

## LOCAL CULTURAL SETTINGS AND TRANSREGIONAL PHENOMENA: ON THE IMPACT OF A FUNERARY RITUAL IN THE LOWER DANUBE IN THE 4<sup>TH</sup> MILLENNIUM BC

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**Rezumat:** În acest articol ne-am propus să aducem în prim-planul analizei arheologice un ritual funerar cu o prezență mai curând discretă la Dunărea Inferioară, contextul cultural-arheologic fiind reprezentat de fenomenul înmormântărilor tumulare din mileniul al IV-lea î.Hr. Principala caracteristică a acestui ritual este poziția dorsal-întinsă a defunctului, la care adăugăm lipsa inventarului și prezența ochrului. Pentru a ne apropia cu analiza de originea acestui ritual am reluat abordările legate de prezența sa în prima jumătate a mileniului al IV-lea î.Hr. în cadrul culturilor Kvityana și Cernavoda I. Dacă în cazul primei culturi menționate acest ritual este unul identitar, în ce privește Cernavoda I nu avem dovezi directe care să lege mormintele cu defuncți așezați dorsal-întins de această cultură. Prin urmare originea acestui ritual în cadrul mormintelor tumulare din a doua jumătate a mileniului al IV-lea î.Hr., eventual începutul următorului, cercetate în arealul vest-pontic trebuie căutată în arealul nord-pontic, dincolo de cadrul cultural local eneolitic.

**Abstract:** This article aims to raise awareness of archaeological analysis of a funerary ritual the presence of which is rather discrete in the Lower Danube, the cultural archaeological context is represented by the phenomenon of tumular burials in the 4<sup>th</sup> millennium BC. The main feature of this ritual is the extended position of the individual, to which we may add the absence of inventory and the presence of the ochre. In order to more thoroughly analyse the origin of this ritual, we have re-examined evidence related to its presence in the first half of the 4<sup>th</sup> millennium BC in the Kvityana and Cernavoda I cultures. In the Kvityana culture this ritual is characteristic, while for Cernavoda I we have no direct evidence to connect the graves with dead people placed in an extended, dorsal position. Therefore, the origin of this ritual within the tumular graves from the second half of the 4<sup>th</sup> millennium BC, and possibly the beginning of the 3<sup>d</sup> millennium BC, investigated in the West Pontic area should be sought in the North Pontic area, beyond the local Eneolithic cultural framework.

**Cuvinte cheie:** tumuli; ritual; Dunărea de Jos; mileniul IV î.Hr.; cultura Cernavoda I; cultura Kvityana.

**Keywords:** tumuli; ritual; Lower Danube; fourth millennium BC; Cernavoda I culture; Kvityana culture.

### Introduction

The revaluation of certain materials and results 'forgotten' or 'lost' in bibliographies and repositories is a premise that should be undertaken by every archaeologist aware of the prospect of enhancing research. This necessitates the existence of a certain mentality of researchers in establishing and defining their relationship with posterity and an exemplary institutional behaviour as regards the preservation of movable heritage and of site archives/ stocks. In Romanian archaeology revisiting old investigations is long-practiced. This exercise is rooted first of all in the unexplored nature of discoveries; for important parts of the archaeological excavations are still unpublished or only summarily/ succinctly presented in more or less extended/ relevant research reports. The stage of evolution of the discipline was also important, which, at one point, decided on the relevance of the published results. This is the case of some research carried out more than four decades ago at Vitănești (Teleorman County) (Leahu and Trohani 1979).

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### **The Vitănești investigations**

In 1976 the National Museum of Romanian History investigated two tumuli located within the commune of Vitănești (Teleorman County) (Leahu and Trohani 1979), and a third was excavated in 1983 (Leahu and Trohani 1986). The three tumuli were located approximately 800 m south of the Bucharest-Alexandria national highway (DN6) and east of Vitănești village. The first tumulus contained prehistoric burials, the second contained archaeological features attributed to historical periods that are not of interest to the proposed topic/ issue. In order to have access to a somewhat broader local context, we also discuss the finds from tumulus III. We extracted the main descriptive data from published archaeological reports (Leahu and Trohani 1979; 1986). From the site archive we added some pictures taken during the investigations.

Tumulus I, which had an irregular shape, was flattened because of agricultural works (Plate IV), with diameters of 15 m and 13.30 m and 0.75 m high from ground level at the time of the investigations. Following archaeological excavations, it was established that the actual diameters of the tumulus were 10.50 m (NE-SW) and 11 m (NW-SE), while the height was 1.10 m from the level from which it had been raised. The mantle, with a maximum height of 0.70-0.80 m, was made of brown clay with blackish and bluish spots. It overlapped a yellowy compact loamy sand layer, which represented the ancient level (Plate IV.3, 4). Three inhumation graves were found in the tumuli, one of which, Gr.1, was Turkic (11th-13th centuries), while Gr. 2 and Gr. 3 were prehistoric (Plate V).

Grave no. 2 (Gr. 2), which represents a secondary burial, was located in the centre of the tumulus with pit base 1.25 m deep. The pit had an irregular shape, the east end was straight, the north and east margins were rounded / irregular. The maximum size of the pit was about 2 x 1.5 m. An adult male was placed at the bottom of the pit. He was oriented in a west-east direction. The deceased was lying supine with the upper limbs alongside the body, while the lower limbs were bent at the knees and initially raised, subsequently falling to the left side. Traces of ochre were identified on the skull, near the shoulders, by the pelvis and near the left palm (Plate V.1). No other grave goods were found (Leahu and Trohani 1979: 128).

Grave no. 3 (Gr. 3), which represents the primary burial, was located in the centre of the tumulus. The grave pit had a small step in the north-east and was rectangular with rounded corners. The maximum pit sizes were 1.80 x 0.80 m. At the bottom, -0.90/1 m from the ancient ground level, a female adult was found in an extended position. The skull was oriented towards north-east, the lower limbs to south-west (Plate V.2). No grave goods were found inside the burial (Leahu and Trohani 1979: 128).

In tumulus III, 2.10 m high and 56 x 52 m in diameter (Plate VI.1), two inhumation graves were discovered. The primary grave (Gr. 1), found in the centre of the tumulus in a rectangular pit covered with wooden beams, 1.20 m deep, reached a maximum depth of -3.45 m, was lying supine, with the lower limbs initially flexed and raised, subsequently fallen on both sides (Froschlage). Ochre lumps were placed near the skull, the pelvis and the lower limbs (Plate VI.2). In the secondary burial (Gr. 2), in a rectangular pit about 1 m deep, two individuals were lying in a similar position, with the legs flexed, raised and fallen in rhombus or to the side (Plate VI.3). The upper limbs were stretched along the body or placed on the pelvis. Ochre lumps were placed near the skulls and pelvises of the two individuals (Leahu and Trohani 1986).

### **Argument or why we return to the Vitănești investigations**

The trigger was the unusual nature of the primary burial (Gr. 3) in tumulus I from Vitănești with features not specific to this category investigated north of the Danube (Frînculeasa *et al.* 2015a: 80; 2017a: 155ff.). Within Muntenia, this grave can be categorized as exceptional, both in terms of the ritual and of the stratigraphic context in particular being the primary burial in the tumulus. Moreover, the secondary burial (Gr. 2) displayed typical Yamnaya traits in terms of the ritualistic position (the deceased was oriented towards west, lying supine, the lower limbs were bent from the knees, raised and fallen to the side), therefore leaving no room for further interpretation (Plate V.1) and confirming the stratigraphic situation recorded (Leahu and Trohani 1979: 128).

To provide a broader setting within which to discuss this exceptional discovery, a short presentation of burial rituals present in the Lower Danube tumuli is necessary (Frînculeasa *et al.* 2013; 2015a; 2017a). Starting with the late 4<sup>th</sup> millennium BC and throughout the 3<sup>rd</sup>, a very dynamic world can be perceived, in which a number of rituals, that involved placing the dead in specific positions inside the funerary pits, defined behaviours and traditions, and elements of identity pertaining to cultural entities and phenomena. Taking the body position in the grave pit as a starting point, the following ritual groups must be mentioned in a general chronological order: GR 1 – body in side-crouched position; GR 2 – body lying supine, flexed lower limbs and raised knees; GR 3 – body in

extended position. The initial position (GR 1) occurs in the first tumular burials (the last third of the 4<sup>th</sup> millennium BC – the beginning of the 3<sup>rd</sup> millennium BC). The second position (GR 2) is typical of the first half of the 3<sup>rd</sup> millennium BC (Frînculeasa *et al.* 2015a), while the last (GR 3) is found in burials attributed to the Katakombanaya phenomenon (circa the second half of the 3<sup>rd</sup> millennium BC). Regarding the last ritual group we should mention that all the identified features were secondary burials in mounds that had already been raised in the first half of the 3<sup>rd</sup> millennium BC by Yamnaya communities or those preceding them (Toshev 2013: 72; Frînculeasa *et al.* 2017a: 150). During the course of their evolution, some secondary rituals occurred and/or coexisted amongst these three main groups. Thus, burials which exhibit the characteristics of the last ritual group (GR 3) can be encountered relatively isolated during the last quarter of the 4<sup>th</sup> millennium BC. We should specify that the catacomb, the defining structure of Katakombanaya burials, is not found in this earlier chronological phase (Frînculeasa *et al.* 2017a: 150).

The Vitănești discovery enables an analysis of this ritual within the boundaries of the tumular phenomenon, a return to its origins, and by considering the Cernavoda I funerary features as well. To this should be added the opportunity to include these finds within the current state of research and to integrate them in the new debates (Frînculeasa *et al.* 2017a: 273-4). The results of some palaeogenetic (Allentoft *et al.* 2015; Haak *et al.* 2015) and isotopic (Gerling 2015; Kaiser 2017) analyses have brought to the fore the issue of Indo-Europeanization and its relation to the kurgan/migration phenomenon (Gimbutas 1979; 1993), a much debated topic (Gogâltan 2016), which concerns both Western (Heyd 2017; Kristiansen *et al.* 2017; Anthony and Brown 2017) and Eastern (Kleyn 2017; Kleyn *et al.* 2017) research.

### **South-western Muntenia and the tumular phenomenon**

The Vitănești tumuli are part of a very well-defined regional context. In this south-western part of Muntenia, administratively located in Teleorman County, a first assessment at the end of the 19th century mentioned 145 'knolls/ hummocks' which can be seen as tumuli (Georgescu 1897). Almost a century later their number would reach 235 (Spiru 1996: 82-85), but field investigations conducted over the past decade have led to the mapping of 351 tumuli, which is unlikely to be the actual number because there are still unresearched areas.

The tumuli are particularly located in the southern half of the county, namely the Danube meadow, as far as the south of the Găvanul-Burdea Plain, the west of the Burnazului Plain and the east of the Boianului Plain, with the northern boundary reaching the absolute altitude of 200 m. Regarding the general placement of tumuli, one may note that they were raised mainly above the elevation of 80 m, in the marginal areas of interfluves and less in the plain area proper.

If the earliest cartographic representations of tumuli in the area in question appear on the 1790-1791 map by the Austrian colonel Friedrich Specht ('Militarische Carte der Kleinen oder oesterreichischen und grossen Wallachei') (Plate I.1), the 'Szathmary's Map' (or 'Charta României Meridionale', i.e. 'Map of southern Romania'), made in 1864, probably shows the first representation of the 'Măgura lui Pisciă' (Plate I.2). The military maps from the late 19<sup>th</sup> century and the early 20<sup>th</sup> century render the tumuli more accurately, as their strategic importance is easily understandable (Plate I.3).

In addition to the three tumuli excavated at Vitănești, very few others have been investigated, although there have been some rescue interventions, and the burials found were assigned to several chronological periods. Thus an 'ochre tumulus' was researched by Emil Moscalu in 1980 at Lăceni, about 11 km north-north-west of Vitănești (Stoia 1981: 371, nr. 69). In 1969 a tumulus dated to the Geto-Dacian age, the 1<sup>st</sup> century BC, had also been excavated at Lăceni (at 'Gârleli' point), while another from the same period was uncovered in 1974, in the neighbouring village of Orbeasca de Sus, at 'Pătan' point (Moscalu 1977).

A tumulus with an 'ochre grave' ('Măgura cu Corni') at Băcălești underwent unauthorised 'research' by the village history teacher in 1976 (Călmățui de Sus commune). Finding a grave and obviously not knowing how to further proceed, he informed the museum of Alexandria where the archaeologist Emil Moscalu happened to be at the time and who latter eventually investigated it. Limited information regarding the archaeological context was preserved only in the notes of the priest Ioan Spiru, an amateur archaeologist. According to Spiru, there was a well-preserved human skeleton, in crouched position, with traces of ochre, with no other grave goods. In addition, a wooden 'bridge' had been placed above the buried person in order to protect him/ her (Spiru 1996: 24). There is unconfirmed information about another tumulus with an 'ochre grave' that was investigated during rescue excavations by George Trohani on the outskirts of Văceni village (Drăgănești Vlașca commune), near DN 6, about 9 km north-east from Vitănești (Spiru 1996: 61).

We conclude this brief presentation of the tumuli finds with mention of the two accidental discoveries which have become emblematic: the 'solar chariot' from Bujoru (Moscalu and Beda 1988) and the 'princely grave' from Peretu (Moscalu 1986).

Returning to the Vitănești tumuli, we suggest they should be assigned to a micro-region defined by the interfluvium of the Vedea and Teleorman rivers (between Alexandria and Vitănești), where almost 80 tumuli of various sizes, ranging from 20 m in diameter and 0.50 m high to 50-60 m in diameter and heights reaching 5 m, have been recorded over an area of roughly 100 km<sup>2</sup> (Plate II).

Of the tumuli investigated at Vitănești, today only 'Măgura lui Piscă' and 'Tumulus I' still survive but with much reduced sizes, while 'Tumulus II' is completely destroyed. Repeated agricultural works, mainly ploughing with large machines, has led to the flattening of the tumuli, which is shown by the increased diameters and decreased height. Thus, tumulus I is currently about 30 m in diameter and less than 0.50 m high, while tumulus III has diameters of 60 x 64 m and is approximately 2 m high (Plate III).

### **The Lower Danube and extended burials: brief presentation (Fig. 2)**

In Romania, the tumuli in which the dead were placed in an extended position were investigated at Anadalkioi T. I/ Gr. 1 (Schuchhardt and Traeger 1919: fig. 3), Suharu de Jos (Nicolăescu-Plopșor 1932; Berciu 1939: 82, fig. 96), Vitănești T. I/ Gr. 3 (Leahu and Trohani 1979: 128, fig. 2, 3/1), Corlăteni/ Gr. 2 (Comșa 1982: 88), Holboca (Comșa 1985), Chilia Veche T. II/ Gr. 2 (Vasiliu 1995: 59), Frecăței T. II/ Gr. 1 (Vasiliu 2004: 12, pl. VI/3-4), Slobozia-Hănești/ Gr. 5 (Zaharia *et al.* 2002: 461). We should also mention two graves from Radovanu (Plate XIV.4, 5), although the stratigraphic context is not clear and they are presented rather from an anthropological perspective, with the archaeological information of secondary importance (Comșa *et al.* 2011; 2013). A skeleton lying in an extended position, partially destroyed, with ochre sprinkled over the bones was discovered in 1957 at Largu<sup>1</sup>. These graves did not receive special treatment in Romanian bibliography but were dealt with hastily within the larger issue of tumuli or perhaps associated with debates on the Cernavoda I culture.

Tumular burials in which the deceased were laid in an extended position also occur sporadically in Hungary, such as Gr. 6/ T. II at Tiszavasvári-Deákhalom (Dani 2011: fig. 9-10) (Plate XVIII.2). Other individuals in the same ritual position were uncovered in the same tumulus, of which we should note Gr.3 with a bronze hair ring of a composition that is not specific to the 4<sup>th</sup> millennium BC (Dani 2011: 28), the absolute dating of this feature indicates the late 2<sup>nd</sup> millennium BC (Horváth *et al.* 2013: tab. 2). South of the Danube, in Bulgaria, such graves were identified in tumuli investigated at Goran Slatina, Polsko Kosovo, Kalugeritsa and Riltsi and were linked to the cultural horizons of Cernavoda I and Cernavoda III, which precede the Yamnaya features (Alexandrov 2010a; 2010b; 2011; Alexandrov and Kaiser 2016).

There is another series of a small number of burials with graves dating from the second half of the 3<sup>rd</sup> millennium BC, connected with the Katacombnyaya group/ GR 3 (Burtănescu 2002; Motzoi-Chicideanu 2011). The only features for which we have stratigraphic data, confirmed by absolute dating, are the four tombs found in the Smeeni tumulus (Frînculeasa *et al.* 2017a: 110ff.).

### **Chronology of a ritual: the relevance of stratigraphic and absolute dating**

**A.** As we have seen in the abovementioned examples, stratigraphic situations are not always easy to specify. At Corlăteni there is Gr. 2, with an oval pit, east-west oriented, which overlapped a grave with an individual laid in side-crouched position, with grave goods (Comșa 1982: fig. 3-4) that has analogies in the Zhivotilovka group (Manzura 2016: fig. 6/2). In its turn, this feature is stratigraphically succeeded by a Yamnaya burial of an individual lying supine, with lower limbs flexed and fallen to the side (Comșa 1982: 91). At Vitănești Gr. 3/ T.I was overlaid by Gr. 2, a Yamnaya grave (Leahu and Trohani 1978). At Slobozia-Hănești Gr. 5 was the primary burial, in an irregular oval pit, the skeleton had been disturbed, initially it was probably lying in extended position, without grave goods or ochre. It was overlapped by Gr. 4, poorly preserved, possibly side-crouched to the right, oval pit, west-south-west oriented (Zaharia *et al.* 2002: 460-1, board. XXXVI/1). At Anadalkioi the deceased was put in the centre of the mound and oriented towards the west (Schuchhardt și Traeger 1919, fig. 3) (Plate XII.1), while at Suharu de Jos the skeleton was extended, east-west oriented, with a pot which may be assigned to the Coțofeni culture, placed over the thorax (+18 cm) (Plate XII.3-5)<sup>2</sup>. The mound was small, approx. 15-16 m in diameter, 0.60 m high, and the pit was 0.50-0.55 m deep (Nicolăescu-Plopșor 1932). At Frecăței, in a small-sized (15 x 14 m) (destroyed) tumulus, Gr. 1 (probably secondary) was uncovered in the 'north-eastern quadrant' in a rectangular pit with rounded

corners excavated in the sterile layer, east-west oriented, without grave-goods or ochre (Plate XIV.3). The segment of stone ring discovered in the same mound was not associated with this feature (Vasiliu 2004: 12), although there are authors who publish this information (Alexandrov 2010a: 278). Another case is Gr. 3/ T. II from Chitila Veche, with a side-crouched skeleton which seemed to succeed both Gr. 2, with an individual lying in an extended position<sup>3</sup>, and Gr. 6 in supine position, with flexed legs and ochre (Vasiliu 1995: 58-59). Here, the situation was ambiguous, compounded because of the partial destruction of the mound, where both Gr. 2 and Gr. 6 had pits dug from the ancient level, but Gr. 6 was considered the primary burial. However, a mound was raised over Gr. 2 (which chronologically appears to be Yamnaya according to this description), which increased the initial diameter of the tumulus (Vasiliu 1995: 59).

In Bulgaria such complexes are more numerous (Alexandrov 2011). The first mentioned is T.II from Goran Slatina (Kitov *et al.* 1991) (Plate XVII). In this tumulus Gr. 13 was considered the primary grave, had a rectangular pit, the deceased was in extended position, east-west oriented, without ochre. It was overlapped by another burial with a similar ritual position of the deceased (Gr. 4), that was north-south oriented, with an inventory comprising a pot fragment, silver ornaments, a gold pendant, ochre. The ceramic fragment, placed to the right side of the individual's shoulder, has a decoration (Kitov *et al.* 1991: fig. 33) with analogies at the Celei site (Bujor 1967: 214; Nica 1982: fig. 12/1), from a level dated to the 3<sup>rd</sup> millennium BC (Frînculeasa *et al.* 2017a: note 116). The next burial Gr. 18 was side-crouched in an oval pit, accompanied by grave goods such as a silver hair ring and adornments made of perforated mammal canines and molars (Kitov *et al.* 1991: 58-59). At T. III from Goran Slatina, the primary grave Gr. 9 was laid in the dorsal position, the legs flexed to the side (not raised) or 'semi-supine' (Alexandrov 2011: 309), arms stretched along the body, surrounded by a ring of stones 8.6 m in diameter. It was overlaid by Gr. 6 and Gr. 7 with individuals placed in extended position; while the subsequent burial stage was typically Yamnaya (Gr. 1, Gr. 3, Gr. 8) with the supine position of the deceased, the lower limbs flexed and raised from the knees, with ochre, hair rings and wooden covers (Kitov *et al.* 1991).

A relevant situation could be that of mound I from Polsko-Kosovo (Plate XVIII.3-8). The initial burial (Gr. 1) was surrounded by a stone ring 9 m in diameter. The deceased was in extended position, east-west oriented, the upper limbs placed near the body. Ochre was sprinkled on both the body and the bottom of the pit (Stancev 2002). The secondary graves belonged to the Yamnaya culture, and one is even more recent (Alexandrov 2011: 310-1). At Kalugeritsa, tumulus III, the primary burial (Gr. 4) had a rectangular pit in which there was an individual in side-crouched position, east-west oriented. The inventory comprised a silver hair ring and ochre. Wood had been used to prepare the pit and for the cover as well. The grave was surrounded by a stone ring 11 m in diameter and 0.65 m wide (Mikov 1936). In the next grave (Gr. 3) an individual had been laid in an extended position, without grave goods. In its turn, it was overlapped by two Yamnaya graves, Gr. 1 and Gr. 2, one of which had ochre on the skull (Alexandrov 2011: 311). In the tumulus investigated at Riltsi Gr. 3 was lying extended, south-north oriented, with ochre on the thorax and skull, and ochre lumps as well. It was a secondary burial which overlapped other features with individuals placed in supine position, with their legs raised or placed to the side. From the description, the primary grave (Gr. 4) seems to be Yamnaya (Alexandrov 2011: 311-2).

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This ritual is also encountered at the mouths of the Danube, the Prut and the Dniester, where it is recorded in more than 40 burials (Levițki *et al.* 1996: 59; Manzura 2010: fig. 1; Ciobanu *et al.* 2016: 40), known in the scholarly literature as 'graves with extended and coloured skeletons' (Levițki *et al.* 1996: 59). Regarding the tumular burials east of the Dniester, Y. Rassamakin included this ritual in the Kvityana culture (Rassamakin 1994; 1999; 2013b).

The debates on this ritual are to be found in a number of synthetic or extended studies (Rassamakin 1994: 39-40; 1999: 83-87; 2004a; Levițki *et al.* 1996: 59ff.; Manzura 2010; Ivanova and Toshev 2015: 355ff.), including a critical approach (Agulnikov and Paşa 2008). The presence of these features in the Prut-Dniester interfluvium was connected to the burial traditions of the Kvityana/ post-Mariupol group (Rassamakin 1994; 1999; 2013b) or even to the horizon of the last third of the 5<sup>th</sup> millennium BC (Levițki *et al.* 1996: 66). The graves had oval-elongated or rectangular pits, most of them lack grave goods, however ochre was present, sometimes stone was used in the funeral structure. They appear in the tumuli in rather secondary positions, although primary burials also occur. Chronologies have been proposed depending on the pit shape (Levițki *et al.* 1996: 60ff.; Manzura 2010). They seem to have existed on the north-north-western coast of the Black Sea for

much of the 4<sup>th</sup> millennium BC They precede the Yamnaya burials, succeed the Cernavoda I burials and coexist with the Usatovo and Zhivotilovka groups (Agulnikov and Paşa 2008: 34-35). According to other authors, in the Carpathian-Dniestean forested steppe area they are dated between the Zhivotilovka and the Yamnaya burials and are connected to the latter communities (Manzura 2016: 57), such as the finds from Bursuceni, Dumeni (Manzura 2016: 57), Corlăteni (Comşa 1982: 91) and Holboca (Comşa 1985: 156). It should be noted that in the Kvityana - Zhivotilovka relationship the last mentioned group is more recent (Manzura 2016: 57, 69).

East of the Prut, tumulus II of Sărăteni is very important (Plate XV). The primary grave (Gr. 3), in an extended position, was overlapped by a mantle 10 m in diameter and 1.1 m high. Later, a 'looted' individual, whose position could not be identified, was buried without grave goods, on top of whom a new layer was raised, which altered the initial shape of the tumulus. Several secondary burials, which are typically Yamnaya and Mnogovalikovaya, occurred later (Leviţki *et al.* 1996: 32ff.). As the burials of the individuals lying supine were included in the Cernavoda I-Hadgider culture, this tumulus gave rise to a debate on the possible existence, in the Carpathian - Dniestean area, of a burial horizon that preceded this chrono-cultural horizon, connected with the evolution of Carpatho-Balkan cultures at the end of the 5<sup>th</sup> millennium BC (Leviţki *et al.* 1996: 61ff.) - a conclusion which was regarded with reservations (Rassamakin 2004b: 136) or was abruptly criticised (Agulnikov and Paşa 2008: 34).

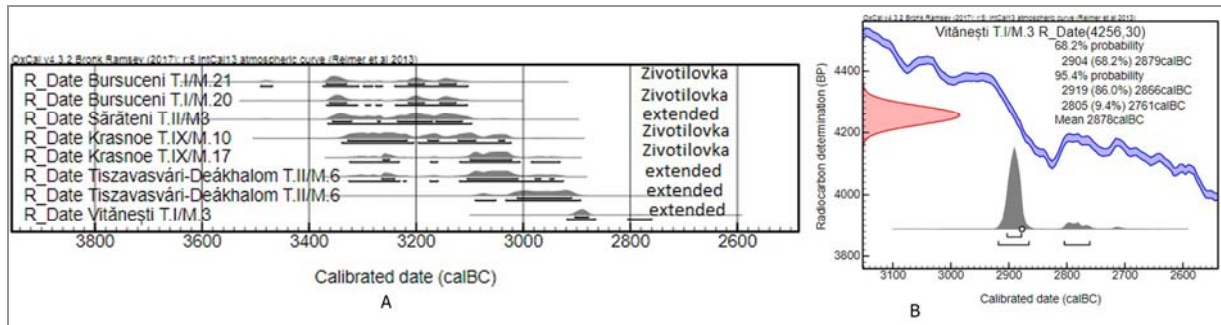
Other stratigraphic information, supported by absolute dates, comes from tumulus I of Sărăteni, with ditch and stone ring (Leviţki *et al.* 1996: 21ff., fig. 3). Thus, Gr. 7 considered as primary - Ly 2454: 5140±40 BP/ 4041-3081 cal BC (Petrenko and Kovaliuk 2003: 108), along with Gr. 14, probably a looted burial taking into account the fact that no bones were found in the pit, were succeeded by a partially destroyed grave (Gr. 2) placed in extended position, then by several Yamnaya graves, among which Gr. 4 - Ly 2476: 4480±50 BP/ 3359-3013 cal BC (Rassamakin and Nikolova 2008: tab. 1, no. 189) contained parts of a wagon and Gr. 5 was dated to: Ly 2459: 4360±30 BP/ 3085-2904 cal BC (Rassamakin and Nikolova 2008: tab. 1, no. 188; Ivanova 2013: tab.1).

In T. I of Crihana Veche, Gr. 14 and Gr. 15 with extended individuals, both with traces of ochre, were overlapped by Gr. 7 with wooden box and cover and disturbed skeletal remains (Agulnikov 1997: fig. 4/2, 4-5), considered early Yamnaya (Agulnikov and Paşa 2008: 32). Let us also mention the Gr. 7/ T. I from Ciumai, with an individual (*infans*) placed extended in an oval pit, under the left arm there was a ceramic fragment painted with a net-like decoration, attributed to the Usatovo group (Plate VII). Traces of ochre were identified on the bones (Ciobanu *et al.* 2016: 32-33). Stratigraphically, the burial was overlaid by Gr. 6 (Yamnaya) (Ciobanu *et al.* 2016: 40). In the Bugeac area, T. 30 from Kochkovatoc is to be noted, with Gr. 7 at its centre, which was the primary burial with an oval pit and circular ditch disposed towards the edges of the mound. The grave was 'looted', so there is no information regarding the position of the deceased. It was overlapped by Gr. 2 with an individual in extended position, without grave goods, which, in its turn, was succeeded by Gr. 6 with Yamnaya ritual and then by Mnogovalikovaya funerary features (Vanchutov *et al.* 1992: 25-28, fig. 7, 8). Gr. 9/ T. 9 from Krasnoe (Plate XI.6) may also be important: it seems to be more recent than Gr. 10 (4467±34 BP) and Gr. 17 (4434±23 BP), both attributed to the Zhivotilovka group (Manzura 2016: 70).

The Brăiliţa cemetery (123 burials, in which 8 individuals were lying side-crouched, while the rest of them were in extended position), given its exceptional nature and its only partial and confusing publication, remains an uncertain reference point which needs to be re-evaluated and considered with much caution. Many of the graves are likely to be dated more recent, to both Katakombnaya and Mnogovalikovaya (Frînculeasa *et al.* 2017a). Others are probably Eneolithic (5<sup>th</sup> millennium BC), but we can also note the presence of Christian burials. According to the published 'plan' (Harţuche 2002: fig. 64) several burials were investigated near a modern pit (no. 3), three of which were in extended position, one had a disc-shaped buckle - Gr. 37 (Middle Bronze Age), while another, Gr. 39, oriented west-east, was probably Christian. Although we do not have all the archaeological data, we note Gr. 40 in the same group lying in extended position in a rectangular pit, oriented east-north-east - west-south-west (Harţuche 2002: 58). The jug with a slightly oblique rim, strap handle, jagged decoration (Harţuche 2002: fig. 89/6, 94/3, 4) may date from the last part of the 4<sup>th</sup> millennium BC, such as those of Ariceştii-Rahtivani (Frînculeasa *et al.* 2014) as well as Ploieşti 'Gara Vest' (Frînculeasa *et al.* 2015a: 218), Ploieşti 'Triaj' T. I/ Gr. 3 (Frînculeasa *et al.* 2013: 17/ 10)<sup>4</sup> or Gr. 70 from Gherăseni (Frînculeasa *et al.* 2017a: 71). In the same nucleus of graves, there are two individuals in side-crouched position, namely Gr. 22 and Gr. 23.

**B.** For grave 6 in tumulus II of Tiszavasvári - Deákhalom (which was not a feature located in the presumed centre of the destroyed mound) (Dani 2011: 28), two dates are available, both obtained

at the same laboratory in Poznań: 4430±30 BP/ 3326-2926 cal BC, 4350±40 BP/ 3091-2926 cal BC (Horváth *et al.* 2013: tab. 3). East of the Prut we shall mention Gr. 3/ T. II of Sărăteni dated Lu-2477: 4530±40 BP (3370-3090 cal BC) (Yarovoi 2000: 16-18)<sup>5</sup>, which indicate a time frame preceding the Yamnaya funerals (Rassamakin 2013a: 134). At Sărăteni Gr. 3/ T. II was the initial burial of a subadult, in an oval pit, with ochre and a cover made of wooden beams (Levițki *et al.* 1996: 32). It was overlapped by another Eneolithic feature - Gr. 11, 'looted', suggesting an early horizon for burials in extended position, which was regarded with reservations (Agulnikov and Pașa 2008: 34ff.); furthermore, the interpretation of published archaeological data is one more argument to reject this suggestion (Rassamakin 2004b: 136-7; Agulnikov and Pașa 2008: 34). Grave 3/ T. I at Vitănești has the date - DeA-12800: 4256±30 BP/ 2919-2761 cal. BC (Fig. 1). It was overlapped by Gr. 2, buried according to the Yamnaya ritual (Leahu and Trohani 1979: fig. 3/2)<sup>6</sup>. Their chronology on the Lower Danube covers the time interval 3050/ 3000 - 2550/ 2500 BC (Frînculeasa *et al.* 2015a; 2017a: 121ff.).



**Figure 1.** Chart of a series of radiocarbon dates from the Zhivotilovka graves and with extended skeletons (A); chart of dates from Vitănești T. I/ Gr. 3 (B).

Grafic cu datele radiocarbon înseriate provenind din morminte Zhivotilovka și cu schelete dorsal-întinse (A); grafic cu data de la Vitănești T. I/ M. 3 (B).

Covering an area stretching from the Don as far as the Siret river, with only 90 tumuli/ around 150 burials (Manzura 2016: 56, fig. 1), Zhivotilovka radiocarbon dates are very few. They are taken from tumuli investigated at Bursuceni (T. 1/ Gr. 20 and Gr. 21) and Krasnoe (T. 9/ Gr. 10 and Gr. 17) (Petrenko and Kovaliuk 2003: tab. 6; Ivanova *et al.* 2005: 106; Rassamakin 2011a: abb. 12a, no. 4, 5). They date from the last quarter of the 4<sup>th</sup> millennium BC, are contemporaneous with the Repin culture finds to the east and precede the Yamnaya funerals (Rassamakin 1999; 2013a: 133; Manzura 2016: 69). The relation with Usatovo is still unclear, although their areas overlap. The map of Zhivotilovka discoveries shows no more than 10 sites in the Usatovo area. As radiocarbon dates indicate (Videiko 1999; Lazarovici 2010; Diachenko and Harper 2016), we believe that Usatovo had an earlier start and might reach the half of the 4<sup>th</sup> millennium BC (Govedarica and Manzura 2011: 54). This chronological relation is indirectly shown by the absence of the Tripolie pots in the inventory of Zhivotilovka funerary complexes (Manzura 2016: 70). Most probably the two cultural groups coexisted for a while. Therefore, based on the limited available data, we shall try to draw a preliminary conclusion that there was a coexistence of this ritual with the onset of Yamnaya funerals and with the Zhivotilovka as well.

### **Towards the origins: Cernavoda I on the Lower Danube and Kvityana north of the Black Sea**

We do not aim to seek to elucidate the origin of this ritual by pushing our analysis as far as the Mesolithic; we only intend to investigate it from the moment of its interaction with the tumular phenomenon. So, in the first half of the 4<sup>th</sup> millennium BC, north of the Black Sea, there was the Kvityana/post-Mariupol group and to the west there was the Cernavoda I (- Hadgidger). With regard to origins, a direct line is still being sought in connection with the emergence of this ritual in the steppe to the north of the Black Sea before the half of the 4<sup>th</sup> millennium BC (Rassamakin 1999: fig. 3.5). Further back in time, a few isolated discoveries in the Lower Danube may be attributed to the last third of the 5<sup>th</sup> millennium BC. Thus, we shall mention the finds in the flat cemetery of Varna I, in which there were 93 individuals in supine position (Slavchev 2015: 370), of which we should emphasise the features with rich inventories such as Gr. 43 or Gr. 6 (Ivanov 1978) as well as the isolated (partially destroyed) tomb of Lungoci, also with remarkable grave goods (Dragomir 1976: 53).



**Figure 2.** Map of funerary finds with skeletons in extended position from the 4<sup>th</sup> millennium BC and contemporaneous cultural areas.

Hartă cu descoperiri funerare cu schelete depuse dorsal-întins din mileniul IV î.Hr. și areale culturale contemporane.

The Cernavoda I culture (-Hadgider, added in order to include a number of early tumular finds in the southern half of Bessarabia and even east of the Prut) covers the Lower Danube area (Muntenia, north-eastern Bulgaria, Dobruja, southern Moldavia and the lower basins of the Prut and Dniester Rivers) (Manzura 1994; 1999) (Fig. 2). It evolved parallel to and came into contact with Cucuteni B/ Tripolie C.I, within a time interval that covers a large part of the first half of the 4<sup>th</sup> millennium BC (Frînculeasa 2016). Few settlements have been discovered, most of them located in Muntenia and Dobruja, but investigations are inconsistent (Hașotti and Popovici 1992; Hașotti 1997; Manzura 1999; Vernescu 2013; Schuster *et al.* 2016). In the Prut-Dniester interfluvium the only settlement is that of Orlovka (Govedarica and Manzura 2011: 52).

To the Cernavoda I culture belongs a small series of flat graves, but tumular ones have also been noted in the south of the Dniester, the Prut and the Danube basins; the typical position is side-crouched, but the dorsal extended has also been suggested. This last group was present at the Brăilița cemetery and a number of tumular graves, although this site, as it is published (Harțuche and Anastasiu 1968; Harțuche 2002), is hardly relevant because there are no dates for any grave of this category which could include it in the Cernavoda I culture. In the monograph of the site, which is confusing, the author included 'with caution and reservations' 123 tombs in the Cernavoda I culture, of which only 8 in side-crouched position, while the rest of them were extended (Harțuche 2002: 127). On analysing, as far as possible, the features and the published material, many things get sifted. At least two side-crouched tombs found at Brăilița may be said to fall under the Cernavoda I culture. Thus, in surface no. 1 (Plate VII), which by the stratigraphic situation indicates the presence of a tumulus, as remarked in the initial publications (Dragomir 1959: 671), Gr. 21 was found below Gr. 20 whose inventory comprised a painted pot with lid, having the shape and decoration typical of the Usatovo culture. The deceased was a sub-adult lying in a side-crouched position to the left, east-west oriented, with an inventory that included a vessel with crushed shells in the paste (Plate VII) and a string made of *Spondylus* and micaceous rock (Harțuche 2002: 51)<sup>7</sup>. Gr. 59 lying crouched on the left side, east-west oriented, had an inventory that contained an amphoroidal vessel (Plate VII) (Harțuche 2002: 62, fig. 59/7) with good analogies in the Cernavoda I milieu, for example at the Ulmeni settlement (Manzura 1999: fig. 7.28/6).

From Muntenia, we mention Gr. 70 from Gherăseni with an oval pit, in which there was an individual in side-crouched position to the right, east-west oriented (Plate IX.1), with an inventory comprised of two vessels (Constantinescu 1994: 105-6, fig. 4/1-2, 4). Of these, one had crushed shells mixed into the paste and was decorated with a cord with motifs resembling some 'small horseshoes' (Plate IX.2), with analogies in the settlements of Chirnogi, Ulmeni, Orlovka, Dereivka

(Plate IX.6-9) (Manzura 1999: fig. 7.13/18; 7.26/1, 3, 5, 6; 7.27/4; 7.29/3; Bruyako *et al.* 2005: fig. 15/14; Kotova 2010: fig. 6/6; Govedarica and Manzura 2015: fig. 15/1).

Dobruja seems to be best represented by Cernavoda I graves. Destroyed/ disturbed graves, which crossed the Boian habitation level, have been found at Isaccea (Marinescu-Bîlcu and Micu 1998: 35). One of these graves revealed a vessel with cord decoration both on the body and on the rim (Vasiliiu 2002: 77, fig. 4/3) (Plate X.5). Also, at Luncavița 'Cetățuie', a similar pot has been found, the context of which is uncertain (Plate X.4) (Vasiliiu 2002: 75, fig. 2/6). Two graves, of which Gr. 2 had been partially destroyed, were found at the Cernavoda site. The deceased in Gr. 1 was crouched to the right side, oriented SSE-NNW, with an inventory comprised of an *askos* vessel and a bitruncated bowl (Plate VIII.1-3) (Nestor 1937: 16, fig. 6-7). The *askos* vessel, which is remarkable, has analogies in a recent find from Sultana. In Gr.75, considered to be Cernavoda I<sup>8</sup>, with a skeleton in side-crouched position to the right, south-north oriented, there was an *askos* vessel lying near the lower limbs (Plate VIII.4) (Andreescu *et al.* 2015: 134). South of the Danube, we should mention Gr. 448 in the Durankulak cemetery which was included in the Cernavoda I culture (Vajsov 2002: 165; Manzura 2005: 51). The adult female was in a crouched position to the left side, possibly laid under a mound ('tumulus H'), and the inventory contained three vessels (Plate VIII.5-8) (Vajsov 2002: abb. 182). In Dobruja, Gr.1 of Baia may also be noted with an individual lying in crouched position to the left side, north-south oriented, with one arm bent and the other extended, brought towards the knees (Lazurcă 1980: fig. 1/3), a position connected to the Cernavoda I-Hadgider ritual (Manzura 1994: 96; 1999: 116). A similar grave was also found at Anadalkioi in T.2 (Schuchhard and Traeger 1919: fig. 4). Regarding the tumular grave of Agigea, data are incomplete and point to an individual laid in a crouched position and an inventory with two fragmented vessels, a small atypical vessel and another included with reservations in the Cernavoda I culture, even though both are missing graphical representations (Hașotti 1997: 131).

Probably the most important Cernavoda I funerary feature is that of Orlovka (Ukraine), where there is information about more than 20 burials (Plate IX.4-5). The individuals were lying in a side-crouched position and were buried 7-10 m away from each other, with no other noticeable traces of tumuli (Govedarica and Manzura 2015: 463). The inventories were made up of pottery (Bruyako *et al.* 2006: fig. 2; Govedarica and Manzura 2015: 463). Although these were not overlapped by tumuli, see Gr. 160 in another group of investigated graves (Bruyako and Agulnikov 2017: fig. 9), such sites in the area have still been excavated (Bruyako and Dzigovskiy 2011). The presence of a flat cemetery is, for the time being, singular in the Cernavoda I cultural milieu, though a possibly similar complex from the same period might be that of Săveni (Muntenia), where we have some information regarding the discovery of at least 9 graves with crouched skeletons (Babeș and Coman 2005: 139, note 2).

### **Cernavoda I and the Eneolithic tumular graves east of the Prut River**

The Cernavoda I tumular finds have been related to a number of Eneolithic graves in the steppe from the mouths of the Prut and the Dniester or the nearby lakes. A few characteristics may be mentioned: the side-crouched position, rings placed to the edges of the mound, interrupted circular ditches, stone platforms, and Tripolie CI pottery. The evidence on Cernavoda I is rather indirect, related to the Tripolie pottery or that with crushed shells mixed in the paste which in many situations was in secondary position. There is also a series of tumuli in which the graves seem disturbed, the term 'looted'<sup>9</sup> being most commonly used (Rassamakin 2004b: 136). They were assimilated/ included into the same cultural group due to the few undisturbed tombs with individuals laid in side-crouched position, with common elements (ditch, ring, painted pottery or pottery with shells crushed into the paste). The few abovementioned elements also occur east of the Dniester, though more rarely (Agulnikov and Pașa 2008: 33), in the same chronological interval, but the ritual includes the extended position of the dead as well (Rassamakin 2000; 2004b). Following some reinterpretations, Y. Rassamakin proposes another chronological position for the Sărăteni finds and assigns them to the Late Tripolie horizon CII/ Usatovo (Rassamakin 2004b: 135-6).

For the early 4<sup>th</sup> millennium BC we should note the finds in T. I Sărăteni and in T. 9 Krasnoe (Petrenko and Kovaliiuk 2003: 108). Three radiocarbon dates are from tumulus 9 of Krasnoe, the earliest Lu-2455: 5180±30 BP/ 4042-3965 cal BC. We have no data regarding the context of the sample, but analysing the plan and the published documentation, including the two absolute dates for Gr. 10 and Gr. 17 attributed to the last third of the 3<sup>rd</sup> millennium BC (Rassamakin 2011a, abb 12a), we assume that Gr. 16 is the primary burial. With this tumulus, the situation is rather complicated and confusing at the same time. The general plan, the published profiles, and the radiocarbon dates give rise to many misunderstandings (Serova and Yarovoi 1987: fig. 20, 21). According to the authors of

the research, the first mantle was raised above Gr. 16 (destroyed/ 'looted'). The construction of the cult structure, the ring and the ditch are connected with this grave. Chronologically, Gr. 17, which seems to cross the ring, was next, and also Gr. 12 above which a second layer was raised. This was in its turn crossed by Gr. 9, 10, 11, 13, 14, 15. They were followed by Gr. 8 which represents a Yamnaya burial and for which a third layer was built (Plate XI).

If for the early sample the context is missing, for the other two the information is equivocal as well. In the first works we find a date in tumulus 1 or 9 for Gr. 17 (Yarovoi 2000: 16-17). We should mention that Gr. 17 is to be found only in tumulus 9 of those researched at Krasnoe (Serova and Yarovoi 1987). The same date in T. 9 of Krasnoe appears in other sources, however without the primary context being mentioned (Petrenko and Kovaliuk 2003: 118). In 2005, a date for Gr. 17 was published, in the last third of the 4<sup>th</sup> millennium BC: 4434±23 BP/ 3324-2933 cal BC (Ivanova *et al.* 2005: 106). The date is later reused and connected with the Zhivotilovka horizon (Rassamakin 2011a, abb 12a, no. 5), noting the wrong code (Hd-19933) taken from a date attributed to Gr. 21/ T. 1 of Bursuceni (Rassamakin 2011a: note 6). In the general plan, the primary complex Gr. 16 (destroyed/ 'looted') is surrounded by a stone ring and an interrupted circular ditch. Gr. 17 is subsequent and seems to overlap the ring (Serova and Yarovoi 1987: fig. 20). Initially, I. Manzura included Gr. 17 (misprinted as Gr. 7) in the Cernavoda I culture and mentioned the bone 'sceptre' (Plate XI.3) present in its inventory (Manzura 1994: 96). Recently, he has used the absolute dates obtained both for this grave and for Gr. 10 in the monographic study on the Zhivotilovka funerary discoveries (Manzura 2016: 70). The date for Gr.10 with the code Hd-19389 is 4467±34 BP/ 3340-3020 cal BC (Petrenko and Kovaliuk 2003: tab.7). The deceased was put in an oval pit in a side-crouched position, with items of flint, stone and horn (Serova and Yarovoi 1987: fig. 27). In the same tumulus, a triple grave (Gr. 9) was also identified, with the deceased lying in extended position, without any grave goods, which is dated, according to the authors of the investigations, to the same chronological stage as Gr. 10. Then followed a series of burials performed according to the well-known Yamnaya standard (Serova and Yarovoi 1987: fig. 20).

From tumulus 1 of Sărăteni there is the date Lu-2454: 5140±40 BP/ 4041-3801 cal BC (Petrenko and Kovaliuk 2003: 108), taken from the abstract of E.V. Yarovoi's doctoral thesis, where the primary context Gr. 17 occurs inaccurately (Yarovoi 2000: 16). Later it is to be found with the abbreviation Gr. 7/ T. 1 (Rassamakin 2011a: 89, note 5). The grave, considered primary, had an oval pit, the deceased was in a side-crouched position, the inventory was made up of a gold earring/ link and bone ornaments placed on the arms and ankles (Plate X.1-2) (Levițki *et al.* 1996: 24).

Another tumular grave, Gr. 14/ T. 10 of Trapovka (Plate X.3), may be from the same period. It is located in the centre of the mound, with the deceased in a side-crouched position, on the left side, oriented east-west, oval pit, with a silver link in the inventory (Subotin *et al.* 1995: fig. 21/3, 4). Although the stratigraphic relationship is wrongly marked on the general plan, this situation is counterbalanced by the published profile, this complex is shown as being overlapped by a Yamnaya grave (Gr. 12). At Koșari also (east of the Dniester) of note is a tomb with an individual lying side-crouched on the left, with a bitruncated bowl, (Patovka *et al.* 1989: fig. 40/1), related to the Cernavoda I typology (Manzura 1994; 1999). The same type of vessel was discovered in Gr. 1 (destroyed) in the Hadjider tumulus<sup>10</sup> with an interrupted ditch and stone ring (Patovka *et al.* 1989: fig. 40/3-5).

An original <sup>14</sup>C AMS date with the code DeA-12977: 5100±34 BP/ 3970-3800 cal BC comes from 'Mound II' in Ploiești 'Triaj'. The sample was taken from a cervid antler with unclear context (Plate XIX)<sup>11</sup>, although it was published as belonging to the Gr.19 inventory (Comșa 1989: 185).

Radiocarbon dates for Cernavoda I settlements, including that of Orlovka for which the published time interval is 3780-3524 cal BC (Govedarica and Manzura 2015: 442), point to the period 3850-3550/ 3500 BC for the development of this culture (Govedarica and Manzura 2011: 51; Frînculeasa 2016: 72). With T. 4/ Gr. 8 from Obileni/ Sărăteni (a disturbed grave considered as primary, located slightly outside the centre of the mound), which had two painted amphorae in the inventory, though proposed within the period of appearance of the earliest Usatovo contemporary with Cernavoda Ic (Levițki *et al.* 1996: 83), the dating 4410±50 BP/ 3321-2909 cal BC takes the complex out of the chronological framework. In fact, some authors assign these two vessels to the Usatovo pottery tradition (Govedarica și Manzura 2011: 54). In the tumulus there was also a ring segment located towards the edge, while in the centre there was a large pit considered to be recent (Levițki *et al.* 1996, fig. 35). At Roșcani, in T. III/ Gr. 7 which was destroyed by another feature there was a vessel (Plate X.6) (Dergachev *et al.* 1989, fig. II/8) that may fall under the Cernavoda I repertoire (Manzura 1999: fig. 7.6/ 4). It was overlapped by Gr. 3 (Dergachev *et al.* 1989: fig. 8/I)<sup>12</sup>, which may be attributed to the Zhivotilovka culture (Manzura 2016)<sup>13</sup>. Examples such as Krasnoe and Sărăteni seem to define an earlier horizon, which may precede the Cernavoda I culture and covers the

*hiatus* between the Gumelnița-Karanovo VI complex and Cernavoda I (Govedarica and Manzura 2011: 51; Reingruber and Rassamakin 2016). So far these burials considered to be Cernavoda I have only been present in the south of Bessarabia (few of them to the north) and are absent in Muntenia (with the exception of the Brăilița site).

South of the Danube, in Dobruja, the primary tomb (the Gr. 1 - Gr. 2 complex) of Medgidia may be noted. There are a few common elements with those present in the area between the Prut and the Dniester, namely it is disturbed/ 'looted', surrounded by a circular, probably interrupted, ditch located towards the edge of the tumulus, with stone in its structure (Schuster *et al.* 2011: 17; Schuster 2012: fig. 2). Gr. 9/ T. III at Goran Slatina may be from the same chronological horizon (Plate XVII.2). The deceased in the primary tomb was laid supinely, with lower limbs flexed to the side, upper limbs stretched along the body. It was surrounded by a stone ring (8.6 m in diameter) and superimposed by Gr. 6 and Gr. 7 with individuals in extended position, which in turn were succeeded by Yamnaya burials (Kitov *et al.* 1991: 62ff.). Another tumulus worth mentioning is that of Galați 'Dunărea district', which had a circular ditch located towards the outside. In the centre of the mound there was a boneless pit - a feature considered to be a cenotaph. The other burials have been attributed to the middle period of the Bronze Age (Brudiu 2003: 59-62, fig. 16A).

### **Kvityana traditions east of the Dniester**

The Kvityana culture was separated from the Sredni-Stog II (4400-3400 BC according to the 'Telegin model') and considered an independent culture (Rassamakin 1994; 1999), but there are debates on this new approach (Telegin 2002; Telegin *et al.* 2003, p. 465ff.; Anthony 2007: 240). Lying in the Dnieper basin, extending towards the Bug and the Don, the Kvityana culture has specific elements such as the extended burials, rather poor inventories, and the occurrence of stones in the structure of features. In terms of the beginning and evolution of this ritual from flat cemeteries and individual burials to the occurrence within tumuli, the origin cannot yet be established based on absolute dates (Rassamakin 2013b). Chronologically, the evolution occurred within the approximate interval 3800-3400 BC, parallel to Tripoliye BII?-CI/CII (Rassamakin 2000; 2013b). The few <sup>14</sup>C dates do not seem to provide a clearer perspective of absolute chronology (Rassamakin 2013b). In this context we should mention a grave with an extended skeleton, namely Gr. 6 in the 'Tarasova Mound' at Orechov (Plate XVI.4-6), where the date 4673±44 BP/ 3630-3360 cal BC comes from (Govedarica *et al.* 2006: 70).

It is important to note that these communities were for a time contemporary with the Usatovo communities that were in the early stage of their evolution in the lower basins of the Prut and Dniester Rivers. In this respect, we should mention Gr. 33/ T. I of Sadovoe, in which Usatovo pots were found alongside a string of beads/ notched bone items (Plate XVI.2) (Maljukevich and Petrenko 1993: fig. 5/2), all of which are typical of the Kvityana culture (Rassamakin 1999: 87)<sup>14</sup>. We should also mention several burials of subadults lying in extended position with Usatovo vessels/pottery, such as the tumular burial Gr. 7/ T. 1 at Ciului (Ciobanu 2016: 32-33, fig. 7) or the possibly flat burials such as those of Grumezoaia (Mantu 1994: 124) and Vișan (Zaharia 1964: 442) (Plate VII). In these last two graves of subadults, amphoroidal vessels with cone-shaped lids, painted with bands occur (Zaharia 1964: 442, fig. 2; Mantu 1994: board 3). These vessels have analogies with that found in Gr. 20 at Brăilița (Harțușe and Dragomir 1957: fig. 2; Dragomir 1959, fig. 7), which overlapped Gr. 21, a complex that can be attributed to the Cernavoda I culture. The fortuitous discovery from Grumezoaia provided a radiocarbon date (Hd-19528: 4449±24 BP/ 3331-3017 cal BC) (Lazarovici 2010: 83, tab. 1), placing it outside the Kvityana chronological framework and closer to the stage initially defined by the Zhivotilovka finds and later the Yamnaya finds (Manzura 2016). Although the Kvityana radiocarbon dates are not near this interval, we note a possible course of this ritual up to the beginning of the Yamnaya culture.

As can be seen, in the West Pontic area there are features (though isolated) with individuals in supine extended position, dating to the last quarter of the 4<sup>th</sup> millennium BC (Frînculeasa *et al.* 2015a: 86), hence more recent when compared to the evolution of the Cernavoda I culture (Frînculeasa 2016), and the Kvityana as well (Reingruber and Rassamakin 2016: abb. 40).

### **Discussion**

1. In the area under discussion, around 4300-4200 BC - a chronological segment marking the evolutionary peak of 'Old Europe' (Anthony 2007: 225), represented by the Cucuteni A/ Tripolie BI, Aldeni-Bolgrad, Gumelnița-Karanovo VI cultures - the first tumular burials appeared (Govedarica 2016: 85). However, flat burials, marked by the existence of some allogeneous elements in the local Eneolithic milieu, were also present. These finds have been linked to the presence (in terms of both trade and conflicts) of Suvorovo/Suvorovo-Novodanilovka communities (Anthony 2007: 251ff.;

Govedarica and Manzura 2011: 46ff.; Reingruber and Rassamakin 2016) or of some groups from the 'western part of the Skelia culture' (Anthony 2007: 251ff.; Govedarica and Manzura 2011: 46ff.; Reingruber and Rassamakin 2016). Moving east of the Prut, the examples are those of Lungoci (Dragomir 1976), Fălcui (Popușoi 1989), south of the Danube those of Casimcea (Popescu 1941), M.33/Kulevcha (Važarova 1986) or Gr. 164 of Durankulak (Manzura 2005: 51). In Transylvania, there is the well-known flat cemetery of Decea Mureșului (Kovacs 1932), while in the Hungarian Plain there is the Csongrád tomb (Ecsedy 1971). The zoomorphic sceptres and the four-knobbed stone mace heads found east of the Prut/the Lower Danube are also related to this topic (Govedarica 2004; Govedarica and Manzura 2011: abb. 5; Gogâltan 2013).

2. The next chronological segment intersects the 'hiatus' recorded between the end of the Gumelnița-Karanovo VI cultural complex and the beginning of the Cernavoda I culture (Rassamakin 2011a: 85ff.; Govedarica and Manzura 2011: 51). We should also mention the existence of a small set of absolute dates ranging within the interval 4200/ 4150 - 3900/ 3850 BC that come from the sites of Sultana, Vitănești, Pietrele, Bucșani, Ploiești 'Triaj', Ovcarovo, Hotnica etc. (Reingruber 2015; Reingruber and Rassamakin 2016; Frînculeasa 2016; Bem and Haită 2016: 63; Krause *et al.* 2016). The examples of Sărăteni and Krasnoe<sup>15</sup> and the abovementioned dates seem to fill out a part of this chronological segment. It is still difficult to say whether they reflect the presence of some communities that led to the disappearance of the Gumelnița-Karanovo VI complex or are connected with an early Cernavoda I, or possibly late Suvorovo evolution. If we refer to the absolute dates obtained for samples taken from mammal bones found in Cernavoda I settlements, we notice that the appearance of this culture in the abovementioned chronological interval is not yet confirmed (Frînculeasa 2016, tab. 3).

3. The Cernavoda I discoveries (approximately 3850/3800 - 3550/3500 BC) are represented in the Lower Danube by settlements and flat graves (the presence of tumular burials should not be completely excluded, see Brăilița). In the Bugeac area, the Cernavoda I culture was until recently defined only by tumular burials (Manzura 1999). The presence at Orlovka of flat graves and of a settlement (with two habitation levels, in which the Cucuteni B painted pottery occurs in association with the unpainted pottery with crushed shells into the paste) (Govedarica and Manzura 2015; Manzura 2018) shows that we are dealing with the same cultural phenomenon both west and east of the Prut, beyond the so-called 'Bessarabian version'. North of the Danube there are flat burials, with individuals in side-crouched position. Unlike the tumular graves (including the early ones), in the flat graves there are no ornaments, only (unpainted) pottery items, including at Orlovka cemetery. Therefore, the presence of tumular graves east of the Prut, in the same chronological interval, may be related to phenomena located east of the Dniester. In fact, Y. Rassamakin associates these finds with the Lower Mikhailovka culture, which precedes here the ritual that is specific to Kvityana communities (Rassamakin 1994: 42, 44; 1999: 92). He establishes a chronological relation between a number of findings such as the plastic anthropomorphic representations from Cernavoda, Râmnicelu, Târpești, Foltești and Satu Nou (Neagu *et al.* 1982) and Dereivka (Rassamakin 1994: 41; 1999: 90), which seems to point to a revival of contacts between the North Pontic area and the Lower Danube, contacts which had been interrupted with the dissolution of the Gumelnița-Karanovo VI cultural complex (Reingruber and Rassamakin 2016).

4. At the middle of the 4<sup>th</sup> millennium BC (we do not exclude that it could reach the end of the chronological interval in which the Cernavoda I culture evolves), we can establish the occurrence (in secondary position) in tumuli - located in the Prut-Dniester interfluvium - of graves with deceased laid in extended position. It is a period in which the Kvityana funeral traditions transcend their place of origin. The painted pottery culture provides evidence for, indirectly or directly through the presence of vessels in graves, including east of the Dniester (Rassamakin 2011b; 2013a), the contact and the chronological relationship. Placing the constructions with rings later towards the last third of the 4<sup>th</sup> millennium BC is supported by the Usatovo finds (Tripolie CII) which are posterior to the Cernavoda I ones (Govedarica and Manzura 2011). The relationship and direct chronological relation between the Kvityana and the (early) Usatovo is also supported by the discovery of Sadovoe (Maljukevich and Petrenko 1993: fig. 5/2). The earliest Usatovo burials are most likely prior to the Zhivotilovka group.

The existence of some contact between the Usatovo and the area south of the Danube has been shown by the presence of vessels in the Goliamo Detelina tumulus T. 4/ Gr. 4, in a tomb with a side-crouched individual (Leshatov and Borisov 1995: fig. 5, 10/a; Alexandrov and Kaiser 2016: 366, fig. 11), or of another at Shumen (Alexandrov and Kaiser 2016: fig. 12). Regarding the Tripolie CI pottery present in tumular graves, we should mention a few discoveries such as Novo-Kotovsk (Agulnikov 1992, fig. 3/9), Reni (Subotin and Petrenko 1990: fig. I/1), Bacșala (Fomenko 2007:

fig.3/7, 11), Prybuzhany (Rassamakin 2011b: fig. 7/5, 6). It also appears in graves with side-crouched individuals and in those with the deceased in supine position with the lower limbs flexed and raised knees, as well as in tumuli with ditches and rings (Rassamakin 2013b). These complexes have not necessarily been included in the corpus of the Cernavoda I culture finds, but rather in the Lower Mikhailovka, at least those lying side-crouched, the ritual being typical of the area between the Dniester and the Dnieper and even to the east of this area (Rassamakin 2013a: 127).

5. Another horizon with burials of individuals in supine position is stratigraphically recorded between Zhivotilovka and Yamnaya (the last third of the 4<sup>th</sup> millennium BC); however, a coexistence of both cultural/ funerary groups with specific ritual elements (side-crouched and supinely with knees folded and raised) is not excluded either. The absence of inventory and of ochre and the presence of oval-elongated pits are specific elements.

6. The probability of a group dated to the first half of the 3<sup>rd</sup> millennium BC is given by several discoveries such as Gr. 4/ T. IV at Vapniarka dated Ki-15013: 4100±80 BP/ 2880-2470 cal BC (Ivanova and Manzura 2011: 243) or Gr. 17/ T. I at Oleksandrivka Ki-9526: 4010±60 BP/ 2855-2346 cal BC (Videiko and Petrenko 2003, tab. 3). We highlight the relatively large error margin in the case of the first sample, the large plateau of some dates with these intervals make them unusable in precise analyses. The second grave succeeded Usatovo burials dating from the second half of the 4<sup>th</sup> millennium BC (Gr. 35, Gr. 22) and was overlapped by a Yamnaya grave (Videiko and Petrenko 2003: 116; Rassamakin 2013b: 17). Y. Rassamakin dismisses the presence of this ritual within the Yamnaya funerals, for these finds do not correspond to the known archaeological setting (Rassamakin 2013b). The extended position disappeared in the Early Bronze Age/ 3<sup>rd</sup> millennium BC (Rassamakin 2013a: 116), but is to be found again in the Katacombnyaya ritual (Frînculeasa *et al.* 2017a). Ascertaining the many discrepancies regarding the contexts and radiocarbon dates, we maintain our reservations on this matter as well. Therefore, the two samples do not represent a solid basis for a possible discussion.

The discussion regarding the further existence of the extended position at the beginning of the 3<sup>rd</sup> millennium BC cannot be entirely abandoned. The Vitănești Gr.2, dating from this interval, may be an example. We also mention Gr. 4/ T. II of Goran Slatina which has revealed silver ornaments, a gold pendant, ochre and a fragment of vessel (Kitov *et al.* 1991: fig. 33) decorated in a manner that is typical of the same chronological interval (Frînculeasa *et al.* 2017a: note 116). Another tumulus that may fall within this theme is T. III at Kalugeritsa, where the primary burial (Gr. 4) was surrounded by a stone ring, the deceased was in side-crouched position, had ochre, a silver loop ring, and the rectangular pit had a wooden cover (Mikov 1936). In the next grave (Gr. 3), the individual was in extended position, without grave goods. In turn, it was overlaid by two Yamnaya graves (Alexandrov 2011: 311). As all available radiocarbon dates show, we observe that this ritual, at the beginning of the 3<sup>rd</sup> millennium BC, was secondary, even discreet within the 'dictatorship' of the standard Yamnaya ritual which was already prevalent in the plains north of the Caucasus as far as the Great Hungarian Plain.

### Conclusions

In the 6<sup>th</sup> - 5<sup>th</sup> millennia BC the burials in which the deceased are in extended position in the Lower Danube are known and generally connected with older traditions, rooted in the Mesolithic. If we tried to identify a certain route of this funerary tradition from isolated flat burials or burials in cemeteries to tumular ones, the working basis seems unstable, unsatisfactory due to the quantity of data. Where and how does this ritual come to be present in tumuli in the Lower Danube at the end of the 4<sup>th</sup> millennium BC? We have no answers that can be linked to the local Eneolithic cultural framework. We nevertheless find it in the first half of the same millennium in the Kvityana culture, north of the Black Sea. At the mouths of the Danube, the Prut and the Dniester the same ritual can be encountered in a stratigraphic/ chronological relationship between the Zhivotilovka burials (the last third of the 4<sup>th</sup> millennium BC) - side-crouched and the Yamnaya (the first half of the 3<sup>rd</sup> millennium BC) - supine, flexed lower limbs. Moreover, a relationship with the Usatovo finds also occurs, perhaps slightly earlier (towards the half of the 4<sup>th</sup> millennium BC).

If the Kvityana evolution covers a significant part of the first half of the 4<sup>th</sup> millennium BC, and partially the second half, west of the Prut we are dealing with Cernavoda I and later Usatovo communities in the same chronological time frame. The relationship between this ritual/ Kvityana and the Cernavoda I culture, which is stratigraphically unclear, and the absence of items to prove direct contacts show a slight chronological gap in favour of the Cernavoda I culture and the side-crouched ritual, at least in the Prut-Dniester interfluvium. This ritual continues to be present, crosses the evolution of Zhivotilovka communities and continues as far as the start of the Yamnaya. The extended position is a late occurrence within the tumular burials in the Lower Danube, but here it is also a rather

discreet ritual, one that seems to be of secondary importance. The presence of this ritual (and the accurate interpretation of stratigraphic situations) is an additional element for establishing a better chronological and chorological relationship between the West Pontic area and realities located in the North Pontic steppe, amidst a phenomenon which seems to have rewritten history in other parameters, initially of the Lower Danube and then of Western Europe.

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### Notes

1. This information is to be found in the Excavation Notebook that belonged to I.T. Dragomir, on pages 18-19. We thank Mr. Daniel Garvăn (Buzău County Museum) for making us aware of this.
2. The vessel has analogies with one recently discovered in a tumulus at Păulești (Prahova), with an absolute date set at the turn of the 4<sup>th</sup> and 3<sup>rd</sup> millennia BC (Frînculeasa *et al.* 2017b).
3. Some authors have attributed Gr. 2 to the Katacombnyaya or even Belozerka groups due to the shape of the vessel (Burtănescu 1996: 91).
4. In a photograph in the collection of Prahova County Museum of History and Archaeology (the V. Teodorescu fund), next to the fragmented vessel there was also a handle. Although we searched the archaeology repository of the institution and that of the Institute of Archaeology in Bucharest, we were unable to identify this bowl fragment.
5. The context of this sample is one that has suffered a lot in the bibliography. We find the context at Agulnikov and Pașa 2008: 34. The reference to the abstract of Yarovoi's doctoral thesis 2000, page 118, is deficient. The 2000 abstract, which represents the primary source for this date, is initially confusing, for only the tumulus is specified (with mistakes) on pages 16-17, while the context mentioned above is to be found on page 18 (Yarovoi 2000: 16-18). The context of this sample does not appear in other works either (Petrenko and Kovaliuk 2003: 108; Rassamakin 2011a: abb. 10a/no.5).
6. We tried to get a date for this site three times. No sample had enough collagen to obtain the absolute date. The human bones from the Vitănești tumuli, in a precarious conservation state, are kept in the patrimony of the National Museum of History of Romania.
7. In another text, the same tomb is mentioned as being completely destroyed and without an inventory (Hartuche 1959: 228).
8. It is somehow eccentrically located as compared to the other graves in the cemetery attributed to the Boian and Gumelnița cultures (Lazăr *et al.* 2017: fig. 1E).
9. We should note that, in the case of the flat graves considered to be Cernavoda I, this behaviour has not been recorded.
10. Another <sup>14</sup>C date, Ki-9528: 4640±70 BP/ 3635-3114 cal BC, comes from T.6/Gr.4 of Hadjider, while Ki-11211: 4720±80 BP/ 3651-3356 cal BC is from Koșari III/ T. 3/ Gr. 6 (Rassamakin 2011a: 89).
11. On the label of the package in which the fragmented branch of deer antler was kept in the repository of the Institute of Archaeology in Bucharest there is the following inscription: 'Tumulus 2, Gr. 19 deer antlers 5 November 1943'. We compared 'Carnetul 1' (i.e. notebook 1) of the student Vasiliu Alexandru (of 17 August 1943) with the notes which seem to belong to I. Nestor. On page 70, the day when this antler was discovered, namely 3 November 1943, is mentioned. It was probably on

5 November 1943 that this antler was taken and packed to allow the investigation of Gr.19 nearby (Plate XIX). Another cervid antler that appears in the photo archive of the site, which is kept at the Institute of Archaeology of Bucharest, and also in the notations made in the excavation notebook, was found on 22 October 1943 in the T. 15 area, -2.15 m. The antler context seems to be rather the surface level preceding Gr. 19 (Plate XIX.1-3), which is not the primary burial. The images show that it does not touch the natural gravel level, which is less than 0.50 m deep (Plate XIX.4). Prior to it may be Gr. 5, with side-crouched subadult and an inventory that contained three tubular copper beads (one of which in secondary position) (Comşa 1989: 182).

<sup>12</sup>. Misprinted kurgan 2.

<sup>13</sup>. In another volume, Gr. 3 is included in the Usatovo culture (Dergachev 1991: 52, pl. 51/4, 6).

<sup>14</sup>. Another radiocarbon date coded Ki 9529: 4900±70 BP/ 3936-3524 cal BC comes from the same tumulus in Gr. 29 (Petrenko and Kovaliuk 2003: tab. 6). The time interval covers the discussed chronological space, which once again shows a local evolution preceding the discoveries attributed to the Usatovo culture. Both the stratigraphic situation and the presence of a lid with the shape typical of the second half of the 4<sup>th</sup> millennium BC (Maljukevich *et al.* 2018: fig. 3/1, 2/II; 11/8) also complicate the interpretations related to the provenance/context of the sample, possibly its validity. As the stratigraphic profile no. II is shown in publications, the two graves belong to the same burial phase.

<sup>15</sup>. The premise of the analysis is that these dates are not affected.

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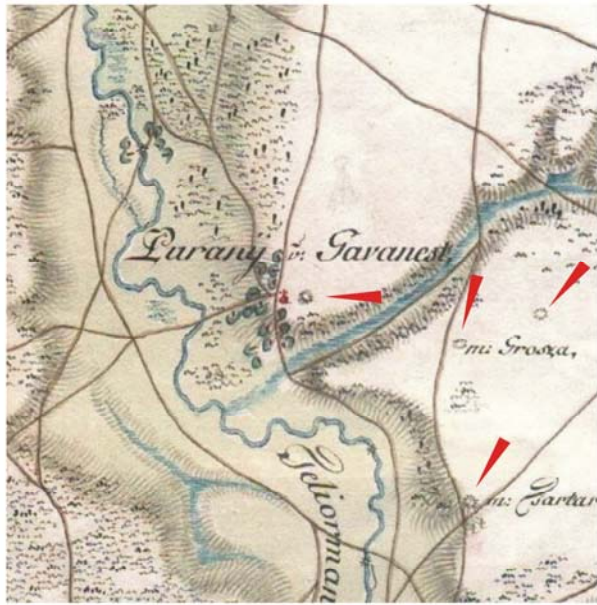
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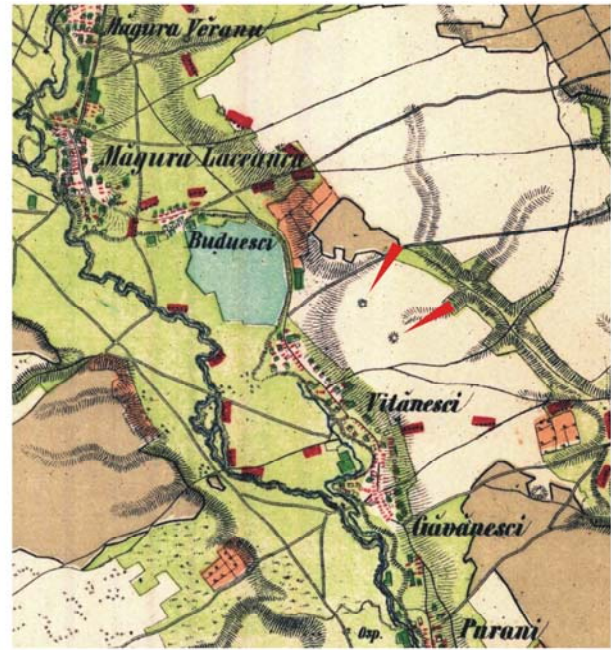
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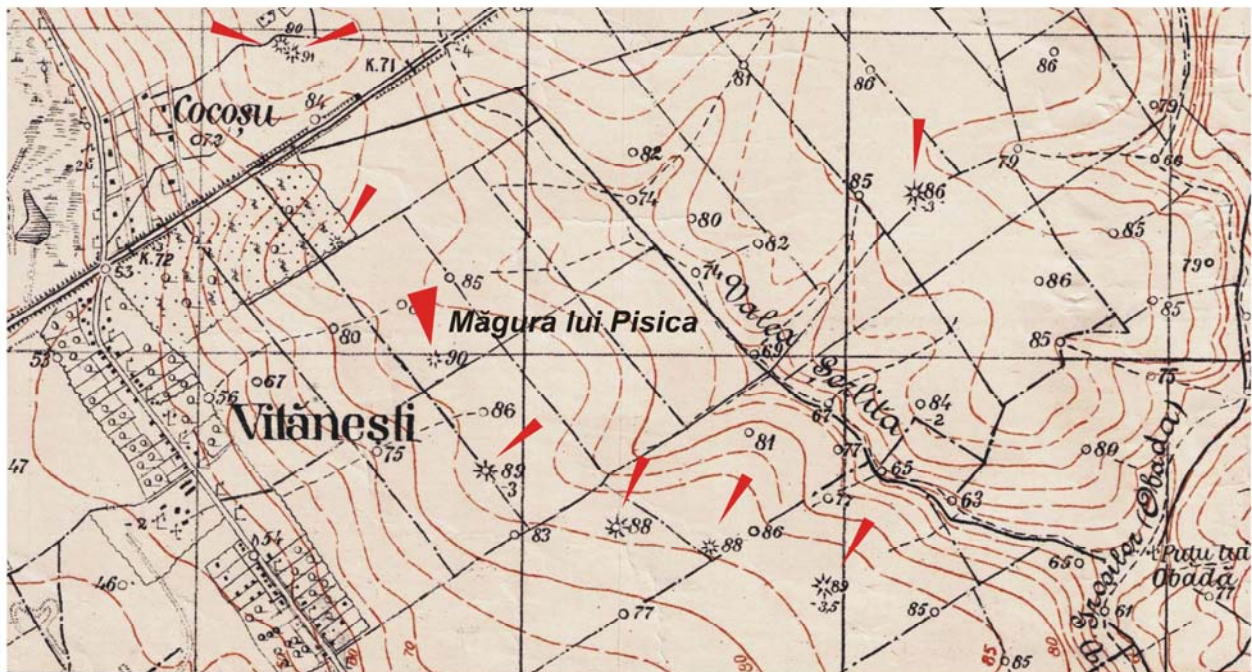
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1



2



3

**Plansa I.** Recorded tumuli on historical maps around Vitănești: 1. Specht Map (1790-1791), 2. Szatmary Map (1864), 3. Artillery Map (reprinted in 1955).

Tumuli figurați pe hărți istorice în zona comunei Vitănești: 1. Harta Specht (1790-1791), 2. Harta Szatmary (1864), 3. Planul Director de Tragere (retipărită 1955).



**Planșa II.** Recorded tumuli in Alexandria - Vitănești area.  
Tumuli repertoriați în microregiunea Alexandria - Vitănești.



1

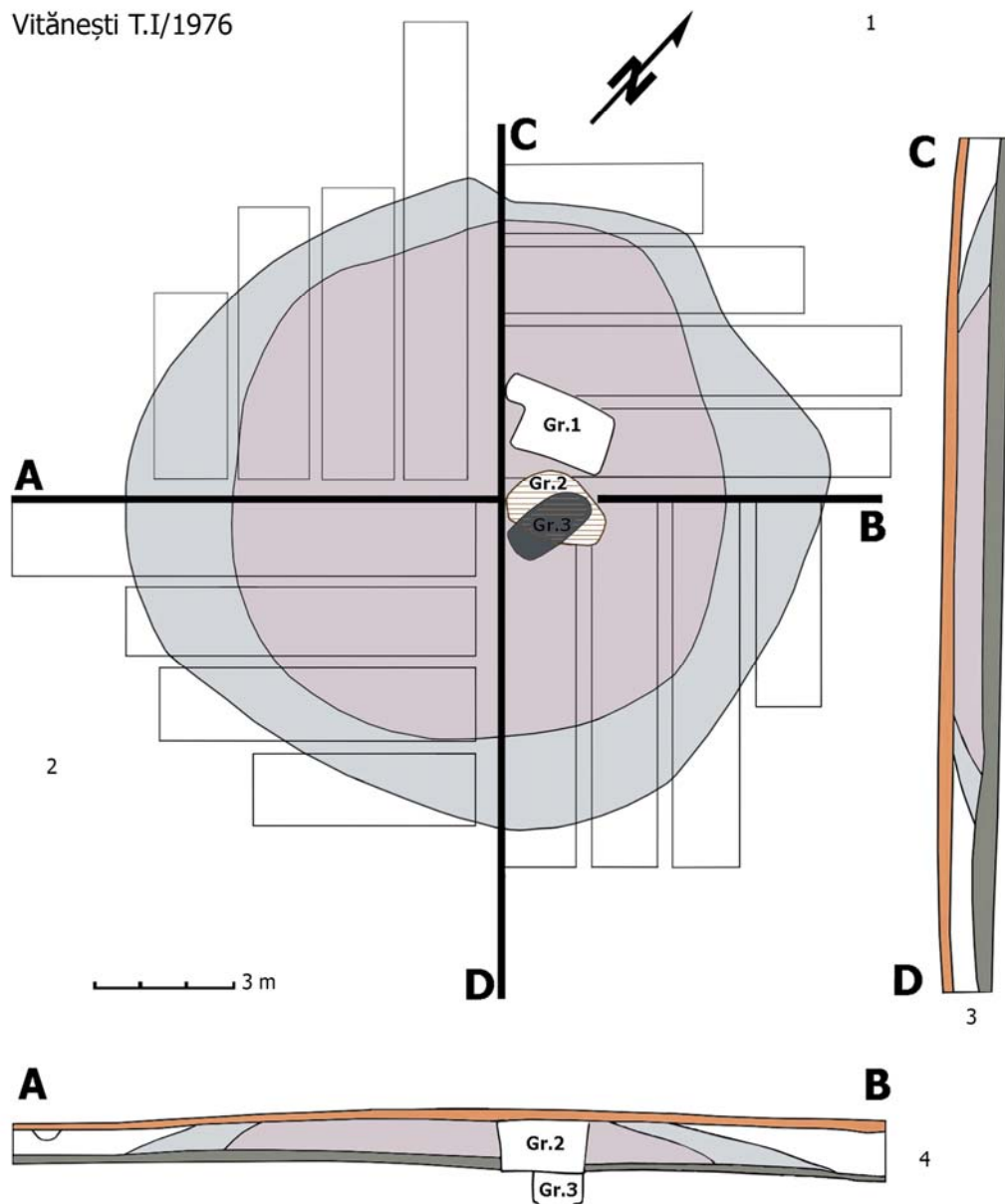


2

**Planșa III.** 'Măgura lui Pisiță' and Tumulus I. Images from 2015.  
'Măgura lui Pisiță' și Tumulusul I. Imagini din anul 2015.

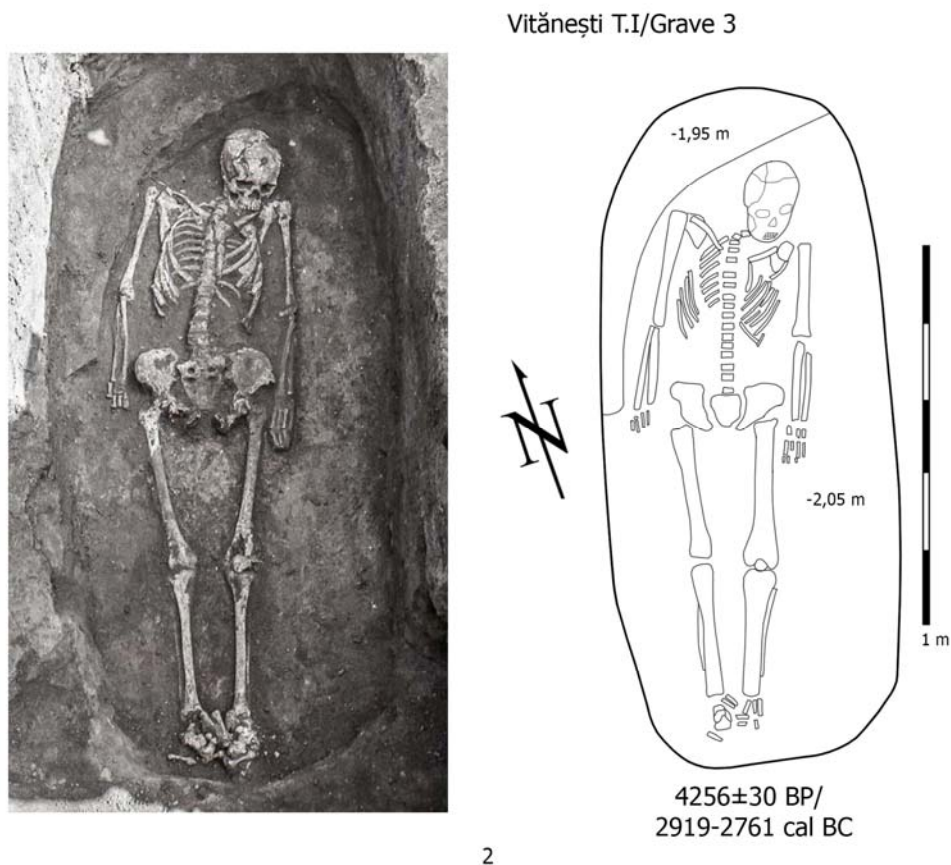
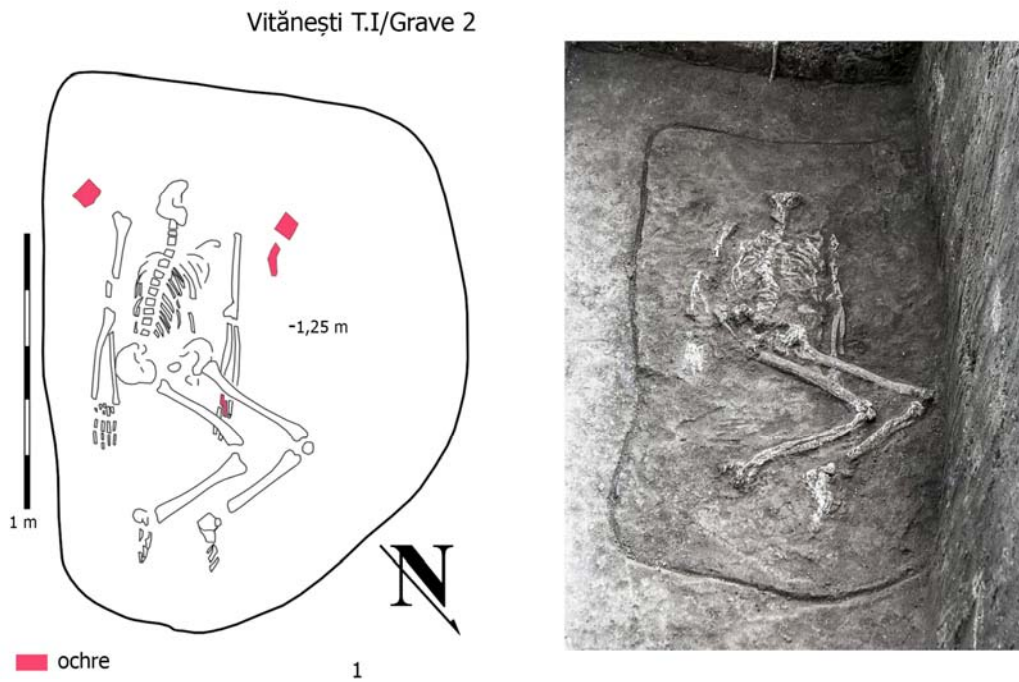


Vitănești T.I/1976



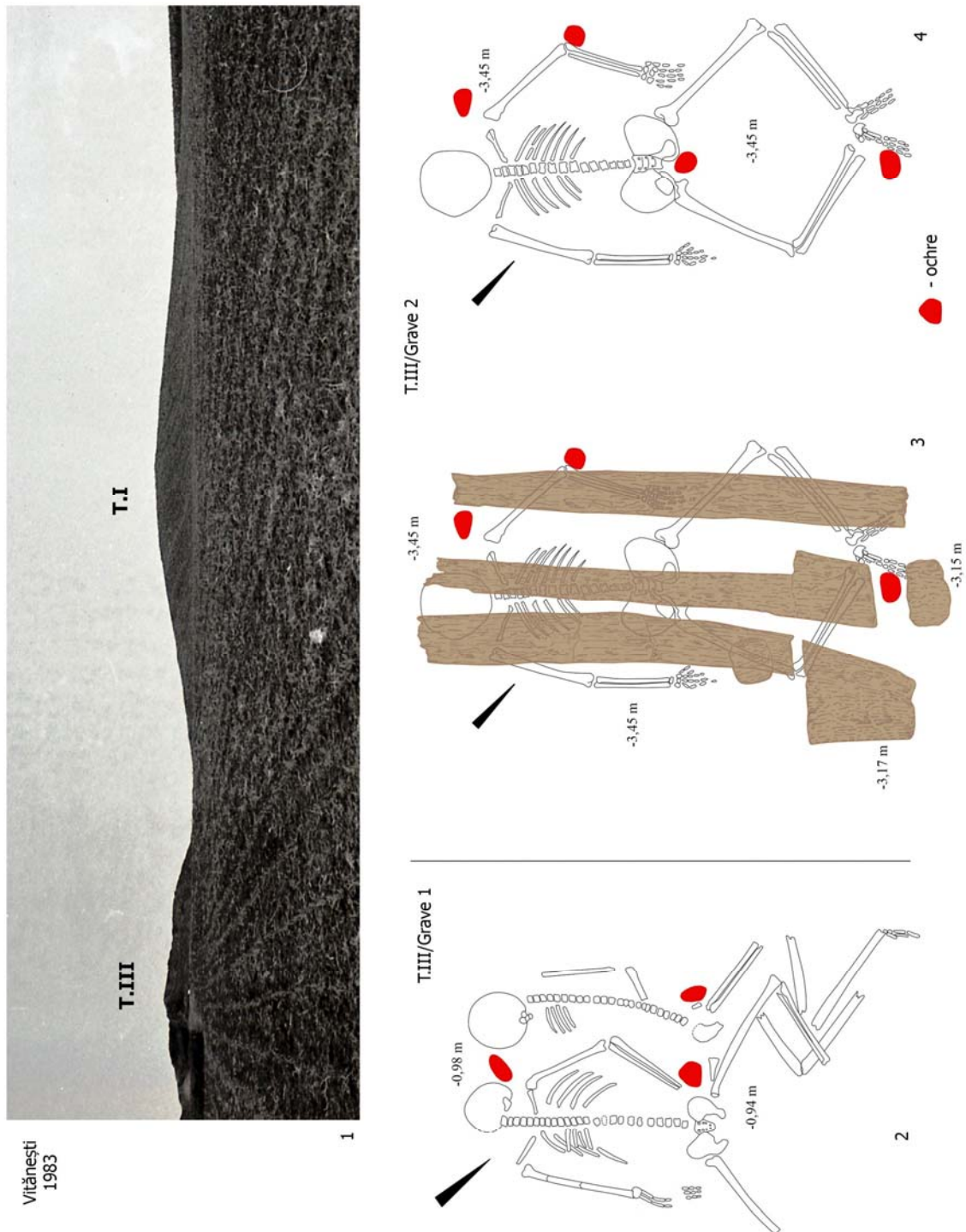
**Plansa IV.** Vitănești - tumulus I: image of the tumulus from 1976 (site archive) (1); general plan and stratigraphic profiles (2-4) (redrawn after Leahu and Trohani 1979).

Vitănești - tumul I: imagine cu tumulul din anul 1976 (arhivă șantier) (1); planul general și profilele stratigrafice (2-4) (redesenate după Leahu și Trohani 1979).



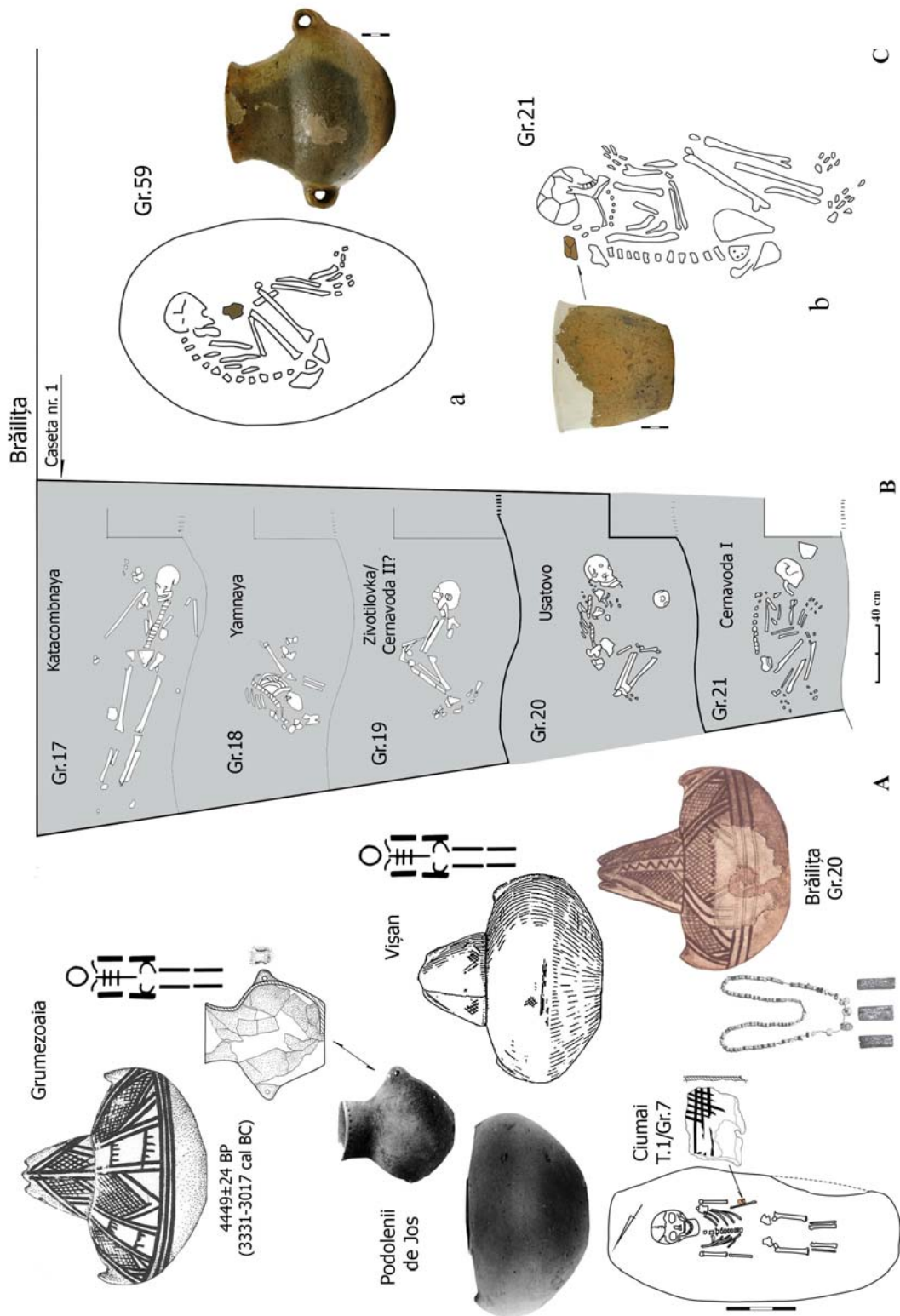
**Plansa V.** Vitănești - tumulus I: grave 2 (1) and grave 3 (2) (drawings after Leahu and Trohani 1979; photos from the site archive).

Vitănești - tumulul I: mormântul 2 (1) și mormântul 3 (2) (desene după Leahu și Trohani 1979; fotografii din arhiva șantierului).



**Planșa VI.** Vitănești - tumulus I and III (photo from the site archive) (1); Vitănești-tumulus III: grave 1 (2) and grave 3 (3) (redrawn after Leahu and Trohani 1986).

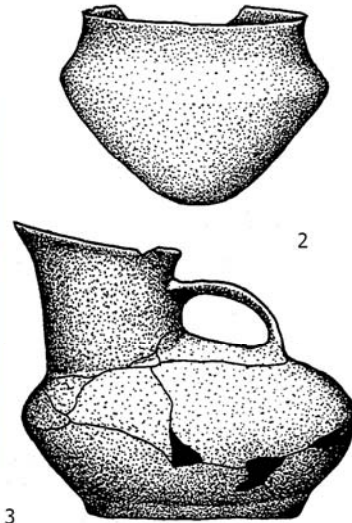
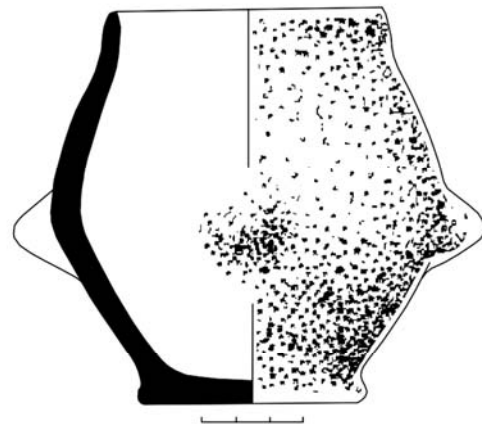
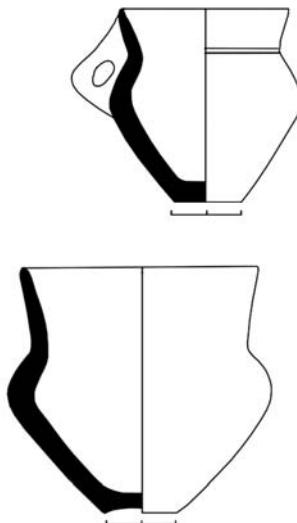
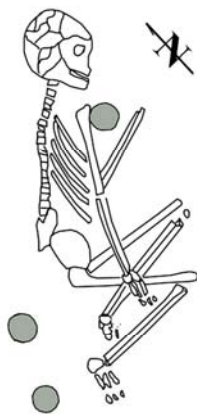
Vitănești - tumulul I și III (fotografie din arhiva șantierului) (1); Vitănești-tumulul III: mormântul 1 (2) și mormântul 3 (3) (redesenat după Leahu și Trohani 1986).



**Planșa VII.** Burials with individuals lying supine and the pot from grave 20 (A) (after Dragomir 1959; Zaharia 1964; Mantu 1994; Ciobanu *et al.* 2016); Brăilița: stratigraphical succession found in surface 1 (after Harțuche 2002) (B); Brăilița: Cernavoda I burials (C) (after Harțuche 2002).

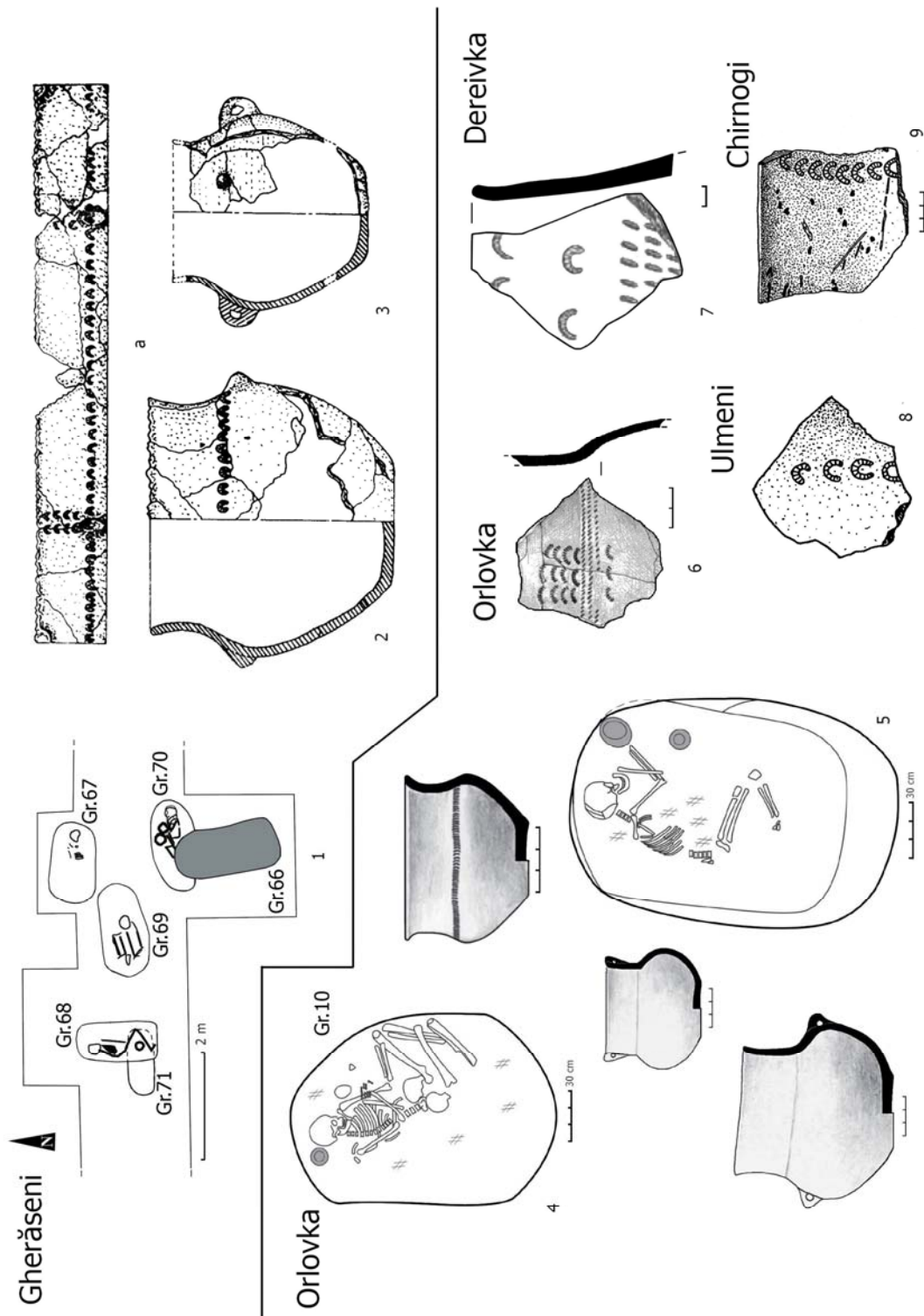
Complexe cu indivizi depuși dorsal și vasul din mormântul 20 (A) (după Dragomir 1959; Zaharia 1964; Mantu 1994; Ciobanu *et al.* 2016); Brăilița: succesiunea stratigrafică din caseta 1 (după Harțuche 2002) (B); Brăilița: morminte Cernavoda I (C) (după Harțuche 2002).

Cernavodă - Grave 1

Sultana  
Grave 75Durankulak  
Grave 448

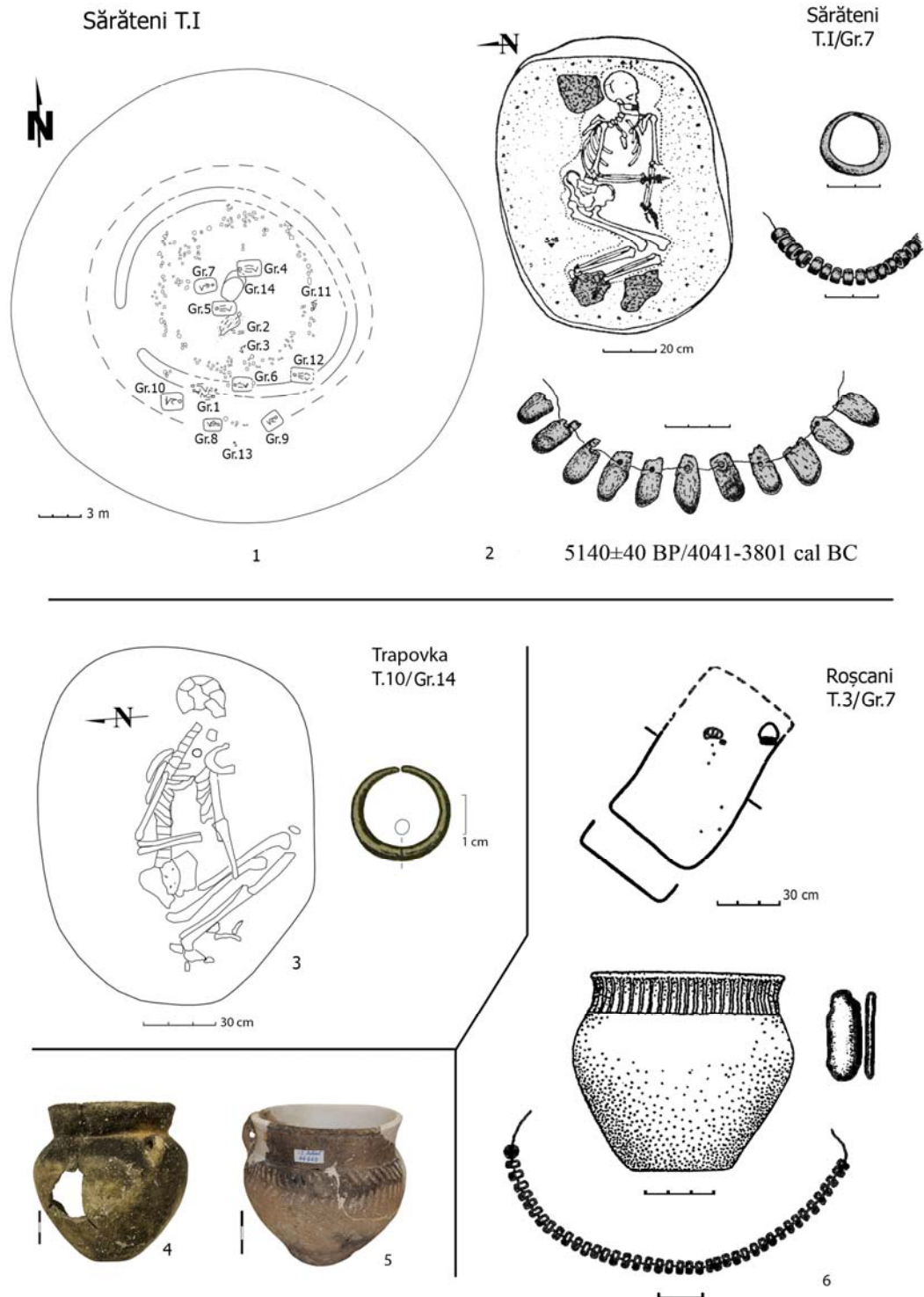
**Plansa VIII.** Burials of the Cernavoda I culture: Gr.1/Cernavoda (after Nestor 1937; Manzura 1999), Gr. 75/ Sultana (after Andreescu *et al.* 2015) and Gr.448/Durankulak (after Manzura 2005).

Morminte din cultura Cernavoda I: M.1/Cernavoda (după Nestor 1937; Manzura 1999), M. 75/ Sultana (după Andreescu *et al.* 2015) și M.448/Durankulak (după Manzura 2005).



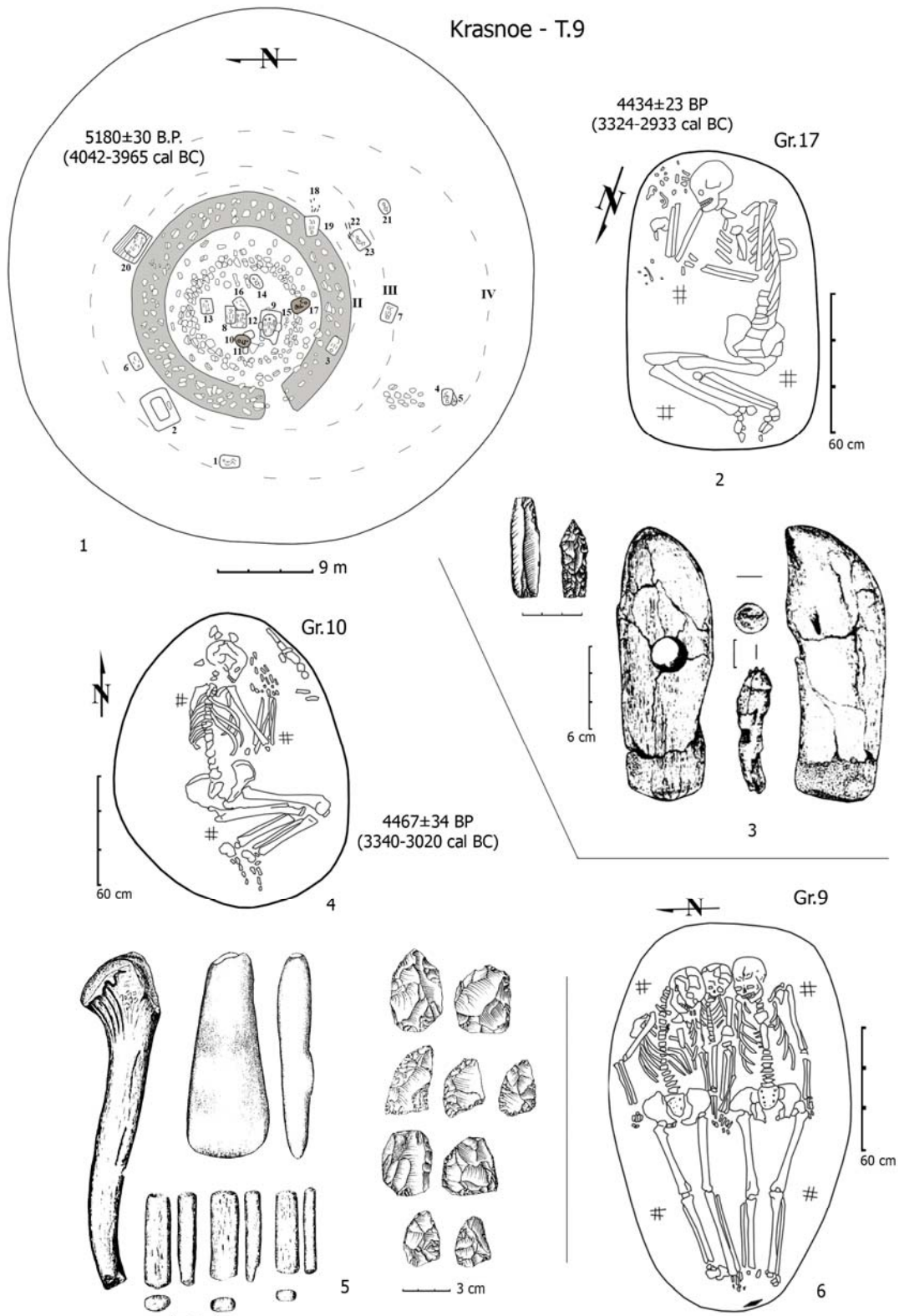
**Planșa IX.** Gherăseni, drawing of grave 70 and the pots discovered (1-2) (after Constantinescu 1994); burials and pots from Orlovka, Cernavoda I culture (after Govedarica and Manzura 2015); pottery with cord decoration from Orlovka, Ulmeni, Chirnogi (after Manzura 1999) and Dereivka (after Kotova 2010).

Gherăseni, planul mormântului 70 și vasele descoperite (1-2) (după Constantinescu 1994); morminte și vase de la Orlovka, cultura Cernavoda I (după Govedarica și Manzura 2015); ceramică decorată cu șnurul de la Orlovka, Ulmeni, Chirnogi (după Manzura 1999) și Dereivka (după Kotova 2010).



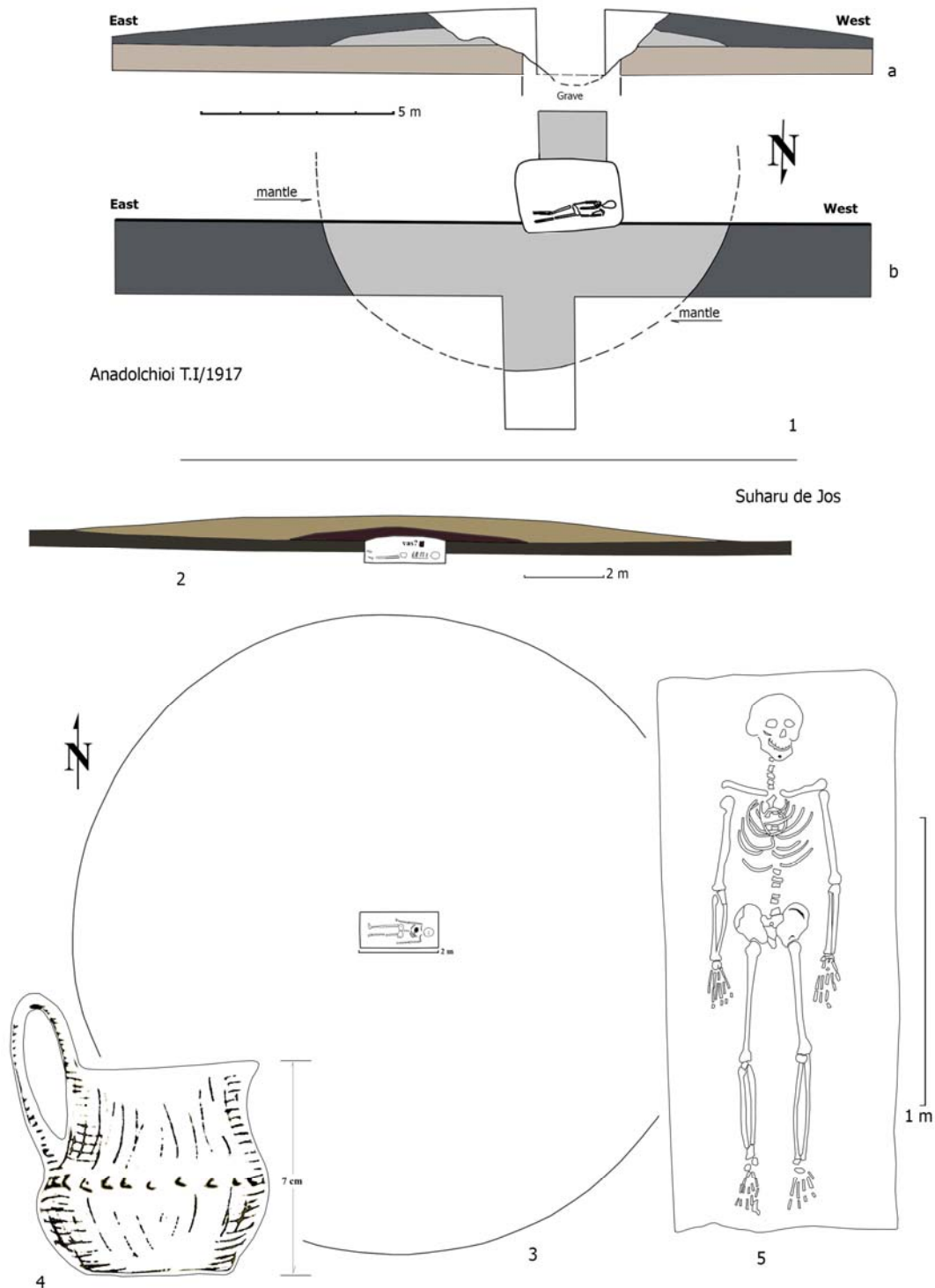
**Plansa X.** The general plan of the tumulus I from Sărăteni (1) and grave 7 (2) (after Levițki *et al.* 1996); grave 14 and tumulus 10 from Trapovka (3) (after Subotin *et al.* 1995); grave 7 in tumulus 3 from Roșcani (after Dergachev *et al.* 1989); pots with cord decoration discovered in Luncașița (4) and Isaccea (5).

Planul general al tumulului I de la Sărăteni (1) și mormântul 7 (2) (după Levițki *et al.* 1996); mormântul 14 și tumulul 10 de la Trapovka (3) (după Subotin *et al.* 1995); mormântul 7 din tumulul 3 de la Roșcani (după Dergachev *et al.* 1989); vase decorate cu șnurul descoperite la Luncașița (4) și Isaccea (5).



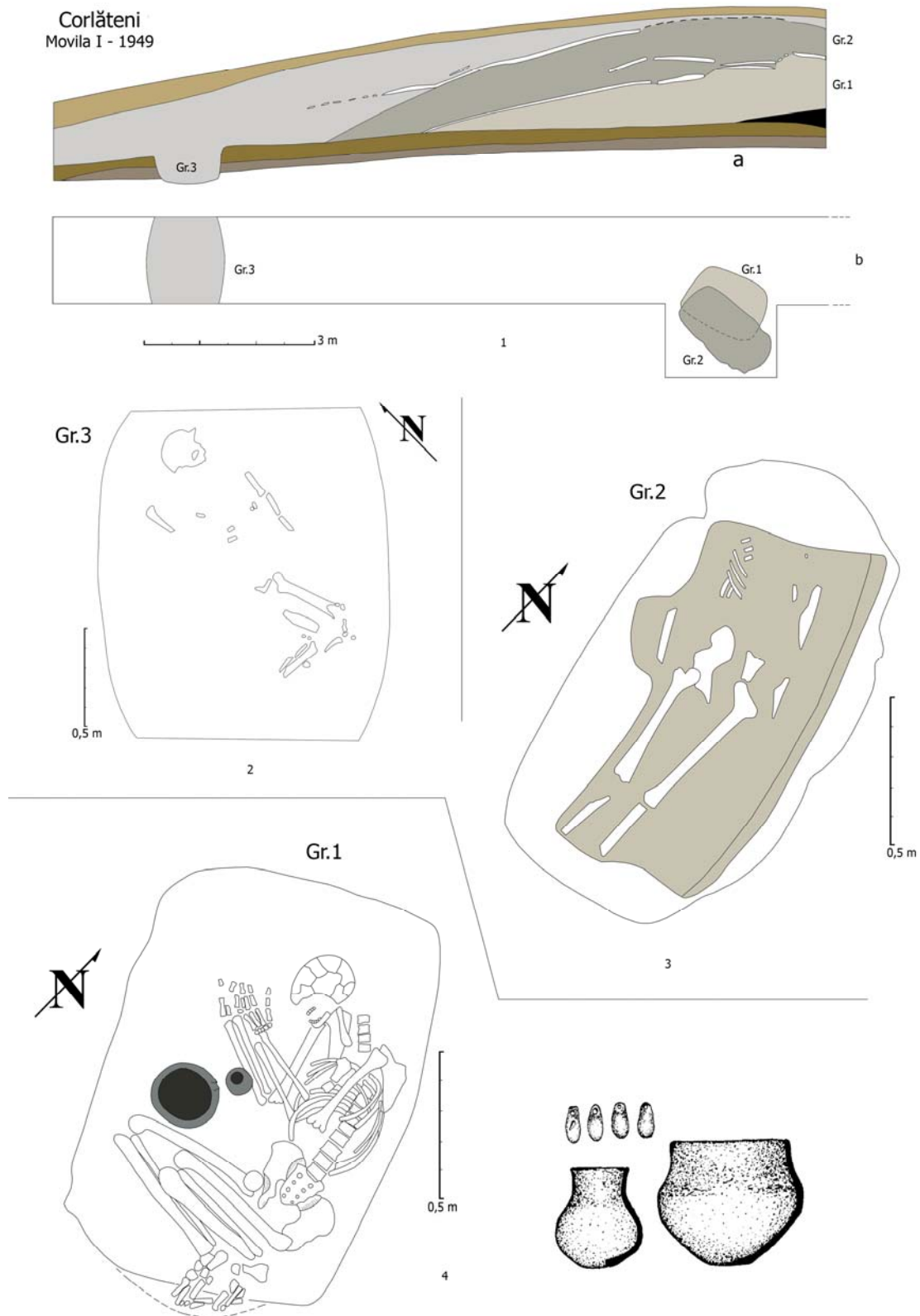
**Plansa XI.** The general plan of tumulus 9 from Krasnoe (1) and the burials discussed in the paper (2-6) (redrawn after Serova and Yarovoi 1987).

Planul general al tumulului 9 de la Krasnoe (1) și mormintele analizate în text (2-6) (redesenate după Serova și Yarovoi 1987).



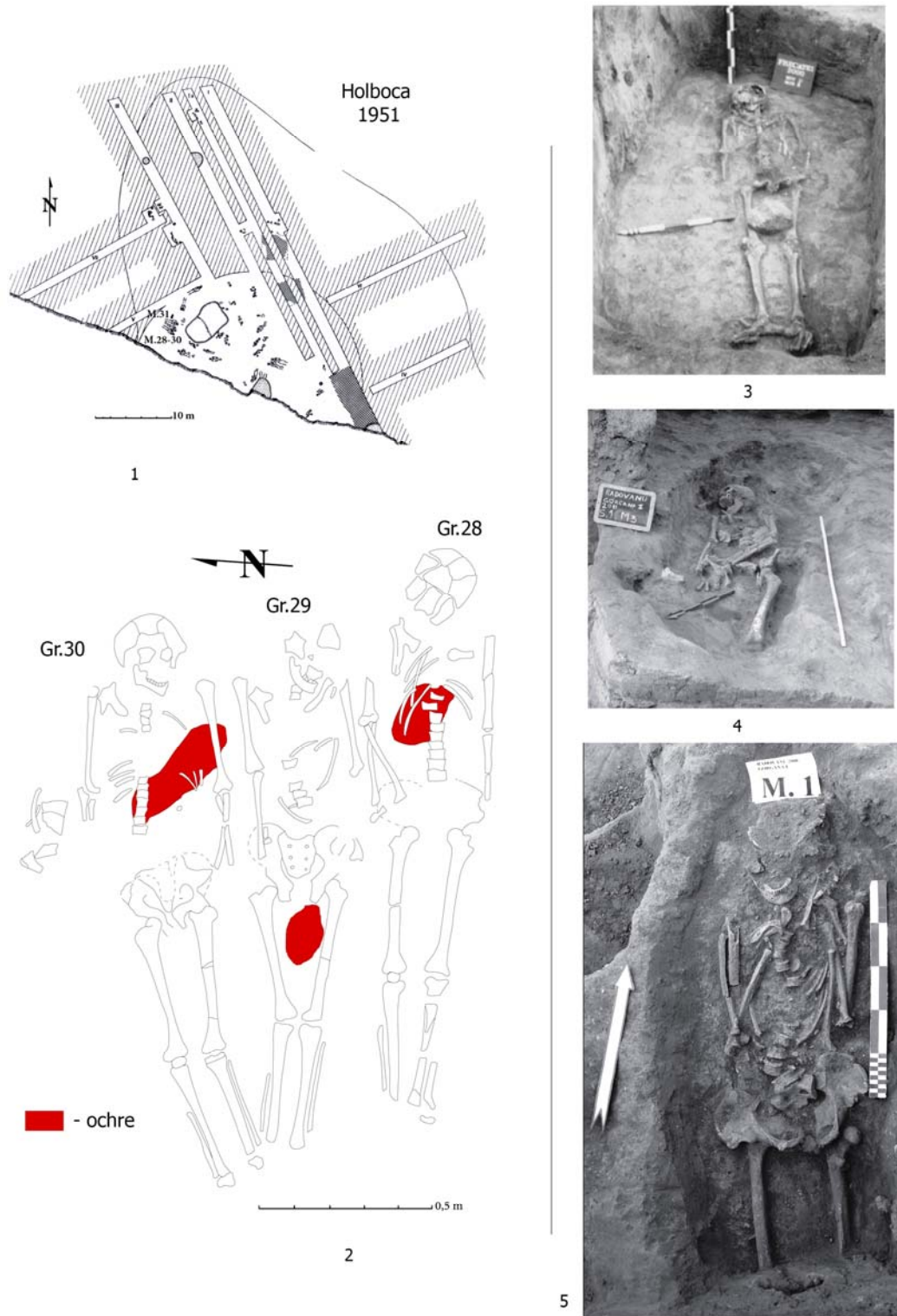
**Plansa XII.** Tumulus I from Anadolchioi: stratigraphic profile, the excavation and the position of the discovered burial (1) (after Schuchhardt and Traeger 1919); the tumulus from Suharu de Jos: profile, the excavation, the position of the discovered burial and the pot (2-4) (after Nicolăescu-Plopșor 1932).

Tumulul I de la Anadolchioi: profil stratigrafic, planul săpăturii și al mormântului descoperit (1) (după Schuchhardt și Traeger 1919); tumulul de la Suharu de Jos: profil, plan, mormântul și vasul descoperite (2-4) (după Nicolăescu-Plopșor 1932).



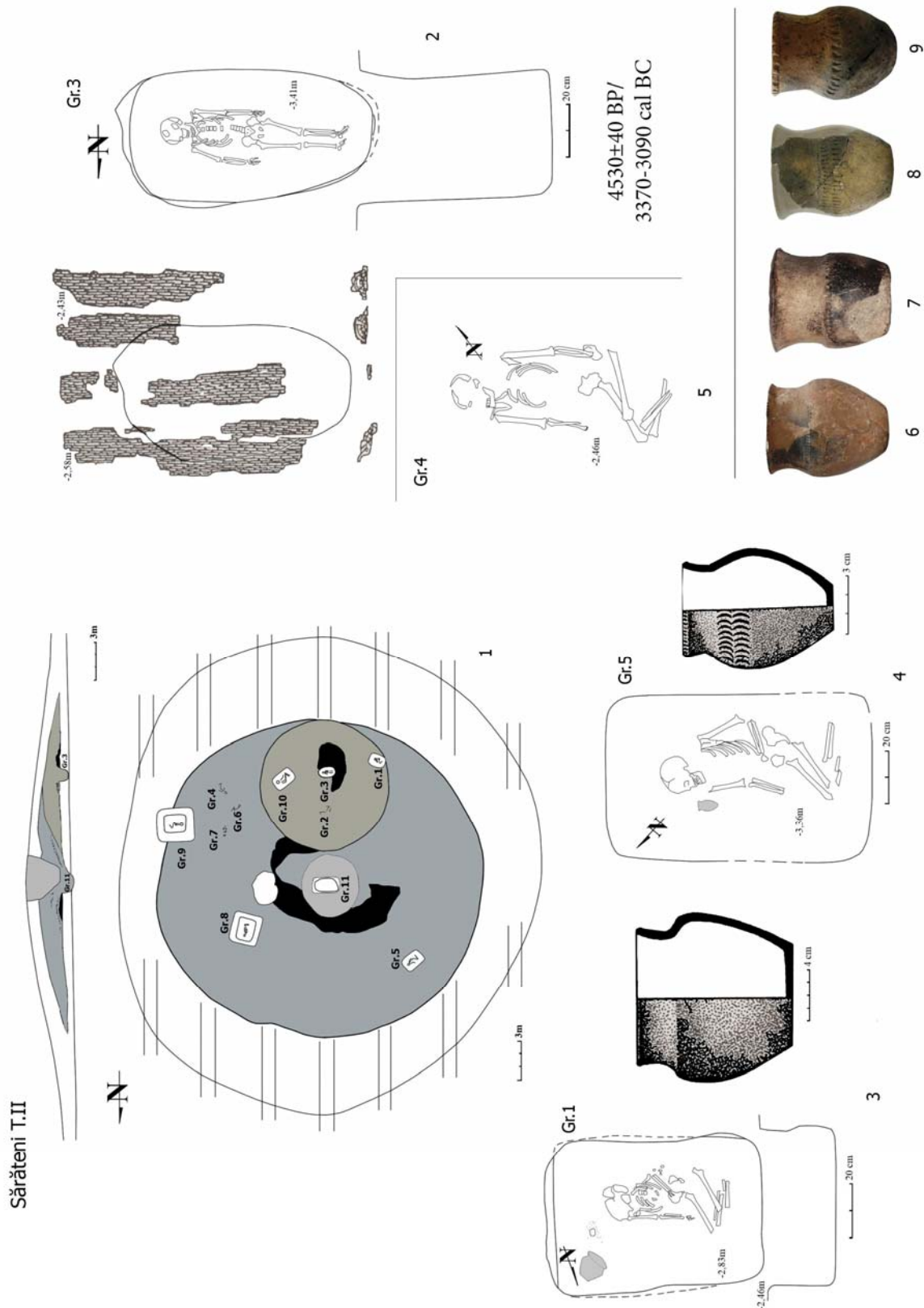
**Plansa XIII.** Corlăteni-Movila I/ 1949: a segment of the stratigraphic profile and the general plan (1/1, b), drawings of the excavated burials (2-4) (redrawn after Comșa 1982); goods from grave 1 (after Manzura 2016).

Corlăteni-Movila I/ 1949: segment profil stratigrafic și planul general (1/1, b), desenele complexelor funerare cercetate (2-4) (redesinate după Comșa 1982); inventarul mormântului 1 (după Manzura 2016).



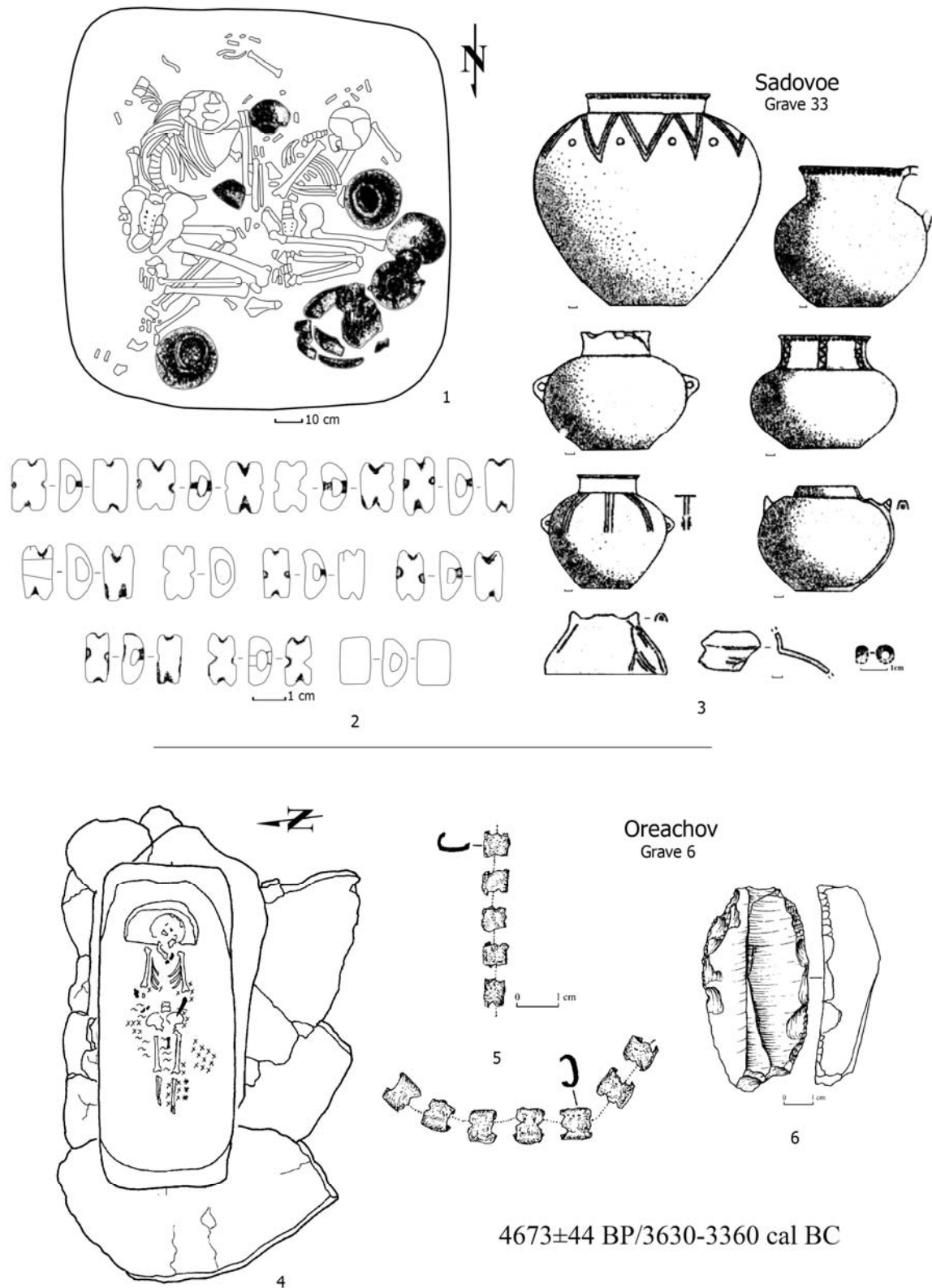
**Planșa XIV.** The general plan of the tumulus investigated in Holboca in 1951 (1) and graves 28, 29, 30 (2) (after Comșa 1985); the grave from Frecăței (after Vasiliu 2004); graves 1 and 2 from Radovanu (4-5) (after Comșa *et al.* 2011; 2013).

Planul general al tumulului cercetat la Holboca în 1951 (1) și mormintele 28, 29, 30 (2) (după Comșa 1985); mormântul de la Frecăței (după Vasiliu 2004); mormintele 1 și 2 de la Radovanu (4-5) (după Comșa *et al.* 2011; 2013).



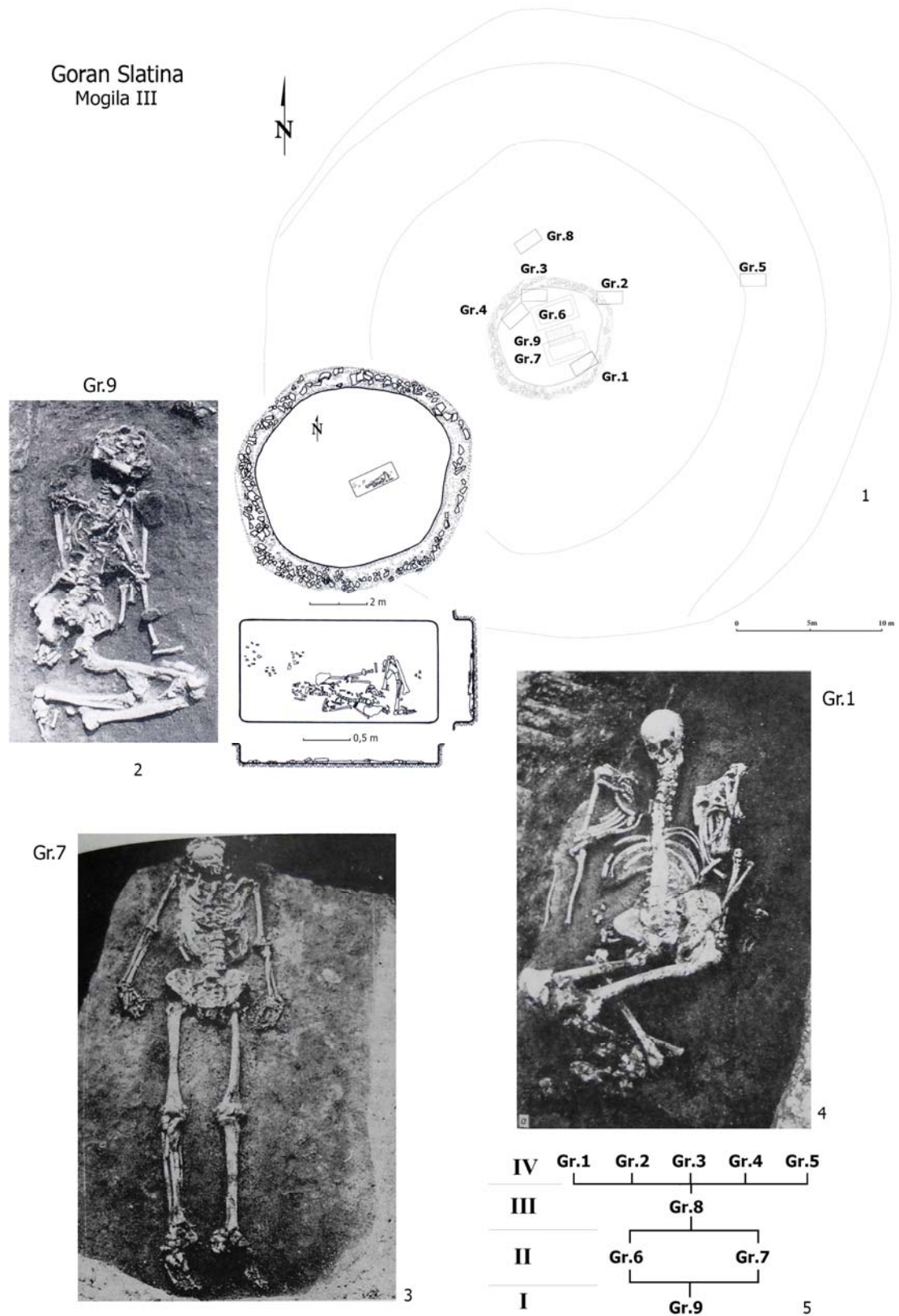
**Plansa XV.** Sărăteni - tumulus II: the general plan and the discussed burials (1-5) (after Levițki *et al.* 1996); pots dated to the end of the IV<sup>th</sup> millennium BC found in the tumuli from Sărăteni (4), Smeeni (6), Liești (7), Brăilița (8), Pliska (9) (after Frînculeasa *et al.* 2017a, fig. 7).

Sărăteni - tumulul II: planul general și al mormintelor analizate (1-5) (după Levițki *et al.* 1996); vase de la sfârșitul mileniului IV descoperite în tumuli la Sărăteni (4), Smeeni (6), Liești (7), Brăilița (8), Pliska (9) (după Frînculeasa *et al.* 2017a, fig. 7).



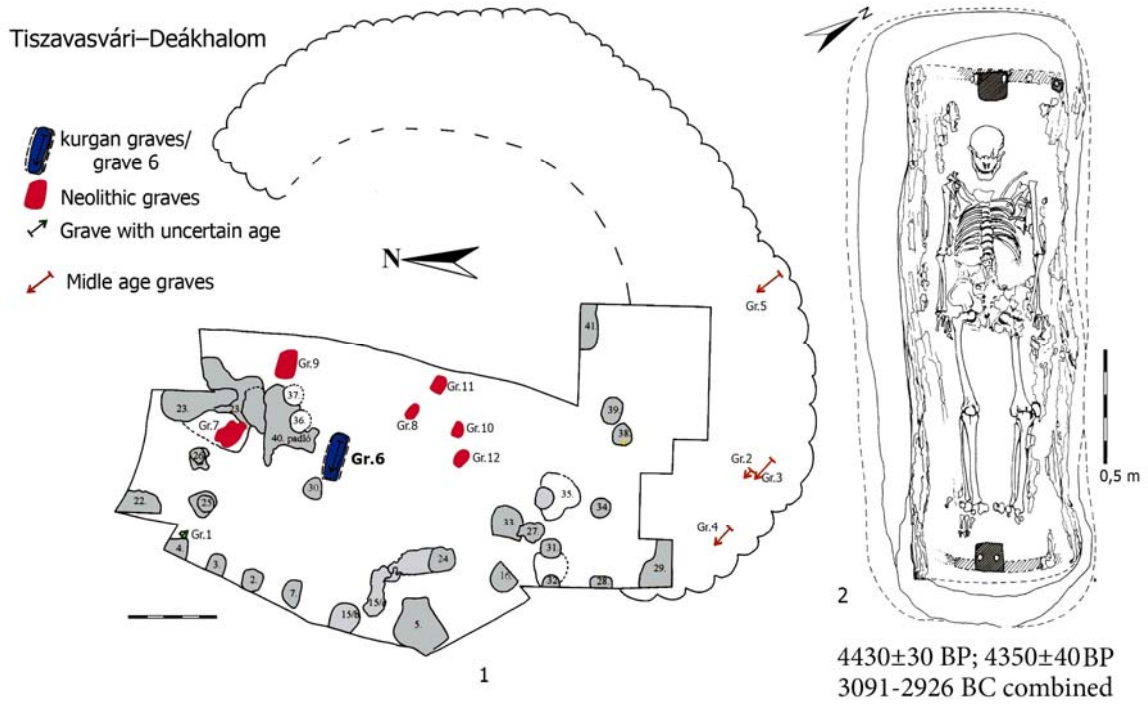
**Plansa XVI.** Grave 33 from Sadovoe (1-3) (after Maljukevich and Petrenko 1993); grave 6 from Oreahov 'Mogila Tarasova' (4-6) (after Govedarica *et al.* 2006).

Mormântul 33 de la Sadovoe (1-3) (după Maljukevich și Petrenko 1993); mormântul 6 de la Oreahov 'Mogila Tarasova' (4-6) (după Govedarica *et al.* 2006).

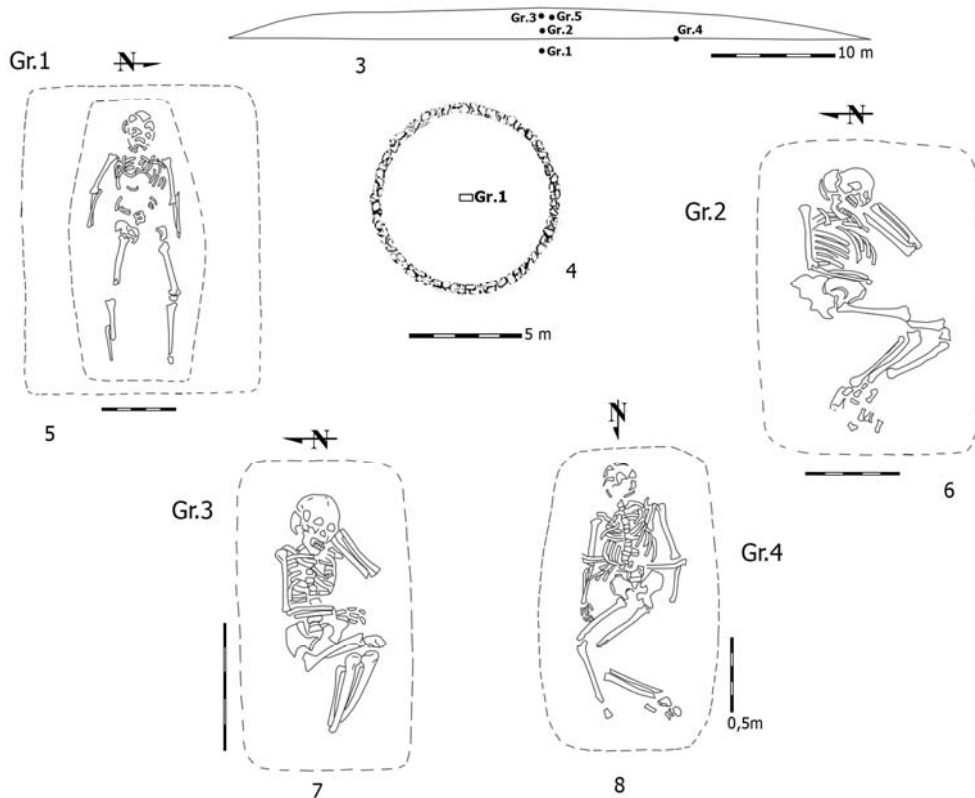


**Plansa XVII.** Goran Slatina - Mound III: the general plan and the main burials discussed in the paper (1-4) (after Kitov *et al.* 1991); stratigraphic matrix of burials (5).

Goran Slatina - Movila III: planul general și principalele morminte analizate (1-4) (după Kitov *et al.* 1991); schema stratigrafică a înmormântărilor (5).

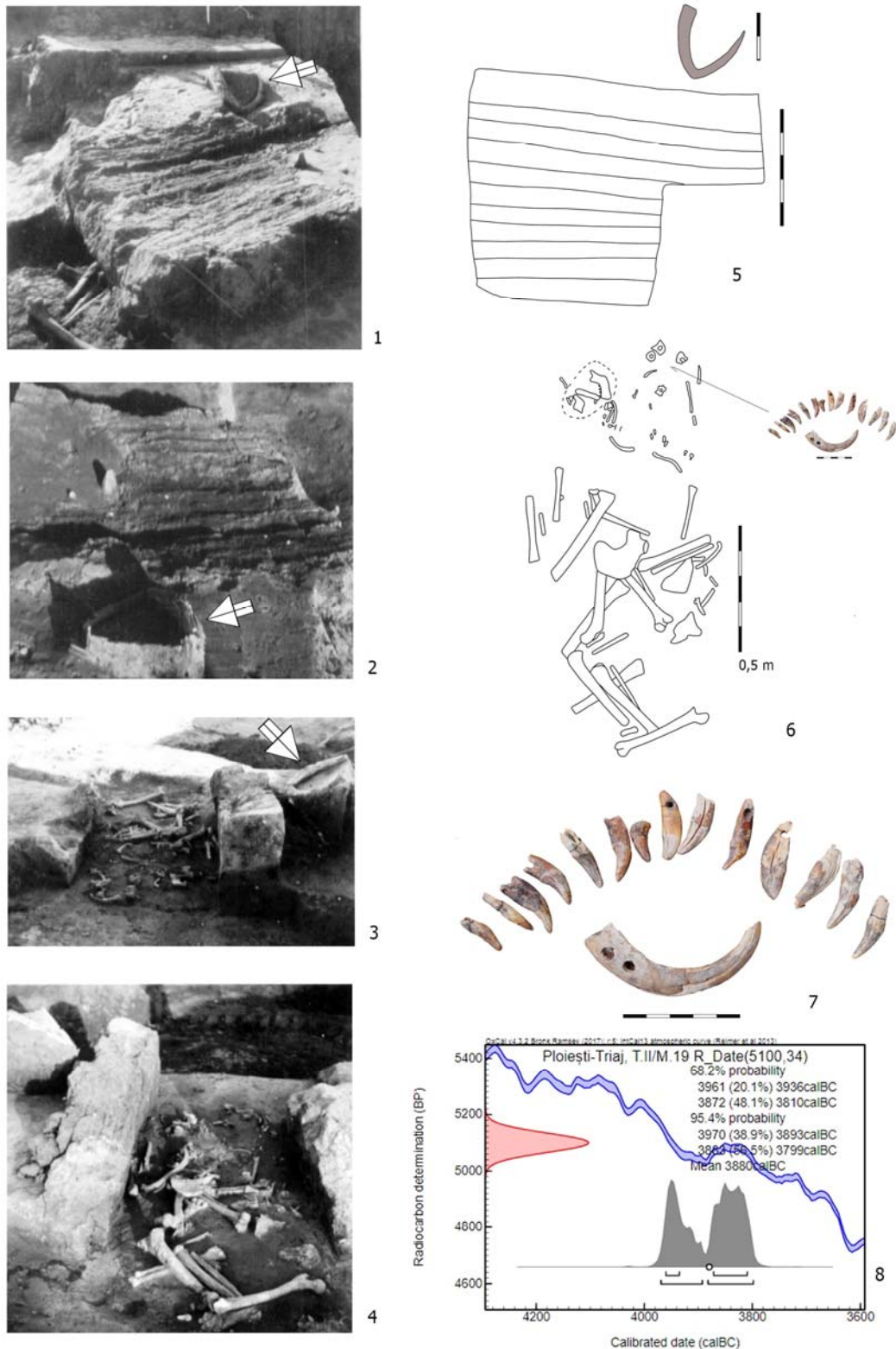


## Polsko Kosovo T.I



**Plansa XVIII.** Tiszavasvári - Deákhalom: the general plan of tumulus II and the drawing of grave 6 (after Dani 2011); tumulus I from Polsko Kosovo: stratigraphic profile (3) and drawings of the discovered burials (5-8), the ring around grave 1 (4) (following after 2002).

Tiszavasvári - Deákhalom: planul general al tumulului II și al mormântului 6 (după Dani 2011); tumulul I de la Polsko Kosovo: profil stratigrafic (3) și desenele mormintelor descoperite (5-8), ringul mormântului 1 (4) (după Stancev 2002).



**Planșa XIX.** Ploiești 'Triaj' - Mound II: grave 19 (1-8) (after Frînculeasa et al. 2013); the position of the horn (pointed by the arrow) (1-3, 5) from which a sample for <sup>14</sup>C dating was taken (8) (1-4 photos from the 'Vasile Pârvan' Institute of Archaeology Bucharest archive).

Ploiești 'Triaj' - Movila II: mormântul 19 (1-8) (după Frînculeasa *et al.* 2013); poziția cornului indicată de săgeată (1-3, 5) din care s-a prelevat proba pentru datare <sup>14</sup>C (8) (1-4 fotografii din arhiva Institutului de Arheologie 'Vasile Pârvan' București).

