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The Late Starčevo and the Earliest Linear Pottery Groups in Western Transdanubia

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ABSTRACT - *Although the Western Part of the Carpathian Basin, Transdanubia must have been one of the most important areas as neolithisation is concerned, research has failed to clarify some key factors. In this paper, possible traces of the Late Mesolithic forager groups are collected, indirect hints of the existence of a population that could have had an influence both on the northernmost limit area of the late Starčevo culture and on the formation of the oldest Transdanubian Linear Pottery Culture. The hunter-gatherer groups are assumed to have controlled the prehistoric flint mine at Szentgál, Northern Transdanubia, supplying late Starčevo villages as well as early Linear Pottery settlements at a great distance with red radiolarite raw material. Besides a new late Starčevo site at Babarc, found in 1997, the systematic excavations at Pityerdomb in Western Transdanubia are discussed in detail, which might be of essential importance in understanding the process of neolithisation around Lake Balaton.*

IZVLEČEK - *Čeprav je zahodni del karpatskega bazena (Transdanubija) eno najpomembnejših področij, povezanih z neolitizacijo, pa dosedanje raziskave niso uspele pojasniti nekaterih ključnih dejavnikov. V tem članku smo zbrali možne sledi o poznomezolitskih lovsko-nabiralniških skupnostih, to je posredne namige o obstoju populacije, ki bi lahko vplivala tako na skrajno severno mejo področja kulture Starčevo, kot tudi na oblikovanje najstarejše transdanubijske kulture LTK. Predvideva se, da so lovsko-nabiralniške skupnosti obvladovale prazgodovinski rudnik kremena v Szentgálu v severni Transdanubiji in so vasi pozne kulture Starčevo kot tudi zgodnje naselbine LTK na velike razdalje oskrbovale s surovino - rdečim radiolaritom. Podrobno obravnavamo novo najdišče pozne kulture Starčevo v Babarcu, ki so ga odkrili leta 1997, in sistematična izkopavanja v Pityerdombu v zahodni Transdanubiji, kar bi lahko bilo bistvenega pomena za razumevanje procesa neolitizacije v okolici Blatnega jezera.*

KEY WORDS - *Transdanubia; neolithisation; boundary; new transitional site*

INTRODUCTION

When regarding the neolithisation process of the Carpathian Basin (Fig. 1), we must face the old problem first which occurs in the research of each prehistoric period. Namely, the area east of the Tisza River has been traditionally much more investigated during the last century, than Transdanubia. The Neolithic heritage of the Alföld region has always been more spectacular, with the enormous number of rich settlements and find assemblages, not to speak of the earliest tell mounds and the rich grave goods in the Tisza region. This abundance of information is also valid for the earliest phase of the Neolithic. The intensive occupation of the river meanders of the Tisza, Körös and Berettyó by the Körös culture people also implies extremely rich find assemblages: one single settlement pit might contain several ten thousand pieces of pottery, even though the internal chronology of the Körös culture is still problematic. It might not be mere chance that the first thorough investigations concerning the late Mesolithic brought success precisely in the Northern Alföld, along the area of the Körös culture's northern limit, where a

possible Mesolithic/Early Neolithic contact had been theoretically presumed earlier. The settlement of Jásztelek I., excavated and published by R. Kertész, is the first real hint of the possibility of contacts between indigenous and newcomer groups also in the Carpathian Basin (*Kertész et al. 1994; Kertész 1996*).

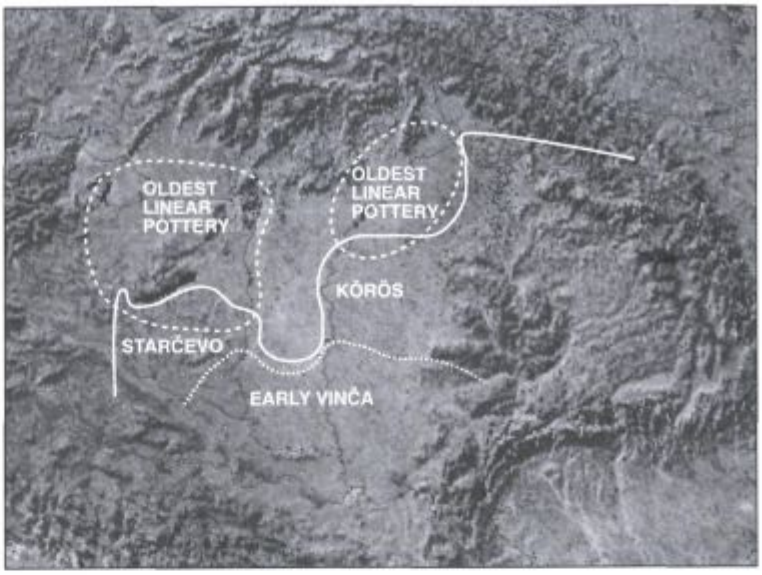

Fig. 1. The distribution of the Körös-Starčevo and early Linear Pottery cultures in the Carpathian Basin.

The situation in the Western part, in Transdanubia, is far less understood. The term 'Early Neolithic' means here, as in the Alföld region, at least two integer phases: the life of the Starčevo culture in the Southern part and the formulation of the oldest Linear Pottery ware culture in the Northern part. Concerning the Mesolithic presence in Transdanubia, we are in a less advantageous position than in Eastern Hungary. That is, our knowledge is still based mainly on scattered surface finds, which, especially in the supposed later Mesolithic phase, may well belong to the earliest Neolithic find assemblages of destroyed settlement features, where the coarsely fired pottery had already diminished. According to colleagues with a good knowledge of flint typology, the finds from Kaposhomok, south of Lake Balaton could perhaps be attributed to Late Mesolithic groups (*Pusztai 1957. Fig. 2*). This can be assumed mainly from their geometric microlithic character, which can be ranged to the Tardenoisien, and is considered one of the latest Mesolithic assemblages in the area (*Dobosi 1972.41–42*). Be that as it may, there remains the great problem of how the Northern Transdanubian hills were settled during the late Mesolithic. If we take the numerous indirect hints of their existence into consideration, the problem becomes even greater, as we shall see below.

THE LATE STARČEVO CULTURE

In the Transdanubian Early Neolithic, the identification and description of the Starčevo settlements as well as the research into their chronological position versus the earliest TLP groups were the greatest steps forward. This was thanks to N. Kalicz and J. Makkay, who carried out several small sondages and field research in the late sixties, although their term 'Medina-phase' for the transition between the two cultures today belongs to the forgotten and outworn categories (*Kalicz 1978–79b; Kalicz, Makkay 1972*).

As it is known from the detailed publications of N. Kalicz and also from his monograph published in 1990, the settlement pattern of the Starčevo culture cannot be compared to that of the Körös, as the former is far less intensive (*Kalicz 1977–78; 1978–79a; 1983; 1990.39–40*). This is reflected not only in the number of settlements, but also in their extent. Kalicz concluded by assuming a few smaller population groups who never stayed in one place for long. According to his observations, two important consequences can be drawn about the Starčevo culture: (a) it appeared from the South in the Linear B phase, according to the periodisation by Dimitrijević, and survived until the final, Spiraloid B phase of the culture, even though only four sites could be then dated to this phase; (b) its area distribution area reached only to the southern banks of Lake Balaton.

In recent years, both statements have had to be corrected. That is, two new settlements of the Starčevo culture have been excavated: Gellénháza-Városrét and Vörs-Máriaasszonysziget (*Simon 1994; 1996; Kalicz, Virág, Biró 1998*). Both belong to the latest phase on the one hand, and both lay on the northern borderland of the culture on the other. Moreover, the site at Gellénháza-Városrét has modified this border by some 50 km to the north and west, as it lies near Zalaegerszeg, in the Zala hills in Western Transdanubia. So the number of Spiraloid B settlements has increased from 4 to 6.

Two years ago a settlement of the same phase, Babarc (No. 10), came to light in South Eastern Transdanubia (Figs. 3, 4). The settlement pits of Babarc

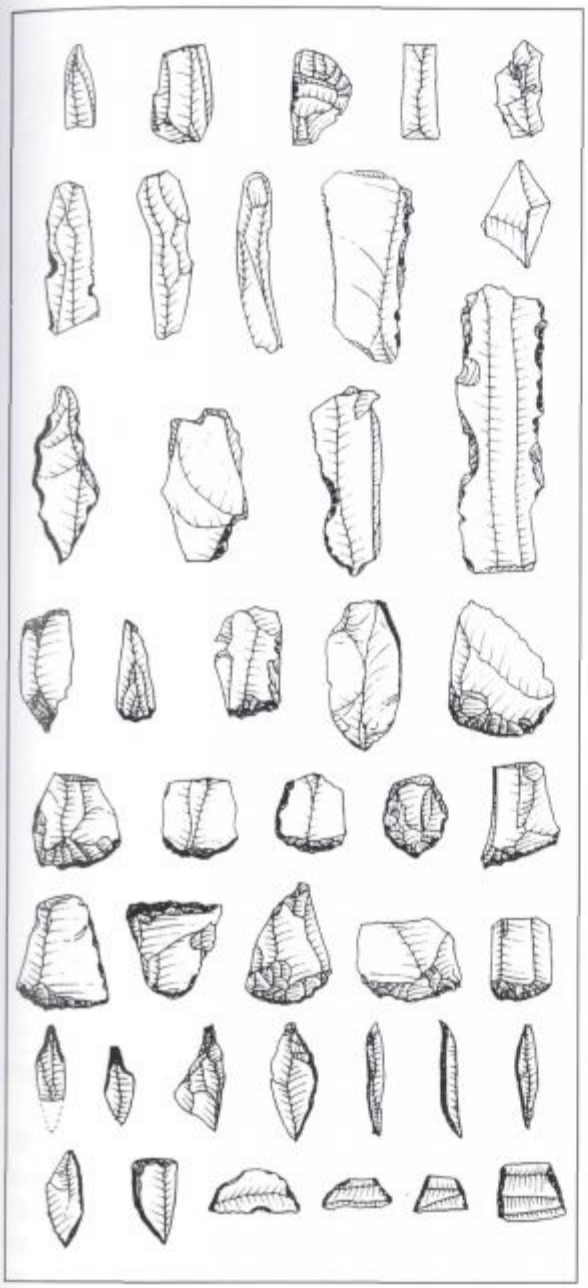

Fig. 2. Kaposhomok – lithic finds (after R. Pusztai, re-drawn by T. Marton).

are again unimportant because of their large quantity, rather than because each new site might become a piece in the chain needed for a better understanding of the complicated processes within the early Neolithic (*Bánffy in press*). However, some interesting problems emerge also on the basis of their dating.

First, the site of Babarc lies next to the village of Lánycsók, where until now the most large-scale excavations of the culture have taken place (*Kalicz 1977–1978*). However, all the Lánycsók features, including the famous four-headed altarpiece can be dated to the so-called classical (Linear B, "Ghirlandoid", Spiraloid A) phase, and none of them survived in the late phase. By that time they must have moved and built their new settlement somewhere in the vicinity. Thus, it is not impossible that in Babarc the heritage of the Lánycsók people was found, from a period of some generations later.

The other point of interest is that, as has been said before, we do not know many *late* Starčevo settlements in Transdanubia. The four original ones lie to the north and west: Kaposvár-Deseda, Dombovár-Kapospart and Harc-Nyanyapuszta are located in South Eastern Transdanubia, but not far from the Southern banks of Lake Balaton, while Becsehely lies at the westernmost edge of Southern Transdanubia. Not to speak of the two newly found sites, Vörs and Gellénháza, which have even modified the northern and western distribution limits of the Starčevo distribution area. Now, on the basis of the new finds, two territorial groups of the late Starčevo culture might be drafted in Transdanubia. Babarc belongs to a group which is strictly bound to its southern relatives beyond the Drava River: its best parallels can be found in Croatian sites such as Podgorac or Vinkovci-Gradska Zona (*Minichreiter 1992b.43–49*). Many typological features from Kaposvár and Dombovár still resemble this southern typed version of the late Starčevo. In contrast to the above stylistic and typological features, the two late Starčevo settlements in the Northwest, Vörs-Máriaasszonysziget and Gellénháza-Városrét, seem to belong to a slightly different group, with less evidence of direct Balkan contacts. As to the excavators, a number of these features become typical in the oldest Linear Pottery culture (e.g. deeply incised linear patterns), which occurs in an uncommonly high quantity, compared to the whole Starčevo area (*Kalicz, Virág, Biró 1998. 163–164*). Similarly, in Gellénháza, the character of the pottery and some find groups strongly resemble those of the earliest Linear Pottery in the vicinity, as discussed below (*Simon 1996; Bánffy 2000.376*). In the case of a cultural formation such as the Starčevo culture, which remained almost identical over a vast geographic area, from Macedonia to the Pannonian hills, these differences observed at the northwestern boundary cannot be neglected! However, the differences could be hard to analyse without a new settlement from the westernmost part of Hungary, which seems to be the first site of the transitional phase between the Starčevo and the earliest Transdanubian Linear Pottery Ware culture and thus, gives a new aspect to research into neolithisation in Western Transdanubia.

PITYERDOMB

In the course of our third micro-regional programme, a small plain along the upper flow of the River Kerka and the surrounding hills were investigated, close to the Slovenian border, north of the town of Lenti (Fig. 5). Among the sixty new sites ranging from the Neolithic to late medieval times, the early Neolithic period proved the greatest surprise. East of this, that is, a microregion which already been investigated (No. 2 in Fig. 5) was totally uninhabited by Linear pottery people. We explained this gap by the distribution area of the culture, and thought we had gone beyond it to the west. Remarkably enough, in the Kerka valley, even farther to the west, twelve of the sixty sites belong to Linear pottery culture. The settlement pattern must have been so dense up to this period that the inhabitants of one village at a hilltop could well catch sight of the next settlement built on a neighbouring hill. What is more, off-site evidence of agriculture and land use was distributed between all the Linear Pottery settlements, in the form of lost flint tools and small household refuse, probably taken with farmyard manure to the cultivated fields. Today, the region consists of small, cultivated areas and grazing land, surrounded and divided by large forests. This area lies at the foot of the Eastern Alps, so even the summers are humid and cool, unlike the average climate in Hungary. In spite of the continuous forests, the largest in Hungary, the first traces of the destruction of indigenous forests could be assigned to as early as the beginning of the West Transdanubian Neolithic, roughly the middle of the 6th millennium BC (*Kertész-Sümegi 1999.18*). One of the settlements, Pityerdomb, near the modern village of Szentgyörgyvölgy, was excavated between 1995–1998, and provided important new data on the problem of neolithisation in Western Transdanubia. The site is located on the top of the hill in the hilly area between the Zala hill-country and the Alps, which consists of old, acidous clay with a very thin layer of humus. The small settlements were concentrated on the top of the hill and on its northwestern slope, at a height of some 220 m, not far from the Szentgyörgy creek, which flows at the foot. The highest area has been eroded. The excavated area, nearly 1000 m^2, which covered almost the whole site – i.e. the part that has been preserved – brought the traces of two houses to light, lying a certain distance (some 30 meters) from each other (Fig. 6). Between the houses, archaeological features were almost totally absent. This probably means there were two focuses to the settlement. As we shall see below, on the basis of the finds, it was impossible to tell whether the two farming units differed in age. Nevertheless, according to measurements in other Central European Linear Pottery sites, the distance between the Pityerdomb houses does not differ from the average, and might be even less. In Langweiler 8, for example, the distance between two coeval houses was measured at not less than 66 m, while in Langweiler 9 almost double this distance could be measured! (*Lüning 1982.147–148;* See also *Coudart 1998.108*).

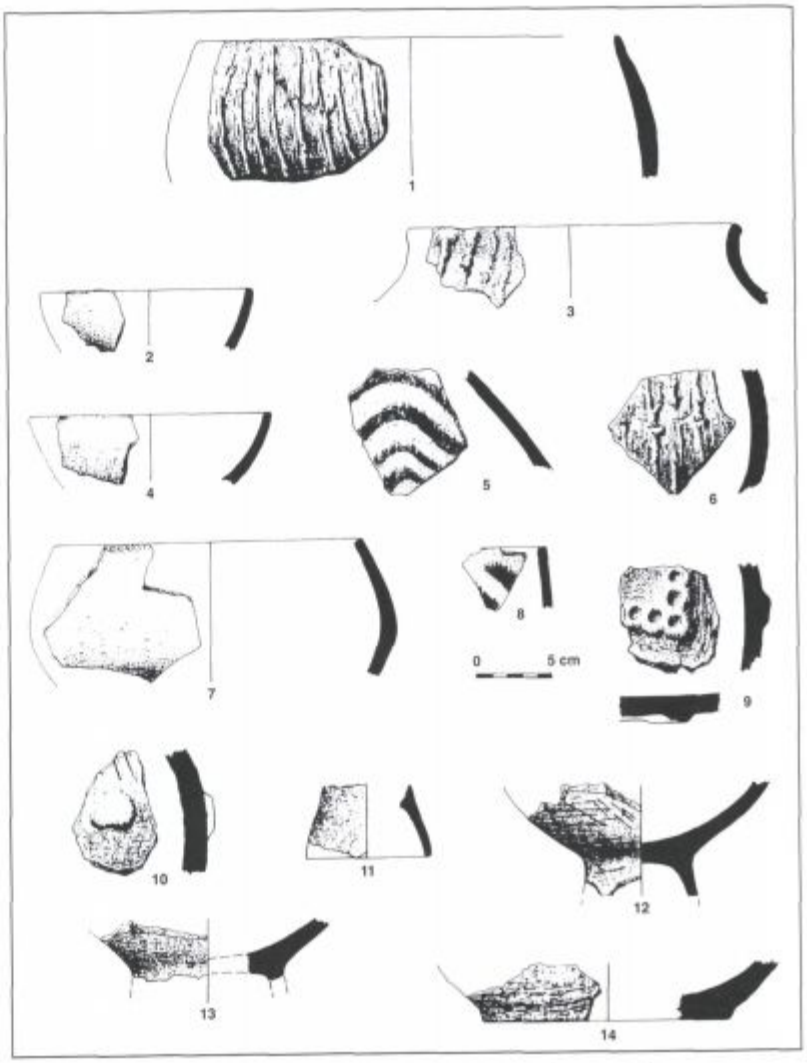

Fig. 3. New finds of the late Starčevo culture from Babarc.

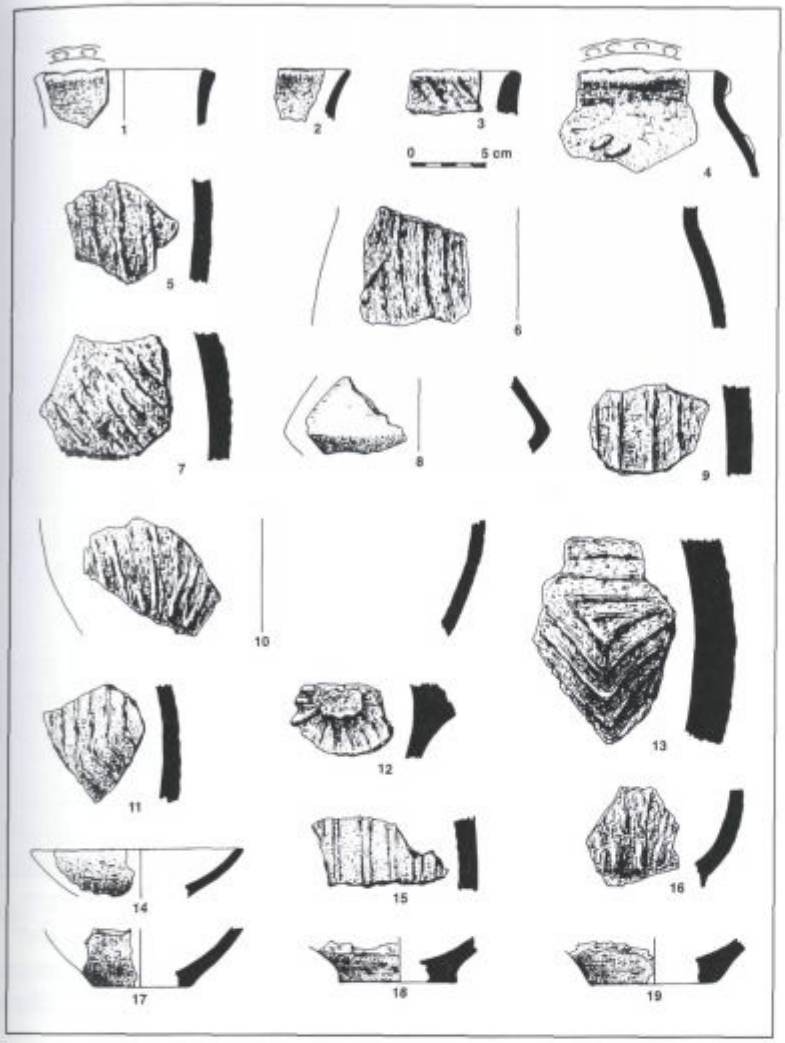

Fig. 4. New finds of the late Starčevo culture from Babarc.

Thanks to the lack of deep ploughing, the features at 25–30 cm below the present surface remained undisturbed. The upper layer consisted of heavily burnt wattle and daub, which covered the rich finds: pottery and lithic material, as no bones survived in the acidous clay. Although the floor within the houses has not been burnt, in some places a certain walking level could be observed, not to speak of the finds which lay on this floor and helped identify it. Inside the houses we could also observe shallow pits, or rather small deepenings, in which the remains of large storage vessels were found (Fig. 7). Fireplaces were found both inside and outside the houses, but larger and deeper storage pits were always dug outside. A round pit, located to the southwest of House 2, (Feature Nr. 17) can probably be considered a workshop for flints.

Both houses were of similar size. In spite of the imperfect circumstances, according to both the site location and financial means, the forms and the sizes can well be estimated: both between 8.50–10.0 times some 13.0–14.50 meters. This shape and size can be perhaps considered one of the most archaic types in Linear pottery architecture, where we do have the central part of later long houses, while the two outer rooms are missing. It is to be noted that some Körös houses are known, e.g. one belonging to its late phase from the Middle Tisza region, which appear to be close parallels to the shorter Linear pottery typed houses in Pityerdomb (e.g. Tiszajenő-Szárazérpart: *Selmeczi 1969*). Given the present state of our knowledge, it is hard to tell whether the northern Starčevo groups also built similar houses, since only pits or systems of pits containing workshops are known, while no dwellings have come to light as yet (*Petrović 1986–87; Minichreiter 1992a; 1992b. 11–38*). All features were oriented precisely towards north. This was the case also with the most typical feature type in Pityerdomb: long ditches alongside the house's walls (Fig. 8). In the filling of these long pits the stratigraphy of the settlement could be well observed. The profiles showed that soon after having dug the pit, the lower part was buried quickly. Above this more-or-less sterile layer there is one layer with plenty of finds. Finally, in the course of a serious fire, the burning parts of the roof and the walls fell in and covered not only the area of the house itself, but also the ditches. The direction of their fall can still be seen, showing the *in situ* character of the assemblages (Fig. 9).

The pottery was generally fired at a low temperature. Consequently, the profile of the wall is red-black-red: the usual characteristic of the early Neolithic throughout South East Europe. The organic tempering was almost always completed with sand. The vivid red colour sometimes occurs with dark greyish spots, similar to late Starčevo house ware in Northern Transdanubia. Black topped pottery is also typical: important chronological information.

Pedestalled vessels occur in a larger number, belonging to two types: one is higher and conic, while the

other is quite low, resembling a footring.

Pots and other storage vessels are often covered with 'Schlickwurf' barbotine type or with the barbotine arranged with fingers in lines or different patterns. Buckles and twin-buckles are often finger-pressed on their top, or divided by cuttings. Linear patterns made with nail imprints are also a frequent form of coarse ware decoration. However, linear motifs, which can be three parallel lines or spiraloid, "voluted" motifs, are extremely rare.

Fig. 5. The three microregional research areas in Western Transdanubia (1: Little Balaton area, 2: Hahót valley, 3: Kerka valley). Key site: Szentgyörgyvölgy-Pityerdomb.

Although the pottery surface was considerably worn by the acidic soil, a fairly high ratio of thin-walled fine ware is clearly observable. As to their types, most are small bowls and mugs, both often carinated. The upper part of the vessel is quite frequently concave. Both the inner and outer surfaces of the fine ware are polished, wherever it these survived. It is to be noted that a high percentage of these vessels show a kind of highly polished wine-red slip, a most typical characteristic of the Balkan Karanovo I–II, the Körös-Criş and the Starčevo cultures (Fig. 10). Another important type of decoration on the surface of fine vessel was preserved in better condition. This is a group of finely polished lines (*einpolierte Ware*), often in the form of concentric circles, semicircles or small lines on the corner point of biconic, carinated bowls. According to N. Kalicz, this decoration occurs only in the late Körös-Starčevo millieu and the earliest Transdanubian Linear pottery culture (*Kalicz 1994.68; 1995*).

An important difference from other early LP settlements in Transdanubia is the ratio of linear decorated vessels. In contrast to the Bicske phase and also in the newly published site at Budapest-Aranyhegyi út (*Makkay 1978; Kalicz-Kalicz-Schreiber 1992; Kalicz 1995*), in Pityerdomb linear, decoration occurs on no more than 0.5 percent of the whole pottery assemblage.

Black painting was present in the Pityerdomb pottery. Given the worn surfaces, mentioned earlier, they can hardly be seen on the potsherds after they dry, but they were present on the wet finds, especially when they lay deeper than 50 cm below the present surface. In some cases, the spiraloid motifs could also be perceived, although usually in the form of an imprint in the soil visible after the lifting of the pottery fragment. There are two more indicators of the use of black paint: one voluted vessel was a container for black paint, with a thick layer inside and smudged traces of it appearing even on the outside (Fig. 11). Finally, a small clay leg, probably broken off from a four-legged vessel, was used

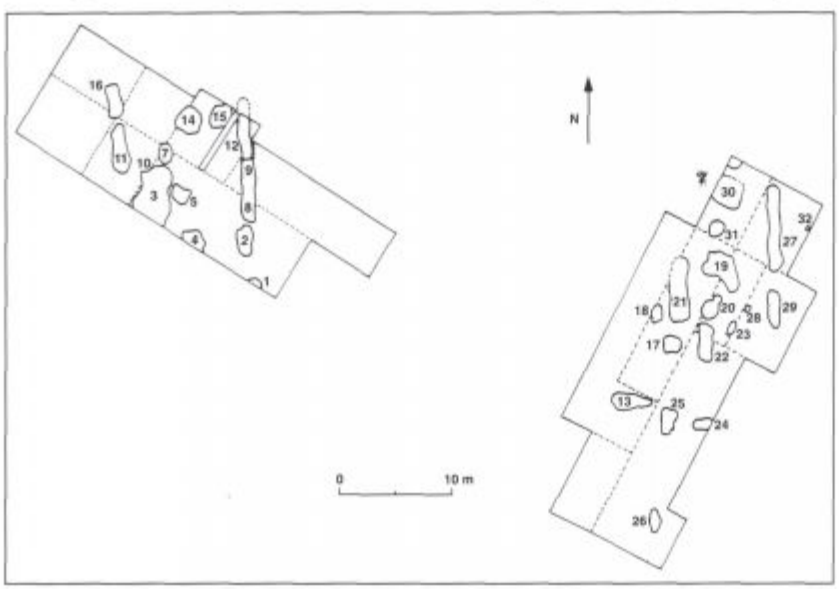

Fig. 6. The excavated area with two houses at Pityerdomb.

Fig. 7. Pityerdomb, finds at the floor surface.

secondarily as a pintadera: the same black paint covered its broken surface.[1]

Among finds that can be associated with cult life at the settlement there was a spiraloid, "voluted" fragment, which has a handle in the form of an upraised human hand. The whole pot, probably having two hands placed symmetrically on both sides, is probably an anthropomorphic vessel, typical of the earliest Linear pottery culture (Fig. 12). On the other hand, another fragment, representing a human leg, with a smoothed surface and delicate linear decoration, can be compared with legged human vessels from the Starčevo tradition (Mostonga I, II and Donja Branjevina, *Karmanski 1977.Pl. 33; 1990.Pls. 1/1, 4/1-9;* Circea, *Nica 1977.Fig. 12/3;* Ostrovul Golu, *Lazarovici 1979.Pl. X/27*).

The most unique find from Pityerdomb is an almost intact clay figurine of a bovine-type animal, probably an ox (Fig. 13). The finely elaborated, asymmetric linear decoration, together with the early Neolithic typological features and the wine-red, polished body surface might perhaps symbolise the formulation of the Central European "Neolithic type of thinking" in the context of early Neolithic Balkan traditions (*Stanković 1989-90; Ciobotaru 1998.Pls. 1/9, 10*).

The immense quantity of lithic finds all come from the prehistoric mine of Szentgál near Veszprém, in North Eastern Transdanubia (Fig. 14). The character of the assemblage is microlithic.[2] The high number of cores and splits, as well as the feature south-west of house 2, probably a workshop for flints, suggests that flint must have been imported in the form of raw material from the Szentgál mine to Pityerdomb, where the chipped stone artefacts were prepared. The kit was probably made for each household. The same raw material, the red radiolarite, is typical also of coeval and somewhat younger sites of early LP settlements in Western Transdanubia. Similarly, the Szentgál radiolarite also occurs in the same period in Eastern Austria and Southern Germany. This

Fig. 8. Pityerdomb, the long ditch along House 1.

1 The chemical analysis was partly made in the MÁFI, Budapest, where the results speak about a certain organic, resin-like material, probably from a tree. A more detailed analysis was promised from Salzburg.

2 Oral communication by Katalin T. Biró. The lithic finds will be evaluated by her.

Fig. 9. Pityerdomb, burnt wattle and daub remnants fallen down, in situ.

fact clearly shows that the Szentgál stone was a raw material of high value at the time of the earliest Neolithic period; its long distance trading had a strong influence on the direction and intensity of the neolithisation process in Central Europe. Along the Transdanubian rivers the L-pottery traders reached the Danube and also regions such as Moravia and the Munich Basin. However, the L-pottery population was not the first to use this raw material in the region, as we shall see below. The detailed and final proceedings of the Pityerdomb assemblages have not been completed, like the finds of Gellénháza and Vörs. So all I am going to say now are not conclusions, but much more some tentative statements which must be confirmed or dismissed later.

First, there is a strong resemblance between the pottery of Gellénháza and that of Pityerdomb. This concerns the method of firing, the tempering and the surface of the vessels, the plastic and slightly incised decoration (*einpolierte Ware*), the majority of the biconic, strongly carinated forms, the polished fine ware and also the coarse ware. What is more, there is a unique clay weight, having an amorphous pear form, which occurs in a greater number both in Gellénháza and in Pityerdomb, but to my knowledge, nowhere else yet. This weight has a hole in each end, but is never completely perforated. These typological parallels as well as the similar geographical preferences suggest not only a possible synchronicity, but also live contacts between the late Starčevo people and the inhabitants of Pityerdomb. What is more, a series of assemblages found earlier, and partly published, can also be placed in this category (Fig. 15). In his contribution to the first Hungarian Topography volumes, N. Kalicz found and/or identified numerous surface finds coming from a well definable site or from small sondages, all of which he dated to the earliest phase of the TLP. The finds from Balatonszepezd, Révfülöp, Vonyarcvashegy, Sármellék, Zalavár all lie along the northern bank of Lake Balaton or close to it. To the same group might belong the pit from Garabonciófalu, in the Little Balaton region, which was found and excavated later, in the course of our first Transdanubian microregional programme.

The sites at Vöröstó and Mencshely in the Southern Bakony mountains, near Szentgál are of special importance, because the lithic assemblages earlier found on the surface can well be ranged to the final Mesolithic, on the basis of to their microlithic Tardenoisien character (*Mészáros 1948; Dobosi 1972*). Only after a small-scale rescue excavation did it become clear that at least a part of the flint show sickle glow, hence they must have belonged to some early Neolithic farming groups (*T. Biró 1991.55*). However, there is a slight contradiction between this latter statement and the Linear Pottery finds found together with sickle blades in the course of the rescue excavation, since the potsherds published belong for the most part to the developed, so-called 'Keszthely' phase of the culture (*Regenye 1991*). I cannot exclude an earlier population group at Mencshely and Vöröstó, whose settlement traces were destroyed by the 'Keszthely' phase site. In my opinion, the question of whether the archaic types in the lithic assemblage belong to the 'Epialeolithic' or the early

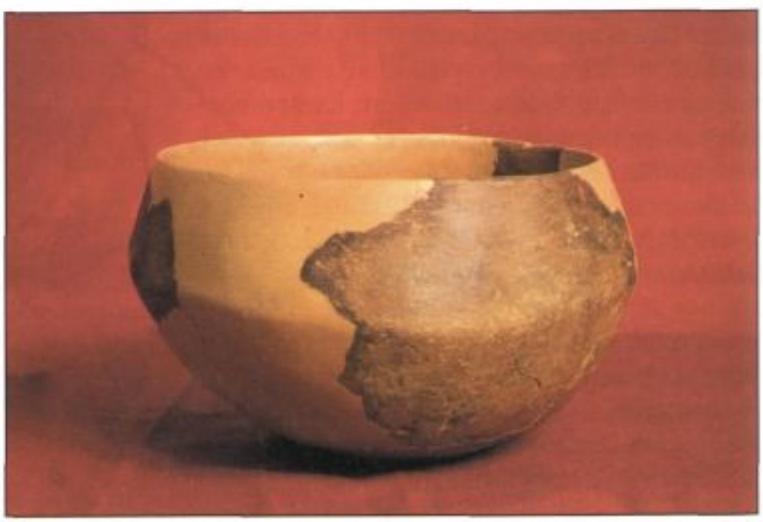

Fig. 10. Pityerdomb, dark red slipped and polished ware, with fine polished incisions.

Fig. 11. Pityerdomb, a pintadera, containing black paint.

Neolithic is almost irrelevant, since even in the early Linear Pottery community the use of exactly these types must have been adopted from local earlier, hunter-gatherer groups. This opinion might be supported by the evaluation by J. Regenye and K. T. Biró, as follows: 'A small part of the Mészáros collection is reminiscent, typologically, of Epipaleolithic forms as well. This impression would coincide with the existence of rich and very early LBC (*Linear Pottery, E. B.*) groups in the Balaton highlands, a region unusually rich in stone tools within Hungary.' (*Biró-Regenye 1991.352*).

Finally, the finds from Tapolca might also belong here, including the altarpiece fragment known to the excavators as 'the wheat-eyed Goddess' (*Sági-Törõcsik 1990; Eöry-Sági-Törõcsik 1991*). Indeed, the eyes of the human head are formed with two grains of *triticum dicoccum*, a domesticated plant.

It is perhaps also possible to range the site of Brunn II, near Vienna, to this group, which seems to be an earliest Linear Pottery settlement. Here, some features such as the house designs resemble the Linear Pottery types, but the eponymous linear decoration on the pottery is missing (*Lenneis 1995.14-16; Stadler 1999*). This is not to exclude the notion that the differences in the two territorial late Starčevo groups and the transitional assemblages in the northern periphery respectively are caused by a certain presence of late Mesolithic (Mencshely-Vöröstó?) groups there. This presence cannot be proven yet in a direct way, but the above-mentioned criteria suggest their participation in the neolithisation process north of the Starčevo distribution area.

As is more or less known, especially since the research work carried out by D. Gronenborn, all the earliest Linear Pottery groups in Transdanubia, but also to a not inconsiderable extent thoss in Central Europe, appreciated and used the Transdanubian Szentgál raw material (*Gronenborn 1994; 1999*). The red radiolarite from the Bakony Mountains, in Northern Transdanubia must have become actually as precious in Western Hungary, and more than one thousand kilometres to the northwest, as the Tokaj obsidian for the Alföld region. As mentioned above, the approximately one and a half thousand flints and nuclei in Pityerdomb all come from the Szentgál mine, about 200 kilometres distant. The excavator, P. Stadler claims, this is also the case at the Brunn settlement, at an even greater distance from Szentgál. The people of the late Starčevo settlement at Gellénháza also used the same raw material, and the same flints are found in those Transdanubian Starčevo settlements where lithic material is used. (See the article by K. T. Biró in *Kalicz, Virág, Biró 1998.*) Concerning this, it is important to mention that Szent-

Fig. 12. Pityerdomb, vessel with a human hand application.

Fig. 13. Pityerdomb, zoomorphic figurine.

gál lies far outside, to the north of any modified Starčevo area. Consequently, if the Starčevo people had access to this raw material, they must have known about it from a group of people about whom we hardly have any firm knowledge yet, apart from some guesses, as in the case of Mencshely and Vörösto. We can consider that they ruled over the northern Bakony forests, conducted some sorts of of exchange with the Starčevo inhabitants and also, that they must have had an influence on the character of the earliest Linear Pottery culture. Thus, it is likely that traces of an important boundary can be identified along the Balaton coast and westwards in Transdanubia.

CONCLUSION

To sum up, it is likely, that the Körös-Starčevo-Çriş culture, i.e. all formations of the early Balkan Neolithic which reached the Carpathian Basin, developed according to geographic differences with a different rhythm, but meanwhile each of them had similar basic features in later life. As is known, the area which was most thoroughly investigated, but meanwhile provoked the greatest debate, was the Middle Tisza region in connection with the so-called 'Proto-Vinča' problem and the formation of the earliest ALP, the Szatmár II group. This debate was and still is certainly not independent of the uncertainties in the Starčevo-Vinča transition in the core area. The two most important opinions reflect totally antagonistic views: the first emphasises local development, without any external impact (*Leković 1990*); while the other regards the southern impulses as the most important element, not excluding even migrations (*Garašanin 1979; Lichardus-Lichardus-Itten 1989–90*).

I regard the opinion of J. Chapman as one of the simplest and not independently, the most logical opinion of a somewhat combined model, which he formulated in his monograph some decades ago (*Chapman 1981. 34*). This model might also sound likely because it has numerous analogies within the prehistory of Europe.

Last, but not least, I should like to draw attention to an ecological model published recently by R. Kertész and P. Sümegi (*Kertész, Sümegi 1999*). This model finally makes clear why the Körös and the Starčevo cultures stopped at a borderline which does not coincide with any natural geographical barriers, neither in the Szolnok-Berettyó line in the centre of the Tisza region, nor at or around Lake Balaton in Transdanubia. In their publication there is a map showing the northern limits of the common climatic, petrological and ground soil potentialities that together were necessary for Körös-Starčevo-typed food production (*Kertész, Sümegi 1999.18, Fig. 3*). The line is not straight because of some environmental mosaics, but roughly it represents the real borders of the early Neolithic distri-

Fig. 14. Pityerdomb, lithic finds.

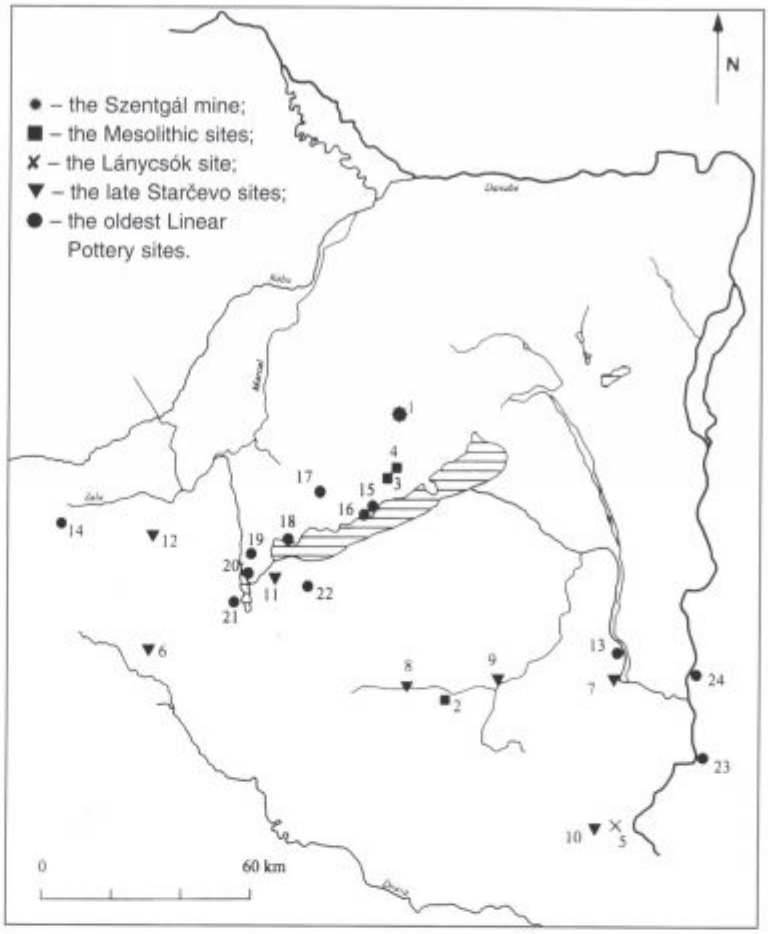

Fig. 15. The late Mesolithic, Starčevo and Earliest Linear Pottery sites in Southern and Western Transdanubia. Sites mentioned in the text: 1. Szentgál (prehistoric mine), 2. Kaposhomok (probably late mesolithic), 3. Mencshely (late mesolithic, or this tradition), 4. Vörösto (late mesolithic, or this tradition), 5. Lánycsók (classical Starčevo), 6. Becsehely (late Starčevo), 7. Harc-Nyanyapuszta (late Starčevo), 8. Kaposvár-Deseda (late Starčevo), 9. Dombovár-Kapospart (late Starčevo), 10. Babarc (late Starčevo), 11. Vörs-Máriaasszonysziget (late Starčevo), 12. Gellénháza-Városrét (late Starčevo), 13. Medina (earliest LP), 14. Szentgyörgyvölgy-Pityerdomb (earliest LP), 15. Balatonszepezd (earliest LP), 16. Révfülöp (earliest LP), 17. Tapolca (earliest LP), 18. Vonyarcvashegy (earliest LP), 19. Sármellék (earliest LP), 20. Zalavár (earliest LP), 21. Garabonc-Ófalu (earliest LP), 22. Kéthely (earliest LP).

bution area in the Carpathian Basin. This line should represent the 'Central European agro-ecological barrier', north of which it was impossible to continue the southeast European mode of food production. Thus, the early Neolithic groups of southern origin slowed down and finally had to stop. This pause for breath might have given time to the local, indigenous Mesolithic groups living to the north of them in the contact zone to learn most of the Neolithic inventions without a total assimilation and absorption into the Körös-Starčevo civilisation.

It might be too early to draw any important conclusions from the above model from the archaeological point of view. Nevertheless, it is not unlikely that the settlements of the Pityerdomb type reflect just this mode of neolithisation: the adoption of the Neolithic way of life whilst preserving some traces of the old values. In my opinion, this sketchy hypothesis will have a good test, which is different from the certainly necessary and useful natural scientific analyses. This would be an analysis of the few hints reflecting something of the way of thinking and the symbolism of the Starčevo and the Pityerdomb-typed early Linear Pottery archaeological material. It is to be hoped that this will help build a bridge between many of the problems associated with the neolithisation of the Carpathian Basin.

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REFERENCES

BÁNFFY E. 2000. Neue Daten zur Entstehung der Bandkeramik. In S. Hiller, V. Nikolov (eds.), *Karanovo III. Beiträge zum Neolithikum in Südosteuropa: 375–382.*

in press. Neue Funde der Starčevo-Kultur in Transdanubien. In F. Drasovean (ed.), *Festschrift Gheorghe Lazarovici.*

BIRÓ K. and REGENYE J. 1991. Prehistoric workshop and exploitation site at Szentgál-Tűzköveshegy. *Acta. Arch. Hung 43: 337–375.*

BIRÓ T. K. 1991. Mencshely-Murvagödrök kőanyaga (The lithic assemblage from Mencshely-Murvagödrök). *A Tapolcai Városi Múzeum Közleményei 2: 51–60.*

CHAPMAN J. C.1981. The Vinča culture of South East Europe. Studies in chronology, economy and society. *BAR IS 117 I-II.*

CIOBOTARU D. L. 1998. Plastica neolitica din asezarea de la Foeni-Salas (Jud. Timis) (Neolithic artistic and cult artifacts from the Foeni-Salas site /Timis County/). *Analele Banatului 6: 73-82.*

COUDART A. 1998. *Architecture et société néolithique. L'unité et la variance de la maison danubienne. Documents d'Archéologie Francaise.* Paris

DOBOSI T. V. 1972. Mesolithische Fundorte in Ungarn. *Aktuelle Fragen der Bandkeramik. Székesfehérvár: 39-60.*

EŐRY B., SÁGI K., TÖRŐCSIK Z. 1991. A Dunántúli Vonaldíszes Kerámia „Tapocai csoportjának" legújabb lelőhelyei a Balaton környékéről (New sites of the „Tapoca group" of the Transdanubian Linear Pottery ware culture around the Balaton). *A Tapocai Városi Múzeum Közleményei 2: 7-30.*

GARAŠANIN M. 1979. Starčevačka grupa. *Praistorija Jugoslavenskih zemalja II. Sarajevo: 115-143.*

GRONENBORN D. 1994. Überlegungen zur Ausbreitung der bäuerlichen Wirtschaft in Mitteleuropa - Versuch einer kulturhistorischen Interpretation altestbandkeramischer Silexinventare. *Praehistorische Zeitschrift 69/2: 135-151.*

1999. A variation on a basic theme: The transition to farming in Southern Central Europe. *Journal of World Prehistory 13/2: 123-210.*

KALICZ N. 1977-78. Früh- und spätneolithische Funde in der Gemarkung des Ortes Lánycsók (Vorbericht). *JPMÉ 22: 137-158.*

1978-79a. Ausgrabungen: Becsehely. *Mitt. Arch. Inst. 8-9: 119-120.*

1978-79b. Funde der ältesten Phase der Linienbandkeramik in Südtransdanubien. *Mitt. AI. 8/9: 13-46.*

1983. Die Körös-Starčevo-Kulturen und ihre Beziehungen zur Linearbandkeramik. *Nachr. Niedersachsens Urgesch. 52: 91-130.*

1990. *Frühneolithische Siedlungsfunde aus Südwestungarn.* IPH Budapest

1994. A Dunántúli (közép-európai) vonaldíszes kerámia legidősebb leletei és a korai Vinča-kultúra (Die ältesten Funde der transdanubischen (mitteleuropäischen Linienbandkeramik und die frühe Vinča-Kultur). *A kőkortól a középkorig - Von der Steinzeit bis zum Mittelalter. Festschrift O. Trogmayer: 67-84.*

1995. Die Älteste transdanubische (mitteleuropäische) Linienbandkeramik. Aspekte zur Ursprung, Chronologie und Beziehungen. *Acta. Arch. Hung. 47: 23-59.*

KALICZ N. and KALICZ-SCHREIBER R. 1992. Die erste neolithische Fundstelle in Budapest. Hommage a Nikola Tasić. *Balcanica 23: 47-76.*

KALICZ N. and MAKKAY J. 1972. Südliche Einflüße im frühen und mittleren Neolithikums Transdanubiens. *Alba Regia 12: 93-105.*

KALICZ N., M. VIRÁG ZS., BIRÓ T. K. 1998. The northern periphery of the early neolithic Starčevo culture in south-western Hungary: a case study of an excavation at Lake Balaton. *Documenta Praehistorica 25: 151-187.*

KARMANSKI S. 1977. *Katalog antropomorfne i zoomorfne plastike iz okoline Odžaka.* Odžaci

KERTÉSZ R. 1996. The Mesolithic in the Great Hungarian Plain: A survey of evidence. In *At the fringes of three worlds. Hunters-gatherers in the Middle Tisza valley. Szolnok 1996: 5-39.*

KERTÉSZ ET AL. 1994. KERTÉSZ R., SÜMEGI P., KOZÁK M., BRAUN M., FÉLEGYHÁZI E. 1994. Mesolithikum im nördlichen Teil der ungarischen Tiefebene. *JAMÉ 36: 15-61.*

KERTÉSZ R. and SÜMEGI P. 1999. Teóriák, kritika és egy modell: miért állt meg a Körös-Starčevo kultúra terjedése a Kárpát-medence centrumában? (Theories, critiques and a model: why did the expansion of the Körös-Starčevo culture stop in the centre of the Carpathian Basin? *Tisicum 11: 9-23.*

MAKKAY J. 1978. Excavations at Bicske. I. The Early Neolithic - The earliest Linear band Ceramic. *Alba Regia 16: 9-60.*

LAZAROVICI G. 1979. *Neoliticul Banatului.* Cluj-Napoca.

LEKOVIĆ V. 1990. The Vincsanization of Starčevo culture. In D. Srejović, N. Tasić (eds.), *Vinča and its world: 67-74.*

LENNEIS E. 1995. Altneolithikum: Die Bandkeramik. *Jungsteinzeit im Osten Österreichs. St. Pölten: 11-56.*

LICHARDUS J., LICHARDUS-ITTEN M. 1989-90. Der Komplex mit Schwarz-, braun und graupolierter Keramik und der Beginn des Mittelneolithikums in Südosteuropa. *Starinar N.S. 40-41: 43-49.*

LÜNING J. 1982. Forschungen zur bandkeramischen Besiedlung der Aldenhovener Platte im Rheinland. In J. Pavůk (ed.), *Siedlungen der Kultur mit Linearkeramik in Europa. Kolloquium Nové Vozokany: 125-156.*

MÉSZÁROS G. 1948. *A Vázsonyi-medence mezolit - és neolitkori települései.* (The mesolithic and neolithic settlements in the Vázsony Basin). Veszprém

MINICHREITER C. 1992a. Ranoeneolitička arhitektura sjeverne Hrvatske (Frühneolithische Architektur Nordkroatiens). *Poročilo o raziskovanju paleolitika, neolitika in eneolitika v Sloveniji 20: 17-26.*

1992b. *Starčevačka kultura u Sjevernoj Hrvatskoj.* Zagreb.

NICA M. 1977. Nouvelles données sur le néolithique ancien d'Olténie. *Dacia N.S. 21: 13-54.*

PETROVIĆ J. 1986-87. Zemunica u naselju starčevačke kulture na Golokutu (Erdhütten in der Siedlung der Starcevackaer Kultur auf Gologut). *Rad Vojvođanskog Muzeja 30: 13-28.*

PUSZTAI R. 1957. Mezolitikus leletek Somogyból. *JPMÉ: 95-105.*

REGENYE J. 1991. Neolitikus leletek Mencshely környékéről (Neolithic finds from Mencshely). *A Tapolcai Városi Múzeum Közleményei 2: 31-47.*

SÁGI K., TÖRŐCSIK Z. 1990. A Dunántúli Vonaldíszes Kerámia „Tapolcai csoportja" (The „Tapolca group" of the Transdanubian Linear Pottery culture). *A Tapolcai Városi Múzeum Közleményei 1: 29-72.*

SELMECZI L. 1969. Das Wohnhaus der Körös-Gruppe von Tiszajenő. Neuere Angaben zu den Haustypen des Frühneolithikums. *MFMÉ 1969/2: 17-22.*

SIMON H. K. 1994. Frühneolithische Kultgegenstände bei Gellénháza, Kom. Zala. In G. Lőrinczy (ed.), *A kőkortól a középkorig. Von der Steinzeit bis zum Mittelalter. Studien zum Geburtstag von O. Trogmayer: 53-65.*

1996. Ein neuer Fundort der Starčevo-Kultur bei Gellénháza (Kom. Zala, Ungarn) und seine südliche Beziehungen. *The Vinča culture, its role and cultural connections: 59-92.*

STADLER P. 1999. Die ältestlinearbandkeramische Fundstelle von Brunn am Gebirge, Flur Wolfholz (5620-5200 v. Chr.). *Führer zur Austellung in Brunn im August 1999: 1-13.*

STANKOVIĆ S. 1989-90. Bull representations in the Early Neolithic. *Starinar N.S. 40-41: 35-42.*