

Sarup

Causewayed enclosures placed in a Neolithic ritual landscape on Funen, Denmark

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Two causewayed enclosures were uncovered at Sarup, one, known as Sarup I, nearly 9 ha in area and representing the Fuchsberg phase of the Funnel Beaker Culture, i.e. 3400 BC, and the other – Sarup II – only 3.5 ha in area and from the Klintebakke phase, i.e. 3250 BC. Intensive surveys of the fields within 12 km² around the Sarup site in recent years have yielded a lot of material from the same periods of the Neolithic, e.g. more than 30 settlements and 130 megalithic tombs. Only parts of skeletons were recovered in both the graves and enclosures. Often the graves were placed in clusters, which may divide the area into equal-sized units. This may imply a segmentation of the land area, just as with the segmentation of the ditches around the enclosures.

Keywords: Funnel Beaker Culture, Sarup, causewayed enclosures, megalithic graves and settlements, ritual landscape

Introduction

A sandy promontory in the village of Sarup in the southwestern part of Funen, Denmark (Fig. 1) was ploughed deep for the growing of carrots in 1967, whereupon numerous dark patches containing a large number of prehistoric objects were noticed. This was the beginning of a Neolithic project in the area which is still going on. Excavations were carried out every summer from 1971 to 1984, covering 6 ha out of the 9 ha of the promontory. Evidence dating from 11 prehistoric periods was uncovered, including five periods dated to the Funnel Beaker Culture, two with traces of causewayed enclosures, the first to be found in Denmark (Andersen 1997; 1999a; 1999b).

The Sarup site is located on a sandy promontory 7 m above the Hårby watercourse in the middle of a landscape dominated by flat glacial heath land surrounded by hilly terrain that reaches a height of 50 m above sea level (Fig. 2).

Sarup I

The first Neolithic causewayed enclosure – Sarup I – was constructed around 3400 BC, in the Fuchsberg

phase of the Funnel Beaker Culture (Fig. 3). The enclosure defined an elongated area of 8.5 ha, of which 6 ha has been uncovered. The promontory was



Figure 1. Funen, Denmark, with the project area around the Sarup enclosures framed – see also Figs. 2 and 5.

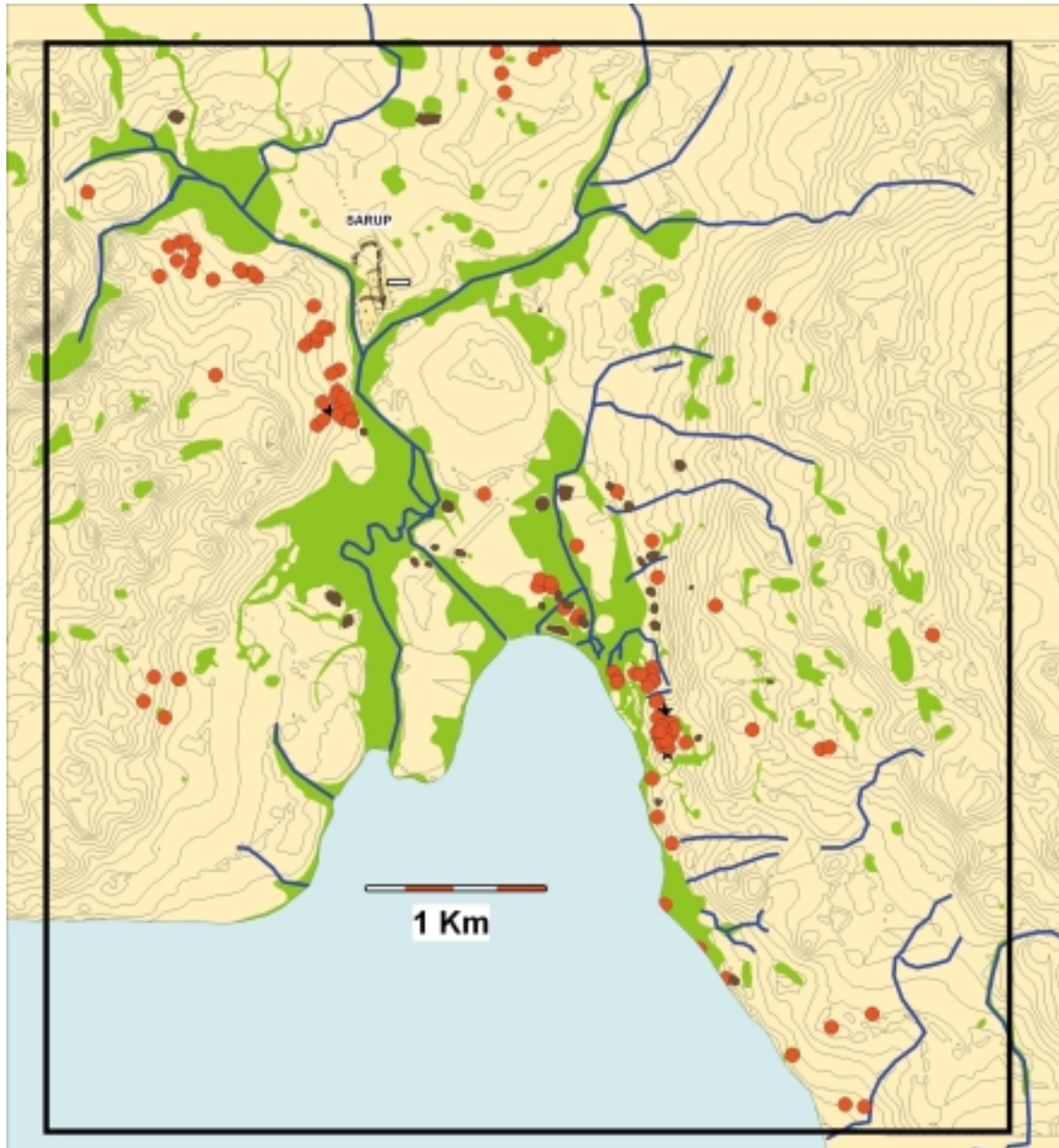


Figure 2. The project area around the Sarup enclosures. Red dots mark the sites of megalithic tombs and brown ones settlement areas dating from the period between 3400 and 3200 BC.

bounded by watercourses on two of its three sides, the third side being marked by a palisade fence. There were 4-sided fenced areas on the outside of the palisade, a fenced entrance passage and two parallel rows of segmented ditches with numerous causeways between them.

The enclosure was constructed in a period characterized by marked human impact on the environment through the clearance of land for cultivation and grazing, and it was in this period that the building of megalithic graves – dolmens – began. Both types of monu-

ment were commonly constructed in the Atlantic Region of Western Europe in the late 4th millennium BC (Andersen 1997:133–309).

The palisade of the Sarup enclosure originally stood in a trench, which could be followed for 572 m. The planks were of split oaken trunks of diameter up to 42 cm, and they were placed close together, probably rising at least 3 metres above the ground. Large amounts of pottery (85% of the total finds, with fragments from at least 278 pots), burnt bones (including human), scorched stones and charcoal for hearths have



Figure 3: Parts of the Sarup enclosures excavated. Sarup I is from the Fuchsberg period of the Funnel Beaker Culture (3400 BC) and Sarup II from the Klintebakke period (3200 BC).

been found close to the outside of the palisade. Nineteen 4-side fenced areas have been found joined to the palisade or placed in the gaps between the ditches. There are no finds to reveal the function of these, but they must have had some special significance, since they appear to determine the placement of the ditches. The entrance was a 1.6 m gap in the palisade shielded by a 3 m fence in front of it. Access to the entrance was along a path 2–3.5 m wide, which was restricted to only 1.4 m at one point by a projecting fence, so that nothing wider could pass through.

In front of the palisade and fences were 2 parallel rows of segmented ditches, originally about 15 m long, 4 m wide and varying in depth between 0.20 m and 2.0 m. The bottoms of the ditches were often en-

tirely lacking finds, but the finds that did occur were of a special character: decomposed organic deposits, whole pots or large fragments of pots, skulls of cattle, sheep or pigs, human skulls or skull fragments and other bones. Only a very few flint artefacts have been found in the ditches. Above the basal layers the homogeneous fill material had been thrown back deliberately from the heaps lining the ditches on both sides. There is nothing to show that the site was fortified with banks (Fig. 4).

Excavations in the two-thirds of the interior of the Sarup enclosure that has been studied so far produced 87 features from the same period (one for every 600 m²). Most of them were scattered small pits, but 11 of the features evidently had a special function, be-



Figure 4: Reconstruction of the entrance area of Sarup I, looking south-west. Drawing: Louise Hilmar, from Andersen 1997:63, fig. 73.

ing used for the deposition of ritual materials, i.e. whole pots, axes and perhaps carbonised grain. One of them was a large funnel-necked jar 42 cm in height with a beaker, a fragmented – deliberately placed? beaker – and $\frac{1}{2}$ l of wheat grains (Andersen 1997:58).

The finds at the site mostly consisted of specially selected materials such as human bones, axes and whole or deliberately crushed pots. This material has been deliberately broken up by smashing (the pottery) or burning (the axes, grain and human bones).

Sarup II

Around 150 years later, about 3250 BC, another enclosure – Sarup II – was constructed, in the form of a crescent cutting off an area of about 3.5 ha on the southern tip of the sandy promontory (Fig. 3). This structure again comprised a palisade fence, 4-sided fenced areas and two parallel rows of ditches. The whole enclosure has been uncovered, one of the few to be exposed in its entirety.

In this case the inner row of ditches was placed within the 4-sided enclosures, and some of the ditches had been refilled and covered four times within the lifetime of the posts in the surrounding enclosure. A total of 144 features have been found in the interior of the Sarup II enclosure. Some of them were small pits,

perhaps postholes, but others will have had a special function, for the deposition of ritual materials or for storage. Three pits, two of them large postholes, contained burnt human bones of adults, and one of them a young girl. The bones had been burnt after the body had been skeletonized, and may have been placed there at the time when the posts were constructed. By the time of Sarup II passage graves were being built and very high-quality pottery was being manufactured, and this was often placed in front of the graves as offerings.

Other causewayed enclosures in Scandinavia

About 30 Neolithic enclosures have so far been found in Scandinavia (Andersen 2002). These sites belong to the Funnel Beaker Culture and are dated to a very short period between 3400 and 3200 BC. The finds in all the enclosures are of certain special types, often with selected materials and seldom waste materials, i.e. the artefacts may have been intentional, selected at the settlements and brought to the enclosures.

Another enclosure with ditches has been found close to the Sarup promontory, and a small dolmen has been uncovered at the bottom of one of the ditches (Andersen 2000:27, Fig. 7).

All the enclosures seem originally to have been used

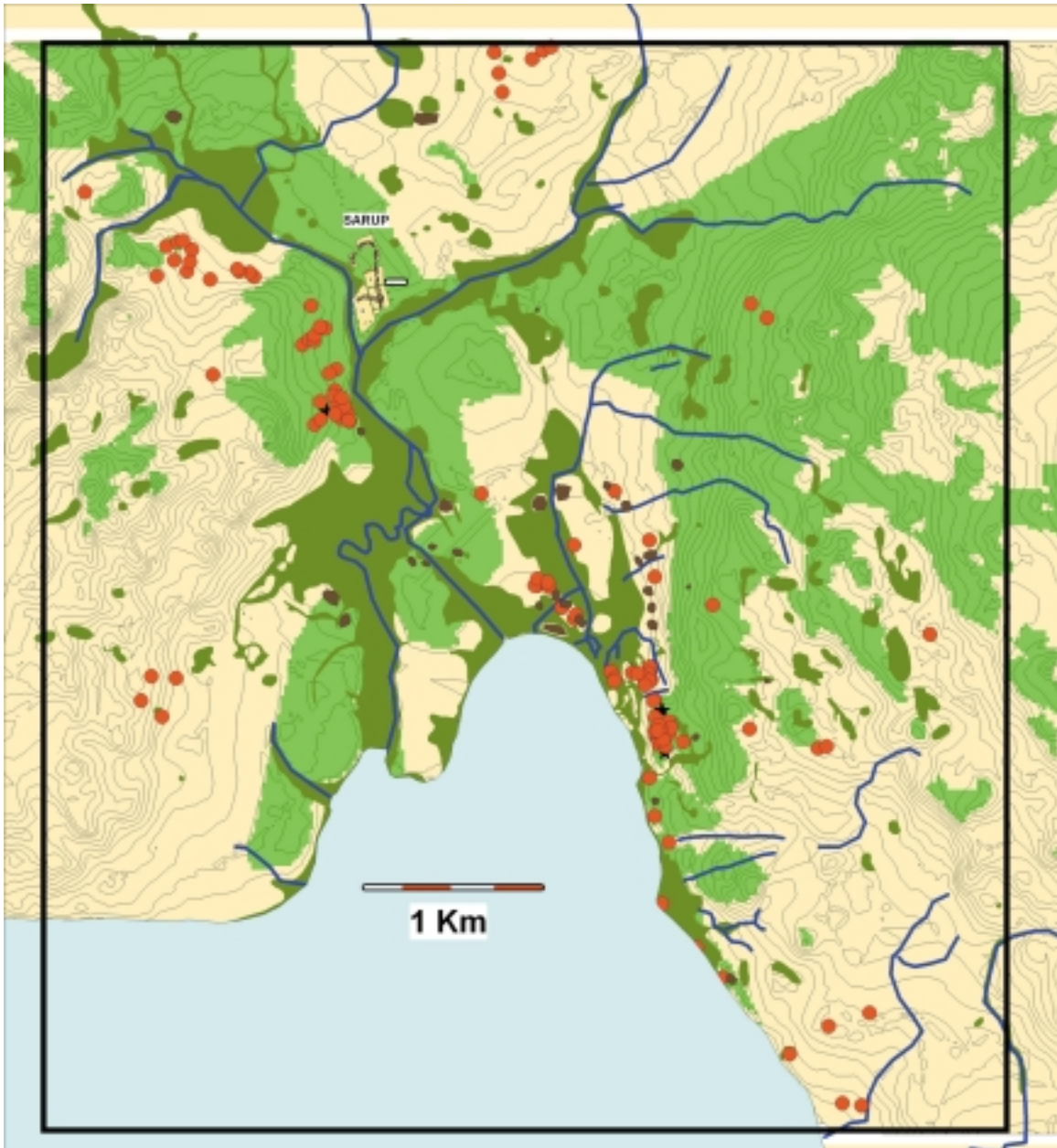


Figure 5: Reconstructed view of the Sarup area. The areas marked in light green are those from which a person of height at least 1.7 m could have seen the Sarup I enclosures, given that the palisade at Sarup I was 3 m high and there was no high vegetation in the area.

only for a short interval, but the ditches were later re-used. Most of the sites were used as settlements a couple of hundred years later.

The Sarup area

Excavations of the enclosures have provided a lot of new information on the Neolithic period. Monuments of this type must be looked at in connection

with the contemporary megalithic graves and settlements in the area. A reconstruction of the view of Sarup, assuming a palisade 3 m high and a Stone Age observer of height 1.7 m, suggests that the enclosure would have stood out in the landscape with no high vegetation in its vicinity, so that it would have been visible from a large part of the surrounding area (Fig. 5).

Intensive surveys of the fields around the Sarup site have been carried out since 1988, and about 160 other

sites from the periods of the two Sarup enclosures (between 3400 and 3200 BC) have been found within an area about 3 km × 4 km, 31 of which are currently regarded as settlements. These were of limited size, and were situated in different zones, which means that the Stone-Age farmers made use of a variety of topographical situations, with sites for hunting and fishing, cattle herding, pig farming and cereal cultivation. The settlements had many types of tools and there is clear evidence of toolmaking. There was also a good deal of variety in the livestock reared and cereals cultivated. The analyses of the settlements reveal significant differences from the enclosures with respect to size, location and finds. The small settlement units suggest that only a few families were living there for a short period. The reconstructed view shows that only a few of the settlements had direct eye contact with the Sarup-promontory, while most of them kept their distance from it.

A site of special interest is one with more than 130 fire-damaged axes and chisels, perhaps a place that had a special function (Andersen 2000:34, Fig. 13).

130 megalithic graves, now preserved only as plough-damaged sites, can be added to the four previously known ones in the area around Sarup. 30 of these megalithic graves have been excavated in recent years, and many more graves will be studied in the coming years, because these are nowadays being rapidly destroyed by intensive ploughing.

The reconstructed view shows that about 100 graves were located within sight of Sarup. In one of the excavated passage graves it was possible to find evidence of the original interment, a few remains of the skeleton of a young girl, obviously brought to the grave in a defleshed state. This burial was covered by a secondary floor, which was in turn covered by a layer of material from MN II, about 3100 BC, with larger parts of further human skeletons. It is of special interest that no complete primary burials have ever been found in a megalithic grave, only body parts (Andersen 1997:343, note 290). The same is also true of the causewayed enclosures, where only parts of the buried individuals have been found. These facts may help us to find a link between the megalithic graves and the causewayed enclosures.

The distribution of megalithic graves close to Sarup indicates that they often were concentrated in clusters, and that some of them were surrounded by wet areas (Fig. 2). It seems that these clusters divide the area into equal-sized units, and perhaps mirror a segmentation of the land area into such units as well. Taken together with the many settlements of uniform size, these may

be signs of the social organisation of a segmented tribal society. The same type of segmentation is to be seen in the ditches of the Sarup enclosures.

Changes in the Neolithic landscape in the Sarup area in the period 3400–3100 BC

The enclosures and megalithic tombs were erected some 500 years after the first vague introduction of a farming economy into Denmark about 4000 BC. By 3500 BC we find the first real changes in the landscape in the form of structures of this kind. Pollen analyses point to smaller quantities of oak (*Quercus*) and lime (*Tilia*) and higher proportions of birch (*Betula*) and later hazel (*Corylus*). Pollen of grasses and herbs characteristic of an open landscape (e.g. *Plantago lanceolata*) also increased during the same period. These changes represent a deliberate creation of open areas for both cereal cultivation and grazing, and are known, following Iversen's terminology, as the Landnam, i.e. land taking (Aaby 1993). Traces of the primitive plough, the ard, have been found beneath some megalithic barrows. Working with an ard drawn by bullocks required large fields cleared of boulders, trees and stumps. The fields were only ploughed a few times, after which the Neolithic people must have moved to new areas, which implies a great demand for new land. Thus the introduction of the ard may have brought with it a series of changes in social relations. Land rights and inheritance would have become important, because a lot of work had been invested in clearing the cultivable plots. Land rights could thus easily have led to conflicts between groups.

We see that enclosures in the Sarup region were placed in conspicuous locations in the centre of many settlement territories with groups of megalithic tombs, and to judge from the labour expenditure necessary for the construction alone, they must have been shared by several territories in each case. It is possible to conceive of this enclosure, with its segmentation into many 4-sided compartments and segmented ditches, as correlating with the settlement pattern of the surrounding area.

The individual segments may have symbolised or been associated with a family, a settlement, a clan or a land unit. When the deceased were temporarily buried in the enclosure, they were being brought into a wider community, and it is evident that their placement at Sarup corresponded to the dangerous transitional phase in which they were transformed from individuals into members of the realm of the dead (Rites of Passage). Participation in the building of such an enclo-

sure and in the activities that took place in it must also have strengthened the social, economic and religious institutions of the community; i.e. the whole structure was a great social manifestation.

Further social changes took place in the Sarup area around 3100 BC. The pattern consisting of a major enclosure with a large number of associated small settlements and the building of megalithic tombs came to an end. Now we see a concentration of settlement at a few sites, one of which – on the promontory of Sarup itself – was about 4 ha in size, many times larger than the settlements in the former centuries. This implies a more stable economy, which allowed more people to live together.

These huge ritual landscapes were in use only for a period of about 200 years, after which the last and most profound changes took place, from a society of hunter-gatherers to one of farmers.

Conclusions

This article shows how large and varied the archaeological materials accumulating in an area can be if the

same small area has continued to be occupied for a long period. Instead of excavations of monuments of the same type in many areas, the decision to work continuously in the restricted Sarup area has provided us with a more varied knowledge of the activities going on in the landscape five thousand years ago, and in that way a more varied knowledge of the activities associated with a single monument.

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