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The Bronze Age Barrow as a Symbol

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Abstract

The paper explores ideas as to what Bronze Age barrows could have symbolized in the society in which they functioned as living symbols. Four possible concepts are discussed: continuity, collective, context, and hierarchy. Source material is taken from five areas in Scania where there is adequate data from excavated barrows to test the ideas: southern Halland, the parish of Raus, the island of Ven, Abbekås and the area around the city of Ystad.

The Bronze Age barrow - a symbol för whom?

"Beauty is in the mind of the beholder", according to the old saying. It seems reasonable to assume that the symbolic meaning or meanings of Bronze Age barrows differs according to the perceiver. For me, having grown up in the United States, the Swedish Bronze Age barrow symbolizes a potential source of information about the Bronze Age. I should imagine that Rolf Petré has a more complex relationship to the barrows, seeing them not only objectively as a source of information, but perhaps also subjectively as the final resting place for people who were, however tenuously, related to him. A modern farmer or highway planner might well regard the barrows as a source of irritation – something which causes additional trouble and cost. Whatever our modern reaction to these monuments is, I maintain that the symbolic messages the barrows may carry are not integrated in our consciousness in the same way as I would imagine they were in the consciousness of members of Bronze Age society.

I assume that the barrows were intended to be active bearers of messages meant for those people who raised and cared for them. Trying to decode such messages is of course an impossible task for us, however. The best we can hope to accomplish is to arrive at some understanding, although fragmentary, of some of the meanings such phenomena *could* have had for members of the contemporary society. This we may attempt to do by means of description, comparison, analogies, and references to our own worldview.

My intention in this article is to discuss what Bronze Age barrows could have symbolized in the society in which (I presume) they functioned as living symbols. I will examine various possible concepts which may have been of importance for members of Bronze Age society and which led them to erect barrows. Examples to illustrate my points will be chosen from a number of geographical areas where appropriate source material is available. These areas include: southern Halland, the parishes of Raus and Valleberga, the island of Ven, Abbekås, and the area around the city of Ystad (Fig. 1).

Continuity

Since most of the Bronze Age barrows in southern Scandinavia contain burials datable to more than one of the Bronze Age periods (as defined by Montelius), they could have symbolized continuity through time. This is one symbolic meaning we archaeologists attribute to them today, and I suggest it was also true for the Bronze Age context in which the barrows were used.

In her study of Scanian Early Bronze Age burial (Håkansson 1985), Håkansson was able to show that barrow burial occurred during periods II and III of the early Bronze Age (Fig. 2). Similar statistics can be arrived at by investigating a smaller area, such as for instance the

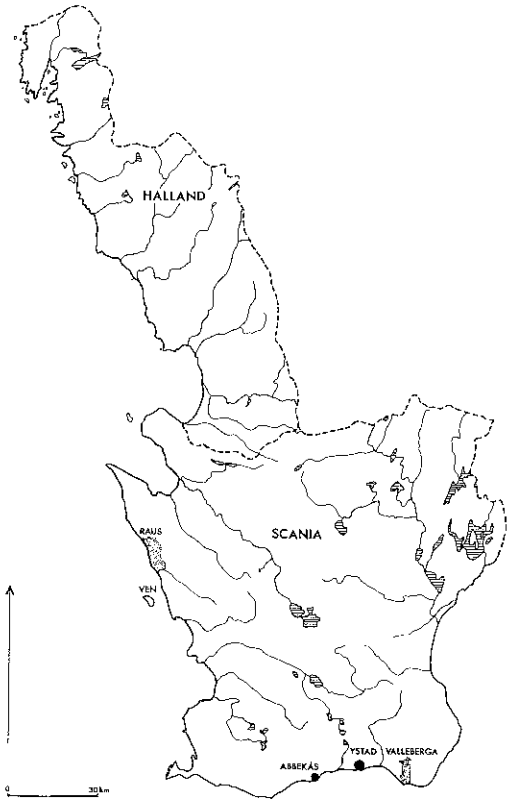

Fig. 1. Map showing the location of the places mentioned in the text.

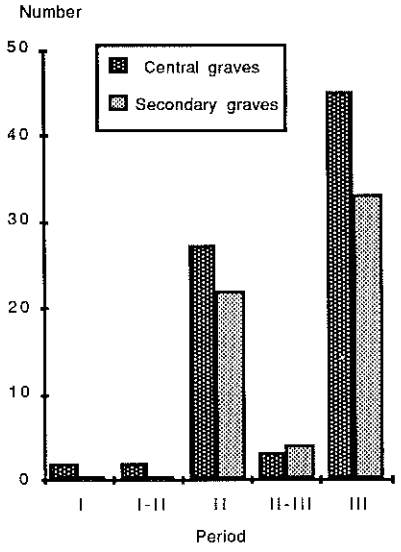

Fig. 2. Diagram showing the distribution of early Bronze Age burials in barrows, either as central interment or secondary burial. Data are compiled from Håkansson 1985.

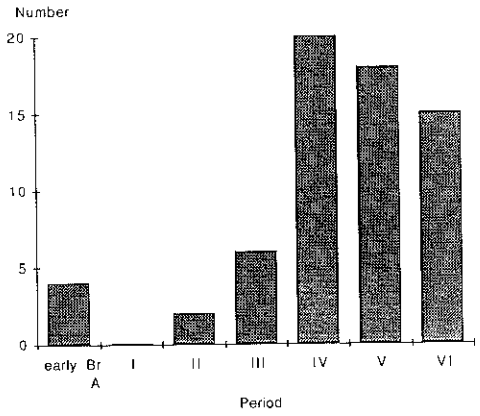

Fig. 3. Diagram showing the distribution by period of dated burials in the Köpingehögarna barrows. Compiled from data in Persson 1978

so-called Köpingehögarna in the parish of Raus. A complex of eight partially excavated Bronze Age barrows here demonstrated barrow use from period II (Fig. 3). All the barrows except Barrow V have burial episodes from the Early to the Late Bronze Age (Persson 1978). In another area, the parish of Stora Köpinge east of Ystad, the barrows illustrate similar continuity. Here, however, the majority of the burials in barrows was concentrated to the Early Bronze Age (Fig. 4).

In her Hagestad investigations, Strömberg placed particular emphasis on the question of whether the erection of burial mounds showed continuity from the Late Neolithic. She noted several cases where Bronze Age barrows were erected on Late Neolithic cemeteries (Strömberg 1984:63). The barrow at Valleberga 5^6 is an especially clear example of spatial continuity (Fig. 5). The first individual buried here was laid in a cist in a flat-earth grave (Grave A) during the Late Neolithic or Early Bronze

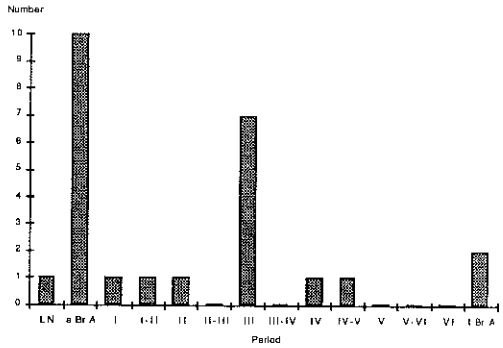

Fig. 4. Diagram showing the distribution by period of dated burials in the barrows from the parish of Stora Köpinge. LN= late Neolithic, e BrA= early Bronze Age,

Age. Grave B, about 1.5 m deep, contained an individual in an oak coffin. The contents of this grave could also be dated to the Late Neolithic or Early Bronze Age. The first barrow erected here (Barrow 1) was a sod mound which partially overlapped Grave B. Barrow I was raised over an individual in his teens (Grave C) during Bronze Age period II. The barrow was considerably expanded in connection with the next phase of burial, which occurred during the succeeding period III. This time the barrow was erected over a double burial (Graves D:I and D:II), containing a male and a female. The double burial illustrates continuity with the later Bronze Age, since one of the graves contained an inhumation burial in an oak coffin, while the other consisted of a smaller oak coffin containing poorly burnt bones (Strömberg 1975).

The barrow at Valleberga 5^6 occurs in an area with a high concentration of barrows, several of which have been investigated by Strömberg. Taken together, these barrows strengthen the impression of continuity given by Valleberga 5^6. Slightly southwest of this is the barrow at Valleberga 6^7, whose central grave was not excavated but which also contained a wealthy burial which Strömberg suggests was contemporary with Grave C at Valleberga 5^6 (see fig. 25) (Strömberg 1975:40). Southeast of Valleberga 5^6 we find the barrow at Valleberga 5^2 containing at least nine graves including one rich inhumation from Bronze Age period II-III (Strömberg 1974:114). Taken together this collection of barrows serves as an illustration of the concepts of both continuity and collective (see below).

It is possible to cite further concrete examples showing that the Bronze Age barrow could have symbolized chronological continuity even for its Bronze Age contemporaries. One example is the barrow at Stora Köpinge 33:19, Skogsdala (Fig. 6) (Jacobsson 1986). The site has an interesting and long history, which began with the erection of a rectangular dolmen

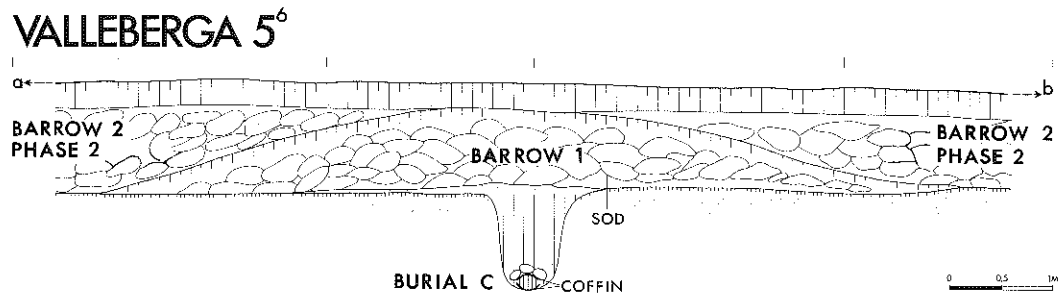

Fig. 5. Profile of the barrow at Valleberga 5^6, which contained two phases of barrow construction and involved five burials. From (Strömberg 1975:20).

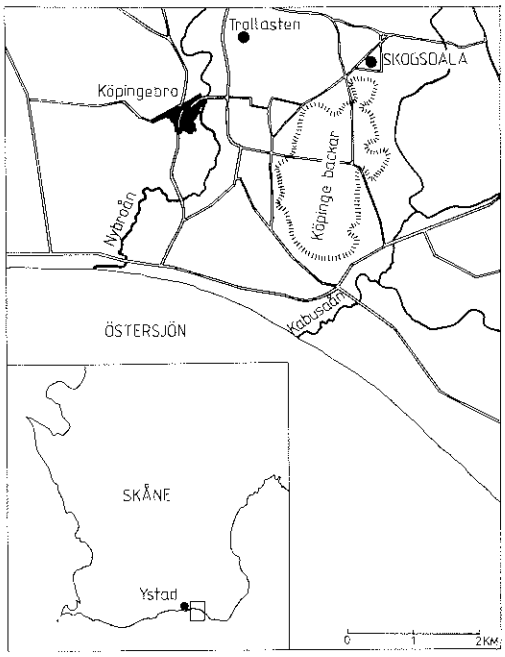

Fig. 6. Map of the Stora Köpinge area with the site of the Skogsdala barrow marked (Jacobsson 1986:Fig. 1).

containing one burial during the Early Neolithic (Fig. 7). In the Early Bronze Age, a stone ring was placed around the dolmen and a barrow consisting of topsoil and sand was raised here. The barrow was used for burial for at least nine more individuals during the Early Bronze Age, and both inhumation and cremation are represented. Other features such as refuse pits and hearths datable to the Bronze and Iron Ages could be discerned around the mound. Clearly Skogsdala, first as a dolmen and later as a barrow, represented a center for human activity over a long period of time.

Another very clear example of barrow buri-

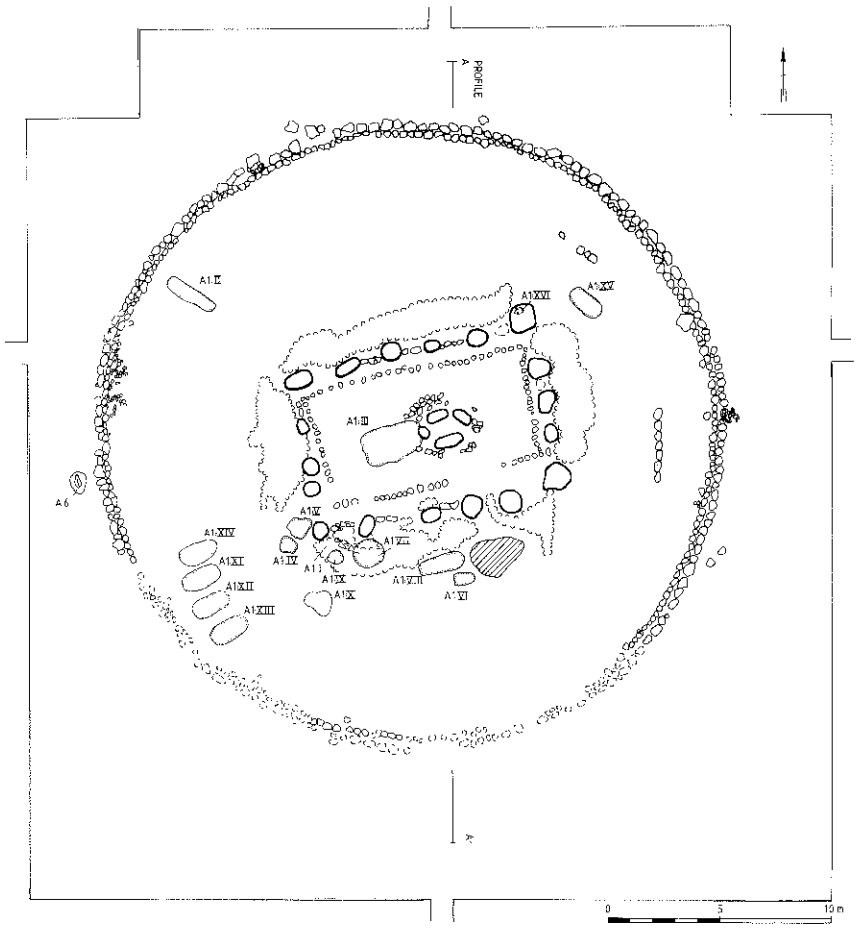

Fig. 7. Plan of the barrow at Skogsdal (Jacobsson 1986: Fig. 3).

al-place continuity covering the Stone and Bronze Ages was encountered during the excavations of four of the barrows at Abbekås in the early part of the 20th century (Hansen 1923-24). Seven inhumation burials and a stone cist were discovered under the eastern half of one of the barrows. The stone cist was only partially preserved, and although the grave had been disturbed, Hansen estimated that it had contained five or six burials. One dagger of flint and one of bronze were recovered. Hansen writes that the barrow was raised over the stone cist during the Late Neolithic, covering everything but the entrance (Fig. 8). He interprets the presence of bronze artifacts in the stone cist to mean that it continued to be used for burial even after the barrow was constructed. A thick layer of clay had been used to cover the roof of the stone cist and to prevent seepage of soil from the overlying barrow (Hansen 1923-24).

We could of course continue to list examples to illustrate that Bronze Age barrows symbolized continuity pointing both backwards and forwards in time. Barrows were not simply constructed and then forgotten; rather they continued to function actively in burial rituals for longer or shorter periods afterwards. Essentially the same aspects of ritual were repeated time and again at the same barrow: new layers of soil and grass, surrounded by new stone rings, could be added with subsequent interments. I feel that this is an adequate basis for maintaining that the barrows functioned as reminders of continuity even for the Bronze Age people who built and used them.

Fig. 8. Photograph showing an accumulation of human bones in the Late Neolithic stone cist under Barrow I at Abbekås. The photograph was taken by Folke Hansen during the investigations of 1920-23.

Collective

Closely connected with the barrows' role as a symbol of continuity is their possible function as a symbol for a collective group of people. With their repeated use as burial places and containing individuals of both sexes and various ages, barrows often give the impression of having been regarded as cemeteries for a group, perhaps a kin group.

In order to investigate this idea it should prove fruitful to look at how many burials Bronze Age barrows do in fact contain. Kristiansen cites a figure of on the average five adults per barrow in Denmark (Kristiansen 1985:125) . However it is more difficult to calculate a similar figure for the Swedish barrows, since so few of them have been excavated. In an effort to arrive at some estimate, we can take a closer look at several restricted areas from which figures are available. One of these is southern Halland, where 235 Bronze Age graves have been recorded in the 76 barrows which were investigated here during the period 1854 to1970 (Lundborg 1972). Here too the aspect of continuity is apparent, since 20 of these 235 graves are inhumations from the Early Bronze Age, while the remaining 215 are Late Bronze Age cremations (Lundborg 1972:121).

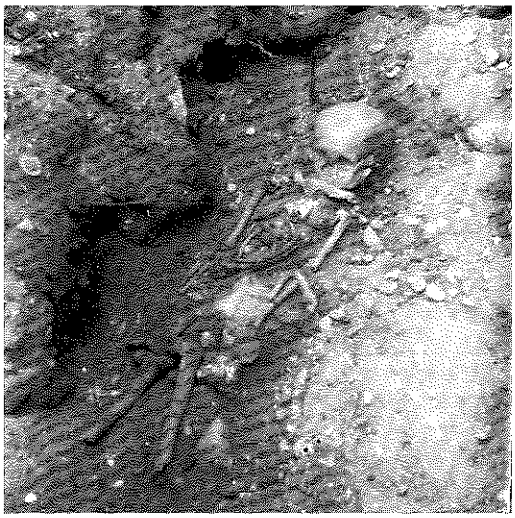

Fig. 9. Child's skeleton from Abbekås, Barrow I. Photograph taken by Folke Hansen during the investigations of 1920-23.

This means an average of 0.3 Early Bronze Age and 2.8 Late Bronze Age graves per barrow. Burial contents in the four excavated barrows at Abbekås varied from two to nine, with an average of 6.8 graves per barrow, all dating from the Early Bronze Age. The 13 excavated barrows in the Ystad region contained an average of 0.8 Early Bronze Age and 1.6 Late Bronze Age graves per barrow (Olausson 1992).

Folke Hansen writes in his report on the Abbekås investigations from 1924: "We find skeletons of men, women and children in the barrows. A newborn baby was buried just outside of Barrow I. Each barrow was probably intended for a family or a kingroup" (Hansen 1923-24:47; my translation) (Fig. 9). In order to try to find out whether barrows might be family burial places we can examine which members of society were buried in barrows. Tab. I contains data on osteologically sexed graves in barrows and flat-earth burials in selected parts of southern Sweden, while fig. 10 shows data on the investigated burials in the eight Köpingehögarna barrows. The latter have not been osteologically sexed, but Persson's determinations based on gravegoods show that the proportion of female burials increased during the course of the Late Bronze Age, dominating entirely by period VI (Persson 1978:67). In a normal population we could expect a ratio of males to females of 1:1. Tab. I clearly shows deviation from this ratio, but how do these figures compare with statistics from a larger sample of prehistoric burials? Based on a random sample of osteologically analysed prehistoric single graves and cemeteries from southern and central Sweden, Welinder found that the ratio varied from 0:7 to 1:7 (Welinder 1979:70). The sample taken from the period Late Neolithic - Early Bronze Age showed a ratio of 1:7 (Welinder 1979:Table 4). The figures for Scanian Bronze Age burial therefore fall well within these ranges.

Table I. Osteologically sexed graves in barrows and flat-earth burials from selected parts of southern Sweden. Compiled from data in [1] Håkansson 1985, [2]Jonsson 1972 and [3]Szalay 1987.

	SEX		
	Female	Male	Ratio F:M
Barrow burial:			
Early BA, Scania[1]	3	16	1:5
Cremation, s. Halland[2]	12	22	≈1:2
Flat-earth burial:			
Cremation, Svarte[3]	6	15	≈1:3
Cremation, Piledal[3]	6	15	≈1:3

Table II. Distribution of age classes for graves in barrows and flat-earth burials from selected parts of southern Sweden. Data are compiled from figures in [1]Håkansson 1985, [2]Jonsson 1972, [3]Szalay 1987 and [4]Johnsen-Welinder & Welinder 1973:66.

	AGE			
	<0-14 yrs	14-20 yrs	≥20 yrs	Σ
Barrow burial:				
Early BA, Scania[1]	35%	19%	45%	31
Cremation, s. Halland[2]	14%	7%	79%	44
Flat-earth burial:				
Cremation, Svarte[3]	41%	2%	57%	58
Cremation, Piledal[3]	19%	9%	72%	58
Deaths per 100 yrs.	59%	4%	37%	265

The observation that male remains are more common than female remains in both barrows and flat-earth burials could be attributed to a number of factors which have nothing to do with prehistoric social practices, however. Errors in osteological sexing or biased representativity can distort the observations. Further, results from osteological analysis of cremation graves are naturally more uncertain than for inhumation graves, due to the fragmentary condition of the former. Were it possible to rule out these source-critical errors, we could conclude that males were more likely than females to be buried in barrows. In view of the nature of the data, however, it seems risky to draw such a conclusion.

Data on the distribution of age classes for the same populations are shown in tab. II. For purposes of comparison we have included data cited in (Johnsen-Welinder & Welinder 1973: 66), showing the distribution of age at death for 265 Swedes of a population of 100 over a 100 year period around 1750. The figures for the Bronze Age samples vary widely and it is not possible to discern any significant correlation between burial treatment and age at death. Comparison between these figures and historical data shows that children are underrepresented while juveniles and individuals over 20 years old are overrepresented in the Bronze Age grave material. Does this mean that children were less likely to be buried in barrows or flat-earth gaves during the Bronze Age than in the 18th century? Once again, we are constrained from drawing too many conclusions from this data by the possibility that source-critical factors and problems of identification of cremated bone, rather than prehistoric choices, have distorted the picture.

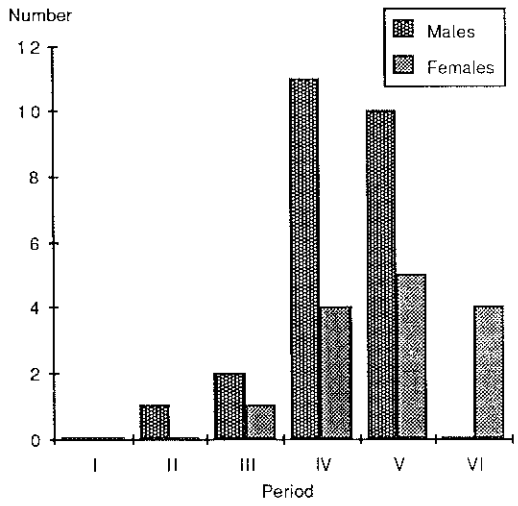

Fig. 10. Distribution of male and female graves by period in the barrows of the Köpingehögarna. Data compiled from Persson 1978.

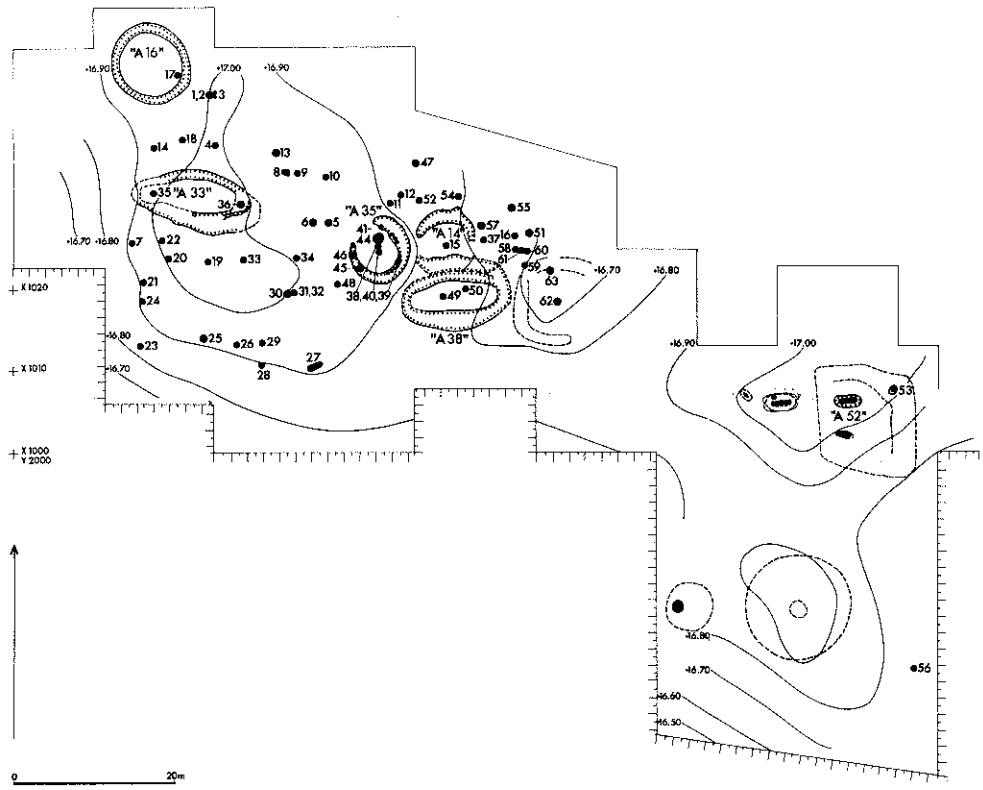

Fig. 11. Plan of the cemetery at Piledal, showing the position of ploughed-out barrows and ship settings from the Early Bronze Age together with simpler flat-earth cremation burials from the Late Bronze Age. Numbers and symbols refer to Olausson 1987:Fig. 4.

Even though we must be cautious in drawing conclusions from these data, this brief examination of aged and sexed burials in barrows has shown that both men and women received this treatment. Children and teenagers are also present in barrows, although in somewhat smaller numbers than adults. An interpretation of the barrow as a cemetery for a family, and not just reserved for certain members of society, thus gains some support from these statistics.

In his article on Abbekås, Folke Hansen arrives at one further conclusion which is relevant for interpreting barrows as symbols of both continuity and collective. He writes "Numerous flat-earth burials from period II of the Bronze Age were found in close proximity to Barrows I and II. This proves that both flat-earth burial and burial in a barrow occurred in the same location during the Early Bronze Age. Therefore there was probably no cultural difference between these forms of burial" (Hansen 1923-24:47; my translation). Scanian barrows can occur in various patterns: singly, clumped together, or in cemeteries together with flat-earth burials. For instance, three barrows containing Early Bronze Age central graves occurred together with Late Bronze Age flat-earth graves in the cemetery at Piledal (Fig. 11). Similarly, barrows were found directly associated with flat-earth burials in the cemetery at Svarte (Olausson 1987). The other phenome-

Table III. Percentage of Late Bronze Age graves with and without bronze objects in selected areas of Scania. [1]Olausson 1987; [2]Strömberg 1975:262 f.; [3]Thrane 1984:160.

BRONZE OBJECTS IN LATE BRONZE AGE GRAVES

	Secondary burial in barrow	
	Bronze	No bronze
Stora Köpinge parish	83%	17%
	Flat-earth burial	
	Bronze	No bronze
Piledal[1]	22%	78%
Svarte[1]	57%	43%
Löderup[2]	41%	59%
Simris[2]	50%	50%
Ingelstorp[3]	51%	49%

non, that is the erection of barrows in concentrations, can be seen in many parts of the area studied in the Ystad Project (Fig. 12).

Erecting an earthen barrow or adding to it involves greater effort than sinking a simple grave under the ground surface. Once the barrow was built, did Bronze Age people prefer to bury their dead as secondary interment in a barrow rather than under the ground surface as a flat-earth grave? Hansen maintains that "a class difference is however possible. Only the most highly ranked kin members were laid to rest in the barrows" (Hansen 1923-24:47; my translation). An analysis comparing for instance the amount of bronze in Late Bronze Age flat-earth graves vs. the amount in Late Bronze Age barrow burials could be used to test this idea. Unfortunately, because most of the published figures for Late Bronze Age graves do not make a distinction between secondary burial in barrow and flat-earth burial, it is difficult to arrive at conclusions which may be regarded as true for Scania as a whole. Tab. III shows a tabulation of data on secondary burials datable to the Late Bronze Age in the barrows in the parish of Stora Köpinge. These are compared with published data on Late Bronze Age flat-earth graves from four cemeteries in or near Stora Köpinge parish. In the 12 Late Bronze Age burials in barrows for which data are available, 10, or 83%, contain bronze while two graves do not. This figure probably represents a higher proportion of graves containing bronze than was actually the case, since it is mainly through metal finds that it has been possible to date cremation burial to the Late Bronze Age. Many of the graves lacking bronze would therefore not be recognized as dating to the Late Bronze Age, even if they did occur then, and are therefore underrepresented in the table. By comparison, we see that Late Bronze Age flat-earth graves in cemeteries in or around Stora Köpinge parish are less likely to contain metal than the secondary barrow graves are. We must point out another source-critical difficulty with these figures, however. Since bronze gravegoods were usually placed at the top of the filling in the urn, many urn burials may have lost eventual bronze objects through damage by modern ploughing, causing the figures for "no bronze" to be too high. I suspect this is the explanation for the high values from the Piledal cemetery, since this cemetery was the one subject to ploughing the longest of the four shown. In spite of these difficulties, the main trend is evident and bears out the suggestion of differential treatment. It appears that secondary burial in a barrow was not an option available to all social classes.

It is clear that the Scanian Bronze Age bar-

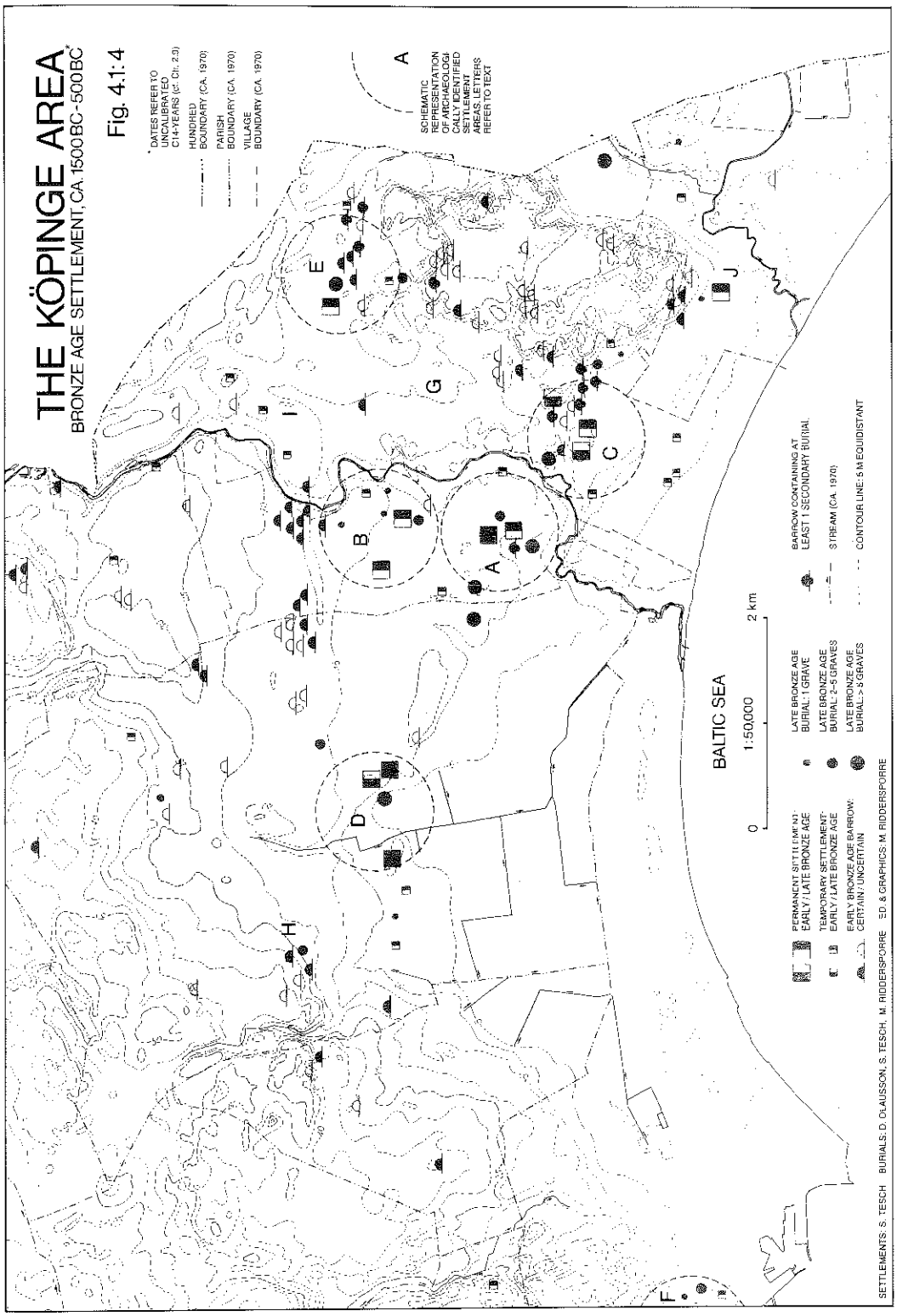

Fig. 12. A map of the Stora Köpinge area, showing evidence for burial and settlement from the Bronze Age (Berglund (ed.) 1991:Fig. 4.1.4)

rows were used for repeated acts of burial and that they contain several individuals. All ages and both sexes are represented. A limited analysis of burial goods seems to indicate that there is some rank distinction being expressed in secondary burial in a barrow as opposed to flat-earth burial. Taken together I maintain that these factors support a hypothesis that the barrow served as a symbol for a collection of people during a longer or shorter period of time in the prehistoric past.

Context

The south Scandinavian Bronze Age earth and sod barrow is a monumental construction. Effort was required to build it, although estimates as to how much effort vary widely. At the lower extreme, we have Baudou's estimates for the erection of Bronze Age stone cairns in northern Sweden. He calculated that 810 – 1080 hours of work would have been sufficient for building a cairn 20.5 m in diameter and 1 m high, including collection and transport of stones (Baudou 1968:156). At the other end of the scale we find Thrane's estimates for the erection of the sod barrow at Lusehøj. Building a barrow of Lusehøj's extreme size (36 m in diameter and 6 m high) would have required 129,000 hours of work, according to Thrane's calculations (Thrane 1984:151 f.). The amount of work invested in south Swedish sod barrows probably lies somewhere between these extremes. The investment this effort represented was wasted unless it gave a "return" of some sort - in the form of favors from the gods, neighbor´s feeling of awe, one's own kingroup´s pride, or to call forth recognition of occupancy. Each of these possibilities meant that monumentality itself was important - it was necessary that the size of the "investment" be obvious to the beholder. It is possible to argue that Bronze Age barrows served all of the above purposes for their builders. However, in this section I would like to pay particular attention to the last aspect; i.e., that the barrow was used by those who built and maintained it to make a statement of spatial proprietorship.

Monumental architecture in the context of burial is of course not new with the Bronze Age. Many researchers (e.g., Chapman 1981; Fraser 1983; Hårdh 1982; Larsson 1991; Renfrew 1984) have speculated that the megalithic tombs of the Stone Age were intented to mark the center of a group's territory. According to these theories the monuments represented the only stable point in a mobile settlement pattern. However, during the Bronze Age, burial monuments would appear to be more clearly tied to settlement. Where both types of remains (that is, settlement and barrow) are present, the distance between the two is normally at the most one kilometer (Olausson 1992). If we assume that there is a similar spatial relationship between settlement and barrow even in those areas where settlements are *not* known, we can begin to build hypotheses about Bronze Age peoples' use of space as illustrated by the distribution of the barrows. I would like to illustrate my thinking by taking examples from the area around Ystad and from the island of Ven.

In spite of intensive survey efforts in the area to the west of the present town of Ystad (the area of the author's focus of interest in the Ystad Project (Berglund (ed.) 1991)), our knowledge of Bronze Age settlement sites here is still extremely fragmentary (Olausson 1988). The indications we do have consist mostly of traces such as ploughed-up hearths or earth ovens found during surface survey and datable by pottery contents or by radiocarbon analysis to the Bronze Age. This material by itself cannot be considered to yield a representative picture of Bronze Age settlement patterns; rather I would maintain that this information can only supplement that gained through a consideration of the location of barrows. Fig. 13 shows the hypothetical distribution of Early Bronze Age settlement, based on all the available information about settlement, hoards, and burial. It would appear that settlement was largely confined to a band about 4.5 km wide along the coast. Pollen analysis indicates that this area was characterised by an open landscape from

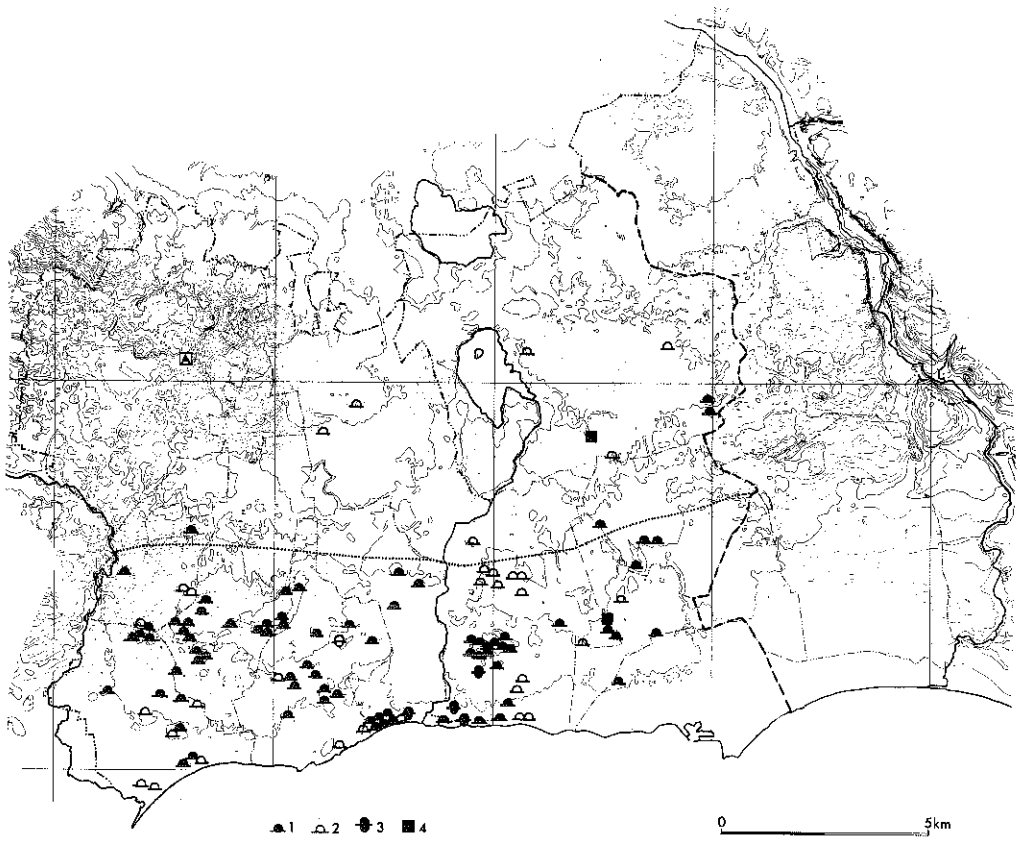

Fig. 13. Map showing the distribution of Early Bronze Age barrows and settlement for the area west of Ystad. The dotted line indicates our estimate of the approximate boundary for the primary settlement zone. A: the site of Trunnerup, where Early Bronze Age settlement remains were found. Legend: 1: Early Bronze Age barrow, 2: Early Bronze Age barrow, uncertain, 3: Early Bronze Age barrow containing at least one known secondary burial, 4: indication of Early Bronze Age settlement (Olausson 1992:Fig. 9).

the Late Neolithic period while the area further inland, in the so-called inner hummocky landscape, was still largely forest-covered (Berglund 1991:70).

As shown by fig. 14, the picture does not change radically in the Late Bronze Age - the center of settlement activity still appears to be in this primary settlement zone at the coast. Estimates of population based on known burials from the area, although of course very uncertain, indicate a population increase from the Early to the Late Bronze Age (Olausson 1992). Pollen diagrams show that the primary zone was still an open landscape used for agriculture and grazing. There are changes to be observed in the inner hummocky landscape, however. During the Late Bronze Age there are traces of clearance and grazing (Fig. 15) (Regnéll 1991: 223).

If we accept the conclusion that population did increase during the Bronze Age, we may ask why Bronze Age people chose to intensify settlement in the primary settlement zone, rather than colonizing virgin territory inland when new land was needed. The reasons for this are probably to be sought in both the eco-

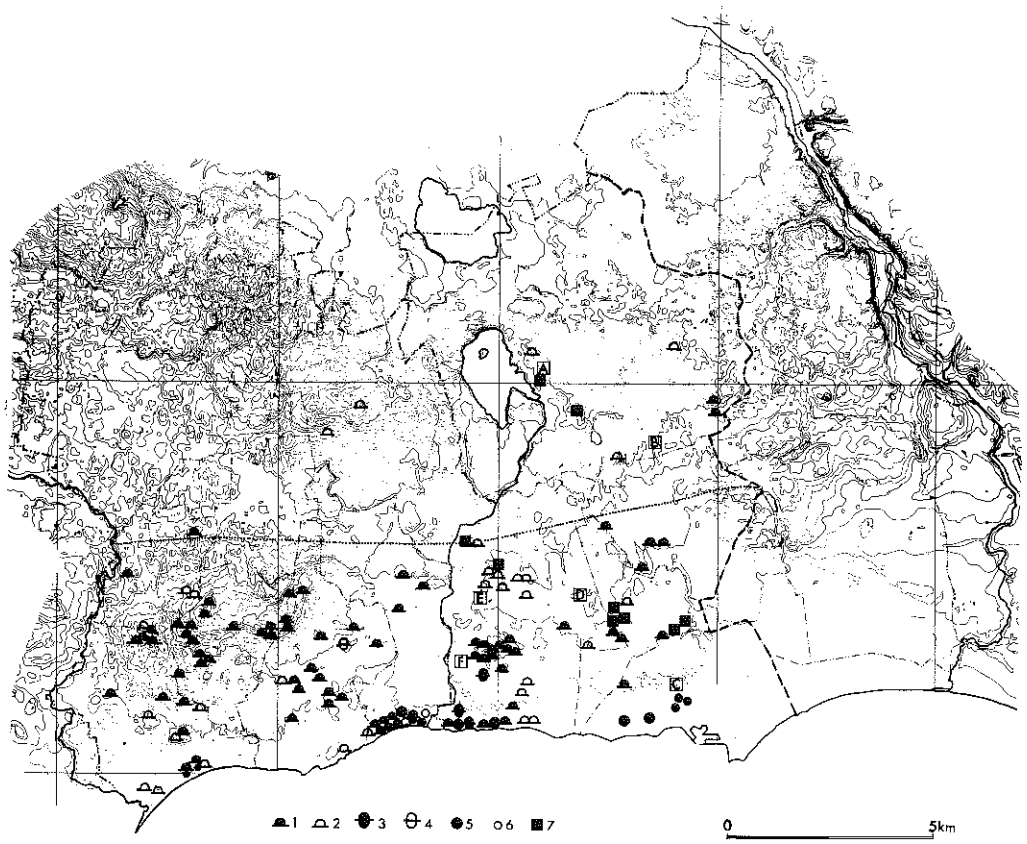

Fig. 14. Map showing the distribution of Late Bronze Age settlement and burial in the western area. The primary settlement zone has expanded inland only slightly. However there is more evidence for settlement activity in this zone, as well as further inland, as compared with the situation during the Early Bronze Age. A: location of Late Bronze Age ploughed-up hearths found during survey, B: location of a bronze hoard, C: location of a bronzesmith's hoard, D: location of the Late Bronze Age vessel from Bjärsjöholmssjön, E & F show the location of settlement remains. Legend: 1: Early Bronze Age barrow, 2: Early Bronze Age barrow, uncertain, 3: Early Bronze Age barrow containing at least one secondary burial, 4: Early Bronze Age barrow containing at least one secondary burial, uncertain, 5: flat-earth burial from the Late Bronze Age, 6: flat-earth burial from the Late Bronze Age, uncertain, 7: indication of Late Bronze Age settlement (Olausson 1992:Fig. 11).

nomic and ideological spheres. Turning first to the economic reasons we can note that proximity to the sea was probably an important consideration. Resources such as seaweed for soil enrichment or barrow construction (Brøndsted 1958:33), salt meadows for grazing (Frödin 1957:220), and fishing were resources of importance in the Bronze Age economy (Olausson 1992).

Another economic consideration was connected to the fact that the outer hummocky landscape and coastal zone were open grazing and agricultural landscapes from the Late Neolithic onwards. The erection of barrows confirms that grasslands were well established in the primary zone by the Early Bronze Age (Olausson 1992). Plant ecologist Urban Emanuelsson has calculated that three to ten times

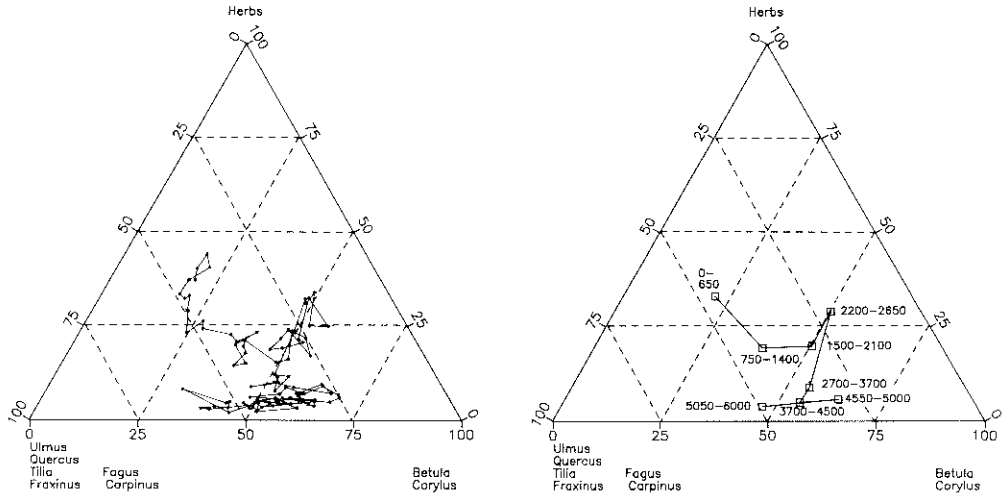

Fig. 15. Triangular diagrams showing the results of pollen analysis from the lake Krageholmssjön. The three corners represent forest of shade-tolerant trees (lower left), forest of light-demanding trees (lower right), and open land (upper). The positions of single pollen samples are indicated by dots (left diagram) and the mean position of samples of each pollen assemblage zone is indicated by squares and labeled by age (right diagram) (Regnéll 1989:Fig. 23).

more effort is required to clear virgin forest for agriculture than to maintain cleared fields (Emanuelsson 1988:116). Rather than clear territory in inland forests, the Bronze Age family wishing or needing to expand its agrarian area would have tried to do so in the zone which was already settled and cleared.

On the ideological plane, we can note that the pattern of intensifying settlement in existing settlement zones, rather than colonizing virgin territory, is a common one in human use of space. Cultural geographers such as Hudson (in Hodder and Orton 1976:86) and Sporrong (Sporrong 1984) have noted that settlement expansion tends to follow one of a limited number of patterns. In the initial colonization of an area a group will establish settlement at locations which they consider optimal with regard to their economic and social requirements. At the conclusion of initial colonization, population is established at individual settlements or small groups of settlements. The spacing of these initial colonies may appear random. A second stage of spread from these initial centers then occurs as population increases. Usually new settlement occurs short distances outwards from the initial colonies. A final stage is a movement towards regularity of spacing due to increased overall density and pressure on the environment (Fig. 16).

I maintain that the ideological reason why Bronze Age people strove as much as possible to "fill up" the primary settlement zone when new settlements were established is closely linked with the symbolic meanings of barrows as discussed in the beginning of this paper. If we accept that the barrow symbolized continuity and collective for Bronze Age populations, it follows that they would be anxious to maintain settlement near the barrows as long as this was possible. It is in this way we should see the barrow as a symbol for a group's spatial context. Like the "sodbusters" taming and cultivating the American plains, the Bronze Age colonizers may have thought "We and our forefathers cleared this land and have continued to farm

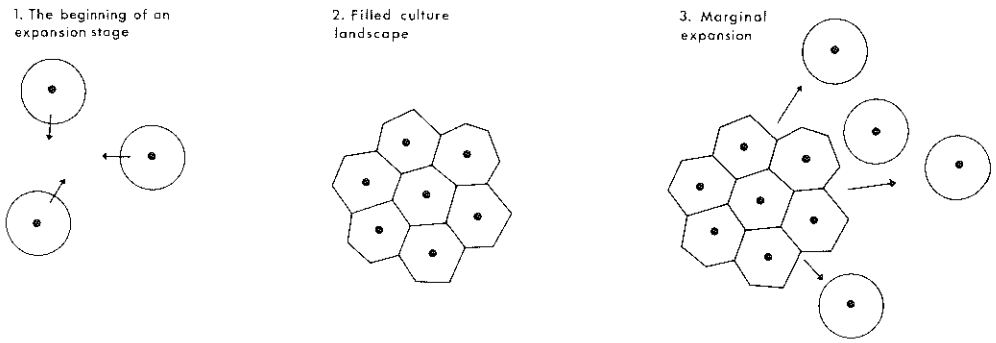

Fig. 16. The principle of the filled culture landscape and marginal expansion. The black dots denote settlement site groups with their respective resource areas (Welinder 1977:Fig. 33).

here ever since. We have no intention of leaving!"

A simple test of this idea would be if we were able to establish an intensification of barrow erection here during the course of the Bronze Age. Unfortunately, because too few of the barrows have been excavated and dated, I cannot carry out this test.

Besides this increase in settlement traces in the primary settlement zone, the distribution map indicates an increased activity in the inner hummocky landscape zone during the Late Bronze Age, however (Fig. 14). These traces are both scattered and amorphous, consisting of, for instance, concentrations of hearths, a few hoards, or a clearance cairn. In sharp contrast to the primary settlement zone at the coast, very few barrows are known here. Distinct increases in herb pollen in the pollen diagram from Lake Krageholmssjön indicate further that even the inland landscape was to a large extent open by the later part of the Bronze Age, but low frequencies of Cerealia-type pollen indicate that crops were grown only on small areas (Regnéll 1991:223). Together such traces give the impression that even if Bronze Age people were present here, they did not want or need to proclaim a spatial claim in the same way as they found necessary in the primary zone near the coast. We suggest therefore that people exploited the inner hummocky landscape primarily for grazing, either regularly on a seasonal basis, or more infrequently as needed. The area was probably used as a commons, accessible to all when the necessity arose and not regarded in terms of ownership (cf. fig. 21).

This is a model which has been suggested for other parts of Bronze Age Scandinavia as well. For instance, Thrane has proposed such a model for southwestern Funnen (Fig. 17). He notes further that an area of this size and natural limits could have represented a chiefdom territory during the late Bronze Age (Thrane 1980). Perhaps the island of Ven is another example. We find that very few of the barrows on the island of Ven are located inland (Fig. 18), which suggests that this inland area could have functioned as common grazing land.

Hierarchy

Several scholars (e.g., Hammond 1972:765; Hodder 1972:891; Hodder & Orton 1976:69 ff.) have suggested that the size of spatial phenomena such as settlements or hill-forts may in some way correspond to the importance of a socio-political institution: smaller spatial entities reflect small-scale institutions, while larger centers reflect a consolidation of power or influence.

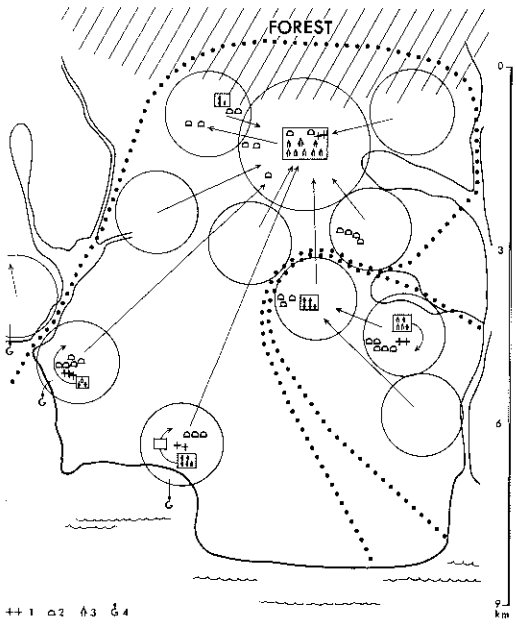

Fig. 17. A model of the area of Kirkebjerg, Funnen during the Bronze Age, as envisioned by Thrane. A hierarchy of sites, with satellite sites and a central redistributive center, can be seen. 1=hoard, 2=barrow, 3=settlement, 4=fishing (redrawn after Thrane 1980:172).

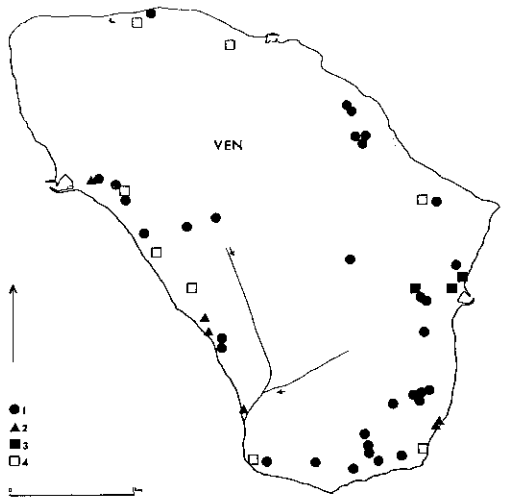

Fig. 18. The island of Ven, showing the location of Bronze Age barrows (1), rock carvings and cup marks (2) and settlements (3= probable, 4= possible).

Is it possible to use barrow size in a similar way? If size differences do exist, we may proceed to test the idea that they in some way reflect a social hierarchy. There are however two major problems to be addressed before such an analysis can be undertaken: 1) the representativity of remaining barrows (e.g., Baudou 1985), and 2) damage which has reduced original volume. The first problem does not pose great difficulties since we are looking for trends and are not reliant on individual barrows. As long as we can assume that the sample of barrows still present is representative in terms of size, we may proceed with the test. In regard to the problem of barrow volume, it is possible that some of the barrows have not been disturbed and therefore retain their original volume, while others, especially those lying in arable fields, have been damaged by ploughing. Unfortunately, we often have no way of knowing the status of many of our preserved barrows. However, if we confine our analysis to areas with similar soil types, it should be possible to assume that most of the remaining barrows were damaged to a similar extent and therefore we can compare their size relative to each other, at least. On Ven the situation is even more uncertain since we must also consider that whole barrows or parts of them have disappeared due to erosion by the sea.

Barrow size can be expressed as diameter or height or by a combination of these as volume. From the description of many of the entries in the Swedish Register of Ancient Monuments it would seem that many of the damaged barrows have suffered a reduction in height while still retaining a diameter of 20 m or more. We might therefore suspect that diameter, rather than volume, is a more reliable measure of barrow size. Diagrams showing both diameter and volume are nevertheless provided here to com-

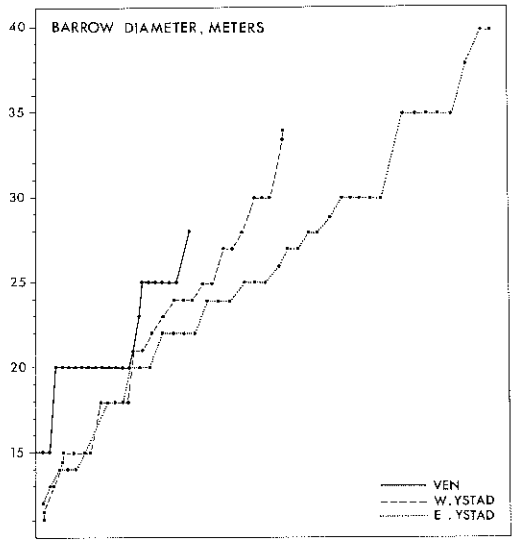

Fig. 19. Diagram showing the distribution of barrow diameter (when known) for barrows on the island of Ven and from the eastern and western parts of the Ystad area. Each dot denotes a barrow. We suggest here that "plateaux" may represent levels in the social/territorial hierarchy.

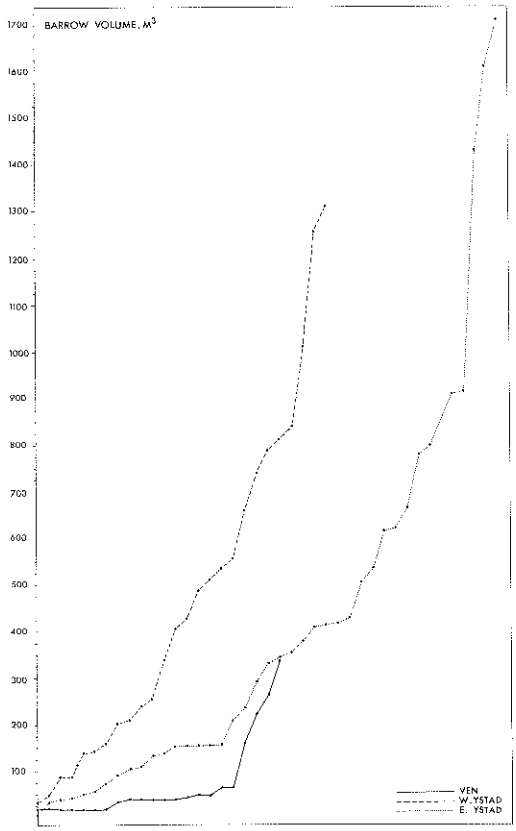

Fig. 20. Diagram showing the distribution of volume (when known) for barrows on the island of Ven and from the eastern and western parts of the Ystad area. Each dot denotes a barrow. The range of variation is greater for the latter two areas than for the island of Ven. We interpret this to mean that the number of hierarchic social/territorial levels on Ven is more limited.

pensate for possible errors (Figs. 19 & 20).

Once we have eliminated modern damage, there are two possible factors which barrow size can be assumed to express: The first is how long the barrow was used for burial: with each new burial the barrow often received another layer of sod and soil, so that the larger the barrow, the more burials it contains. The second possible factor is socio-economic differences: larger barrows represent power, status, wealth, or a central place function. Actually, of course, these factors are complementary: we would expect barrows which are tied to a central place to have been used for a longer time than more marginally placed barrows. Figs. 19 and 20 are cumulative diagrams showing barrow diameter and volume for the present-day measurements of barrows on Ven and for the western and eastern areas of the Ystad Project.

Unfortunately, since few of these barrows can be dated more specifically than (at best) to Bronze Age, we will not be able to address the question as to whether the temporal factor is responsible for eventual size differences we observe. We can however examine the second possibility: that barrow size at least partially reflects socio-economic factors.

In fig.19, barrow diameter, the Ystad barrows show greater size differences than the Ven barrows. On Ven, barrow diameter lies

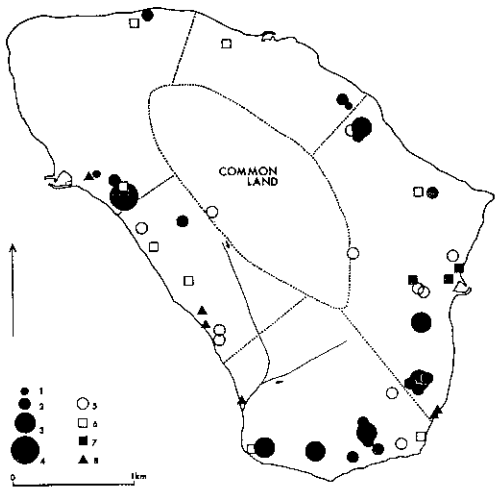

Fig. 21. A hypothetical division of the island of Ven into 5 farmsteads, each containing remains of Bronze Age settlement (6 & 7), rock carving localities (8), and barrows of fairly uniform size. The central area of the island could have served as common grazing ground. The island has only one barrow larger than 25 m in diameter. Legend: 1=barrow diameter <20 m, 2=20-23 m, 3=24-25 m, 4=>25 m , 5=barrow of unknown diameter.

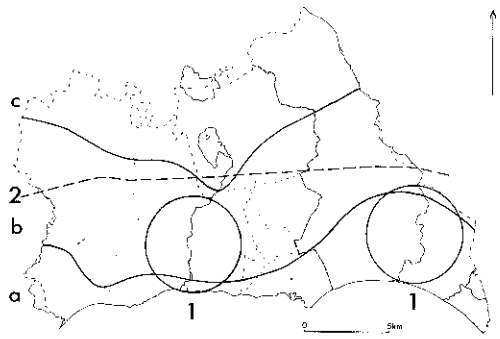

Fig. 22. The area studied by the Ystad Project, marked to show the scale of the district (1) and the province (2). Natural zones: a=sandy coastal zone, b=outer hummocky zone, c=inner hummocky zone.

within narrow limits of 15 to 28 m, while the ranges for the Ystad barrows are 11 to 34 m and 12 to 40 m. More levels are apparent in the Ystad material: at 18 m, 22 m, 25 m, 30 m , and 36 meters.

The diagram of barrow volume shows a similar picture (Fig. 20). The barrows on Ven are of fairly homogeneous size and none is larger than 345 cubic meters. A size range from c. 30 to 160 cubic meters is well-represented among the barrows east of Ystad. This area also has a few outstanding barrows whose volume exceeds 1500 cubic meters. Aside from the lower range, however, there are no clearly demarcated levels to be seen in the size curves for the western and eastern Ystad areas.

The island of Ven has an area of 7.5 square km (Welinder 1977:112), while the area studied in the Ystad Project is about 280 sq km. It is evident in figs. 19 & 20 that the barrows on Ven are much more homogeneous in size than the barrows from the two much larger Ystad regions. The explanation for this difference may be that the barrows erected on Ven are territorial expressions made by minor socio-economic groups of equal status. The size differences which are apparent in the larger Ystad region may be due to the fact that what we are seeing are several hierarchical levels of social organization.

It is difficult and perhaps risky to try to equate a particular level in an organizational hierarchy with the size of area over which the group exercised control. Åke Hyenstrand has attempted to do so (Hyenstrand 1984:28). He identifies the following four levels:

1. Agricultural unit, with a radius of 250 m (area c. 0.2 square km),
2. District, with a radius of 2.5 km (area c. 20 square km),
3. Province, radius 25 km (area c. 2000 square km), and
4. Region, radius 250 km (area c. 200,000 square km).

Based on these figures and on results from the Ystad Project, I would like to suggest the following model for the Scanian Bronze Age.

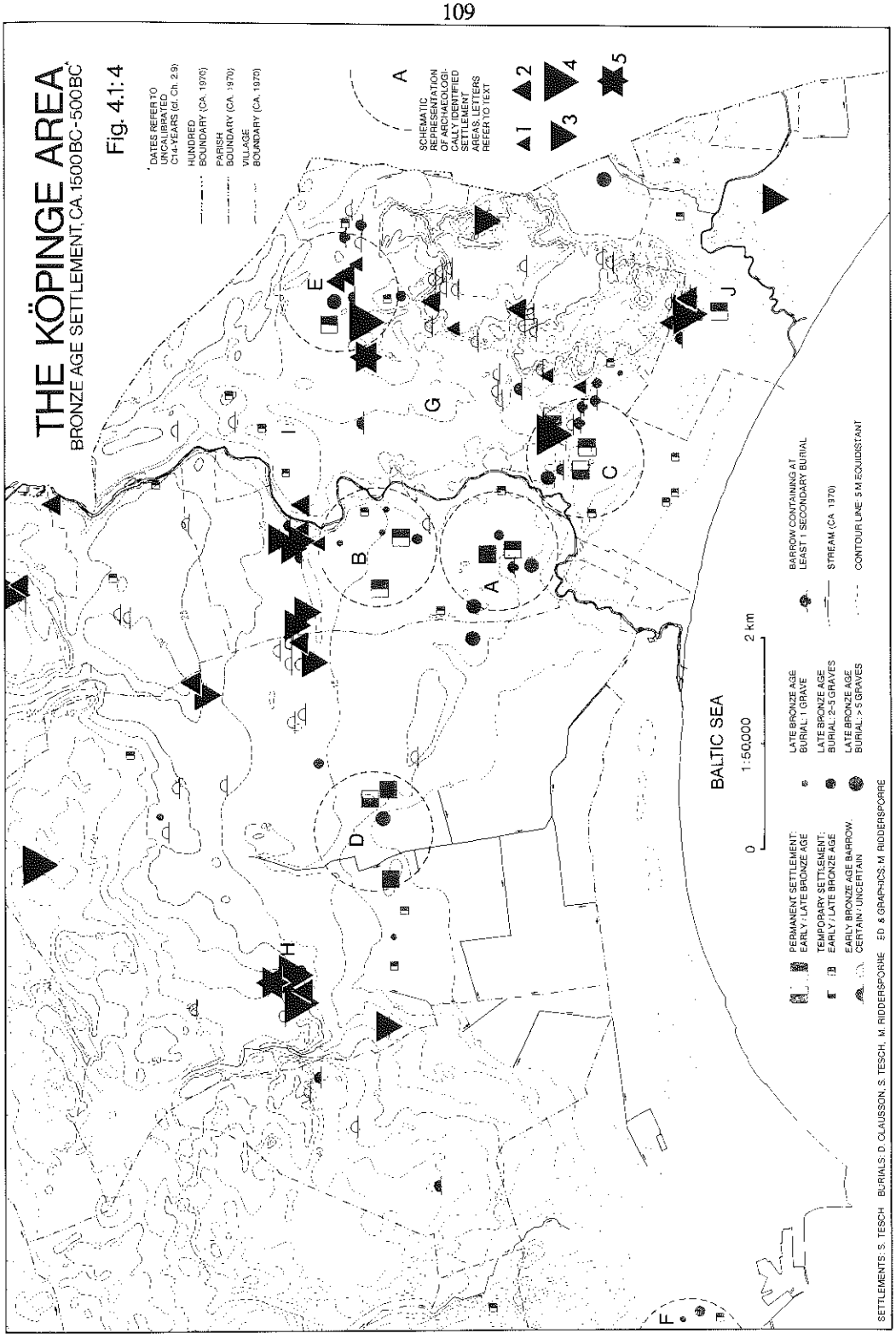

Fig. 23. The area east of Ystad, with barrow size (diameter) when known plotted. The stars mark barrows of exceptional size. Legend: 1=barrow diameter <20 m, 2=20-23 m , 3=24-25 m, 4=25-39 m, 5=>39 m. Based on Berglund (ed.) 1991:Fig. 4.1.4.

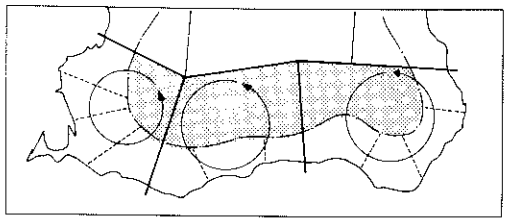

Fig. 24. Thomas B. Larsson's hypothetical division of South Scania into territories, based on the distribution of metalwork and barrows (T.B. Larsson 1986:Fig. 66). These territories correspond in size to what we have here called the province.

The agricultural unit or farm was the primary economic and social entity and the building block of Bronze Age daily life. The farm encompassed an area of c. 0.5 square km (Olsson 1991:183); that is, somewhat larger than in Hyenstrand's model. This territorial unit was expressed in the landscape by the erection of barrows about 20 m in diameter. According to this model, Bronze Age Ven had five farms. Rock carving sites are known in four of these five farm territories (Fig. 21).

The next level, the district, encompassed several farms and had an area of c. 20 square kilometers (Fig. 22). The Plain of Ystad, which is delimited by natural boundaries (see map in Berglund 1991 (ed.):Fig. 1.2:15), is a likely example of the district. We note that barrow sizes are fairly evenly spaced in the Stora Köpinge district (Fig. 23). Six of the barrows located in this area have diameters exceeding 35 m: perhaps these marked six farms in the district? Two of the barrows, marked with a star, have diameters of 40 m and are the

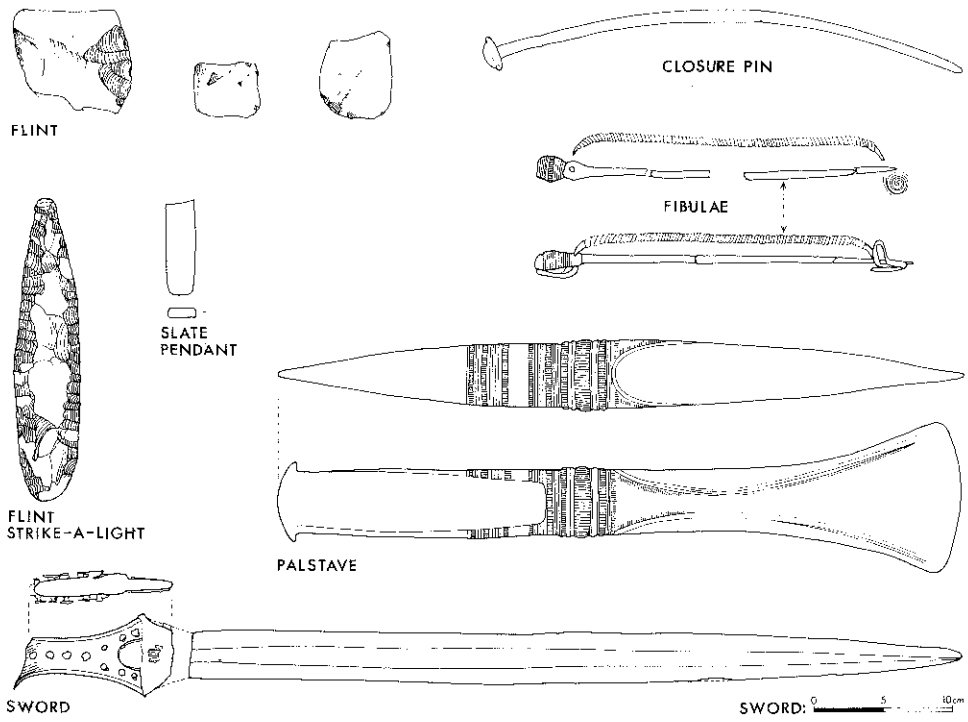

Fig. 25. Objects from the oak coffin secondary burial at Valleberga 6[7], one of the richest early Bronze Age graves known from Scania (Strömberg 1975:38 ff.).

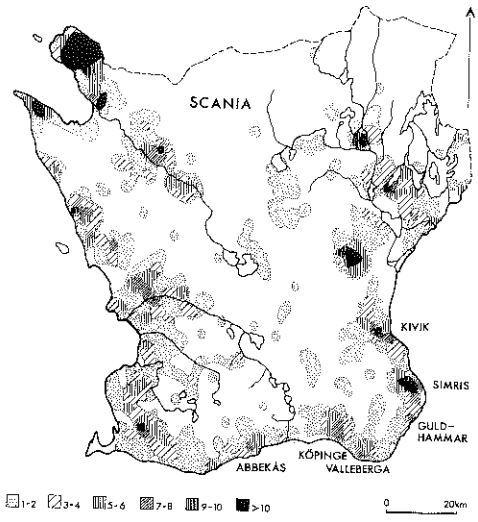

Fig. 26. Map illustrating the density of Bronze Age burial mounds and other Bronze Age monuments of exceptional size in Scania (Olausson 1992:Fig. 17).

largest in the district.

The province, encompassing an area of 2000 square km, should be the next level in the hierarchy. The heavily settled coastal area of the Ystad Project area is of this size (Fig. 22). The territories which T. Larsson postulates are also an example of this level of organization (Fig. 24)

At the regional level (200,000 square km) we can note several places in Scania which are of a special nature and may express a center for this hierarchical level. The unusually rich early Bronze Age grave from Valleberga 6^7 (Fig. 25) (Strömberg 1975:44) may be one such center. We might also mention the rock carving localities at Simris and the enormous stone cairn at Kivik (Fig. 26) as other phenomena which are highly unusual and which therefore may be indicators of high status centers of ceremonial, religious or perhaps economic importance during the Bronze Age.

Conclusion

There are of course many additional ideas which Bronze Age barrows might have symbolized for their users. One example is the possibility that they symbolize contact with tumulus peoples to the south. Nevertheless, I feel reasonably convinced that barrows symbolized continuity, the collective, sense of context, and perhaps social hierarchy, to the people who erected and cared for them.

Acknowledgments

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