | 9. Irechekovo, barrow 1                         | 1          | 2                                 | Iliev, Bakardziev 2009                          |
|                           | 10. Mogila, barrow 1                            | 10         | 4                                 | Iliev, Bakardziev 2006                          |
|                           | 11. Kamen, "Gabrova" barrow                     | 10         |                                   | Dimitrova 2014                                  |
|                           | 12. Kamen, "Shekerdza" barrow                   | 6          | 3                                 | Dimitrova 2014                                  |
|                           | 13. Drazovo, barrow 1                           | 6          |                                   | Bakardziev 2005; Iliev, Bakardziev 2008         |
|                           | 14. Boyanovo, "Lozianska" barrow                | 10         | 10                                | Agre 2015                                       |
|                           | 15. Boyanovo, Golyam Kairak, barrow 1           | 20         | 3                                 | Bakardziev et al. 2011                          |
|                           | 16. Boyanovo, Golyam Kairak, barrow 3           | 3          |                                   | Bakardziev et al. 2011                          |
|                           | 17. Popovo, "The big barrow"                    | 12         | 20                                | Agre 2007                                       |
|                           | 18. Malomirovo, barrow 1 "The Big barrow"       |            | 6                                 | Agre 2011                                       |
|                           | 19. Malomirovo, barrow 2                        |            | 2                                 | Agre 2011                                       |
|                           | 20. Sinapovo                                    | 8          |                                   | Agre, Dichev 2014                               |
| EAST-2                    | 21. Tvarditsa                                   | 1          |                                   | Velkov et al. 2014                              |
|                           | 22. Izvorovo, barrow 1                          |            | 1                                 | Borislavov 2010                                 |
|                           | 23. Izvorovo, barrow 2                          |            | 2                                 | Borislavov, Ivanova 2011                        |
|                           | 24. Sokol                                       | 1          |                                   | Batsova, Kanchev 1974                           |
|                           | 25. Targovishte                                 | 3          |                                   | Kanchev 1991                                    |
|                           | 26. Kovachevo                                   | 2          |                                   | Batsova, Kanchev 1974                           |
|                           | 27. Pet mogili, barrow 2                        | 3          |                                   | Kancheva-Ruseva 1994                            |
|                           | 28. Ovcharts, barrow 1 "The big barrow"         | 16         | 1                                 | Exc. I. Panayotov, St. Alexandrov; Kalchev 1994 |
|                           | 29. Ovcharts, barrow 2                          | 4          |                                   | Exc. I. Panayotov, St. Alexandrov               |
|                           | 30. Ovcharts, barrow 3 "Barrow in the vineyard" | 1          |                                   | Alexandrov, Hristova 2009                       |
|                           | 31. Malka Detelina, "Manchova" barrow           | 2          | 9                                 | Kanchev 1991                                    |
|                           | 32. Malka Detelina, "Tanyo Koleva" barrow       | 2          |                                   | Kanchev 1991                                    |
|                           | 33. Malka Detelina, "Kurdova" barrow            | 4          |                                   | Kanchev 1991                                    |
|                           | 34. Golyama Detelina, "The small barrow"        | 1          | 5                                 | Kanchev 1991                                    |
|                           | 35. Golyama Detelina, "The big barrow"          | 28         | 4                                 | Kanchev 1995; Leshtakov, Popova 1995            |
|                           | 36. Golyama Detelina, barrow 4                  | 5          |                                   | Leshtakov, Borisov 1995                         |
|                           | 37. Beli Bryag, Chitashki mogili, barrow 5      | 4          |                                   | Alexandrov et al. 2016                          |
|                           | 38. Troyanovo, barrow 1                         | 2          |                                   | Buiukliev 1964                                  |
|                           | 39. Troyanovo, "Chernyova" barrow               | 6          |                                   | Exc. I. Panayotov, St. Alexandrov               |
|                           | 40. Troyanovo, "Kangalova" barrow               | 5          |                                   | Exc. St. Alexandrov, Il. Kirov 2016             |
| 41. Mednikarovo, barrow 1 | 3   |            | Panayotov, Alexandrov 1995        |   |
| 42. Mednikarovo, barrow 2 | 2   |            | Panayotov, Alexandrov 1995        |   |
| 43. Mednikarovo, barrow 3 | 3   |            | Panayotov, Alexandrov 1995        |   |
| 44. Mednikarovo, barrow 4 | 3   |            | Panayotov, Alexandrov 1995        |   |
| 45. Mednikarovo, barrow 6 | 5   |            | Exc. I. Panayotov, St. Alexandrov |   |
| WEST                      | 46. Benkovski, barrow 1                         | 3          |                                   | Alexandrov, Karailiev 2010                      |
|                           | 47. Benkovski, barrow 2                         | 8          |                                   | Alexandrov, Karailiev 2010                      |
|                           | 48. Merichleri, barrow 1                        | 6          | 1                                 | Iliev 2012; Iliev, Vasilev 2013                 |
|                           | 49. Bratya Daskalovi, "Malkata momina" barrow   | 7          |                                   | Ivanov 2011                                     |
|                           | 50. Dolno Sahrane, barrow 3                     | 6          |                                   | Getov 1965                                      |
|                           | 51. Dolno Sahrane, barrow 4                     | 3          |                                   | Getov 1965                                      |
|                           | 52. Svoboda                                     | 1          |                                   | Kalchev 2004                                    |
|                           | 53. Stambolovo, barrow 3                        | 2          |                                   | Nehrizov, Tzvetkova 2010                        |
| <b>TOTAL</b>              | <b>53 barrows</b>                               | <b>238</b> | <b>87</b>                         |   |

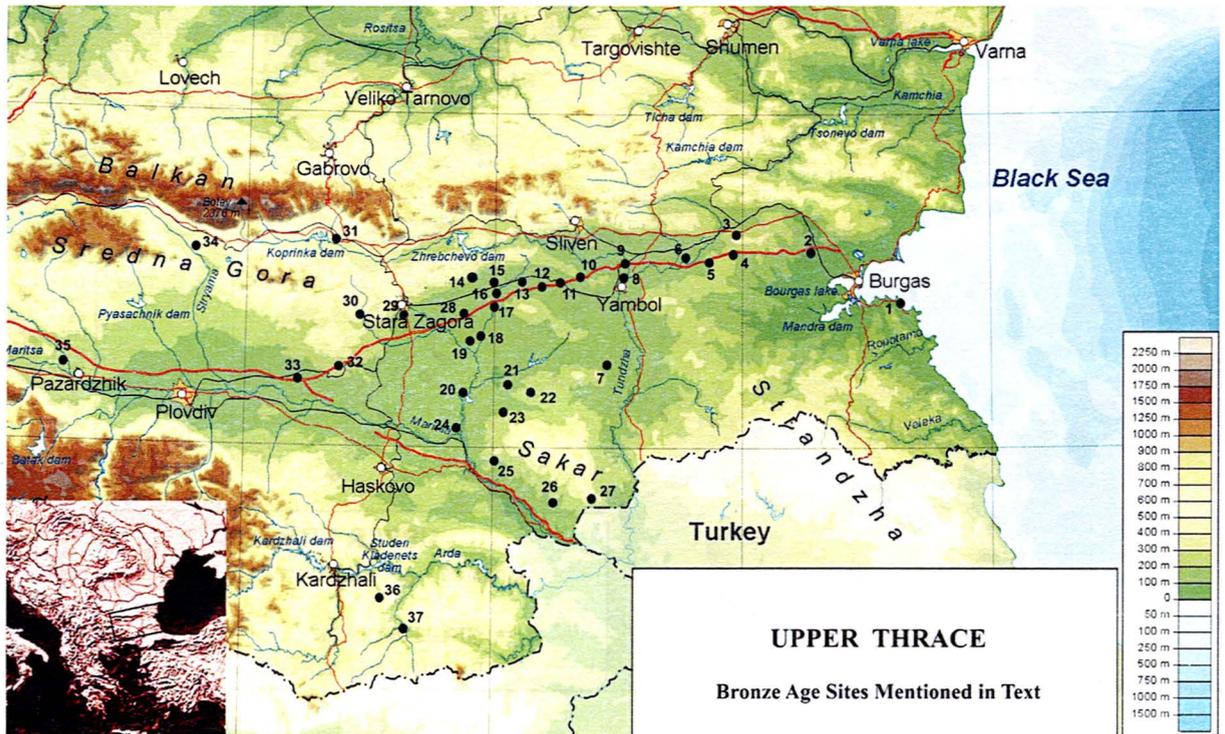
**Table 2. Upper Thrace. Calibrated radiocarbon dates from Early Bronze Age barrow graves.**

OxCal v4.2.4 Bronk Ramsey (2013); r:5 IntCal13 atmospheric curve (Reimer et al 2013)

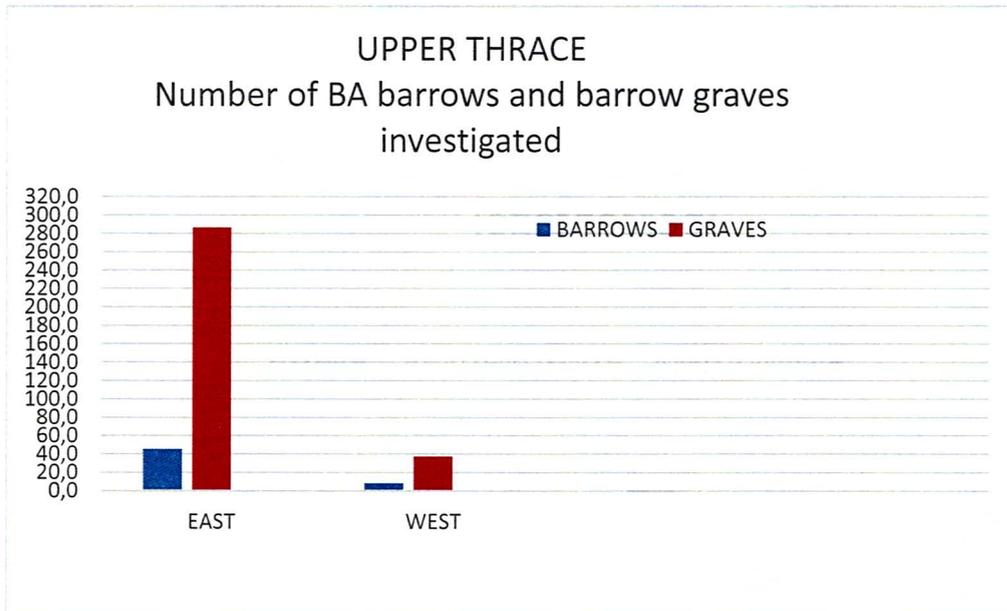




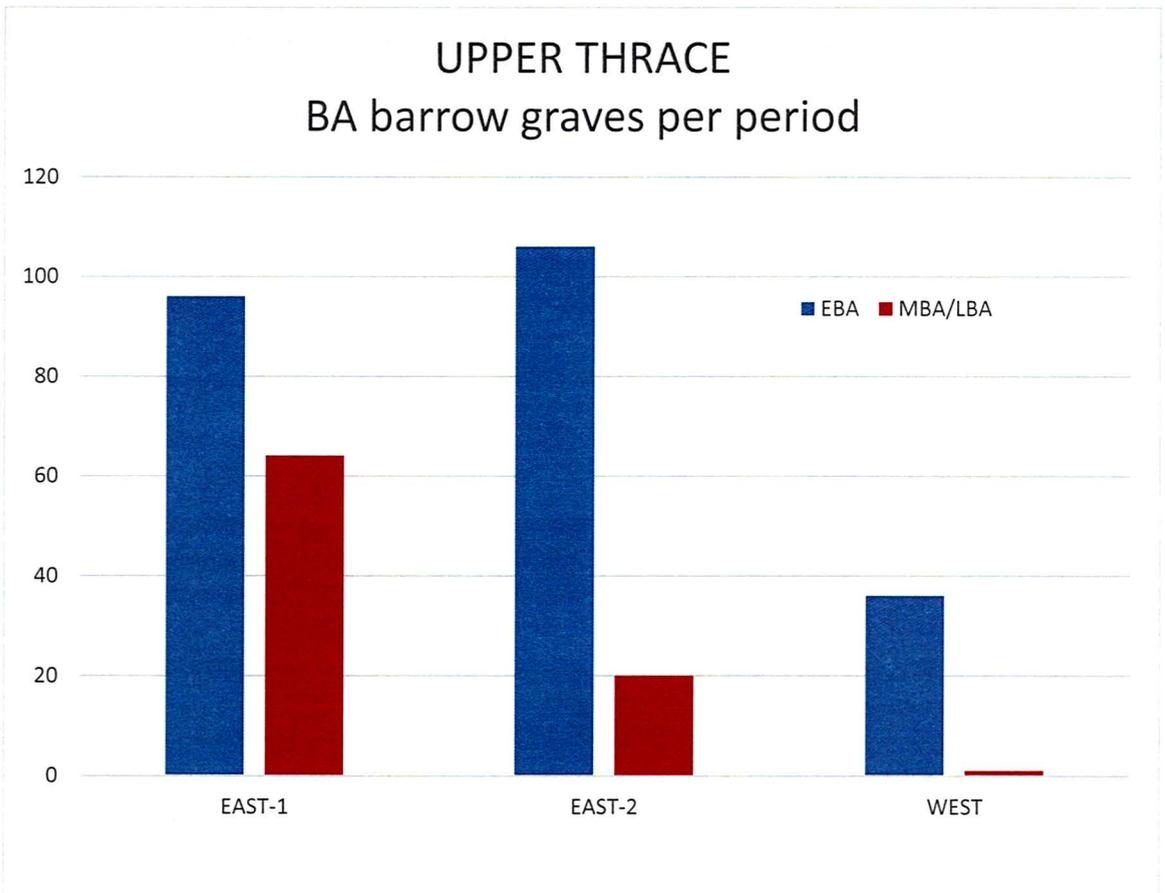
**Fig. 1. Upper Thrace. Bronze Age Barrows Investigated.** 1. Debel/Deultum, barrow 1; 2. Debel/Deultum, barrow 2; 3. Karnobat, “Gyaurska” barrow; 4. Karnobat, “Chatalevo” barrow; 5. Venets, “Tonchova” barrow; 6. Straldza I, barrow 1; 7. Straldza II, barrow 3; 8. Zimnitsa, barrow 1; 9. Irechekovo, barrow 1; 10. Mogila, barrow 1; 11. Kamen, “Gabrova” barrow; 12. Kamen, “Shekerdza” barrow; 13. Drazovo, barrow 1; 14. Boyanovo, “Lozyanska” barrow; 15. Boyanovo, Golyam Kairak, barrow 1; 16. Boyanovo, Golyam Kairak, barrow 3; 17. Popovo, “The big barrow”; 18. Malomirovo, “The Big barrow”; 19. Malomirovo, barrow 2; 20. Sinapovo; 21. Tvarditsa; 22. Izvorovo, barrow 1; 23. Izvorovo, barrow 1; 24. Sokol; 25. Targovishte; 26. Kovachevo; 27. Pet mogili, barrow 2; 28. Ovchartsy, barrow 1 “The big barrow”; 29. Ovchartsy, barrow 2; 30. Ovchartsy, barrow 3 “Barrow in the vineyard”; 31. Malka Detelina, “Manchova” barrow; 32. Malka Detelina, “Tanyo Koleva” barrow; 33. Malka Detelina, “Kurdovala” barrow; 34. Golyama Detelina, “The small barrow”; 35. Golyama Detelina, “The Big barrow”; 36. Golyama Detelina, barrow 4; 37. Beli Bryag, Chitashki mogili, barrow 5; 38. Troyanovo, “Kangalova” barrow; 39. Troyanovo, barrow 1; 40. Troyanovo, “Chernyova” barrow; 41. Mednikarovo, barrow 1; 42. Mednikarovo, barrow 2; 43. Mednikarovo, barrow 3; 44. Mednikarovo, barrow 4; 45. Mednikarovo, barrow 6; 46. Benkovski, barrow 1; 47. Benkovski, barrow 2; 48. Merichleri, barrow 1; 49. Bratya Daskalovi, “Malkata momina” barrow; 50. Dolno Sahrane, barrow 1; 51. Dolno Sahrane, barrow 2; 52. Svoboda; 53. Stambolovo.



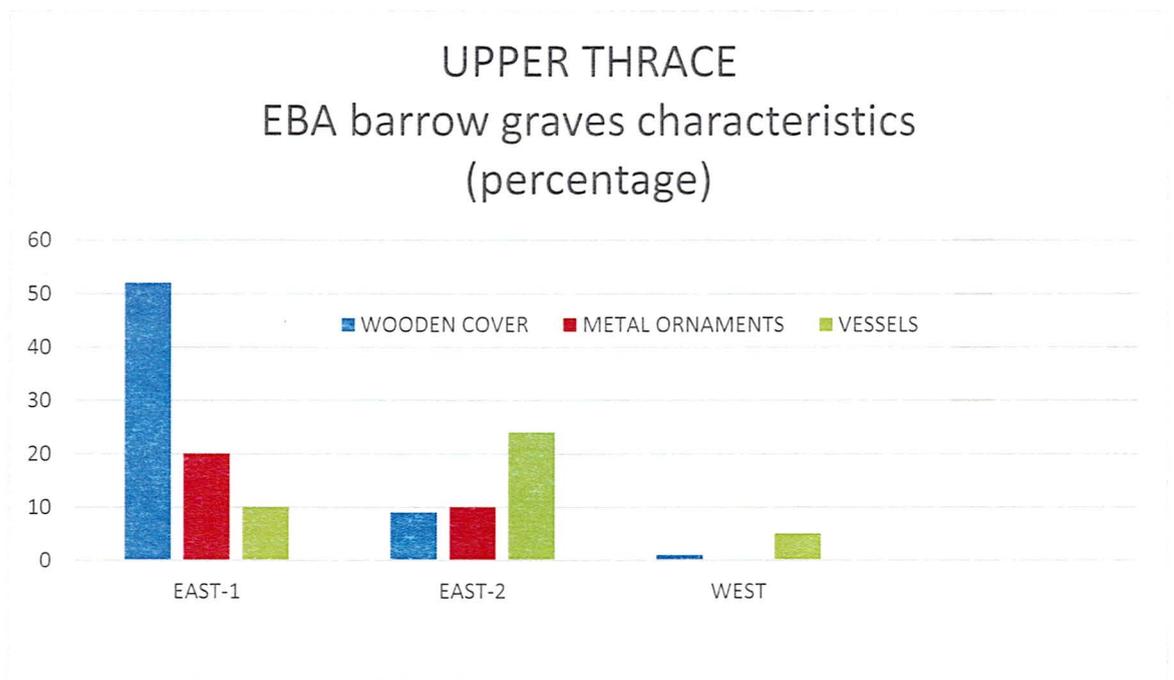
**Fig. 2. Upper Thrace. Bronze Age Sites Mentioned in Text.** 1. Chernomorets – Akladi Cheiri; 2. Vratitsa; 3. Karnobat – Bada bunar; 4. Dragantsi; 5. Devetak; 6. Malenovo; 7. Drama; 8. Veselinovo; 9. Zavoi; 10. Chokoba; 11. Kermen; 12. Bikovo; 13. Konevo; 14. Tell Karanovo; 15. Tell Nova Zagora; 16. Tell Ezero; 17. Tell Dyadovo; 18. Radnevo; 19. Znamenosets; 20. Tell Galabovo; 21. Ovchartsi II; 22. Polski gradets; 23. Madrets; 24. Simeonovgrad-Asara; 25. Kolarovo; 26. Levka; 27. Mihalić; 28. Zagortsi; 29. Bereketska tell; 30. Sveti Kirilovo; 31. Kazanlak; 32. Yazdach; 33. Cherna Gora; 34. Dabene; 35. Tell Yunatsite; 36. Tatul; 37. Ada tepe.



**Fig. 3.** Upper Thrace. Number of Bronze Age Barrows and Barrow Graves investigated.



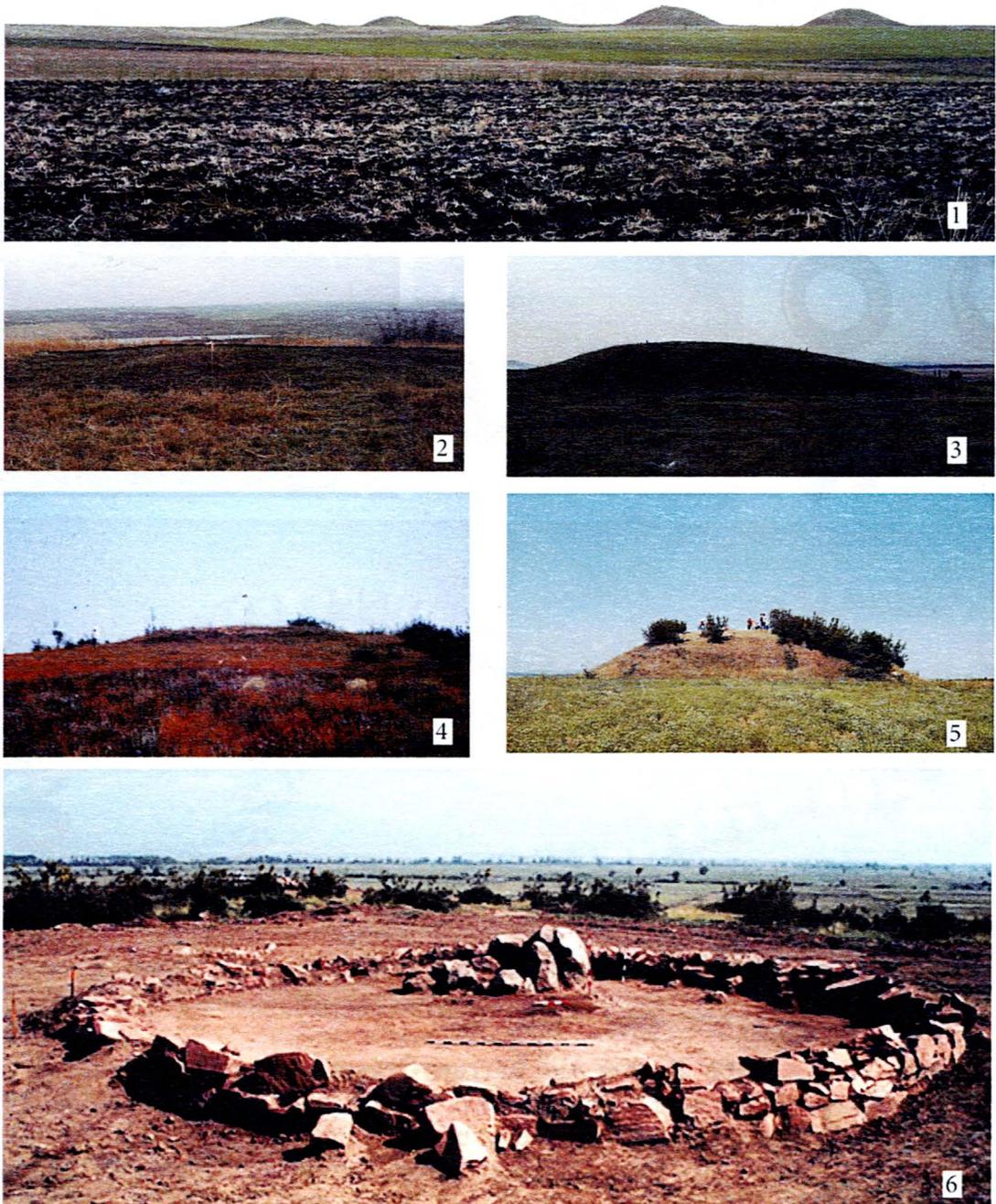
**Fig. 4.** Upper Thrace. Number of Bronze Age Barrow Graves (per period).



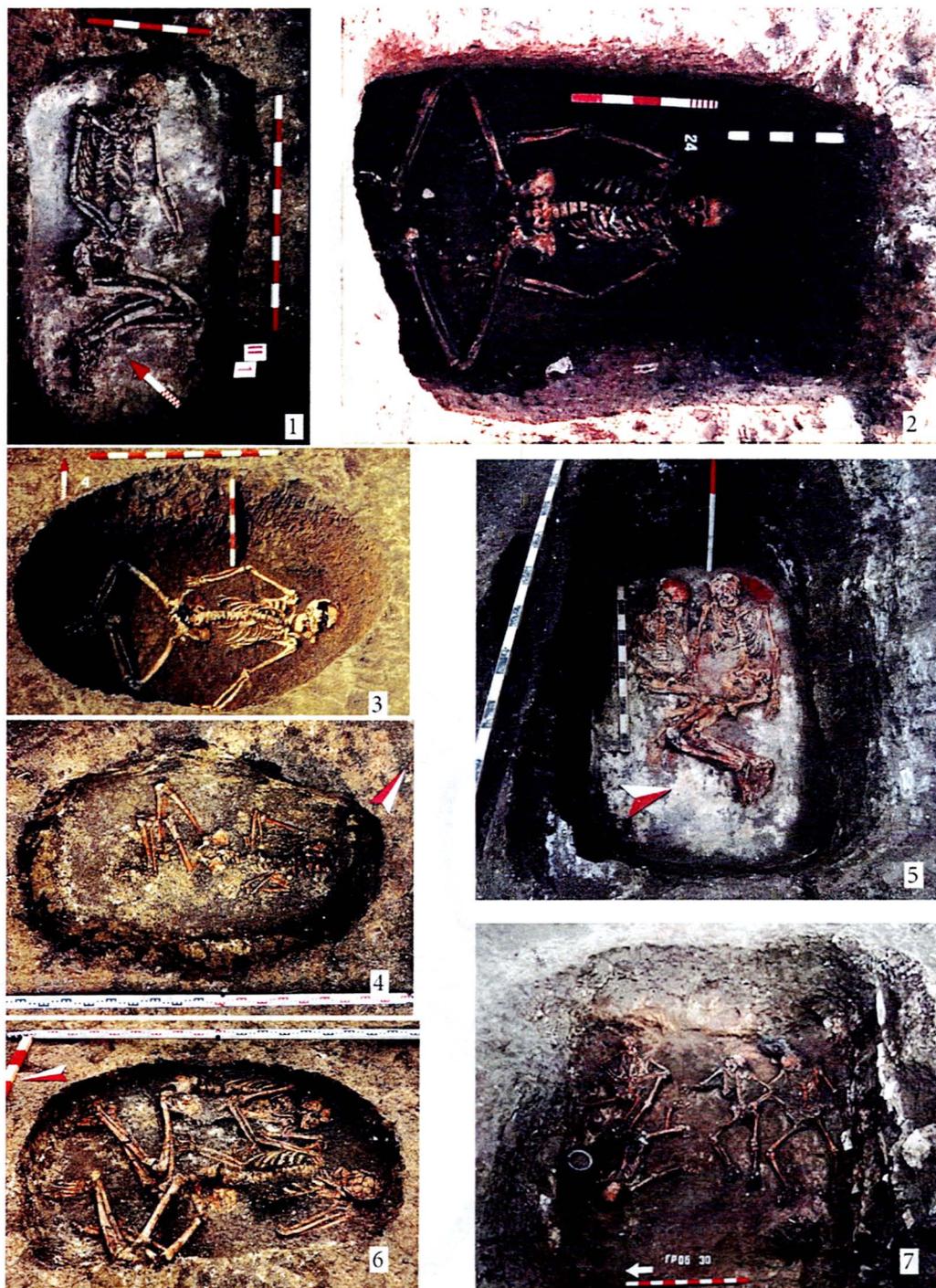
**Fig. 5.** Upper Thrace. Early Bronze Age Barrow Graves Characteristics (percentage).



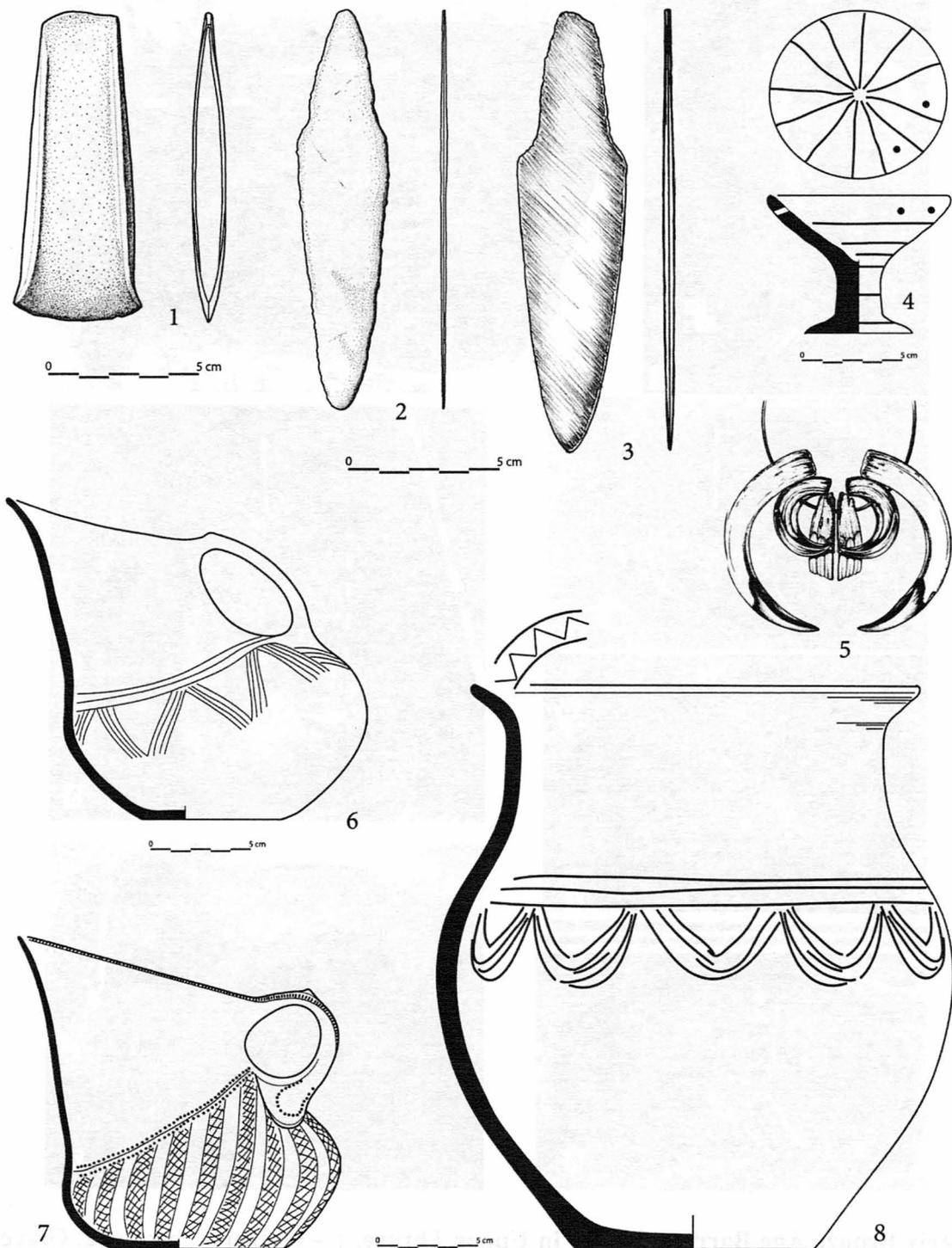
**Figure 6. Upper Thrace. Early Bronze Age Barrow Graves Gold and Silver Jewelry.** 1. Pet mogili, barrow 2, Grave No.3 (after Kancheva-Ruseva 1994; 2 – Straldza I, barrow 1, Grave No.1; 3 – Zimnitsa, barrow 1, Grave No. 5; 4 – Drazevo, barrow 1 (after Iliev, Bakardziev 2008); 5-6 – Troyanovo, barrow 1, Grave No. 2; 7 – Mednikarovo, barrow 4, Grave No.1; Troyanovo, “Chernyova” barrow, Grave No. 6.



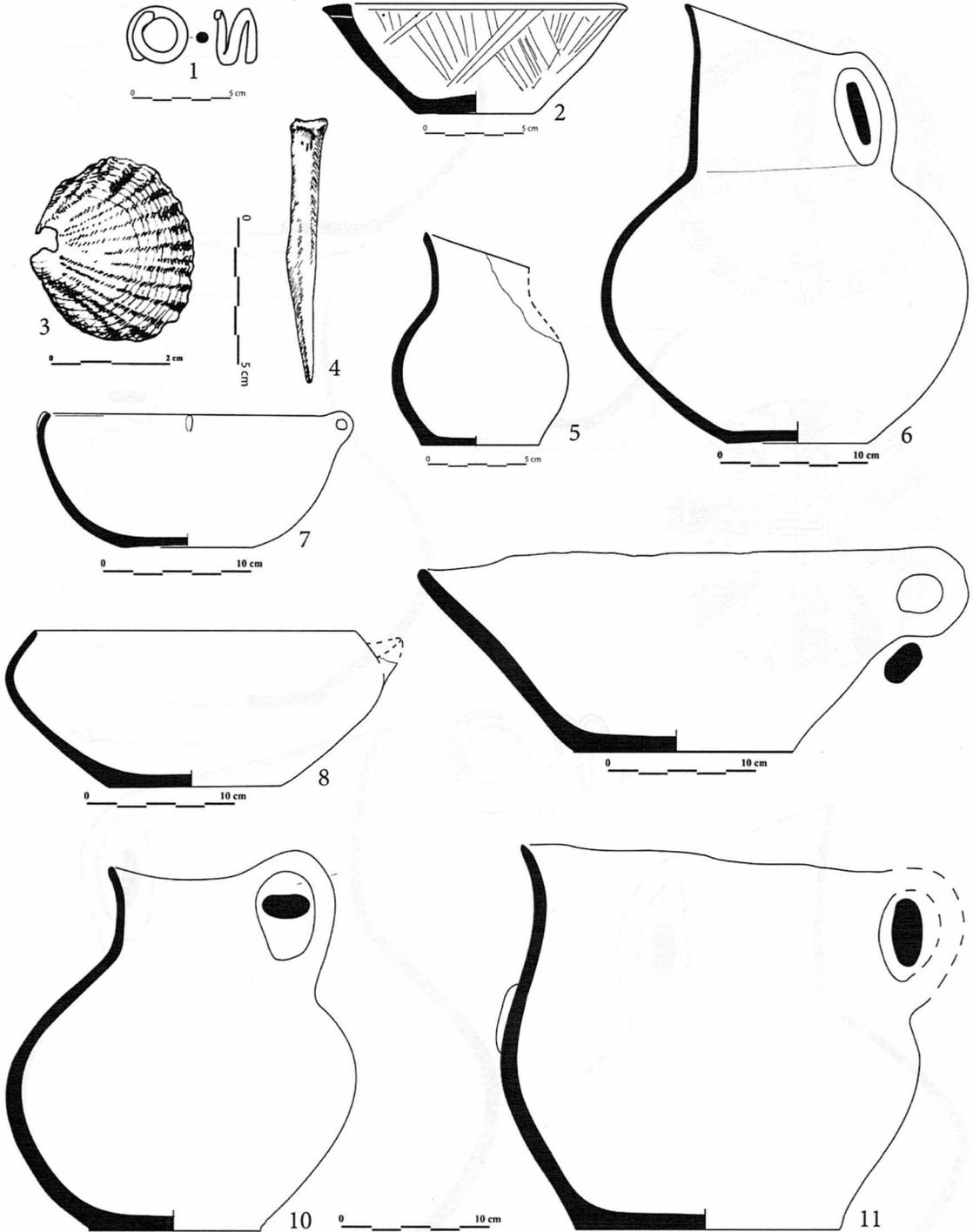
**Pl. 1. Bronze Age Barrows in Upper Thrace.** 1 – Pet Mogili barrow necropolis; 2 – Ovcharts, barrow; 3 - Kamen, “Gabrova” barrow (after Dimitrova 2014); 4 - Troyanovo, “Chernyova” barrow; 5 - Boyanovo, “Lozyanska” barrow (after Agre 2015); Drazevo (after Iliev, Bakardziev 2008).



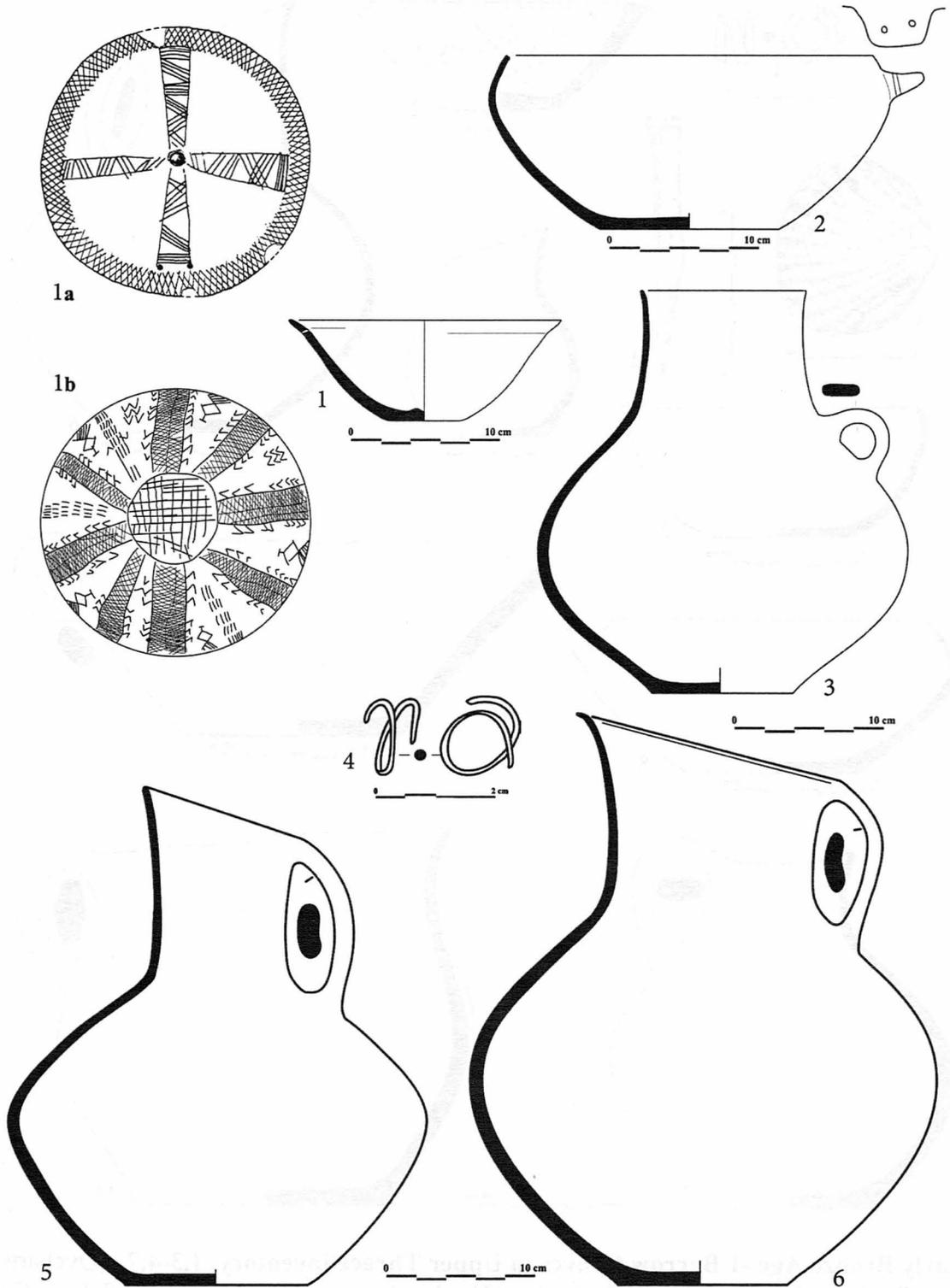
**Pl. 2. Early Bronze Age Barrow Graves in Upper Thrace.** 1 – Ovchartsi, barrow 2, Grave No.1; 2 - Mogila, barrow 1, Grave No. 24 (after Iliev, Bakardziev 2006); 3 - Troyanovo, “Cherniova” barrow, Grave No. 4; 4 - Beli Bryag, feature 2, Grave No.1; 5 - Boyanovo, Lozyanska barrow, Grave No.4 (after Agre 2015); 6 - Beli Bryag, feature 3, Grave No.1; 7 – Kamen, “Gabrova” barrow, Grave No. 30 (after Dimitrova 2014).



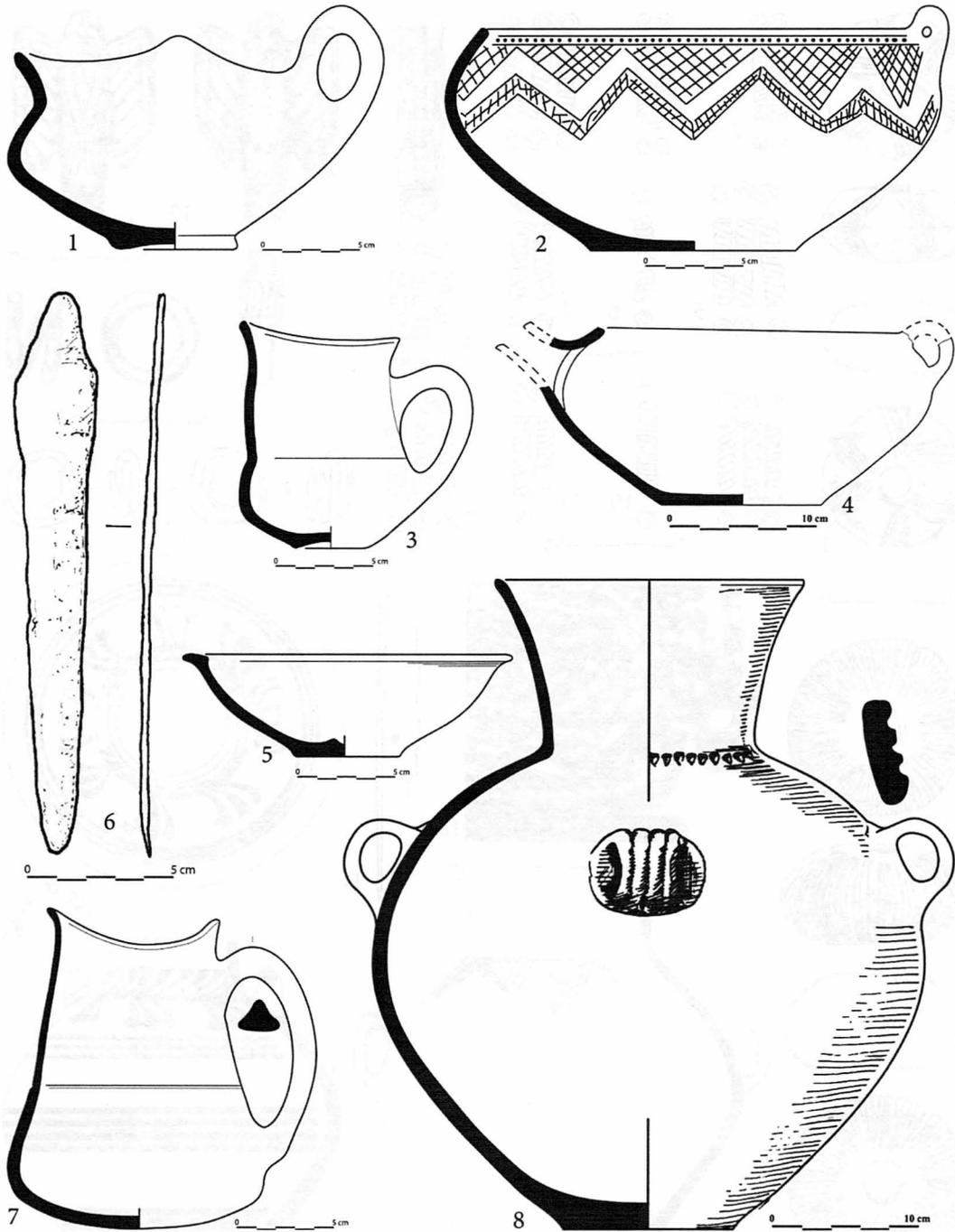
**Pl. 3. Early Bronze Age -1 Barrow Graves in Upper Thrace inventory.** 1-8. Kamen, Gabrova barrow, Grave No. 30 inventory (after Dimitrova 2014). 1-3 – copper/bronze; 5 – boar tusk adornment (graphic reconstruction); 4,6-8 – ceramics (4 – red ochre painting, 6-8 – incised decoration).



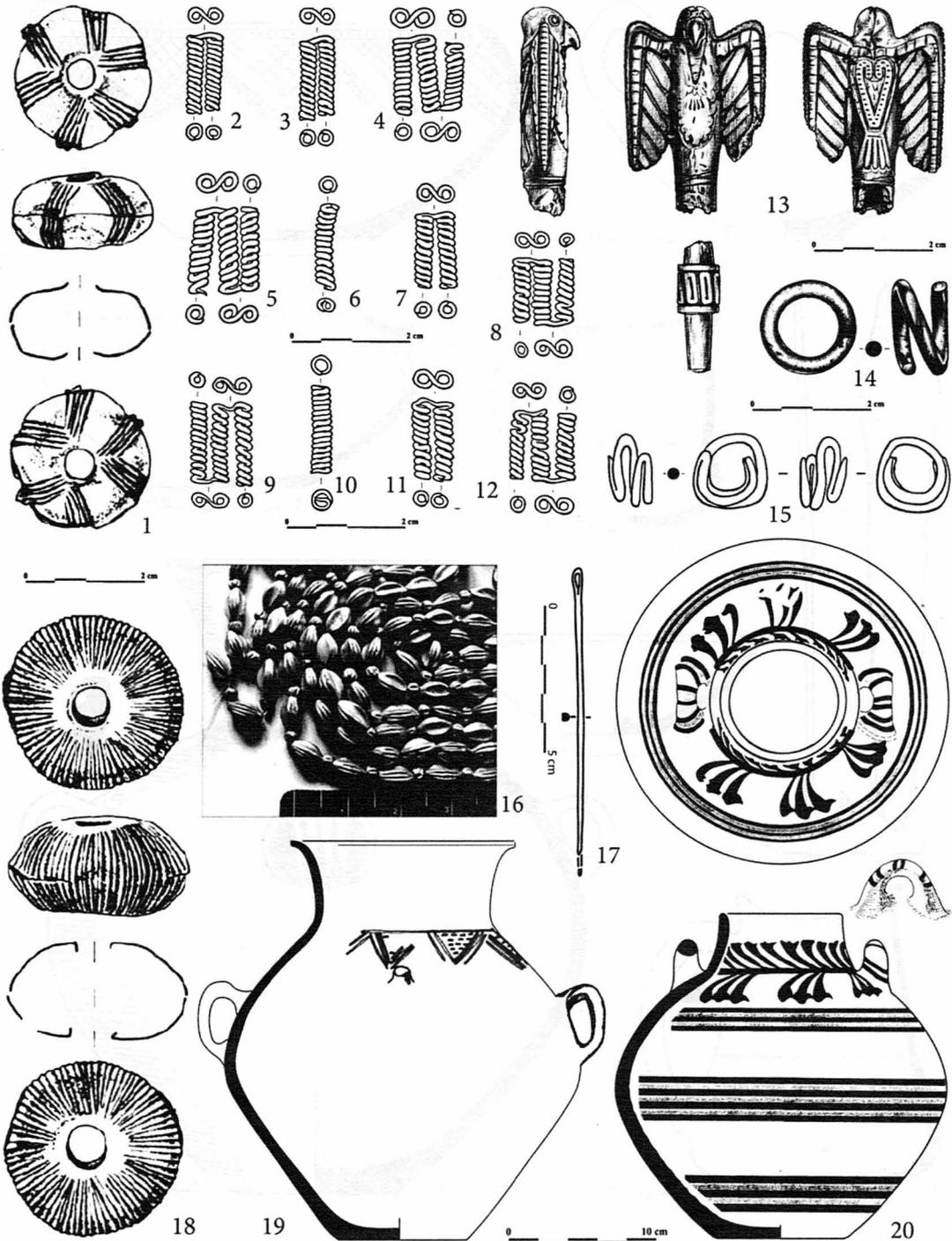
**Pl. 4. Early Bronze Age -1 Barrow Graves in Upper Thrace inventory.** 1,3-4,7 – Ovchartsî “The big barrow”, Grave No.12; 2,5-6 – Ovchartsî “The big barrow”, Grave No. 10; 8-11 – Golyama Detelina, “The big barrow”, Grave No. 24 (after Kanchev 1991) inventory. 1 – copper, 3 – shell, 4 – bone, 2,5-11 – ceramics.



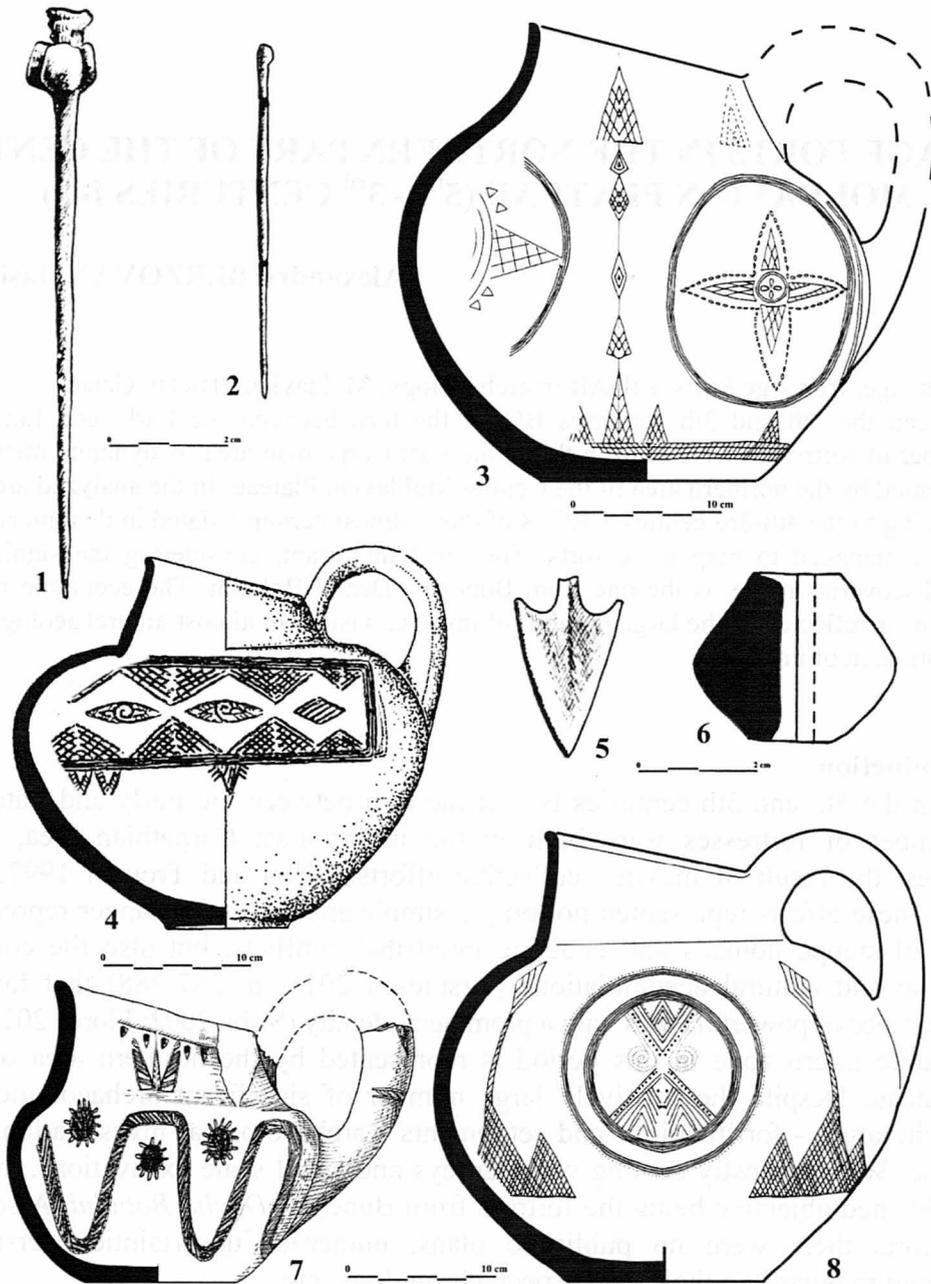
Pl. 5. Early Bronze Age -1/2 Barrow Graves in Upper Thrace inventory. Mednikarovo, barrow 4, Grave No. 2 inventory (after Panayotov, Alexandrov 1995). 1-3,5,6 – ceramics; 4 – copper.



**Pl. 6. Early Bronze Age -3 and Middle Bronze Age Barrow Graves in Upper Thrace inventory.** 4-5 – Ovchartsı “The big barrow”, Grave No. 3a: EBA-3; Irechekovo, grave No. 7: EBA-3 (after Iliev, Bakardziev 2009); 1,3 - Irechekovo, Grave No.10: MBA (after Iliev, Bakardziev 2009); 6,8 – Debelt, Grave No. 3 (after Leshtakov 1995); Boyanovo, “Lozyanska barrow”, Grave No.4: MBA (after Agre 2015). 1-5,7,8 – ceramics; 6 – bronze.



**Pl. 7. Middle Bronze Age Barrow Graves in Upper Thrace inventory.** 1,16,18-19 – Izvorovo (after Borislavov 2010); 2-12,14-15,17,20 – Ovchartsi, “The big barrow”, Grave No.7; 13 – Kamen, “Shekerdza barrow”, grave No.1 (after Dimitrova 2014); 14 – Kamen, “Shekerdza barrow”, grave No.4 (after Dimitrova 2014). 1-2,14-16,18 – gold; 13 – bone; 17 – bronze; 19-20 – ceramics.



**Pl. 8. Late Bronze Age Barrow Graves in Upper Thrace inventory.** 1-2,6,8 - Golyama detelina, "The small barrow", Grave No.2 (after Kanchev 1991); 3,5 - Golyama detelina, "The small barrow", Grave No. 3 (after Kanchev 1991); 7- Kolarovo - stray find (after Stoyanov, Nikov 1997); 4 - Nova Zagora, flat necropolis (after Kanchev 1991). 1-2,5 - bronze; 3-4,6-8 - ceramics.