## NEW DATA ON THE TRANSITION TO THE EARLY CHALCOLITHIC FROM THE RESEARCH NEAR GRADISHTE VILLAGE, SHUMEN DISTRICT, NORTHEAST BULGARIA

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Rezumat: Subiectul acestui articol este rezultatul săpăturilor din anul 2019 din situl Gradishte 3, situat lângă satul Gradishte, regiunea Shumen, de-a lungul traseului autostrăzii Hemus. Au fost descoperite 21 de gropi, dintre care doar una datează din calcoliticul timpuriu, iar restul aparțin perioadei de tranziție de la neoliticul târziu la calcoliticul timpuriu. Principalele caracteristici ale ceramicii din groapa calcolitică sunt prezența unor forme precum o cupă cu partea superioară cilindrică și alungită, ornamentată cu benzi cu grafit și un suport dreptunghiular, acoperit cu ocru roșu. Ceramica din celelalte gropi studiate reprezintă o combinație unică de forme și ornamente din calcoliticul timpuriu cu cele din neoliticul târziu. Decorul cu grafit lipsește. Datele C14 stabilite sunt 5036 – 4714 cal BC. Analogii se găsesc în siturile neoliticului târziu și calcoliticului timpuriu, atât la sud, cât și la nord de Dunăre. Analiza comparativă susține ideea existenței unui complex cultural comun Polianița - Boian. Unde sunt rădăcinile acestui complex și dacă este posibil ca situl arheologic Gradishte 3 să reprezinte o etapă cea mai timpurie și o etapă de tranziție care marchează începutul fazei necercetate până acum Polianița I, sunt întrebări care vor aștepta răspunsuri de la descoperirile viitoare.

Abstract: The subject of this article are the results of the 2019 excavations of the Gradishte 3 site, located near the village of Gradishte, Shumen region, along the Hemus highway. Twenty-one pits have been excavated, of which only one dates to the Early Chalcolithic and the rest belong to the transitional period from the Late Neolithic to the Early Chalcolithic. The main characteristics of the pottery from the Chalcolithic pit are the presence of forms such as a bowl with an elongated cylindrical upper part ornamented with graphite bands and a rectangular base covered with red ochre. The pottery from the other pits studied represents a specific combination of Early Chalcolithic forms and ornamentation with those of the Late Neolithic. Graphite decoration is absent. The C14 dates found are 5036 - 4714 cal BC. Analogies are found in Late Neolithic and Early Chalcolithic sites both south and north of the Danube. The comparative analysis supports the idea of a common Polyanitsa – Boian cultural complex. Where are the roots of this complex and is it possible that the archaeological site Gradishte 3 represents an earliest and transitional stage marking the beginning of the so far unexplored Polyanitsa I phase are questions that will await answers from future discoveries.

Cuvinte-cheie: neolitic târziu; calcolitic timpuriu; perioadă de tranziție; Gradishte; ceramică.

**Key-words:** *Late Neolithic, Early Chalcolithic, transition period; Gradishte; pottery.* 

The topic of the transition from the Late Neolithic to the Early Chalcolithic and the associated changes on the territory of Northern Bulgaria is rarely addressed in the scientific literature due to the lack of sufficient archaeological data for its clarification. On the basis of her research and observations in the 1990s Henrietta Todorova made one of the first scientific generalizations about the Balkan Late Neolithic and Early Chalcolithic cultures, which she united into one work<sup>1</sup>. In her view, in the northern half of the Balkan Peninsula, the complex of the Vinča type cultures was formed. Within its boundaries, a gradual transformation of Late Neolithic cultural phenomena into their Early Chalcolithic pendants is attested in some places. She gives as examples the transitional Gradacka phase of the Vinča culture and the Proto-Sava phase from the Kamchia river valley, North-Eastern Bulgaria. At the same time, the researcher stresses that elsewhere the

<sup>1</sup> Тодорова, Вайсов, 1993, р. 80.

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transition was accompanied by settlement discontinuity and internal movements of population. Henrietta Todorova assumes for the Vinča, Polyanitsa, Boian and Hamangia cultures that significant internal transformations took place during the transition into their Early Chalcolithic phases<sup>2</sup>.

The topic of the development of a cultural phenomenon with a transitional character in North-Western Bulgaria was raised by the investigations of the settlement near Brenitsa in 2000. The identification of decorative patterns of the Late Vădastra – type III-IV according to the periodization of M. Nica – on pottery from the lower Neolithic levels and the appearance of forms with further development in the Gradeshnitsa culture in the Chalcolithic provide grounds for their assignment to the period between the Vinča B2 and Vinča C1 phases<sup>3</sup>. Similar materials were found near the village of Bohot, Pleven municipality, Central North Bulgaria in 2019. They originate from buried features and were identified as the Vădastra-Brenitsa culture<sup>4</sup>.

Rescue excavations under infrastructure projects in North Eastern Bulgaria in recent years have enriched the archaeological map of North Eastern Bulgaria with two sites that represent the Neolithic-Chalcolithic transition period. One of them is located near the village of Gradishte, Shumen region – an area which represents mainly an area of distribution of the Chalcolithic Polyanitsa culture. The other site is located about 40 km to the east, near the village of Belogradets, Varna region, where a kind of contact zone with intercultural influences is formed.

The subject of this article is the result of the investigations of Gradishte 3 site, located near the village of Gradishte, on the Hemus highway route (Fig. 1). It is located on the left bank of the Pakosha River, 1,5 km northwest of the mentioned settlement. Excavations were carried out in 2019 on an area of 21 acres. Twenty-one prehistoric pits with no defined arrangement were uncovered, as well as a necropolis from the Early Iron Age. According to the ceramic material, only one of the prehistoric features (No. 7) dates to the Early Chalcolithic, while the others belong to an earlier chronological level, which we define as a period of transition from the Late Neolithic to the Early Chalcolithic. The pits are cylindrical with a circular opening of up to 1.30 m in diameter or have sloping walls and an oval opening whose dimensions vary between 1.90 and 2.50 m. They contain fragments of pottery, animal bones and flint artefacts or only secondary baked destructions<sup>5</sup>.

The main characteristics of the pottery from feature 7, attributed to the Early Chalcolithic, are the presence of forms such as a bowl with an elongated cylindrical upper part decorated with graphite bands and a rectangular base covered with red ochre.

Graphite decoration is absent in the other pits excavated from Gradishte 3. Intact vessels found are few in number. In the case of the fine, thin-walled pottery we find the following forms: cylindrical-conical (Fig. 1/1), slightly biconical (Fig. 2/4-5) and conical bowls with slightly rounded walls (Fig. 2/2-3); bowls with cylindrically-conical (Fig. 2/6), hemispherical (Fig. 1/7) or elongated body (Fig. 2/9); deep vessels with rounded body (Fig. 2/8, 10-11) or highly biconical (Fig. 2/12). The decoration of these thin-walled vessels is mostly represented by narrow channels up to 3-4 mm, arranged horizontally, obliquely or arcuately, often united in patterns and various combinations (Fig. 2/1, 4, 6, 7-10). Sometimes they are found in combination with red ochre. Cut decoration is also used (Fig. 2/3, 11-12). In one fragment of a highly biconical vessel the incised bands are very narrow, circa 3-4 mm, and they alternate with those with a preserved vessel surface, 2 mm wide. They form a pattern of concentric circles next to which there is a bundle of oblique bands (Fig. 2/12). In another case, some space is cut out to produce a circle with a preserved vessel surface (Fig. 2/11).

For the pottery of medium wall thickness (about 1-1,2 cm), decorated mainly with the technique of clay carving and white inlay, the registered forms are: medium deep and deep bowls of

<sup>&</sup>lt;sup>2</sup> Тодорова, Вайсов, 1993, р. 83.

<sup>&</sup>lt;sup>3</sup> Найденова, Ганецовски, 2002, р. 79.

<sup>&</sup>lt;sup>4</sup> Вайсов, Славчев 2020, р. 255.

<sup>&</sup>lt;sup>5</sup> Петрова, Найденова, Тодоров, 2020, pp. 246-249.

conical shape (**Fig. 3/1, 3**) or with a rounded body (**Fig. 3/2, 5, 8-9**), cylindrical-conical bowls (**Fig. 3/6-7**), deep bowls with S-shaped profile (**Fig. 4/1**), pot with a cylindrical neck and slight transition to a rounded body (**Fig. 4/2**). Specific type represents the hollow-stemmed vessels, in which the body is cylindrical-conical or rounded-biconical with a high conical neck (**Fig. 4/3-7**). The cut decoration shows a wide variety of patterns. Thin incised bands alternating with thin bands from the preserved surface of the vessel are typical, often in combination with staggered ornament or with individual squares (**Fig. 4/3, 9, 11**). Incised and pierced decoration is met (**Fig. 4/1, 8**).

Deep bowls are well represented among the vessels with rough surfaces. They are decorated with barbotine, embossed bands and embossed buds (Fig.4/8).

We put the vessels with wall thickness over 1,2 cm in a separate group. Storage vessels with closed forms belong to these (Fig. 4/9-10), deep bowls with carved decoration (Fig. 4/11) and lids (Fig. 4/12)

Radiocarbon dating of Gradishte 3 site was carried out by AMS 14C dating at the Scottish Universities Environmental Research Center (SUERC), East Kilbride, Scotland based on animal bone samples taken from five pits. The resulting radiocarbon dates show a smooth development that took place in the chronological interval 5036-4714 cal BC (6051-5915 BP) (**Fig. 5**). This time period covers the end of the Neolithic and the beginning of the Chalcolithic (Bulgarian chronology).

The ceramic complex presented here also has characteristics from both periods. It represents a specific combination of Early Chalcolithic forms and ornamentation with those of the Late Neolithic.

Insufficient research related to the material culture of the Late Neolithic in the area does not allow for comparison with local preceding traditions in pottery production. Channels decoration is what brings it primarily closer to the aesthetic taste of Late Neolithic societies. Channels have a wide application on fine ceramics in most Late Neolithic cultures on the Balkan Peninsula.

They are also found on the pottery of the neighbouring Hotnitsa culture from Central North Bulgaria (Koprivets - Hotnitsa II)<sup>6</sup>. The canelure decoration was preserved in the Chalcolithic period, but in simpler patterns and often in combination with graphite drawing, which is missing in Gradishte. In the Late Neolithic, incised decoration, incisions at the mouth, and checkerboard ornamentation are also known. Incised decoration is attested in pottery in individual sites in North Eastern Bulgaria, which researchers associate with the Boian – Giulesti – Greaca societies. These are the settlement mound near Ruse, the lowest horizon<sup>7</sup> and the settlements at Krasen<sup>8</sup> and Sboryanovo - the "Water power plant" The similarities with them are few and relate precisely to the use of checkerboard ornament and the cannelures.

Among the most characteristic early Chalcolithic elements from Gradishte 3 are the deep bowls, open vessels with seats, and lids with conical or cylindrical ledges, as well as a number of patterns in the carved decoration – rectangular patterns of alternating carved bands with bands of preserved vessel surface; cut out diamonds and circles. However, it should be stressed that these appear here as variants that have no exact parallels in the Early Chalcolithic pottery complexes from the tells at Polyanitsa and Ovcharovo<sup>10</sup>. The explanation is that the pottery from the mentioned tells a later typological development corresponding to the II and III phase of the Polyanitsa culture. The Polyanitsa phase I, according to Henrietta Todorova's periodization, remains unexplored and with no materials found.

Comparisons with the Boian-Vidra type pottery from the settlement near Straklevo village, Ruse region, published by Volodya Popov (1992) show some correspondences. These relate to the

<sup>7</sup> Попов, 1996, pp. 206, 280.

<sup>&</sup>lt;sup>6</sup> Попов, 1996, р. 46, 84.

<sup>&</sup>lt;sup>8</sup> Попов, 1992, pp. 20-28.

<sup>&</sup>lt;sup>9</sup> Матева, 1993, pp. 29-32, Tab. II. <sup>10</sup> Тодорова et al., 1983, Табло 35.

bowls with rounded bodies and to the patterns of the incised decoration<sup>11</sup>. However, the bowls with seats from Shtraklevo have different shapes.

Several similarities are also found north of the Danube. Deep cylindrical-conical bowls covered entirely with channels are part of the Boian-Giulești type pottery from the last stage of habitation of the "Movila Berzei" settlement near Gălățui village<sup>12</sup>. In the same settlement there are similar cylindrical-conical bowls with soft profiling and canelures, deep open vessels with incised decoration including meanders of motifs in the form of the Bulgarian letter " $\Gamma$ ". The researcher Marian Neagu assumes that the first Boian-Giulești societies settled here shortly before 4850 cal. BC, when the Karanovo V – Maritsa horizon began<sup>13</sup>.

Analogies can also be made with the pottery materials from the tell at Tangâru village, both from level II c – the last phase of Boian-Giulești, and from levels III a-c – Boian-Vidra. They refer mainly to the patterns realized with the technique of clay carving – bands up to 8 mm wide, a row of triangles, stripes with a checkerboard ornament, a ladder of squares<sup>14</sup>.

The comparative analysis confirms the general trends in the development of material culture during the Late Neolithic and Early Chalcolithic in present-day North-Eastern Bulgaria and South-Eastern Romania. It supports the idea that the cultural phenomena of Polyanitsa and Boian belong to a common cultural complex<sup>15</sup>. Where are the roots of this complex and is it possible that the archaeological site Gradishte 3 represents an earliest and transitional stage marking the beginning of the hitherto unexplored Polyanitsa I phase are questions that will await answers from the next future discoveries.

In any case, however, the material culture revealed at Gradishte 3 refers to a chronological stage in which Late Neolithic traditions died out and new, Early Chalcolithic, elements appeared, the development of which continued through the subsequent phases of the Stone-Copper Age.

## **BIBLIOGRAPHY**

Вайсов, И., Славчев, В. 2020. Енеолитно селище при Бохот. *Археологически отврития и разкопки през 2019 г.* І. София: Булгед ООД, рр. 255-259, па разположение на https://publications.naim.bg/index.php/ADE/issue/view/50/44 (последно влизане на 29.10.2022).

Матева, Б. 1993. Находки от късния неолит в археологическия резерват "Сборяново". *Годишник на музеите в Северна България* 19, pp. 29-32.

Найденова, Е., Ганецовски, Г. 2002. Сондажно проучване на праисторическо селище Бреница — Кременитата могила през 2000 г. . *Годишник на археологически музей Пловдив* 19(1), pp. 74-95.

Петрова, В., Найденова, Е., Тодоров, Л. 2020. Спасително археологическо проучване на обект Градище 3, Шуменско, АМ Хемус (323+100 – 323+400). *Археологически открития и разкопки през 2019 г.* І. София: Булгед ООД, pp. 246-250, па разположение на https://publications.naim.bg/index.php/ADE/issue/view/50/44 (последно влизане на 29.10.2022).

Попов, В. 1992. Култура Боян на юг от Дунава. Археология 4, рр. 20-28.

Попов, В. 1996. *Периодизация и хронология на неолитните и халколитните култури от поречието на р. Русенски Лом.* Русе: Авангард принт.

Тодорова, X. et al. 1983. *Овчарово, Разкопки и проучвания* IX. София: Българска академия на науките.

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<sup>&</sup>lt;sup>11</sup> Попов, 1992, р. 12.

<sup>&</sup>lt;sup>12</sup> Neagu, 2003, pp. 234-235, Pl. LIII-LIV.

<sup>&</sup>lt;sup>13</sup> Neagu, 2003, p. 152.

<sup>&</sup>lt;sup>14</sup> Berciu, 1961, pp. 384-389, fig.175-178.

<sup>&</sup>lt;sup>15</sup> Naidenova, 2010, p.75.

Тодорова, Х., Вайсов, И.1993. *Новокаменната епоха в България: Краят на седмо- шесто хилядолетие пр. н. е.* София: Наука и изкуство.

Berciu, D. 1961. Contribuții la problemele neoliticului în România în lumina noilor cercetări. București: Academia RPR.

Naidenova, E. 2010. Actual research status of Chalcolithic cultures Polyanitsa and Boian. *SP* 7, pp. 71-75.

Neagu, M. 2003. Neoliticul mijlociu la Dunărea de Jos cu privire specială asupra centrului Munteniei. *CCDJ* 20, pp. 8-259.

## **ABBREVIATIONS LIST**

CCDJ	- Cultură și Civilizație la Dunărea de Jos, Muzeul Dunării de Jos, Călărași.
SP	- Studii de preistorie, Asociația Română de Arheologie, București.

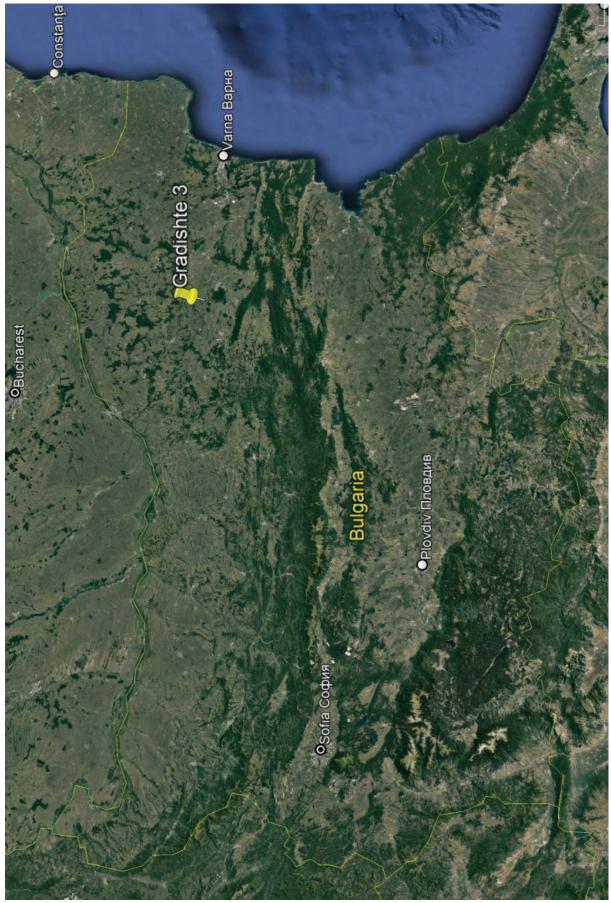


Figure 1

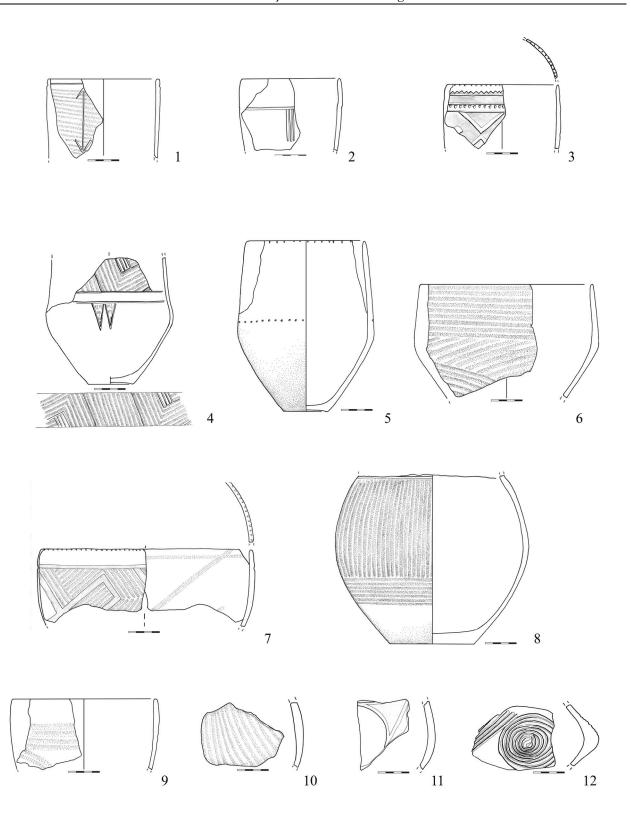


Figure 2

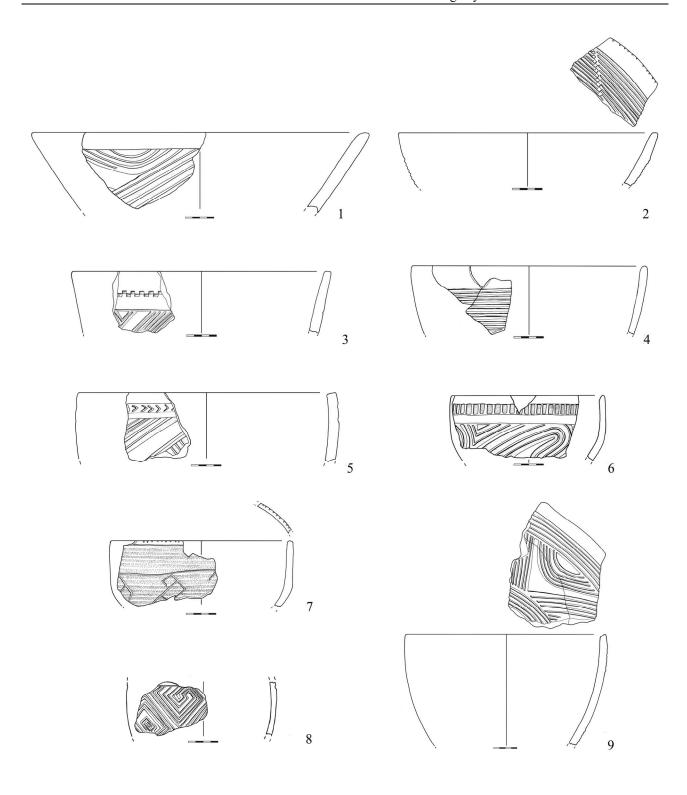


Figure 3

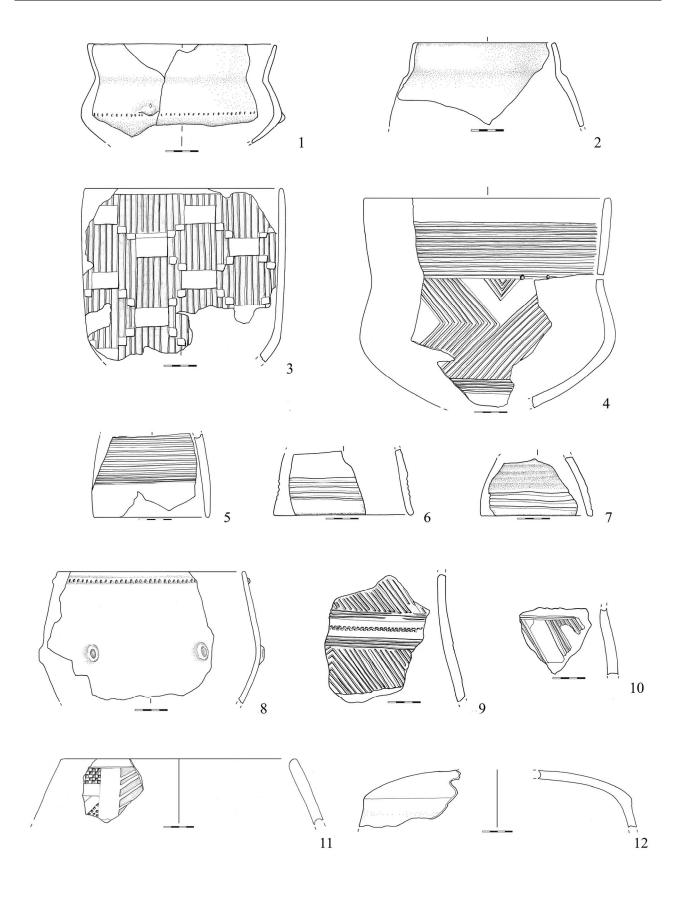


Figure 4



