

# Changing scenery

## Historicity in the Area of Lake Hjälmaren, Sweden, c.2800-2300 BC

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The article addresses changes in the archaeological record during the Middle Neolithic B in the area of Lake Hjälmaren. The main focus is on the difference between the Pitted Ware sites and the Boat-Axe sites with regard to choice of location. Traditionally the different distributions of these two assemblages have been understood as designating two different and more or less contemporaneous “cultures”. An alternative view to the conventional understanding is that the material cultures represent use and re-use activities associated with different spaces in the landscape. In the author’s opinion, the choices and activities that constitute these spaces should be understood as reflecting activities that took place in relation to a pre-existing landscape. In order to describe and analyse the relationship, the author applies theories of historicity and landmark, pointing towards an active social reproduction of a landscape.

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During the second half of the Middle Neolithic, a change occurs in the archaeological picture of mainland Sweden (c. 2800–2300 BC). The change is indicated by the appearance of the Boat-Axe culture, also known as the Battle-Axe culture. In particular, new types of inhumation graves appear in different geographical locations, with a new set of grave goods. These graves differ from the graves belonging to the previous and contemporaneous Pitted Ware culture (c. 3200–2300 BC). The latter graves seldom contain any grave goods and often consist of dispersed bones on a presumed settlement area. The Boat-Axe culture is said to have emerged as a result of either immigration (Müller 1898:278; Forssander 1933:142f; Oldeberg 1952: 148ff) or a new set of ideas inspired by contacts with the Corded Ware culture and later the Bell Beaker culture in Denmark and the rest of Europe (Åberg 1935; Malmer 1962:677ff). For example John-Elof Forssander (1933) used stray finds of boat-axes in Scania as verification of a European cultural expansion through colonisation. Axes of the early type were found in the interior, and axes of the later type in the coastal area. Forssander interpreted the

movement of the axes as indicating an initial colonisation of the interior and a subsequent capture of land from the “primitive natives”, that is, the Pitted Ware culture (Forssander 1933:108ff). Later this was criticised by Nils Åberg (1935) and Mats P Malmer (1962). Åberg showed in his article “Den svenska båtyxekulturens ursprung” (Eng. “The Origin of the Swedish Boat-Axe Culture”, my transl.) (1935) a correspondence in location between stray finds of the early Neolithic polygonal axes and the boat-axes. This raised the question whether there had been two invasions influencing the material culture. Åberg found it more likely that this pattern indicated diffusion, whereby the same people had been influenced from outside during different times, and that this was the reason for the new material culture (Åberg 1935:335ff). In his thesis, *Jungneolithische Studien*, Malmer shows, also contrary to Forssander, that the early and the late types of boat-axes in Scania in general have the same distribution in the landscape (Malmer 1962:677ff, 1975:102ff, Fig. 78-79).

Despite the explanation for the appearance of the Boat-Axe culture, the culture is usually positioned in dualism with the Pitted Ware culture. The two cultures are said to have represented two different ethnic and/or economic groups. Some scholars are of the opinion that there is a chronological difference between the two on a regional basis, while some mean that they existed side by side (for a summary see Edenmo *et al.* 1997:198ff, Fig 5.47). The Pitted Ware culture is often recognized as living in the coastal areas.

Based on the assumption that there existed an unstructured grave form, the society has been understood as a profane and egalitarian hunter-gatherer group with a marine economy that sometimes included animal husbandry (Tilley 1982; Knutsson 1995:166ff). Although rare, remains indicating cultivation have been found on some Pitted Ware sites (Welinder 1987:117f; Edenmo *et al.* 1997:180; Welinder 2004:97ff, 183ff). The Boat-Axe culture, on the other hand, is perceived as an agro-pastoral society living in the interior (Malmer 1975:116f, 2002:177ff; Welinder 2004:185f). In contrast to the great variation in the grave forms of the Pitted Ware culture, the Boat-Axe graves have a stricter form and the culture is therefore understood as a more totalitarian and ritualised society (Tilley 1982; Knutsson 1995:166ff).

“(...) the Boat-Axe and Pitted Ware traditions in Scania represent two culturally heterogeneous groups practicing different economic strategies closely linked in a series of economic and social exchange in which the relationship between the two becomes increasingly antagonistic leading to a greater structural differentiation of the material culture through which economic and social relationships were, in part, expressed and mediated” (Tilley 1982:55).

## RESEARCH PROBLEMS

There are two main problems concerning the presumed cultural dualism. Firstly, the interpretations of the different sites, i.e. the Pitted Ware sites and the Boat-

Axe sites, maintain that these sites were places where people of the Middle Neolithic lived and expressed their ethnicity. In contrast to the above-mentioned distribution of Middle Neolithic sites where Pitted Ware sites are found in the coastal area and Boat-Axe sites in the interior, studies have indicated that the stray finds from the two cultures complicate and perhaps even change the picture of the Middle Neolithic. The stray finds show that the Boat-Axe culture is distributed throughout the landscape, in the interior as well as in the coastal area. On the other hand the Pitted Ware culture is comparatively absent in the material (fig. 1) (c.f. Carlsson 1987; Lekberg 2002; von Hackwitz & Lindström 2004). If one wanted to maintain the picture of a dualistic Middle Neolithic, it could be argued that the pattern shows exchange between two ethnic groups. Nevertheless this hypothesis can be contradicted by the fact that the distributions of stray finds of boat-axes are fairly even in the different topographical contexts. Furthermore, the boat-axe finds in the coastal area consist of preforms for boat-axes, supposed votive deposition, broken axes and other remains. It is apparent that the finds represent the whole production chain, which in turn suggests that they were not brought there through exchange. This assertion will not be discussed further in this paper, but it should be noted that a combination of sites and stray finds will add nuances to the picture of land use during the time in question (von Hackwitz, forthcoming thesis).

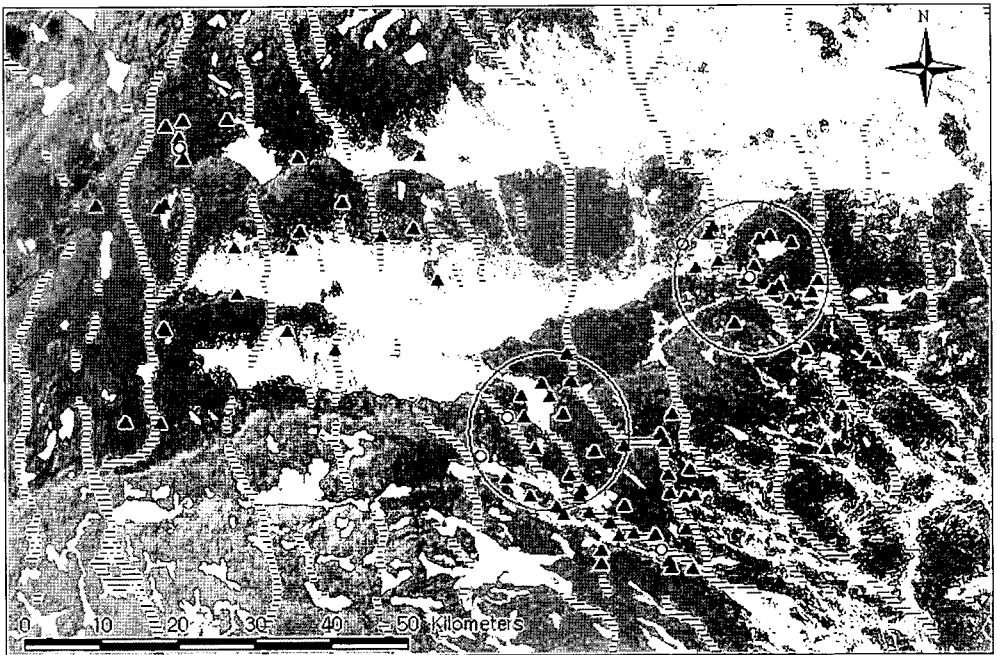


Fig. 1. Lake Hjälmaren during the end of the Middle Neolithic, 27 m.a.s.l (2300 BC). Stray finds associated with the Pitted Ware culture (dots) and the Battle-Axe culture (triangles) that are found in FMIS (antiques information system) are marked on the map. The eskers are hatched. The encircled areas have been subjected to more thorough investigation and include stray finds documented by the Museum of National Antiquities.

The second problem regarding earlier interpretations is the presumption that a different material culture equals a different people. Different material cultures cannot automatically be translated into different ethnic groups (Ucko 1969; Carlsson 1987:235; Welinder 1987:104; Werbart 2002:40ff; Gill 1998; 2003:9f). For example a difference in burial form such as grave goods or grave structure does not have to result in different ethnic groups when translating the Middle Neolithic material, as suggested by Knutsson and Tilley. The differences can be the result of gender, status, cause of death or place of death (Thomas 1917; Ucko 1969; Binford 1971). The differences can also reflect an action with social or political intentions, an expression of power or social changes (Hodder 1980; Pearson 1999:73ff). Furthermore, grave form does not have to be an expression of any sort of social praxis, but can differ according to personal ideas and individual manipulations of the death rituals. In addition, the form does not need to have any connection to the living society according to power, wealth and ethnicity (Hodder 1980:163; Pearson 1982:112). As a result, Peter J Ucko stresses that burial records are not a good indicator of different ideological beliefs and different ethnic groups.

“So much variability has been seen to exist both between cultures and within a culture, that it becomes all-important to consider the question whether prehistorians are generally correct in laying so much stress on the usefulness of burial customs to identify different groups of people, and are right in assuming that burial practices are the kind of traits which can be treated as diagnostic of different cultures (and therefore of cultural contact and change)” (Ucko 1969: 273).

Another important issue to consider is that the society that handled and produced the Pitted Ware pottery, sites and graves is also the society that introduced the Boat-Axe pottery, sites and graves (that is, if we do not prefer the invasion theory). In the Hjälmaren area, radiocarbon dating as well as relative dating methods suggests a possible chronological difference between the Pitted Ware culture and the Boat-Axe culture, as the latter replace the former (von Hackwitz, forthcoming thesis). Even so, there has to be *a certain point of overlap*, which must be considered. This implies that the Boat-Axe culture can be understood through the values, rules, etc. that were practiced in the society that produced the Pitted Ware culture. This is why the two material groups should be studied in relationship to each other (cf. Gill 2003:179ff).

To sum up, the cultural dualism is problematic due to empirical difficulties within the scientific field (cf. Gill 1998:80ff). The debate is caught in a loop since the material that defines the cultures (with all its assemblages) is in turn defined by the cultures. My proposal is that the two archaeological cultures should be viewed from a different perspective and that the relationship between the two *material groups and the activities they were part of* should be put into focus.

## AN ALTERNATIVE APPROACH

*Historicity* is a concept for defining human actions that can be shown to arise from previous human actions in terms of social reproduction. Archaeological historicity can be demonstrated either in the reproduction of objects or by the re-use of sites in the landscape (Gosden & Lock 1998:4; Bradley 2002). The use of an active historicity can be divided into a *genealogical* use of history and a *mythological* use of history. Genealogical historicity refers to known ancestors while the mythological historicity refers to a less known and more distant past. Both types of historicity are functional in a society, and their purpose is to structure and handle continuity and change by means of the rituals they are part of. There is, however, a fundamental difference between the two types of historicity. The mythological historicity explains and handles reality by referring back to the origin of the world. The genealogical historicity is about practice and the power of human action that is preformed through genealogies. Both are used to shape the present and both co-exist in one society (Gosden & Lock 1998:3ff). Kjell Knutsson (2005) suggests that a change in the material culture indicates a change in people's life-world. As a result, an active role for the past is created in order to generate a sense of security, for example by re-activating older sites. Furthermore, a return to the ancestors can be an attempt to save the present ideology or a strategy to bring about changes. To understand the purpose, the acts have to be placed within a larger social practice and also linked to the material representations (Knutsson 2005:194). Knutsson refers to those sites as "relics from the period of sacred origins" (Knutsson 2005, cf. Knutsson 2004).

So far, the use of historicity has been discussed frequently when it occurs in relation to a preceding object or a previous site. In an archaeological landscape study there may, however, be further sites to consider. Richard Bradley has discussed the archaeology of so-called *natural places* or *unaltered places* (Bradley 2000). Such natural places can consist of caves, trees, lakes, springs and rivers. They are often situated where two or more zones in the landscape meet, for example at the shore areas where the water meets the land, or in caves where the upper world meets the lower world. Despite the absence of archaeological artefacts, Bradley argues that these sites have an archaeological significance because of the meaning they have in people's minds as part of history. He presents examples from the Saami landscape where rock formations that bear a certain resemblance to humans, animals or birds, so-called *siejdde*, are used for sacrifices to the gods (Bradley 2000:6ff). Natural places can be used for the establishment of descendant monuments or sites. A formal architecture at a natural place can bring about several changes. It can alter the experience, make the place more or less visible or bring about additional layers of symbolism. The monuments can also have a meaning in the organization of the wider landscape (Bradley 2000:104ff).

Even though the function of natural places as socially important locations is difficult to demonstrate, it is probable that these sites existed in the past. It can, however, be hard to give them archaeological value due to the lack of anthro-

pogenic features. In an article, María Nieves Zedeño (2000) examines how people (in particular Native American Indians) create a social environment through interaction with nature through a behavioural perspective. She argues that, even though several theories have been formulated on architectural arrangement and social space, the frameworks are not directly applicable to social groups that built their social environment around the use of localized natural resources. Zedeño means that a place may be defined as the discrete locus of human behaviour. Places become a material culture category by virtue of transformation through human action. This material category is referred to as *landmarks* (Zedeño 2000: 105ff). Landmarks are places where interactions and activities occurred. They may consist of natural features, as described above (rocks, rivers, etc.), or human constructions. A landmark represents some of the history of the land and resource-use practice, and has a life history that stems from different uses and during different times. The study of landmarks involves evaluating the potential of a place to attract people to carry out activities there (natural and/or cultural resources) and furthermore reconstruct the different sequences of activities that transformed the place into a landmark (Zedeño 2000:106; 108). The theory can be said to offer a link between Bradley's natural places and altered sites.

In the following I will apply theories of historicity and landmarks when discussing differences and similarities concerning *the choice of location* of Pitted Ware sites and Boat-Axe sites. The central question to be examined in this paper is the choice of location in relation to the history of the landscape.

The analysis in this paper is based on site distribution and landscape reconstruction. The map study is formed through digital modelling of the Middle Neolithic landscape using reconstructed shorelines and topography in the mapping program Arc View 3.2. In the creation of the Middle Neolithic sea level, digital elevation information is taken from the National Land Survey of Sweden (Sw. *Lantmäteriet*). The reconstruction of the sea level is made with consideration to earlier research as well as to the altitude of some of the sites. The sea level shown on the maps is placed at 27 m.a.s.l. (c. 2300 BC) calculated on site level positions. Digital soil information is taken from the Geological Survey of Sweden (SGU, permission 30-399/2005). A personal database, containing coordinated sites from the research period, is applied to the models to create/reconstruct a Middle Neolithic landscape. In the following it should be stressed that the taphonomic processes within the different sites have not been examined. However, in the research area the archaeological preservation is poor as a result of decomposition of organic matter caused by high soil pH. The discussion is based on information on the different sites found in excavation reports.

## SETTING THE SCENE

Lake Hjälmaren is situated in the middle of Sweden and is the fourth largest lake in the country, with a water area of 458 square kilometres (Claesson & Klingnéus 1999:7). It is situated between the provinces of Västmanland, Södermanland and

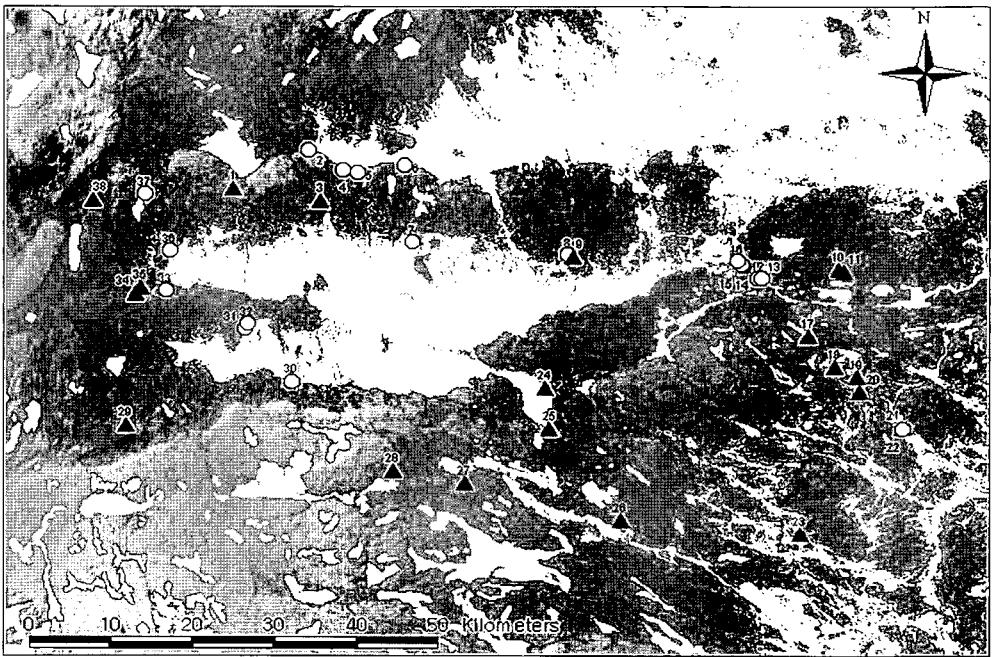


Fig. 2. Sites associated with the Pitted Ware culture (white dots) and the Battle-Axe culture (black triangles) are marked on the map. The numbers are the same as in table 1. The eskers are hatched. 27 m.a.s.l. (2300 BC).

Närke. Several glaciofluvial eskers cross the area in a north-south direction as landscape relics from the inland ice. There are plenty of archaeological and historical remains found on and nearby the eskers. The reason could be that the eskers have been used as roads (Malmer 2002:138) and because they contain sandy light soils that comprise good farming land. There are 39 sites dated to the Middle Neolithic in the area: 19 Pitted Ware sites and 20 Boat-Axe sites (fig 2). During the time in question the area consisted of a lake with brackish water connected to the Baltic Sea, which was then a saltwater sea called the Litorina Sea. At the beginning of the Middle Neolithic the land had risen to about 35 m.a.s.l. By the end of the period the sea level had fallen to at least 27 m.a.s.l. Today, Lake Hjälmaren lies at 22 m.a.s.l.

Sites, artefacts or graves belonging to the Boat-Axe culture are often found on or very near sites or stray finds belonging to the early Neolithic Funnel Beaker culture (3900–3300 BC), in this area referred to as the *Vrå culture* (cf. Åberg 1935:335ff; Florin 1958; Malmer 1975:115). This is sometimes explained in economical terms whereby the Boat-Axe culture supposedly adopted the Funnel Beaker/*Vrå* agro-pastoral economy. Consequently they occupied the same geographical areas, which differ from the hunter-gatherer adaptation of the Pitted Ware culture (Malmer 1975:108ff, 2002:131; Tilley 1982:54f). In general, sites from the Middle Neolithic in the research area show little evidence for an agri-

| No on map | Site             | Parish        | Inv. No.         | Material Culture    | O/Y BAC* |
|-----------|------------------|---------------|------------------|---------------------|----------|
| 1         | Skumparberget    | Glanshammar   | RAÄ 194          | Boat-Axe Culture    | O        |
| 2         | Körartorpet      | Fellingsbro   | RAÄ 288          | Pitted Ware Culture |          |
| 3         | Högby            | Lillkyrka     | RAÄ 58           | Boat-Axe Culture    | Y        |
| 4         | Sjölunda         | Fellingsbro   | RAÄ 291          | Pitted Ware Culture |          |
| 5         | Urvalla          | Götlunda      | RAÄ 27           | Pitted Ware Culture |          |
| 6         | Gärdselbäcken    | Arboga        | RAÄ 70           | Pitted Ware Culture |          |
| 7         | Nannberga        | Götlunda      | RAÄ 128          | Pitted Ware Culture |          |
| 8         | Snickartorpet    | Västermo      | RAÄ 91           | Pitted Ware Culture |          |
| 9         | Täby             | Öja           | RAÄ 65           | Boat-Axe Culture    | Y        |
| 10        | Eka              | Ärla          | RAÄ 67           | Boat-Axe Culture    | O        |
| 11        | Åstorp           | Ärla          | RAÄ 130          | Boat-Axe Culture    | O        |
| 12        | Moäng            | Husby-Rekarne | RAÄ 21           | Pitted Ware Culture |          |
| 13        | Hagby udde       | Ärla          | RAÄ 9            | Pitted Ware Culture |          |
| 14        | Lundby-Ålläng    | Husby-Rekarne | RAÄ 88           | Pitted Ware Culture |          |
| 15        | Lundby           | Husby-Rekarne | RAÄ 83           | Pitted Ware Culture |          |
| 16        | Hållsta          | Husby-Rekarne | RAÄ 55           | Pitted Ware Culture |          |
| 17        | Hagtorp          | Lilla Malma   | RAÄ 47           | Boat-Axe Culture    | O        |
| 18        | Barrsjön         | Dunker        | RAÄ 50           | Boat-Axe Culture    | O        |
| 19        | Domarhagen       | Lilla Malma   | RAÄ 166          | Boat-Axe Culture    | Y        |
| 20        | Länsmansgården   | Lilla Malma   | RAÄ 73           | Boat-Axe Culture    | Y        |
| 21        | Hyltinge         | Hyltinge      | RAÄ 183          | Boat-Axe Culture    | Y        |
| 22        | Hyltinge, åkern  | Hyltinge      | RAÄ 160          | Pitted Ware Culture | O        |
| 23        | Katrineborg      | Vadsbro       | Nyköping 175-176 | Boat-Axe Culture    | Y        |
| 24        | Julita kyrkogård | Julita        | RAÄ 87           | Boat-Axe Culture    | Y        |
| 25        | Gimmersta        | Julita        | RAÄ 50           | Boat-Axe Culture    | Y        |
| 26        | Julsäter         | St. Malm      | SHM 19315        | Boat-Axe Culture    | O        |
| 27        | Sävsta           | V.Vingåker    | RAÄ 80           | Boat-Axe Culture    | O        |
| 28        | Knutstorp        | V.Vingåker    | RAÄ 41           | Boat-Axe Culture    | O        |
| 29        | Sannahed         | Kumla         | ÖLM 19833-34     | Boat-Axe Culture    | O        |
| 30        | Valsta           | Askers        | RAÄ 11           | Pitted Ware Culture |          |
| 31        | Bärstalund       | Stora Mellösa | RAÄ 4            | Pitted Ware Culture |          |
| 32        | Tallåsen         | Stora Mellösa | RAÄ 85           | Pitted Ware Culture |          |
| 33        | Tybble           | Örebro        | RAÄ              | Pitted Ware Culture |          |
| 34        | Adolfsberg       | Örebro        | SHM 21289        | Boat-Axe Culture    | Y        |
| 35        | Gustavsvik       | Örebro        | SHM 14292        | Boat-Axe Culture    | Y        |
| 36        | Kränglan         | Örebro        | RAÄ 210          | Pitted Ware Culture |          |
| 37        | Gottsäters mosse | Axberg        | RAÄ 107          | Pitted Ware Culture |          |
| 38        | Vallby           | Kil           | RAÄ 79           | Boat-Axe Culture    | O        |

\* O/Y BAC = older/younger Boat-Axe Culture based on the artefacts

*Table 1. Middle Neolithic sites in the area of Lake Hjälmaren. The numbers are the same as in fig. 2.*



cultural or agro-pastoral economy. Very few sites had animal bones and only two sites contained cattle bones. One of the Boat-Axe graves at Sannahed had a possible cattle bone placed in a pot. At the Pitted Ware site of Körartorpet bones from cattle, pig and sheep or goat were found. Furthermore, the evidence for an agronomical economy is even more invisible. Pollen analyses and impressions of grain have been recorded at Early Neolithic sites in the research area, for example at Vallby (Hultén & Welinder 1981:101ff). However, only diffuse evidence of agriculture has been found in the Middle Neolithic material from the area. Clearance of vegetation has been recorded at the Boat-Axe site of Hagtorp, but the pollen analyses revealed no evidence of cultivation (Florin 1959). The Pitted Ware site of Tybble contained one seed of grain (Bergold & Holm 2005:31ff). In conclusion, two Pitted Ware sites and two Boat-Axe sites show some evidence of an agro-pastoral economy. As a result, it is difficult to discuss possible economical differences on the basis of archaeological data in relation to the different sites in the research area. As discussed above, neither the artefacts nor the grave forms seem to be good indicators for defining ethnic/cultural differences. Without direct indications of different economies in this area we are left with the site location in the landscape. As the Boat-Axe culture is found both in the interior and the coastal area (fig. 2) one can wonder whether a cultural dualism is the best explanatory framework for understanding the differences in site location that *do* occur?

Ideological reasons for the re-use of Vrå sites have been discussed, whereby a legendary/mythological or ideological explanation is presented together with an economical (Carlsson 1998:64; Gill 2003: 184). A study concerning Neolithic axes and their deposition in Scania suggests that not only graves and settlements but also deposits of axes during the Middle Neolithic have a strong correlation with deposits from the Early Neolithic (Karsten 1994:180). Around Hjälmaren several Boat-Axe sites are located on or close to Vrå sites, for example the site of Barrsjön. The site contained among other things decorated Vrå pottery. During the early phase of the Boat-Axe culture at least three graves were placed on the previously used site (for references to sites mentioned in the text, see Site references).

Two areas, referred to here as the *Moäng area* and the *Gimmersta area*, will be used as examples in this paper. As stated above, the Middle Neolithic landscape is usually seen as having two different topographical spaces, one on the sandy shores containing the Pitted Ware culture, and the other on the eskers in the interior containing the Boat-Axe culture. I have stressed that the location of the different sites should not be explained by ethnic reasons and can furthermore not be explained merely by economical reasons. I will demonstrate this by taking a closer look at the location of Boat-Axe sites in relation to earlier occupation.

The Moäng area is situated in the southeast part of Hjälmaren (fig 3). During the Middle Neolithic the region was located in the outflow between Hjälmaren and Mälaren. The area contains five Pitted Ware sites: Hållsta, Moäng, Lundby, Lundby-Ålång and Hagby Udde. There are three Boat-Axe sites: Hagtorp, Eka

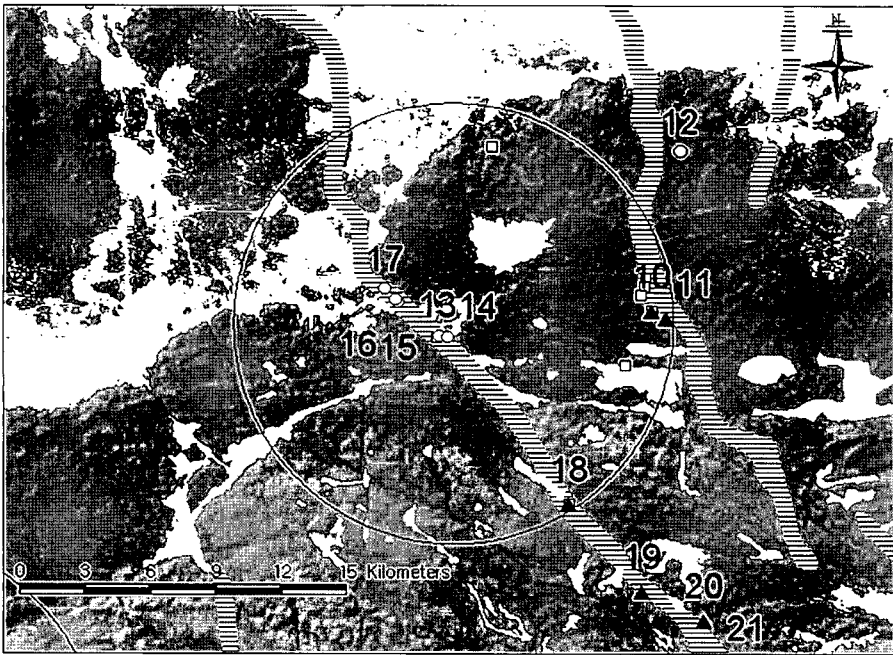


Fig. 3. The Moäng area with the sites discussed in the paper. Grey unnumbered squares mark sites belonging to the Vrå culture. The eskers in the area are hatched (altitude information from the National Land Survey of Sweden, and soil information from the Geological Survey of Sweden). The numbers are the same as in table 1. 27 m.a.s.l. (2300 BC).

and Ärla (nos.10-16 in fig. 2 and table 1). Two sites contain remains indicating graves, namely Moäng and Ärla.

The Pitted Ware sites contain pottery of type Fagervik II and III. This type of ceramic is dated to 3620–2610 BC and 3650–2790 BC, Middle Neolithic A and B (Edenmo *et al.* 1997:184, Fig. 5:33). The sites are situated between 26 and 32 m.a.s.l. in close relationship to each other. They are located in direct connection to the Middle Neolithic Hjälmaren, on sandy slopes on or in close proximity to the western esker. Besides pottery, the finds at the sites include amber artefacts, beads of clay, burnt bones, and stone, quartz and flint artefacts. On several sites the pottery is of both the early and the late type. Next to the site of Moäng an earlier Vrå site has been found, called southern Moäng.

The three Boat-Axe sites are located in the interior, on sandy slopes on the eskers. The sites yielded artefacts dated to the early Boat-Axe culture (c. 2800–2600 BC). Eka is situated on the eastern esker directly on a previous Vrå site and close to two other Vrå sites, Mortorp and Götstorp. Eka contained, for example, Vrå pottery and thin-butted axes characteristic of the Vrå Culture, as well as Boat-Axe pottery and thick-butted concave-edged axes characteristic of the Boat-Axe culture. Ärla is also located on an earlier Vrå site, only 750 meters from Eka. The interpretation of the site as a Boat-Axe grave is based on the artefacts found in a

gravel pit, which consist of a boat-axe, flint axe, concave-edged stone axe, and pieces of pottery (definition for Boat-Axe grave see Malmer 1975:34). Hagtorp is situated on the western esker in the southern part of the area.

In conclusion, the sites in the Moäng area are located in two different spaces. The Pitted Ware sites are all found in direct relation to the Middle Neolithic Hjälmaren. One of the sites, Moäng, is located near an earlier Vrå site. The Boat-Axe sites are all found in the interior and in relation to earlier Vrå sites. All the sites in the area are located in connection to an esker. In addition, the Pitted Ware and Boat-Axe sites *can be* contemporaneous according to the relative dating (see above).

The Gimmersta area is located in the southern part of Hjälmaren (fig 4). Three eskers cross the area, and two of the three Boat-Axe sites are located on them. These sites are Gimmersta, Julita and Sävsta (nos. 24, 25 and 27 in fig. 2 and table 1). No Pitted Ware sites or Vrå sites are known in the area.

The Boat-Axe sites have a different kind of location compared to the sites in the Moäng area. Sävsta is located in the interior, on an esker. During roadwork at the site two graves were found, which were dated to the early Boat-Axe culture. The other two sites, Julita and Gimmersta, are situated in the shore area. They contained one grave each, dated to the late Boat-Axe culture (c. 2600–2300 BC).

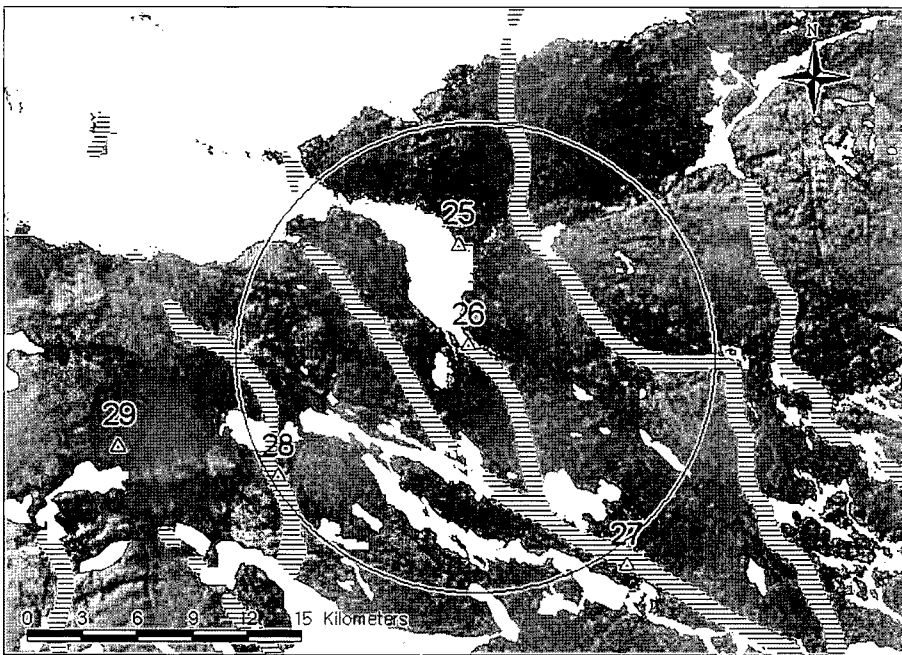


Fig. 4. The Gimmersta area with the sites discussed in the paper. The eskers in the area are hatched (altitude information from the National Land Survey of Sweden, and soil information from the Geological Survey of Sweden). The numbers are the same as in table 1. 27 m.a.s.l. (2300 BC).

The Gimmersta grave was found in a gravel pit, and the Julita grave in a modern churchyard.

The location of the early Boat-Axe site of Sävsta is comparable to the locations of the Boat-Axe sites in the Moäng area, as they are located in the interior. However, the locations of the younger sites, Julita and Gimmersta, are comparable to the locations of the Pitted Ware sites in the Moäng area, as they are situated in the shore area, 30 and 27 m.a.s.l. I will discuss the meaning of the dissimilarity below.

## THE USE OF LANDSCAPE HISTORICITY

“As material culture, places have properties, performance characteristics, and life histories that must be brought to life before we can understand how social environments are built from nature” (Zedeño 2000:98).

When investigating human actions in relation to the social environment, we first need to examine the history or the narrative of the place/landmark we have in front of us. By comparing the locations of the Boat-Axe sites in the Moäng and Gimmersta areas in relation to earlier sites, it is possible to see some fundamental differences pointing towards an active consciousness and manipulation in the choice of locations.

With regard to the Moäng area and the Gimmersta area, the early Boat-Axe sites are located in relation to earlier Vrå sites, while the late Boat-Axe sites are not. In the entire research area only 20 % of the Boat-Axe sites that have been found in relation to Vrå sites can be referred to the later phase (von Hackwitz, forthcoming thesis). Many authors agree that there exists a physical connection between early Boat-Axe sites and Vrå sites, whereas the later Boat-Axe material is more widespread in the coastal area (Forssander 1933:108ff; Malmer 1962:677ff, 1975:102ff, Fig. 78-79; Edenmo *et al.* 1998:191, Fig. 5:39). The differences in location of the Boat-Axe sites, whereby the earlier sites most often are positioned in the interior and the later sites in the shore areas (fig. 2, table 1 – column O/Y BAC), have been suggested to be a sign of the Boat-Axe culture taking over the shore areas either as a dominant ethnic group (Forssander 1933) or as an ideology (Malmer 1963). As I see it, the difference in location in this area is not dependent on the material culture as reflecting an ideological or ethnic group taking over another. Instead I suggest that the key to understanding the movement of the Boat-Axe sites, from the interior to the coastal area, lies in the history of the places where they are found. By applying landscape historicity and Zedeño's landmark theory, I will try to distinguish the archaeological features of the places where Boat-Axe sites are located.

During the introduction of the Boat-Axe culture, Vrå sites are attractive as locations for the above-mentioned sites. They are separated from the Pitted Ware sites geographically, and they also differ in character. Of importance in the discussion is that, during this time, the Vrå sites were in use in the mythological

time and were part of the narrative in the landscape. The sites represent actions of the antecedent inhabitants. According to Chris Gosden and Gary Lock, there are two ways of reusing the landscape. The first is by repeated use, and the second is by a re-use of the ancient landscape by giving it new values within the contemporary setting (Gosden & Lock 1998:4). According to this, the localization of Boat-Axe sites on Vrå sites is clearly a re-use. Further, since the time difference between the two material cultures is at least 400 years, it is possible that the placement of Boat-Axe sites on Vrå sites was a way to re-activate the sites in an act of mythological historicity. But how can we use the archaeological material to identify mythology? In my opinion the archaeological record from this time is too meagre to give an answer. The genealogical historicity is better demonstrated. In this case the place has had the function of a historical landmark where the actions of past generations were at work. During the Middle Neolithic, the sites were re-used by the establishment of Boat-Axe sites.

Contrary to the early Boat-Axe sites, the late sites are found in the shore areas in the same topographical settings as the Pitted Ware sites. In Middle Eastern Sweden there are even some Pitted Ware sites containing Boat-Axe material, for example at Häggsta in Södermanland (Olsson 1996). In the research area there are no such sites. However, the Boat-Axe sites are found in what seem to be unaltered areas with the same topographical features as the previous Pitted Ware sites. Most likely these “new” sites had a life history before the material culture was deposited. Considering the point of overlap discussed above, the Pitted Ware sites are an active part in the establishment of the Boat-Axe sites, as they determine the features as part of the past. From this perspective, it is possible that the sites at the shore that include the late Boat-Axe culture are part of the history connected to the Pitted Ware sites through the acknowledged topographical features they usually have. The Pitted Ware sites are established where land meets water and furthermore often at the end of an esker (see figs. 2 and 3). As pointed out earlier, eskers are thought to have been used as roads in prehistoric times (see above). This means that the Pitted Ware sites can be understood as nodes in the landscape connecting different kinds of communication – waterways and land routes (von



*Fig. 5. The Boat-Axe grave at Julita is situated behind the photographer, in the present-day shore area with a view over Lake Öljaren. About six kilometres away, on the other side of the bay, is the site of Gimmersta, which also contained a Boat-Axe grave (photo by the author).*

Hackwitz, forthcoming). Hence, locating the Boat-Axe sites in the shore areas can be explained as an act of genealogical historicity through the use of important nodes of communication in a pre-existing society.

By referring to landscape historicity and landmarks we get indications that the Boat-Axe sites were placed here with reference to the history of the landscape through known landmarks. This could have been an act of politic, of showing rights to the land by connecting to past time, or it may have to do with the ideology. The answer is beyond the scope of this study. As stated by Zedeño, the sites' performance characteristics should also be part of the study of a place. Site performance characteristics are what make a place suitable for specific activities (Zedeño 2000:108), for example the location of specific sites on the shore area. This draws attention to the action performed on a site instead of on the material culture deposited.

## CONCLUSION

To sum up, there are a number of points worth repeating:

- Different material cultures should not be translated immediately into different ethnic groups, but should instead be understood as different actions.
- Even if there is a chronological difference between the two material cultures, the point of overlap must be taken into consideration when studying the relations between them.
- If there is a lack of archaeological material verifying a specific economy, one cannot automatically assume that sites with different material cultures have different economies.
- By looking at the sites from a behavioural perspective, namely by using the history of the site as part of a landmark, an alternative explanation for site location has been formulated.

In this paper I have attempted to show that the differences or similarities in site location are not only due to the economy, but also to the historicity in the landscape through the use of known landmarks. A different use of historicity in the localization of Boat-Axe sites has been illustrated: (1) the early Boat-Axe sites' use of a distant past by genealogical means through the re-use of a historical landmark (Vrå site); and (2) the late Boat-Axe sites' use of a genealogical historicity through the re-use of the same topographical features as the Pitted Ware sites, as they were important nodes in the landscape. The results suggest a new avenue for research addressing the relationship between the Pitted Ware culture and the Boat-Axe culture.

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