

# New light on Ale's Stones

– A monumental ship-setting in the province of Skåne, Sweden

BY BENGT SÖDERBERG & ANNIKA KNARRSTRÖM

## Abstract

*This article deals with the largest preserved ship-setting in Sweden, Ale's Stones, situated on the Käseberga ridge in the south-eastern part of the province of Skåne. The monument was subject to a research project which was initiated in 1987 by Professor Märta Strömberg† at the Department of Archaeology, University of Lund, and carried on well into the 21st century. Different aspects and archaeological results were published in a number of articles, by Strömberg and fellow scientists. The excavations carried out by the project have been described in some detail in a report published by the National Heritage Board in 2012. In this article we will recapitulate and update the state of knowledge regarding the monument and its setting. The site is examined in relation to: (1) The distribution and contexts of similar monumental ship-settings in Denmark and Sweden; and (2) The local landscape. A theoretical approach is briefly outlined in order to contextualize the monument and some perspectives for future research are suggested.*

## Introduction

The well-known ship-setting called Ale's Stones is magnificently situated on the Käseberga ridge close to the Baltic Sea in the south-eastern part of the province Skåne in Sweden (Fig. 1). It is one of the most frequently visited ancient monuments in Sweden and hence also one of the most renowned. During the period from 1987 and well into the 21st century, the monument was subject to a research project which was initiated by Professor Märta Strömberg† at the Department of Archaeology, University of Lund.

The aim of this paper is to recapitulate and update the state of knowledge and to test some of the various possible approaches in order to suggest social contexts and narratives for Ale's Stones. In stressing the importance of contextualizing the monument we have found the concept of materialized ideology a useful theoretical approach, which will be briefly outlined and discussed (DeMarrais *et al.* 1996).

First we will recapitulate and update the research history and archaeological knowledge of the monument and its setting. Next, the

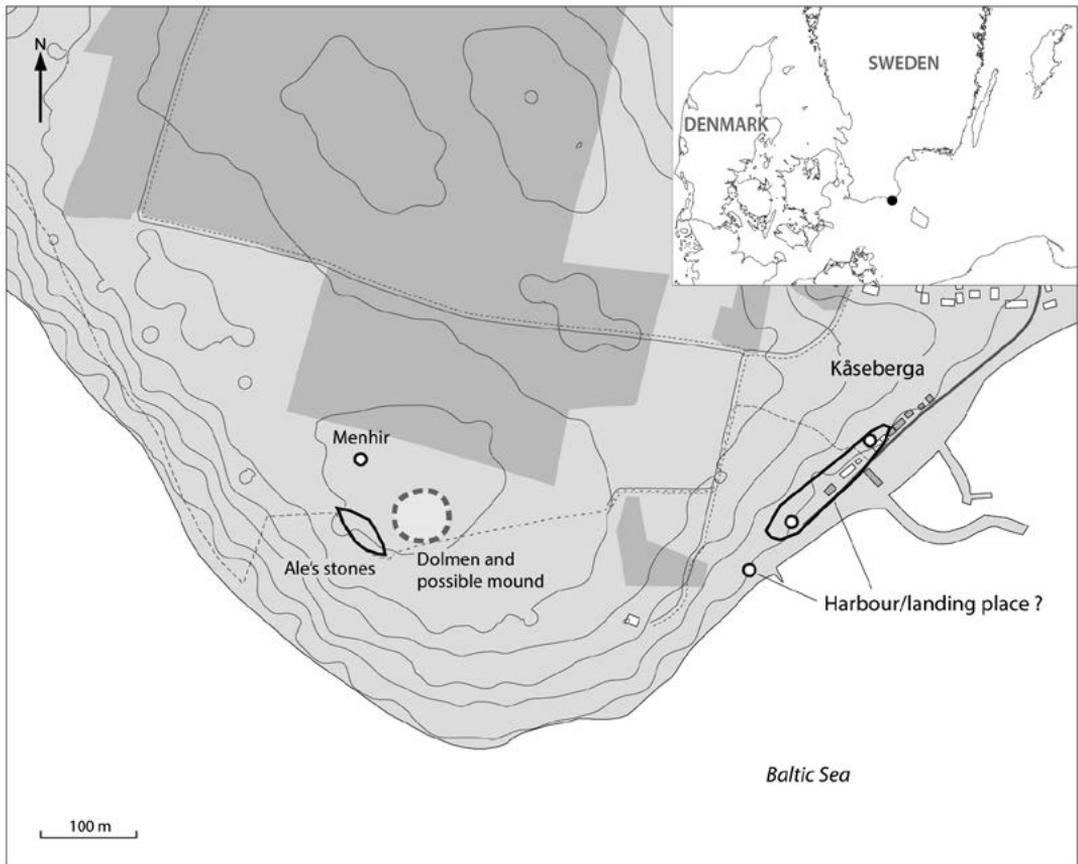


Fig.1. The location of Ale's Stones and its setting on a plateau on the Kåseberga ridge (data from Söderberg *et al.* 2012; National Board of Antiquities, Fornsök).

overall distribution and contexts of similar monumental ship-settings are considered. Finally, the setting is examined in relation to the local landscape and some perspectives for future research are suggested. The paper may thus be regarded as work in progress.

## The early history of the monument

The earliest written evidence for Ale's Stones dates from about 1515, when a field called "Hesten" ("the stones on the heath") is mentioned in a land-holding register (PB). From a cadastral map dated 1704 we learn

that this previously mentioned property really is Ale's Stones, as the ship-setting is sketched besides the name "Heestena" (Geometrisk avmätning, Valleberga 1704). The oldest evidence for the actual name Ale's Stones (in Swedish "Ales stenar") originates from 1624, when the parish clergyman Niels Ipsen submitted a report on the antiquities of the parish to the chancellery of King Christian IV of Denmark. He also related the local tradition that a certain individual named *All* planned to build a harbour at the foot of the ridge where the stones had been erected (Åberg 1960).

These ancient testimonies and tales are followed by a number of statements and references to the monument, by

cartographers, representatives of the church and the early antiquarians of the 18<sup>th</sup> and 19<sup>th</sup> centuries. The first detailed description was made in 1777, when the ship-setting and some surrounding stones are measured and depicted by C. G. C. Hilfeling, drawer of antiquities. N. G. Bruzelius, principal and antiquarian, produced more professional, albeit imaginative, reports in 1853 and 1873. He also noted that on each side of the ship-setting there are smaller stone-settings, which he describes as smaller ships.

Judging from descriptions and reports, a progressive decline occurred, accelerated by the intensified cultivation close to the stone-ship. Already the drawing by Hilfeling shows that several stones are severely tilted, and by the beginning of the 20<sup>th</sup> century it was evident that something had to be done to save the ship-setting from complete destruction. The local historical society in Ystad hired a building contractor, who undertook to raise the stones. The scanty documentation consists of a brief account of the monument before the restoration, a schematic sketch of the stones, and after the finished work an account of the measures plus a few photographs (Söderberg *et al.* 2012, 28 ff., Appendix 1–2). The famous Swedish archaeologist Oscar Montelius then wrote an article in which he argued for a dating of the ship-setting to the Viking Age (800–1050). The dating, however, is based solely on analogies with other ship-settings, not on excavations or observations in connection with the restoration. Symptomatically, the ship-setting is presented in the article with a stylized drawing, not a measured plan (Montelius 1917).

It is surprising how quickly the monument once again declined into a state of disrepair, as a result of intense cultivation followed by heavy sand erosion. In 1942 the Head of the National Heritage Board, along with entourage, visited the site, to discover the stones half buried in shifting sand. As if

this were not enough, the Swedish military had built an air monitoring station, with a barracks and bomb shelter very close to the monument. As a result of the visit, the stones were eventually measured and described, as were the encroachments. A letter in sharp terms was sent to the military, but after that nothing really happened. The air monitoring station was not dismantled until late in the 1940s and some military installations were in use well into the 1950s (Söderberg *et al.* 2012, 31 f., Appendix 3–6).

The next restoration took place in 1956, and has rightly been criticized. It was conducted in December, a time of year that cannot be said to be climatically favourable, with the aid of a mechanical excavator and a bulldozer. There is no formal documentation at all, just the instructions for the assignment and a brief report from the subsequent inspection (Strömberg 1990; Söderberg *et al.* 2012, Appendix 7–8). From the evidence it is clear that one stone was temporarily removed, to let the machines in to remove the shifting sand within the ship-setting. The sand was then placed around the ship-setting, in an area where the topsoil had been stripped off. The only archaeological observation recorded (which was also noted during the first restoration) was about the remains of a stone-setting – possibly an Iron Age or Early Medieval grave. Since then, several issues have never been fully sorted out, for example the irregular placing of some stones in the north-eastern side and the formerly standing but today horizontal stone known as the altar-stone inside the ship.

## The project “Ale’s Stones and the Kåseberga Ridge”

When the project “Ale’s Stones and the Kåseberga Ridge” (in short: the “Ale’s Project”) was initiated by Professor Märta Strömberg,

virtually nothing had been added to the archaeological knowledge of the monument since the days of Oscar Montelius. Primarily, the question of the monument's state of preservation was considered (Strömberg 1987; Strömberg 1990; Strömberg 1998). During the course of the project many other issues turned up, of a practical as well as a sociological nature. The economy was severely limited, and the fieldwork was carried out by students and volunteers. Initially the antiquarian authorities decided that trenches should be refilled the same day they were dug, making documentation and comparisons difficult and generally complicating things.

The fact that Ale's Stones attract and inspire numerous visitors and interpreters is well known, and this was also problematized and discussed (Strömberg 1995a; Strömberg 1995b). The project drew a lot of attention, which gave rise to media hype. Ale's Stones soon became the most disputed single ancient monument in Sweden, thus functioning as a social arena reflecting today's society as well as past ones (cf. Roslund & Lindström 2002; Kishonti 2004; Rudebeck 2008). The attraction has by no means faded. Time and again the monument has been pointed out as a Bronze Age sun calendar and lately it has been claimed that it was built with the same geometry as Stonehenge (Mörner & Lind 2012).

During the period 1987–2003 Strömberg published a large number of articles with preliminary archaeological results as well as shifting perspectives on Ale's Stones, and it is possible to follow her thoughts and actions during this period in some detail. To start with, one of the main reasons behind the project was that the monument is situated in the parish of Valleberga which was included in Strömberg's Hagestad Project, a study in long-term settlement development in the coastal region of south-east Skåne (Strömberg 1980).

Prior to the starting up of the Ale's Stones Project, Strömberg considered a Viking Age burial context for the monument to be self-evident (Strömberg 1987; Strömberg 1990; Strömberg 1998). However, she wished to reassess preconceived notions and open up for alternative possibilities, i.e. an older dating of the monument, to the Late Neolithic or the Bronze Age, and to discuss alternative functions as well. Several reasons contributed to this approach, not least the astronomical perspective on megaliths which was introduced in Sweden at the time by Curt Roslund of the Department of Astronomy at Chalmers University in Gothenburg, who became a close collaborator in the project (Roslund 1979). Roslund also measured the monument and drew the first accurate plan with the numbering system of the stones used here (Fig. 2).

As it turned out, the archaeological data soon convinced both Strömberg and Roslund that the traditional Viking Age dating of the monument was correct after all. The fieldwork generated a sparse but quite unambiguous data set, allowing for the conclusion that the ship-setting was built at some point during the period *c.* 550–1050, at a place that most likely had been previously used for burials. The astronomical perspective was also moderated (Roslund & Strömberg 1991; Strömberg 1997; Roslund 2004). Furthermore, Strömberg stressed the possibility that many of the boulders in the sides had been quarried at older megalithic monuments (Strömberg 2003). As will be shown in more detail, later prospecting, observations and comparisons have strengthened these positions.

## From stem to stern

Ale's Stones is situated on a ridge, 37 metres above sea level and just 50 metres from the scree facing the sea. Today, the monument

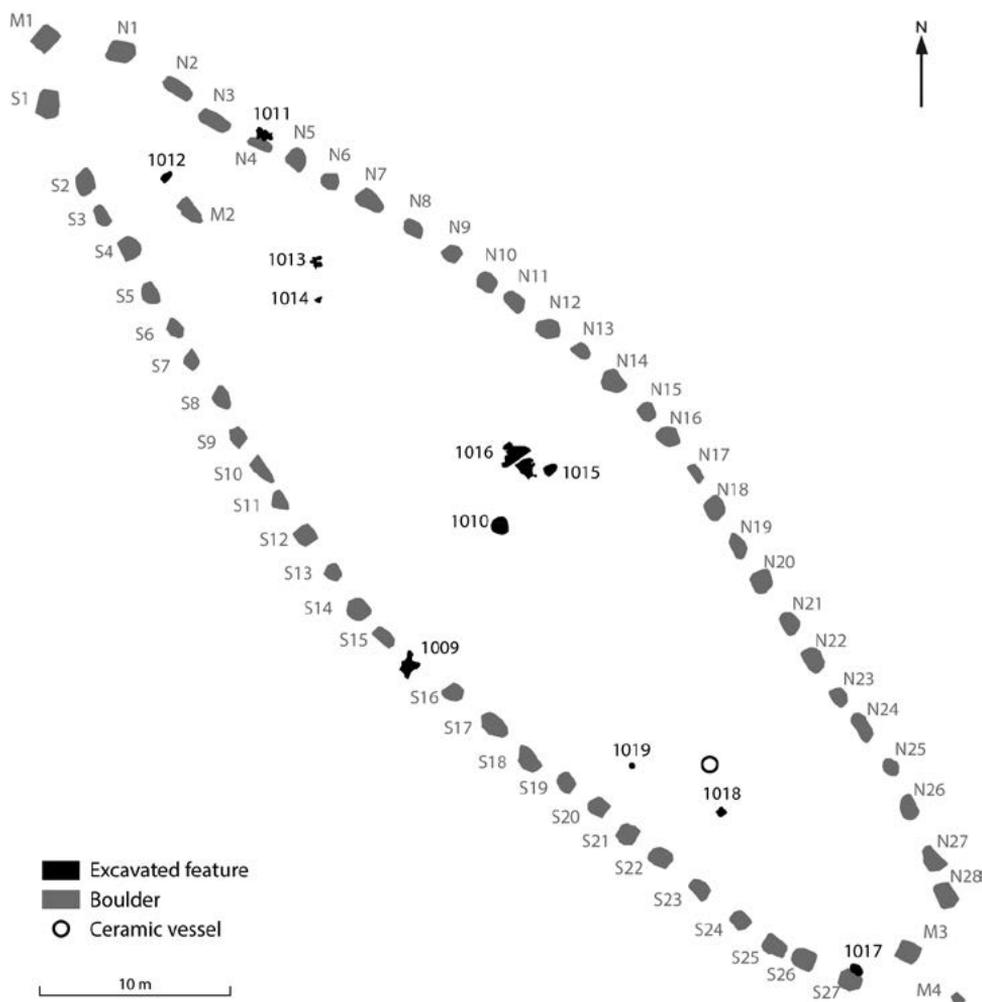


Fig. 2. The ship-setting with boulders (letters/numbers) and excavated features (1011–1017) (Data from Söderberg *et al.* 2012, 44, Fig. 26 and 92 f., Fig. 8).

consists of 59 boulders, 28 in the northern side and 27 in the southern, one stone each in the stem and stern (M1 and M3), one stone called the “rudder-stone” (M4) and one boulder called the “altar-stone” (M2). According to the latest digital survey of the monument it is approximately 70 metres long, including the stem (M1) and the rudder-stone (M4), and at its widest about 19 metres, including the boulders S14 and N14 (Fig. 2). Its orientation generally follows the ridge and the coast, which is NW–SE.

The boulders vary in size. In connection with the 1916 restoration and different investigations the full length has been recorded for 43 of the stones. The stem measures 4.6 metres in height. Most of the boulders in the sides range between 2 and 2.6 metres, though there are odd ones measuring down to 1.3 respectively up to more than 3 metres. Obviously, the full length is not exposed above ground, partly because the boulders have been placed in pits, partly due to the shifting sand. The depth under ground in most cases

varies between 0.6 and 0.9 metres. Notably, the rudder-stone appears relatively small and the altar-stone has supposedly been laid flat, today displaying a length of 1.4 metres (in 1916 stated as 2.75 m).

The Ale's Project engaged scientists from different disciplines. The geologist, Professor Jan Bergström, concluded that the boulders in the sides in most cases consist of granite, but also gneiss and granodiorites (Bergström *et al.* 1988). The materials are common primary rocks from southern Sweden and could have been gathered just about anywhere in the surroundings. However, Bergström stressed the overall pillar-like characters of the boulders and the fact that this shape is comparatively unusual. The stem, stern, rudder and altar-stone differ, as they consist of Hardeberga sandstone. This material has a local connection, and the boulders were most likely quarried along the coast south of Simrishamn (Bergström 1990).

The standing monument thus consists of 59 boulders, 27 in the southern side and 28 in the northern. The southern side has a quite suspicious gap, and the Ale's Project set out to investigate whether this was due to a missing stone or a particular construction feature. Investigations showed that the boulders rested on a foundation of smaller stones, supporting the weight and positioning. A trench was dug at the suspicious gap in the southern side and exposed a small stone foundation. There are good reasons to believe that each side originally consisted of 28 boulders. The stern, stem and rudder stones also appear original, whereas the altar-stone may be questioned. However, as will be discussed in more detail, two pits investigated by the Ale's Project may be interpreted as foundations. Thus, the monument may originally have been composed of between 59 and 61 standing boulders.

Above, some results of the Ale's Project have already been introduced, mainly to give the

reader a vision of the monument as it stands today. The surveys and digs in connection with the project were carried out by Strömberg and her team over a long period, from 1989 to 2004. To support Strömberg in compiling the substantial and (for reasons connected to the longevity of the project) slightly scattered archaeological field data, the County Board of Skåne asked the National Heritage Board to gather, process and produce a report on the basic knowledge of the data and history of research, as complete as possible. The work was finally presented in the spring of 2012. It is published on the Internet though only available in Swedish (Söderberg *et al.* 2012).

We were handed documentation from the fieldwork, with scale drawings and notes, alongside an overview of the site and the different ground works. The sheets were digitized, rectified and processed in ArcMap and Intrasis, and the connected data were registered. The overview showed that all of the Ale's Project's digs consisted of small trenches/pits, mainly in connection with what is considered "unmoved" boulders (compared to the restorations in 1916 and 1956), plus a few cross-section trenches between the sides.

In all, roughly 13% of the area in the immediate context of the ship setting has been archaeologically investigated. It should be noted that Strömberg and her team also placed some pits and trenches at varying distances from the monument. These were in most cases hard to properly rectify and in any case did not yield any data of major importance for the understanding of the ship-setting. Besides that, after Strömberg's death in 2012, a few additional drawings from the fieldwork were discovered in her posthumous documents (LUHM). The sheets and notes have been briefly studied, and as it seems will add details but nothing of substantial significance to the overall interpretation.

From the state of the report we have concluded that the investigations have

touched upon 32 of the boulders, almost evenly distributed between the northern and southern side, plus all four of the axial stones. Besides recording each stone's full length, the trenches also exposed the above-mentioned small stone foundations/packings under and next to the boulders. The material is sometimes the same as in the standing stones, and small stones from the seashore occur often.

Strömberg was keen on noting cup-marks on the boulders, of which several were documented on the parts under ground level (Fig. 2: cup-marks occur on boulders N1, N25, S7, S9, S12, S22 and S27). These positions are crucial, combined with the observation that some of these cup-marks were very well preserved while others were in poor condition. It was concluded that the two categories "represent a rather long time and were not made on the ridge just before the construction of the ship-setting" (Strömberg 2003, 86). Strömberg considered this as an indication that the boulders might have been collected from older stone-built monuments in the surroundings, and reused to raise the ship-setting.

The excavations also resulted in the discovery of some archaeological objects plus finds and  $^{14}\text{C}$  material. Six stone pavings, three pits (including the two mentioned above) and one possible post-hole were documented over the years. Märta Strömberg herself commented that it was difficult to decide whether the pavings were natural concentrations of smaller stones or actual constructions (Strömberg 1990), but these objects have been carefully selected as representatives of the later.

One paving, or rather foundation, has been mentioned before as the possible site of a missing stone in the southern side. One metre north-west of the altar-stone a pit was discovered, and Strömberg suggested that as the correct place for the altar-stone, originally in upright position (Fig. 2, no. 1012). Another pit was discovered in a most central position,

axial between the stem and stern and right in the widest gap between the sides (Fig. 2, no. 1010). It might have been a foundation for a raised stone, analogous to other Viking Age ship-settings with similar centrally positioned large stones interpreted as a symbol of a "mast" (Capelle 1986).

The documentation shows that the thickness of the soil layer inside the ship-setting varies between 0.3 and 0.9 metres, but in most instances is around 0.5–0.6 metres. The layer is described as plough soil, mixed layer (containing sand) and sometimes as a disturbed layer. Considering the thickness of the soil layer, surprisingly few artefacts were found. Apart from occasional finds of animal bone and worked flint, one fragment of a polished flint-axe and one fragment of pottery were found in the topsoil, both dating to the Middle Neolithic phase (Battle Axe culture). Placed in an axial central position, in the stern half of the ship-setting, a ceramic vessel was found at a depth of 0.43 metres (Fig. 2; Söderberg *et al.* 2012, 54, Fig. 33). On typological grounds it was dated to the 5<sup>th</sup> century AD. Inside the pot, a food crust was preserved as well as a fragment of burnt bone and lots of charcoal. Analyses showed that the bone was human and one  $^{14}\text{C}$  analysis each of crust and charcoal resulted in dates between AD 250 and 660 (Table I: Lu-4124 and Lu 4125).

Human bone was also found, next to the boulder N24, besides more charcoal, dated between AD 430 and 660 (Table I: Lu-4126). Another  $^{14}\text{C}$  analysis was carried out on charcoal from the above-mentioned "mast" pit, no. 1010, resulting in a date between AD 690 and 1050 (Table I: Ua-2578). Charcoal samples close to the stern dated to AD 400–950 and AD 570–890 (Table I: Ua-1581 and Ua-2579). Finally, a sample was gathered close to the stem, in a layer with sooty soil containing recent artefacts. The result of this  $^{14}\text{C}$  dating differs greatly from the others,

Lab. nr	Material/context	Age BP	Cal. 1 sigma	Cal. 2 sigma
Ua-1581	Charcoal, young trunk, oak/stern	1375 ±115	AD 540 – 780	AD 400 – 950
Ua-2578	Charcoal, trunk, beech/no. 1010	1110 ±75	AD 820 – 1020	AD 690 – 1050
Ua-2579	Charcoal, branch hazel/stern	1330 ±80	AD 620 – 780	AD 570 – 890
Lu-4124	Charcoal/ ceramic vessel	1650 ±60	AD 260 – 530	AD 250 – 540
Lu-4125	Food crust/ ceramic vessel	1480 ±60	AD 530 – 650	AD 430 – 660
Lu-4126	Charcoal, birch/N24	1490 ±60	AD 470 – 650	AD 430 – 660
Lu-4012	Charcoal/ stem, disturbed context	4600 ±140	3650 – 3100 BC	3650 – 2900 BC

Table I. Radiocarbon samples from Ale's Stones analysed in Uppsala (Ua) and Lund (Lu). (Strömberg 1997; Strömberg 2003; Söderberg *et al.* 2012).

being 3650–2900 BC (Table I: Lu-4012), that is, Early to Middle Neolithic (Strömberg 1997; Strömberg 2003; cf. Söderberg *et al.* 2012, 51 ff., Figs. 31, 32).

Strömberg suggested the existence of a grave-field prior to the construction of the ship-setting (Strömberg 1997, 16 f.). Besides the stone-setting and the finds, the location of a menhir, buried around 1950 is also known. This was situated north-west of the ship (Strömberg 1990, 79 f.; Fig. 2). With a single exception the samples were taken from key contexts reflecting a sequence of events presumably connected to burials during the Iron Age/early Medieval Period and in connection with the raising of the stone-ship during the Viking Age. The sample dating to the Neolithic may be related to the find of a dolmen next to the ship-setting.

While processing the report on the Ale's Stones Project, the National Heritage Board conducted a field survey in the form of geophysical prospecting in 2006 (Trinks *et al.* 2012). Two round structures, possibly graves, were indicated at both sides of the stem, and to the north of the monuments one of the two small side-ships mentioned by Bruzelius was indicated. But the shape that really caught the eye was a huge circle, partly double, with a smaller rectangular element in its centre, situated just 20 metres to the north-east of the ship-setting. The anomaly was strongly reminiscent of a well-known archaeological site situated just some 15 kilometres northwest of Käseberga (Trinks

*et al.* 2012, 23). At Skogsdala, the remains of a Neolithic dolmen, embedded in a circular Bronze Age mound, were excavated in the 1980s (Jacobsson 1986).

We received grants to follow the intriguing clue, and in October 2012 a small excavation was carried out (Andersson *et al.* 2013; Söderberg & Wallebom 2015). Using an excavator, a trench was opened right across the 50-metre wide circle pointed out by the technical department (Fig. 1). Several features that are generally associated with dolmens were found at the centre of the circle, such as small stone rims, markings from the boulders of the grave chamber and the surrounding outer chain of stones, well in the position of the observed rectangular shape. The Neolithic experts on the site were quite confident that what had been discovered actually were the remains of a long dolmen. The surrounding circle was less visually tangible, but the crossing trench was only a couple of metres wide, perhaps too limited to securely validate data. But there really was a ditch at the position of the circle, not well shaped (or preserved) but an obvious physical indication.

The remains of the Neolithic dolmen and the possible Bronze Age mound, the Iron Age/ Early Medieval grave-field and the Viking Age ship-setting reveal a diachronic use of this spectacular piece of landscape. Professor Strömberg (2003) suggested multiple ways to view the site: as landmark, cemetery, meeting-point, symbol of power, cultic centre; and also multiple functions: a place for gatherings,

rituals, administration of justice, and managing economic or social matters. The shift from finding *the* function to acknowledging the multiple functions agrees with a general interdisciplinary understanding as regards long-term perspectives: people and communities change, and so do ideas and places.

Looking back at Märta Strömberg's open-minded and well-informed research, it is rather impressive to view the title of her article in *Lund Archaeological Review* (2003): "Ale's Stones: A Monument of Recycled Boulders?" Merely from the observations from the excavations and the boulders, with special reference to the cup-marks, she found it most probable that the construction material for the ship-setting had been gathered nearby from already existing stone monuments. Judging from the results of the geophysical prospecting in 2006 (Trinks *et al.* 2012) and the 2012 excavation (Andersson *et al.* 2013), one fitting supply of boulders has been discovered, giving strong support to Strömberg's ingenious suggestion.

## Monumental ship-settings

A ship-setting is a symbolic representation of a ship (Kobylynski 1995). As a symbol of passage closely connected to ideas concerning life and death, the ship symbol is widely spread in time and space. In Scandinavia symbolic representations of ships as well as real ships and boats occur in death rituals during many periods of prehistory.

The tradition of building ship-settings is primarily found in certain regions in Scandinavia at different times during the Bronze Age and the Iron Age, c. 1700 BC–AD 1050. A subclass, consisting of very large or monumental ship-settings, measuring more than 40 metres in length, is known only from southern Sweden and Denmark (cf. Capelle 1986; Vestergaard 2007). A few of these oversized ship-settings, situated

on the island of Gotland, are dated to the Bronze Age (Wehlin 2013). The vast majority, however, are dated to the Swedish Vendel Period/Viking Age (c. AD 550–1050). As we shall see, the foundations of the dating vary considerably.

At present 23 places display somewhat disparate evidence for the presence of one or several monumental ship-settings with probable dating to the period c. 550–1000 (Fig. 3). Although there is a marked concentration, with nine places situated to the east in the province of Skåne, the distribution of the monumental ship-settings is clearly supra-regional.

The number includes places with preserved, more or less fragmented and/or restored ship-settings as well as a couple of destroyed examples, known through archaeological excavations, air reconnaissance, and/or written sources. A few may be questioned, but it would not affect the overall picture. It could, however, be affected by the fact that monumental ship-settings most likely are underrepresented in the archaeological record. Remains of monumental ship-settings are discovered now and then, more or less by chance. The latest example was found in 2011, at Hammar in north-eastern Skåne, situated close to the shore of Lake Hammarsjön and next to a ploughed-out Bronze Age mound (Helgesson *et al.* 2013). We may assume that more examples will eventually be identified.

In a thorough study of the monumental ship-settings in Denmark and the province of Skåne, Felix Vestergaard concludes that the lowest common denominator was the topography. The monumental ship-settings are generally situated on higher ground close to major transport routes over land and water, in many instances close to points of intersection. This is indeed also true when it comes to the monumental ship-settings further to the north in Sweden. A close association to places of power, wealth and



Fig. 3. The distribution of places with ship-settings measuring more than 40 metres in length with a probable dating to *c.* 550–1050 (data from Capelle 1986; Tesch 1988; Elfstrand 1998; Vestergaard 2007; Helgesson *et al.* 2013).

cult has also been pointed out by a number of researchers (Glob 1970; Elfstrand 1998; Artelius 2000; Vestergaard 2007).

Peter Skoglund emphasizes that the ship-symbol was used in social strategies varying in time and place. The supra-regional distribution of monumental ship-settings and their general connection to wealth and power indicate that they were associated with an elite network, and he suggests that “they were built in order to reflect the power and strength of warships” (Skoglund 2008, 395).

Most of the small ship-settings contain

graves, predominantly cremations, but when it comes to the monumental ship-settings there is generally a lack of grave-related finds. Furthermore, the small ship-settings are situated at contemporary burial grounds whereas the locations of the larger ship-settings differ. Sometimes they occur in, or close to, more or less contemporary burial grounds, but in some instances they appear as solitaires (although this may partly be an illusion, cf. Trinks *et al.* 2012; Andersson *et al.* 2013). In other instances they occur in complex monumental settings.

To sum up, the distribution of the monumental ship-settings clearly indicates a connection to the social elite. The specific functions of the monuments, however, are not very well known although in fact there is contemporary textual evidence. The inscription of the Tryggevælde rune stone from Zealand, dated to *c.* 900, says that “Ragnhild, Ulv’s sister, set up this stone and made mound and ship-setting (skaiþ) in memory of her husband, Gunulv, son of Nærve...” (Moltke 1985, 226 ff.). The statement is explicit and we may assume that a large ship-setting could be part of a complex monument serving as a memorial and probably also a cenotaph.

In Denmark, where six places with monumental ship-settings are known (Tryggevælde included, although the actual ship-setting is long gone and the exact place unknown) and rune stones are associated with four of them, it is somewhat surprising to learn that Lady Ragnhild of Tryggevælde was jointly responsible for ship-settings at two places. The other place is at Glavendrup, Fyn, where Ragnhild paid respect to her second husband by placing “this stone in memory of Alle, *gode* of the Sølver, honour-worthy *thegn* of the *uia*-host”. It is also mentioned that “Alle’s sons made this monument in memory of their father” (Moltke 1985, 226 ff.).

The use of the words “karþu kubl” – made this monument – in the inscription is important to note. Runologist Erik Moltke argued that “kumbl in the plural means neither grave nor stone-setting alone but a monument complex which might consist of several items: rune stone, stone-setting, grave mound or cenotaph mound, a surrounding wall or fence, a church and possibly more” (Moltke 1985, 215).

So far we have been introduced to Ragnhild’s husbands, no doubt magnates and most important persons: Gunulv, “a clamorous man” – “few will now be born better than him” and Alle, “*gode* and *thegn*”.

According to Moltke the titles suggest that Alle was a priest (*gode*) of the *Æsir* faith as well as leader of a warrior band (Moltke 1985, 224 ff.). The other two rune stones connected to large ship-settings in Denmark are placed in memory of women and parents. At Bække, Jutland, the rune stone was probably placed in the stern of a large ship-setting which was added to a pair of Bronze Age mounds at a location close to the famous ancient road, the *hærvej* (Vestergaard 2007, 175). The inscription says that this “stone-monument (griotku(m)bl) was built by one, possibly two sons, in memory of their mother, Vibrog” (Moltke 1985, 386) Finally, recent excavations at Jelling have shown that the rune stone erected by King Gorm in memory of Queen Tyra stands close to the centre of a 354-metre long ship-setting. King Harald Bluetooth’s famous rune stone, known as “Denmark’s baptismal certificate”, was added somewhat later. All in all, Jelling appear as a most amazing monument complex, also including large mounds, palisades and a hall succeeded by a church (Holst *et al.* 2013).

At Lejre in Zealand, another place associated with kings, at least four monumental ship-settings are known, one of which is situated at a Viking Age burial ground close to a large 6<sup>th</sup> century mound (Andersen 1995; Vestergaard 2007). In Sweden the setting *par excellence* is no doubt Anundshög (Anund’s Mound) close to the Badelunda ridge to the north of Lake Mälaren. Two impressive ship-settings, measuring a total length of 105 metres, are built together and anchored at Anund’s Mound, one of the largest mounds in Sweden. A number of smaller mounds and ship-settings as well as round stone-settings are also present. To the east of the site and through a ford led a road, known as *Erikskatan*, a route which was supposedly travelled by the king in order to be acknowledged in the provinces after his acceptance as king in Uppsala. The road is lined by 14 menhirs and prospecting has

shown that there is a row of large posts-holes as well (Sanmark & Semple 2011). Between the road and the mound there is an impressive rune stone, dating to AD 1000–1050.

The setting at Anundshög is documented as a *thing* site from 1392 (Emmelin 1944), and the connection between ship-settings and places of assembly has been stressed (e.g. Elfstrand 1998; Artelius 2000; cf. Brink 2004; Sanmark & Sample 2008). The impressive ship-setting (or perhaps rather “hall-setting”, since there is neither stem nor stern, cf. the monumental ship-setting at Nässja) called Rane’s Stones in Askeberga, in the province of Västergötland, was used as a *thing* site at the close of the twelfth century (Beckman 1974). Place names in the surroundings of Askeberga indicate the presence of residences of power as well as cult sites in the old folk-land of Vadsbo (Brink 1999). According to the medieval provincial laws, *Erikskatan* passed the Tidan River not far from the monument. Another site with a monumental ship-setting, in the province of Östergötland, has also been discussed in connection with places of assembly. It is situated in Linköping, close to a ford where *Erikskatan* passed the Stångån River and the royal farm at Stång (Elfstrand 1998).

The possibilities to date the monumental ship-settings vary considerably. By comparison the Danish examples are very precisely dated. Rune stones were present at four monumental ship-settings, and it has been suggested that the monumental ship-settings in Denmark were erected during a rather short period, c. AD 900–970 (Vestergaard 2007). The dating of the large ship-settings in Sweden is far more uncertain. There are rune stones close to large ship-settings at two locations. At Färlöv in the province of Skåne, the runic inscription is weathered and the stone was not included in the stone ships (Björk 1999). At the site of Anundshög the runic inscription is ambiguous. It says that “Folkvid raised all

of these stones”, but this statement probably refers to the row of menhirs flanking the road, not the double ship-setting (Brink 2004). The excavated ship-settings at Färlöv (Björk 1999) and Linköping (Helander & Zetterlund 1995) have been dated by means of radiocarbon and stratigraphy. Based on these methods Färlöv ship 2 has been dated to AD 650–850, ship 1 to AD 750–950, and the Linköping ship to AD 800–900.

Considering the other examples, we have to rely on typology at present. Märta Strömberg has listed a number of variations: in size (length and width) and form, in the use of large boulders versus thin slabs, homogenous or varying stone material, between closely placed stones and single stones placed at a certain distance from each other, significant differences in height between stem and stern stones and the sides, the presence or absence of stone filling, of stern and stem stones, of mast and rudder stones, of differences in orientation, of relations to other stone-ships connected by the same stem or stern stone and of relations to rune stones, mounds etc. (Strömberg 1998, 275). However, typology must be considered inaccurate. It clearly offers a possibility to roughly distinguish between Bronze Age and Early Medieval ship-settings but it is not possible to take it further.

## In close context

In relation to several of the monumental ship-setting sites discussed above, Ale’s Stones does not at first sight appear to be particularly centrally placed, as regards the exercise of cult and power. Apart from the Färlöv site, the connection to places of power and the absolute social elite which is so obvious in Denmark, and in some instances further to the north in Sweden, is not that apparent in Skåne. The concentration of nine places with monumental ship-settings, nearly all of which are situated

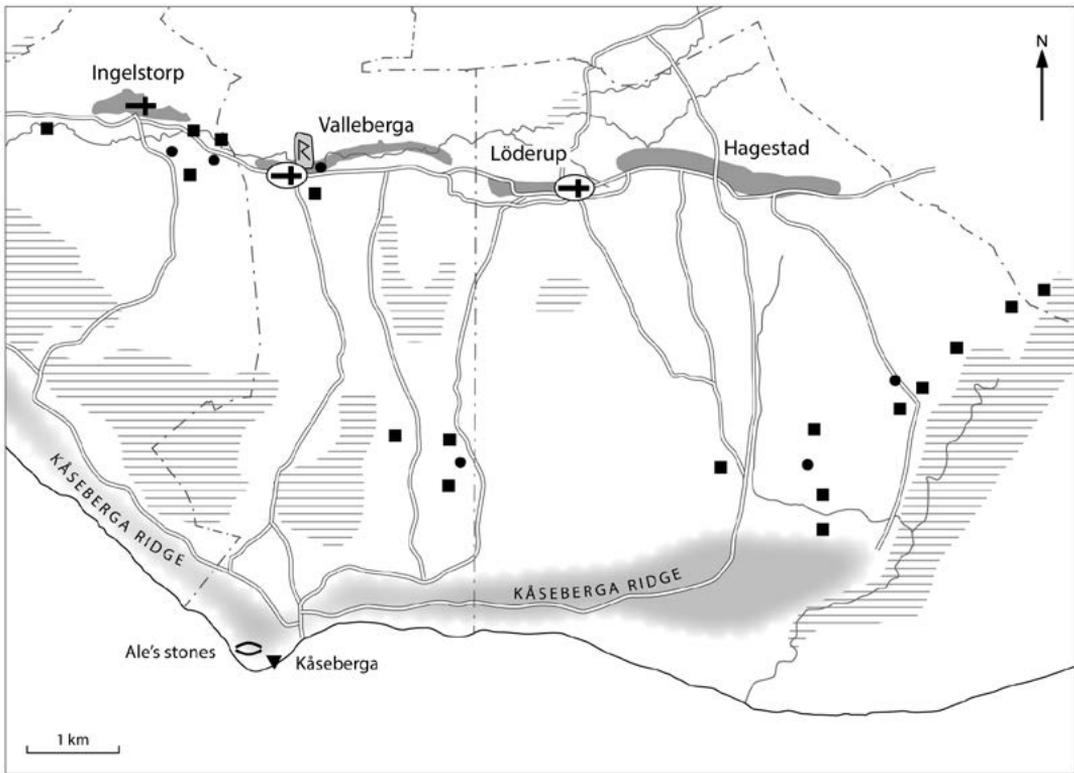
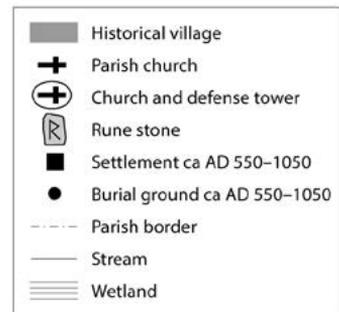


Fig. 4. The parishes of Ingelstorp, Valleberga and Löderup *c.* 550–1000 and later, with settlements and other phenomena discussed in the text (data from Strömberg 1982, 204 Abb. 143; National Board of Antiquities, Fornsök; Skånska rekognosceringskartan 1812–1820).



in the eastern and northern parts of the province, is characterized by morphological variation. Most of the traits mentioned above are represented at least in single examples. In combination with the large variation and somewhat less obvious connection to the absolute social elite, the distribution perhaps suggests that the monumental ship-settings in Skåne represent a wide time-span within the period *c.* 550–1050.

The potential for communications at the location of Ale's Stones is also hard to estimate

(Fig. 4). The ridge follows the coastline, and the early medieval settlements appear to have been primarily gathered in a parallel zone, a couple of kilometres inland. The historical villages of Ingelstorp, Valleberga, Hagestad and Löderup are situated another couple of kilometres further inland, and the cadastral maps show that the villages farms formed an almost unbroken long row alongside the road.

For many years Märta Strömberg studied the local prehistoric settlement history through the Hagestad Project. Most of

the known settlements on the Kåseberga ridge were of Stone Age origin, and she maintained that settlements on the ridge were mainly of seasonal character (Strömberg 1994). At any rate, the ridge was clearly less populated than the inland plain. Instead, the importance of the ridge for communication and for supplementary resources was stressed. However, we may presume that the monument was built in order to impress, implying that people must have been present at land as well as at sea.

By the seashore at the foot of the ridge, where the fishing village of Kåseberga is situated, first mentioned in the written records in 1537 (Wikborg 2002a), a sequence of cultural layers has recently been exposed by erosion. Samples from sediments and features underneath the layers belonging to the fishing village have been radiocarbon-dated to different phases during the Late Bronze Age, Iron Age and Viking Age (Mörner & Lind 2013, 85 f.; cf. Söderberg 2014). The activities, mainly represented by hearths and rather anonymous sediments, may well indicate the presence of a seasonally used prehistoric harbour/landing place. However, the knowledge of the cultural layers in Kåseberga is at present limited.

More substantial remains were uncovered by the excavations of the previously mentioned early medieval settlement area on the inland plain. The excavations were of quite small scale; test pits were dug in order to locate sunken-floor huts, since these generally yield substantial find material. The excavations were carried out manually and the trenches were seldom larger than the hut in question.

In this manner large settlement areas were investigated in 1949–1951 and 1965–1970 at Stockholmsgården and Tygapil, a couple of kilometres to the north-east of Ale's Stones. In total, some 30 huts were excavated together with a large number of hearths and cultural layers, resulting in a rich and varied find

material, mainly from the Vendel Period/Viking Age (c. 550–1050) (Strömberg 1961; Strömberg 1971). Close to the villages of Ingelstorp and Valleberga to the north-west and further to the east, several settlements from the same periods were excavated in a similar way, also yielding rich find material (Strömberg 1963; Strömberg 1982; Strömberg 1988).

In connection with these settlements, a number of grave-fields were partly investigated. Most of the Viking Age graves were found at Ingelstorp and, to some extent, at Valleberga and Hagestad (Svanberg 2003, Cat. Nos. 243–245). The graves are typical representatives of the ritual system prevailing in south-east Skåne at the time, a cremation tradition with external constructions consisting of round unfilled stone circles, ship-settings (mostly small) and more or less round stone-settings (cf. Svanberg 2003, 145).

Summing up, the excavations offer an extensive but fragmented picture of the settlement complexes on the plain. Although many details are obscure, there is no doubt that there was a large and growing population on the plain close to the Kåseberga ridge and Ale's Stones AD 550–1050. In the late Viking Age (c. 900–1050) a process took place leading to settlement agglomerations at the historical village sites, on the heavier soils further away from the coast. This development agrees with a general trend on the coastal plains of Skåne at the time. It seems to have involved the (partial) abandonment of the coastal zone, most probably a consequence of troubled times and piracy (Callmer 1986). In a larger perspective, there was an increasing preference for heavier soils, which may be explained by the needs of a growing population and, in particular, a stratum of wealthy landowners, requiring new agricultural methods and new modes of organization. The re-localization is particularly evident in Valleberga, Löderup

and Hagestad, i.e., the villages closest to Ale's Stones and Kåseberga.

There was also political and ideological change. During the Viking Age, Skåne was to a high degree characterized by its local and/or regional communities and traditions. Based on a system of death-rituals differing from neighbouring regions, south-eastern Skåne may be considered as a community with a need to express an identity of its own in relation to surrounding communities (cf. Svanberg 2003). As previously mentioned, ship-settings were quite commonly represented in the eastern part of Skåne, with only a few peripheral examples in the west.

The events and actions working towards increased homogenization and reinforced connection to the kingdom of Denmark accelerated during the second half of the 10th century. A number of features linked to the changes have been studied, such as the presence of circular forts, re-location of central places/royal demesnes, coinage and hoard finds, runic stones and place-names (e.g. Andrén 1983; Anglert 1995; Söderberg 2005; Lihammer 2007). In the early stages, changes were amplified in south-western Skåne, where the westward contacts had deep roots. At about the same time and slightly later, there is evidence that the elite groupings in south-eastern Skåne were taking part in the supra-regional network, with connections to the second wave of Viking raids and the royal powers behind these (Svanberg 1999). In the villages of Baldringetorp, Östra Herrestad and Glemminge, rune stones were erected in memory of *thegns*, and hoards with the same composition as in the western region were hidden (Söderberg 2005, 421 ff.).

The rune stone from Valleberga shows that these groupings and networks were also represented in the close vicinity of Ale's Stones. The renowned inscription translates: "Sven and Thorgund [or Thorgot] made these monuments in memory of Manne and

Svenne. God help their souls well. And they lie in London" (Moltke 1985, 238). The rune stone is intriguing for many reasons. It clearly states that it concerns a cenotaph or memento, and the word *kumbl* (monument) is used in the plural, referring to a monument complex (cf. above). The concluding prayer and the cross on the stone show the Christian influences in the region, and according to Moltke, this special type of cross (outline crosses with swastika) is paralleled on several rune stones on Bornholm (Moltke 1985, 272 f.).

The rune stone may be regarded as a sort of prelude to the manifold manifestations of the high aristocracy in the local villages of the 12<sup>th</sup> and early 13<sup>th</sup> centuries. A church with a west tower was built in Löderup in the 1140s, and a round church in Valleberga at the close of the century (Nilsson 1994). Defence towers were erected close to both churches (Prah 1996). Round churches are rather unusual, and the combination with defence tower is very unusual outside Bornholm.

The baptismal fonts of Löderup and Valleberga in particular are famous works of art, traditionally attributed to the stonemason "Magister Majestatis Domini" (Karlsson 1996). Richly decorated masonry in the form of architectural building details as well as grave-cists are also known from Valleberga church (Wikborg 2002b). It has been pointed out that these extraordinary manifestations should be viewed in relation to the cadastral map from 1704–1705 where the church is depicted close to a farm situated on the largest toft in the village (op.cit., 178 f.). Close by, to the east of the church, Märta Strömberg excavated a sunken hut and graves dating to c. 550–1000 (Strömberg 1973).

Furthermore, an analysis of the cadastral maps indicates that the villages of Valleberga, Löderup and Hagestad originally formed a single parish, later to be split up in two. The church in Löderup with its central location in the original unit was possibly the parish

church and the church in Valleberga an exclusive private church, built at a manor that was connected to the high aristocracy, perhaps involving Archbishop Absalon (cf. Wikborg 2002b).

## Landing the ship

When comparing Ale's Stones to similar monumental ship-settings it is absolutely vital to embrace and study the contexts they are a part of. The examples above show that the stone-ships are erected in prominent locations close to intersection points of important land and water routes, and that they are associated with places of wealth and power and in some instances are mentioned as *thing* sites during the 13<sup>th</sup> and 14<sup>th</sup> centuries.

The inscriptions on the rune stones display some of the primary functions which can be attributed to the ship-settings: they were set up as a memorials and cenotaphs by the social elite. But it is clear that there also were other, underlying motifs. Sometimes the ships were incorporated in relation to already existing monuments, sometimes a whole complex of monuments was constructed, simultaneously or successively. The monumental settings were initially created as a result of social strategies and developed further according to accessible possibilities and circumstances.

The monumental ship-settings can be discussed in concept of materialized ideology (DeMarrais *et al.* 1996; cf. Söderberg 2005, 33 ff.). In this context, ideology is defined as the means by which a dominating individual or group of individuals uses symbolic representation in order to create or maintain power or authority. It refers equally to the material resources available to communicate an idea, and to the idea in itself. The notion of materialization is intended to stress that the creation is a continuous process, in which the ideological content is

subordinate. Materialized ideologies focus on establishing mutual conceptualities, and the materialization in itself generates basic social power. Those who organized the resources needed to erect a monumental ship-setting, made an impression in the landscape which promoted their agenda. The materialization is connected to a series of efforts and labour, and by constructing a monumental ship-setting the ideology was rooted in the economy.

The analysis of the landscape around Ale's Stones demonstrates the presence of resourceful individuals or groups, particularly in Valleberga during the period from the late 10<sup>th</sup> century to the 12<sup>th</sup> century, when extensive changes took place on both local and overall social levels. The traditional contacts with Bornholm, evident from a large body of archaeological material (cf. Sonne Nielsen 1996), were maintained and developed further, as suggested by the rune-stones and fortified round churches, while new collaborations were initiated with networks oriented westwards. Bornholm can be described as a natural stepping stone when crossing the Baltic, giving Ale's stones a strategic position in a larger geographical context (cf. Lihammer 2007; Naum 2008). Kåseberga and places nearby with monumental ship-settings situated at the coast may tentatively be viewed as nodal points connecting south-east Skåne with Bornholm and the regions beyond (cf. Fig.3: indicated/preserved monumental ship-settings at Kabusa to the west of Kåseberga [Tesch 1988] and at Torup/Kivik to the east [Vestergaard 2007]).

It goes without saying that the contacts were maintained by sailing, and the significance of ships – in particular warships – was great and increasing. In such a situation the raising of monumental ship-settings appear as a means to assemble and engage people in joint projects. If we presume that there was a harbor in the vicinity of Ale's Stones, for example in Kåseberga, the choice

of position appears logical by analogy with the sites where monumental ship-settings are regularly placed. Besides, supplies of reusable material from older monuments were available here. Altogether, this can be regarded as a conscious act aiming to connect with and at the same time recreate the past, which resembles the placing of several other monumental ship-settings close to Bronze Age mounds (cf. Thäte 2007, 177).

In conclusion, we argue for continued research regarding monumental ship-settings and the local landscape in the south-eastern part of the province of Skåne, in order to put Ale's Stones into overall historical and social contexts of the kind which we outline in the article. The review demonstrates some of the present problems and possibilities. In further research we wish to stress the importance of continued prospecting and focused archaeological investigations in connection with the monuments and their settings.

## Acknowledgements

Thanks to Henrik Pihl for illustrations, Alan Crozier for language revision and the anonymous reviewer for valuable comments. Thanks also to the National Historical Museums Contract Archaeology Service in Lund and the Anders Althin Foundation for generous support.

## References

- Åberg, G. 1960. Kring Ales stenar. Saga och sanning om skeppssättningen vid Kåseberga. *Skånes hembygdsförbunds årsbok*.
- Andersen, S. W. 1995. Lejre – skibssætninger, vikingegrave, Grydehøj. *Aarbøger for Nordisk Oldkyndighed og Historie* 1993.
- Andersson, M., Knarrström, A., Söderberg, B. & Wallebom, B. 2013. *Ales stenar i nytt ljus. Delprojekt 1 - gravmonumentet intill skeppssättningen*. Riksantikvarieämbetet UV Rapport 2013:80. Stockholm. Available from <http://kulturarvsdata.se/raa/samla/html/6106http://samla.raa.se/xmlui/> [accessed 15 May 2015].
- Andrén, A. 1983. Städer och kungamakt – en studie i Danmarks politiska geografi före 1230. *Scandia* 49 (1).
- Anglert, M. 1995. *Kyrkor och herravälde. Från kristnande till sockenbildning i Skåne*. Lund Studies in Medieval Archaeology 16. Stockholm.
- Artelius, T. 2000. *Bortglömda föreställningar. Begravningsritual och begravningsplats i halländsk yngre järnålder*. GOTARC, Series B, Gothenburg archaeological theses 15. Göteborg.
- Beckman, N. 1974. *Äldre Västgötalagen – översatt och förklarad*. Västergötland – Bidrag till landskapets kulturhistoria och natur, B 3. Skara.
- Bergström, J. 1990. Ett geologiskt studium av Ales stenar. *Ystadiana*.
- Bergström, J., Daniel, E., Herner, E., Kornfält, K-E., Strömberg, M. & Wikman, H. 1988. Ales stenar – stenarnas historia. *Ale* 4.
- Björk, T. 1999. For Gods and Men to Behold: Excavations at an Iron-Age Grave Field in Färlöv, 1996–1998. *Lund Archaeological Review* 4, 1998.
- Brink, S. 1999. Social order in the early Scandinavian landscape. In Fabech, C. & Ringtved, J. (eds.), *Settlement and Landscape. Proceedings of a conference in Århus, Denmark, May 4–7 1998*. Jysk Arkæologisk Selskabs skrifter. Århus.
- Brink, S. 2004. Mytologiska rum och eskatologiska föreställningar. In Andrén, A., Jennbert, K. & Raudvere, C. *Ordning mot kaos. Studier av nordisk förkristen kosmologi*. Vägar till Midgård 4. Lund.
- Bruzelius, N. G. 1853. *Svenska fornlemningar, af-tecknade och beskrifna*. Lund.
- 1873. Antiquarisk Beskrifning öfver Walleberga Socken. *Samlingar till Skånes historia, fornkun-*

- skap och beskrifning* 1874.
- Callmer, J. 1986. To stay or to move. Some aspects of the settlement dynamics in southern Scandinavia in the seventh to the twelfth centuries AD, with special reference to the province of Scania, southern Sweden. *Meddelanden från Lunds Universitets Historiska Museum* 1985 – 1986.
- Capelle, T. 1986. Schiffssetzungen. *Præhistorische Zeitschrift* 61 (1).
- DeMarrais, E., Castillo, L.J. & Earle, T. 1996. Ideology, materialization and power strategies. *Current Anthropology* 37.
- Emmelin, A. 1944. Om tingsställen i Uppland och Västmanland före tillkomsten av 1734 års lag. *Rig* 26.
- Elfstrand, B. 1998. Skeppssättningen vid Stångån. Stångebro – händelser kring vatten. *Meddelanden från Östergötlands Länsmuseum* 1997/1998.
- Glob, P.V. 1970. Jellings Bautasten. *KUML: Årbog for Jysk Arkæologisk Selskab*.
- Helander, A. & Zetterlund, P. 1995. *Paragrafen. Arkeologisk slutundersökning av gravfält och boplatz i Kv Paragrafen och stg 1759. Linköpings stad, Linköpings kommun, Östergötland*. Riksantikvarieämbetet Avdelningen för arkeologiska undersökningar UV Linköping Rapport 1995:46. Stockholm.
- Helgesson, B., Fabeck, C., Linderöth, T. & Skoglund, P. 2013. *Hammar 9:21 m.fl. Särskild undersökning 2010–2011. Fornlämning 90:1 och 157. Nosaby socken, Kristianstads kommun, Skåne län*. Sydsvensk Arkeologi Rapport 2013:25. Kristianstad.
- Holst, M. K., Jessen, M. D., Andersen, S. W. & Pedersen, A. 2013. The Late Viking Age royal construction at Jelling, central Jutland, Denmark. Recent investigations and a suggestion for an interpretative revision. *Præhistorische Zeitschrift* 87 (2).
- Jacobsson, B. 1986. The Skogsdala Dolmen. A Long Dolmen beneath a Bronze Age Burial Mound at Skogsdala, South Scania, Sweden. *Meddelanden från Lunds Universitets Historiska museum* 1985-1986.
- Karlsson, M. 1996. *Dopffuntar i Skåne – en essä*. Bachelor Thesis in Medieval Archaeology, Lund University. Lund.
- Kishonti, I. 2004. Att ta ställning eller inte? Med erfarenheter av alternativ arkeologi vid Ales stenar i Skåne. In Andersson, P. & Welinder, S. (red.), *Mellan Thomsen och Däniken. Oenig diskussion kring alternativ arkeologi*. Lindome.
- Kobylinski, Z. 1995. Ships, Society, Symbols and Archaeologists. In Crumlin-Pedersen, O. & Thye, B. M. (eds.), *The Ship as a Symbol in Prehistoric and Medieval Scandinavia*. Publications from the National Museum Studies in Archaeology & History Vol. 1. Copenhagen.
- Lihammer, A. 2007. *Bortom riksbildningen. Människor, landskap och makt i sydöstra Skandinavien*. Lund Studies in Historical Archaeology 7. Lund.
- Moltke, E. 1985. *Runes and their origin. Denmark and elsewhere*. Copenhagen.
- Montelius, O. 1917. *Stenskeppet vid Käseberga. Minnesskrift 1907–1917 utgiven af Ystads Fornminnesförening*. Ystad.
- Mörner, N-A. & Lind, B. G. 2012. Stonehenge Has Got a Younger Sister. Ales stones in Sweden decoded. *International Journal of Astronomy and Astrophysics* 2012 (2).
- 2013. The Bronze Age in SE Sweden. Evidence of Long-Distance Travel and Advanced Sun Cult. *Journal of Geography and Geology* 5 (1).
- Naum, M. 2008. *Homeland's lost and gained. Slavic migration and settlement on Bornholm in the early Middle Ages*. Lund Studies in Historical Archaeology 9. Lund.
- Nilsson, I-M. 1994. *Rundkyrkor i Norden*. Master's Thesis in Medieval Archaeology, Lund University. Lund.
- Pb. Jordeböcker över Lunds ärkesätets gods vid medeltidens slut. Palteboken och 1522 års uppbordebok*, utgiven av G. Johannesson. 1953. Skånska senmedeltid och renässans 7. Lund.
- Prahl, G. 1996. *Kastaler på Gotland, Bornholm och i sydöstra Skåne*. Master's Thesis in Medieval Archaeology, Lund University. Lund.
- Roslund, C. 1979. Ale – forntidsmatematiker och astronom? *Forskning och framsteg* 5.
- 2004. Liten astronomilära för Ales stenar. *Ale* 3.
- Roslund, C. & Lindström, J. 2002. Det stora guidebräcket på Ales stenar. *Folkvett* 2.
- Roslund, C. & Strömberg, M. 1991. Ales stenars datering. *Ale* 2.
- Rudebeck, E. 2008. Ales stenar lider skeppsbrott i ämbetsmannapekoral. Skyltar, språk och kommunikation vid en kontroversiell fornlämning. In Goldhahn, J. (red.), *Gropar och monument – En vänbok till Dag Widholm*. Kalmar Studies in Archaeology IV. Kalmar.
- Sanmark, A. & Semple, S. 2008. Places of Assembly. New Discoveries in Sweden and England. *Fornvännen* 103 (4).

- 2011. *Tingsplatsen som arkeologiskt problem. Etapp 3: Anundshög. Arkeologisk provundersökning – forskning*. TAP Field Report No 3. Newcastle. *Skånska rekognosceringskartan. Framställd av fältmättningsbrigaden 1812–1820*. 1986. Stockholm.
- Skoglund, P. 2008. Stone ships. Continuity and change in Scandinavian prehistory. *World Archaeology* 40 (3).
- Söderberg, B. 2005. *Aristokratiskt rum och gränsöverskridande. Järrestad och sydöstra Skåne mellan region och rike 600–1100*. Riksantikvarieämbetet Arkeologiska Undersökningar Skrifter No 62. Stockholm.
- 2014. *Skadebesiktning i Käseberga. Kulturlager från förhistorisk och nyare tid. Antikvarisk kontroll*. Riksantikvarieämbetet UV Rapport 2013:43. Stockholm. Available from <http://kulturarvsdata.se/raa/samla/html/7094><http://samla.raa.se/xmlui/> [accessed 15 May 2015].
- Söderberg, B., Knarrström, A., & Stark, K. 2012. *Ales stenar. Fördjupat kunskapsunderlag. Arkeologisk utredning*. Riksantikvarieämbetet UV Rapport 2012:21. Stockholm. Available from <http://kulturarvsdata.se/raa/samla/html/5296><http://samla.raa.se/xmlui/> [accessed 15 May 2015].
- Söderberg, B. & Wallebom, B. 2015. Monumental make over? Remains of a long dolmen close to the ship-setting Ale’s stones. In Ekengren, F., Helgesson, B., Larsson, L. & Söderberg, B. (eds.), *Small Things – Wide Horizons. Studies in Honor of Birgitta Härdh*. Oxford.
- Sonne Nielsen, F. O. 1996. *Forhistoriske interesser*. Rønne.
- Strömberg, M. 1961. *Untersuchungen zur jüngeren Eisenzeit in Schonen*. I. Textband. *Acta Archaeologica Lundensia*, Series in 4°, No 4. Bonn & Lund.
- 1963. Handelsstråk och vikingabygd i sydöstra Skåne. *Ale* 3.
- 1971. Grubenhäuser in Valleberga. *Untersuchungen 1965–70. Meddelanden från Lunds Universitets Historiska Museum 1969–1970*.
- 1973. Nya fynd av vendeltida fibulor i Skåne. *Finska fornminnesföreningens tidskrift* 75.
- 1980. The Hagestad Investigation – a Project Analysis. *Meddelanden från Lunds Universitets Historiska Museum 1979–1980*.
- 1982. *Ingelstorp. Zur Siedlungsentwicklung eines Südschwedischen Dorfes*. *Acta Archaeologica Lundensia*, Series in 4°, No 14. Bonn & Lund.
- 1987. Bör man undersöka Ales stenar? *Ale* 1.
- 1988. *Från bågskytt till medeltidsbonde. Bosättningshistoria i och kring Hagestad*. Ystad.
- 1990. Vikingamonument eller maktsymbol i bronsåldersbygd. *Ystadiana* 1990.
- 1994. Käsebergaåsen under forntiden. *Österlen. Årsbok från den samlade hembygdsrörelsen på Österlen*.
- 1995a. Teater, musik, poesi och bröllop vid Ales stenar. Nutidsmänniskans behov av forntida helgedomar. *Ale* 1.
- 1995b. Fornminne med många uttolkare. Ales stenar inspirerar fackmän och allmänhet. *Ale* 4.
- 1997. C14-dateringar vid Ales stenar. *Ale* 1.
- 1998. The complex meaning of Sweden’s largest stone ship “Ales stenar”. In Wesse, A. (red.), *Studien zur Archäologie des Ostseeraumes. Festschrift für Michael Müller-Wille*. Neumünster.
- 2003. Ale’s Stones. A Monument of Recycled Boulders? *Lund Archaeological Review* 7, 2001.
- Svanberg, F. 1999. *I skuggan av vikingatiden. Om Skåne, Halland, Blekinge och Själland*. University of Lund, Institute of Archaeology, Report Series 66. Lund.
- 2003. *Death Rituals in South-East Scandinavia AD 800 – 1000. Decolonizing the Viking Age 2*. *Acta Archaeologica Lundensia*, Series in 4°, No 24. Stockholm.
- Tesch, S. 1988. En slättbygd vid kusten under brons- och järnålder – arkeologiska undersökningar inom ramen för Ystadsprojektet (B3). *Ystadiana*.
- Thäte, E.S. 2007. *Monuments and Minds. Monument Re-use in Scandinavia in the second Half of the First Millenium AD*. *Acta Archaeologica Lundensia*, Series in 4°, No 27. Lund.
- Trinks, I., Larsson, L.-I., Stark, K. & Karlsson, P. 2012. *Arkeologisk prospekteringsundersökning Ales stenar. Skåne, Ystads kommun, Valleberga socken, RAÄ 20*. Rapport Riksantikvarieämbetet UV Teknik. Stockholm.
- Vestergaard, F. 2007. Monumentale skibsøetninger i Danmark og Skåne. *Kuml: Årbog for Jysk Arkæologisk Selskab*.
- Wehlin, J. 2013. *Östersjöns skeppssättningar. Monument och mötesplatser under yngre bronsålder*. GOTARC, Serie B, Gothenburg Archaeological Theses 59. Göteborg.
- Wikborg, J. 2002a. Det gamla fiskeläget. In Wikborg, J. (red.), *Käseberga. Historia och historier kring ett fiskeläge*. Käseberga.
- 2002b. Valleberga kyrka. In Wikborg, J. (red.), *Käseberga. Historia och historier kring ett fiskeläge*. Käseberga.

*Internet references*

Geometrisk avmätning 1704. Valleberga socken Valleberga nr 1-55 58 92 93. Available from: <http://www.lantmateriet.se/Kartor-och-geografisk-information/Historiska-kartor/> [Accessed 10 January 2015].

National Board of Antiquities, Fornsök. <http://www.fmis.raa.se/> [Accessed 15 May 2015].

*Unpublished sources*

LUHM. Lund University Historical Museum. Archive.

*Bengt Söderberg, The Archaeologists, National Historical Museums, Odlarevägen 5, SE-226 60 Lund, Sweden. Bengt.Soderberg@arkeologerna.com*

*Annika Knarrström, The Archaeologists, National Historical Museums, Odlarevägen 5, SE-226 60 Lund, Sweden. Annika.Knarrstrom@arkeologerna.com*