OPEN ACCESS, NODAL POINTS,
AND CENTRAL PLACES

Maritime communication and locational principles
for coastal sites in south Scandinavia, c. AD 400–1200

This paper surveys the archaeology of coastal settlement in south Scandinavia, c. AD 400–1200 from a perspective of communication. The location of important centres of communication and exchange reveal changes of preference, which reflect the shifting nature of social relations. The Late Iron Age port Lundeborg is characterized by safe access for foreigners, gathered for periodic assemblies; the Early Viking Age emporia Åhus is identified as a nodal point at a natural barrier for bulk-traffic; Early Medieval Roskilde, finally, was a central place related to a local hinterland, and collected several central functions under central authority.

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Introduction

The sea was treasured by Late Iron Age and Early Medieval Scandinavians for many reasons.

In addition to supplying fishery and other coastal resources, it was the principal conduit of regional and long-distance communication. Through the period c. AD 400–1200 various sites emerge or disappear as centres of communication and exchange. The fate of individual sites is often explained as an effect of the changing fortunes of political centres. Communication, however, is a reality of its own. This paper argues that over the centuries, the choice of location for sites concerned with long-distance traffic follows a pattern, which is closely related to changing modes of communication and social relations, rather than mere political shifts. Analysing the location of three evidently important sites, it asks what form of communication made just these positions particularly attractive at a particular period of time.
Coastal settlements

In recent years, many investigations have shown that settlements at the coast became common in south Scandinavia in the middle of the first millennium AD (Fig. 1). Well-studied examples include Selsø – Vestby in Roskilde Fjord and Vester Egesborg in southern Zealand (Ulriksen 1998; 2006), Strandby Gammeltoft in south-west Fyn (Henriksen 1997) and Næs in southern Zealand (Christensen 2006). Comparable sites are also known from earlier excavations (e.g. Strömberg 1978), and from investigations in other parts of south Scandinavia (Carlsson 1991; Callmer 1994; Birkedahl & Johansen 2000; Dobat 2005; Ulriksen 2006).

The coastal sites are often characterized by large numbers of sunken-featured buildings, rather than the large multi-purpose longhouses of agrarian villages in the inland. The find-material is marked out, unsurprisingly, by tools for fishing, boat-repair and other maritime activities, and sometimes by a more varied assemblage.

Fig. 1. Excavated settlements in south Scandinavia c. AD 600–1100. Sites discussed in the text are indicated.
related to crafts and exchange. Sailing, exchange and communication are the main issues discussed in connection with these sites. But the coast held many other attractions. Among the many sites located on the coast, several were not concerned with trade or travel, but with a basic economy of fishing or grazing in the coastal meadows.

The most common maritime activity was undoubtedly fishing. Judging by the species identified in bone-samples from many sites, Viking Age North Europeans were not yet accustomed to deep-sea fishing (cf. Barrett et al. 2004). Rather, fishing took place on shallow water near the coast. Albeit a maritime activity, it scarcely implied navigation beyond the local surroundings, and did not in itself lead to more distant communication.

The forests and meadows of the coastal forelands were another valuable resource, certainly exploited for permanent or seasonal grassing. Whether the herds were sent out from nearby villages or belonged to separate communities, the groups settled here had very different needs than people in inland villages. Settled perhaps only seasonally at the sea, and with no need to stall cattle, as farmers did to collect manure for their fields, people lived mainly in the lightly built, easily heated sunken-featured huts. As the sunken-featured buildings preserve more varied finds than ploughed-out sites with post-built houses, we might be led to consider such coastal sites as more significant than they really were.

The majority of coastal sites, then, belonged to fishers and herdsmen, rather than sailors and merchants. They were essentially rural sites in a maritime setting, located to take advantage of resources in the immediate environment of the site, either on land or in the waters just beyond.

The problem of ‘central places’

A fishing community may use their location and facilities to engage in contacts by sea. But only a small group of sites in south Scandinavia appear to have fulfilled a more specific function in maritime communication. These sites deserve a special interest, not only because they are ‘special’ and often contain more varied assemblages than other sites, but because they were literally hubs in the social interaction of their time.

The most influential concept in previous discussions of sites connected to exchange and communication in Iron Age and Viking Period Scandinavia is ‘central places’. As a concept, this is rooted in discussions of towns and urbanization by sociologists or historians such as Max Weber or Henri Pirenne. The German geographer Walter Christaller was to develop the concept to its most concise form in the justly famous ‘central place theory’ (Christaller 1966 [1933]). The central place model became widely used in archaeology from the late 1960s. When in the 1980s Scandinavian archaeologists began to recognize a group of specialized Late Iron Age settlements with indications of trade and crafts production, the term that began to be used was just ‘central places’ (e.g. Näsmann 1991; 2000).
As it has been pointed out, the archaeological use of the central place concept is not intended to refer strictly to Christaller (Fabech 1999, 456). In fact, however, it shares a number of fundamental assumptions with his model: The significance of a centre is believed to spring from the interaction with a local hinterland; sites are believed to enter into a functional hierarchy, in which the size and economic significance of a site corresponds to the political position of its leaders; and in keeping with this, the largest and most spectacular sites are related to the top of Late Iron Age society: the king.

Central-place theory, however, was designed to model a strongly integrated, modern society, and ignores the plethora of conflicting concerns likely to have influenced pre-modern communication. In suggesting a single, uniform hierarchy of sites, it leads to entirely wrong expectations. Communication, above all, depends on the nature of social relations. As these relations changed over the centuries, so did the requirements imposed on the sites where encounters took place. In the following, three important sites are discussed in order to suggest what considerations affected the choice of locations from the Roman Iron Age to the Age of Crusades. The sites are discussed primarily with regards to maritime communication. While land transport is evidently also of importance, the sea posed the greatest locational constraints as well as potential throughout the period concerned.

**Lundeborg: an open access assembly site**

The trade and craft centre at Lundeborg in south-east Fyn was discovered in the 1980s, and was immediately recognized as a complement to the long-known centre Gudme located 3–4 km inland.

The archaeological structures investigated in Lundeborg comprised extensive cultural layers covering a line of 800 m immediately adjacent to the shore. Remarkable quantities of Roman imports were mixed with refuse from several specialised crafts. In nearby Gudme, the remains of a huge hall, more than 50 m long, was the focus of a landscape with exceptionally rich detector-finds and hoards, including some of the richest gold-finds from Danish prehistory. Part of the space left between Gudme and Lundeborg is taken up by the cemetery Møllegårdsmarken, whose 2.200 graves makes it the most extensive necropolis from the Iron Age in Denmark. Gudme-Lundeborg is commonly explained as a combined regional centre, the residence of a petty king, and a centre of cult (Thomsen 1994).

Lundeborg’s location has puzzled more than one researcher (Fig. 2). It is described as “strangely peripheral on Fyn, cramped in between the forest-districts of inner Fyn and the Great Belt” (Näsman 1991, 171; my translation). It has even been maintained that “the prominence of the region cannot be explained alone by the topography of the landscape, the fertility of the soil, good access or strategic position. None of these conditions are optimal here, and one may presume that something religious has been the cause why a centre evolved just here”
Fig. 2. The location of Lundeborg: directly accessible on an open coast.

(Crumlin-Pedersen et al. 1996, 88; my translation). Yet a particular aspect of the location has escaped attention.

Lundeborg is facing the Great Belt, one of the most trafficable central Danish waters, and the principal channel between the Baltic and the North Sea. Quite atypically for a Danish coastal settlement, Lundeborg is not in a sheltered fjord or inlet, but on a directly exposed coast. Compared to the nearby medieval towns Svendborg and Rudkøbing, Lundeborg has little maritime foreland, and no natural harbour (Crumlin-Pedersen et al. 1996, 86). Neither does the site refer to the strangulation-point between Nyborg, Sprogø and Korsør, fortified since the 12th century to control traffic through and across the Belt. Rather, Lundeborg is located at the point where the island Langeland splits the Great Belt into three waters: Fynsk Øhav, Langelandsbælt and Smålandshavet. This position has interesting implications.

Besides being equally accessible from each of these waters, and obviously from the terrestrial hinterland on Fyn, Lundeborg was accessible from a corridor of long-distance traffic, at a point that could be approached by visitors from remote
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regions without moving too close towards any settled districts and intimidating potential enemies on the ground. Likewise, it could be rapidly escaped if a conflict emerged.

The scope of interregional contacts in the Baltic Sea region in the Late Roman Iron Age is brought out by the so-called Ejsbøl-horizon of sacrificial weapon-deposit, found in regions facing southern Danish Waters, but containing weapons and artefacts from central Scandinavia. In an age of sea-warriors, the sight of boats with foreigners – certainly armed, be that for defence or attack – might be enough to provoke an unwarranted conflict. Lundeborg was an obvious location for avoiding an unintended offence of peace.

This is a quality shared by several other sites, which can be compared to Gudme-Lundeborg in the Late Roman and Migration Period: Sorte Muld in Bornholm, and Uppåkra in western Skåne, itself more comparable to Gudme, but undoubtedly with at landing-place in the bay of Lund (Hårdh 2002). A similar connection to open coasts is met at the aristocratic residences, which appear in eastern Denmark from the 6th century: Toftegård-Strøby, Järrestad and Tissø (see Söderberg 2005, 107 ff.).

From the Late Roman to the Merovingian Period, then, we find sites with intense evidence of long-distance exchange in the south-west Baltic area in very similar locations: At an open coast near the entrance to a narrow strait or sound that would demand foreign vessels to navigate uncomfortably close to inhabited coastal regions. The locations chosen were hardly optimal for controlling traffic. But they were locations where traffic from a large area convened, and to which foreigners could count on a neutral passage, even if no authority could guarantee peace but the landing place itself.

The locational principle of these sites was open access. Their archaeology suggests that this was exactly the quality that served their purpose: They were places of convention, of formal meeting or assembly between peers and their retinue from near and distant regions to confer and collaborate on politics, exchange, cult, and other matters of common concern.

Unlike the sites to complement or replace them in the following period, there is nothing in the location, or in the archaeological material, to indicate that they served generally for receiving or transmitting large cargoes. By nature of the activities taking place, they acted as centres of distribution. The distribution concerned individual things, personal relations and power – things and relations that held value and whose protection was important to the people concerned. But they did not involve transhipped bulk-cargoes that posed marked constraints or demanded special landing facilities.

Åhus: a nodal point

The site Åhus, a few kilometres upstream the Helge river in eastern Skåne, had been a focus of research for some years when in the early 1990s a development project led to a large-scale excavation (Ericson-Borggren 1993; Callmer 2002).
Its archaeological features consist mainly in dozens of sunken-featured buildings and thin, irregular cultural layers. They hardly differ from many other Iron Age coastal sites in south Scandinavia. But Åhus was a special site indeed: it is one of only five sites in Scandinavia known to be directly engaged in the trade with Western Europe in the 8th and early 9th century. This is evident from the frequent occurrence of Rhenish ceramics and the large-scale practice of crafts with raw materials imported from the Rhinelands: bronze-casting and bead-making. Both are otherwise restricted to the famous group of Early Viking Age emporia: Birka, Hedeby, Ribe and Kaupang in Scandinavia, and Truso and Staraja Ladoga on the eastern side of the Baltic (Sindbæk 2007). The emergence of these sites was associated with the growth of maritime trade, invigorated by the introduction of the sail to the northern seas of Europe in the Merovingian period.

The location of Åhus was distinctly unlike that of Lundeborg (Fig. 3). Being set a bit into the land, it was not immediately accessible from the sea. As for the safety of ship, crew and cargo, a visitor was at the mercy of his hosts. But as a natural harbour, the site was far superior to Lundeborg: ships of considerable size could be safely landed along the riverbank, perhaps even without being beached.

![Map of Åhus](image)

**Fig. 3.** The location of Åhus: a natural harbour on a corridor of long-distance transport, close to the natural boundary between the rocky archipelago and the sand-coast.
The potential as a local centre was also favourable, as the Helge river opens into one of the largest and most fertile plains in southern Sweden. The most striking aspect of Åhus’ topography, however, is its position in relation to long-distance maritime traffic.

The shores of Skåne are mainly open coasts formed by sand and silt transported by the currents. But just north of Åhus the first encounter is made with the rocky archipelago-coast distinctive of Blekinge and the Swedish coasts further north. The essential art of a skipper in following the sand-coast is to avoid shifting banks and coping with few sheltered harbour-sites. Hanöbukten, immediately south of Åhus, is particularly feared because of its capricious winds and currents. The archipelago, in turn, implied a different set of problems to sailors. There were plenty of sheltered places for anchorage, but also a persistent danger of striking underwater rocks (Callmer 2009, 121 ff.). To a sailor acquainted with either environment, passing Åhus meant suddenly multiplied and unfamiliar risks.

Åhus, then, was a natural harbour located near a salient border for maritime traffic. This description, as it happens, fits any large emporia of the period. All of these sites, besides providing good conditions for local traffic, also possessed special topographical qualities connected to long-distance transport. It was this function as a nodal point on trade-routes, and not the role as a centre to a hinterland, that conditioned the special importance of these ‘network-towns’ (cf. Hohenberg & Lees 1996, 59; Sindbæk 2005, 99 ff.).

Long distance transport can be understood as simply an extension of the central place function, but the distinction of nodal points from central places makes it possible to draw attention to an important difference. Most central place functions are served by local traffic, and thus depend on maximum accessibility from the greatest possible hinterland. The role of a nodal point, on the other hand, is exercised through long-distance traffic, and is stimulated in particular by topographical restrictions that guide traffic into narrow corridors. A situation of particular significance occurs where a topographical or a social barrier causes a break of traffic and requires a transhipment and perhaps a temporary storage of goods. Where such a physical break occurs, a social transaction is likely to take place as well. This topographical logic was noted more than a hundred years ago by the American sociologist C. H. Cooley in his ‘Theory of Transportation’ (Cooley 1969 [1894]).

The locational principle of Åhus was that of a nodal point. It was related to trade-routes, acting in a transmission of bulk-cargo, served by long-distance transport. Its basic topographic condition was a barrier, and the dominant economic activity was assemblage and trans-shipment.

Roskilde: a central place

Roskilde, one of the chief towns of medieval Denmark, grew swiftly from an insignificant landing-place in the bottom of Roskilde Fjord, in the opening decades
of the 11th century. Archaeological excavations on several locations within the town show that the site rapidly became extensively settled, and acquired workshops for specialized crafts (Birkebæk et al. 1992, 74 f.). Before 1030, Roskilde was the site of a royal mint, an ecclesiastic centre, and on occasion a place of general assembly. According to later sources, the town was created as a royal foundation, either by King Harald Bluetooth or his successor, Svein Forkbeard. The archaeological data agrees chronologically with this claim.

The position of Roskilde in the bottom of the long, narrow fjord could hardly be more different from Lundeborg’s open accessibility or Åhus’ boundary position on a corridor of long-distance transport (Fig. 4). Among earlier south Scandinavian centres only Hedeby had a similarly withdrawn location. Hedeby’s position, however, was influenced by the site’s potential to act as a bridge between the traffics of the North Sea and the Baltic. The long, narrow Roskilde Fjord, on the other hand, did not lead on to any further routes, but simply made for an unusually slow approach to Roskilde. If, as has been suggested, the withdrawn position was a safety-measure, guarding the town against sudden attack, the situation almost reversed that found in Lundeborg, where the safety of the approaching party

Fig. 4. The location of Roskilde: a regional centre of terrestrial and maritime traffic.
seems to have been the prime concern (Birkebæk et al. 1992). In spite of the obvious importance of trade, the location may have discouraged the skippers of the increasingly bulky cargo-vessels of the Early Middle Ages. They may often have chosen to transfer their cargoes to smaller vessels in the natural harbour Lynæs in the outer reaches of the fjord (Ulriksen 1998).

Roskilde was not by far the most attractive site one could imagine for a port-of-trade. In a regional perspective, on the other hand, Roskilde was undoubtedly the most favourable location in Zealand for a centre. On the land-side, it was a meeting-place of some of the island’s most important natural corridors of traffic. And the fjord provided what was arguably the greatest maritime foreland of any medieval town in Denmark.

Roskilde’s location, at last, truly illustrates the principle of a central place. This was a position in which different central functions could be collected in one site and subsumed under central authority. As its history shows, the town emerged exactly at a time when central authority rose to a much more appreciable position in Denmark. Roskilde appeared along with other centres of a similar nature, and mostly at very similar location: Odense, Århus, Viborg, Alborg, and Lund. This family of sites, the oldest proper towns in Denmark, were all located so as to attain optimal conditions as regional centres, while communicating with each other through a maritime network.

Conclusion

The majority of coastal sites in Late Iron Age and Early Medieval Scandinavia exploited the coast for its productive rather than communicational potential. Yet a small group of maritime sites stand out as foci of local or long-distance traffic. During the period 400–1200 AD, different types of location gain or lose significance in connection with maritime exchange and communication. These shifts are not caused by changes in the natural landscape, which does not alter significantly through the period within southern Scandinavia. To some extent they reflect development of transport technology, in as much as the introduction of the sail is likely to have stimulated new modes of contact. Mostly, however, they reflect changes in the nature of social interaction.

The setting of Lundeborg, I argue, reflects a situation in which non-local contacts were only established at great risk. A site like Åhus became interesting when vessels carrying bulk-cargoes began to cross regularly between distant stations. They raised a demand for entrepôts at salient maritime barriers – and testify to more trustful relations between hosts and visitors. An excellent local centre like Roskilde, on the other hand, did not become relevant until the appearance of a central authority, which benefited from the accumulation of many central functions in one place, and could guarantee their protection by military power.
References


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AVATUD LIGIPÄÄS, SÕLMPUNKTID JA KESKUSED
Veeteed ja Lõuna-Skandinaavia rannasulate paiknemisloogika aastail 400–1200 pKr

Resümee


Paraku eirab selline arvamus mitmeid vastandlikke aspekte, mis tõenäolisel mõjutasid uusajaastel kommunikatsiooni. Ummikteele viiv on ka taolist muisliste kategoriseerimise otsese ja üldistava hierarhia alusel. Kommunikatsiooni söl-
tub eelkõige ühiskondlike sidemete iseloomust. Kui sellised sidemed sajandite
duurulid, muutus see ka suhtlemiskohta tundud esitatavaid nõudeid. Neid
väiteid on püütud tõestada järgnevalt näidetega kolmest olulise tähtsusega kohast,
is on mõjutati rooma rauaaegast ja rahvasterännuperioodi kuuluvat
Gudme-Lundebergi kompleksti Fyni saare kuueosas on tavasiliselt interpretitud kui kombinatsiooni
regionaalset keskeduse kõrgehinnata, väikekeuniga residentsist ja kultuskohast. Selle muistise
asukohta võib kirjeldada kui perifeersem, mis muutis kohta eelkõige funktioneerida
regionaalset keskuses väga väikesteks. Erinevalt muudest Taani rannasululate
-sadamakohtadest ei piinke Lundeberg mitte looduslikult kaitstud fõrdis või lahes,
vaid täielikult avatud rannal. Sellisest asukohta võib teha huvitavaid järelusi.
Lundeberg oli ligipääsetav rahvusvahelise tähtsusega mereteel mereteel
mereteel, asudes kohta, millele oli ka kaugelt tulnud küljastajatel võimalik läheneda ilma asustatud piirkondade liigisesse lähedusse sattumata ja sealseid potentsiaalseid vaenlasi ärritamata. Samuti oli võimalik kiiresti põrega juhul, kui ikkagi tekkis konflikt.

Arvatavat valmialduse tulostus esitele tugineb kaks metode teiste tolleasutuste sadama-
kohtade asukohta osalejate iseloomust. Siiskohal võiks eelkõige mainida Sorte Muldi (Must Maa)
Bornholmi saare või Uppåkrat Lääne-Skånes; viimane on iseensi kätt enam
võrreldav Gudmega, kuid selle randamiskoht paiknes kahtlemata Lundi lahes. Nende kohtade asukohta osalejate põhiseama või lihtsalt nii oli avatud ligipääs. Sinna jooksid
kokku mereteel aladest aladest ja välismaa tudoosid võisid arvestada seljastest kohtadest
vabalt läbipääsvalguse, isegi kui viimane polnud kiirendatud kohtaliku võimu
poolt, vaid garantiteid eesmus sadamakohe enesega. Arheoloogiline aines kinninat, et just see määrab nende kohtade olulisuse omaegsega maastikul: need olid
gugumisekaubamahad, kindlaksmääraci koostöökohad, kuhu gugumised teadud aega-
del sotsiaalse eliidi elised esindajad koos oma kaaskondlastest lähedalt ja kaugelt. Neis
kiirendatud arutelutest poliitika üle ja sõlmiti poliitilisi liite, vahetati kaupu, viidi läbi
riitu ning teisi ühiskondlikult olulisi aktsioone.

Åhus Skåne idaosas on üks vähimise kohtaest, kust on leitud piisavalt
arheoloogilist tõendusmaterjali 8. ja 9. sajandi kaubandussidemete kohta Lääne-Euroopaga. See nõu-kerkimine on seostatud ülemerekaubanduse tähtsuse kasvuga
eelviikingiajal, mida soodustas purje kasutuselevõt tõhjapoolse Euroopa mere-
sõdikut. Åhusi isad võivad eesmärki tunduda Lundebergi omast: see jää vaid sisemaja
poole ega olnud merelt hävitult ligipääsetav. Mis puutus laev, meeskonna ja
laadungi turvalisusse, siis selles osas oli siisned külastajad täielikult sõltuvad
vastuvõtjast. Samas oli Åhus looduslikku randamiskohtana tunduvat soodsam kui Lundeberg. Kõige silmatorkvam aspekti Åhusi asukohta asukohta oluliselt
oluliselt seotud rahvusvahelise veeteedega. Koht asub enam-vähem kahe looduslikku erineva
ranniku laiir: sellest ühela poole jäävad Skåne liivased rannad, põhja poole
aga Rootsis kivine rannasarestik. Neist ühega harjunud meremehed täidendas Åhusi
läämini äkitselt mitmekordistunud ja tundmatuid riske. Åhus oli seega sadama-
koht merelikluses oluliselt looduslikku piiriala lähist.

Åhusi asukohta osaleja osaleja printsibiks oli sõlmpunktiks olemine. Selle määravaim
topograafilinise tingimus oli barjäära ja valdavaks majanduslikuks tegevuseks oli nii

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kogunemine kui ka ümberlaadimine. Kaugtransporti võib käsitelda lihtsalt kui keskuseks olemise funktsiooni pikendust, kuid sõlmpunktide (nodal points) olmuslik erinevus keskustest (central places) võimaldab juhtida tähelepanu olulisele erinevusele. Enamik keskuse funktsioonidest toimivad läbi kohaliku liikluse, mis teeb keskused äärmiselt sõltuvaks tagama ulatusest. Sõlmpunkt roll on seeavast seotud kaugliikluse ja rahvusvaheliste teedega ning seda stimuleerivad eriti topograafilised takistused, mis juhivad liikluse kitsastesse koridoridesse.
