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## SECRETS OF THE BASKETS FROM ČARNOK OF VRBAS

**Apstrakt:** Česti sukobi Rimljana sa Keltima tokom II veka stare ere, kao i prodori rimske vojske u Podunavlje i centralni Balkan, dolinama Save i Morave, primorali su Skordiske da se presele na levu obalu Dunava i zaposednu prostor sve do Telečke visoravni. Duboko u močvarama, između Dunava i Tise, Skordisci su podigli otvorena i utvrđena naselja koja su bila okosnica keltske proizvodnje žitarica. Istraživanja sprovedena u drugoj polovini 20. veka potvrdila su da Kelti već u II veku stare ere podižu svoja naselja u Bačkoj iz ekonomskih razloga. Jedno od njih je i Čarnok kod Vrbasa, koje je smešteno u središnjem delu plodne bačke ravnice. Nalazi sa Čaronka kod Vrbasa potvrđuju da je gajenje žitarica, odnosno proizvodnja hrane, bila važna strateška grana u ekonomiji keltskih plemena u Podunavlju.

**Ključne reči:** Skoridisci, Čarnok, utvrđena naselja, žitarice, ekonomija, II vek stare ere – II vek nove ere.

When in 1984 we dug the first spade on the site Čarnok in the area of Vrbas (Bačko Dobro Polje, Bačka), we could not even suppose that we shall spend there more than two decades. Earthen fortification elliptically shaped, covered in steppe vegetation looked like mystical sanctuary which our ancient ancestors left for future generations. It seemed rather impressive in the quiet lowlands. At that time we did not know that we were walking on top of the earthen fortress wall which was built by Scordisci by the end of the 2<sup>nd</sup> and the beginning of the 1<sup>st</sup> century BC.<sup>1</sup>

The progress of Roman army along the valleys of the rivers Sava and Morava made Scordisci move to the left bank of the river Danube and occupy the territory to the north as far as Telečka highlands. Deep in the marshes, between the rivers Danube and Tisa, Scordisci built numerous open and fortified settlements on loess terraces – elevations and raising grounds. Nowadays when we possess many evidences which assert the fact that those were Celtic tribes who had lived in the area of today's Bačka for almost two centuries, the more we are convinced that their settlements were built and formed according to certain plan.

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So that in the middle part of fertile Bačka lowlands, between the two Panonian rivers - Crna bara in the north and Jegrička in the south - in the area of Bačko

Dobro Polje, there are remains of fortified settlement Čarnok from late La Tene period. Earthen fortification elliptically shaped (dimensions 190 X 130 m), with earthen fortress walls or embankment, preserved up to 3 meters high, were built by Celtic tribes known as Scordisci by the end of the 2<sup>nd</sup> and the beginning of the 1<sup>st</sup> century BC. The settlement which was built few thousand years ago had the outer ditch (trench) as well, which is now covered up, although these massive earthen fortress walls even nowadays dominate the lowlands. Čarnok is the only fortified Celtic settlement in Podunavlje, i.e. in Bačka, which had been preserved as a whole (Jovanović 1994: 119).

In the last twenty years (1984 ? 2007), the period of time the archeological excavations has taken place on Čarnok, the huge number of sondes (twenty) were put in the inner part of the settlement. Fewer number of sondes were also placed around the fortification, mainly in the east and west part of the site and on slender elevations (raising grounds) which were suitable for housing and sacred objects.

At the moment, of great interest for us are the facts gathered during the research on sondes XVII-XVIII, XIX-XXIII, XXII, i XXV. We are discussing here objects with different functions which were found in these sondes. In one group we can put those that can be classified as overground construction objects-houses with stoves which were used for drying the grain, and then

accessory structures in which reserves of crops were preserved, being put into wooden chests, weaved baskets, large vessels of pithos type and pits - silos. We are talking about the structures with different functions that were found in these sondes. Various forms of miniature stoves and fireplaces, which were most probably used for drying grain, can be classified in the second group of the findings.

In the sondes XVII-XVIII, placed in the period from 1994 to 1996, on the eastern part of the earthen embankment in the house number 5 were found four baskets and a big chest with carbonized grains, along the eastern wall of the structure. The chest and one of the baskets were found nearby horseshoe shaped stove in the north eastern corner of the house. At the end of the chest (whose length was about 2 meters) was also found a larger cylindrical vessel-pot made of unbaked clay of approximate dimensions: height 36 cm; diameter of muzzle 23 cm; diameter of the bottom 30/36 cm.

In all likelihood, the pot was a kind of "measure" used while selling or bartering the grain for some other products and goods that were obtained in surrounding (neighbouring) regions. Next to the "mouth" of horseshoe shaped stove were also found half cylindrical pieces of wattle-and-daub technique, which were most probably, fixed to the very calotte. Ring like extension on the upper part (or side) of the calotte formed a kind of shallow dish in the shape of "djouveh", that was used for drying wheat. The dish or the upper part of the calotte in the shape of "djouveh" was used for chaffing the grain ( Jovanović 2004: 114).

The corns of barley were coalesced with the husk while the corns of millet were firmly wrapped in small husks. In order to be able to use the grain with husk/pod (or small husk) it was necessary to worm them up or to dry them on the temperature of 40° to 60°. By warming the husk becomes brittle so the corns are easily separated from it (Medović 2006:43).

The three remaining baskets had been on the floor of the accessory room which was used as a store room. The room was built as an extension to the house 5, next to its southern wall, dimensions 4,40 x 2,60 m. The store room consisted of two parts. In the first part (dimensions 2,20 x 2,0 m) were the baskets with grains. Stuck all over with mud, they were firmly fixed to the ground of the structure. In the second part of the store room, which was slightly smaller (1,70 x 1,60 m), there was open hearth, where were found, next to burned grains,

pieces of a basket or baskets and also greater amount of ashes and fragments of La Tene vessels. Most probably in this part of the house there was also another basket with grain, but judging by the scattered pieces of brushwood,

it was not fixed for the floor of the structure. Along the eastern and northern wall of the house 5 was found greater amount of La Tene ceramics of fine facture. Among them were singled out some pithoi and pots of different shapes for which we can find analogies on the site of Gomolava, in the horizon VIb (B. Jovanović - M. Jovanović 1988: 164, T. XXXV i T. XXXVI).

On the other hand, house number 5 and the accessory structure-store room were damaged during the excavations in 1902, so their exact dimensions are difficult to find out (Loc 1935).

In the sondes XIX i XXIII, which were open on the other part of the settlement, on the northern part of the earthen rampart, another overground structure - house number 7 was researched. Its dimensions were 5,5 x 4 m. Just the northern wall is preserved at this object on the whole. The eastern and western walls were partially demolished, while it was very difficult to determine the presence of the southern wall for the reason of large demolishing. On the western part of the house number 7 there was an accessory structure-store room.

In the accessory structure, dimensions 3 x 1,50 m, were found pieces of weaved basket, about 70 cm in diameter, with larger amount of carbonized "clean" barley (*Hordeum vulgare*), (Medović: 2006, 42). The basket was, as in the house number 5, fixed to the floor of the structure-store room.

On the southern part of the house number 7, probably along the very south wall of the house there was a big pit in the form of silo. It was rectangular, dimensions 2,15 x 1,30 m, about one metre deep, this pit was filled with fragments of La Tene ceramics, pieces of home made wattle-and-daub and larger quantity of ashes. On the corners of the structure were found the remains of wooden pillars which were used as carriers of the lid. The remains of the lid - carbonated boards were found on the bottom of the silo. In the eastern part of the pit - silo larger quantity of carbonized "clean" millet was found (*Panicum miliaceum*), (Medović 2006: 41, 47).

The second group of objects consists of remains of the small stoves differently shaped and of different dimensions. Small stoves elliptically shaped (5 pieces) were found in the upper layers of the sonde XXIII and

XXV. Stoves of circular form were also found – one in the sonde XXIII and the other four in the sonde XXV.

The phenomenon of open hearth is also very interesting and it was discovered in the sonde XXII. Rectangular hearth, dimensions 80 x 55/60 m was dug in the floor of the structure – house at the height of about 16 to 20 cm. Around the hearth were found the remains of carbonated grains and fragments of La Tene ceramics. Besides, in the southern profile of the sonde, at the hearth level, the whole horizon with carbonated grains was found.

Among the objects which were discovered during long-standing research special position take different shapes of miniaturized stoves, i.e. their fire-boxes. So that in the sonde XXIII/2003 were discovered five smaller stoves. One of them was in the northern profile, circular, whose diameter was of about 60 cm. The stove had thin calotte that was about 10 cm far from the floor. Inside the stove large quantity of ashes were found. Along the north profile were found the remains of other four miniature stoves. Two of them, which were better preserved, had some kind of platform in front of the “mouth” or next to it, while the other two, were extremely damaged. Dimensions of those peer shaped stoves were 35 ? 40 cm, and the preserved height of fire-box was from 11 to 23 cm. The inside part of these fire-boxes (stoves) was filled with ashes.

On the other end of the site, in the sonde XXV, different type of miniature stoves was found. We are discussing here small circular, elliptical and square stoves. Square stove, dimensions 47 x 47 cm, which had flat cylindrical calotte and miniature gridiron with the opening and fire-box. According to the shape and the way it was built, this stove was a copy of the big pottery kiln. Around the stove and on the gridiron were found some pieces of pot in the form of situla, of rough facture, whose surface was scored by comb. Preserved height of calotte is about 17 cm. The pot is 41 cm high and it was half dipped into the stove (dim: height 41 cm, Ro 34 cm, diameter 16 cm). Judging by the structure of the pot, which was fastened on several places with iron clamps, might have been used for drying grain. Both to the left and right side of the stove were found two more stoves, one of them was circular and the other one elliptical.

The damaged, circular stove (diameter 70 cm) was partly in front of the previous one. In front of the stove there was a pit for ashes.

Elliptical stove (only the upper part of it is preserved-fire box) according to its shape and size reminds

of the small peer shaped stoves from the sonde XXIII, the only difference is that the bottom of this fire-box was not found. The inside part of the fire-box was filled with ashes, and its dimensions were 40 x 50 cm. The height of the fire-box was 20 cm. The stove was constructed and made very simply: prepared pit was covered with thick layer of clay from which the fire-box was made. In the lower part of the stove - fire box were found the remains of the wooden pillars which supported the walls of the fire-box, gridiron (grill) and calotte.

The remains of the two miniature circular stoves (diameter of one is 30 cm and of the other is 40 cm) were placed on the floor of large pottery kiln(?), whose diameter was 1, 60m. The smaller stove also had partly preserved circular fire-box. It is for sure that they belong to the youngest dwelling horizon on Čarnok ? Gomolava VI c phase (B. Jovanović - M. Jovanović 1988: 36; T. XV/ 4,7; T. XXVI/9 i T. XXIX/9).

For the time being, stoves of these shapes and dimensions were not found on the other La Tene localities in Podunavlje and Posavina. They are unique. Regarding the fact that around them were found pieces of larger dishes and carbonated grains, we can conclude that they were used for drying the grains before storing them. For they were discovered in the youngest construction horizon on Čarnok we can chronologically classify them into Gomolava VI c phase. It is for sure that erecting - building them can be related to the Roman arrival to the area of Podunavlje and establishing the Roman authority in this region. Building the fortification on the limes, building the roads and piers, together with building villas rustica on the right bank of the river Danube opened the opportunity for the new forms of cooperation between Scordisci and Romans in the 1<sup>st</sup> century BC. Instead of wars Scordisci offered high quality crops which Romans needed for feeding both the soldiers and citizens.

During the last ten thousand years barley and millet had multifunctional role in the nourishment of people and animals. They were grown both in prehistoric and historic times. The question is “Why”. We could look for the answer in the fact that in the La Tene period in this area, according to archaeobotanical analysis, those kinds of grain that were adaptable to the climate conditions of that time were cultivated .

They were sowed in spring, after reclaiming marshland and withdrawal the waters into the river beds. By using archaeobotanical analysis, it was discovered that

on Čarnok were cultivated those kinds of grain, such as barley (*Hordeum vulgare*) and millet (*Panicum miliaceum*) which had shorter period of ripening. Lack of other kinds of grain in this settlement or their small incidence is a characteristic that we also meet in some other La Tene settlements, such as Gomolava in Srem (Jovanović 2004: 112; Medović 2006: 41)

In the open settlements, which were built on the left bank of the river Danube, as well as in the interior part of Bačka the grains that were cultivated were also barley and millet. After the harvest they were preserved in the settlements that were protected with earthen embankment. Those were Čarnok, Turski šanac, Plavna, Gardinovci. All these settlements were very well connected by the rivers with the other La Tene settlements in Bačka (Jegrička - Tisa, Crna bara - Tisa, Krivaja - Tisa). Those were the first prehistoric agricultural estates, forerunners of modern farms. Besides, fortified Celtic settlements on the left bank of the river Danube had also the function of piers, in which exchange/barter was done for some other goods or different agricultural products.

Preliminary analyses of carbonized samples from 5 baskets that were found in two structures – houses number 5 and 7 - gave the following results: in four baskets were found the corns of barley (*Hordeum vulgare*), while the fifth basket was filled with corns of millet (*Panicum miliaceum*). According to A. Medović (Medović 2006: 41) barley from Čarnok belongs to the type of four-rowed barley (*Hordeum vulgare*). In one of the baskets from house number 5 (number 3) were found the corns of pure millet. On Čarnok were distinguished the two types of grain: millet (*Panicum miliaceum*) and Italian muhar (*Setaria italica*).

Great quantities of “clean” barley (*Hordeum vulgare*) and millet (*Panicum miliaceum*) for sure were very suitable goods for exchange and acquisition of different necessities. For those grains Celts could buy a variety of every day objects, but they could also buy the most various raw materials, even the most valuable ones. The confirmation of this we can find in necropolis and settlements in which we can notice the remains of “purchased” gold (*Aurum*), silver (*Argentum*), copper (*Cuprium*), iron (*Ferrum*), tin - cositer (*Plumbum album*), salt (*Sal*), amber (*Electrum*), then shells (*Spondilus - Concha*), glass (*Vitrum*), enamel, oil (*Oleum; olivum*). Next to different raw materials they also acquired semi products.

However, one is for sure now. After suppressing the Panonian-Dalmatian rebellion, Romans established

the authority in Podunavlje defining the Danube as a natural border towards the barbarian population. By setting up limes on the Danube, both Bačka and Banat remain out of reach of Roman Empire but their inhabitants take active part in the changes that happened in the following period of time. By erecting the fortification on limes, building the roads and piers, together with building villa rustica on the right bank of the river Danube some other forms of cooperation between Scordisci and Romans was open in the 1<sup>st</sup> century AD. Instead of wars Scordisci now offered good quality harvest that Romans needed for feeding their soldiers and the inhabitants. The settlement on Čarnok, after establishing the Roman authority in Podunavlje, was also not abandoned, but the inhabitants continued to produce grain.

A special finding from Čarnok is certainly a couple of silver fibula, of smaller size, length 3.8 to 4 cm with decorated rectangular foot and arch. On the arch of the fibula there are – on one side four (4), and on the other five (5) slab-like decorations ending in crescent concavities. These crescent concavities on the fibula resemble “consecrative horns”, which is a rarity. A pair of the fibula from Čarnok does not have, for the time being, any close analogy among the jewelry that was used by the Eastern Celts. On the territory of Western Celts we meet them in the necropolis “Mokronog group” (Slovenia). On the silver fibulae that were found on Čarnok, the foot is rectangular, with slits on the frame, which show the similarities with the type of fibulae of Nova vas (Guštin, 1987, 54, Fig. 3, 12). The fibulae made of bronze from the Celtic necropolis Belet's garden, from the female grave 201 in Novo Mesto (Slovenia), have also some similarities with the fibula in Čarnok. Chronologically they may be classified into LT D1 and D2 phases (Guštin 1977: T. 19, 1; Guštin, 1984, ab. 25/1; Božič 1987: 878, Fig. 46). Several similar fibula were found in a Celtic oppidum Stradonice (Czech Republic), (Philip 1956: T. CXXV. 24, 25; Rybová - Drda 1994: fig. 40. 22. 23) belonging to the same period.

If we add to this the finding the Celtic coins from the territory of today's Bačka, such as the storage of gold coins from Bački Obrovac, which is ascribed to Bojis, the question still remains why the larder was stored. It is very likely that hiding the money is related to the conflict between Bojis and Dacians during the middle of the first century BC, but the purpose of this money still remains unknown (Popović 1987: 146; Marić 1960: 196; Castelin 1976).

In the close vicinity of Obrovac (Bački Obrovac), on the distance of some 20 kilometers, there are the remains of fortified Celtic settlement Turkish Trench from the first century BC (Brukner 1970: 41-42; *ibid.* 1978: 6). According to the remains of the movable archaeological material, mainly pottery, the settlement was built by the Celts, perhaps even by Bojis. We believe that the golden larder of the Celtic coins from Obrovac, should be considered as a confirmation of the commercial activities of the Celtic tribes who used to live on the left bank of the river Danube during the first century BC.<sup>2</sup>

Building several fortified Celtic settlements on the left bank of the river Danube in the second half of the second century BC, are at the same time the evidence of political-economical and social circumstances which occurred in the Danube region, together with the gradual conquering of the Pannonia by the Romans (Brukner 1978: 6).

By establishing the Roman authority in the Danube region in the beginning of the first century (about the 10 AD), Čarnok near Vrbas, remained out of reach of the Roman Empire but certainly in the function of Roman administration.

The portable archeological material, gathered on Čarnok, such as a pair of silver fibulae, pieces of Roman vessels and bricks on which we can see the signet with the inscription - H VII BR (COH VII BR – COHOROS VII BREUCORUM CIVIUM ROMANORUM EQITATA) – confirm that (Jovanović 1987:4; Šaranović-Svetek 1989-1990: 46, T. IV, 17). What was the reason for residing of this Roman cohorte in the middle part of Bačka, remains the secret, for the time being. It is interesting that larger number of Roman bricks were found in the vicinity of Čarnok, in the walls of mediaeval church - chapel (13<sup>th</sup> -15<sup>th</sup> century), (Stanojević 1996:16).

After all facts presented in this paper, we can conclude that several years of research on Čarnok helped to

lighten some questions related to the Celts in Podunavlje. Great amount of carbonated grains, vessels for preserving them, baskets and silos, show, first of all, that Scordisci in Bačka had rather organized agriculture.

However, in this area the lack of necropolis is very noticeable, at least in the former research. The exception makes several individual graves - Ridica, Vajska, Odžaci, Bačko Gradište, Gospođinci i Mošorin (Todorović 1968: 25, 26; Todorović 1974: 169, 170). This leads us to the conclusion that the settlements built on the left bank of the river Danube, i.e. in Bačka, during the year were used in certain period of time, mainly during the season of agricultural work.

The conclusion here, which is quite logical, is that fertile Bačka lowland, covered in high quality fertile soil, had always been big granary (Букуров, 1978: 36). Since the Neolithic till these days, the way of using this area remained unchanged. Placid fields carried for centuries the omen of unique mine, as a source of life for many generations. Therefore it is not unusual that even Celtic tribes recognized that fact. Grains were their “golden ore” which they used for their own needs, which they sold and exchanged for other goods with their contemporaries from neighbouring regions.

## NOTES

<sup>1</sup> Rad je bio izložen/ pročitan na Međunarodnom simpozijumu *The Eastern Celts Between Hellenistic and Roman World* koji je održan u Vršcu od 1. do 4. novembra 2007. godine, sa temom: *The Enigma of the Miniature Kils from the Late La Tène Settlement Čarnok near Bačko Dobro Polje.*

<sup>2</sup> Museum of Vojvodina in late 2002 bought another golden Celtic currency from Obrovac. Now their number has risen to 123 pieces, of which 122 pieces are kept in the National Museum in Belgrade.

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