

On the Early Neolithic Links between the East-Baltic Area and Fenno-Scandia

Dating from the Early Neolithic times on the territory of the East Baltic Area are the sites of the Narva Neolithic culture and, in the southern part of the region, several sites of the Zedmar type and of the Niemen culture¹.

The sites of the Zedmar (Serovo) type have been investigated by systematic excavations only in the past few years (Timofeev, 1979, 1980). The Zedmar type of pottery, known originally from amateur excavations of the early twentieth century was related by some investigators to the earliest ceramics of South-West Scandinavia belonging to the Ertebölle culture (Gaerte, 1927; Gross, 1939; Äyräpää, 1955, p. 51; Jaanits, 1968, p. 23; Siiriäinen, 1973, p. 161).

Certain authors seem to find in the ornamentation patterns of the Zedmar type vessels signs of the influence of the early neolithic pottery of Finland (style 1:1) (Luho, 1968, p. 48). It has now been established that sites of the Zedmar type existed in the South-East Baltic Area for a fairly long time (from the earliest to the early late Neolithic period). More characteristic of the pottery of the earlier complexes (Zedmar A, Utinoe Boloto I) dated by the C₁₄ technique to about 5300–4800 years BP (Table 1) is the addition to puddled clay of shell- and plant temper; the vessels had predominantly slightly profiled rims and flat bases and were most commonly ornamented in the upper part of the body with notches and pit depressions. That pottery differed greatly from the Ertebölle vessels which had a sharp bottom, an S-shaped profile and inorganic tempering. Vessels with the S-shaped profile which used to be linked to the Ertebölle pottery are characteristic of the later stage in the development of the Zedmar type of ceramics and cannot be associated with influences of the Ertebölle culture. Investigations carried out by R. K. Rimantiene (1979) have established that on the whole the profiled, close to S-shaped form in the South-East Baltic Area is typical of the ceramic complexes of the second half of the Neolithic period. The flint material of the Zedmar type monuments differs greatly from that of Ertebölle, showing influences of the Niemen culture, which is indicated, among other things, by the presence of lancet-shaped sharp points and trapezoids.

Some south-western influences are conceivable as well as links with the Funnel-Beaker culture, which may account for the fact that flat-bottomed vessels are characteristic of the early Zedmar type complexes. There are signs of such influences in the material of a later Zedmar E site dating to the second half of the Neolithic period. However, no remains of the culture of Funnel-Beakers are known from the Kaliningrad District or in the adjacent areas.

Some dwelling sites of the western variant of the Narva culture are known in the littoral regions of North-West Lithuania and West Latvia (Vankina, 1970; Rimantie-

¹ The remains of the Niemen culture known in South-East Lithuania represent the periphery of the vast Niemen culture-province whose principal territory lies in the Polesie and Niemen areas in Byelorussia. They are not discussed in the present paper.

ne, 1979). Characteristic of the pottery of the sites is the presence of plant and shell tempering, two vessel shapes (a large sharp-bottomed pot and a bowl), ornamentation of the vessels predominantly in their upper part, a considerable proportion of the »pit» decorative pattern and the presence of peculiar ornamental motifs. R. K. Rimantiene defined about 60 ornamental motifs in the pottery from the dwelling sites in Sventoji (Rimantiene, 1979). Three stages in the development of the culture have been identified on the basis of the Sventoji material (Rimantiene, 1978, pp. 31–34). In this connection, the standard settlements in Sventoji and Sarnate should apparently be regarded as approximately contemporaneous. Judging by some series of radiocarbon datings (Table 1), sites of the western variant of the Narva culture are not, properly speaking, Early Neolithic. They belong to the time when layers with material of Early Neolithic sites of the Narva culture in East Latvia and Estonia were covered over by sites of the population using typical comb-pit pottery. Material from the other now known sites of the western variant of the Narva culture are, on the whole, comparable to that of Sventoji and Sarnate pertaining to later stages in the development of that culture.

Such peculiarities as the admixture of ground shells and plant remains in the temper, sparse ornamentation and »pit» ornamental patterns make the pottery of the western variant of the Narva culture similar to vessels from the earlier Zedmar type sites. In this connection one may recall the opinion offered by A. Äyräpää (1960, p. 243) that the Zedmar sites represent the earlier stage of the same culture whose later phase is embodied in the material of the Sarnate site. Afterwards Äyräpää's opinion was shared by L. V. Vankina (1970, p. 142) and a similar view was expressed by L. Jaanits (1968). The material obtained by us does not refute this thesis. It is conceivable that the population that left the earlier sites of the Zedmar type served as the basis or as an important component in the formation of the people of the western variant of the Narva culture. The solution to this problem, however, will be possible only when strictly Early Neolithic, early ceramic monuments have been discovered in the littoral part of the South-East Baltic Area.

The southern variant of the Narva culture comprises Early Neolithic monuments in South-East Latvia (Zagorskis, 1973, pp. 56–69; Loze, 1975, pp. 53–64) and the Zatsenje site in North Byelorussia (Chernyavsky, 1978, pp. 42–46). The pottery of those monuments is characterized by admixture of plant remains and finely ground shells in the temper, vessels of two shapes – a pot and a basin – being found on most of the sites. Characteristic of the ornamentation is a narrow comb stamp most frequently inclined or horizontal as well as »pit» patterns, other kinds of ornamentation are rare. A total of about 20 ornamental motifs have been distinguished in the pottery material from the Osa site. There are several characteristic types of bone artefacts (arrowheads with a conic tip smoothly passing into the body, as well as needle-shaped arrowheads, »horn hoes», objects with the working edge »at an angle of 45°» and others).

In our opinion the southern variant of the Narva culture is chronologically its oldest version (Timofeev, 1975, pp. 18–25), which is evidenced, among other things, by a series of radiocarbon datings (Table 1). In the material of the southern variant, first of all in the Zatsenie site complex, there are features common with those of the pottery of more southern cultures of the forest belt, obviously pointing to the influence of the Dnieper-Donets culture or sites of the Strumel-Gastyatin type (Telegin, 1971).

Apparently, certain variations in the material of the southern variant sites (specifically, the Osa and Zvejsalas sites in Lubansk lowland) can be accounted for

by chronological differences, indicating the long existence of the southern variant of the Narva culture in the Lubansk lowland. It is significant that some features that first appear in the Zveisalas complex (peculiar ornamental motifs, including geometrical patterns, and the use of the »trowel and anvil» technique for finishing the surface of some vessels) afterwards became characteristic of the material of the Usvyaty IV B type monuments dating to the developed Late Neolithic period (Miklyayev, 1971, pp. 7–29).

On the whole the material from the sites of the southern variant of the Narva culture probably indicates that Southern contacts were of the greatest importance for the genesis of the culture.

To the northern variant of the Narva culture we refer sites in the Estonian SSR, the south Ladoga area and possibly North Latvia.

The pottery of the northern and southern variants is similar in many respects, characteristic of both is the admixture of shells and plants in the clay, as well as the vessels of two shapes- a pot and a basin. On the basis of the Narva III, 1 (Gurina, 1967) and Kääpa (Jaanits, 1965, 1968) material about 40 ornamental motifs can be distinguished, executed mainly with small pits and a comb stamp and, less frequently, with notches. It should be pointed out that the absolute majority of the ornamental motifs of the pottery of the southern variant (the Osa type) is similarly peculiar to vessels of the northern variant. One of the distinctive features in the ornamentation of the pottery of the northern variant is the motif of the »stepping comb» of a certain group of vessels which are present in all the Narva pottery complexes of Estonia. A group of vessels from Kääpa and several sherds from the sites of Narva-Riigiküla are also decorated with large separately placed imprints of the »retreating trowel». The »stepping comb» and the »retreating trowel» patterns are altogether absent in the ornamentation of the pottery of the southern variant. Other differences in the ornamentation are evident only in separate vessels.

The bone industries of the monuments of the northern and southern variants of the Narva culture are practically identical.

We believe that monuments of the northern variant of the Narva culture are more recent as compared with complexes of the I Osa type. In support of this thesis is the recently published series of C¹⁴ datings of the Narva layer of the Kääpä site (Dolukhanov, Liiva, Miklayev, 1978, pp. 25–30). The sites of the northern variant seem to record the northward movement, in the second half of the Early Neolithic period, of population from the southernmost Narva-culture areas. The links between the Narva-type pottery and the Early Neolithic pottery of Finland and Karelia of the Sperrings type are still not clearly understood. L. Jaanits has noted certain common features in the ornamentation of the pottery of the Narva type and that of the later stage of the Early Neolithic period of Finland (style 1:2) (Jaanits, 1965). G. A. Pankrushev has suggested that the presence of the plant admixture in the temper of the Sperrings-type vessels from sites in South-West Finland is due to the influence of the Narva-type pottery (Pankrushev, 1970, p. 30).

Particularly important for investigating the links between the Narva and the Sperrings cultures is the material from the south Ladoga area. Traces of the presence of the Narva culture in the south Ladoga area were first noted by N. N. Gurina in the material collected by A. A. Inostrantsev during the digging of the New Syas Canal (Gurina, 1955, pp. 169, 170; 1967, p. 186). Certain typological peculiarities of the Narva pottery from the »Inostrantsev sites» have made some authors doubt the correctness of their attribution and object to the inclusion of the south Ladoga area into the Narva culture area (Tretiyakov, Grigoriev, 1968, pp. 271–275). New data

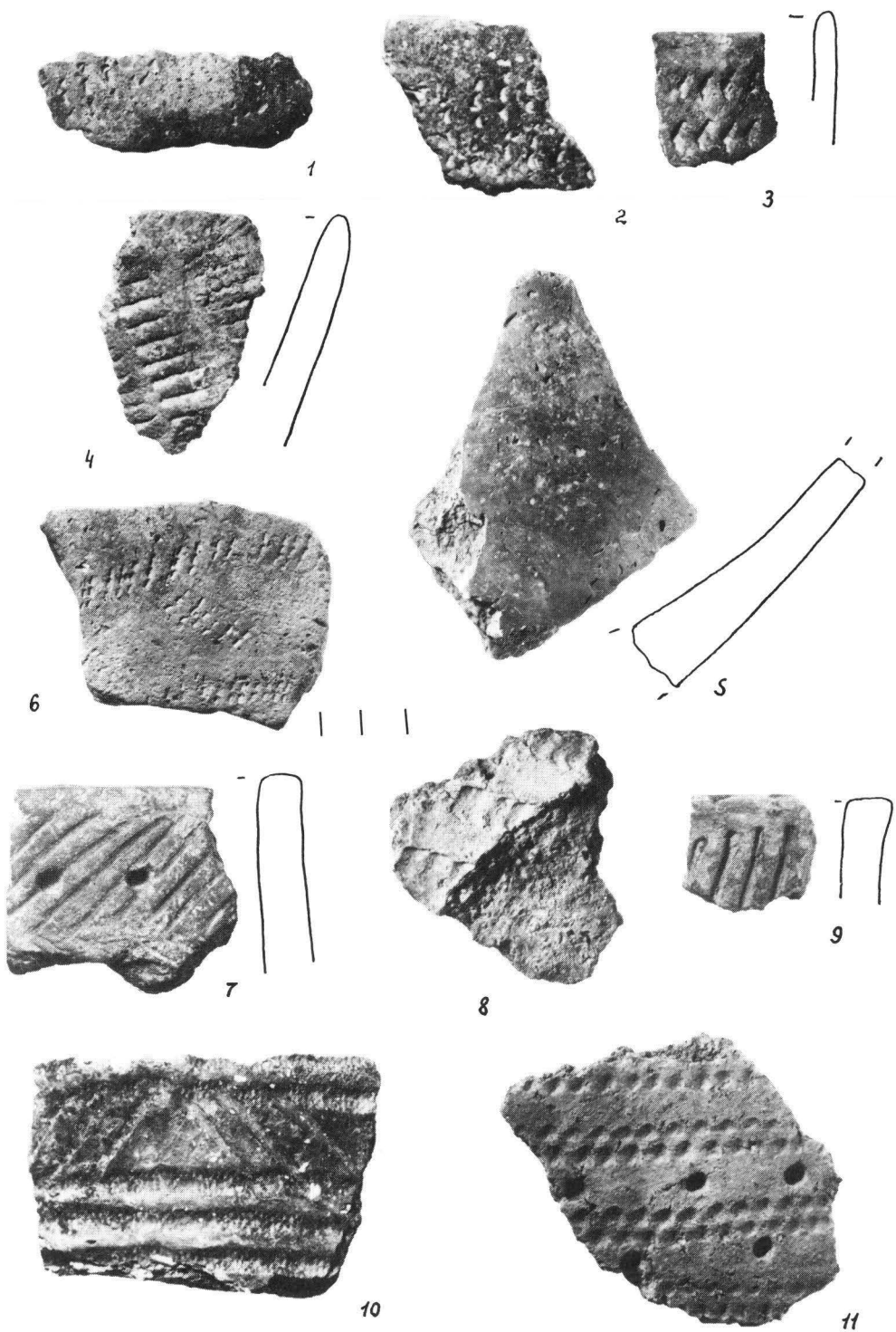


Fig. 1. Pottery from the Berezye Neolithic site (1-11).

relevant to the links between the Narva culture and the Neolithic period in Finland and Karelia are provided by the material from the Berezye site discovered on the right bank of the Volkhov River about five kilometres from the mouth of the Volkhov (Timofeev, 1974, pp. 81–82). The finds on the site were collected at the very edge of the water. Digging has shown, that beneath the sand deposited by the waters of the river, there is a thick layer of lake and swamp sediments associated with the cultural layer of the site situated below the water edge. About 220 fragments of Neolithic vessels have been collected on the site, some containing tempering of finely ground shells and plants and decorated with imprints of a thin comb stamp and long narrow notches (Fig. 1, 1, 2, 5, 6). Some of the vessels had a smooth, slightly glossy surface and a drawn bottom filled with clay (Fig. 1, 5). The connection of the pottery with the Narva culture is certain. There are also interesting fragments of several vessels with similar ornamentation and profile containing a small portion of inorganic temper in the clay (Fig. 1, 3, 4). However, most of the finds are, according to N. N. Gurina, fragments of vessels of the Baltic Area culture, representing typical comb-and-pit pottery. Vessels of this group are adorned with imprints of a large comb stamp, the wound-cord ornament and pits (Fig. 1, 11). The clay of the comb-and-pit ornamented pottery contains inorganic temper. A special group consists of vessels decorated with drawn lines and the wound-cord ornament sometimes alternating with sparse

Table 1

Southern variant of the Narva culture
Osa: 5880 ± 80, 5780 ± 70, 5730 ± 50/LE-961, 962, 850/ Zvidzienaskrogs: 6315 ± 60 (TA-856) Zatsen'je: 5450 ± 75 /LE-960/ Zvejsalas: 4905 ± 70/TA-395/
Northern variant of the Narva culture
Kääpa: 4865 ± 235, 4740 ± 60, 4760 ± 80, 4640 ± 100/TA-5, 724, 478, 815/
Western variant of the Narva culture
Sarnate: 4700 ± 250, 4490 ± 250, 4630 ± 70, 4510 ± 110, 4639 ± 100 /TA-26, 24, 265, LE-814, Bln-769/
Sventoji, site 2: 4640 ± 60, 4400 ± 55/LJ-2523, Vs-23/ Sventoji, site 1: 4400 ± 90, 4470 ± 40, 4225 ± 70, 4100 ± 60 /TA-247, IGAN-12, LE-904, 833/
Zedmar-type sites
Zedmar A: 5280 ± 50, 5300 ± 60, 5100 ± 50, 5120 ± 50 4955 ± 110, 4900 ± 80, 4870 ± 80, 4730 ± 140, 4920 ± 80, 5100 ± 60/Bln-2162, 2163, 2164, 2165, Le-1268, 1387, 1386, 1319, 1388, 1389/
Utinoe Boloto: 4870 ± 230/LE-1237/

Table 1. Radiocarbon datings of sites of the southern, northern, and western variants of the Narva culture and of the Zedmar-type sites. The dates are given before present with the C_{14} half life of 5570 ± 30 , without taking into account dendrochronology scale corrections.

deep pits (Fig. 1, 7–10). The clay contains inorganic temper. Those vessels have counterparts in the Sperrings-type pottery, the later phase in particular, represented on the outlying sites of the culture, e.g. the Iliinsky Ostrov site (Kozyreva, 1975, pp. 91–95). Of particular interest is a find of fragments of a vessel with drawn and wound-cord ornaments typical of Sperrings pottery, with finely ground shells as temper (Fig. 1, 10).

Those finds substantiate the inclusion of the south Ladoga area in the Narva culture province. The find of the »hybrid« vessel combining features of the Sperrings (ornamentation) and the Narva (shell temper) pottery, obviously, indicates the contacts of these cultures in the south Ladoga area.

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