

## SETTLEMENTS OF THE BÜKK CULTURE FROM HERNÁD VALLEY, NORTH-EASTERN HUNGARY

### A BÜKKI KULTÚRA TELEPÜLÉSEI A HERNÁD VÖLGYÉBEN (ÉSZAKKELET- MAGYARORSZÁG)

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#### Abstract

*Some new results of the research of Bükk culture has been summarized in this paper. The presented data has been derived from recently excavated Middle Neolithic sites of the Hernád valley. Settlement features of important site of the DAAD-MÖB project “Long distance trade in Neolithic pottery”, Garadna-Elkerülő út, site No. 2 has been introduced. The Garadna ceramic finds and radiocarbon dates (from skeletal remains) have thrown new light upon the earliest phase and the earliest decoration styles of the Bükk culture. The ceramics of Garadna and Novajdrány-Elkerülő út sites have other interesting characteristics that have shown direct connections with the contemporary painted pottery groups.*

#### Kivonat

*Jelen tanulmány a bükki kultúra kutatásának néhány új eredményét foglalja össze, melyek Hernád-völgyi feltárásokhoz kapcsolódnak. Bemutatásra kerülnek az “Újkőkori kerámiák távolsági kereskedelme” elnevezésű DAAD-MÖB programban hangsúlyosan szereplő Garadna-Elkerülő út, 2. lelőhely települési jelenségei. A 2003-ban feltárt lelőhely kerámiaanyaga és az embertani leleteken végzett radiokarbon vizsgálatok eredményei új megvilágításba helyezik a bükki kultúra kezdetével és a legkorábbi bükki díszítőstílusokkal kapcsolatos elképzeléseket. Szó esik Garadna és Novajdrány-Elkerülő út települések leletanyagának egy másik érdekes vonásáról is, mely a festett kerámiát használó kortárs vonaldiszes csoportokkal fenntartott kapcsolatokra utal.*

KEYWORDS: NORTH-EASTERN HUNGARY, HERNÁD VALLEY, NEOLITHIC, BÜKK CULTURE, CERAMICS, CHRONOLOGY

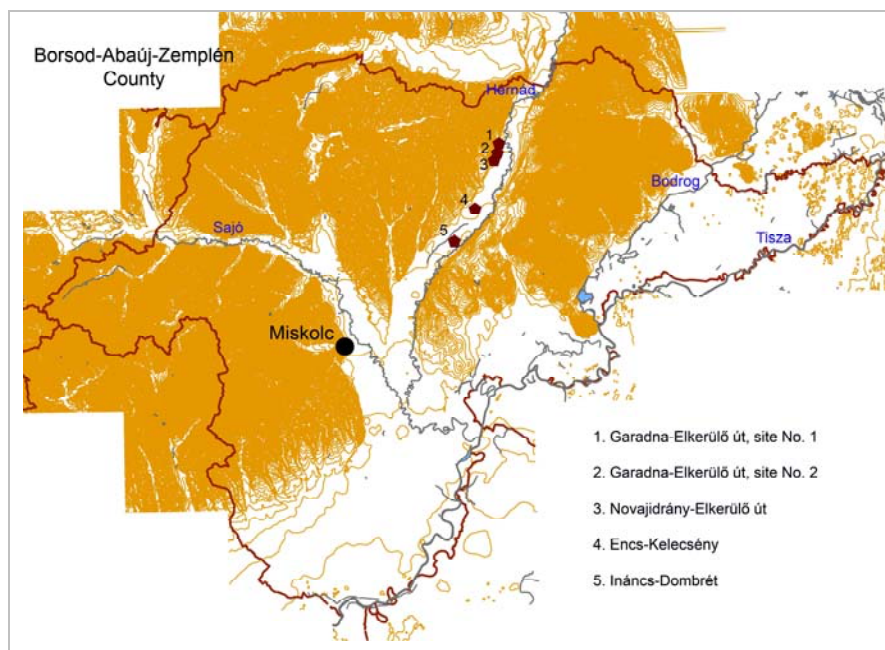
KULCSSZAVAK: ÉSZAKKELET-MAGYARORSZÁG, HERNÁD-VÖLGY, NEOLITIKUM, BÜKKI KULTÚRA, KERÁMIA, KRONOLÓGIA

Some new results of the research of Bükk culture has been summarized in this paper. The presented data has been derived from recently excavated Middle Neolithic sites of the Hernád valley. Settlement features of important site of the DAAD-MÖB project “Long distance trade in Neolithic pottery”, Garadna-Elkerülő út, site No. 2 has been introduced. The aims of the DAAD-MÖB project were the analyses of Bükk ceramics from its core area to find out its characteristics and production technology and to determine whether had been special settlements and specialists for this purpose or not. This article is an archaeological contribution to petro-mineralogical, geochemical and other archaeometrical investigations of the project.

The communities of Bükk culture had an extended “core area”. It spread from the Mátra Mountains, Bükk Mountains and the vicinity of river Tisza to Spiš/Szepesség towards north and from the Southern Slovakian basin to Hungarian and Slovakian parts of Bodrogek region and Eastern Slovakian Lowland towards east. The Bükk style pottery also has a wide range distribution outside its core area: from Moravia to Transylvania (west-east) and from Little Poland to Middle Serbia (north-

south). So Bükk ceramics that have been found at contemporary cultures/cultural groups should be studied in the future, too. The aim should be to find out whether they were local products or got there via exchange. South-western Slovakia, North Transdanubia and the Kraków region have a “special status” because of S. Šiška’s hypothesis about the end of the Bükk culture and the immigration of its people to these territories (Šiška 1995a: 12–13; M. Soják shares his opinion, Soják 1998: 143).

There are also territories with sites that thought to be interesting because of their “mixed” pottery. For example Bükk and Želiezovce/Zseliz style ceramics are found together at the Middle Neolithic settlements of Spiš/Szepesség at north (Soják 2000). Bükk style pottery occurs along with painted ceramics in the Hungarian and Slovakian Bodrogek region (e.g. Sátorajújhely-Ronyva-part, Visegrádi 1907; 1912) and in the Eastern Slovakian Lowland (e.g. Zemplínske Kopčany/Hegyi, Šiška 1974; 1979: 249–256, 259–260). Bükk and Esztár style ceramics are together east from the river Tisza (e.g. Tiszavasvári-



**Fig. 1.:** New excavated sites of the Bükk culture in the Hungarian section of Hernád valley

**1. ábra:** A bükki kultúra újabb feltárt települései a Hernád-völgy magyarországi szakaszán



**Fig. 2.:** Oven of the Bükk culture (S6) with a child burial next to it (S119) from Garadna-Elkerülő út, site No. 2.

**2. ábra:** Kemence (S6) és a közelében előkerült gyermektemetkezés (S119) Garadna-Elkerülő út, 2. lelőhelyen

Keresztfal, upper part of pit No. III/α, Kalicz & Makkay 1977: 171; Tiszavasvári-Paptelekhát, densifying of ceramics V-9, Kalicz & Makkay 1977: 176) while Tiszadob, Bükk, Esztár and Szakálhát ceramics occur together at the sites of “Polgár island” from 4<sup>th</sup> phase of Middle Neolithic (Raczky & Anders 2009: 40–43). Finally, Bükk and Szakálhát style ceramics are found in southern territories of the Bükk culture at Mátraalja and Bükkalja (e.g. Kompolt-Kistér, site No. 14; Bánffy 1999: 167; 2000: 88). There are a lot of Bükk style pieces west from the Bükk territory, in an eastern settlement of the Zseliz culture, Szécsény-Ültetés, too (from almost every settlement feature, Soós 1982: 21–22; in the studied House I, pit No. 16 and 20, Fábíán 2002: 74–75).

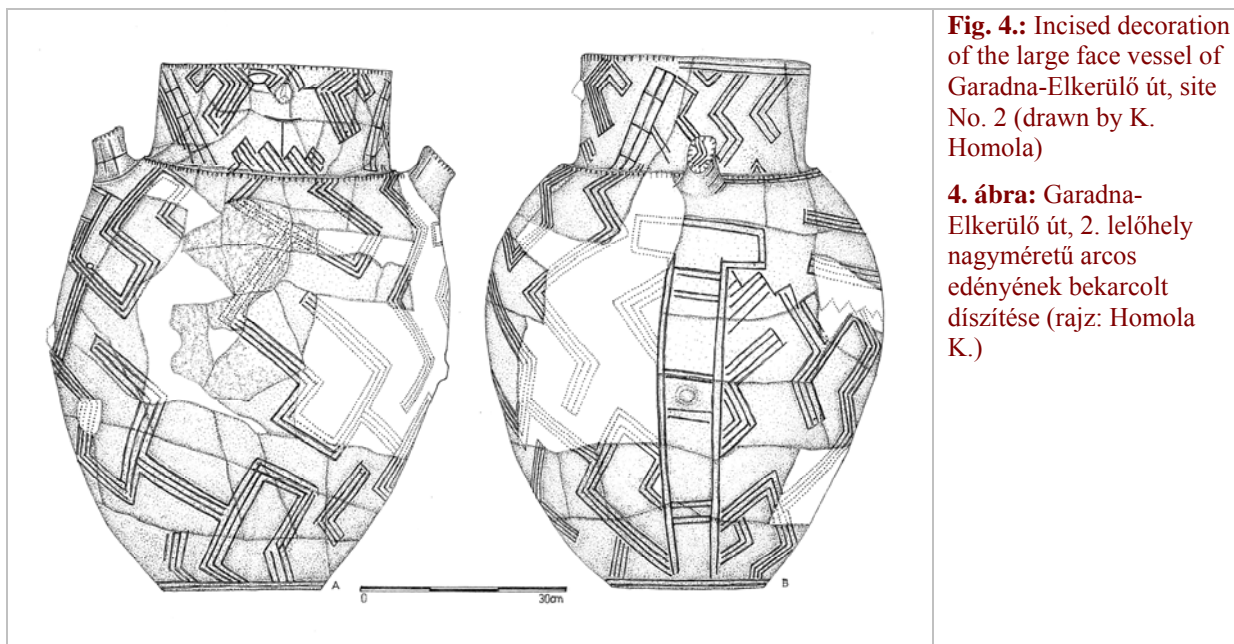


**Fig. 3.:** Large storage vessel with face depiction under debris (S22) from Garadna-Elkerülő út, site No. 2

**3. ábra:** Omladékkal borított nagyméretű, arcábrázolásos hombár Garadna-Elkerülő út, 2. lelőhelyen

The mentioned territories may be contact zones between different cultural groups or communities that used different pottery decoration styles. The study of these territories, ascertaining the ratio of styles in material of each sites and the explanation of this situation will be necessary in the future.

Noticeable part of settlement area of the Bükk culture was the north-south oriented Hernád Valley that might be an important exchange route in the Neolithic. There are some new and some non-published sites of the culture from the Hungarian section of this valley (**Fig. 1.**; Borsod-Abaúj-Zemplén county, North-eastern Hungary). M. Wolf and K. Simán excavated a site of the formative Bükk culture at Encs-Kelecsény in 1983 (Wolf & Simán 1984, Fábíán 2002: 74–75, 2010, 269–270)).



**Fig. 4.:** Incised decoration of the large face vessel of Garadna-Elkerülő út, site No. 2 (drawn by K. Homola)

**4. ábra:** Garadna-Elkerülő út, 2. lelőhely nagyméretű arcós edényének bekarcolt díszítése (rajz: Homola K.)

Huge amount of find material of the site is derived from two main features. Beside fine ware and coarse ware some idols, fragments of face vessels, clay beads, bone implements, a lot of animal bones and chipped stone artefacts came to light (Wolf & Simán 1984). J. Koós uncovered burnt house remains with ceramics, animal bones and obsidian artefacts of the evolved Bükk culture at Ináncs-Dombrét in 1986 (Koós 1987, unpublished material). The author conducted excavations at Novajdrány in 2002 (Csengeri 2003b) and at Garadna in 2003 (unpublished material, site No. 1 with some features and site No. 2 see below).

Garadna-Elkerülő út, site No. 2 is situated three kilometres west from the present-day channel of river Hernád. Ceramics of this settlement were analysed in detailed in the DAAD-MÖB project as it was mentioned earlier. 117 Middle Neolithic features were found in an area of 2000 m<sup>2</sup> in the site. The features were already turned up from 20–30 cm depth beneath the present-day surface. Settlement remains of other periods also came to light: from the Late Bronze Age (Gáva culture), from the 2<sup>nd</sup>–4<sup>th</sup> century AD (Germanic people) and from the 13<sup>th</sup> century AD (Arpadian Age).

No house debris or postholes were found but two large refuse pits, several smaller, cylindrical pits, oven and hearth remains were turned up from the Middle Neolithic. The most important feature is thought to be an oven with sixty centimetres high wall (Fig. 2.; S6) with a child burial next to it (S119).

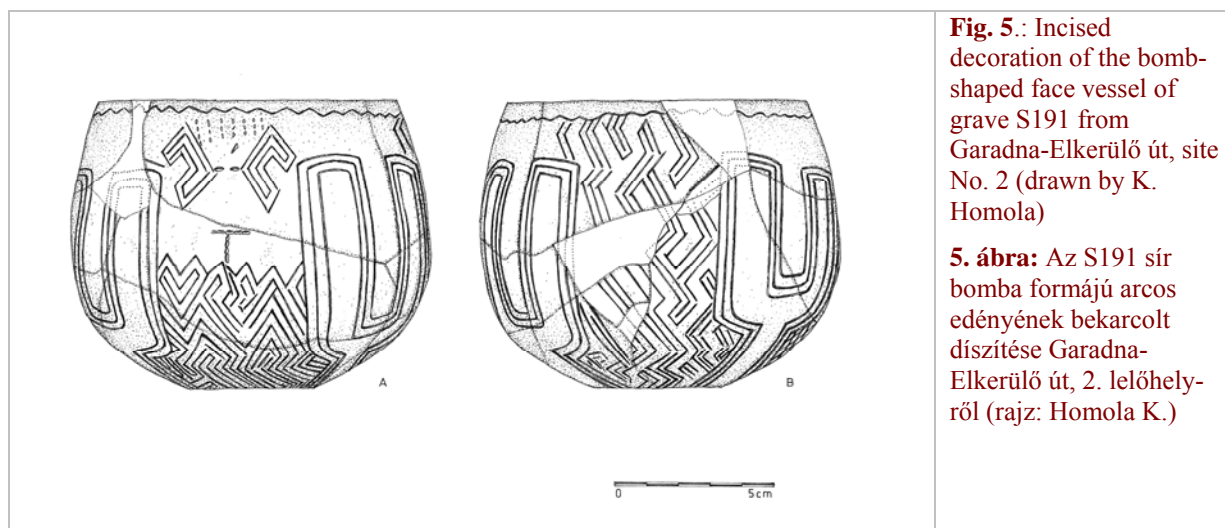
Remarkable find is a large storage vessel (S22) that was found beneath a debris layer (Fig. 3.). It could

stand in a shallow pit with two grinding stones under its bottom. The vessel is 80 cm high and remains of red painting cover its body. There is a face depiction with arched motif on the neck of the vessel (Fig. 4.) which was characteristic for the northern territories of the Alföld Linear Pottery culture (ALPC in the next) and its groups, while the double bands of its back part was typical on the face vessels and idols in the whole area of this culture (Kalicz & Koós 2000a: 18–22, Raczky & Anders 2003: 163–170). Features of the Garadna vessel, the objects belonged to the vessel and its finding context possibly referred to a past ritual event.

The arched motif appeared also on bomb-shaped vessels and bowls of the site, sometimes in symmetric arrangement (Fig. 5.) which are unique characteristics of Garadna face vessels. Namely, the general forms of this type are vessels with cylindrical neck in different size and the face representations are always asymmetric (Kalicz & Koós 2000, 19–21).

Two complete face vessels and pieces of approximately 20 other ones were uncovered on the site No. 2 of Garadna but no idols came to light at all. Increasing number of face vessels were mentioned as characteristics for the 3<sup>rd</sup> and 4<sup>th</sup> phases of Middle Neolithic of the Carpathian basin (Raczky & Anders 2003: 159; Hansen 2007: 188) while the „prosperity” of figurines was typical for the early periods of Linear Pottery culture and for the whole of its territory (Bánffy 1991, 188).





**Fig. 5.:** Incised decoration of the bomb-shaped face vessel of grave S191 from Garadna-Elkerülő út, site No. 2 (drawn by K. Homola)

**5. ábra:** Az S191 sír bomba formájú arcsos edényének bekarcolt díszítése Garadna-Elkerülő út, 2. lelőhelyről (rajz: Homola K.)



**Fig. 6.:** Latest Tiszadob or earliest Bükk grave S20 with grave-goods from Garadna-Elkerülő út, site No. 2

**6. ábra:** Garadna-Elkerülő út, 2. lelőhely S20 sírja mellékletekkel a legkésőbbi tiszadobi vagy legkorábbi bükki időszakból

13 Middle Neolithic graves came to light in Garadna. Ten graves possessed own grave-pit (**Fig. 6.**) further two ones were turned up from a cylindrical refuse pit and one skeleton was disturbed. The everlasting grave-goods were numerous and varied: vessels, grinding stones and necklaces from Spondylus beads.

**Table 1.:** Radiocarbon dates of grave S20 and S191 from Garadna (measured by Poznań Radiocarbon Laboratory in 2010)

**1. táblázat:** Garadna-Elkerülő út, 2. lelőhely S20 és S191 sírjainak radiokarbon adatai (a méréseket Poznań-ban végezték 2010-ben)

Sample name	Stratigraphical unit	cal B.C. with 95.4% probability
Gar2lhS20	grave S20	5303 BC (42.8%) 5191 BC 5183 BC (52.6%) 5057 BC
Gar2lhS191	grave S191	5296 BC (10.0%) 5240 BC 5232 BC (85.4%) 5046 BC

It could be observed that the burials were more scarcer in refuse pits than in the earlier periods and far numerous graves were found with grave-goods than on the average in the ALPC. The possible cause may lies in the geographical position of Garadna (in the Hernád valley) and its role in the Middle Neolithic exchange.

There are three supposed grave-groups on the excavation area of the site. Five graves of them contained decorated vessels. These decorations fit to the Tiszadob style or show the latest Tiszadob style with the earliest Bükk elements (**Fig. 5**). Two anthropological samples from the grave S20 and S191 of them were measured in Poznań Radiocarbon Laboratory in 2010. Absolute date of the sample of grave S20 has been 5303 BC (95.4 %) 5057 BC while the date of S191 has been 5296 BC (95.4 %) 5046 BC (**Table 1**). These could be the dates of the birth of Bükk decoration style.

Absolute chronological data of the Bükk culture are originated from Domica cave, Miskolc-Hillebrand cave and Slavkovce and are very few in number (Lichardus 1974:108; Kordos 1985:221; Gradziński et al. 2007:42–43 and Tab. 1; Csengeri 2010, Tab. 1).



**Fig. 7.:** Decorated fine ware from pit S14 of Garadna-Elkerülő út, site No. 2

**7. ábra:** Díszített finomkerámia Garadna-Elkerülő út, 2. lelőhely S14 gödörből

New Domica cave measurements of Gradziński et al. that was concerned the beginning of the culture or the later episodes of Gemer Linear Pottery ( $6320 \pm 40$  BP; Gradziński et al. 2007: 43 and Tab. 1) correspond to the data of Garadna well ( $6220 \pm 40$  BP from the grave S20 and  $6200 \pm 40$  BP from the grave S191). However the other data from Domica cave site that “should be regarded as an indication of the last period of Bükk populations’ existence in the Slovak Karst” seems to be late for the Middle Neolithic period as Gradziński et al. emphasized (Gradziński et al. 2007: 43 and Tab. 1). So more new data will be needed from the end of Bükk culture and the reconsideration of internal chronology based on the forms and decoration of fine ceramics will be needed in the future, too.

J. Lichardus divided the life of the culture into four phases (A, AB, B and C; Lichardus 1974: 83–93, 104–108) while N. Kalicz and J. Makkay determined three stages of development (I, II, III, Kalicz & Makkay 1977: 43–49, 100–104). In S. Šiška’s opinion the Bükk A phase had appeared only in the caves of Slovak Karst (Šiška 1989: 206, 1995b: 43) so on the other territories of Eastern Slovakia the system of 3 phases had been valid (Šiška 1995b: 43–44).

At the same time Tiszadob style ceramics was summarized by Kalicz & Makkay (1977) and S. Šiška (1989). N. Kalicz and J. Makkay determined two stages within this phase: early Tiszadob with ALPC elements or with “clear” Tiszadob style, and late Tiszadob phase with early Bükk elements (Kalicz & Makkay 1977: 97). S. Šiška divided the life of Tiszadob group into three stages: first phase with components of Barca III group, second phase with own Tiszadob style and the third phase with some Bükk elements (Šiška 1989, 132). Noticeable the difficulty of distinguishing the latest Tiszadob style apart from the earliest Bükk one that refers to a continuous change in pottery decoration as it was also mentioned by Kalicz & Makkay (1977: 97). In my opinion decorations from Boldogkőváralja-Tekeres-patak, Miskolc-Büdöspeszt cave, Kenézlő and etc. have represented the developing of Bükk style like vessels of the grave S20 and S191 from Garadna.

Otherwise Garadna vessels and pieces of ceramics show a heterogeneity of Bükk styles. For example pit S14 contained the mentioned late Tiszadob style ceramics with earliest Bükk elements and with the evolved Bükk style (Fig. 7.) and may correlates with the measured graves of the site.



**Fig. 8.:** Decorated fine ware from pit S176 of Garadna-Elkerülő út, site No. 2 (photo by G. Kulcsár)

**8. ábra:** Díszített finomkerámia Garadna-Elkerülő út, 2. lelőhely S176 gödörből (fotó: Kulcsár G.)



**Fig. 9.:** Decorated fine ware from unit S7 of Garadna-Elkerülő út, site No. 2

**9. ábra:** Díszített finomkerámia Garadna-Elkerülő út, 2. lelőhely S7 feltárási egységből





**Fig. 10.:** Painted ware from Garadna-Elkerülő út, site No. 2, 1 – pit S55, 2-3 – pit S11, 4 – unit S31, 5-6 – pit S14

**10. ábra:** Festett kerámia Garadna-Elkerülő út, 2. lelőhelyről, 1 – S55 gödör; 2-3 – S11 gödör; 4 – S31 feltárási egység; 5-6 – S14 gödör

There are some features with evolved Bükk styles – Bükk AB and B(?) or Bükk I and II(?), too (e.g. S176 with white encrusted pottery, **Fig. 8.**; or S7, **Fig. 9.**). Also there are some pieces of classical phase of the culture (Bükk B or Bükk II) as like as some sherds with fine decoration and red and yellow incrustation of late Bükk period (C or III; e.g. from pit S124). But there aren't radiocarbon dates concerning the cited internal phases from the site. So the temporal differences between the features haven't been known yet.

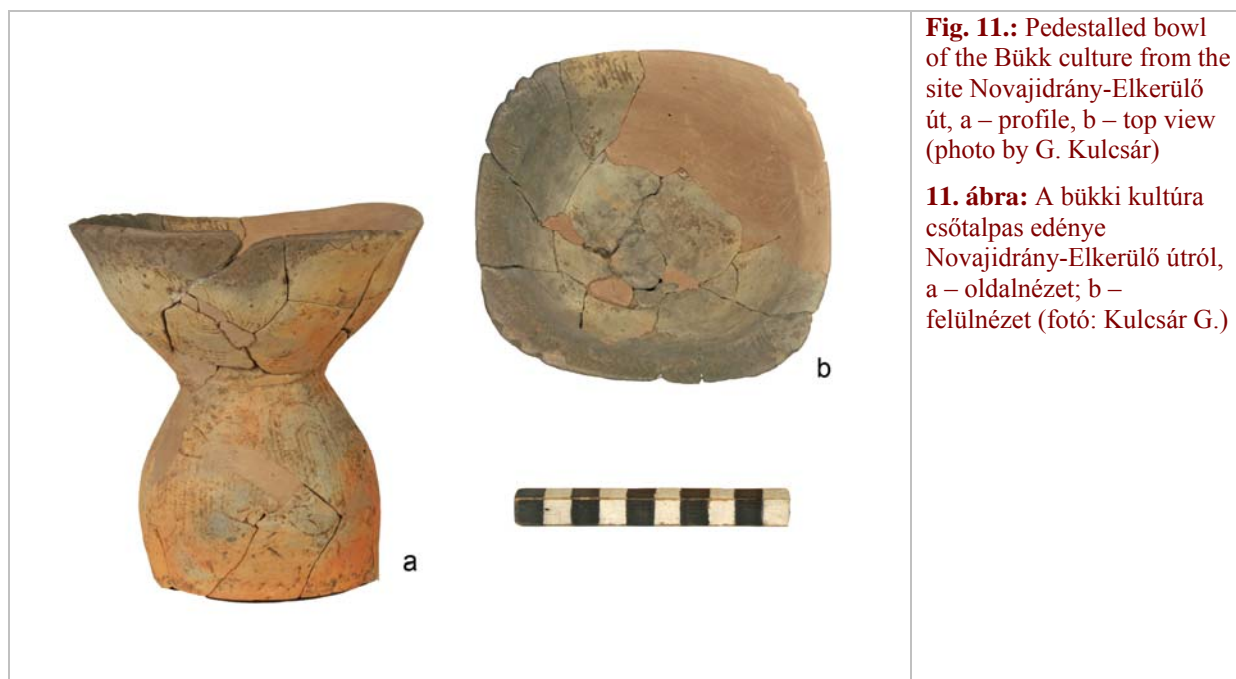
There were also uncovered some pieces with earlier Bükk decoration styles except from red and yellow encrusted ceramics from the pit S124. And several other features of Garadna contained ceramics with decoration of more than one Bükk phase. This phenomenon reveals the problem of internal chronology of the Bükk culture again.

Painted pottery of settlements of Tiszadob and Bükk groups also have to dealing with. Painted ceramics that were found in Garadna are from coarse ware and seemed to be local products (**Fig. 10**). According to Kalicz & Makkay the combined painted and incised decoration and also the single painting don't occur frequently in Tiszadob materials (Kalicz & Makkay 1977, 43)

and are extraordinary among Bükk culture's ceramics (Kalicz & Makkay 1977, 47). So the number and ratio of painted ceramic pieces in material of each Tiszadob and Bükk settlement should be examined, too.

Painted pieces in "incised context" may refer to the connections between two large blocks (with incised decoration and with painted decoration) of ALPC. In our knowledge Esztár and Raškovce groups constituted "the painted neighbourhood" of Tiszadob group (Kalicz & Makkay 1977: 99 and Tab. 2; Šiška 1989: 116–117: Tab. II) while Bükk culture surrounded by Esztár and Diakovo "painted" groups from east (Kalicz & Makkay 1977: 102–103 and Tab. 2; Potushniak 1997: 37–38). M. Potushniak means that the settlements of Eastern "painted" group of the Bükk culture determined by S. Šiška belong to Diakovo group in fact (Potushniak 1997: 37–38). This is a problem again that should be examined.

There is another settlement that refers even more to the contacts with the painted groups in the Hernád Valley: Novajdrány-Elkerülő út. Features of this site belong to the first phase of ALPC but some stray finds of the Bükk culture also came to light (Csengeri 2003b: 44 and 66).



**Fig. 11.:** Pedestalled bowl of the Bükk culture from the site Novajdrány-Elkerülő út, a – profile, b – top view (photo by G. Kulcsár)

**11. ábra:** A bükki kultúra csőtálpas edénye Novajdrány-Elkerülő útról, a – oldalnézet; b – felülnézet (fotó: Kulcsár G.)

Emese Lovász found two Bükk vessels and some ceramic pieces at the discovery of the site (Csengeri 2003b: 44). One of the vessels is with rectangular, slightly wavy mouth, inside decoration and high, belly pedestal (**Fig. 11.**). The pedestalled bowls were very rare in the Bükk culture, only some sherds are known with low pedestal from the earlier phases (Kalicz & Makkay 1977: 45, 48; from Bükk A phase: Lichardus 1974: 86; from Bükk AB phase: Csengeri 2003a: 34; from Bükk B–C: Csengeri 2001: 76). The Novajdrány vessel resembles the belly ones of Raškovce, Esztár and Diakovo groups. The pieces of another pedestalled vessel with rectangular body, pressed mouth and decoration divided into some panels are also unique in the Bükk culture. These two vessels are thought to be reminiscences of the contacts with the communities of painted groups but they may be special local products of the Novajdrány settlement.

This short report presented a new site of Bükk culture from the Hungarian section of Hernád valley: Garadna-Elkerülő út, site No. 2. Although the elaboration of features and find material of the site have just begun we keep it important to outline characteristics and problems concerned to it because these are major questions of the research of Bükk culture.

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