**Abstract**

Today, about 525 dolmens and passage graves are known in Sweden. These tombs were built in a short and intense period, c. 3300-3000 BC, in the cultural setting of the Funnel Beaker (TRB) culture. The tombs occur in two distinct types of landscape. In Scania, Halland and Bohuslän, they are found close to the coast, in a strongly marine environment.

The second and larger group of tombs is found in the inland area of Falbygden in Västergötland. Here, a remarkable concentration of at least 255 tombs coincides with one of the very few places in the region where bedrock consists of limestone and slate instead of Precambrian rocks.

Spatial patterns are discernible in Falbygden but not very clearly in Bohuslän. In Falbygden, the tombs are closely spaced, occur in clusters or groups of 5–15 tombs, and tend towards regular spacing within the groups. Also, the largest tombs tend to occur in the centre of the area, for instance in Karleby, where several of the largest tombs are found. I will discuss the spatial patterns in the Falbygden landscape at different spatial levels, and whether the spatial patterns are also discernible in other variables, such as tomb or pottery typology. I will also touch upon the relations between Falbygden and surrounding non-megalithic regions as visible in ongoing isotope studies.

**Zusammenfassung**


Räumliche Strukturen werden in Falbygden deutlich, weniger jedoch in Bohuslän. In Falbygden finden sich deutliche Gruppen von 5-15 Gräbern, die zu regelmäßiger Anordnung im Inneren tendieren, wobei die größten Gräber sich häufig im Zentrum befinden. Hier sollen die räumlichen Strukturen auf verschiedenen Maßstabebenen diskutiert werden sowie die Frage, ob sie für andere Variablen zu finden sind, etwa Keramiktypologie oder Anlagenarchitektur. Schließlich soll die Frage des Verhältnisses zwischen Falbygden und den umliegenden, nichtmegalithischen Regionen behandelt werden.
In the short time between c. 3300 and 3000 cal BC, at least some 525 dolmens and passage graves were built in Sweden. This region was on the margin of the megalithic phenomenon in Western Europe, and megalith-building was short-lived. Recent overviews of Scandinavian tombs have been published by Tilley (1996; 1999) and Midgley (2008).

The Swedish tombs occur in two distinct types of landscape (fig. 1). In Scania, Halland and Bohuslän, they are found close to the coast. Especially in Bohuslän they are very close to the Neolithic shoreline and have been built in a rocky archipelago, in a strongly marine environment. In spite of this marine focus, the sea seems to have contributed very little to subsistence (Sjögren 2003; 2004a). Instead, terrestrial food, probably from domesticated plants and animals, dominated the diet. Judging from the evidence of macrofossils, pollen and animal bone refuse, the Neolithic economy in Falbygden seems to have been almost exclusively based on domestic crops and animals (Sjögren 2003).

Thus, similar economies and lifestyles seem to have existed in these two very different kinds of landscapes. This is not surprising in the case of Falbygden with its fertile soils, but the fact that a domestic economy and lifestyle also was practiced in the much less favorable coastal area seems to implicate a strong symbolic and ideological significance to this kind of economy.

Adhering to this cultural code would then have been a basic aspect of personhood and identity, a form of TRB habitus underlying the more specific identities defining various tribes, groups, lineages etc., defining codes of behavior as well as socially important values which were aspired to and competed for by these groups.

The megalithic tombs in Scandinavia form part of a complex system of ritual and ceremonial practices, some of which were performed at specific sites or monuments. An overview of such sites in southern Scandinavia includes causewayed camps (Sarup-type monuments), palisade enclosures, cult houses, graves, and deposits of human and animal bodies, pots and axes in wet sites. Many of these features are chronologically and spatially connected, probably forming an inter-
connected complex of ritual practices. This complex seems to have evolved towards a climax in the early Middle Neolithic, at the same time as the majority of megalithic tombs were built (Madsen 1982; 1988; Andersen 1997; 2000). Only parts of this complex are known from western Sweden, but it is not clear whether this is a real difference or due to the limited fieldwork done in the area.

The purpose of this paper is to discuss spatial structure at different levels, from the regional down to the individual body. It is suggested that TRB society showed spatial structure at several levels, and that these are associated with different aspects of social identity. Identity as such is a difficult and floating concept, and the identity of a given individual may well have varied from time to time and place to place, different aspects of identity being activated according to context and suitability.

Regional level

Within Scandinavia, several regions may be identified, each with some distinctive traits, although all within the broad Funnel Beaker tradition. Regional traits include construction features but also details of pottery form and decoration (Bägerfeldt 1992; Persson / Sjögren 2001, Sjögren 2003).

Comparing the tombs in Falbygden with those along the coast, there are some notable differences. The Falbygden tombs are almost all passage graves. Chamber forms are mostly rectangular, with passages placed in the midpoint of the eastern long side (fig. 2). In size, they range from small tombs with chambers just a few m long up to some of the largest tombs in Scandinavia, with chambers almost 17 m long and mound up to 40 m in diameter. Apart from size variation they are rather uniform in construction.

Fig. 2. The passage grave at Luttra Knaggården in Falbygden. Drawing by Nils Månsson Mandelgren 1865.

In contrast, the Bohuslän tombs are generally quite small and architecturally variable. Most tombs in Bohuslän are small polygonal dolmens (fig. 3), but several of the passage graves are also small and dolmen-like in construction, so that classification is sometimes rather arbitrary.

The architectural differences are paralleled by differences in pottery style. In Falbygden, TRB pottery is similar to that found in Scania, with for instance many small and richly decorated so-called brim beakers. These are not found in Bohuslän, where pottery, as well as chamber forms, is more reminiscent of Jutland.

**Geography of ceremonialism**

The distribution of megaliths in no way reflects the actual population. A number of settlements and stray finds as well as indications in pollen diagrams indicate settlement and agricultural activity all over the area, or at least most of it. The geographically most representative indicator is the finds of thin-butted flint and stone axes. These axes are deposited in a number of different contexts; in graves, hoards, bogs, on settlements and as single finds without known context. A number of biases affect the known distribution of axes. A major factor is the intensity of contemporary agriculture, since most axes have been found in ploughed fields or during agricultural work. Compensating for this, we get three distinct regions with high densities of axes: southern Halland, central Bohuslän, and Falbygden (fig. 4). These are all regions with concentrations of megalithic tombs.

It may be suggested that two basic factors affected the distribution, namely population density and the intensity of certain ceremonial practices involving the deposition of axes.

A number of earlier studies (Olausson 1983; Sundström 2003) have demonstrated that long axes were selected for deposition in bogs or in hoards. The areas with a high density of axes in western Sweden, in particular Falbygden, also turn out to have a high proportion of long axes. In these areas, the proportion of flint to stone axes is also high. This suggests that the concentrations of thin-butted axes may be partly explained by a high level of ceremonial depositions in these areas. In other words, the areas with many megalithic tombs are associated with a high level of ceremonial axe deposits.

Taking the effect of differing ceremonial activities into account, the remaining difference may be mostly due to population density. Thus, it is suggested that the population of Falbygden was about 30% more dense than that of the surrounding areas (Sjögren 2003).
At this level, it may be suggested that such large-scale regional patterns reflect aspects of social identity connecting people over large areas, each region consisting of a symbolic and ceremonial ‘centre’, with surrounding groups attaching themselves in various ways to these centres. One of the main questions in this context is how the relation between megalithic and non-megalithic regions should be conceived. Did megalithic areas form separate ‘ethnicities’ socially and demographically distinct from other areas, or did groups in megalithic areas stretch out across such boundaries, including people in non-megalithic areas? Was there direct communication between megalithic areas, perhaps at an elite level, bypassing intermediate regions?

**Human and animal mobility**

New insights into the relations between different megalithic and non-megalithic regions have recently come from strontium isotope...
analysis of the human bones found in the Falbygden tombs. The Falbygden area is ideal for isotopic studies of human movement in the past. It is essentially a small “island” of relatively young marine deposits, largely limestone, surrounded by much more ancient, gneissic terrain of metamorphosed igneous rocks. On top of these bedrocks, sediments have been deposited as glacial till, composed of largely local materials spread from northeast to southwest across the area.

Analysis of $^{87}$Sr/$^{86}$Sr isotopes in human tooth enamel has been undertaken by Douglas Price (Sjögren et al. 2009). The result are summarised in fig. 5. The human values show a rather distinct separation into three groups, a primary group with ratios 0.714–0.717 and two smaller groups with higher values. This pattern would indicate places of origin in three geologically distinct regions. Most probably, the larger group with lower values consists of people born locally, while the other two groups are formed by immigrants. While the cutoff value and therefore the exact number of immigrants may be discussed, it seems clear that the number of outsiders moving in is substantial, somewhere around 25%. The distinct separation among the groups also indicates that Falbygden has received immigrants from more than one source area.

While it is not possible to pinpoint exactly the areas of origin, there is nothing in these results that indicates very long distance travels. Origins in southern Scandinavia or northern Germany may be ruled out, since these areas are geologically very young, with Sr values at 0.709–0.71. Likewise, origins in eastern Sweden are unlikely because of the higher ages of these bedrocks (Sr values at around 0.725–0.73). What remain as probable source areas are the non-megalithic gneiss regions of western Sweden, in particular to the west and southwest from Falbygden.

These results show that Falbygden was not isolated from the surrounding non-megalithic areas, but had close social exchanges with them. We can now ask about the content of these exchanges, i.e. what social mechanism lay behind the movements of people?

Marriage exchange is perhaps the simplest mechanism to explain movements of this scale. If this was the case, we should expect...
movement to involve primarily adults, while children were buried near their place of birth. Also, if marriages were either patri- or matrilocal, we would expect to see a difference between sexes regarding frequency of movement.

These questions are currently being explored, but preliminary results indicate that in fact none of these scenarios apply. Both sexes move in equal proportion, and children move in the same proportion as younger adults, while older adults seem to move more frequently. At present, marriage exchange does not seem to explain the movement patterns very well, and we must probably look for other factors contributing to movement.

One possibility to bear in mind is that of people being moved after death, to be buried in an ancestral tomb possibly far away from the place of residence. To check this possibility, we would need a method indicating place of residence in the latest years of life, something which at present is very difficult.

Another aspect of on-going work concerns the movement of domesticated animals; cattle, sheep and pigs. The results obtained so far indicate that in particular cattle were moving to a large extent, while pigs stayed at their place of birth. In fact, more than half of the cattle analysed were born outside Falbygden. Moreover, the source areas are more varied and in several cases different from human migrants, suggesting a different kind of network for these movements.

Falbygden: landscape and tombs

The particular geology of Falbygden gives this region several distinguishing features. The diabase-capped plateau mountains (Mösseberg, Älleberg, Billingen, etc.) have characteristic profiles visible over large areas. The flat limestone plateaus below them are good agricultural lands. The vegetation in Falbygden is different from that of the surrounding areas and contains several unusual species.

Thus, Falbygden is distinctive; it is clearly distinguishable from its surroundings both in terms of topography and vegetation (fig. 6). It is also clearly bounded by escarpments or slopes in most directions, although not so clearly towards the south. Moreover, its mountain tops are visible over large areas and would have formed points of orientation and reference already from the arrival of the first humans. Finally, it has a definite horizontal and vertical structure formed by horizontal limestone areas bounded by escarpments where other rocks such as alum shale and slate come out. Centred on the limestone flats, plateau mountains rise sharply.

Fig. 6. Landscape view of the western border of Falbygden. Part of Gökhem parish as seen looking west from the top of Mösseberg mountain. Open cultivated land is limestone plateau, beyond it is the forested primary rock areas outside Falbygden.

Abb. 6 Blick auf die Landschaft an der westlichen Grenze Falbygdens. Wir sehen einen Teil der Gemeinde Gökhem von der Spitze des Mösseberges westwärts schauend. Das offene, bebaute Land ist das Kalksteinplateau, unterhalb dessen sehen wir die bewaldeten Gebiete des Urgesteins außerhalb Falbygdens.
Apart from the connection of the tombs with the plateau mountains and the Cambrio-Silurian rocks, no clear relation between tomb locations and natural features is to be found (fig. 7). As regards terrain forms, tombs are usually found on minor elevations, but not in very prominent locations. Even within the close neighbourhoods, tombs are not usually located on the highest points.

Visibility analysis indicates that the passage graves in Falbygden are located on points with only restricted visibility. Often, points with larger views may be found in the close vicinity. Neither are they placed to maximize intervisibility between tombs. In some cases, visibility areas seem to exclude each other, and in other cases intervisibility is restricted to a few tombs, despite the close spacing. Furthermore, the tombs are all on the same level in terms of visibility, independently of the degree of monumentality. No graves seem to occupy a more central or strategic position in this respect.

**Within Falbygden: spatial clusters**

The study of spatial variation within Falbygden shows some interesting patterns, which do not seem to relate to the natural background but rather to the human organisation of landscape. As seen in fig. 7, the tombs seem to be clustering into a number of local tomb groups. A number of spatial statistics indicate that the tombs do indeed deviate from a random pattern and tend to be more closely spaced than would be expected from a random placement (Sjögren 2003).

On this basis, the tombs may be spatially divided on two levels, called sectors and groups. Six sectors are defined, and it is argued that spatial separation on this level can be largely explained by natu-
Fig. 8. Spatial clustering at the sector level (Sjögren 2003, Fig. 12, 2).

Abb. 8. Räumliche Gruppierung auf Sektorenebene (Sjögren 2003, Fig. 12, 2).

Fig. 9. Spatial clustering at the group level (Sjögren 2003, Fig. 12, 6).

Abb. 9. Räumliche Gruppierung auf Gruppenebene (Sjögren 2003, Fig. 12, 6).
Between-group variation

If identity was reproduced at this level, it might be expected that constructional and typological traits would exhibit spatial variation distinguishing them from each other. Owing to source-critical problems, only a few features may be discussed in more detail. Some of these show no spatial tendency within the area, while a few show some spatial variation on a larger scale than the groups defined.

One feature, however, shows a clear spatial patterning, probably due to the fact that it has been recorded more systematically. This is the orientation of the tombs, as measured by the orientation of the chambers. Chamber orientation shows a localized pattern, in which neighbouring graves tend to have a more similar orientation than more distant ones (fig. 10). Local groups are usually characterized by one dominant orientation, often different from neighbouring groups, while at the same time similar orientations characterize groups at some distance from each other. This pattern is interpreted as reflecting the existence of larger social groups in Falbygden, possibly similar to clans or lineage groups. A local group would then be related to other groups, although not necessarily to the geographically closest. Instead, the suggested picture is one of different and presumably competing groups being geographically interspersed.

This idea may to some extent be supported by studies of pottery style, although the material at hand is still rather small. Looking at details in pottery decoration, there seems to be no correlation between spatial proximity and similarity in pottery style. Pottery style is partly individual, i.e. characteristic for particular sites. Some
close neighbours, such as the passage graves at Rössberga and Jakobsberg, show differences in the execution of similar patterns, and passage graves at some distance from each other sometimes have more similar styles than graves that are close to each other (Persson/Sjögren 2001).

Further, there are differences between the central and peripheral parts of Falbygden. The centre is distinguished by higher density and closer packing of tombs. In general, the largest tombs are also to be found in the centre, although the size variation within groups is also considerable. Several explanations for this may be possible: different population densities, different sizes of social groups, different positions within a lineage organization, or differing access to ideologically important resources, such as the plateau mountains.

Tombs and settlements in Karleby

The structuring of space on a detailed level can be approached using the example of Karleby parish, which has been surveyed recently. In Karleby, a number of tombs, settlements and other finds are known. The distinct topography makes it ideal for discussing Neolithic landscape use. At least 12 and possibly 14 passage graves are known. They are located more or less in a line along the limestone escarpment running north-south through Karleby (fig. 11–12). More than 80 settlement sites are known, of which 17 may be dated to the Funnel Beaker period. None of these settlements have been found in the immediate vicinity of the tombs. Most of them are on a terrace east of and below the tombs, about half way down to the bog in the bottom of the Åsle valley. Two more groups lie to the west of the tombs, adjacent to smaller wetlands. Similar, but less clear, patterns may be seen in other areas of Falbygden. The distances between tombs and settlements are not very large, around 3–500 m, but form a consistent pattern of separation between settlement and tomb locations. A similar situation applies in Bohuslän, where distances are of the order of 1–2 km.

Looking at the relation between tombs and settlements, a clear pattern emerges, with graves and settlements occupying different positions in the landscape (fig. 12). Also, they are not visible from each other. The position of tombs seems to be one of spatial separation from settlements, but also one of transition from the more to the less domesticated. The tombs are not located centrally in relation to territories, but on the margins of cultivated areas. The liminality of the tombs, as mediating between the living and the dead, is then paralleled by a liminal position in the landscape.

What emerges seems to be a contradiction between, on the one hand, the monumentality, durability and long-term use of the tombs.

Fig. 11. Air photo of Karleby as seen looking north. Left of the village is the limestone plateau with passage graves beyond the church, to the right of the village is the slope with settlement sites.

and, on the other hand their withdrawn position in the landscape, rather emphasizing seclusion and marginality.

Perhaps this can be linked to certain traits in the Neolithic worldview, in which reference to the ancestors formed an important part of the construction of social identity. The ancestors were important, but at the same time potentially dangerous, as were perhaps the ceremonies by which the newly dead were transformed into ancestors. These rites were then relegated to special places and probably visited only on special occasions. The Neolithic world-view may be said to have been directly linked to the landscape, and the megaliths by their physical presence would have demonstrated the validity of the dominant ideology in a forceful way.

The individual

Two recent excavations, at Landbogården and Frälsegården in Falbygden, allow some new insights into the burial practices in passage graves, and by extension into the handling of identity at the most basic level, that of the individual itself. At both sites, a series of virtually complete, articulated skeletons were found, along with partial skeletons, disarticulated bones and some bones which seem to have been treated in a special way.

The passage grave at Landbogården was excavated in 1987 (Bägerfeldt 1987; 1992; Sjögren/Persson 2001). Osteological material from the tomb has been analysed by Ahlström (2009), light isotopes by
Lidén (1995) and strontium isotopes by Price (Sjögren et al. 2009). The tomb is one of the smallest known from the area, with a rectangular chamber of limestone slabs only 2.7 x 1 m and a c. 4 m long passage leading from the eastern side. Notably, a series of articulated skeletons were found, along with a scatter of disarticulated bones. In the passage, a distinct bone package contained the bones of two people, an adult male and a c. 6 years old child. The dating of the articulated individuals has been controversial, but a recent series of re-dates suggest that they were all deposited about 3000–2900 cal BC, i.e. rather late in the use life of the tomb (Sjögren i. pr.).

The passage grave at Frälsegården was excavated 1999–2001 (Axelsson / Sjögren 2001; Ahlström 2004; 2009; Sjögren 2008). In spite of heavy damage and continuous overploughing since the beginning of the 1900’s, a fairly well preserved bone layer was found. The great majority of finds consisted of unburnt human and animal bones. More than 9800 fragments have been recorded, of which 8381 have been determined as human and 268 as animal (fig. 13). These finds are currently being analysed in detail within the project “Anonymous ancestors?” funded by the Bank of Sweden Tercentenary Foundation (Sjögren / Ahlström i. pr.).

Among the bones, several articulated skeletons and partial skeletons were found, ranging from almost complete ones to body parts with just a few bone elements (fig. 14–15). A number of skeletons were found lying on their side in strongly contracted position, suggesting some form of binding or wrapping.

No artefacts could be definitely associated with any of the articulated skeletons. The most common artefacts, amber beads, formed a dense scatter with the same general distribution as the human bones. Nor were there any indications of different treatment of the dead as regards for instance body position according to sex or age.

Along with articulated bones, a large number of disarticulated bones were also found. Indications of special treatment for some body parts were also noted, such as a group of three skulls in the northern part of the chamber.

Comparing the 14C datings of femurs belonging to articulated vs. disarticulated skeletons, it is interesting to note that disarticulated bones tend to get early dates, while articulated ones are dated later in the sequence. Also, the best preserved skeletons tend to be the
youngest ones, with dates in the same range as the skeletons from Landbogården, c. 3000–2900 cal BC (fig. 16). This suggests that the disarticulation process is something which largely took place within the chamber, and may probably be the result of repeated burials and rearrangements.

In other words, the situation is best explained if we assume that most bodies were put in the chamber soon after death, before decomposition of the soft tissues, i.e. as primary burials. This does not exclude the possibility of different rituals being applied in some contexts, or to some categories of bone such as skulls. However, the widespread use of a prolonged secondary burial rite, involving deliberate decarnation and dissolution of the individual body does not seem to fit the evidence from Falbygden (Sjögren 2010). Whether such practices can be sustained for other Scandinavian regions, as has been suggested (Andersen 2000; Tilley 1996; 1999; Shanks / Tilley 1982), is a matter for future analysis.

In such a case, buried bodies could very well have retained their form and their individuality for long periods, maybe several generations. This would have been further supported by the effect of clothing, binding, skin wrapping etc.
What mattered, then, was not so much the bodily transformation of deceased members of the community, but to retain them as individuals, and probably to keep track of and maintain very specific genealogical links between people, some living and some dead. This could indeed have been a forceful tool for manipulation by genealogical and ritual specialists. It also suggests that ideology in this case would not have been functioning as a mask for social realities, but rather have had a demonstrative function. Sustaining claims for rights and status would have been linked to the ability to show the legitimacy of certain ancestral links, indeed important aspects of social identity.

Summary

In this paper, I have suggested that spatial organisation is visible on several scales in the west Swedish TRB, from the regional down to the individual level, and that these are associated with different aspects of social organisation and social and individual identity. If structure is visible in the landscape, this may correspond to certain enduring aspects of the social construction of individuality, but is not necessarily translatable into individual identity, which is probably always floating and subject to contextual interpretation and negotiation. What we can see as archaeologists are the more stable infrastructures of identity, of which individuals make use in pursuing their particular projects.

There are also indications that social groups were not always confined to very local areas but could stretch out and include people in

Fig. 16. **14**C dating of articulated vs disarticulated femurs at Frälsegården. The dating of a skull from the group in the northern end is also included.

Abb. 16. **14**C-Datierung der artikulierten gegenüber den disartikulierten Femuren von Frälsegården. Ebenfalls aufgeführt ist die Datierung eines Schädels von der Gruppe am Nordende.
different regions, creating a complex and probably overlapping net-
work of groups and identities over much of western Sweden, and
possibly outside the region. Though these networks, a flow of peo-
ple was channelled, but also of cattle and of artefacts such as flint
axes and amber beads. Certainly, archaeologically invisible flows
would have included things like socially important knowledge and
social alliances.

A further point is the use of landscape as a metaphor for social
identity, reworked though the transformation of landscape through
human activities such as monument construction, clearing forest,
agriculture and so on.

Finally, the emphasis on ancestral legitimacy is maintained through
the activities concerned with the dead, perceived not as a homoge-
 nous mass but as specific persons whose individuality was preserved
long after death.
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