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Living in cultural diversity
The Pitted Ware Culture and its relatives

Mats Larsson

University of Kalmar, SE-391 82 Kalmar, Sweden (mats.larsson@hik.se)

This article discusses relations between the Funnel Beaker, Pitted Ware and Battle Axe Cultures in Southern Sweden during the late Middle Neolithic period, employing terms such as ethnicity, ethnic groups and material culture in the interpretation of the changes involved. People invented and re-invented, used and re-used principles, while still being able to communicate through the medium of material culture. It was this that made it possible to "live in cultural diversity".

Keywords: Middle Neolithic, Southern Sweden, ethnic groups, material culture

Introduction

The relationship between the Funnel Beaker Culture (FBC), the Battle Axe Culture (BAC) and the Pitted Ware Culture (PWC) in southern Sweden during the Middle Neolithic has been regarded for many years as a highly complex one. The differences between these periods have been seen as chronological or as representations of different cultural or ethnic groups. The cultures have also been associated with different economic strategies. Both the FBC and BAC have been linked with farming, while the PWC has to a great extent been seen as a hunting and gathering culture.

One of the key concepts in this discussion is of course the term "culture" itself. Janis Runcis (2002:96) raised the issue of "*Stone Age cultures; realities or constructions*" (author's translation). This is in many ways a well-founded question that it would take too much space and time to try and answer in the present connection. Some points ought to be made, however.

Culture has been seen within the New Archaeology as an adaptive mechanism in which changes in environment cause changes in material culture (Binford 1962). In later years, especially among the post-processualists, descriptive historical reconstructions of past societies and peoples as "cultures" were pushed into the background of archaeological interpretation (S. Jones 1997:26f). There has been an awareness of this problem, especially in the study of the Neolithic cultures of Scandinavia, with much discussion of the problem of "culture". Terms such as "societies" or "traditions" have been proposed (cf. Edenmo et al. 1997; Andersson 2003:288; Gustafsson et al. 2003:6). The concept of culture is nevertheless still very much in evidence in Mats Malmer's (2002:83) overview of the Neolithic in southern Sweden, where he states that

> "*The innovations, the changes in livelihood and culture, do not seem to have been mainly caused by economic factors*" (Malmer 2002:184).

I will still use the old term "culture" below, but will add some terms introduced by Sian Jones (1997) that I think are useful for interpreting changes during the Middle Neolithic:

1. Ethnic identity: that aspect of a person's self-conceptualization which results from identification with a broader group in opposition to others on the basis of percieved cultural differentation and/or common descent.
2. Ethnic group: any group of people who set themselves apart and/or are set apart by others with whom they interact or co-exist on the basis of their perceptions of differentation and/or common descent.
3. Ethnicity: all those social and psychological phenomena associated with a culturally constructed

> group identity as defined above. The concept of ethnicity focuses on the ways in which social and cultural processes intersect with one another in the identification of, and interaction between, ethnic groups (S. Jones 1997:xiii)

In the case of the Middle Neolithic it is important to take into account the fact that items of material culture which are widely distributed and used in a variety of ways may be consumed and become implicated in the generation and signification of a variety of expressions of ethnicity (Thomas 1996:78 ff). Sian Jones (1997:140) writes something along the same lines:

> "*Within such a framework, a static one-to-one correlation between particular monuments and a particular ethnic group is untenable, because the significance of such material culture is continously reproduced and transformed in changing social and historical contexts by different people occupying varying positions within society*"

It is important in this context to remember, as Bergsvik firmly states, that ethnicity is a socially constructed phenomenon primarily concerned with how people think about themselves as groups and how they set themselves apart from other groups. It is a social construction of "us" and "them" which is marked in cultural terms (Bergsvik 2003:300).

I will now discuss briefly some key concepts regarding each of the three Middle Neolithic cultures. The main focus is on the Pitted Ware Culture and developments during the late MN A.

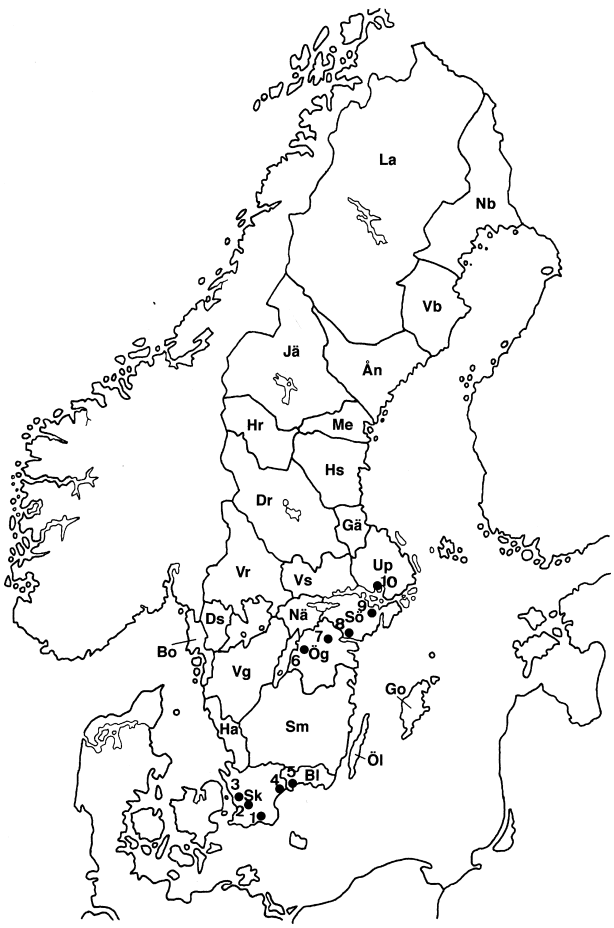

Figure 1. Map of Sweden with sites mentioned in the text. Legend: 1 – Karlsfält, 2 – Stävie, 3 – Borgeby, 4 – Nymölla, 5 – Siretorp, 6 – Alvastra, 7 – Åby, 8 – Svintuna, 9 – Häggsta, 10 – Lindskrog. Provinces: Sk – Scania, Bl – Blekinge, Ög – Östergötland, Sö – Södermanland, Up – Uppland.

The Funnel Beaker Culture

In Scania we see during the later part of MN A (that is, the late FBC) the development of the Karlsfält and Stävie local groups (L. Larsson 1992:146) (Fig. 1). A "local group" is taken here to mean a geographically confined social unit with a distinct material culture.

The Stävie group shows an obvious connection with the PWC in its flint technology, e.g. the use of cylindrical cores and blade arrowheads. The radiocarbon dates also suggest that it is somewhat younger than the Karlsfält group, although the two have several traits in common, such as thick-butted flint axes of type A and the same use of pottery decoration (Edenmo et al. 1997:144) (Fig. 2). These late FBC groups have been dated to 2800–2400 cal BC (Edenmo et al. 1997:143).

We also have evidence in Scania for what is usually called PWC, but in my view these should be classed as local FBC groups dated to between 2800/2700–2450 cal BC. Sites such as Jonstorp, Nymölla and Siretorp should also be included in this group (Edenmo et al. 1997).

The Battle Axe Culture

The Battle Axe Culture (BAC) was viewed for many years as a result of migration. The first to discuss this idea in depth was Sophus Müller in Denmark in 1898 (Müller 1898). He discussed only the Single Grave Culture in Jutland, but the idea was applied later to the whole of Scandinavia. Such ideas were discussed in Sweden by Forssander (1933) and Oldeberg (1952), for example. Mats Malmer (1962) presented an entirely different model, however, proposing that the BAC was the result of an indigenous development. He identified the changes in FBC society as being caused

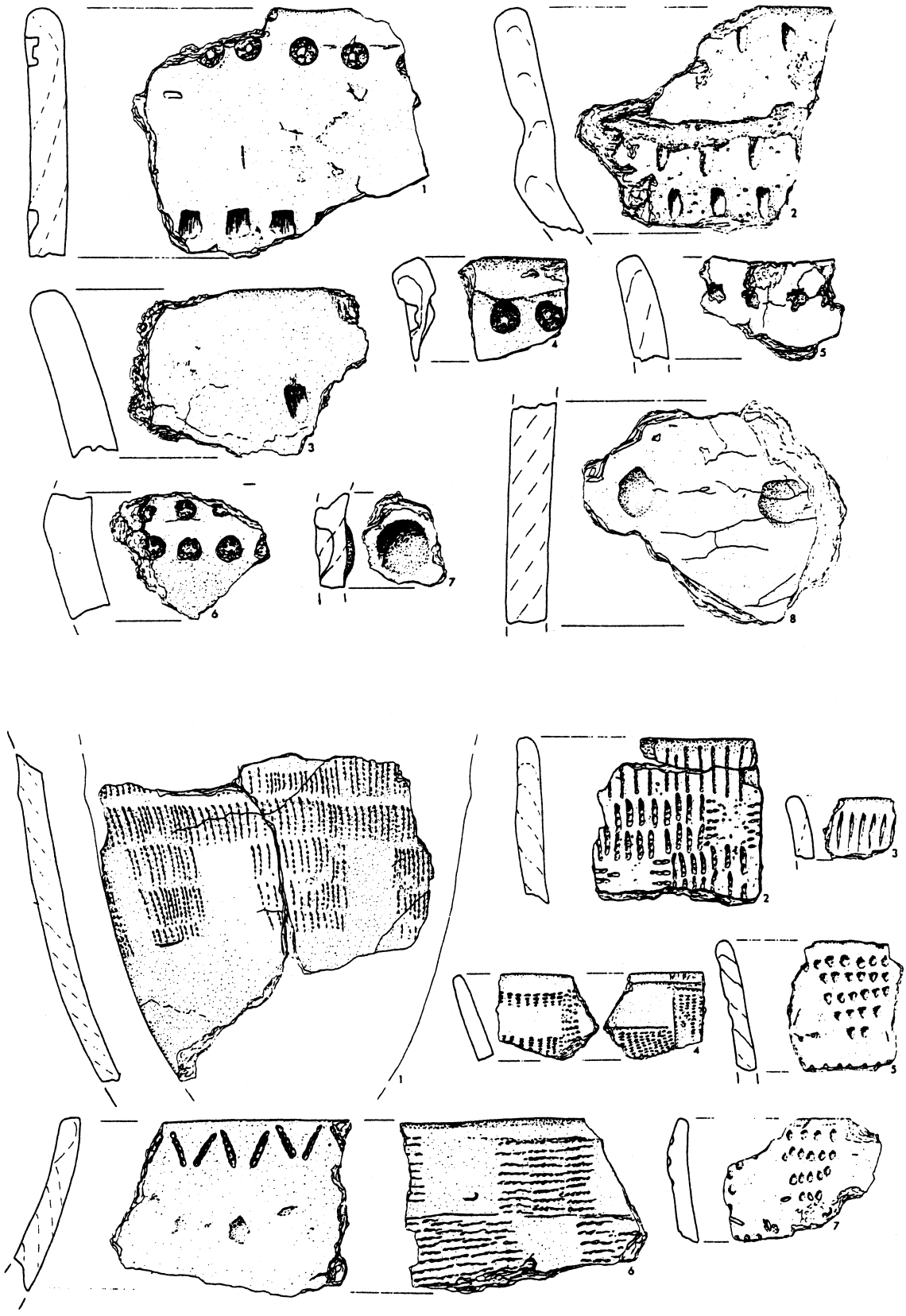

Figure 2. Sherds from the Karlsfält site in Scania. From L. Larsson 1985. Scale 1:2.

by the introduction of private ownership, e.g. with the introduction of copper ornaments. This was also seen as a religious transformation. Today both chronological studies and the available radiocarbon dates show fairly clearly that the BAC to a large degree followed on from the late FBC (MN V) in most of Southern Scandinavia.

Several archaeologists have also stressed the clearly conservative traits that the BAC exhibited during its existence:

> "*Under its perhaps 400 years of existence the BAC shows great conservatism. Graves, pottery form, pottery decoration and battle axes all change very little*" Malmer (1992:242).

Ian Hodder (1990) stresses the tension between the wild and the tame that frequently recurs in the Scandinavian Neolithic, and considers that, in spite of the focus being shifted from the megalithic tradition in the FBC to the BAC, the same fields of tension can be found in both:

> *"It is as if there is really nothing new in the Scandinavian Corded ware. All the cultural principles are old ones. The corded ware is new but the old antitheses remain*" (Hodder 1990:218).

The Pitted Ware Culture

Among the Neolithic cultures of Scandinavia the PWC has been the hardest to define, as its material culture differs quite markedly between regions. The older definitions include variables such as material culture, economy and grave form. Several traits have been used that are manifested in single artefact types such as arrowheads or ceramics. In Eastern Middle Sweden, where we find most of the large settlement sites, the definition has been based on ceramics, divided into the five Fagervik stages (Bagge 1951; Edenmo et al. 1997), while in southern Sweden and Denmark it has been based on arrowheads and cylindrical blade cores. We should be careful not to stress these cultural markers too heavily, however, since the same types of flint and stone artefacts are found in both FBC and PWC contexts.

Mats Malmer (1973; 1975) defined the PWC as a Scandinavian Neolithic culture which does not fit the definitions for Ertebölle, FBC, BAC and late Neolithic culture. Others have pointed out that these cultural definitions are very weak because of their wide geographical distribution and their ability to absorb different traits from other regions and cultures. Chris Tilley (1982) has supported the notion that a much heavier emphasis ought to be put on regional differences.

In spite of these difficulties, some archaeologists such as Becker (1982) have prefered to see the PWC as one culture distributed over a very wide area.

For some time the FBC and PWC were considered to be contemporaneous. The radiocarbon dates also show this clearly, as the PWC has its oldest dates in the EN (3900 cal BC) in eastern Sweden, while its much younger, 2700 cal BC at the earliest, in Denmark and Scania (Edenmo et al. 1997). This idea of contemporaneity has led to two models:

1. A dualistic model implying two ethnic groups
2. Differences in material culture reflecting variations inside one overall group.

The evident differences in the economic basis have also been stressed in such discussions, the farming economy of the FBC being contrasted with the hunting/gathering economy of the PWC. Alternatively, the PWC has been seen as a hunting/gathering aspect of the FBC in the west, or as a homogeneous hunting society in the east. (Edenmo et al. 1997)

Anders Carlsson (1998), in his discussion of the middle Neolithic, and above all the Pitted Ware Culture**,** placed heavy emphasis on its ritual aspects as opposed to the economic and social ones. He wrote,

> *"The ceramics, that is those of the PWC, are loaded with symbolic power and are left broken in places where the new "wild" ideology is expressed, that is near the ever-changing beach. At these places the people have obviously built neither hearths nor houses*" (Carlsson 1998:49; my translation).

The notion that the sea was a "sacred spirit" has been discussed in a similar way by Jan Storå (2001:49ff), who suggests that the seal-like ceramic figurines found at the Åland site of Jettböle should be regarded as representing spirits or "seal-humans".

Although these are interesting interpretations in many ways, I firmly believe that Anders Carlsson's view in particular is oversimplified. We now have clear evidence for both houses and hearths in many regions of Sweden (Björck 1998; M. Larsson 1999). The ritual aspect is important, of course, but it is now obvious that what we interpret as ritual activities occurred at PWC settlement sites as well as at burial sites. Sites such as Åby and Häggsta contain evidence of what have been interpreted as ritual activities, the former yielding both remains of humans in the form of burnt bone, fire-damaged flint-axes and whole, undamaged chisels all within a fairly limited area (M. Larsson

1999; Einarsson 2002; Olsson 1999). There is obviously no great difference in these aspects between the PWC and the FBC, in which the same ritual expressions, which might be called structured deposits (Thomas 1991; Bradley 2000), have been observed. Richard Bradley (2000:122) has recently suggested that the placing of material in the ground invoked a whole series of references to the origin of the object. The flint that was brought to the site came from far away and would have been immersed in almost mythical history, in which myths, stories about ancestors and accounts of events that took place long ago were brought together. This leads us back to what was said above about ethnicity. We can interpret these structured depositions as denoting the way in which a group of people might handle changes in society. In turning to the past and linking up with their ancestors, such a ritual became a way in which the people could adjust to a new situation.

A good example of these changes, and at the same time one of the most important sites in the discussion regarding the FBC and PWC in central Sweden, is the Alvastra pile dwelling in Östergötland. Full details of this site have not yet been published, and it is therefore difficult to discuss the connection between the FBC and PWC at it, but it is clear from the published information that there is a great deal of FBC pottery at the site as well as PWC pottery (Browall 1991; Malmer 2002:102ff). Objects of flint are also much more frequent here than at other PWC sites in central Sweden. Interestingly enough, the bone assemblage is dominated by cattle, followed by pigs (Malmer 2002:109). This is in sharp contrast to Gotland, for example, where recently published data from Västerbjers clearly show that the people were almost completely dependent on seals for food (Eriksson 2004).

The stable carbon isotope isotope values for the bones of three individuals from the pile dwelling are consistent with an entirely terrestrial diet. As Lidén et al. (2004) have stated recently, there are problems concerning the cultural affinity of these individuals, although according to Malmer (2002:112), the skeletons all belong to the last phase of the pile dwelling and therefore ought to be PWC. Ritual expression at the pile dwelling seems to have changed very little throughout its existence (Malmer 2002:112). Interestingly enough, Malmer (2002:129) stresses the point that features of the pile dwelling's material culture can be found at several PWC sites. Åby is one such example, with the burning of flint axes and the deposition of whole vessels and burnt human bone.

How, then, should we interpret the history of the PWC? As Anders Strinnholm (2000:123) thoughtfully noted, "*There might not be a story to tell about the Pitted Ware Culture, but there are many important tales to tell about the Middle Neolithic*" (transl. by author). I will now propose a further approach.

Living in cultural diversity

I will begin with a brief discussion of the large PWC site of Åby in Östergötland (Eastern Sweden). The site has been thorougly discussed and interpreted over the years, so that there is no need here to go into any details regarding its dating, material or structure (Gruber 1995; M. Larsson 1999; Einarsson 2002). Large amounts of pottery, worked stone and some flint were found, and huts of different types were found in 1995 and 1997, together with a probable grave. Of great interest is an area found in 1997 that has been interpreted as being intended for ritual purposes.

It is possible to distinguish at least two separate living areas within the settlement, one situated in the area investigated in 1952 and 1995 and the other in the areas investigated in 1934, 1936 and 1997.

Chronologically there is no great difference between the two areas, as the radiocarbon dates fall in the interval between 3600–2200 cal BC (Einarsson 2002:5). Several thorough analyses of the pottery have nevertheless shown that there is a marked difference between them in the way in which the rim decoration was used. The rim decoration of type 85 (\\\\\) that is clearly dominant at the site excavated in 1952 and 1995 is only present on a very few sherds in the area excavated in the 1930's and in 1997 (Gruber 1995:30; Einarsson 2002, figs. 4-8).

The analysis of the ceramic material has led to a three-level model for interpreting the decoration on the vessels:

1. Upper level
2. Middle level
3. Lower level

The first level may, according to Gruber (1995:38), correspond to patterns common to the PWC as a whole, while the second shows more of a regional level of patterning and the third comprises those patterns used at the household level. This corresponds in many ways to a scheme developed from ethnoarchaeology (David & Kramer 2001:179):

Identification, ownership and individuality

These levels can in many ways also be compared with the levels of ethnicity discussed above: ethnicity/upper

level, ethnic group/middle level and ethnic identity/ lower level, implying that people may show their social affiliation, or ethnic individuality, through the use of different patterns of ceramic decoration at the same locality, such as within the recently observed agglomerations of PWC sites (Åkerlund 1996; Edemo et al. 1997). Studies in the province of Östergötland have shown that differences in pottery decoration can be discerned between localities as well (M. Larsson 1995). This pattern should correspond to Gruber's middle level, or else it may constitute an ethnic group according to the scheme discussed above.

Concerning the history of the PWC, Mats Malmer (2002:179), following other researchers (Browall 1991:56; Edenmo et al. 1997), states that it developed in the Lake Mälar area sometime around the EN/MN A transition, as shown by radiocarbon dates. The situation becomes very complex when we consider the evidence from the Alvastra pile dwelling. Occupation here begins with the FBC in the early part of MN A, together with several small settlements in the vicinity. A megalithic grave is also situated not far from the pile dwelling (Janzon 1984), and the Middle Neolithic pottery associated with it can be dated to MN II/III. The same kind of pottery was also found inside the pile dwelling (Browall 1991:114). There is similarly no great change to be seen in the economy. The people still practiced farming, kept cattle and pigs, and hunted, especially red deer. The transformation from the FBC to the PWC seems to have been a gradual, peaceful one and not connected with any economic changes of the kind seen in Eastern Middle Sweden. If we look for a moment at the settlements in Östergötland and compare them with those excavated a little further north, we see both similarities and dissimilarities. With the exception of Alvastra, there is little, if any, evidence of farming, and with a few noticeable exceptions (Åby, Svintuna), there are no recognisable houses on the sites. In the Mälar valley, for example, there are very few sites that show traits typical of what we call base camps, ones that include huts etc. (Gustafsson et al. 2003:56). Compared with Åby, flint is also very rare at these sites, very little having been found at the recently excavated site of Lindskrog in Uppland, for example (Gustafsson et al. 2003:36f). Åby, as discussed above, differs in many ways from the common PWC sites, with evidence of several huts of different types, graves, a ritual area, working areas, relatively large amounts of flint, including tanged arrowheads, fragments of both flint axes and stone axes. There are even some small fragments of double-edged battleaxes.

Long-term connections with the flint-rich areas in southern Scandinavia are still to be seen, as is the case with Alvastra and Åby. In the Mälar valley, however, these connections seem to have been broken. Knut Bergsvik (2003:298) has recently written something that may be taken as a useful starting point for this discussion of living in cultural diversity:

> *"In the context of ethnicity, one might argue that the more people have in common in terms of values, technology or subsistence practice, the more they are likely to recognise and acknowledge other people as similar to themselves"*

In the light of both the radiocarbon dates and the pottery chronology, the changes observed in the western part of Östergötland occurred around the middle of MN A (MN III). How, then, does this correspond to cultural developments in southern Sweden?

Some years ago, based on archaeological investigations in the Kabusa area east of Ystad, I proposed that it was possible to follow a group of FBC settlements up to the middle part of MN A (M. Larsson 1992), after which it was possible to see a re-location of the settlement to other areas. The use of megalithic graves reached a high point in MN III (Hårdh 1986; 1990; Tilley 1996). Magnus Andersson (2003:248 ff), who has recently discussed and interpreted developments in western Scania, concludes from large-scale rescue excavations that

> *"We see that this trend (towards large settlements) seems to culminate during MN III in some areas of Scania"* (Andersson 2003:302, my translation).

At the same time, at least in some areas, some of the remaining settlements grew markedly in size, which might be interpreted as a process of re-settlement. During the later part of the FBC the settlement pattern once more changed dramatically. The large settlements were abandoned and we see instead a large number of small-scale settlements in the landscape (Andersson 2003:302). To cite Andersson once more,

> *"I believe that the break-up of the FBC society resulted in part of the population taking up a way of life that, for a long time, had been led by people in the coastal areas of Middle and South Sweden"* (Andersson 2003:306, my translation).

This group of sites could be called the Stävie group, after the eponymous Sarup type site Stävie (L. Larsson 1982).

Pär Nordquist (2001:157ff) has quite another story to tell:

> *".certain coastal groups managed to withstand this development towards single farms and unequal forms of production and thereby continued to reproduce a collective society based on cooperation and reciprocity*" (my translation).

He sees a unilinear development from coastal people in the Mesolithic through a non-agrarian FBC, located close to the coast, to the PWC in the Middle Neolithic (Nordquist 2001:162 ff). As has been discussed above, there is really no reason to regard this as a plausible model, since it is in many ways based on a misconception of the archaeological evidence.

One last example of how the story of the Middle Neolithic could be written is Janis Runcis' (2002) report on a children's cemetery outside Borgeby in western Scania. The cemetery is actually located on a beach ridge on the coast at Öresund. He writes (Runcis 2002:33) that there is nothing in the excavated material that actually indicates any sort of culturally created conflict nor any dependence on marine resources. "*We still think that this is the case, though*" (Runcis 2002:33, my translation). It is not easy to extract from Runcis' book what he actually means by this. He skilfully avoids any discussion of the Stävie and Karslfält groups, for example. He does state at the end of the book, however, that people with different customs lived side by side in a spacious landscape. They created borders and they exchanged ideas, goods and gifts (Runcis 2002:132). This is an interpretation that includes some of what both Andersson and Nordquist have suggested, but is it a probable interpretation? In my opinion, it is not.

At long last this leads to my own story of the PWC

During late MN A we witness a rapidly changing FBC society. In some well researched areas in Scania it is possible to see marked changes in settlement structure as early as MN III, which is the middle part of MN A. In many areas we have been able to follow settlements of the FBC culture from at least the late EN up to MN III. We then see a rapid change around 2700 cal BC. The old settlement areas were partly abandoned and new areas came into use. At the same time, no more megalithic graves were built, although the existing ones continued to be used.

In this period, c. 2700–2400 cal BC, we see the existence of several groups of people in southern Sweden that manifested their ethnic affinity through variations in their material culture, especially pottery, but also flint and stone working. I have referred to these elsewhere as the Karlsfält, Battle Axe Culture and Jonstorp/Siretorp groups (Edenmo et al. 1997:143 ff). The sites RÄ and M2/M3 in the Jonstorp area of north-western Scania have clear FBC influences in their pottery decoration (Malmer 1969), and radiocarbon dates for the youngest sites, M2/M3, place them in the period c. 2800–2450 cal BC (Carlie 1986:160; L. Larsson 1989:66). This is about the same time as Karlsfält and Stävie. These sites all existed at the same time, but had very dissimilar locations and the people who lived there probably all had quite different economic strategies as well. There are similarities in their material culture, however, in that we find the same kinds of flint axes and other implements, and also tanged arrowheads, and pottery decoration motifs such as hanging triangles and others influenced by the PWC are common.

In my opinion, people showed their ethnic affinity especially through the use of particular patterns of ceramic decoration, and in this way the material culture played an active role in linking ethnic groups together.

Most people would agree that there were some profound social changes that began as early as the middle part of MN A and culminated during the late part of this period, and most archaeologists would also agree that there is really no evidence for any large-scale migration of people. And yet we see evidence of these rather rapid changes in various parts of Sweden. Lars Larsson (1998:443), in a discussion of the Neolithic societies in southern Sweden, has written

> *"the finds point towards cultural assimilation between the existing FBC settlement and an expanding Pitted Ware culture. This cultural assimilation may have been encouraged by the fact that the two cultures appear to share a common origin*".

We should recall here Knut Bergsvik's (2003:298) notion that the more people have in common in terms of values, technology or subsistence practice, the more they are likely to recognise and acknowledge other people as similar to themselves.

In summary, there is good evidence for a social upheaval in FBC society that altered many old traditions and customs. The break-up of burial customs, the settlement pattern and many ritual aspects of society must have caused a great deal of confusion. Per Karsten (1994:177, 181) is of the opinion that high-ranking members of society changed the ritual practices fundamentally. Instead of making collective offerings in lakes, for example, offerings of axes in particular were made beside megalithic graves.

Other values and beliefs emerged. Existing corporate groups disintegrated into smaller kin groups, cre-

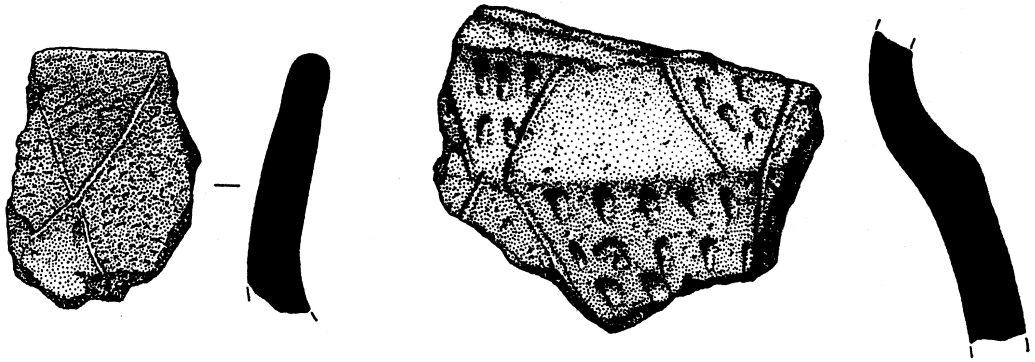

Figure 3. Sherds with hanging triangles from the Åby site in Östergötland. Actual size. Drawing by R. Holmgren.

ating various regional groups (the Stävie, Karlsfält, Jonstorp/Siretorp and early Battle Axe cultures), which perhaps ought nowadays to be called ethnic groups, groups of people who set themselves apart and/or are set apart by others with whom they interact or co-exist on the basis of their perceptions of differentation and/or common descent (S. Jones 1997: xiii).

From this perspective, I do not believe that Lars Larsson's interpretation that what we see in the late MN A is a cultural assimilation of Pitted Ware elements into the FBC is entirely correct. What I think we see is the re-use and re-arrangment of some already existing principles. Judging from the archaeological evidence provided by sites such as Alvastra and Åby in Östergötland, these connections were already there early on. This is especially noticeable at Alvastra, as discussed above. The pottery from Åby features one decorative element, although rare, that could be interpreted as linking these distant ethnic groups together, the hanging triangles (Fig. 3). The youngest radiocarbon date for the site is 2400–2040 cal BC (3800±85, Ua-9166), one sigma calibration, and this comes from deposits on a sherd with a hanging triangle motif (M. Larsson 1999; Einarsson 2002:5). This is a common pattern in several areas, as mentioned above, and among different groups during the later part of MN A (Edenmo et al 1997:147 ff.). We can find it in the late Funnel Beaker culture, the Pitted Ware culture and the Globular Amphora culture (Edenmo et al 1997:147 ff.). The use of such a motif could be said to be a visible aspect of memory that is linked to its use, being located on the surface of the pot (A. Jones 2002:131). Andrew Jones (2002:130) also writes, based on studies of Grooved Ware pottery at Barnhouse on Orkney, that social relations are inscribed on the surfaces of vessel. This is a fitting remark in the context of the above interpretation.

Other aspects of material culture that we can see at sites like Åby and Stävie are more standardized items such as tanged arrowheads and thick-butted axes. As Christopher Gosden (1994:35) points out, standardized material forms provide support for people when dealing with rapid changes in society.

The mixing of old and new elements made it possible for people to create "*a new world*" (Thomas 1996:37). Public meanings and interpretations were negotiated and contested, especially interpretations of ethnic identity. In times of rapid change people used, re-invented and re-used principles while still being able to communicate through the medium of their material culture, as we have seen. In this way "living in cultural diversity" was possible.

English language revision by Malcolm Hicks.

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