

# Pottery, Houses and Graves

## The Early Funnel Beaker Culture in Southern Sweden and Central Poland

BY MATS LARSSON AND SEWERYN RZEPECKI

### Abstract

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The following essay is about the Early Neolithic in southern Sweden and in central Poland, Kuyavia. The essay is divided into two parts and the material from southern Sweden is discussed in the first part and the Polish material is treated in the second part of the essay, with the emphasis on the new excavations in Kuyavia. Of special interest in the context of this essay is the pottery of the Oxie group. The similarities in both shape and decoration between what Becker called the A group and the early TRB material on the continent were noted early on. On purely typological grounds there is a profound likeness between, for example, the Sarnowo group in Kuyavia and the Oxie group. The obvious spatial demarcation between activity areas and living areas seen at several sites like Mossby, Brunneby, Dagstorp and many others is discussed. It is suggested that this might be interpreted in structural terms, for example, as clean/unclean and wild/tame.

Simultaneous existence of two culture blocks is characteristic of the Middle Neolithic in Kuyavia (c. 4400–3650 BC cal.). The first of them is formed by the Brzesc Kujawski group of the Danubian circle, the other by the early (Middle Neolithic) Funnel Beaker Culture. The TRB-s1 settlements are characterized by the presence of a number of elements which did not occur earlier among the early farming Kuyavian societies of the Danubian circle. The TRB-MN1 settlements were located on sandy areas of black soil base of “linear” economy. They consisted of 1–2 rectangular houses, built in post construction with an area of 15–30 sq. m. On the grounds of the data for the whole period of the early TRB it seems that cemeteries were located exclusively outside the settlement area.

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### Introduction

The following essay is the outcome of a visit by one of the authors, Mats Larsson, to Łódź in November 2001. As I heard Lucyna Domanska and Seweryn Rzepecki talking about the excavations carried out by them during the last couple of years in Kuyavia (Polish Kujawy), I was really astonished. Here we had intriguing

and important new information concerning both the Neolithization process and the earliest Funnel Beaker culture (TRB). Spending some days with Seweryn looking through the pottery and discussing both chronology and settlement structure, we agreed that we ought to write an essay where we should try and focus on the development of the earliest TRB. In a recent article Douglas Price (2000, pp. 269 ff.) has

stated that the Sarnowo group in Kuyavia is a good candidate for the origin of the TRB. It must have begun about 4400 BC in that region. The newly excavated Polish material is therefore of the greatest interest for the interpretation of this hotly debated issue (Bogucki 1988). The new material is still largely unknown in northern and north-western Europe, and that is one good reason to write something together.

The essay is divided into two parts with an interpretative part at the end. The material from southern Sweden is discussed by Mats Larsson in the first part. The emphasis is on the settlements, so the chronology and material culture in southern Sweden are rather briefly discussed. The Polish material is discussed by Seweryn Rzepecki in the second part of the essay with the emphasis on the new excavations in Kuyavia. At the end we will try and bring all the loose threads together in an interpretation of the earliest TRB culture in Northern Europe.

## Neolithization in south Scandinavia – an introduction

Two rather different models of the Neolithization process are classical. One of them was presented by Becker (1947) in his dissertation in which he stated that the Funnel Beaker culture was the result of a migration. An alternative interpretation was presented by Troels-Smith in 1953. In this seminal essay he proposed, based on meticulous fieldwork in Aamosen on Zealand (Muldbjerg), that the TRB was actually based on the Mesolithic Ertebølle culture. This debate raged on for many years but it was Becker's view that gained the most influence. It was not until the 1970s and the rise of "New Archaeology" that new models were discussed. Issues like economy, population pressure and ecological change were integral parts of the discussion. Sören Andersen's article from 1973 is in many ways typical of its time. On the basis of his own excavations of kitchen middens, he discussed a change in the settlement pattern around 4500

BC. A change towards a more sedentary way of life was observed. The result of this was a marked rise in the population, which resulted in a pressure on the local environment (Andersen 1973, pp. 26 ff.).

Andersen's article might be seen as typical for the debate during the 1970s and the early 1980s. There was obviously a tendency in this discussion to a rather simplified view of the period. The role of population pressure and ecology was widely exaggerated. During the early 1980s new ways of looking at the Neolithization process were introduced. In this discussion the large permanently settled Ertebølle sites, and the cemeteries that often belonged to these, such as Skateholm, were seen as very important links in the chain that eventually led to Neolithization (cf. L. Larsson 1988). The new evidence led to new interpretations in which ecological determinism and population pressure gradually gave way to studies of social relations (cf. Fischer 1982, Jennbert 1984). In the late 1980s Torsten Madsen (1987, p. 237) stated that Neolithization was a "black box", that is, we can study what goes into it and the result of it but we cannot see the "process" itself. This rather dark view of the potential for archaeologists to interpret changes in society in some ways put an end to the debate for many years.

During the last couple of years the discussion has picked up pace and new elements have been introduced in the discussion (Bradley 1998; Hodder 1990; Tilley 1996; Thomas 1991, 1996; M. Larsson 1997; Peterson 1998; Persson 1999). Much of the debate takes its starting point in the hermeneutical and phenomenological interpretations by, for example, Ian Hodder, Richard Bradley, Chris Tilley and Julian Thomas. Lately a couple of important new works on the Neolithic in southern Sweden and Denmark have emerged. (Malmer 2002; Fischer 2002; Andersson 2003; Svensson *et al.* 2003). To some degree they take their starting point in the theoretical framework mentioned above.

## The chronological framework

For many years the chronology of the south Scandinavian TRB culture has been discussed using Becker's (1947) framework. His division of the TRB into three separate chronological groups that he named A, B and C is classic. During the 1980s several new attempts to redefine these groups were made (Madsen & Petersen 1984; M. Larsson 1984). Based on new investigations in both Denmark and Scania a new division was introduced that is commonly used to this day. In Denmark the local groups Volling, Svaleklint and Virum with Volling are the oldest. In Scania Mats Larsson discerned three distinct local groups in the south-western part of the landscape. These were named Oxie, Svenstorp and Bellevuegården with Oxie as the oldest. It was also obvious that the Oxie and Svenstorp groups were at least to some degree contemporaneous (M. Larsson 1984; Koch 1998; Malmer 2002, pp. 19 f.). The radiocarbon dating of the oldest phase was placed between 3950 and 3700 BC cal. (M. Larsson 1997b, p. 96). In the late 1980s a new element was introduced; the Mossby group in south-eastern Scania (M. Larsson 1992). From this site we also have the oldest radiocarbon datings from the TRB culture in Scandinavia, 4100 BC cal. This is very early and as such has been discussed by Per Persson (1999, pp. 85 f.). In a recent discussion of the earliest TRB radiocarbon dates, Anders Fischer reevaluates these datings. In his opinion, and he is probably correct in this, the food crust dates are much too early due to a hitherto unrecognized reservoir effect (Fischer 2002, p. 366).

From the site of Herrestorp in southern Scania we also have some very old radiocarbon dates – 3940–3933 BC cal. (food crust). They are associated with Oxie group material (Torstensdotter-Åhlin 2000). From newly excavated sites in western Scania we also have some early radiocarbon datings associated with this type of material (Andersson 2003, pp. 78 f.).

During the 1990s there was some discussion regarding the oldest of these groups – Oxie and Mossby. The present author has suggested on purely typological grounds that the Oxie group ought to be the oldest (M. Larsson 1997b). There are still rather few radiocarbon datings from the oldest TRB phase. As mentioned above, though, there are some indications that the oldest groups are to a certain degree contemporaneous. Håkan Peterson (1998, pp. 159 ff.) has criticized the present author for some lack of clarity regarding this issue. I still maintain though that the Oxie group is the oldest and the homogeneity of its accompanying material culture over a large area of south and central Scandinavia might be taken as evidence for a rapid change and transformation along old contact routes. In a recent work Anna Lagergren-Olsson (2003) claims that, based on the excavations at Dagstorp 19, the Svenstorp material is found in pits at the site while, interestingly enough, most of the sherds found in the open layers belong to the Oxie group. The interpretation of this is not easy. The pits and the culture layers seem to be contemporaneous so what we might see here is, according to her, probably a functional and not a chronological division.

During the latter part of the 1980s and the early 1990s the Early Neolithic was divided into two parts, EN I (3950–3650 BC cal.) and EN II (3650–3300 BC cal.). This partition is often used today in discussions of the Early Neolithic in southern Scandinavia (M. Larsson 1988, 1992; Andersson 2003, pp. 18 f.)

From this brief introduction it is obvious that it is very hard to see any TRB culture in southern Sweden before c. 4000 BC. The oldest radiocarbon datings are all placed around 3950–3900 BC cal.

## The material culture

This is not the time nor place for a lengthy discussion of the material culture of the early TRB in southern Sweden, but some points of

interest may be raised. In the framework of this article the oldest TRB groups are the most interesting. In the following the Oxie, Svenstorp and Mossby groups will be briefly discussed. For a more thorough presentation we recommend Mats Larsson's works from 1984, 1985, 1992, 1994a and 1997b.

As has long been recognized, there is a close resemblance between the flint industry of the late Ertebølle culture and the early TRB culture. There is a close similarity between, for example, the flake axes. The flake axes in the TRB culture are smaller and somewhat cruder in appearance, but still the affinity is close. The pointed-butted flint axe is basically a core axe in technique but when ground it is typical of the Oxie group. There is also some scant evidence for pointed-butted axes in the Svenstorp group but not in either the Volling or Mossby group (Madsen & Petersen 1984; M. Larsson 1984). Other implements that appear in the earliest TRB are, for example, transverse arrowheads. These are also very similar in shape and technique to the ones found on Ertebølle sites.

If we then turn to the pottery there are obvious dissimilarities between the different groups. The pottery of the Oxie group is very sparsely decorated, just beneath the rim and only with small vertical strokes or shallow pits (M. Larsson 1984). The pottery from both the Svenstorp and Volling groups is much more decorated with lines, pits and especially cord decoration. The decoration is also very much more elaborate with vertical/horizontal lines and both belly and neck decoration (Madsen & Petersen 1984; M. Larsson 1984; Koch 1998, pp. 87 ff.).

Of special interest in the context of this essay is of course the pottery of the Oxie group. The similarities in both shape and decoration between what Becker called the A group and the early TRB material on the continent were noted early on (Becker 1947). On purely typological grounds there is a profound likeness between, for example, the Sarnowo group in Kuyavia and the Oxie group (M. Larsson 1997b, this article). Lately

this "connection" has been discussed and an early TRB phase (Oxie group), rather short-lived, has been discerned. During the earliest Neolithic we find the Oxie group from Jutland up to eastern central Sweden (M. Larsson 1997; Peterson 1998).

## Place and space

The Early Neolithic settlement sites in southern Scandinavia have often been characterized as being rather limited in size. Some years ago it was proposed that they seldom exceed 600 m<sup>2</sup> (M. Larsson 1992). The settlement pattern is usually interpreted as being made up of dispersed single farms in a segmentary social system (M. Larsson 1992). The size of the sites can be compared to the household structure discussed by Richard Grygiel in the Kuyavia area. On the site of Brzesc Kujawski he was able to delimit settlement areas, households, that varied in size between 600 and 800 m<sup>2</sup> (Grygiel 1986, pp. 210 f.). In this area, apart from the house, graves and activity areas were present. Today this model is somewhat problematic. In Ireland, for example, several Neolithic houses have been excavated during the last decade and the evidence points towards some sort of settlement agglomeration with clusters of two or more houses in contemporary use (Grogan 1996, pp. 56 f.). New excavations in Scania (see below) have delivered new evidence for these kinds of clusters, and we have to discuss other possible models.

For many years most of the excavated early TRB sites were made up of different types of pits and almost nothing else (M. Larsson 1984, 1985). These sites are in many ways problematic as there is almost no evidence for actual settlement activities such as hearths or houses. The pits, as for example on the large site of Svenstorp in south-west Scania, are often layered, meaning that they were actually redug and reused. In one pit (Ö71) on the site a thick layer of burnt clay was found. Large amounts of flints debris are usually found in the pits, but also obviously unused implements like flake axes, flake scrapers

and in some cases even complete axes and vessels (M. Larsson 1984, pp. 60, 86, 105; Karsten 1994). The interpretation of these pits has usually been very functional; they were waste pits. In the light of recent interpretation of places like Sarup on Funen in Denmark as ritual centres for the TRB population we might look at these strange Scanian sites with new eyes (Andersen 1997). In the context of this essay there is really no place to elaborate on the issue but perhaps we should look at some of these sites such as Månasken and Svenstorp as in some ways ritual locales. Ideas of the same kind have recently been discussed by Magnus Andersson in his dissertation (2003, pp. 212 f.). It is also interesting to note that several of these sites, such as the ones mentioned above, were located in conspicuous parts of the landscape like hills and ridges. They very often have a high position in the landscape. At the beginning of the Neolithic people obviously changed their view of the world in many ways, and the building of large monuments and houses is evidence for these profound changes. The deposition of flint axes, implements and complete vessels and even single sherds might also be interpreted as an example of this. Richard Bradley (2000, p. 131) has said, referring to Britain, that these artefacts were being returned to the elements from which they were formed. By bringing together elements the sites eventually became a microcosm of the landscape as a whole. There are many challenging aspects regarding these sites but they will have to wait until another essay. I think that it is now time to turn to the settlements themselves.

Some houses of different types have been excavated in both Denmark and southern Sweden over the years, however. Most of these houses are hard to interpret and most of the Danish ones were also to a large degree dismissed in an article some years ago (Eriksen & Madsen 1984). In the following some south Scandinavian sites will be discussed. The literature today regarding Early Neolithic settlement sites in this area is vast and it is of course not possible in this context to discuss every single site, so the

discussion will mainly focus on the growing number of sites with houses.

Probably the first time a proper house was excavated in southern Scandinavia was in 1986 at Mossby in the southernmost part of Scania (M. Larsson 1992, 1997a). The house was about 12 x 6 m in size. In the centre of the houses three large post-holes were found. The diameter of these varied between 0.4 and 0.5 m. Their maximum depth was 44 cm. These posts are interpreted as the ones that supported the roof.

The remains of the wall were made up of rather shallow post-holes and the form of the house was elliptical. A culture layer, rather poor in finds, covered the Mossby house. The layer covered an area of about 70 m<sup>2</sup> and was made up of greyish, rather sooty sand. The culture layer was to a large degree delimited by the wall posts. The layer was also clearly bowl-shaped so the interpretation as the remains of a floor layer is not that far-fetched. In the layer cord-decorated sherds and some flint waste were found. Interestingly enough, in the south-east corner of the house a quernstone was found on a patch of clay

Some 40 metres east of the house a roughly 500-m<sup>2</sup> large culture layer was excavated. It contains a rather large amount of finds, both ceramics and flint. Clear concentrations with flint waste, tools and sherds were identified. These might be interpreted as activity areas. Beneath the culture layer were found pits, patches of soot and post-holes. It was not possible, however, to delimit any houses in this area (M. Larsson 1992, pp. 67 ff.). The culture layer was "disturbed" by three Viking Age pit-houses, which of course rendered it more difficult to interpret. The sherds that were found in the layer and in the pits were identical to the ones found in the layer that covered the house. In a rather deep pit (A8) charred grain and some sherds with burned food crust were discovered. Both the grain and the food crust were radiocarbon-dated and gave very early datings. The datings between 4100 and 3900 BC cal. are among the earliest in southern Scandinavia (M.

Larsson 1992, pp. 74 ff.; Persson 1999, p. 85; Fischer 2002, p. 366).

If we turn for a moment to other sites in Scania it is rather obvious that it is not so easy to interpret the use of space on most of these sites. However, some examples do exist where a spatial analysis is possible. In connection with an excavation at Herrestad east of Ystad in southern Scania a 17 x 4.5 m large house was excavated (Andersson 1998). The house itself is dated to the transition between the Early and Middle Neolithic. In a culture layer situated about 40 m west of the house pottery, flint waste and implements were found. Based on the pottery it is obvious that the house and the culture layer are from the same period. Interestingly enough, some pits with the same type of pottery were excavated in 1984 south-west of the house (M. Larsson 1992).

In connection with the very large rescue excavations performed in western Scania for a new railway, a large number of Early Neolithic settlements have been excavated. Houses have been found on several of these sites. To a large extent these sites are still unpublished and the following discussion is based on the excavation reports.

In the vicinity of the village of Dösjebro (Dagstorp 19) probably the largest number of Neolithic houses in Sweden has been excavated (Lagergren-Olsson & Linderöth 2000; Andersson 2003, pp. 76 ff.; Svensson *et al.* 2003). The settlements make up a sequence from the earliest Neolithic to the MN III. The total number of houses of different types amounts to 15. It is hard, however, based on the published material, to get a comprehensive picture of the individual sites themselves. It is obvious, though, that most of the houses were situated close to or were covered by a culture layer. At least two houses (57/58, 61) and a semicircular hut (54) can be dated to the earliest part of the Neolithic (Andersson 2003, p. 76). From the published material we can see the same picture as discussed above; the houses and most of the culture layers with different activity areas are separated.

If we briefly look at the Danish evidence it is rather difficult to identify a similar picture. Based on Lars Buus-Eriksen's (1992) publication it is very difficult to draw any firm conclusions. In most cases the excavated areas around the structures are too small. There is one exception, though, at Skräppekærgård in northern Zealand (Kaul 1997, pp. 7 ff.). In connection with the excavation of the house, two smaller areas with culture layers were excavated. The culture layers were situated 4–8 m from the actual house and had an extent of 25 x 25 m and 20 x 20 m. Pottery was found in the layers.

If we look outside of Scania and Denmark for a moment we can discern the same pattern in other parts of Scandinavia too. In connection with the rebuilding of road RV 35 in 1991 in the western part of Östergötland, a settlement dating to the Early Neolithic as well as the Iron Age was excavated (M. Larsson 1994b, c). The Early Neolithic house was 9 x 4 m large and had one row of roof-supporting posts. The roof-bearing construction was made up three posts. Based on sherds found in the post-holes, the house is dated to the later part of the period, c. 3400/3300 BC cal.

The finds were rather sparse, made up of pottery, quartz and some flint. About 20 metres from the house itself a rather small culture layer was excavated. In this the same type of pottery as well as some flint and quartz was found. In the vicinity of the house some small pits were also found. We might see the culture layer and the pits as the activity area of the house. Very close to the house two horseshoe-shaped features were excavated. They were orientated towards each other. The largest of these features was about 2.5 x 2 m (M. Larsson 1994b). At the time of the excavation these features were seen as probably the remains of tree fells. Today, as discussed below, they might be interpreted in a quite different way.

Before we go on, one more example of spatial use will be discussed. The site is Skogsmossen in Västmanland in eastern central Sweden (Hallgren *et al.* 1997). During the course of the

investigation a house of the Mossby type was found. This is rather fragmented, though. The area with the house was initially seen as a stone-free area with few or no finds. North of this area a 10 x 10 m large culture layer was excavated, revealing a great many finds. This area has been interpreted as an activity area (Hallgren *et al.* 1997, p. 101). The house itself is rather incomplete but the interpretation of the site with house and activity areas is conclusive.

Before we end this discussion and go on to an interpretation, there is one more type of house that we have to discuss at some length. This type of house has been discovered in the last couple of years and in different contexts. It consists of more or less horseshoe-shaped features, often with few or no finds. During excavations in Östergötland in 1997–1998 this type of feature was found on sites like Abbetorp and Bäckaskog (Carlsson & Hennius 1998; Molin *et al.* 1999). I believe that this type of house is of great importance for our understanding of the Early Neolithic settlement pattern, so a lengthier discussion is necessary. At the Abbetorp site, which is mostly dated to the Iron Age, two features of the type mentioned above were excavated. Their size is 3.5 x 3.5 and 4 x 3 m. They are almost D-shaped and the supposed entrances were situated opposite each other.

At the Bäckaskog site two similar huts were discovered. One had a diameter of 3.1 m and the other measured 5.9 x 4.5 m. The latter might be seen as a transitional form of the two-aisled houses. Pits, hearths and post-holes were found on the site. As no finds were uncovered, we have to rely on the radiocarbon datings for their chronological provenance. They are dated to 3900–3500 BC cal., that is, the earliest Neolithic (Molin *et al.* 1999). It is not only in Östergötland that this kind of house has been found. A similar, yet different, type of house or hut was excavated in 1997 at Glumslöv in western Scania. We are dealing with a round post-built structure 11.4 x 6.3 m in size (Artursson 1999). At the Saxtorp 23 site, as well as at the above-mentioned site

Dagstorp 19, we have the same kind of huts as well (Andersson 2003, pp. 166 f.).

On other sites in Scania as well as in Denmark we also have evidence of this kind of house (Hadevik 2000, p. 49; Fønnesbech-Sandberg 1996, p. 18).

The features briefly discussed above are sometimes connected to long-houses or other types of buildings. The two features close to the house at Brunneby were discussed above. The connection between the house and the features is rather tenuous, though. If we look briefly at evidence from other areas there is one case from England, Lismore Fields in Derbyshire. Up to three structures were found at the site (Darvill 1996, p. 102). Based on the evidence from the excavation plan, there is a horseshoe-shaped feature west of the house (Thorpe 1998, pp. 152 f.). The evidence for any contemporaneity is not conclusive, however.

Tom Carlsson and Andreas Hennius (1998) have interpreted the houses found at Abbetorp as traces of “invisible activities” which have left no traces at all. This interpretation might be right for the other sites as well. If we look at the same type of feature from Scania and Denmark we see that in these areas they are associated with different types of material culture. Obviously the activities at Bäckaskog were more “obvious” than at, for example, Abbetorp.

To summarize: Since 1986 several similar houses have been identified on several occasions. Today houses of the “Mossby type” are known from Denmark as well as from southern and central Sweden (M. Larsson 1997a; Nielsen 1997). In other words, it is possible today to discern a specific Early Neolithic house type. This type of house is, as we have seen, just one of probably several other types of houses that existed during the Early Neolithic. We have been able to discern pit-houses, D-shaped structures and round post-built structures. The variation in the function of the houses indicates that space was used and manipulated in different ways depending on where people lived.

The probable combination of the two different types of structures observed at Brunneby and in England as well as the obvious spatial demarcation between activity areas and living areas seen at several sites like Mossby, Brunneby, Dagstorp and many others can be interpreted in structural terms as, for example, clean/unclean and wild/tame. The houses were obviously kept clean and, for example, tool making was performed at some distance from the house. Gosden (1994) distinguishes between the day-to-day activities of people which were governed by *habita* and the long-term continuities expressed by monuments and similar structures. He calls it *public time*. This is a very useful concept when we look at the Early Neolithic settlement system. It is rather obvious that if we look at the evidence discussed above there were some sort of “rules” that governed people’s use of space. Some areas, like the house, were kept clean while other areas were not. Another issue of great importance is the interpretation of different activity areas, or lack of them, that we can distinguish on the sites themselves. We might assume that every task was undertaken in the “correct” place and through time spatial meaning was created. This space is also gendered, so that in many ways a gendered space is created (cf. Stig Sørensen 2001).

## The oldest Funnel Beaker culture in Kuyavia

Simultaneous existence of two culture blocks is characteristic of the middle Neolithic in Kuyavia (c. 4400–3650 BC cal.). The first of them is formed by the Brzesc Kujawski group of the Danubian circle, the other by the early (Middle Neolithic) Funnel Beaker Culture (TRB) (Czerniak 1994; Rzepecki 2001). For the early TRB, at the same time, parallel functioning of different “versions” (“mutations”) of cultural system was characteristic (Rzepecki 2001).

The aim of this part of the essay, by Seweryn Rzepecki, is to show current views of the earliest TRB “version” (Rzepecki 2001).

### *Taxonomy and chronology*

On the basis of the analyses of the pottery from Sarnowo site 1, Sarnowo site 1A (Wiklak 1983), Lacko site 6 (Domanska 1995) and Strzelce-Krzyzanna site 56 (Czerniak & Rzepecki 2003), group 1 of the Middle Neolithic TRB has been distinguished (Rzepecki 2001, 2003). It was formerly referred to as the “Sarnowo phase” (Wislanski 1979). Differentiation, which is visible between the above assemblages, was the cause for division of group 1 into two units (phases): TRB-MN1a and TRB-MN1b. The morphology, decoration and ceramic technology of the two groups will be characterized below.

For the TRB-MN1a (fig. 1) assemblages (Sarnowo 1, Lacko 6) the domination of funnel beakers is typical (approx. 41%) over plates (approx. 33.3%), amphorae (approx. 11.5%) and pots (approx. 6.5%). The lack of collared flasks is of special importance. As far as decoration is concerned, for the phase under consideration the domination of decorative motifs placed below the rim is characteristic. The majority of motifs were made with the use of impressed technique (89–100%); there is a complete lack of engraved motifs. Plate decoration (both inside and outside the rim) is characteristic. As for the rest of the vessels, ornaments placed on the rim are predominant (notches – 5%) or just below the rim: impressed points of different sizes (47–62%), impressed pillars (28–30%). The ladder type of decoration (approx. 4%) and fingerprints (0–8%) rarely occur. Very exceptionally plastic decoration of plates appears (bands) as well as points impressed on bellies. There is no handle ornamentation. To produce the majority of vessels, clay with fine fireclay admixture (53–68%) was used, although a relatively high share of pottery with sand admixture is especially characteristic of FBC-MN1a (Rzepecki 2001, 2003).

The TRB-MN1b (fig. 2) phase has been distinguished on the grounds of the research on Strzelce-Krzyzanna, site 56 (Czerniak & Rzepecki 2003; Rzepecki 2003). Full continuation of previously recognized morphological, orna-



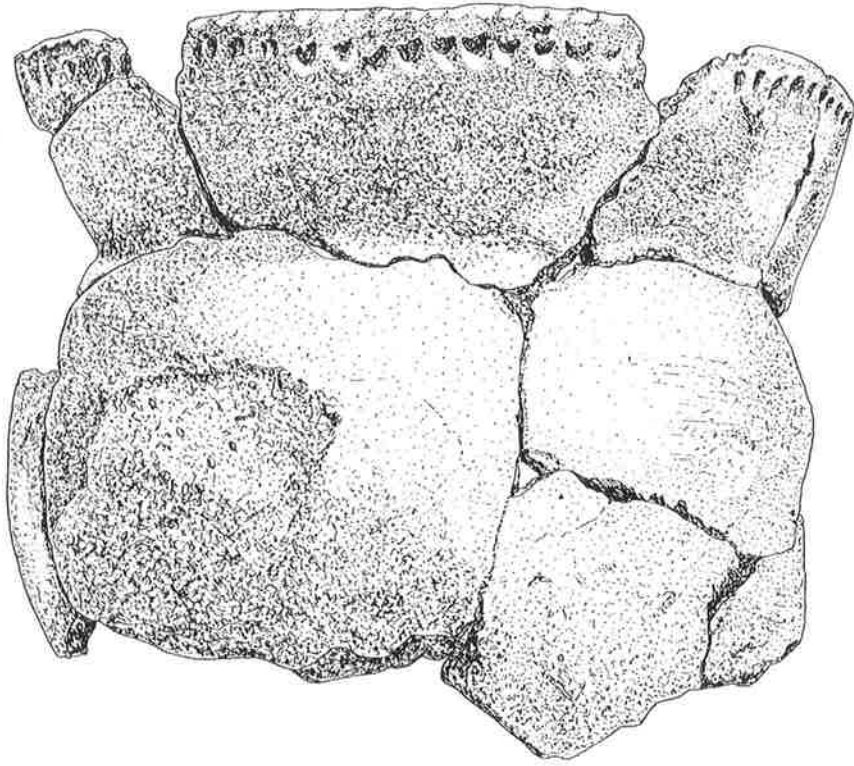


Fig.1. Fragment of an early TRB pot (Oxie group). 1:2. (M.Centerwall ill).

mentational and technical canons of the pottery is clearly visible. In the case of morphology and technology the differences are hardly noticeable; they concern only the decoration. Here, the belly zone ornamentation becomes more frequent (approx. 8%), and handle decoration occurs sporadically (approx. 1%). In decoration plastic technique was applied more frequently (approx. 1%) as well as engraving technique (up to approx. 6%). A decrease in the use of the motif of impressed points below the rim (approx. 42%) in favour of impressed pillars (approx. 40%) is of great importance. Vertical engraved lines appear on bellies (approx. 1%), fingerprints underlined by impressed zigzags (approx. 1%), horizontal engraved lines underlining the curve of the belly (approx. 4.5%).

The chronology of these phases of group 1 (TRB-MN1a and TRB-MN1b) has been worked

out on the grounds of stratigraphical, typological and radiocarbon data. In the two first kinds of data the seniority of the TRB-MN1a in relation to other groups ("versions") of the Middle Neolithic TRB has also been noticed. Radiocarbon data that we collected for the TRB-MN1a assemblages are shown in table 1. In the comment on it we should stress that group 1 can be globally dated to the period 4400–3800/3700 BC cal. It is reasonable to divide this period into two phases:

- TRB-MN1a (4400–4200 BC cal.);
  - TRB-MN1b (4200–3800/3700 BC cal.)
- (Rzepecki 2001, 2003).

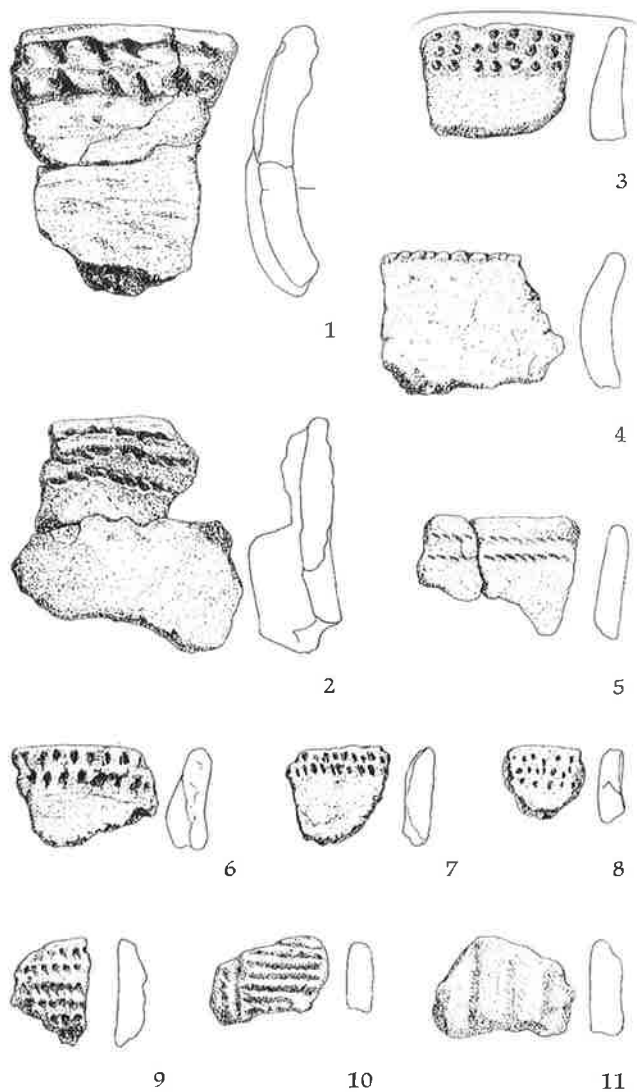


Fig.2. Sherds from the site Månasken (Svenstorp group). 1:2. (M Centerwall ill).

In our further deliberation it is important to emphasize that not only chronological but first of all genetic meaning can be ascribed to group 1 of TRB. Secondly, parallel with the period of TRB-MN1b in Kuyavia, another four versions of the early TRB functioned: TRB-MN2, TRB-MN3, TRB-MN4 and TRB-MN5 (Rzepecki 2001, 2003). Within such a cultural mosaic, the

TRB-MN1b societies constituted the most conservative, simply “ultraconservative” core.

#### *Flint and stone tool production*

The occurrence of truncated blades and burins, the high frequency of scrapers and the presence of microliths are characteristics of the flint tool production of the TRB-MN1 assemblages. These

Table 1. Radiocarbon dates for TRB-MN1.

Site	Lab. No.	BP	BC OxCal 3.5	Sum BC OxCal 3.5
cko 6A	G-6019	5570±110	4540–4320 (64.9%) 4280–4250 (3.3%)	4500–4330 (68.2%)
Sarnowo 1, tomb 8, pit 1	GrN-5033	5570±60	4460–4350 (68.2%)	
Strzelce-Krzyzanna 56, pit A6	Ki-6179	5020±60	3940–3860 (31.1%) 3810–3710 (37.1%)	3910–3880 (6.5%) 3800–3660 (61.7%)
Strzelce-Krzyzanna 56, pit A6	Utc-8559	4980±50	3900–3880 (5.0%) 3800–3690 (60.5%) 3680–3660 (2.7%)	
Strzelce-Krzyzanna 56, pit A6	Ki-6180	4950±50	3780–3660 (68.2%)	

products were made of local material (Baltic flint) or of chocolate flint imported from Little Poland. It is distinctive that in the western part of Kuyavia Baltic flint predominates, whereas in the eastern part it is chocolate flint (Domanska 1995).

The peculiarity of the TRB-MN1 societies' stone production has hitherto been weakly recognized. However, occurrence of axes of "flat-convex", Danubian character is symptomatic (Domanska 1995). Lengyel pottery is lacking on the sites mentioned, which indicates that the described finds are in no case "contamination".

#### *Settlements*

The TRB-s1 settlements are characterized by the presence of a number of elements which did not occur before among the early farming Kuyavian societies of the Danubian circle. The TRB-MN1 settlements were located on sandy areas of black soil base of "linear" economy. They consisted of 1–2 rectangular houses, built in post construction with an area of 15–30 sq. m (Sarnowo 1A – fig. 3). On the grounds of the data for the whole period of the early TRB it seems that cemeteries were located exclusively outside the settlement area (Rzepecki 2001). Stones sometimes protected flat graves; the dead were laid in upright position on their backs (fig. 4). It may be presumed that the TRB-MN1

societies built monumental earthen barrows (Kuyavian barrows). Considering the character of material used to construct embankment protection, monuments with stone, timber-stone and timber construction of the embankment protection can be distinguished (fig. 5). Beneath the graves almost exclusively men at advanced age were buried (on average about 46 years old), often accompanied by young (16–18-year-old) women. The graves formed a vast necropolis consisting of unchambered graves and flat graves. The TRB societies formed dense settlement micro-regions including several not very large settlements and cemeteries of unchambered graves.

#### *Genetic conditions of the TRB-MN1 development in Kuyavia*

In current discussions on the genesis of the Kuyavian TRB a fundamental share of "linear" component is emphasized (Czerniak 1994). In spite of the opinion of the older generation of researchers, the Mesolithic groups could not have played an active role in this process. Kuyavia was never an area intensively settled by the Mesolithic societies. Additionally, most of them underwent acculturation as a result of the pressure of the Danubian people, lasting for about 1,000 years (Czerniak 1994). Therefore, in the period immediately preceding the development of these,

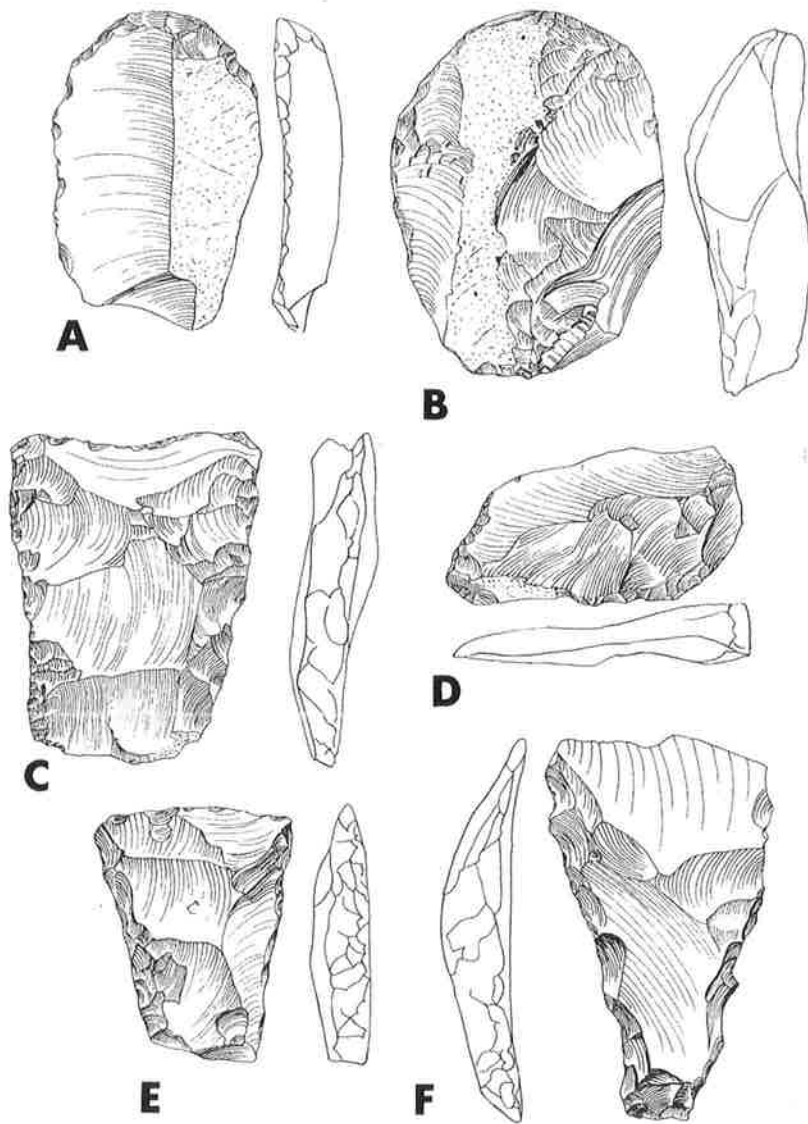


Fig.3. Flint implements from the site Svenstorp (Svenstorp group). 1:2. (M Centerwall ill).

the Mesolithic groups were of minor demographical importance. This notion is confirmed by the latest results of the fieldwork in the region (personal communication, Prof. L. Domanska).

Below I would like to briefly present the latest conception of the genesis and development of the TRB-MN1 groups in Kuyavia (Rzepecki 2001).

The occurrence of the oldest TRB assemblages (TRB-MN1a) is a derivative of a complex process of “cultural fusion” in which three factors took part: “west European cultural package” (a), linear substratum (b) and Mesolithic elements (c) (Rzepecki 2001).

a. In the 5th millennium cultural influence from the Chassey culture caused a profound

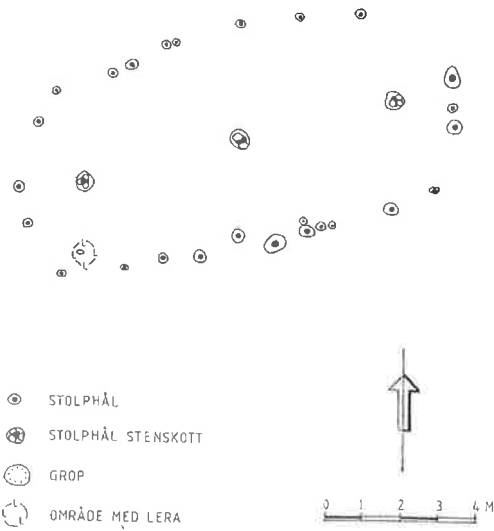


Fig.4. The Mossby House dated to the earliest neolithic.

“reorganization” of the cultural situation in the area of the Parisian Basin. At that time groups of the Cerny culture, probably replaced by the Noyen group, were of minor importance. The suddenness of these transformations resulted in the episodic existence of migration movement

eastward. Using earlier existing traditions of eastern migrations that took place among the Rhine societies of the Rössen circle, these groups came to the area between the Harz Mountains, Pürzyce Land and Kuyavia. In the case of Kuyavia the presence of these “west European migrants” is visible in the occurrence of a package of cultural elements which were previously absent among local farming societies. The package included pottery (funnel beakers, plates), sepulchral activities (cemeteries outside settlements), burials in upright position, unchambered graves) and probably dwelling houses (small post-houses).

b. In the process of the TRB genesis local societies of Danubian provenance were of crucial importance. This is clearly visible in the continuation of flint, stone and pottery production rules (pottery technology) (Czerniak 1994; Domanska 1995; Rzepecki 2001). This situation is especially distinctly shown by flint sources with characteristic full continuation of the Danubian norms (Domanska 1995).

c. For the reasons mentioned above, the local Mesolithic groups could not have played any

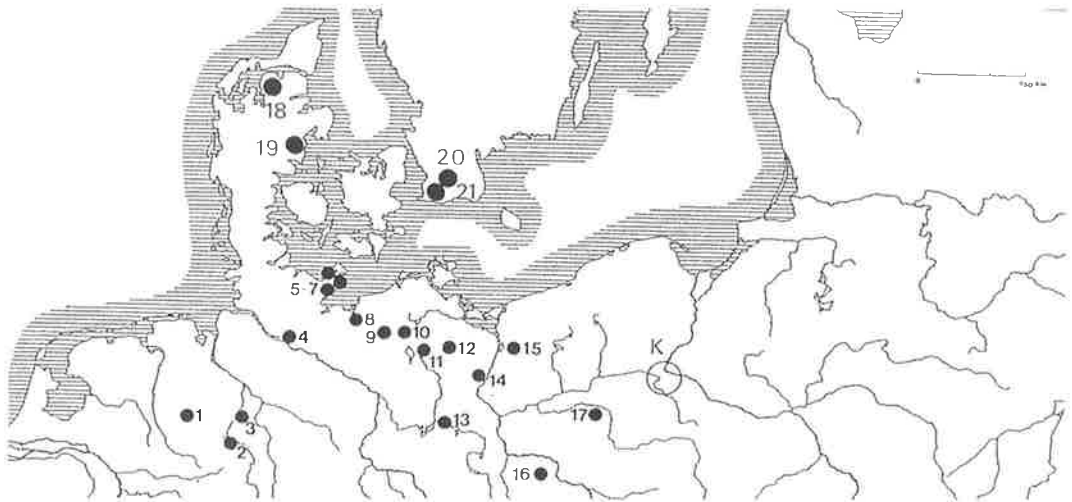


Fig.5. Map of Northern Europe with some of the oldest TRB sites marked. 1.Hude 2.Engern 3.Loccum 4.Boberg 5. Rosenhof 6. Siggeneben 7. Klenzau 8. Ostorf 9. Bernit 10. Klaaden 11. Moltzow 12. Neuenkirchen 13. Berlin-Britz 14. Niederlandin 15. Kosin 16. Wraclau-Pracze 17. Sobota 18. Björnsholm 19. Norsminde 20. Värby 21. Herrestorp The circle with K indicates the Kujavia region in Poland. (After Midgley 1992, fig.3 with adjustments).

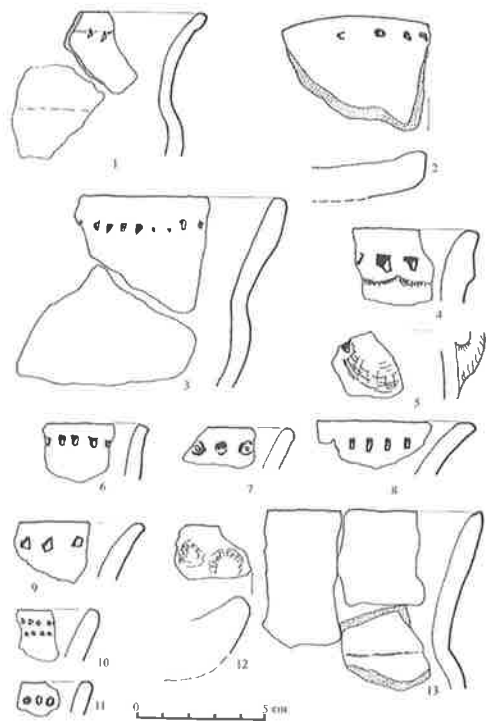


Fig.6. FBC-MN1a. Lacko, site 6.

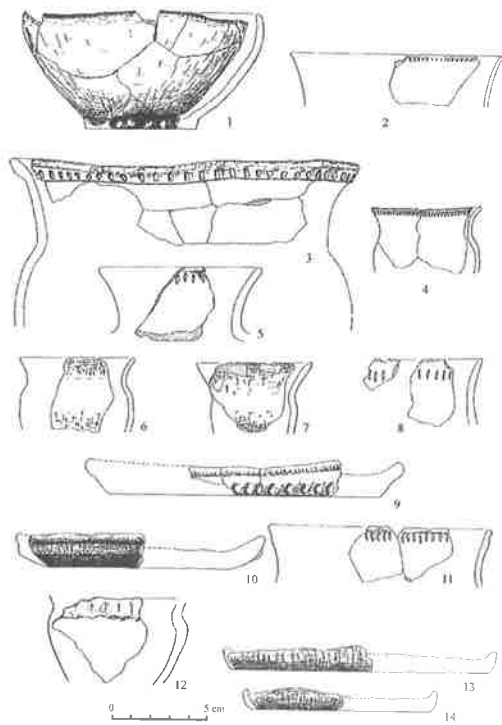


Fig.7. FBC-MN1b, Strzelce-Krzyzanna site 56.

active role in the process of the TRB genesis. The contribution of this factor is shown by just a few microliths discovered at TRB-MN1a sites (Domanska 1995). However, in the TRB-MN1a there is no structural reference to Mesolithic flint production.

The process of “cultural fusion” mentioned above can be reconstructed as follows. Before 4400 BC cal. in the area of Kuyavia strong societies of the early Brzesc Kujawski group were developing, as well as some Mesolithic groups. Making use of already existing connections, some west European migrants came to the area under consideration. The new culture brought by them forced local farming groups to accept it or to refuse. Political conflicts, which probably accompanied this process, resulted in deep cultural divisions. Some of the local agricultural societies actively accepted new patterns that deeply restructured the image of their culture. In this way the TRB originated. However, the

rest (originally the majority?) of the Danubian groups chose to reject the new cultural patterns. Through this the classical Brzesc Kujawski group developed. In the newly formed culture – TRB – a high level of mixture with “linear” elements (flint, stone production) is characteristic. Further development of this group, however, was characterized by a high degree of acculturation. It was probably at the earliest stage of the TRB-MN1a that the process of acculturation of the Mesolithic groups started (Rzepecki 2001).

The processes of genesis and initial development stages described above, connected with TRB-MN1a, took place between 4400 and 4200 BC cal. Later, (4200–3800/3700 BC cal.) the picture started to change dynamically. The growth of the TRB-MN1a group’s importance (also demographically) caused polylinear development of different “mutations” of the Middle Neolithic TRB. In these rapidly changing circumstances a part of the TRB-MN1a

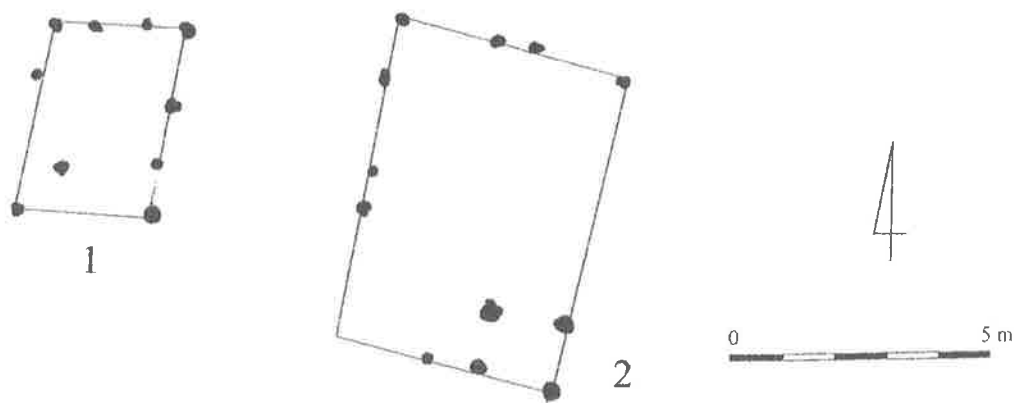


Fig. 8. Sarnowo, site 1a, examples of houses.

population conservatively continued earlier traditions (TRB-MN1b). The share of new elements in pottery decoration was of marginal character. However, growing pressure from more progressive groups – especially TRB-MN15 (the earliest version of the classical Wiórek trend) – finally caused the disappearance of the TRB-MN1b societies.

To sum up, TRB-MN1 is the earliest (in a genetic sense) variant of Kuyavian, Middle Neolithic TRB. The meaning of this for the

history of TRB development is of great significance. At that time fundamental cultural norms typical of the TRB were established. On this genetic foundation, subsequently, succeeding “variants” of TRB formed. The TRB-MN1 responded to changes by “escaping into conservatism”, but being gradually marginalized they finally (c. 3800/3700 BC cal.) developed into a strong new unit – the early classical Wiórek phase of the TRB.

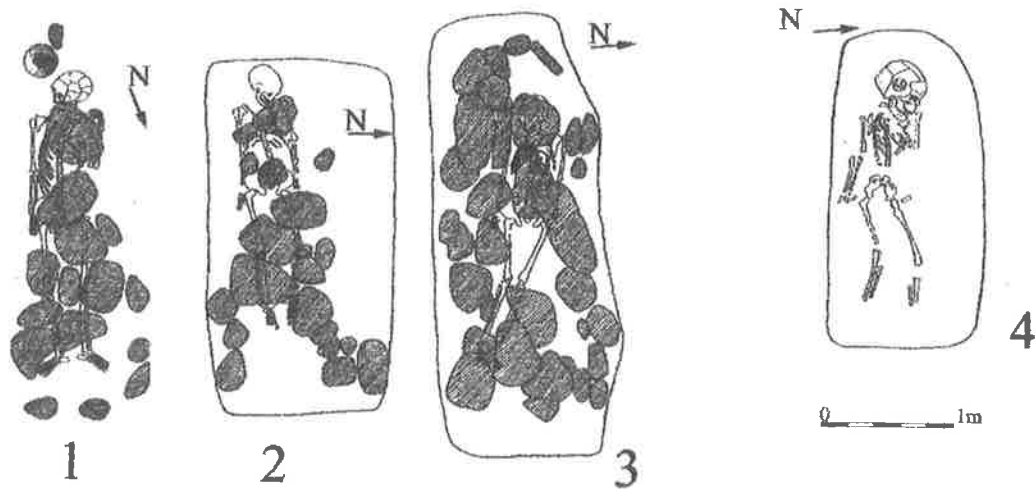


Fig. 9. Stary Brzesc-Kolonia(1-3) and Pikutkowo, site 6(4), examples of graves.

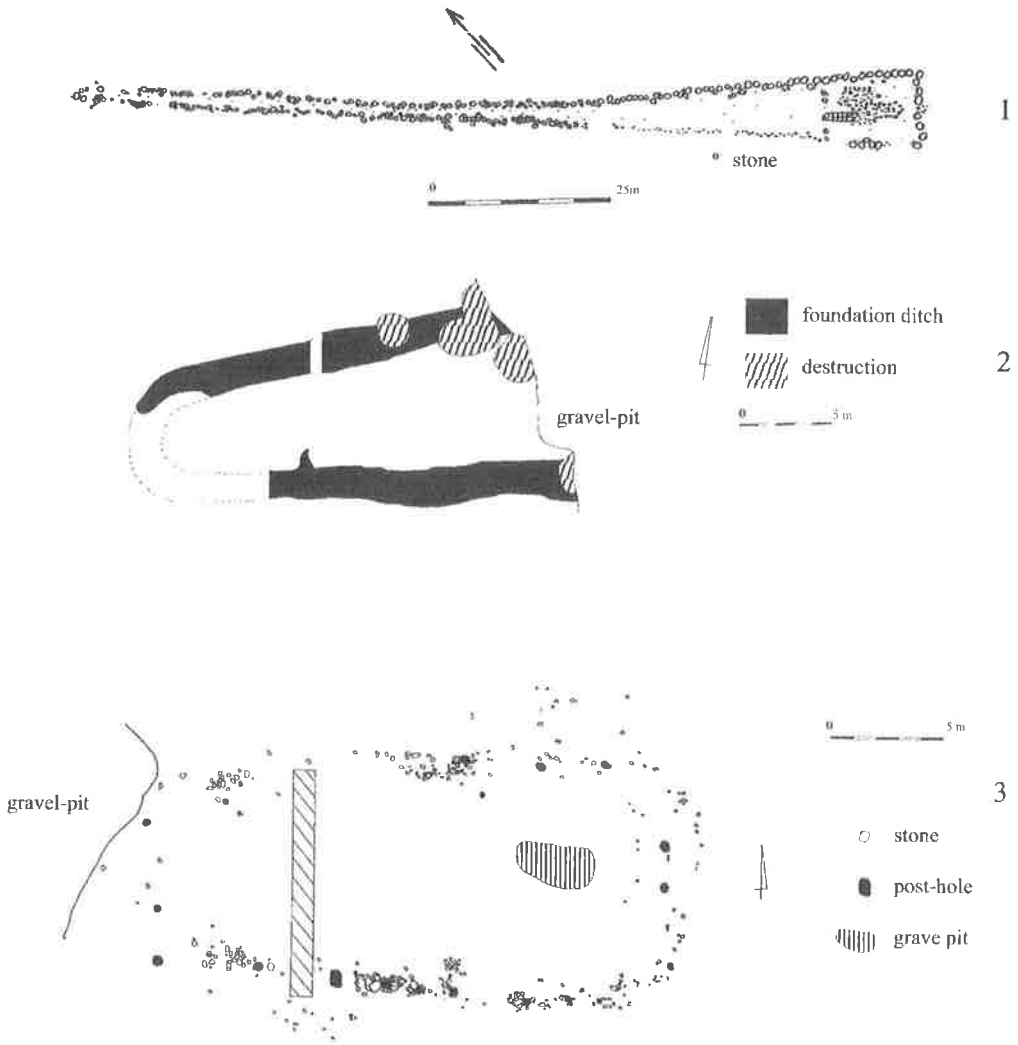


Fig.10. Examples of Kujavian tombs: stone (1), wood(2), stone and wood (3). 1. Wietrychowice, site 1, tomb 1, 2. Podgaj,site 7A 3. Lacko,site 6, tomb 2.

## Settlements and landscape in the Early Neolithic – an interpretation

In the previous sections the early TRB culture in southern Sweden and Poland has been discussed and interpreted from a great many different angles. It is obvious that we do not always agree on the interpretation of the things that we see

happening in northern Europe between 4400 and 4000 BC cal. A “story” such as this might be told in many ways, and this is also both the strength and weakness of archaeology. The main difference probably lies in our view of the importance of Mesolithic man for the development of the TRB. In Kuyavia it seems that Mesolithic man is hardly visible. In southern Scandinavia we have quite a different picture; Mesolithic man as the foundation of the TRB



culture is today the norm. We could of course always say that contacts between the farmers and the hunters were non-existent but we know that they interacted in many ways. We have the T-shaped antler axes, the stone axes and even some jewellery (Vagn-Petersen 1984; Fischer 1982, 2002). In a grave from Pikutkowo (Site 6) we have the evidence for shell beads of Lengyel origin in a TRB context (Grygiel 1986, pp. 257 f.). Marek Zvelebil and Malcolm Lillie (2000, pp. 66 f.) have discussed in a recent article the exchange of goods across the agricultural frontier in northern Europe. At the end of what they call the availability phase they suggest that there is a more competitive relationship between the farmers and the hunters than before. The increase in the circulation of objects like stone axes is, in their opinion, one piece of evidence for this. These axes were surely first of all prestige items that increased the personal status and pleasure of the people who owned them. There is, in other words, actually plenty of evidence for exchange over the agricultural frontier for a long period of time. Anders Fischer (2002, p. 373) states that the introduction of pottery around 4700 BC might also be one such innovation that might first have been introduced more for prestige reasons. The main source for these items is the southern coast of the Baltic where we have late Stichband sites dated to no later than 4800–4600 BC (Fischer 2002, p. 373). In Kuyavia we also have the late Stichband sites but in the manner of the Lengyel culture. This area is the source of the T-shaped antler axes (Grygiel 1986). The Lengyel culture came to an end about 4200 BC.

On purely typological grounds there is also a profound similarity between, for example, the Sarnowo group in Kuyavia and the Oxie group. Lately this “connection” has been discussed and an early TRB phase (Oxie group), rather short-lived, has been discerned (M. Larsson 1997b)

The development of the TRB started much earlier in Kuyavia, however, 4400–4000 BC cal. This is some hundred years earlier than in southern Scandinavia. The earliest earthen long

barrows also ought to be the ones in Kuyavia (Midgley 1985, p. 207). The dating of the long barrows, according to the latest result (see above), is very early and might even be as early as 4400/4300 BC cal. This means that we have to envisage a society in which the building of monuments was important right from the beginning. A short coexistence between the Lengyel culture and the TRB culture actually seems to be documented. The problem with this is really that there still are rather few radiocarbon dates available, but if we rely on the new dates this is quite possible. In that case Richard Bradley (1998) might be correct when he states that the Neolithic really began with the building of monuments. In Denmark we certainly have very early datings from earthen long barrows, as early as 3900/3800 (Liversage 1992, p. 104). In Scania as well we probably have the same kind of pattern, although the evidence is not conclusive (Rudebeck & Ödman 2000, L. Larsson 2002, pp. 147 ff.).

The relationship between the long-houses of the late Linearbandkeramik (LBK) settlements and the long barrows has been recognized for a long time (cf. Hodder 1984, 1990; Bradley 1998). The linear way of building during this period has often been interpreted as a link between the LBK long-houses and the long barrows. The oval or rectangular TRB houses should probably be seen in the light of this discussion.

In this context the house found a couple of years ago at Tågerup in western Scania is most interesting (Cronberg 2001, pp. 108 ff.). The house was 14 m long and 4–7 m wide and had an area of 85 m<sup>2</sup>. One row of roof-supporting posts were found. The dating of the house is somewhat problematic but it probably ought to be dated to the middle part of the Ertebølle culture. No pottery was found in the floor layer, of the house which might indicate a dating before 4700/4500 BC. The house at Tågerup surely indicates that long-houses were being built in southern Scandinavia at the same time as the ones found on the continent! In the light of the discussion briefly mentioned above, this is

somewhat problematic. One possibility is that the building of long-houses is a much older tradition and has nothing at all to do with the long-houses of the LBK culture. It might also indicate much earlier contacts between the farmers and the hunters than we have believed.

If we accept the notion discussed above, we might also see the rounded houses/huts as a lingering Mesolithic trait. Richard Bradley has recently (1998) stated that a Mesolithic world view probably existed, and we might turn this argument around and state that a Neolithic world-view of course existed as well. This relationship is of course of the greatest importance for how we should perceive the Neolithic. We therefore think that a brief discussion regarding man, material culture and landscape could act both as a finishing point and a starting point for new discussions of this issue.

For some years now there has been a discussion in archaeology regarding man, material culture and the landscape and their mutual dependency. To a large degree this discussion is based on phenomenological issues regarding man and his "being in the world" (Thomas 1996). Contextual archaeology in the way that Ian Hodder has proposed is also a great source of inspiration. He once stated (1986, p. 141) that the main task of archaeological interpretation is the recovery of buried or lost meaning. Chris Tilley (1994, p. 35) said that to try and understand and interpret some of the similarities and differences in the relationship between people and the land, and the manner in which it is culturally construed, is of great importance for the understanding of the power and significance invested in a "natural" environment. The building of a house or a monument involves an important change which significantly alters people's roles in the landscape and their view of it. "Building" means transforming a place; a "place for something" emerges. Myths are then woven about it and the place thus becomes historical (Thomas 1996, p. 89). Buildings and placing might be thought of as a kind of naming process (Whittle 2002, p.

195). Social structures have a dialectical relationship with human actions. Structures are both the medium and the outcome of social practices (Parker Pearson & Richards 1994, p. 3). This notion has been expressed rather elegantly by Matthew Johnson (1994, p. 170) as follows: "Landscape is all about a sense of place; architecture is simultaneously a moulding of landscape and the expression of a cultural attitude towards it."

One main issue that has been discussed over the last few years is to what degree Neolithic man changed his concept of land and the myths and stories about it. In building a new type of house man's view of the landscape changed. The very nature of a house, or for that matter a monument, means that it can be very active in direct control over people, their access, movement and interaction in architectural space (Hodder 1994, p. 74). As John Barrett (1994, p. 93) has suggested, this might have a long history, perhaps going back to the Mesolithic in those paths, places of meeting and departures might have been part of a much wider seasonal cycle of movement. According to him it is hard to see any kind of "rethinking" of the world in the Neolithic. Vicki Cummings (2002, p. 107) has stated that the first monuments fitted into a landscape already filled with potent and symbolic places. The presence of monuments in the landscape began to transform people's understanding of the world, in other words, the beginning of the dualism between nature and culture.

There are obviously different opinions regarding the degree of ideological transformation and changes in the landscape at the Mesolithic and Neolithic transition. As discussed below, we actually believe that there were profound changes both in ideology and in the ways people experienced the landscape. Stefan Berg (2002, p. 139) has recently expressed the same kind of relationship in that people were making the landscape adapt to them instead of the other way around.

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