

## Ancient sea marks: a social history from a North European perspective

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# SOZIALGESCHICHTE DER SCHIFFFAHRT

► CHRISTER WESTERDAHL

## Ancient Sea Marks

### A Social History from a North European Perspective

*He glimpsed a strand of foggy streak  
It was not the flying skies he saw  
It was mountains with crags and gorges  
But high over all the ridges lay  
The Saddle of Imenes broad and blue  
Then he felt where he was.<sup>1</sup>*

#### Introduction

The background of this study is mainly my field work in Norrland, Sweden 1975–82 and in Vest-Agder, South Norway 2003–05.<sup>2</sup> Already at the start sea marks were considered an important part of the maritime cultural landscape, especially if this was defined mostly as a “network of routes and harbours.”<sup>3</sup> My purpose in researching Norrland was above all to sketch a picture of medieval conditions, where place names had an important role.<sup>4</sup> I made no systematic documentation of the existing sea marks, however. In Vest-Agder documentation was my main goal, although only on a tiny stretch of coast. To some extent then it may be said that these two field works complemented each other.<sup>5</sup> It appears that there are in history such striking cultural similarities between the Nordic countries, that any study on maritime matters must take into account the whole area. This is at least partly due to similar natural conditions in Sweden, Norway and Finland in terms of navigation in archipelagos and indented coastlines.<sup>6</sup> In Denmark natural conditions are different and more similar to those of the continent. This may show to some extent in the practicalities of the sea. But Denmark has been decisive, often as a prototype, in creating a general Nordic cultural identity, which is far more important.

As we shall see later the main impetus for marking the routes and approaches to harbours came to the entire area from the outside. If the coasts faced the Baltic this originated in Germany, if they faced the North Sea, in Holland. The British Isles should not be forgotten, but their sea mark system was slightly different, and came a little later.<sup>7</sup>

Most studies, however, even though seldom treating only sea marks, have used a largely straightforward, evolutionary and functionalist perspective, which partly obscures social and cognitive considerations. Other questions, such as those of cognition, symbols, power and dominance, have largely been neglected. Most authors who have written about the history of sea mark systems seem also to underestimate the discontinuities apparent over time. Apart from the



Fig. 1 The inventories in South Norway and in Norrland, Sweden consisted partly of interviews with local people. A glimpse of field work in Vest-Agder. (Photo: Christer Westerdahl, 2004)

obvious motive, to aid in navigation, why were sea marks erected? What was their position in society? Was the sea mark system initiated on a local, regional or “state” community level? The overwhelming majority of present-day sea marks dates from the most recent centuries. Why do we find so few remains of ancient sea marks? Why do we sometimes find only place names indicating sea marks? I will attempt to answer some of these major questions in this text.

What is the definition of a sea mark? I quote: “As a purely visual aid, a sea mark is defined in the International Dictionary of Aids to Marine Navigation as ‘an artificial or natural object of easily recognizable shape or colour or both, situated in such a position that it may be identified on a chart or related to a known navigational instruction.’”<sup>8</sup> But during the centuries under study there were few charts or formal navigational instructions. The definition should here rather read, as is further expressed in the quoted passage, “identified by a person familiar with the coast and having past navigational experience.” In any case, the remainder of the definition applies as in the past not only to *constructed* sea marks: an exceedingly important point. The definition can be broad. Here I will introduce not only the exceedingly important *natural* but also the more neglected *verbal* or *cognitive* sea marks.

Sea marks are of two types: those which warn sailors of shoals and banks near the coastline and those which show the sailors where they are on that coast. The latter would mean that the sailors are aided by them to find the direction to sail and also to know how far they have come. In recent times sea marks have been expected to be placed so densely that your exact position can be estimated correctly even in a dense fog or if you have temporarily lost your way. This presupposes a coherent international system of form, size and colour, and of course, access to charts, compasses etc., none of which was possible in former days however: most sailors even did without a compass.

Sailors were met with the same dangers as they are today. This means that the reference to fog and difficult sighting is particularly relevant in judging the need for sea marks in general. In order to navigate in a fog that only covers the lower parts of the coast you have to align to the tops of hills and mountains protruding above the mist. Certain of these areas may have been given a recognizable cairn or beacon visible from a great distance (Norweg. *overlandsmerker*). Another possibility is that other constructions or buildings, such as windmills, towers and

churches (below), may serve the same function. But you have to know how to distinguish between them. If there are very few this may not be a problem at all, but if there are many you have to be familiar with each one to use them with success. The fog may be covering the tops, but the lower coast may be visible. In that case the need arises for sea marks recognizable in the same way on islands, spits of land, or in the water beside the safest route, etc. (Norweg. *underlandsmerker*). Fogs and mists are typical of the North, but extremely rare in the Mediterranean. This is an important difference with implications for the need, occurrence and location of constructed sea marks.

We have now so far thought of how to *approach* the coast, to find a harbour, but the same needs and possibilities are found sailing *along* the coast or between coasts. If the coast is only a contour at the horizon no visible sea marks exist, and you are bound to navigate according to your memory of the contours that you have seen before.

This may all appear elementary but we must emphasize two consequences for the further treatment of this subject. Local experienced people had little need of constructed sea marks. They navigated according to memory. The sea marks fulfilled an obvious need only to foreigners. But even then strangers needed supplementary guidance while using them, because there was no standard established in the past defining what the sea marks actually meant. Were you supposed to pass this or that cairn or barrel to port or to starboard? What was marked, the route to a harbour or just the way to an inner route in the archipelago? In fact, it seems that even with a developed system of sea marks there was and is *an inevitable need of pilots*. And with reliable and experienced pilots there may be no need for sea marks at all. Thus there appears to be either a connection or an opposition between sea marks and pilotage, quite apart from the fact that the pilots usually in later times were responsible for the upkeep of sea marks. This connection might have meant that in certain areas they eliminated each other: if there were a lot of pilots few sea marks, if many sea marks few pilots. Such considerations are more or less theoretical, but they have to be borne in mind when assessing the emergence of sea marks in the distant past. There is always some sort of direct or indirect historical relationship between pilotage and sea marks. The coastlines differ so much that any assessment has to rely on the local context.

In any case the need for sea marks is emphatic and has always been so. In certain areas there can never be enough of them. Even with GPS and beyond there is no question that fatal mistakes will occur. There are, however, other reasons for erecting such marks than the need for navigational aids and I will endeavour here to explore this question.



Fig. 2 A simple cairn at Norrbyskär, Västerbotten, Sweden, called *båk* or *kummel*. (Photo: Christer Wester Dahl, 1986)

In the following text I will treat all kinds of sea marks according to the definition given above, both as a continuum and as a reflection of changes in society. The exceptions are the proper lighthouses, which mostly belong to quite modern times.

There are great variations between coasts in the area. The Norrland coast of Sweden has a land rise of up to one metre per one hundred years. There, continuity in the location of sea marks is at least doubtful. In other areas continuity in location should be much more striking. There the social background is even more variable than at the coasts. It is therefore necessary to be careful with generalizations.

In the past the knowledge of the coast was kept exclusively by people who were illiterate. They had learnt their trade in a tactile way as helmsmen by trial and error under the auspices of their male relatives, mostly by way of father to son. This knowledge was thus personal and could be kept from outsiders. During wars, however, developing states or principalities tried to monopolize this knowledge to the detriment of an attacking enemy. The knowledge inherent in monuments such as the sea marks had to be made invisible. The sea marks would therefore be pulled down and the materials taken away. Potential pilots among the locals would be ordered by authorities not to assist enemy sailors. Foreign ships were kept under tight surveillance and crews were possibly sent away or imprisoned as potential spies. We will return to this point but suffice it to say that we can find many examples of this conduct in early modern times in the North. In conclusion it must also be emphasized that the military aspect of sea marks has been a salient factor not only in recent centuries but before.

## Societal Background

This is a particularly important question since the defence system included certain types of land-marks, secondarily used as sea marks. The fire beacons on mountain or hill tops were originally designed as part of an early warning system against foreign fleets. But since they often were located on similar high places as natural or other secondary sea marks (towers etc.) they functioned also as such. Their terminologies were conflated with sea marks (cairns), as we shall see. Interestingly, their standard terminologies differ in the three early Nordic realms: *böte*, *viti*, *bavn*<sup>9</sup> (fig. 3; and below). It seems therefore that their build-up as a system belongs to the consolidation of these realms in the High Middle Ages, during the 12<sup>th</sup>–14<sup>th</sup> centuries. Place names with these elements have been recorded back to c. AD 1300.<sup>10</sup> This is a hint that even the first actual sea marks may belong to this period or the period immediately before that. The societal background is thus the particular Nordic variety of feudal monarchy.

There is a remarkable consistency between this idea and the first explicit mention of royal interest in aids both for seaways and for land communication. King Øystein of Norway has received his brother and co-regent, the warlike Sigurd Jorsalafar, back from the Crusades in c. AD 1115 and he claims that he has done more good for the country than he.<sup>11</sup>

“I have heard that you have had some battles abroad, but it was more useful for our country that I during this time built five new churches and I made a harbour at Agdenes (at the approaches to Nidaros/Trondheim; my note), where no harbour was to be found, and where all men must go past northward or southward along the land. I also built the tower in Sinholmssund and the hall in Bergen ...”<sup>12</sup>

In another version, Morkinskinna<sup>13</sup>, he says: “North in Vågan (in Lofoten; my note) I set up a place of sojourn for fishermen, so that poor people could get food and help. There I also ordered a church to be erected, and gave maintenance for a priest there. I procured property for building churches where there formerly almost only pagans were found ...

On Trondarnes I also had a church built and procured property for it ... Across Dovrefjell a



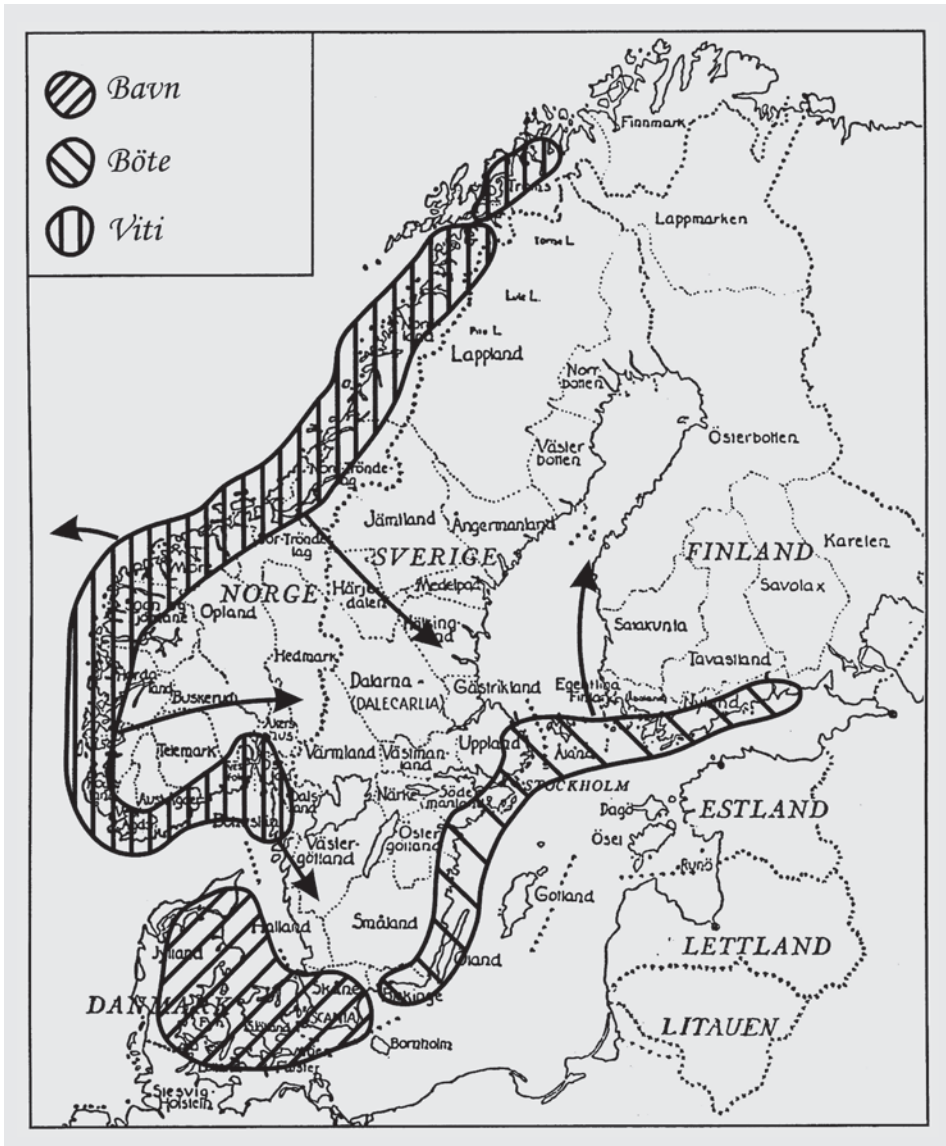


Fig. 3 The three terminologies of fire beacons in the medieval realms of the North. (After Westerdahl 2002b / Drawing: Christer Westerdahl)

path led to Trondheim. People often had to stay outdoors there, and they had to travel the difficult way. I had booths built there and procured property for them as well. Outside Agdenes the open shores lacked any harbour, and many ships were wrecked there. Now harbours and good anchorages have been made and a church has been built. Then I built beacons on high mountains.”

The harbour mentioned at Agdenes at the entrance of the Trondheim fiord has been excavated and the main part can be dated to the years around AD 1100 (fig. 4).<sup>14</sup>

It is striking that king Øystein mentions churches, harbours, a sea mark (tower) and beacons



in his plea for his own cause. As I have pointed out elsewhere in connection with the coastline of medieval Norrland, these are all monuments to show the omnipresence of kingly power. This power was certainly weak in those days in the North and – accordingly – the need for symbols of it was greater. Churches, preferably built of stone, served this purpose. The very north of Sweden and Finland got such enduring monuments only around 1500 (1480–1520). Only then was the state present there in earnest, owing to the intimate relationship between royal power and the Catholic church. In fact I would claim that precisely this period represents a new period of activity in building and maintaining sea marks. As far as I can see the place names indicate that they were often crosses, presumably wooden. This activity coincides suspiciously with the fact that the hegemony of the Catholic church was being called in question. It may therefore be partly a social crisis phenomenon. In the late medieval period the power of the Church and its interests permeated almost all aspects of society. Its clerics controlled literacy and the production of all kinds of documents and texts.

It is probably no coincidence that Olaus Magnus, appointed in exile as the last Swedish Catholic archbishop, described the northernmost part of the realm more or less as a paradise. In fact its people appear rather as an early version of “the noble savage.” His experiences date from the years 1518–19, when he travelled along the entire coast to end by visiting the midsummer market at Torneå. At this time numerous recently built churches of stone, among them the next largest in the archdiocese of Uppsala, in Nederluleå, now also called Gammelstad, in Norrbotten, were standing along the route.

The church sites were established not only

Fig. 4 King Øystein’s harbour at Agdenes at the entrance to Trondheim Fiord, Norway. The wooden log is probably part of the pier construction dating from approximately around the year 1100, according to historical sources the year of its construction. (Photo: Christer Westerdahl, 1996)

Fig. 5 The cross at Kvitsøy (Stavanger), SW Norway. (Photo: Endre Elvestad, Stavanger sjøfartsmuseum)

for ecclesiastical purposes, but also as nodes in a new system<sup>16</sup> of community meeting places along routes which were the backbone of royal control. As to Norway, its very name, *Nordvegr*, 'the way to the north,' implies that the entire realm depended on maritime connections. The occasion of the dispute between the kings Øystein and Sigurd is a case of the classical Nordic *mannajafnad*, where the merits of two males are compared. The text is a literary creation as well. Possibly we meet here two metaphors of vibrant interest, Sigurd the embodiment of the sea king, the warrior and the sea, and Øystein the symbol of the stable land territory, the farmers and the realm. Other such dichotomies are found in the medieval Norse romances, such as the Saga of Gautrek & Rolf. Although it is probably not reasonable to oppose mercantile capitalism to peasant sluggishness, as Bruce Lincoln<sup>17</sup> does, the opposition sea to land is obvious (see below on the ritual landscape). That said, I believe there is still no good reason to doubt the source value of the story.

## Monuments of Hierarchy and Territoriality

A few words on the concept 'monument.' A Swedish pioneer in "monumentology," Leif Gren, has emphasized the significance of the stone churches in imposing an entirely new Christian structure on a traditional society.<sup>18</sup> In this work he comments on other types of monuments: "In some cases it can be hard to decide what is to be counted as a monument. Clearing cairns and boat landing places hardly belong here. Stone fences and stone arch bridges may belong in certain cases, and probably gate posts of stone, rock carvings and milestones as well. Rune stones, burial mounds and stone churches are undoubtedly monuments." The question is: why not sea marks (i.e. stone cairns)? Or boathouses of the Norwegian *naust* type? I have tried in vain to find any formulated reference to the significance of monuments in reminding people of the omnipresence of power, sometimes generalized, but also specifically, royal power. Therefore I must remain responsible for this definition myself. I consider the display of power to be an almost self-evident role for a monument. Feudal power attempted to show itself established locally by way of visible testimonies to its control of the coast.

A number of important innovations reached Scandinavia in general at the onset of the feudal age, and these were not just novelties. These innovations created the regional trappings of feudalism. They comprised the church, literacy, documents, registers, all used to create systems to maintain power by way of a kind of *circuitus*, that is, royal mansions (*kongeleiv, husbyer*) in areas important to the monarch, along with regal rights and privileges, aspects of defence, such as the levy fleets, and ultimately, taxation. Urban structures of the European kind supplanted the older versions of exchange or market sites, which were often seasonal.

In the North the feudal power structure consisted mainly of king, aristocracy and church, as in the sketch, fig. 6. The towns had no independent role here, even though foreign influence may have made some of the Nordic towns stronger in this regard than others. Royal power was paramount as the founder of towns. Of 175 medieval cities in Scandinavia 21 were originally connected to bishops and monasteries, but in fact most of them acquired these secondarily by grants from the king.<sup>19</sup> The Hansa had a direct influence but its member cities were mostly abroad. As we shall see later the Hansa was an important factor in the introduction of a more regular sea mark system.

The transport pattern that had been established before the realms, i.e. in the latter part of the Viking Age at the beginnings of history in the area, was regional. These efforts were organised by local proto-feudal chieftains who built the roads and routes in their own interest. To this pattern belong the traditional transport zones<sup>20</sup>, corridors of socio-cultural space along which traffic ran according to time-honoured traditions. The means of transport were often local, like



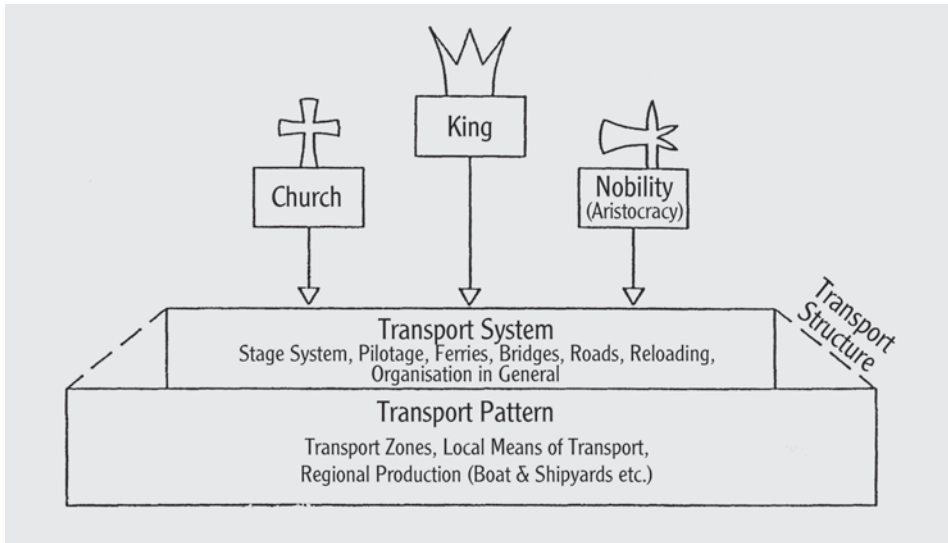


Fig. 6 Sketch of the principle in the relationship between transport patterns, systems and structures. (Drawing: Christer Westerdahl)

the roads, although a certain congruence may have existed with the transport zones, which already transcended local concerns. In the stage of central royal dominance, supported in the North by the church and to some extent the aristocracy, the local systems became coordinated. Local systems of roads were combined and connected, for example across the wilds, forests or mountains between settlement areas – often former chiefdoms. This would presumably mean that *most monuments and markings/signs along the land roads could be directly paralleled by those along the sea routes*. I have myself maintained this general idea in my later work.<sup>21</sup> This imposition from above was also motivated by self-interest but on another level than before.

A kind of regionalization within the new more extensive unit could mean that certain areas specialized in building ships. A stage system associated with sea inns and seasonal fishing villages might be introduced, at sea as well as along the main roads, along with an informal pilotage at sea by fishermen. Ferries, portages and reloading sites would be controlled by the authorities. Those who realized this system on the ground would always be the local peasants and fishermen. As to sea marks the local character must have been obvious, with less supervision possible, much more so than in the case of defence, e.g. the warning fire beacons.

This is reflected in our scarce sources. In the medieval provincial laws there were rather detailed rules for beacons, but sea marks were seldom even mentioned. This may mean that the terminology of the sea marks could be expected to be less standardized than in the case of the beacons, where, as we have mentioned, we have three distinct terms, one for each medieval realm. Even though there may have been variations in feudal control, likely in such an immense area, the correspondence in forms is striking.

The feudal realm and its drive to control was the start, but continuous maintenance was only possible with a beginning state. Roads, sea routes, marks and beacons were kept in order. Inversely, the system fell inevitably into decay with a weak realm or – in the incipient state – with a weak monarch. Some of the Nordic monarchs of early modern times ruled with a strong personal exercise of power, even with a degree of personal surveillance. This was true of some late union kings, Frederik II, Christian IV and Christian V in Denmark-Norway and Gustavus I Vasa, Erik XIV, Charles XI and Gustavus III in Sweden-Finland. An obstacle to assessing their efforts

to improve transport conditions is that the main aspects by which they have been studied are their handling of the church and military matters and the curbing of the independence of the aristocracy.

Power in a medieval feudal society<sup>22</sup> could generally be said to have developed more stable forms for:

1) Internal appropriation by way of taxes. In contrast to the economy of plundering, that is, external appropriation, of the Iron Age and the Viking Age societies, this system was supported by laws, documents and the authority of the church.<sup>23</sup>

2) Delegation of authority/power by the royal person. This meant that kingship had to some extent reached the level and maturity that permitted it fairly safely to risk formal delegation, beyond the family and the petty kings to those of their confidants who depended on royal grace and lacked possibilities of their own. It was still, however, a question of presence and of personal exercise of power. Delegation presupposed both control and support through networks between individuals and active "exercise of command." Such a delegation could be made – at least temporarily – to (preferably individuals) in cities, or (likewise preferably individuals) in organizations of cities, such as that of the Hansa.

3) Regionalism. There was a steady but slow development of regionalism within a realm fairly recently constituted. This included regional production, with a tendency to specialization and complementation between regions, and zones as well, such as the coast, inland cultivated plains and forested areas. On the other hand regionalism could also mean extensive differences in internal development between the component parts, which may render true complementation more difficult, a classic core-periphery problem.

4) Roads and transport systems. In the North this is obvious in the inescapable need for safe land and sea routes and waterways in navigable rivers and lakes, with concomitant arrangements for ferries, portages, bridges etc. Actual constructed land roads remained largely out of scope for the period. This last aspect was a prerequisite for all the other three.

In any case it will not be possible to talk about even incipient states in the North until the very end of the Middle Ages, c.1500–1550. As we have stated, any administration depended on the personal presence, the surveillance and the orders of a king. And even then several centuries passed before a thoroughly civilian literate bureaucracy manifested itself. The efficiency displayed by the military segment of society – which existed all the time – was matched only during the last more or less peaceful centuries of modern times.

*System* is a term which by definition should point to intentional ordering by a higher authority. What preceded the systems, i.e. the transport systems, I have called *patterns*, i.e. transport patterns. It would presumably mean that the patterns grew up more or less naturally. However, their background must have been a kind of organization, but of a more fragmented and uneven character. They were the patterns of chiefdom societies. Among the elements that may have appeared in such a context were sea marks – but certainly of a local, temporary and haphazard appearance. The necessary amalgamation of pattern and system would be called a *structure*.

A fifth aspect to add to the four above is *urbanization*, more specifically of cities which managed to acquire their rights and freedoms in opposition to any of the feudal powers, king, aristocracy or church. This, however, did not – as mentioned above – really happen in the North. As emphasized, the founders of all the cities would have been kings or belonged mostly to the church, or rather to the bishops individually, but they were not challenged in earnest by other internal groupings, such as a bourgeoisie.

A sixth aspect is that all societies even in everyday life were put *on a potential war-footing*. The authorities in feudal societies were notoriously aggressive. What was imperative for king-

ship was to curb and to turn to external outlets the power of the private aims and the armies of princes and high nobility. Serious opposition had to be crushed. Otherwise kingship either succumbed or was reduced to powerlessness.

These considerations may also have affected the sea marks. But it appears that the basic factors for dynamic changes were still the transport structures, urbanization, trade and wars between realms.

As mentioned, as many marks as possible were taken away in wartime to confuse the enemy. Perhaps this sometimes affected both the sea marks and the warning beacons on hilltops. The beacons were needed but may have been razed and moved inland as far as possible, to be visible only to the home team. There are traces of what may have been double, parallel systems of beacons inland in certain areas.<sup>24</sup> At least this seems extremely probable since so many beacon sites are pointed out, in documents and oral traditions alike, that they could not possibly have worked in one single contemporary system. However, the ever-present source criticism on place names tells us that some of the marks may have just been named after one single genuine beacon site, simply because they denoted high places.<sup>25</sup> The extreme cluster of *Böte*-names at Stor-Pellinge at the Gulf of Finland has been explained this way. On the other hand Ritva Valtavuori-Pfeifer rejects this explanation, and points to the important harbour, mentioned already in 1431.<sup>26</sup> The same could go for the many *Böte* names at Kökar in the archipelago of Åland, which is recorded as an indispensable haven on the main route during the 13<sup>th</sup> century. It is easy to see that such beacons must then already have worked as sea marks. Another premise that appears reasonable is that the greatest density of sea marks is likely to have occurred at important harbours and havens.

Besides removal, other measures were also taken in wartime. On the Agder coast in south Norway the parish church of Tromøy and the naturally white spot of the rock called *Risør Flekk*, both commonly used as sea marks, were painted black during the Napoleonic wars.

The early ethnographer Olaus Magnus explicitly mentions similar actions in connection with the important island haven of Älvsnabben south of Stockholm in Sweden, later to be a naval base, in 1555.<sup>27</sup> After having called attention to difficulties for enemy fleets in the archipelagos, including natural obstacles, he points out the following: "Moreover, the settlers in the area used to take away the shore marks in times of trouble, so that the enemy would have no way to escape his fate." This presumably means that this procedure is at least late medieval in date. But a "reasonable" precondition is that sea marks did exist before that. As has been indicated before, the period of more systematic marking activity is thought to be the later part of the 15<sup>th</sup> and the beginning of the 16<sup>th</sup> century. I will be giving other arguments for this date.

Apart from local measures, all kinds of crown-initiated mapping at the coast, including soundings, were kept secret.<sup>28</sup> This is an important reason why regular sea charts were extremely late in coming into public use even though the basic work had already been done. In Denmark the excellent maps of the director of sea charts, Jens Sørensen of about 1700, were never published. Thus, possible enemies prepared for conflicts in advance, by reconnoitring at other coasts. Expansive navies like the British were ordered to document coasts by sounding during all their visits abroad. In many cases their published results were the first that could be procured by those who inhabited and sailed these waters in their daily lives. Logically the only efficient method to counter the crown's security measures was to capture local people and force them to show the way. Many such stories are told of local fishermen and islanders being forced to be pilots for the enemy. In Norrland, Sweden, my principal field area, and in western Finland most are from the Russian galley raids from 1714 to 1721. In Agder in South Norway the stories concern Swedish pirates, often Scots or Englishmen in Swedish service, during basically the same period.

Here these courses of action are assumed to have worked in an embryonic form already during the first periods of sea marks. It is assumed as well, that this is the reason why such early

sea marks have not survived, even though they may have been rebuilt at the same spot. For this reason they may initially not have been prepared for any permanence at all. Feelings of insecurity, the threat of invasion and lawless conditions at sea in general were probably endemic in most periods. Sea marks were preferably mobile, and made of wood, barrels, logs and stakes, but were also stone cairns, though never fixed with mortar. Periods of insecurity when sea marks were removed could have been the Vitalian pirate decades around 1400, and the privateering wars of the supporters of the deposed union king Christian II after 1521. Regular war periods were the Nordic Seven Years' War of 1563–1570, the Great Northern War of 1700–1721 and the Napoleonic Wars of 1807–1814. Some of these I have already mentioned. All the Nordic area was affected, in the North Sea as well as in the Baltic. In northern Sweden and Finland there is ample evidence of the firing of beacons and the removal of sea marks during the war with Russia of 1808–09, and finally during the Crimean War, 1855–57. It is no coincidence that almost all sea marks still standing or found at the same spot today date *from the period after those great wars*. In later times special wartime sea marks were set up, e.g. during German occupation in the 2<sup>nd</sup> World War. Intermittently marks were restored and repaired. Pilotage experienced the same ups and downs. And although pilotage for the Swedish crown was made regular in the 1580's no such obligation pertained to civilian merchant ships until 1677.<sup>29</sup>

It is also not a coincidence that *the first major organization of pilotage* for any kind of shipping in the entire area was set up immediately after the Great Northern War, mainly in the years from 1720–1725. The system of sea marks was, as mentioned, maintained by the pilots. A necessary prerequisite for a coherent system of common navigational aids was the disappearance of warlike conditions from everyday life at the coast.

## Trade and Compulsion

Urbanization has been mentioned as a line of development in feudal societies. Only those city ports which faithfully served the authorities and their international trade would get official sea marks. In Norway the most obvious objects would be the various routes leading to the major port of Bergen. Beginning in the 14<sup>th</sup> century peasant trade outside of the cities was prohibited, both "rural purchase" (Swed. *landsköp*) and foreign direct trade, except through specific market fairs. The formative period for restrictions would be c. 1350–1400.<sup>30</sup> This prohibition also served the Hansa although it was forbidden for its merchants to trade directly with the peasants. In early modern times the system worked the same way, although now it was a part of the mercantilist trading policies. Trade was supposed to be a privilege of the Estate of Burghers. Although these bourgeois industries sometimes were despised by the other estates, the king, the church and the aristocracy were sometimes represented by dummies in this trade. The monopoly did not work, however, especially not in the peripheries. Beginning in the 14<sup>th</sup> century prohibitions and regulations for the peasants poured in, which clearly indicates that peasant trade occurred fairly regularly. Since prohibitions were needed the peasants presumably had goods to trade and vessels. Their feudal lords then controlled both their travelling and their surplus. This may have been the case in Denmark, where peasants themselves are known to have traded in vessels of their own only in the 15<sup>th</sup> century.<sup>31</sup> But the crowns had undoubtedly to accept irregular trade to a certain extent and to issue temporary exemptions from the rules, not least when peasants could mobilize other feudal authorities for their own advantage. There was no obvious consistency. The feudal "front" was usually divided and the burghers had many enemies.

As to the peripheries outside of towns, there was a Bothnian Trade Restriction<sup>32</sup>, from c. 1350, which was renewed more efficiently in 1624. The peasants north of Stockholm and Åbo in Finland had to bring their goods – often officially only their own produce – to these cities. No



foreign vessels were allowed to sail in the Bothnian Bay to trade independently with them. This area got the first towns of its own in the last decades of the 16<sup>th</sup> century. These towns were subjected to the same restrictions, but now the peasants were instructed to sell their produce in the market place of the closest town or in temporary fairs set up by these towns. This system was often vigorously opposed, both by town burghers and peasants, and there were many exceptions and temporary privileges. In 1767 the towns were finally allowed to sail directly to foreign ports, and in 1812 no restrictions existed on traffic to the Bothnian towns. Only the condition of the peasants was unchanged, except for those who by tradition were seafarers (Bohuslän in the west) and those who lived farthest away from the southern markets (Norrbottnen and Västerbottnen in the north). All others were permitted to sail only in undecked vessels up to 1825. A restriction similar to that imposed on the northern Swedes applied to the rural Norwegians north of Bergen from about 1300 on.

What conditions relevant to sea marks can we suppose from this short exposé of trade? Probably they are more or less obvious. The small peasant harbours with their pilots and pilotage would have gotten no help from the authorities. They would have had to rely on their own resources. Regular and standardized sea marks would have served the approved port cities and the approved route to them.<sup>33</sup> This was the thorough-going route of the *Hansa* and the other privileged cities. Only this route was documented in the earliest cartography of the sea. As we shall see, one of the rather irregular indigenous sea mark name types, that on *Grim(me)-*, to a significant degree seems to be found outside "illegal" harbours and market sites, with at least roots which are medieval. Primarily, therefore, their material counterparts would have been installed by local interests – perhaps even in conscious opposition to the crown interest.<sup>34</sup> Thus, the sea marks are a social construct. They have a close relationship to power, compulsion, law and societal conditions in general.

## The Earliest Sea Marks

To show the way to the harbour is the primary objective of constructed sea marks. This function is explicitly carried out by what is in medieval Norse literature called *hafnarkross*, 'harbour cross' or *hafnarmærki*, *hafnarmark*, both meaning 'harbour mark'.<sup>35</sup> These are the first recorded indigenous terms for a sea mark. But they may not only mean actual sea marks. As medieval market crosses they may also express the protection at approved sites extended by both secular and ecclesiastical powers.<sup>36</sup>

Harbours, big and small, are at the heart of any maritime culture. What is a systematic hunt for Stone Age coastal settlements other than an estimate of the most suitable topographical locations for harbours? These principles appear to be valid for small vessels in all times. A maritime culture reasonably would choose protected places both for boats and for the settlement itself. Microtopographic harbour theory is a neglected theme within archaeology. However, settlement archaeology provides several models. Two illustrations (figs 7–8) give the principal ideas of the Mesolithic, one applicable in an area of land-rise with dramatic topography, where the sites are found high up nowadays, one in a reasonably flat and sandy area of land-sinking, where they are found under water today, down to a depth of about 17 m below normal sea level.<sup>38</sup> Another observation is valid for the mountainous Eastern Mediterranean in the Bronze Age (figs 9–10).<sup>39</sup> It is easy to imagine that among these are tiny harbour locations which could not always easily be spotted and that they would have been marked out in some way. This is a strong argument for very early discrete sea marks in many such places. No wonder, therefore, that among the first attested terms in Christian times for sea marks are found the harbour crosses. To a certain extent the same principles are applicable also for the situation of most medieval

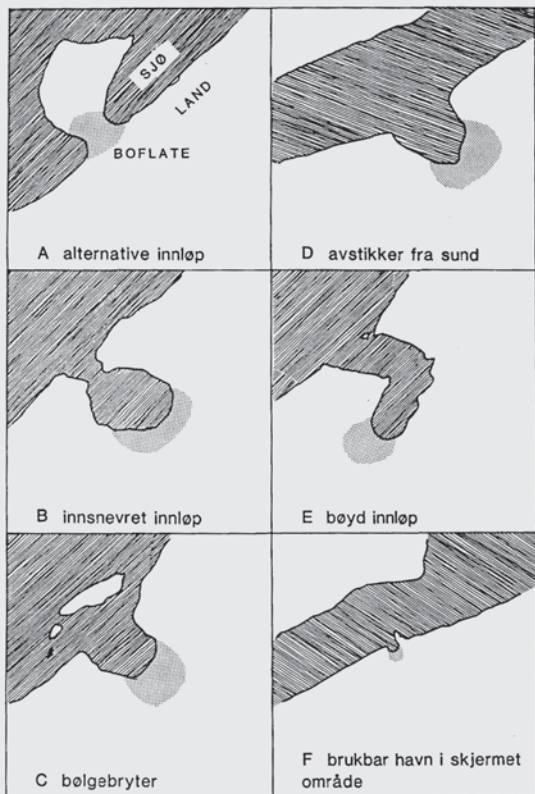


Fig. 7 Assumedly favourable locations for Mesolithic settlements in Nordland, Norway, in an area of strong land uplift. The bedrock topography is rather dramatic and coastal archipelagos of islets and skerries are often found. (After Bjerck 1989)

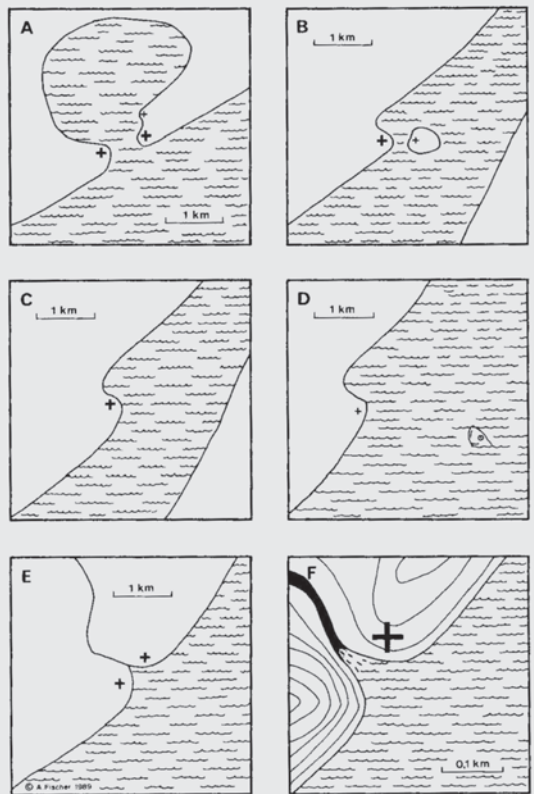
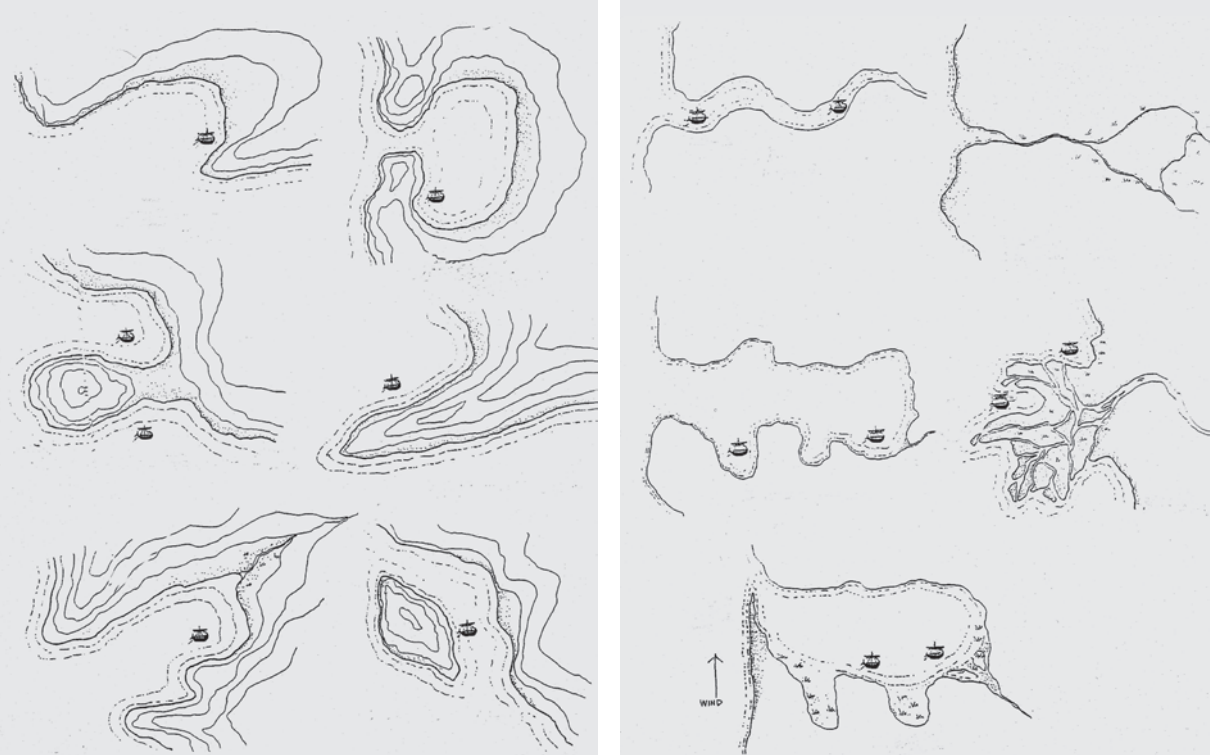


Fig. 8 Prediction types of Mesolithic settlement sites in Denmark (and North Germany), where land-sinking is the rule west of a line NE-SW from Limfjorden in Jutland to the German island of Rügen. The topography here consists of moderately flat or slowly undulating sedimentary coasts. Large islands are rare. (After Fischer 1995)

coastal towns in the North, where Denmark is the area with most of the material (fig. 11).<sup>40</sup> This means that preserved ancient sea marks, particularly concentrations or indications of such, may mark ancient harbour sites, now disused and accordingly unknown to research.

A few constructed stone cairns or beacons may, as we have seen, have been contemporary with beacons belonging to the defence system. The conditions for local demands of sea marks are basically the same today, such as the sighting distances and the topography. The most important points in the maritime landscape have remained so, even with considerable land rise during the last centuries, although the location as a social construct may vary. At least the basic land contours important to shipping remain in the same area. Several generations of sea marks have succeeded each other at approximately the same spot. At some of the sites of old sea marks we now find lighthouses and lanterns. All traces of the old cairns have disappeared entirely or have been built into the new constructions. As we have seen, many may have disappeared during the wars and have never been rebuilt. Traces, if there are any, are easy to confuse with the remains of demolished burial cairns. On the other hand the stone material of such cairns has been reused in some sea marks. It is easy to understand why it has been maintained that coastal burial cairns were originally placed where they are because they were used as sea marks. As will be apparent in the following I myself think that even though they are supposed from the beginning to be seen from the sea they are also located to be seen from the land. Perhaps the latter aspect is the most important. Being on the very edge of the shore they are in-between, occupying liminal space between sea and land.



Figs 9–10 Topographic harbour types of the Eastern Mediterranean during the Bronze Age. The coastlines were supposedly at approximately the same level as today. (After Blue 1997)

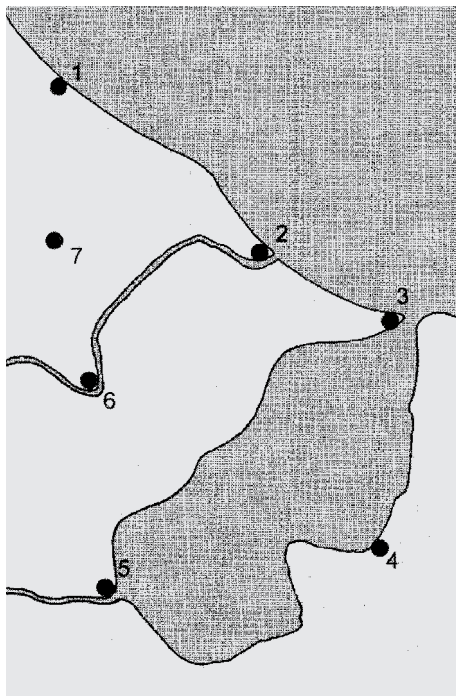


Fig. 11 Typical locations of Danish medieval towns, mostly situated on the coast or on waterways adjacent to it. (After Bill 1999b)

At any rate, it appears that from the beginning there were very few constructed sea marks. They were exceptional and so remembered and recorded. All others were natural sighting points. The date of the so-called *Floka-warden*, in Norway, is purportedly c. AD 870. It is possible that it still exists, in that case incorporated in the *Smørsundsvarden* north of Haugesund in the west.<sup>41</sup> If the dating is even distantly correct, the Viking Age ought to have produced a few marks of monument type. *Floki Vilgerðarson* was a local chieftain, not a representative of any central authority.

Even if only a few very similar-looking cairns have been erected in the same area it may be easy to confuse them with each other from the sea. In order to distinguish between largely similar marks it is sometimes necessary to *vary the number* of visible marks at a certain spot. This is presumably the background of the two *Ny Hellesunds varden* in Søgne, Vest-Agder (fig. 12). They are probably of medieval origin, as they were mentioned first in the 16<sup>th</sup> century.<sup>42</sup> They are traditionally associated with St. Olav, who was killed in 1030, but he was probably not their author, since almost





Fig. 12 The two varder at Ny-Hellesund, Vest-Agder, South Norway, as reconstructed after World War II. (Photo: Christer Westerdahl, 2003)

anything could be ascribed to him. St. Olav was the most famous traditional hero not only at the coast but inland.<sup>43</sup> Precisely these two beacons are known to have been rebuilt after the Great Northern War.<sup>44</sup>

If the supposition of an intentional distinction between marks by varying numbers at one single spot is a true one we have to look for other marks of the same age and earlier at this coast, one being the monumental *varde* at *Gamle Hellesund* in Aust-Agder. If both sites are contemporary they may date from the medieval period, at any rate after 1100, where we presumably have a starting point (see above on King Øystein). There are also early datings of stone crosses and beacons in Western Norway, although not substantiated as early as some authors would like to suppose.<sup>45</sup>

Variation in number is certainly an old principle of distinction. In the same vein two white lighthouses were visible in the 18<sup>th</sup> century on top of Lindesnes and Markøy further west in Vest-Agder. In 1799 they were improved with fire lanterns.<sup>46</sup> Three lighthouses were erected at Lista to distinguish from another feared point, Skagen (The Skaw) in Denmark, another distant but in contrast to it rather low-lying compound of two lighthouses. According to the same thinking two were erected in 1844 at the approaches to Arendal in Aust-Agder, *Lille* and *Store Torungen*, not to be confused with the single lighthouses at Oksøy (1832) and Jomfruland (1839).

### Indigenous or Imported?

Some kinds of sea marks must have existed during the 15<sup>th</sup> century in Northern Europe, including the far north. There is no way to interpret the situation otherwise. Travellers noting what they find remarkable from their point of view are always important. The Venetian Pietro Quirini foundered with his Mediterranean cog, a *coccia*, at Røst south of Lofoten in north



Norway. In May, 1432, he was taken to Trondheim with other survivors. He tells us that along the route they were steering in alignment to cairns on top of the islands, which marked the best and deepest channel:<sup>47</sup>

“So we were sailing between many islands, and all the time we navigated southwards through the sounds, we heard powerful screams from gulls and other sea fowl who had their nests on the skerries. But when it was time for us to sleep they went silent. This time came when there was still daylight, and then we went to sleep too. In this way the journey lasted for fifteen days almost always in a following wind, and all the time we steered by cairns on top of the islands, which pointed to the most rapid and the deepest channel. There were people on many of the islands, and they received us charitably when they learned from the monk what our plight was. They gave us what they had, i.e. milk, fish etc., without any kind of payment.”<sup>48</sup>

What navigation actually meant in respect to the sea marks we do not know. Maybe the weather was misty? But most likely the cairns together with other contours of land would be used sometimes in transit lines, to find “the most rapid and the deepest channel.”

Most remains of ancient sea marks are immaterial, i.e. they consist of place names. Maritime place names are, accordingly, the most important source for reconstructing past systems. But the difficulties are enormous. The Swedish place name specialist Ivar Modéer is one of a very few scholars who has penetrated these intricacies successfully. His pioneering study dates from the 1920's and later he acquired some competent followers, among them Bertil Ohlsson. Even though some of his interpretations have met well-founded criticism, they generally hold water. Like most linguists in the field he applied an all-Nordic perspective.

I have already mentioned one of his most important conclusions. In 1936 he himself summarized it in this way:<sup>49</sup>

“It will emerge from my account below, that scholars have not sufficiently taken into consideration the fact that in ancient times the marks of nature were used almost exclusively, and that still today they are of incomparable importance, while those marks that have been set out by people on the ground generally are of a relatively late date and are to be ascribed primarily to foreign influence.”

Apart from the absence of a domestic social perspective this conclusion remains, in my opinion, valid even today. This goes for the whole of Scandinavia, a European periphery. Up and into the 19<sup>th</sup> century, Germany, Holland and England are mentioned as the innovators. Modéer is not blind to the advantages that representatives of an incipient state may see in an existing foreign system. His quotation from a letter written by the Swedish king Gustavus Vasa (reigned 1523–60) in 1550 is singularly apt. In many ways the king symbolized the intentions of a first genuine Swedish statehood, himself present in all affairs. He created the first regular Swedish European-style navy. During his reign in the 1530's the first known pilot organization was initiated for the benefit of this navy.

The letter concerns the approaches to the town of Helsingfors (Helsinki) in Finland, which had recently been founded by the economy-minded king in order to counter the influence of Narva and of mighty Reval on the opposite side, which were not yet in Swedish possession.<sup>50</sup> The king explicitly mentions German prototypes. His intention was precisely to tempt merchants and sailors from the cities of Europe. Very likely he had seen such sea marks himself during his escape in exile to Lübeck in 1520. The monarch could also have gotten ideas from his partly German Chancellery.<sup>51</sup>

“We have heard that on the route which has to be used from the open sea to Helsingfors, there are some shoals which could be dangerous, and therefore must be made recognizable. In order to mark the ship route well, you and Erich Spore must find some way to identify this same ship route, where shoals or dangers are apparent, by way of cairns, or where there are rocks in the deep, by way of floating barrels and on top of them something high, which could be at a



Fig. 13 Lighthouses erected in Northern Germany mainly during the Middle Ages. According to Naish 1985, after F.K. Zemke, Falsterbo 1222 (which is incorrect, before AD 1241 is the most exact estimation permitted by the sources), Travemünde 1226, Lieps, Wismar 1266, Hiddensee 1306, Warnemünde 1482, Hela 1482 and Pillau 1526.

distance from the sea, like those occurring *in other places in Germany...*" (free translation from 16<sup>th</sup> century Swedish and italics by the author).

These concerns of the king for conditions of navigation were consistent and valid for the entire realm, not only for major ports of the south. They were maintained during the reigns of successive strong monarchs. In the instructions for the local upkeep of sea marks there was provision for fines if they were forgotten. The peasants of Vånum (Vuono) close to Torneå in the far north of Sweden were fined in 1562 for failure to mark out the shoals and banks in the approaches to (one of) the harbours of the important market site of Torneå.<sup>52</sup> The term used for 'marking out'<sup>53</sup> indicates that temporary wooden stakes or buoys with brooms were used. These were certainly removed each year, either by human action or by the ice.

In no way, however, could the deliberations of Modéer be strained so far as to maintain that no efforts were made during the Viking Age or the Middle Ages to erect sea marks or even to create a coherent sea mark system. But we have few material traces of it, either because it was not supposed to be permanent, or it was not maintained, or it was destroyed in later times or because it was only local or regional.

## The First Lights at Sea

We know that Travemünde at the approaches to Lübeck and the banks at Falsterbo in Skåne on the opposite side of the South Baltic got the oldest leading lights in the Baltic. There had, however, been a single effort before, in the 1070's AD at Wolin, formerly Jumne, Jomsborg or Vineta, according to Adam of Bremen.<sup>54</sup>

Of these two were genuine harbour lights and thus similar in their significance to the *hafnarkross* first mentioned in the North. For Lübeck the date would be c. AD 1206. With



Fig. 14 Kolabacken at Falsterbo, the site of the oldest maritime light in Scandinavia. The disused lighthouse is visible to the right. (Photo: Christer Westerdahl, 1991)

regard to Falsterbo we only know that the origins of the first light must have been before AD 1241. An undated letter by the Danish king Valdemar Sejr (1202–41) gave permission to the town of Lübeck to erect a light fired by wood in *Falsterbode*, and to cut wood in Skåne to provide for it, by way of the *predicatorum fratrum ordinis*, the Dominicans, of Lund. But it is most likely that the primary aim was not like the others to mark the entrance to the harbours at this important peninsula, but to warn against the dangers of *Falsterbo rev* (reef), the feared shoals jutting out from the land at this point (fig. 14).

This is fairly early, but two harbour lights were recorded at the port of Brielle in Flanders from the same period, at least in AD 1280. Probably there were several others working in Western Europe. Most lights marked entrances to harbours, e.g. in Germany (fig. 13) and in the British Isles.<sup>58</sup>

The Norwegian author Roald Morcken believes that the Nordic area was a pioneer in sea marks in Europe. One of his arguments is that sea marks are mentioned in England for the first time only in AD 1160 and those at Seville for the first time in a Venetian sailing instruction of AD 1250.<sup>59</sup>

This appears to be a general misconception in the history of navigation. It could, however, be maintained that the weather conditions in the sailing season of the Mediterranean were very different from those of the misty North. Shipping was also carried on by a large number of independent and intensely competing port cities. This situation in some respects may have prevented concerted action in such procedures. But sea marks have existed here almost since time immemorial, and as in the North, most of them have been natural. If Mediterranean piracy had been a reason not to set up sea marks the North would not have used them either. According to Morcken sea marks may have been set up already in about AD 870, as in *Flokavarden*, mentioned above. But now we are dealing not only with monuments but with much more straightforward means to avoid running aground in a fixed route.

In this connection I would like to make a comment on the coasts further south. I am not intimately familiar with them, but I have some knowledge of what has been registered as

ancient monuments. There is indeed something to say for Morcken's views. In the continental part of Atlantic Europe, e.g. France, and in the Mediterranean there does not exist such a wealth of cairns, wooden marks and corresponding place names etc. as in the North. Partly this could be ascribed in both areas to the absence of extensive archipelagos of small islands, islets and skerries and perhaps to the strong tidal environment in some parts, which transforms the landscape continuously and makes the dangerous bottoms extremely well known and knowledge of them perpetuated, at least locally. The marks are mostly restricted to harbours. In the North the use of transit lines and fairly strict measuring may be of more immediate concern.<sup>60</sup> In the mostly clear sailing weather of the Mediterranean we know that the most important natural sea marks were promontories and spits of rocky headlands.<sup>61</sup> It is easy to imagine how they worked both as recognition points and parts of a ritual landscape at sea. A templed promontory is a characteristic of major routes in classical times. In her important study Ellen Semple enumerates 175 such points.<sup>62</sup> Many more must undoubtedly have existed.<sup>63</sup>

### Germany and The Netherlands as Models

Lübeck was for a long time the leading merchant and shipping city of Northern Europe. Its initiative at Travemünde and Falsterbo was one of several elements in a more or less systematic build-up of sea marks at Hanseatic towns. During the same period the first mention of pilots, whatever their actual form, in the Baltic, appears in the Chronicle of the German Henry of Livonia. Presumably they were more private and bound to particular missions, than formal expressions of any kind of organization for pilotage.<sup>64</sup> As John Naish emphasizes in his standard work on sea marks, the Hanseatic Union was the most important single factor in establishing standards for our part of the world, from the Low Countries on the Atlantic to Germany in the Baltic, between c. AD 1250 to 1500. Naish relies heavily on the most careful and exhaustive study of sea marks which treats this area, by A.W. Lang (1965).



Fig. 15 The lighthouse at Nieuwpoort on the Yser, erected c. AD 1300. (After A.W. Lang 1965)

In the Low Countries and Germany there emerged a sea mark system in the later part of the Middle Ages.<sup>65</sup> The trading interests of cities were strong enough independently to decide upon and locally to arrange systems. Local feudal powers and interests were not consistently in conflict with these but seldom took any action on their own. The towns in the south were, as emphasized above, in contrast to those of the Scandobaltic realms, not dependent on the feudal authorities. They were rather opposed to their own variety of princes and bishops. In the North they often had to fight the foreign kings – and other competitors – for the sake of preserving their own supremacy and monopoly on trade.

Nature in northern Germany or the Low countries is very different from that of most of the rocky and mountainous North. The area of medieval Denmark including parts of present-day southern Sweden is similar to the conti-



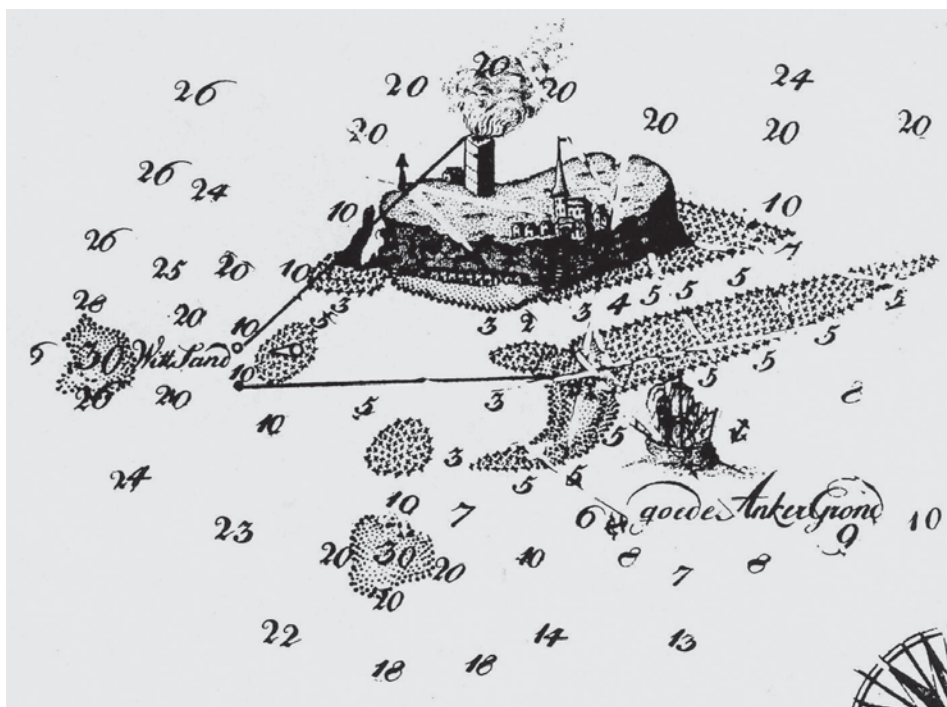


Fig. 16 Helgoland with light, *Bake* and a free-standing rock, called *der Mönch* (the Monk). Two *Baken* and one barrel are visible. Transit lines are marked. Map of 1762/65. (After A.W. Lang 1965. Cf. fig. 32, the Monk, the rock at the Faroes)

ment. In the south the coasts are indeed shallow, sometimes extremely so, and display sedimentary spurs and banks, generated by extensive river outlets. It can be no surprise that the Wattenmeer/Waddenzee/Vadehavet on the Atlantic side (North Sea) and the estuaries of the Rhine and Schelde were provided with the first *systems* or *chains* of sea marks. An important point was the isolated island of Helgoland, which itself served both as a threat and as a route mark but which was also an emergency harbour (fig. 16).

The process of installing systems may have started immediately after the demise of the reign of piracy of the Viking Age. The first mentions of these systems derive not surprisingly from the 11<sup>th</sup> century.

In Flanders there was a High Medieval tower for a leading light at Nieuwpoort (fig. 15). The most important trading port of northwestern Europe was undoubtedly Brügge, situated inland, behind dunes, in a lowland river and drainage system with progressive sedimentation. At the outlet of the river Swin buoys must have been necessary at an early stage, possibly already in the 11<sup>th</sup> century. On a map from c. 1500 of the approaches to the river Sluys there are two channels, one with three barrels, the other with two.<sup>66</sup> *Pari passu* the silting-up process Sluys became the harbour of Brügge. During the 16<sup>th</sup> century Brügge lost its dominant role, presumably as a consequence of changes in the trading networks, the worsening of harbour conditions and changes in ship technology. Antwerpen and later Amsterdam took over its role.

The first lighthouses had been erected in Holland in the 14<sup>th</sup> century. The lighthouse of Terschelling at the Vlietroom, the entrance to the Zuyder Zee, was built in 1326 by the town of Kampen at the other end of the huge bay. The first buoys of the other entrance were also laid out by Kampen. During the 15<sup>th</sup> century the responsibility for these were taken over by Amster-

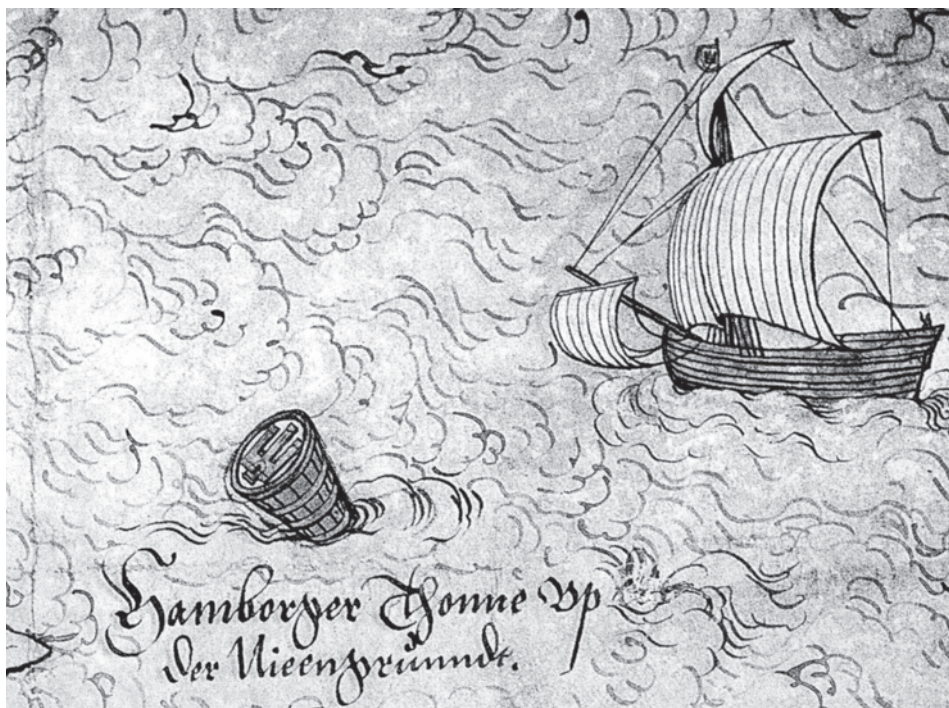


Fig. 17 Conical barrel with the arms of Hamburg. Map of the Elbe by Melchior Lorichs, 1568. (After A.W. Lang 1965)

dam, and in 1573 by Enkhuizen. In the shallow area of the Zuyder Zee long stretches of the routes had to be marked at the edges although no shoals were visible. These systems must have been in use at the beginning of the 14<sup>th</sup> century. Land marks were erected at suitable sites on the island and at the mainland, the banks were contained by pilings at their margins, followed by floating barrels anchored by poles along the deeper channels between them. Some defined stretches could be buoyed up by private associations for charity and poor relief, e.g. in Harlingen. This more or less private structure had a long life. It became centralized only in the middle of the 19<sup>th</sup> century.<sup>67</sup>

Here, in contrast to the North, we know in detail how the maintenance was financed, at least in early modern times. In Kampen and Enkhuizen<sup>68</sup> the skippers were charged with a fee called *paalgeld*, directly denoting the pilings which anchored the buoys. In other places these fees were called *baken-, vuur-, lantaarn- or tonnengeld*, indicating the costs for beacon, lights, lanterns or barrels. As receipts the skippers got coin-like tokens, called *bakenloodjes* or the like. They were typical for the Zuyder Zee but corresponding tokens were also issued on Zeeland. Since these *vuur- or bakenloodjes* were stamped for each year they have been used to date shipwrecks excavated in the polders.<sup>69</sup> Like the origins of the system the taking of fees was decentralized, and this caused conflicts between the cities involved.

Along the flat North Sea coast large-scale fishing took place, probably quite early. There is reason to believe that fishermen were pioneers in sea marks at the coast. These marks were rather elements in alignments or transit lines to show the way to fishing grounds or the route back to the right shore. The need for such aids in detailed navigation is universal. In Scandinavia such transit lines were known as *me* or *med*. With a more commercial fishing system further out in the North Sea, small huts with a platform for fires, *vuurboeten*, were erected. These

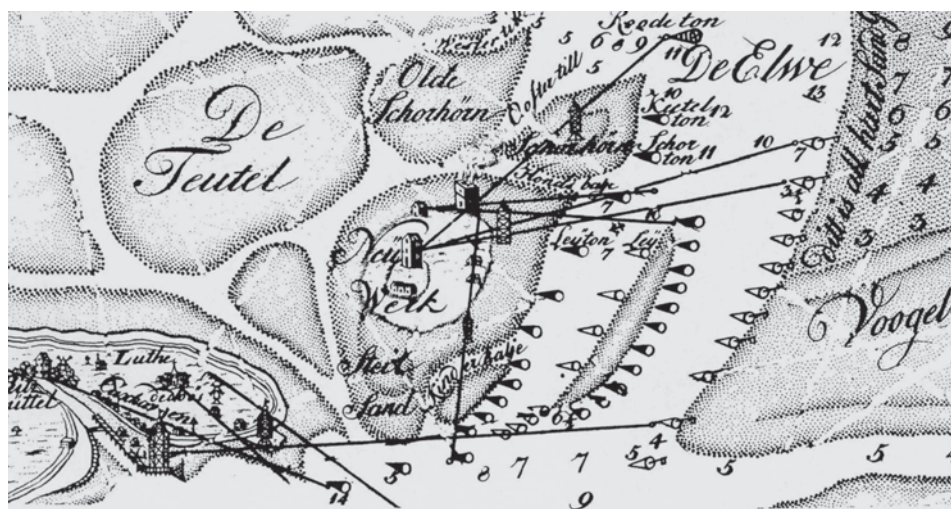


Fig. 18 The entrance to the Elbe with the tower of Neuwerk in the middle. Two *Kapen* and houses form transit lines. Black and white barrels line the edges of the channels. (From map drawn up in 1762/67. A.W. Lang)

marks served fishing and approaches from the open sea during night-time and were independent of shipping. They worked as secondary sea marks for passing vessels as well.<sup>70</sup>

In northern Germany the mouth of the river Elbe was a dangerous place to approach by sea. Undoubtedly, barrels were early affixed to the sandy bottom (fig. 17). At the *Scharhorn* reef it was decided to erect a tower for permanent surveillance and for a light in times of need. It was finished and in full action in AD 1310. The burghers of Hamburg commissioned the tower, with permission from the local feudal lord. It was known as the *Neuwerk* (fig. 18).

Every single city in this way initiated local sea marks in this area, as in Holland, starting with the first part of the 15<sup>th</sup> century. The town of Bremen managed the chain of buoys and stakes along the river Weser, where in fact there is evidence that marks existed as early as the 11<sup>th</sup> century. These measures were not slow to reach the Baltic. The town of Rostock had at least one buoy at Warnemünde in the 13<sup>th</sup> century. By 1500 lanterns and lighthouses had been erected at several entrances to town harbours (fig. 19). *Baken* and *Kapen* (below) were found at cities like Danzig, Rostock and Stralsund.

The terms for sea marks were approximately the same in Holland and Germany. Dutch and Low German are closely related. *Tonne* is barrel. *Baken*, Engl. *beacon*, denoted all kinds of stakes with different markers, which were also called *Pricken*. Larger timber constructions on land were called *Kapen* or *Caapen*. The fees received in the ports were accordingly called *Baken-* or *Kapengeld*, or collectively, *Tonnengeld*.

As we will see some of this terminology filtered into the Nordic languages. A large number of loanwords from Low German, and later from Dutch, is generally speaking found in all of them. Even though the impetus for sea marks may have come to the North from this area, there is no record of a similar system of fees to defray the costs. The obligation to erect and maintain sea marks was probably imposed from above more or less as a feudal duty among local people, an alternative being compensatory tax reduction. As has been pointed out before, the society in Scandinavia was organized in a different and somewhat old-fashioned way, and thus absorbed only superficially innovations from the outside. But the foreign skippers were supposed to pay for the upkeep of sea marks. Christian IV (1577–1648), who was an active monarch, ordered all *bakker* (poles or barrels) taken up and no lights to be fired, since the Dutch had not paid their





Fig. 19 *Bremer Bake* on Hoheweg c. 1790. (After A.W. Lang 1965)

*fyr- or bakkepenge* ('light and bakke fees;' my italics). Apparently this means that the fees were supposed to be paid in the official harbours.<sup>71</sup>

## Changes in Ship Scale and Technologies

The reason why there was a demand during the 15<sup>th</sup> century for a system of markings on underwater rocks and shoals has a background in the changing scale of ship technology. Ships were not only acquiring greater draught and carvel planking but also more masts. This made them more maneuverable at sea but if they were not expertly handled, rendered them more cumbersome in narrow space (fig. 20). During the Iron Age a rowing ship of 23 m length such as the famous Nydam ship had a draught of only 0.7 m. During the Viking Age and the Early Middle Ages ships drew only 1.5 m. The standard cog (*Bremer Kogge*) c. 1400 and presumably even more the recent hulks (whichever they were) would draw 3 m.<sup>72</sup> For this reason the buoys, barrels, brooms, stakes etc. were introduced in earnest at harbour areas, and a concomitant demand followed for stable sea marks on spits, islands and skerries along the approaches.

These loading machines, created by a new urban capitalist spirit, were built for large and valuable (composite) cargoes and had comparatively wider and flatter bottoms than Nordic keels, of the elegant 'wine-glass' cross-section. They were thus comparatively more sensitive to damage, both in terms of value and construction. Unlike small clinker vessels, such ships could not be repaired anywhere. Sailors on ships with draughts of more than 3.5 m could not see small shallow areas, even from the masts, as they could formerly in ships with less draught, and especially not in troubled or turbid waters. The older type of one masted square-sail vessels remained in local traffic but towards the turn of the century 1500. The larger ships with several masts increasingly used fore-and-aft sails. It was now possible, with the mariner's increasing professionalism, to sail closer to the wind, which in turn meant that other water areas than





Fig. 20 The kind of ships that transformed shipping in the later part of the 15<sup>th</sup> century. Miniature from the Hastings manuscript M. 775, dated 1461/1483, fol. 130<sup>v</sup>. (The Morgan Library & Museum, New York)

manufacture, repair and store equipment. A particular ship type was designed to drive piles into the sea bottom for *Baken* and to lay out barrels. It was called *bargia*, later *bardze* or *bardse* (fig. 21). The field activity and the concomitant terminology proceeded from this vessel. Among the crew was a *Barsenmeister*, and at least two specialists were employed, a *Tonnenleger* and a *Bakenstecker*. Due to the risk of piracy the *bardse* was often armed with guns. The successive expansion of sea marks along the channels towards the open sea meant strengthened and specialised constructional features of the ship type.

Interestingly, the ship term *barsa* is at least known from Sweden as well. Presumably it was originally more a term for a function rather than for an individual ship. We meet it, however, as the latter. In the capital harbour of Stockholm a vessel called *barsa*, owned by the town ("Stadens barsa"), is mentioned several times in records of the 1460's and 1470's.<sup>75</sup> Several authors have tried to identify it with a wreck find made 1933 at Riddarholmen in the centre of the town (fig. 22). It was a relatively large ship, 22 m long, and clinker-built in the traditional Nordic manner.<sup>76</sup> But its traits clearly deviate from those of other late medieval ship finds. Only

before could be used as regular routes. This could in turn mean that new rest and emergency havens had to be used. In northern Europe the new ship types were introduced first by Dutch and German interests.<sup>73</sup> All these factors combined to make the demand for sea marks of all types more apparent. The fairwaters in the North were certainly deeper and less continuously shallow than in the Low German North and in the Low Countries, and needs were accordingly different but nonetheless required by circumstances. The routes and harbours immediately concerned were few, however. A similar demand for the safety of large ships led to the establishment of mooring rings in rocks along concentrated areas. These can be dated to the same period, late 15<sup>th</sup> century (below).<sup>74</sup>

### Special Vessel Types for Sea Marking

To set out and maintain sea marks new ship yards were organized in North Germany to

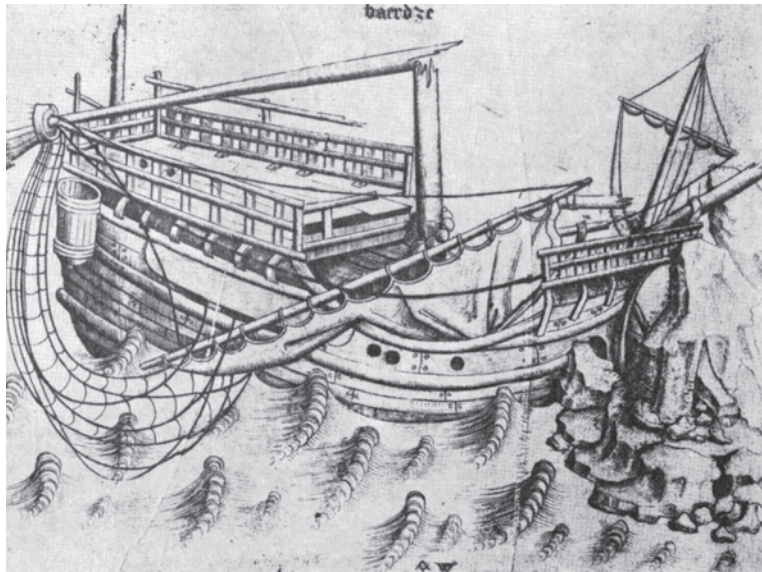


Fig. 21 *Bardze* in distress, by the unknown artist WA, possibly living in Bruges, Belgium, from about 1450. (After Eich/Wend 1985)



Fig. 22 The shipwreck found at Riddarholmen, Stockholm, possibly called *barsa*. The transom to the left discovered around 1985 (Lindberg 1985) is unfortunately not visible. (Photo: The Medieval Museum, Stockholm)

very late was it found to have had a transom stern.<sup>77</sup> It is thus an unusually early find of this foreign feature. Apart from this it was equipped with four cannons, three of them with a loose loading chamber. One of them has the stamp of the town, a crown, “stadsens krona.” If it had been called a *barsa*, there is reason to remember what was said above on specialized construction and armament of the possible German prototype. The date does not conform to the mention of a “stadsens barsa.” The latest efforts to date it indicate (local) building c. 1520 and later repairs into the 1530’s and 1540’s. As can be seen these dates may well be contemporary with the ambitions documented by the King, Gustavus Vasa, on Helsingfors (Helsinki) a little later.

Stockholm was doubtless a harbour where the complicated approaches through the archipelago would require a sea mark system. The passages where there were marks anchored under water may have been rather few but on the other hand, the main route by way of Vindö in the





Fig. 23 A late *boejer* from *Aurigarii Speculum Marini* 1586, outside Bergen. (After Åkerlund 1951)



Fig. 24 A *bojort* depicted as the prototype for the seal of the town of Bro/Kristinehamn in Lake Vänern in 1642. In contrast to most *boejer*-type ships it carries a square mainsail and is probably thought of as clinker-built, in the manner of local adaptation. But the prestige of a Dutch *boejer* still lingers in the choice of seal. (Photo: Kurt Eriksson, Riksarkivet, Stockholm)

commercial fleet as well as in the navy.<sup>79</sup> The type is mentioned in Holland during the 15<sup>th</sup> century. Its dimensions obviously inspired innovation. The first carvel-built vessels in this area c. AD 1460 were *boeijers*, *smacks* and other small craft. The new *smack* rig with a stay foresail is mentioned on a barrel-layer in Hamburg in 1466, although possibly it was a *bardse*. The stay foresail could be earlier by some decades in northern Europe. Around AD 1480 is

south was a winding passage, sometimes shallow, where it was fairly easy to get lost or at least to be seriously delayed. Only in 1616 was the later principal route *Kanholmsleden*, much more suitable for larger ships, discovered and made official by the authorities, through the efforts of an experienced local peasant who was duly rewarded.<sup>78</sup>

In any case, an idea about a certain function for the *Riddarholmen* vessel does not exclude its having been used for multiple purposes. Its armament is an indication of this, and its transom stern discloses another peculiarity still unaccounted for. It may perhaps indicate unusual ambitions on the part of the builder, and perhaps a partial adaptation to foreign carvel techniques.

It is remarkable then, that the particular ship type originally associated with sea marks in Holland was also transplanted to the North. It was the *boeier* or *boejer*, after Dutch *boej*, 'buoy,' denoting the setting out of barrel buoys along the channels of the *Zuyder Zee*. It can thus be said that it corresponds – at least from the beginning – to the *bardse* in Germany. In Scandinavia its name was corrupted to *bojert*, *bojort* and similar names. Having lost its immediate associations with buoys it became immensely popular as a small, highly manoeuvrable vessel for multiple ends, in the

mentioned a *boejer* from Kampen which had visited the Baltic.<sup>80</sup> The *boejer* or *bojort* was flat-bottomed and at least mostly built in carvel-style in later years (fig. 23). In contrast to the well-known depiction by Hogenberg of a *boejer* with a transom stern from the 1580's it most often had a rounded stern. In literature it is described as two-masted, with a sprit-sail on the main-mast and above it a square sail. On the mizzen mast was placed a lateen. Additionally it had a small square sail on the bowsprit (*Blinde*). Over time this original set was adapted to northern conditions: it was made less flat-bottomed, was equipped with a main square-sail (Swed. *råbojort*) and was even built in clinker/lapstrake<sup>81</sup> (fig. 24).

There is no mention of importing a *boejer* precisely to practise the same original function that it had had in Holland. But the active Swedish king Gustavus Vasa in a letter did commission his agent in Danzig to try to buy a "good and rightful" *bojort*.<sup>82</sup> It may not just be coincidence. But there were a number of innovations with Dutch origins in ship building at the time. In western Sweden these were extended to small working boats as well: oar tholes with pins instead of the traditional *hå*<sup>83</sup>, the transom stern, sprit-sail, the keel with a rabbet, bow-sprit, rounded stem and stern, and comparatively flat bottoms.<sup>84</sup> In any case, there is a slight possibility that its original function may have played a role in the introduction of the *boejer* in the North.

Thus we have two ship terms which may have been transplanted while their specialised function still was known and alive. It is not possible to prove, but it appears as not just a coincidence that their introduction is contemporary with the presumably first regular sea mark system of the North.

### *Garpen, Hollender and Pampus*

German influence was considerable in all spheres of the North, both before and after the Great Plague, c. AD 1350. It was particularly strong in the urban sphere, in trade, techniques, e.g. in mining, and language. However, the retail trade was still largely in the hands of the northerners. Indigenous northern shipping and production stagnated, however, after the Great Plague. It is therefore likely that the push for sea marks only arose after about 1400–1450. It is interesting to see that the town of Kampen was much engaged in the establishment of the Dutch system. This city had early and intimate connections with the Nordic area, especially Denmark and Norway. The influence of Lübeck – and to some extent other Baltic cities – had had a steady and profound influence beginning in the 13<sup>th</sup> century.

The question now arises if the sea mark was therefore a particularly "German" phenomenon in Nordic understanding. To some extent this may concern Holland as well. In popular representations the Hansa is never mentioned, nor referred to elsewhere, such as in place names. It remained an abstraction in peoples' minds. There may therefore be more than meets the eye in the words on sea marks and Germany by King Gustavus Vasa, which I mentioned previously.

The old nick-name for a German in Scandinavia was *garp/er*.<sup>85</sup> At the beginning this was presumably a term implying esteem for an active, fearless person, but could also over time acquire a pejorative sense, such as "boastful bragger" indicating feelings of inferiority. More specifically, it was a term for those who worked in the Hanseatic trading office, which in Norway of course meant those in Bergen.<sup>86</sup>

I have suggested in my own survey of place names, that at least some of the fairly common *Garp-* names in the eastern Swedish and Finnish archipelagos may denote sea marks, put up or initiated by "garpar." They may in fact denote the sea marks themselves. As we will see below quite a number of other ancient sea marks have been personified and given names pointing to human beings.

There are very few place names pointing to Germans (*Tysk-*), and most of them seem to indicate places where German ships foundered. Places where ships of other nations foundered are



also indicated by names in the languages of those nations. In my opinion they are only found in insignificant localities, and quite late, that is, in early modern times.<sup>87</sup> This impression is conveyed by my Norwegian experience as well.

There are quite a few *Garp* names along routes and in harbours, which sometimes denote fairly large localities. In the approaches of the town of Söderhamn, founded in 1620, there are two islands called *Lilla* and *Stora Garpholmen*, and their earliest evidence dates from the middle of the 17<sup>th</sup> century. This area was an important harbour area long before the 17<sup>th</sup> century and the Vitalians, including Germans, occupied the castle of Faxehus around 1400 at the site of the later town of Söderhamn, in support of the deposed Swedish king, Albrecht von Mecklenburg. One of the first mayors of Söderhamn was called *Hans Garp*. It seems, although it is impossible to prove, that the place names ought to be older. Their position is in any case quite relevant from the point of view of sea marks.<sup>88</sup>

Moreover, there are three islands in northern Roslagen, the archipelago north of Stockholm, where three major uninhabited outer islands carry the name *Garpen*, at Skogsskär, east of Vässarö and east of Vätö. Oral traditions actually mention cairns in the entire area. The outer sea route passes here. But this route to the North was largely forbidden to the Hansa! Perhaps it was not, after all, in practice? Could this possibly be an indication in terms of private sea marks of an illicit trade, like the *Grim(m)*- place names at unlawful harbours, mentioned elsewhere in the text?

Another island, *Garpen* at Bergkvara in Småland, fairly close to the medieval border of Denmark, earlier had an important pole mark.

To take a Norwegian example there is a stone cairn placed on the top of the major island, Hille, 90 m a.s.l., in Vest-Agder. The plateau is called *Garpeheia*, 'heia' meaning heath (fig. 25). The present cairn is quite insignificant but it may mark the site of a larger construction. In the vicinity is found another rock called *Vardeheia*, where *varde* denotes a cairn.

The island has an important position in the inner route between the archipelago and the mainland. Because of the many naval conflicts at least since the 15<sup>th</sup> century any major sea marks of the *varde* type would no doubt have been taken down. Some were certainly re-erected as part of a pre-conceived and probably rather coherent system in later times, but a large number must have been totally neglected and forgotten.

There may be similar traces of Dutch seafaring in southern Norway.<sup>89</sup> In Vest-Agder, the Dutch were particularly active. The *Hollender*- names could at least theoretically in the same



Fig. 25 *Varde* on *Garpeheia*, Hille, Vest-Agder. This construction is probably late and nothing more than a local rock-top mark. (Photo: Christer Westerdahl, 2004)



Fig. 26 Kirkehavn on Hidra, Vest-Agder. The locality called Pampus is in the far distance on the rocky shore of one of the islands at the approaches to the harbour. (Photo: Christer Westerdahl, 2004)

way point to sea marks. Otherwise they often point to loading sites for timber, like those with the element *Skott-*, ‘Scottish.’ But if found in open waters it is far more likely that they denote various types of misfortunes.<sup>90</sup> Traditionally it has been told – and mentioned further below – that *Risor flekk*, the white natural sea mark in the rock, was painted first by Dutch sailors. There are other indications of a profound Dutch interest mainly during the 16<sup>th</sup> and 17<sup>th</sup> centuries in Norwegian sea marks, natural or artificial.

At the approaches to Flekkefjord, where the Dutch were particularly active, lies the large island of Hidra (fig. 26). On the southwest of Prestøyna island two place name localities catch attention, *Pampus* and *Pampusbukta*. As has been pointed out several times they are difficult or impossible to explain from a local perspective.<sup>91</sup> However, *Pampus* or *Pamphuys* is a very well-known shoal outside of Amsterdam.<sup>92</sup> Already in 1544 ships unloaded their ballast at this site.<sup>93</sup> As a migrant name among sailors *Pampus* obviously spread to a number of other maritime localities in Holland, but also to Scandinavia. They appear at three sites in the Oslo fjord, one in Ringkøbing fjord, western Jutland and one in Bråviken, Östergötland, east Sweden. As Modéer points out, the shoals denoted are often dangerous and have been provided with sea marks. In addition, their location often reminds you of the original *Pampus*, at the route to an ancient trading site.<sup>94</sup> In my survey area the reef of *Pampus* in Öregrundsgrepen bay in north Uppland between Stockholm and Gävle is an example, *Pampus* in Dramsfjorden in Norway another. The wives of the pilots in Svelvik cried to their husbands at departure in a recorded formula, that they would beware of the two shoals called Pampus and Blinda.<sup>95</sup> It is possible that the *Pampus* locality once had the function of warning against another shoal in the entrance to Kirkehavn in Hidra, together with the other main harbour of Hidra an important haven for Dutch and other sailors in this exposed stretch of coast with very few suitable refuges. Possibly a sea mark was once placed there.

## Iron Mooring Rings in the Rocks

It is reasonable, I believe, to compare the sea marks on underwater shoals and other specific dangers with the mooring rings (fig. 27). They are a similar kind of contribution to safety in routes with havens and wintering sites. The use of large mooring rings of iron is also recorded in medieval times. Olaus Magnus illustrates and describes them briefly, partly on his map *Carta marina* of 1539, and in his book on the Nordic Peoples in 1555 (fig. 28).<sup>96</sup> He says that they are common in Norway and pinpoint the routes to Bergen, both directly from the sea and those inshore along the islands. Probably he had seen them himself during his journeys. A little later they are mentioned in 1613 by the Norwegian parson Peder Claussøn Friis, from the southern island route from Karlsund to Bergen.<sup>97</sup>

Their inception would be given approximately the same date. Presumably the rings, like the sea marks were initiated by the needs of fairly large Hanseatic ships with valuable cargos. The sea mark systems in Germany and Holland grew during the 15<sup>th</sup> century, especially in the latter half. It is reasonable to surmise a start around 1500 in the North. The fact that Olaus Magnus



Fig. 27 Mooring ring of the 19th century. Landøy, Vest-Agder. (Photo: Christer Westerdahl, 2004)

mentions them is a sign that they represented something new and exciting at this time, worthy to be shown to Italians and other southerners some decades later. The development of the ring sites appears to have been rapid. In 1632 king Christian IV of Denmark/Norway decreed that the mooring rings in the Bergen route which had rusted away or were decrepit in some other way would be restored. Around 1774 there were at least 120 rings in this route. There ought to have been a corresponding number along the south coast, for example at Agder, where routes from the south to the north converged with these to and from the Baltic. There are accumulations of dozens of rings still to be studied (and used!), for example at Ny-Hellesund<sup>98</sup>, – with its famous two *varder* just mentioned, Kleven, the deep harbour of Mandal and outside Flekkerøy, and including Målsfjorden, the best and most spacious harbour area along this entire coastline.<sup>99</sup>

Since this area was part of my latest survey, I listed a number of place names referring to the





Fig. 28 Iron mooring rings depicted as a vignette of Olaus Magnus' *Historia* (1555) 2:13. Similar rings are found on as early a map as the *Carta marina* of 1539, depicting the outskirts of Bergen.

existence, former or still present, of mooring rings, a rich flora including skerries, islands and bays like *Ringen*, *Østerringen*, *Ringskjæret*, *Ringodden*, *Ringnuddboen*, *Ringekaste*, *Kilringskjæret*, *Ringboltudden*, *Ringfora* and *Ringbukta*. A mooring site, irrespective of its character could also be indicated by the element *Feste-*, Old Norse *festr*, 'to fasten, a hold,' like *Festervoll* in Kjerkehavn, *Hidra*<sup>100</sup>, also mentioned above in connection with *Pampus*.

Thus, all the elements that we have mentioned coincide in time: the features of general history and social change, the tendency to credit-based urban economies and nation states, changes in ship technology, new ship types and rings in rocks and thus presumably sea marks. Another important contemporary feature which has not been treated in depth here is regular pilotage, at least for the crown and some of the cities. However pilots and pilotage have been mentioned. The "hot" period would be c. AD 1500–1550 in our part of the world. It is possible



Fig. 29 Vignette with the rocky promontory of Bjuröklubb in North Västerbotten, Sweden, personified by the crowned head to the left. Sea marks are depicted (like fig. 30) as human beings pointing with their arms. A foundering ship is at the spit to the right, indicating the danger in the approaches to the harbour inside the rock which Olaus Magnus may have visited himself in AD 1519. Seals are found around a small skerry. The area is well-known for remains of seal-hunters' huts of the Iron Age. The drying of herring takes place on the rocks. The smell is an *olfactory* sea mark by itself, as pointed out by Christer Westerdahl of *Historia* 2:6.





Fig. 30 Sea marks illustrated outside a harbour, depicted (like fig. 29) as human beings pointing to the entrance. The rune stones may indicate that this vignette partly takes its inspiration from Hälsingland, which Olaus had passed by ship, travelling southward in 1519. *Historia* 2:28.

then to maintain as well, that most terms and place name types referred to during early modern times originate in the same period. Another phenomenon, the restoration of the *varder* and *veder*, the fire beacons, was at least current in 1604 in the Norwegian law of Christian IV, but very likely already during at least the Nordic Seven Years' War (1563–70) and can be considered a parallel development. It is very likely that contemporary sea marks systems emerged successively in the same way. If they are to be looked upon as a temporary or permanent feature is perhaps a meaningless question. They were there already as a recurring fact and the following wars and peaces in many cases meant their intermittent removal and restoration, respectively.

### Maritime Anthropomorphics I. *Steinkjerring*: To See Human Beings in Sea Marks

An important aid to understanding the cognitive ideas about ancient sea marks are the place names and tales associated with them. They may also give clues to sites where all material traces have disappeared.

The most common anthropomorphic form is a 'stone woman,' a *steinkjerring*. In the medieval Norse lay on Helge Hjørvardsson in the Edda we are introduced to a witch, Hrimgård, a giantess who was transformed into a "ridiculous" sea (harbour) mark at the rise of the sun. More specifically the form was a harbour mark, *hafnar mark*.<sup>101</sup> This pattern is not unknown in later tales. A natural rocky formation, *Hudda* or *Huddsteinen*, at Flekkerøy in Vest-Agder, is supposed to be a creature who was born looking like this. A witch is indicated by names like *Trolkjerringa*, attached to several such localities in the area in question. Stone formations like this are often called *Gumman*, familiarly 'the old woman' (fig. 31).

It is obvious that maritime culture in this sense is male and reflects gender prejudice. Also in other respects the conflation of people and sea marks mirrors social prejudice and the manifold manifestations of rigid class societies. But the prevailing impression is nonetheless a humorous and fairly decent understanding of human frailties in general.

As we know, Olaus Magnus also points to the existence of sea marks in his works, the map from 1539, and his book from 1555. He mentions and illustrates watchtowers or lighthouses, lanterns on stakes, barrels, and leaning poles. Several of his vignette illustrations in his *Historia*



Fig. 31 The båk at Stora Fjäderägg, Västerbotten. It could also be called *Gumman* ('the old lady'). (Photo: Christer Westerdahl, 1998)

1555 show that he thought of them as *human-like* (figs 29–30). This must mean that he is referring specifically to built-up cairns of stones, that is, *beacons*, and what is variously known in Scandinavian languages as *kummel* (present-day Swedish) and different forms of *varder* (present-day Norwegian). It is easy to understand that a human form was imagined in these constructions, especially in a mist. Today, or at least in recent times, there is still a tendency to call sea marks after individuals who once lived. This applies as well to border markings inland, for example. Imagination has discovered faces, coats and bodies in them. Sometimes the cairns or formations were named after well-known personalities. The 'mayor,' *Borgermesteren*, at Lillesand, was apparently supposed to suggest a body large enough to fit a *varde*. Surprisingly many personal first names, both male and female, are attached to sea mark sites, for example skerries like *Simonsbåen* and *Ragnhildsbåen*. The form of the skerry also may give the name to the mark.<sup>102</sup>

The tendency to humanize sea marks has gone further: there is a most remarkable record of a series of wooden sculptures of human beings from an 18<sup>th</sup> century main sea route in Finland. But the explanation given is not one of sea marks, but of "scare-wolves" (below).<sup>103</sup>

Parallel to other, more official names, we also find female or male designations<sup>104</sup>, like *Kjerring*-<sup>105</sup>, or the Hellesund *varder* being called 'girls,' *Hellevars-* or *Hellesundsjentene*, or simply *Jentan*. Sometimes you may be tricked into believing that they are actually memories of something that happened there. Hanssen was told that a man from Åkerøy lost both his daughters in an accident at sea close to *Østre* and *Vestre Jentene*, or collectively, *Tronderøyjentene*, in Aust-Agder.<sup>106</sup> All kinds of popular etymologies may have been invented. No one rejects a good story.

There is a large number of male associations as well. Such names contain the elements *Karl*, *Kall-*, 'fellow, man,' *Gubben*, 'old man,' possibly *Bonden*, 'the farmer.'<sup>107</sup> Names such as *Kallsundet*, *Store* and *Lille Kallholmen* and *Kallneset* are found in my survey area in Swedish Norrland, as well as in Vest-Agder.<sup>108</sup> The capstan of a winch for floating timber bundles could also be likened to a large human "fellow."<sup>109</sup> Of course this anthropomorphic tendency applies to natural sea marks as well. The headland of *Kullen* in Skåne and the limestone rock of the southern tips of Gotland, *Hoburgen* have been collectively called *Gubbarne*, 'the old men,' at least by Nordic sailors during the last four centuries. Moreover, both places were known as important sites for sailors' baptism.

Natural sea marks could be likened to human beings, such as *Tjockekarl*, 'the fat fellow.' In fact this is the origin of the name of the island group *Kökar* in Åland, the *thiyckaekarl* of the



Fig. 32 The free-standing rock at the Faroes, called *Monachus*, The Monk, by Olaus Magnus. Vignette of *Historia 2:5*. Cf. *der Mönch*, another Monk at Helgoland, fig. 16.

itinerary c. 1300. It is also found at Vinö island in Småland, *wino* of the same itinerary.<sup>110</sup> Younger males were imagined in Swedish *Dräng-*, which reappears as *Drengan* and *Drengholm* in Søgne, Vest-Agder, while corresponding natural formations could be called *drangur* in Icelandic or Faroese.<sup>111</sup>

It is possible that certain other personal designations, such as the female place elements *Fru-*, *Jungfru-*, *Jomfru-* denote sea mark cairns. But with perhaps more credibility it could be maintained that most of them belong to what I have called *the ritual landscape*.<sup>112</sup> At any rate they denote skerries perilous to shipping or fishing. Like the *Käring-* names they remind you of female beings, which were *taboo* at sea according to the basic principles of maritime cosmology. Due to their liminal position beings as well as names were dangerous, but could also bring luck.<sup>113</sup>

In some areas sea marks with *Munk-* names appeared, where there were monasteries whose property, being on the coast, was often also associated with fishing. Sometimes *Munk-* names were based simply on resemblance and did not refer to the presence of monasteries. Olaus Magnus knew the principle. He refers in one passage to the rock *Monachus*, *Munken*, at the Faroes (fig. 32).<sup>114</sup> He personifies it by recounting, as he believes, how the sailors felt the same safety when they saw it as when they were in a protected haven. The sailors knew in any case that they would soon approach a haven. Not for nothing was Olaus an apologist for the Catholic faith and for the religious professions. He lived in exile from Sweden for this reason but remained well informed of the intentions and actions of his adversary, the Lutheran king Gustavus Vasa. Olaus was inordinately interested in the measures taken by Gustavus Vasa to alleviate the dangers of shipping. The work of Olaus, who was widely travelled, is a treasure of the late Middle Ages.

## Maritime Anthropomorphics II. Perceiving Sea Marks in Human Beings

A human being does not seem a very likely kind of sea mark, especially if a permanent installation is involved. Although this is true, human beings have indeed been intentionally used as sea marks by those waiting at the shore. As has been recorded in oral traditions certain look-out points which were well known to sailors and fishermen could be marked this way. A tempo-

rary guard post was set out in difficult weather conditions when somebody was expected from the sea. In the archipelago of Grimstad in South Norway several place names occur with the first element *Va-*. The probable etymology of Reidar Marmøy<sup>115</sup> is that it derives from the Norse *vera á vadbergi* and *sitja vad*, which mean 'to keep watch, be on the look-out.'

A closer study shows the advantages of these sites set up specially for watching. The reasons for the marks varied, that is the people on shore may have been waiting for fishing boats or – not least – looking for shoals of fish. On certain spots even whales and seals may have been observed by hunters *in spe*. In any case, a site known for such practices, even by way of everyday use, might have been an excellent point for orientation. Of course they may even have been used in troubled times, such as in naval warfare. If, however, a certain site had a military use it is likely that it would have been denoted by the element *varð*, guard, or variations like *Var-*, *Vår-*, *Vål-* etc., which occur elsewhere. The main sites for such look-outs were simply those of the warning beacons on hilltops, with concomitant groups of place name types.

*Va(d)-* also could mean 'net' or in fact also a 'ford,' but the study of the exact location would no doubt unveil what the name really meant.

### “Negative” Sea Marks?

Some statements by Olaus Magnus on sea marks are vaguely expressed. A remarkable notion is that of “negative” (warning) sea marks:<sup>116</sup>

“There are also comparatively tall stones without inscriptions which have been set up by considerate ancestors along the shores, which in a leaning position are facing harbours, which thus are indicated as unsafe, whereby they so by an obvious mark educate sailors to avoid to suffer shipwreck.”

Maybe there is a misunderstanding here. The reasonable thing would rather be that any such harbour mark would point to a suitable, protected haven. Since the stones are described as leaning, one wonders if that could in any way be equated with the arm of a gallows mark, which points to the right and clean sailing route past a rock?

The Old Norse word *hafnarmark* or *hafnarmerki* was used in the following way: it denoted a mark “erected at a harbour, in particular by a person who had been lucky to find it, and then partly in gratitude for the refuge he had found there, partly to serve other seafarers as a guide, whether that mark would be a tall stone, a wooden log, a varde or something similar.”<sup>117</sup>

### Beacons and Other Markings at the Coast Which are not Genuine Sea Marks

Marks are sometimes not beacons and, in addition, not even primarily sea marks at all. Some doubts still cling to the human-like illustrations, mentioned above, by Olaus Magnus (1555; here figs 29–30). But grotesque wooden figures resembling human beings have existed at some coasts in later times. Mårten Sturtzenbecker records them as “scare-wolves” at the approaches of Åbo (Turku) in southwest Finland in 1785. Since they were found on the starboard (SE) side they were designed to stop wolves from passing on the ice from the mainland to the islands – or the reverse.<sup>118</sup>

As is well known, stone heaps as markings are common along paths and roads on land, not least on treeless mountains, where they may be visible for miles. There are many other possible varieties. A successful expedition in a hitherto unknown area may be commemorated this way. Small stone beacons were found in 1824 on the island Kingigtorsuaq near Upernivik on the west coast of Greenland. They dated from the time of the Norse in Greenland by way of a runic





Fig. 33 The salvage cairn of the S/S *Axelhus* 1883 at Geiterøy (Geideri), Vest-Agder. (Photo: Christer Westerdahl, 2004)

inscription on a small stone, where it was noted that Erling Sigvatsson, Bjarne Thordarsson and Eindride Oddson had erected these *varder* on the Saturday before “gangdagen” which is 25<sup>th</sup> April, 1<sup>st</sup> May or possibly one of the three days before Ascension Day, but unfortunately the year is not known. This probably dates from the 14<sup>th</sup> century. In Greenland as well as other places such small *varder* could have indicated sites suitable for fishing or hunting. Sometimes they were used as hiding places or even as traps (for birds).

There is a small *varde* on the island of Geiterøy (fig. 33) in the Landøy-Udøy archipelago of Vest-Agder. It was erected at the site where the steamer *Axelhus* of Copenhagen was salvaged. The shipwreck occurred in a south western gale 26<sup>th</sup> October 1883 at “Gillerholmen,” another place in the neighbourhood, but the hull came off the rock and was driven to the site of the memorial *varde*. The shipwreck did not lack drama. Two young people were drowned. One, a waitress, was found later in a crevice on Skogsøy by a man who thought from a distance that he had found a figurehead and was terribly shocked to discover the corpse. The custom of marking a sunken ship is part of a long tradition. At Sandön in Embarssund or Spetalsund in Åland there was a similar large cairn set up by Russians where they had lost their vessel in AD 1651.<sup>119</sup>

The background of many *varder* or stone markings has usually been lost. *Varder* are likely to occur, however, in any dangerous and complicated archipelagos with a high frequency of foundering. This is so along most of the southern coast of Norway (Sørlandet) where almost all of the European sea traffic for the Baltic passed during early modern times.

Shipwreck catastrophes lead to the creation of more sea marks. The site would be widely discussed. People experienced in the area realize that the absence of sea marks on a certain site may have contributed to the foundering. A sea mark is consequently put up. In later centuries the lighthouse of Songvår in Vest-Agder was built in 1888, one year after the tragic shipwreck of the whaler *Vardøhus* on the rock of Fora, east of Ryvingen, Mandal. I mention in the caption of fig. 55 the sea mark on the hitherto unknown shoals where the steamer *Bergen* struck in 1871.

## An Ancient System of Lights?

In 1933 Anton Espeland<sup>120</sup> opened a discussion about a Norwegian coastal fire *system*, before there were lighthouses, which dated back to prehistoric times. His main argument was the common place names indicating fires at the coast and in the archipelagos. Several place name

specialists<sup>121</sup> denied this possibility but at least one voice agreed.<sup>122</sup> Several others have mentioned this hypothesis, but most of them only in passing and with even more doubtful criteria.

It is not plausible – not even possible – that a coherent *system* of lights existed far back in time. What we know of the social structure of the Middle Ages excludes any thought of a suitable organisation for such a system. In no way, however, does this objection omit from consideration specific occasions when fires were lit in order to guide fishermen or sailors in distress, or in order to lead them to doom. The folklore of the coast of Europe uses to justify a migratory motive stories about ships that were wrecked in order to be plundered and their crew lost, by setting deceptive fires.

Although few of these stories have been substantiated or are even probable<sup>123</sup>, occasionally wrecks must have occurred in this way. Why not in Vest-Agder? Most of the stories of lights are not even logical, however. Lights should generally be thought of as warning rather than leading. The dangerous shallows outside the peninsula of Lista have made many sailors outdistance it. It has been maintained there that lanterns were hung on lame horses by devious people to deceive sailors in thinking that these lights belonged to a vessel gently swinging at anchor in a protected bay behind the sandbars.<sup>124</sup> The same logical but still migratory motive is found in stories told at Gotska Sandön north of Gotland<sup>125</sup> and in France, where cows are supposed to have been used (fig. 34). Several other cases imply that the sailors were supposed to see a high-placed fire and confuse it with a certain lighthouse, which made them approach the coast in the wrong direction.

Wreckage has certainly always been a classic source of income in coastal societies. Thus it was definitely not the local population which called for lighthouses, not even in the case of Lista. Then the initiative came in the 19<sup>th</sup> century from the town of Flekkefjord which had extensive contacts with continental Europe. In Scotland active resistance to the erection of lighthouses has been documented.<sup>126</sup>

Thus, even if not a part of a *system*, there are indeed scores of place names in the archipelagos which indicate fires and smokes of different kinds, e.g. *eld*, *brand*, *rök* or *bål*. To a certain extent they may have referred to warning beacon fires, perhaps at an irregular spot, since we already possess the early system of the *viti* (or *bavn*, *vårdkase*) names. Others may hint at ferry routes, or perhaps to a signal picked up by boat at a more local passage on water, which would smoke during daytime, and light at night. They may also refer to a clearing on the island or the point where the vegetation had been burnt to get better grounds for the grazing of sheep.

I have mentioned the Dutch system of *Vuurboeten* in fishing. The contrast between the coastal environments of Europe with those of Norway or Scandinavia in general is obvious.



Fig. 34 Illustration of cunning wreck-plunderers in the 18<sup>th</sup> century. (By courtesy of Musée des Phares et Balises, Ouessant [Ushant], France)

Variations in natural lighting along the coasts during summer nights also influence the sea marks. People also believe in signs from the supernatural world. Fires have been seen on distant skerries, either warning against – predating – a tragic event at the site or referring to a crushed vessel with casualties in the past. In particular I know such stories from Bohuslän, West Sweden.

## Dating Old Sea Marks

Understandably, few old sea marks have been dated with certainty. It is true that cairns and other similar constructions of unfixed stones can be dated to medieval times or later by way of lichenometry and surface erosion (Smith's test hammer) or a combination of these methods.<sup>127</sup> Another possibility is context. During the national monuments survey in 1983 Erik Enström found two cairns in the forest on the island of Drakön, Hälsingland, Sweden. Both are placed near a cleft in the rock (fig. 35). By mapping he was able to ascertain that they together would have formed a transit line to the narrow entrance of the lagoon harbour of S:t Olofs hamn. They must have been supports for some kind of wooden mark, presumably a tall pole, possibly painted white (lime-washed?), with a cross (cf. references precisely to crosses at harbours in the preceding text, and in a particular chapter further on). In this case we know that this harbour basin was closed by a storm bar in the later part of the 15<sup>th</sup> century at the latest, and then dried up into a bog. As sea marks these constructions must therefore be dated to the 15<sup>th</sup> century or possibly a little before.<sup>128</sup>

S:t Olofs hamn on Drakön could not possibly be interpreted only as a fishing harbour.<sup>129</sup> The existence of sea marks would rather fit the alternative view that it was as well a stage point for shipping along the Norrland coast.<sup>130</sup> At any rate the considerable work to erect these sea marks would not have appeared reasonable to local fishermen who knew their landscape by heart.

The promontory *Grundskatan* in northern Västerbotten provides us with lichenometric datings between 1472 and 1575, of five small cairns in a row, interpreted as foundations for sea marks. In this case it is likely that the marks mainly served the needs of fishing. A transit line for a good fishing shoal is plausible. The area has a long tradition of fishing and seal hunting. It could certainly be observed as well by sailors as a sign of progress on their route. The topography is not dramatic, and it might have been difficult to identify natural landmarks. Perhaps the



Fig. 35 The foundation cairn of a sea mark in the forest of Drakön, Hälsingland. Terminus ante quem c. AD 1450. (Photo: Christer Wester-dahl, 1987)

precise number of cairns has a meaning to distinguish this place from other similar points in small scale, this number, as we have pointed out above, being a useful measure for the light-houses or the beacons (*varder*) of Ny-Hellesund.

Another way to date sailing marks hypothetically is to analyze their relationship to what would seem to be a medieval route, for example, due to passages in it now grounded or even dried up. An effort to date such cairns in a part of the Småland coast can be seen on fig. 44.



## The Permanent Marks of Nature

The ancient primary sea marks high up above the shore lines (Norw. *overlandsmerker*) are almost always natural. These are characteristic visual formations distinguishable from others as to size, colour, appearance, form or possibly something else. No human construction is necessary. It should not, however, be denied completely that certain highly placed and extremely prominent burial cairns may have had a primary function as sea marks. Neither should it be denied that fire beacons could have had a double role. But generally speaking these natural marks could give as exact an information as any constructed sea mark, especially in connection with transit lines.

Natural marks and contours of the coast may be observed in carefully drawn illustrations (*förtoningar, landtoninger*) in pilot books such as those of Lövenörn (1800). These drawings can still be found in all modern editions of pilot books (*Den Norske Los, Svensk Lots*). The phenomena which these drawings illustrate are recognizable from a long distance out at sea. As a mental map they were imprinted in the memory of the sea people. They *felt* them, as did the sailor Terje Vigen in the poem by Ibsen (see introduction).

The earliest and most visually efficient natural marks are mountains and hills, observed against the sky. The well-known massif of *Hvidserk* (Mt. Forel, 3360 m) in East Greenland could be “felt” from high up on West Iceland (Vestfirðir, Western Fiords) in clear weather. The reflected light of the Icelandic inland glacier Vatnajökull (however usually soiled) was mirrored underneath the cloudy banks usually assembling above. Most of these natural marks are more localized on a certain stretch of coast. Examples of such points are *Kua*, The Cow, and *Kalven*, The Calf, at the harbour of Kleven at Mandal, south Norway. They were well-known in continental Europe, officially (in print) from at least the early 16<sup>th</sup> century (fig. 37). *Kua* and *Kalven* are peculiar in the way that they cannot be seen both



Fig. 36 *Hådyret*, a natural sea mark, a whitish patch on the rocky coast between Jæren and Åna-Sira, S. Rogaland, S. Norway. (Photo: Endre Elvestad, Stavanger sjøfartsmuseum)



Fig. 37 *Calf* and *Koe*, at Kleven, Mandal, Vest-Agder, marked on the map by Waghenauer 1584–85.



together when you are closing in on the coast, but only further out. They are, both or individually, orientation marks at sea as well as aids at the approach to an important harbour.

Out at sea on the coast of Kristiansand, with its important harbour of Flekkerøy and further inside the bay, with the town harbours, are seen the familiar mountains *den omvendte Baad*, 'the boat turned upside down,' and *Buksteen*.<sup>131</sup> Lövenörn also points out the island of Skarvøy east of Farsund as an important natural mark: one rock like a sugar-loaf which can be seen all the way.<sup>132</sup> Lövenörn says the same of Underøy further east.<sup>133</sup>

Among the characteristic mountains mentioned by Roald Morcken<sup>134</sup> in the west of Norway, Vestlandet, are *Siggen* or *Siggjo* on Bømlo island<sup>135</sup> and *Lyderhorn* at Bergen. Other important sites with significant names are *Stemshesten* on the dangerous and exposed coast of Hustadvika in Nordmøre, and *Hornelen* at Nordfjord, which is pointed out as *mons altissimus Hornilla Buk* by Olaus Magnus on his *Carta marina* in 1539.<sup>136</sup> There are other mountains with "horse" and "horn" names. Further north, in Nordland, we find *Torghatten*, an island rock with a large hole right through it. In Sweden there are *Brattön* in Bohuslän and *Kullen* in Skåne, in the west and south respectively. Besides functioning as sea marks, most of these had ritual importance. Traditionally, *Lyderhorn*, *Siggjo* and *Brattön*<sup>137</sup> were principal meeting places of airborne witches. One of the most important sites of sailors' baptism was found at *Kullen*.

According to the folklore of the North, which has been well recorded, the horse (*Hest*-) names, such as *Stemshesten*, were taboo at sea, like all other equine phenomena. This is also the case with a name like *Buksteen*, where *buk* means 'buck' or 'he-goat,' like the horse a land animal which is taboo at sea. Probably this custom of giving mountains and rocks "dangerous" names explains why the famous rocks on the route to Bergen were called *Buk van Ra* and *Buk van Zee*.<sup>138</sup>

We can say in general that magic properties were ascribed to important natural sea marks. The horse is a special case in the maritime world, however: "For some reason, horses have been prominent in the minds of seamen for a long time. All along the coasts of the British Isles, Ireland and North America we find White Horse, Horse, Black Horse and Colt Island as well as many bluffs or headlands incorporating the word. Moreover, a number of items aboard ship bore names that included 'horse' or had something to do with horses ..."<sup>139</sup>

Contrast counts heavily in visibility. Light patches in an otherwise dark rock may be very useful. At Kristiansand the important haven of *Flekkerøy* with *Flekkesund* may have had its names from *flekk*, 'patch,' here in the plural. Locally one of the white patches is called *Gåsa*, after a white 'goose,' and another is called *Bageren*, 'the baker,' which clearly suggests the whitish colour of flour. Morcken also mentions the well-known *Hädyret*<sup>140</sup>, a patch west of Sogndalsstrand between Åna-Sira (Lista) and Jæren (Stavanger: fig. 36). The place name apparently means 'the high stag,'<sup>141</sup> another impressive land animal. At this coast the rocky coastal front runs in an almost straight line and falls steeply into deep waters without bays or the protection of an archipelago. Another important spot for orientation is *Vårdalskua* in Sunnfjord much further north.<sup>142</sup> An artificial mark is *Risør flecken* or *Bleket i berget* close to the out-harbour *Risør* in Aust-Agder. According to tradition it was first painted white by Dutch sailors. It is said to be visible from the sea from a considerable distance, 12 nautical miles, in other contexts somewhat less.<sup>143</sup> According to some sources the Danish-Norwegian king Christian IV (1577–1648) ordered the owner of the farmstead *Randvik* to maintain the painting.<sup>144</sup> This could once have been a natural sea mark. But in fact it seems that no one knows for sure whether there is anything visible underneath the painting, such as a whitish quartzite intrusion. In other cases a white patch could certainly be painted where it was felt that it was needed. One instance is *Daumanen*, 'the dead man,' on *Steinsøya* close to *Tvedestrand*, and another is found in *Aust-Agder*.<sup>145</sup>

On shallow coasts large boulders visible from the sea at the shore could be helpful in navigation. In AD 1256 a small erratic boulder from *Morup* at the *Halland* coast in west Sweden is

mentioned. In the saga of king Håkon Håkons-son it is called *Glaumsteinn*.<sup>146</sup> Even today it bears the same name, *Glomsten*, as a land mark and also as an ancient monument. From the land it appears in fact absurdly insignificant (fig. 38). Interestingly, it is situated in the neighbourhood of a medieval township called *Geitkjorr*, also mentioned in the saga. Today it is a village named *Getakärr*. This townlet is supposed to have been one of the precursors of the present-day town of Varberg, founded in 1612. Moreover, the coast of the parish Morup includes in itself an important harbour function with several significant maritime indications of presumably medieval date. Perhaps this is the ultimate background to the significance of *Glomsten*. Up to 1645, when Halland was conquered by Sweden, the (still) Danish island of Anholt belonged to Morup.



Fig. 38 *Glomsten*, Halland, Sweden. This insignificant boulder has apparently been an important sea mark at least since the 13<sup>th</sup> century (see text). (Photo: Christer Westerdahl, 1999)

## Churches and Other Tall Buildings as Sea Marks

Coastal churches and chapels, and in particular church towers have been important as sea marks since the medieval period. Even without a tower a white stone church could be visible far out. In fact there is certainly an underlying intention of the authorities in this, not only for the benefit of shipping. A primary function of monuments would be *an eminent visibility*, as has been pointed out in studies of "monumentology."<sup>147</sup> Churches are supposed to recall to everybody the eternal presence of God, and preferably also that of the crown. In all probability this worked fairly well since vegetation in the ancient cultural landscape was much more sparse than it is today. To take one more example from the Agder coast, the Romanesque stone churches at *Fjære* near Grimstad and *Tromøy* at Arendal (fig. 40) are often mentioned as pointing the way both spiritually and physically. Not only directions were given, but also a number of specifics. Some of the most sophisticated oral expressions are evidently lost. However, on *Tromøy* church has been preserved the simple rhyme:

Når Tromø Kirke staar på Vandet  
Saa er Mand Tre Miil fra Landet.

When Tromø Church is on the water (line)  
You are three mil (1 mil = 11 kms, not miles) from  
the land.

This church is mentioned as an important sea mark in an early Dutch pilot book, *De Kaert van de Zee*, from AD 1532.<sup>148</sup> It was important to distinguish between these churches, even though *Fjære* church is situated much higher up on the land – and perhaps just because of that. It was therefore suggested in later times by naval authorities that the walls of the church of *Fjære* should be painted red. Understandably this was not a popular idea in the parish. Instead, it has been stated, large trees were planted on the side facing the sea.

The church expert Ragnhild Boström points out the importance of church towers as sea marks, such as those on the large island of Öland in east Sweden.<sup>149</sup> Well into the 18<sup>th</sup> century – and even later – they are marked on all sea charts and land contours. This is only natural on a mainly shallow and even coastline, as it appeared from the sea. Functional counterparts would be the lighthouses *Långe Jan*, Long John, in the very south and *Långe Erik*, Long Erik, to the



Fig. 39 Oleviste (St. Olav) of Tallinn (Reval). (Photo: Christer Westerdahl, 1987)

north, at the busy harbour of *Öre hamn*. Each one of these indicates one of the two entrances to the seminal Kalmarsund thoroughfare. Their companions in an even row along the sound itself were the classical small windmills, *stubbamöllor*, eminently visible on the top of the landborg, the chalk ridge or escarpment towards the mainland (fig. 41). They were stage markings on the route. At the same time they were all part of a ritual landscape. All land names were taboo, and for the mills only their *noa* names could be used. Their *noa* names were *tjuvkors*, 'thieves' crosses,' equivalent to the *noa* names for windmills among Danish fishermen. The Dutch, however, used the word *trindel* (a "going around") for these windmills.<sup>150</sup> Windmills were generally important as sea marks in the North. It sometimes happened that the authorities rebuilt as dummies mills that had been burnt down. It is known that the mill *Homborsunds Mølle* in Aust-Agder was blown down in a gale in AD 1830 and was replaced by a similar-looking sea mark approximately 15 years later, which kept its old name.<sup>151</sup>

*Långe Jan*, the name of the lighthouse at the southern tip of Öland, is another *noa* name. Originally it belonged to a medieval chapel, dedicated to John the Baptist, and now obliterated. *Öre hamn* in the north had another medieval chapel, somewhat oddly named *sancti olavii in Böda*. One would have expected it to be named after the Swedish national saint St Erik at *Långe Erik*. Very possibly in this shallow, open terrain even small chapels worked well as sea marks.

In the same way the tall church tower of Öja on the southern tip of Gotland got its maritime *noa* name, mostly even used on land, *Gra gåsi*, Gotl. dial. 'the gray goose.' Gray is in fact a liminal colour at sea, between black (land) and white (sea).



Fig. 40 The medieval stone church of Tromøy, Aust-Agder. (Photo: Christer Westerdahl, 2004)

Elsewhere in the Baltic there are numerous examples of urban and other church towers used variously in approaching port cities. The tower of *St Peter* in Rostock, 126 m high, was a beacon visible from far out at sea. In Reval the tower was *Oleviste* (S:t Olav; fig. 39) and in Helsingør the tower was another *St. Olai*. For the sailors this would have been a welcome sight as they approached from the open sea, or if they had just doubled the cape of Kullen. In fact these towers were often the principal churches of the towns and they may have been built high purposely, even explicitly, to serve as sea marks. – At *Tunø* island inside Samsø on the routes to Århus in Jutland the church worked as a sea mark during daytime. When it had to be repaired at the end of the 18<sup>th</sup> century plans were advanced simply to tear it down because of the cost. Shipping interests in Århus and Copenhagen immediately protested loudly, however. This tower was too important to them. Instead the tower was equipped with a light in February, 1801. Since then it has also acquired another storey.

As Johan Anton Wikander reminds us<sup>152</sup>, the chapel on *Seløy* or *Sellor* inside Cape Lindesnes (the Naze) was already explicitly mentioned in 1585 by the Dutch pilot and sea cartographer Waghenaer: *soo seylt opt kercken aen, dat opt die noordsyde staet*. Also according to Willem Blaeu in 1612 it was the right place to drop the anchor. It was formerly doubted that the insignificant ruin with its churchyard-like oval stone wall was the remains of an actual church building. Another doubtful tradition was the chapel of *Hesnes* harbour in Aust-Agder, of which there are no traces today. However Dutch 17<sup>th</sup> century sources explicitly point to “a white church at the shore.”<sup>153</sup> There are many such small chapels in the North, important as sea marks despite their small size. Even the small fishermen’s chapels in seasonal harbours have been important to shipping, as is shown in numerous official pilot books, where they are illustrated, along with other sea marks, natural or made by human beings. They can be illustrated by the important marks of the fishermen’s chapels at the islands *Malören*, *Rödkallen* and *Brändö* in Norrbotten, at the extreme north of the Swedish side of the Bothnian Sea.<sup>154</sup> They are all unique, never standardized and have to be distinguished from one another, but they are quite small. Because of the flat terrain they are easy to find (fig. 42).

For the approaches to the river town harbour of Lidköping in Lake Vänern, the medieval tower of Kållands Råda was used by shipping together with other transit lines. The town has been known as such since AD 1446.

Other high buildings were important marks, often as parts of transit lines. Olaus Magnus mentions in particular the castle of Borgholm on Öland in 1555 and explicitly illustrates the significance of both castle and churches in the Kalmarsund area.<sup>155</sup> The ruins of the castle are impressive from a distance even today. Another eminent example is the later castle Carlsten, at Marstrand in Bohuslän.<sup>156</sup> At an extremely shallow coastline even buildings far inland could be valuable as sighting points. A well-known example would be the castle of Tosterup in Skåne, situated c. 6 kms from the route at the dangerous reefs of Sandhammaren. A tower was



Fig. 41 A typical windmill of the type *stubbamölla* (Öland). (Photo: Christer Westerdahl)



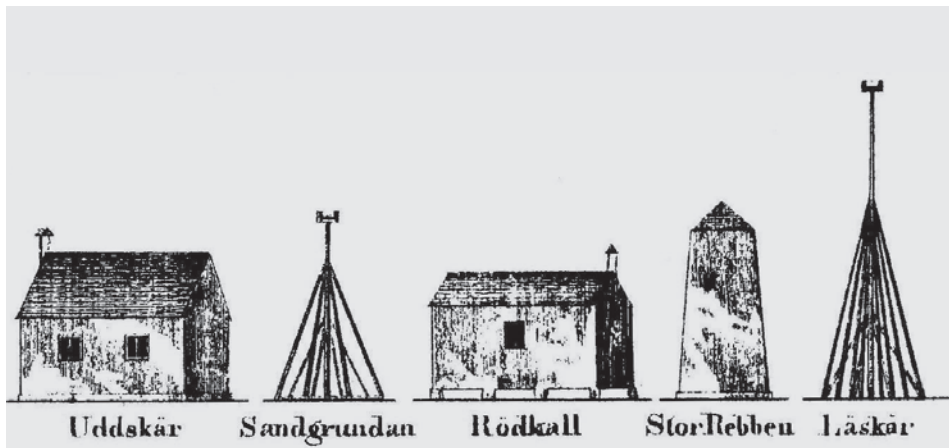


Fig. 42 The chapels of Uddskär and Rödskallen with a tower (*båk*) and two other sea marks in Norrbotten, Sweden. (From *Underrättelser ...* 1852)

temporarily used as an early lighthouse in the later half of the 16<sup>th</sup> century. The famous astronomer Tycho Brahe (1546–1601) was brought up here. Later, living on the island of Hven in the Sound he was to be charged by the Danish king Frederik II to maintain the light at Kullen and to send for its coal from England.<sup>157</sup>

This section has illustrated a general statement: the more buildings stand out in bold relief against the sky or another light background the better they work as reference points in general, both at sea and on land. Other contrasts also work. The tradition of painting houses white at the coast in South Norway has served for several hundred years a need which may be partly subconscious. In difficult sighting conditions they are extremely useful amidst the darkened rocks. This contrast is always a two-edged sword, however. In troubled times it would have been an undisputed advantage for homes, like sea marks and other beacons, not to be fully visible.

## Trees as Sea Marks

Among natural marks there are some which are as temporary as many a human-built construction. The most common are individual trees. They differ then from other trees in a certain forested area or are standing alone in an exposed place. The Norse manual of navigation *Rim* from the 13<sup>th</sup> century mentions a tree as a sea mark.<sup>158</sup> In AD 1565 an English decree prohibits the cutting down of trees which function as sea marks.<sup>159</sup> The fine is 100 pounds, an enormous sum.

In the Baltic there was the famous ash of Sladö, *Sladö ask*, close to the approach of the harbour town of Västervik in Tjust, Småland. Today only the island where it once stood bears this name. This ash is mentioned as a sea mark in the 17<sup>th</sup> century, recognized all along the Western Baltic Sea, when it was already quite old.<sup>160</sup> In the south many oaks are mentioned even in the pilot books as serving the same purpose: in Blekinge there was *Kron-Eken*, 'the crown oak,' and *Flack Eken*, 'the shallow oak,' and so on (fig. 43).

In the North, where deciduous trees are found less frequently at the shores, the visual effect is provided mostly by tall pines (Swed. *tall* or *fura*) often with a top or a crown that stands out clearly from the rest. The names are illustrative. In Lake Vänern we find at least five *Hattefuran*, 'the pine with a top like a hat,' along routes and close to the harbours. During my exten-

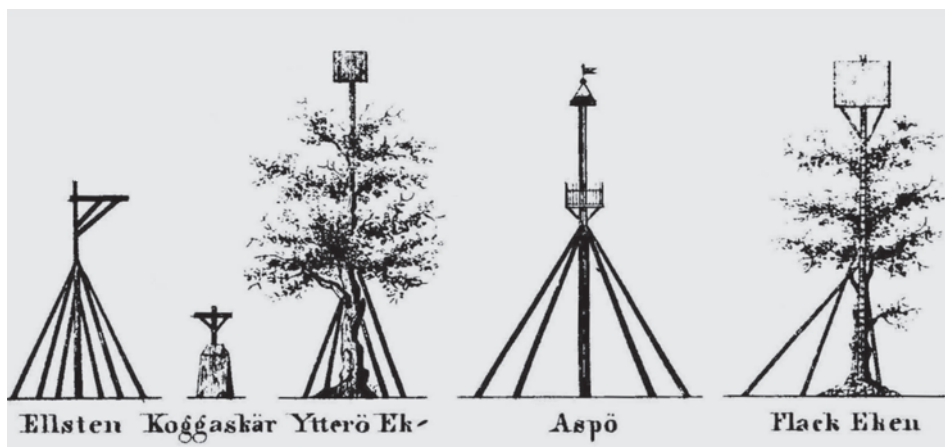


Fig. 43 Two sea mark trees, *märketråd*, in South Sweden. Boards set up above them make them more distinctive. (From *Underrättelser ... 1842*)

sive survey in Norrland I found *Toppatall* from the island of Storjungfrun and *Topptallarna* (1788–89) at Nyhamn, Ljusne, Hälsingland. In Medelpad was a crooked spruce fir, accordingly called *Snegran*, on Bremön. Others were called ‘mark trees,’ *Märketråd* or ‘mark pines,’ *Märketall*, in many places. These natural sea marks were to be found at almost any harbour or loading place. Most of them have disappeared and may be forgotten today. Sometimes their names still are preserved at the site, although with a different denotation, such as *Sladö ask*. Some have been replaced by other means of marking, but others not at all.

## The Older Terms for Sea Marks in the North

Ivar Modéer<sup>161</sup>, a prominent pioneer in research on maritime place names, gives a list of the earliest still existing terms for sea marks in the Nordic languages. In Swedish, with similar forms and variations they are: *grim(a)*, *skalle*, *kors* (*kross*), *stång* (*stang*), *kummel*, *varde*, *märke*, *kalm* and *bak*, *båk*. One should not assume that localities named with such terms are particularly old. Their specific meanings – although not only in connection with sea marks – are still very much alive. In a very few cases ancient sea mark cairns have been documented along a restricted coastal area (fig. 44, Småland, Sweden). Almost any of these names may have been used for these cairns.

### *Grim/a*, *skalle*

It was Modéer who for the first time interpreted place names with the elements *Grim-* (*-grim/men*) and *Skall-* (*-skall/e*) as sea mark names. Their somewhat curious primary meaning is ‘mask’ and ‘skull,’ and they would indicate poles where masks, sculpted heads or (horse) crania had been set up. There is a singular mention in Norse medieval literature, the Saga of Egil Skallagrimsson of a libel ‘*niðstang*’ pole with a horse skull on it, set up on a skerry at sea, ostensibly to challenge the *landvættir*, the land gnomes. By the same means the fierce Viking Egil was supposed to challenge his enemy, the Norwegian king, Erik Bloodaxe. Fundamentally, this is *strong magic*<sup>162</sup>, rather than an example of a primitive sea mark. But this case does not exclude other intentions. Besides, we cannot compare what we cannot describe in detail. As



Fig. 44 Ancient sea marks (black dots) along the coast of Tjust, Småland, East Sweden. Some of them may indicate medieval routes. Some interesting place names from the text can be seen; islands or skerries like *Sladö ask*, *Garpen*, several *Kors-* (cross) names. Redrawn after Peter Norman. (Drawing: Christer Wester Dahl)

always, such names could denote the similarity of certain natural features, for example, rocks or trees to heads, skulls or masks. The only other problem seems to be the possibility that *Grim* and *Skalle* are personal names. Both occur often in Nordic tradition. They can even be combined, as in the name of Egil's father *Skallagrim*! The probability that these names actually do point to ancient sea marks increases perceptibly if 1) the named sites are situated in seemingly relevant positions along the ancient sailing routes, in particular at the approaches to harbours, and if 2) later sea marks are known to have been erected there.

Along the Småland coast in East Sweden all four important harbours and market sites outside of Kalmar town were provided with a *Grim(me)*-locality. Interestingly, as has been mentioned, all these harbours have from time to time belonged to the explicitly illegal exchange places.<sup>163</sup> This may indicate that the *Grim(me)*-name sites at least in a significant number of cases – even outside Småland – denote the *indigenous, i.e. local, but not officially endorsed sea marks* that I

discussed earlier. This idea corresponds well to their linguistic character and their assumed meaning(s). Could this even be a late version of the magic displayed by Egil Skallagrimsson, a challenge to the crown? Unlawful or illicit harbours where no returns could be expected by the authorities were no small matter in former times. These harbour markets were fought against energetically by the latter, which shows that the urge to use them by common people was strong. In most of the recorded cases, however, in the end the crown had to give way, simply by making them as lawful as the official markets and even as the towns.

Some other examples in Sweden where localities have been surveyed are *Grimskär* close to Kalmar, where a lighthouse was set up fairly early, and skerries and spits called *Grimskallen* and *Grimsten* in other parts of the coasts of Småland. In Lake Vänern we find *Grimöarna* (plur.) in Dalsland, where the western skerry has a lighthouse today. In the west we find the island *Stora Torgrimmen*. All these have had a sea mark of some kind, and some have one still.<sup>164</sup>

Despite the seemingly strange meaning, Kurt Zilliacus finds no objection to it on a linguistic or philological basis, and finds no alternative interpretation for his Finnish occurrences of *Grim*-names. What is "strange" here is presumably our own perception of a sea mark. Identical or similar meanings are documented for boundary marks inland. Even *Mask*-names could be relevant, although that word appears to be a late loanword.<sup>165</sup> However, in dynamic maritime contexts loanwords may perhaps be earlier than elsewhere. For *Grimöarna* in Vänern mentioned above Per Hultqvist proposes an alternative interpretation, by way of the supernatural being called *grim*, otherwise *näck*, an evil water-sprite, 'the Neck,' or in Old Norse *sjóvar grimr*, 'the sea grim.'<sup>166</sup> However, even Modéer dealt with the *grimor* in folklore.<sup>167</sup> The process whereby a being, supernatural or not, is identified with an actual construction or vice versa is quite familiar – and appears as a natural step – in popular tradition.

In my survey area of Norrland I found only a single occurrence of the name type. It is the island *Grimskär*, with a smaller group of skerries called *Grimshararna*, clearly derived from the name of the larger locality, close to the approaches of the town of Söderhamn, Hälsingland. Interestingly, it is in this very harbour area that we also found *Garpholmen*, mentioned above, possibly indicating the interest of German or Hanseatic people. According to vague oral tradition some kind of cairn has existed in both localities mentioned. This name type is also represented in Norway. The islet *Grimeskjær* at the border between Sogn and Hordaland has a *varde*. I am not personally familiar with this area.<sup>168</sup>

The name type *Skall-* (*-skall/en*) is found in many coastal areas, usually denoting small localities. A former island at an important promontory to be doubled by seafarers at Lövånger, Västerbotten, in my area, is called *Skallören*. It is situated north of the harbour area of Bju-röklubb, described by Olaus Magnus in 1555 from his journey in 1519.<sup>169</sup> Another *Skallören* in Norrland is that of Grundsunda, Ångermanland with a Late Iron Age graveyard, situated just outside the medieval harbour of *Kyrkesviken*. But the most famous *skall*- name in Sweden is *Påskallavik*, an important harbour site in Småland.<sup>170</sup>

The word *bak/en* for a sea mark, Anglosaxon and English *beacon*, German and Dutch *baken*, also appears to be the basis for the Danish *bavn*, a 'fire beacon.' Before this word became a standard for the fire beacon system of medieval Denmark the term would have been *warth*, 'watch-out site'<sup>171</sup> (cf. below on fire beacons and their relationship to sea marks). A few place names in Sweden with the elements *bak/en* have been interpreted by Modéer as sea mark names.<sup>172</sup>

Moreover there are a large number of coastal place names in Sweden with the elements *Båk*, *-båk/en*. All denote sea marks, beacons made of stone, often painted entirely or partly white or black. The elements *båk*, *fyrbåk* (indicating a light) are still very much alive and well understood. Some appear to be quite old, but no certain criteria to date them exist.<sup>173</sup> In my northern survey I was able to document about twenty occurrences.



## Names Denoting a Stone-Built Structure or a Tall Cairn

An old bone of contention among archaeologists is the possible primary function of sea marks for coastal burial cairns from the Bronze and Iron Ages (figs 45–47). In my view they represent something entirely different. Their background is the rituals of death. In this context they were located in a liminal zone, between land and sea. During the Stone Age and, contemporary with the cairns, the Bronze Age, the ritual significance of the shore-lines was marked by the majority of rock carvings. Even in later times we see the significance of the shore in Nordic rituals in the stone mazes, clearly an instrument of fishing magic. The fundamental opposition between sea and land is richly illustrated by Nordic folklore and its taboos at sea.<sup>174</sup>



Fig. 45 Burial cairn of the Iron Age on the coast. Mølen, Vestfold, South Norway. (Photo: Christer Westerdahl, 2007)



Figs 46–47 Burial cairns from the Bronze Age, Halland, Sweden. (Photos: Christer Westerdahl, 1994)

Two recent master theses of my institute illustrate the two main ideas. A quantitative and GPS-based analysis of the sighting vistas, the viewsheds, of coastal cairns of the large island Hitra does indicate the possibility of a primary function as sea marks or at least a direct relation to sea passages.<sup>175</sup> On the other hand a qualitative analysis of the cairns at the coast of Hustadvika just a little further south could at the same time express cognitive factors such as liminality.<sup>176</sup>

Furthermore the coastal cairns could secondarily work as local marks of identification (fig. 48). This is true of most burial monuments. Another consideration is that some foundation cairns for sea marks have been – possibly often – misunderstood as burial cairns. It might be that some large stone heaps actually once were sea marks of the high cairn/beacon type but later fell down or were intentionally demolished. Such a stone heap could be the foundation of a wooden pole or cross mark. What would be easy to confuse with a burial cairn is the “crater” in the centre where the pole had been. Such “craters” are often found in genuine burial cairns and may be either remains of plunder, or possibly the only trace of a collapsed wooden cist or coffin. Even though the shore appears to have been liminal all along the precise location of a cairn is likely to have been influenced by a wish to expose ancestral points and lines both land- and seaward.

In West Sweden the secondary use as sea marks of genuine burial cairns, large and highly visible, is well attested. Several bear names of their own, well-known among sailors, such as (*Sankt*) *Olofs vålar*.<sup>177</sup> Claes Krantz finds 70–80 sites in Bohuslän in this category during last century and a further 40 which



Fig. 48 Ulvesund (called *Wolfsondt* on the map) on the border between Vest-Agder and Aust-Agder. A little below the middle, some skerries are marked with dots and a short pointer to the sea. These are described as sea marks. The cairn to the left is in fact a prehistoric burial cairn. (Waghenaer 1584–85)

probably have been used as such before. He himself believes strongly in a primary function as sea marks.<sup>178</sup> Such a survey could be done almost anywhere. The coastal burial cairns are a major monument category in almost all Scandinavia, excepting Denmark, but including Finland. Coastal cairns are, however, unlikely as sea marks in areas with a strong land-uplift, where the sites have long since left the shore area and may not be visible anymore to anyone at sea.

In Norway, most of the cairn-like constructions are called *varde*, *vare*. The basic meaning is 'watch out, guard.' Many sites are suitable generally as look-out posts. It is not self-evident, therefore, that all place names with this element actually ever pointed to a construction, although this may also have disappeared before the present day. Some examples of composition of place names are *Vardåsen*, *Varholmen*, *Storevaren*, *Vareskjær*, *Piggvarden*. A locality called *Trevaren* may point to a *varde* made of wood. There is also a confusion with *viti*, *ve(t)te* or *vede*, a fire beacon within the early warning system. In Sweden, starting with the same word, place

names contain *vard*, *vård*, *vår*, *vål*, *val* etc. We have already mentioned the identical Danish version *warth*, changed in place names to *vord*, *vor*, *vaal* etc.

It is striking, in any case, that so few individualized prehistoric cairns are marked with these name elements, although they may be highly visible. Could this absence of names indicate that local people knew how to distinguish – better than archaeologists – between primary and secondary sea mark cairns?

There may not have been so many *varder* of maritime significance from the start. In Vest-Agder in 1800 Löwenörn mentions the famous *Hellevarane* (two) at Ny-Hellesund, and four *varder* on the promontory of Lista, of which one in fact is called *Kiörnæsøvætt*, illustrating the above variation in terminology. The only other man-made constructions for guiding other sailors in the area that he points out are a highly visible house on Skarvøy, the light of Markøy and the lighthouse of Lindenes, those later two a part of the same complex. Perhaps there were more of them, but Löwenörn may have pointed out only those for which he felt some kind of official responsibility. On the other hand at this time many may have been pulled down entirely during recent wars.

Some kind of cairn or stone built beacon is indicated by a number of other important name elements in Sweden. The following have been well studied: *Kummel-* (*Kumlän*), *Kalm-* or *Kälm-*<sup>180</sup>, the latter mainly in Småland, *Torn-* (tower), *Rör-*<sup>181</sup>, in West Sweden (mostly), and also *Rös-*, *Russ-*, *Ross-*. Some of them denote burial cairns on the spot. Sometimes no cairn can be found, but the tradition of a sea mark lingers.

It should be pointed out that a few of these name categories may only denote stony terrain in general, likened to cairns that had fallen down.<sup>182</sup> *Torn-* is likely sometimes to denote ‘thorn’ (bushes), and *Ross-*, Old Norse *hross*, ‘horse’.<sup>183</sup>

In my survey area perhaps a dozen *Kummel-* names, including *Kumlän*, were registered. *Kalmarn*, an island close to Norrbyskär in Nordmaling, Ångermanland, is probably a migratory name derived from the important medieval town of Kalmar in Småland.

Nils-Gustaf Stahre has recorded a number of varying meanings of the *Kummel-* names in his standard research work:<sup>184</sup> grave (cairn), sea mark, border mark.

Like several other sea mark names they could also be transferred to the sphere of the early warning systems, as fire beacons. The basic meaning would simply be ‘sign, mark, marking,’ Swed. *märke*, almost identical in Old Norse and on rune stones, as *mærki*. This name element is also found in place names denoting sea marks. Both these words have a long ancestry in Germanic languages.

Finally, any kind of stone heap or cairn-indicating name element could point to a foundation or bottom for a sea mark, a raised pole, a wooden cross, a stand for a wicket, board or other kind of sign, in fact even for a wooden beacon in the form of a pyramid for the defence system.<sup>185</sup> There are other alternatives as well.

### Cross (*Kors-*) Names

Sites with ‘cross’ names must be analysed individually, like all other possible sea mark sites. These suggest the medieval Catholic legacy of the North. It is important, however, to note that they, if actually pointing to monumental crosses of wood or – less likely – stone, might not only denote sea marks proper but also the market peace proclaimed by the king or possibly some other feudal power.<sup>187</sup>

Cross names are extremely common in all of the North. In Sweden alone may be found at least 800, including inland sites.<sup>188</sup> A large number are also found along the coasts. Taken as a whole they are among the most common maritime place names. In Norrland I have registered at least 45, and from Stockholm southwards down to Blekinge at least 85. A detailed map records



34 *Kors*- names in the Stockholm outer archipelago alone.<sup>189</sup> No systematic registration has been made in the west, but only for Göteborgs and Bohuslän Fritiof Birkeli has recorded a list of 125 *Kors*- names. In Norway c. 150 localities have been listed by Stylegar & Grimm from Østfold to Finnmark, without any pretension of being systematic.<sup>190</sup> Birkeli has in total 260 names in Norway, but this is not mainly a maritime survey.<sup>191</sup>

One must surmise the purpose of each sea mark by what one knows of the history of the area.<sup>192</sup> A partly religious background would probably define such a cross as a (possibly) consecrated cross guiding and protecting travellers and sailors. Partly parallel phenomena are found today in Catholic countries, crosses and crucifixes, often under a small roof, with additional pictures or sculptures of Mary and some well loved saint (fig. 51).

It is inconceivable that crosses would have been set up at all of these hundreds of places. At any rate there could not be any traces of the crosses themselves since they would all have been wooden. Morcken gives only two known exceptions, ancient maritime stone crosses.<sup>193</sup>



Fig. 49 Simpevarp, Öland, Sweden. The medieval harbour is marked by a Gothic cross. In the background the ruin of the Chapel of S:ta Brita (Birgitta), which was once an efficient sea mark, and the lighthouse of the Heidenstam type, constructed in the late 19<sup>th</sup> century. (Photo: Christer Westerdahl, 1973)

Fig. 50 This cross stands in a graveyard devoted to British sailors of 1809 on Hanø island, Skåne. The island was at that time unofficially (Sweden being neutral) a British naval base in the Baltic. (Photo: Christer Westerdahl, 2000)







Fig. 51 Road cross in Tras-os-Montes, Portugal.  
(Photo: Christer Westerdahl, 1985)

Nor would it have been likely that only sea marks are denoted at the coasts. There must be other hidden, perhaps metaphoric, functions of several if not many *Kors*-named sites.

Many other interpretations of individual sites can be put forward, with good reason. There is always a possibility of transfer from another site, giving a migratory name. Crosses could have worked as border marks, even in the form of carvings.<sup>194</sup> Modéer and Zilliacus think that they may mark burials of a drowned corpse or even an isolated burial ground. Several other name types suggest discoveries of drowned people, such as *Dödmanskär*<sup>195</sup>, *Likskär* and *Manskär*. A cross clearly visible from the sea could in addition be used as a simple sea mark, a mark of identification (figs 49–50). Another alternative is a *crossway*, or rather *crossroute*, a site with an obvious need for a sea mark.<sup>196</sup> It could point to a natural formation looking like a cross.<sup>197</sup> Another possibility refers to those who ‘took the cross,’ that is, pilgrims. In some inland areas of Scandinavia, in particular along the routes to Nidaros (Trondheim) *Kors*- names are quite common.<sup>198</sup> Inland, and mainly in central urban market sites, crosses of wood or stone were set up as

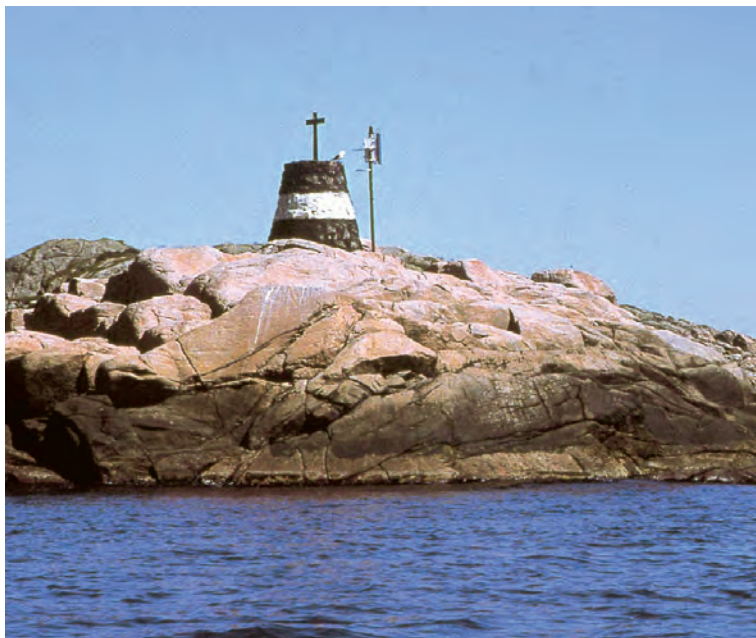


Fig. 52 Cross-marked stone beacon, Vest-Agder.  
(Photo: Christer Westerdahl, 2004)

*market crosses* or *Marktkreuze* in England or Germany. The idea of a market cross need not be entirely irrelevant to harbour crosses in the North, since many of these harbours were (official) market sites as well. But there are certainly no clear-cut cases so far. Hans Horstmann<sup>199</sup> points out that crosses in medieval times not only signified the church and Christianity in general, but also more specifically the power supporting it, Carolingian imperial power. A striking example would be the crosses at the mastheads of ships and on coins and town seals, evidently supporting trade and shipping.

This group cannot be substantiated with examples in very early sea routes. This is common among coastal names. But the composite name *Korshamn*, *Korshavn* or *Krosshamn*, 'harbour of the cross,' is an exception. We have already mentioned that *hafnarkross*, 'harbour cross,' is a common designation for a sea mark known from ancient Norse literature.<sup>200</sup> Crosses still exist inserted in *varder* or beacons of stone in Norway and also fairly recently in Sweden as well. In Sweden also they are set on a beacon or a wooden stand in the form of a pyramid<sup>201</sup> (fig. 52).

The earliest mention in the North of a *Korsham* comes from Sweden, already in AD 1334. Apart from a harbour this name must have denoted a farm in the vicinity of Uppsala. It is mentioned not only in this year in a diploma but also on burial slabs from the same year.<sup>202</sup> In the archipelago of Stockholm there is found a Low German form *Kryts-* (*Kreuz-*) in *Krysshamn*. There is another *Korshamn* just north, that is, another name with the same meaning but this time in Swedish. The name *Krytshamn* is recorded only at the end of the 17<sup>th</sup> century. In the southern part of the Stockholm archipelago there are two other *Korshamn*. In Lake Mälaren, once a bay of the Baltic, is the Viking Age urban settlement at Björkö, called *Birca* in early medieval times. *Korshamn* is the name of a small inlet to the north, another in the vicinity is called *Kugghamn*, evidently referring to cogs (the ship type). As Detlev Ellmers points out, there seems to have been little reason to visit Birca by cog ships after the desertion of the township c. 1000 AD.<sup>203</sup> Would these names possibly be close to contemporary with the settlement? Unfortunately we do not know any early records of these names. They even seem to have had other, but possibly only alternative, names.

In Mönsterås, Småland, there is a *Korshamn* on the inside of the island of Björnö, where is found a ruin presumably belonging to a monastery (probably situated elsewhere).<sup>204</sup> At Figeholm, a bit north in the same province, is found another, close to *roxhammer*, "Rookhammars udd" in the 17<sup>th</sup> century, of the Danish itinerary c. 1300.

Interestingly, it seems that the four southernmost provinces of Norrland have been provided with one *Korshamn* each. However, two of them, those in the north, I have recorded only in oral tradition, at Solumshamn, Härnösand, Ångermanland, and at Galtström, Medelpad. The two others, at Stålnäset, Söderhamn, Hälsingland, were recorded in 1747 and at Kusön in Gästrikland in 1699/1785.

In Lake Vänern are three harbours named *Korshamn*, recorded first in 1618/1666 (Dalsland), 1668 and 1773 (Värmland).<sup>205</sup>

The earliest recorded *Korshavn* in Norway, in Lyngdal, Vest-Agder, is mentioned in the form *corshaun* by the first Nordic cartographer, Claudius Swart, in AD 1427.<sup>206</sup> Although not primarily maritime, stone crosses were erected in the early Nordic Middle Ages, perhaps after 1100, in Vestlandet, Norway.<sup>207</sup> Some of the oldest may be those of Kvitsøy at Stavanger (fig. 5) and *Korssund* between Sognefjord and Sunnfjord.<sup>208</sup> The environment of the cross on the island Kvitsøy could be associated with a sea route, by way of Leiasundet, and the chapel consecrated to St. Clemens on the island. In the immediate vicinity of Korssund was that tower purportedly erected by king Øystein at Sinholmssund, which I mentioned earlier in this text.

In the present day sites with the composite name *Korshamn*, without known medieval history, are found in Norway from the south to the north at Hvaler (Østfold), Risør (Aust-Agder), Lillesand (Aust-Agder), Lyngdal (Vest-Agder, that from AD 1427), Kvinnerherad (Hordaland),

Austevoll (Hordaland), Lindås (Hordaland), Gulen (Sogn og Fjordane), Hareid (Møre og Romsdal), Hitra (Sør-Trøndelag), Ballangen (Nordland) and Flakstad (Nordland).<sup>209</sup>

In Denmark we find a *Korshavn* mentioned in AD 1453 at Fyns hoved, the northernmost part of Funen. It still exists and denotes a distinguished natural haven. Two other havens with this name are known but not recorded at this early date, on Hindsholm in the north of the main Danish islands and Avernakø, to the south. For a cross as a mark along a fairway we possess the early mention by Saxo as terminus ante quem. The presumably wooden cross at Grønsund between Sjælland and Falster must have been erected at the latest during the 1150's AD. According to Saxo it was cut down by West Slavonic pirates in 1157.<sup>210</sup>

On the west coast of Sweden I have only noted a few, without any pretense of being systematic. There are localities so named from the north to the south at Hönö and Öckerö in Southern Bohuslän, on Asperö and Styrsö in Västergötland, Vallda, Kyvik in Släp and at Morups tånge, Halland.<sup>211</sup>

It is possible that we could also have a trace of a ritual landscape at the sea indicated by *Kors*-names. The cross was apotropaic both as symbol/sign and as a name/word. In Christian tradition of the North both are well known. If you broke a taboo at sea the word 'cross' had to be pronounced instantly and/or a cold iron had to be seized by all members of the crew. Barns and houses could be provided with a carved cross or a cross-formed opening to protect against unwanted intrusions. Evil powers in an area may have been disarmed and neutralized merely by naming that area after the cross. In particular, dangerous passages at sea could be so named.<sup>212</sup>

Cross-indicating names should be analyzed against a background of their immediate environment, including other relevant place names.<sup>213</sup> A concentration in the vicinity of a harbour or haven makes the interpretation of a sea mark more probable. Such concentrations of remains I have called *centres of maritime culture*.<sup>214</sup>

## Younger Borrowings (Loanwords) and Other Terms for Sea Marks

Later terms, presumably belonging to early modern times, are often loanwords, such as *prick*, which usually means a 'spar buoy' and very seldom 'beacon,' and *boj*, 'buoy.' Both show the direct influence of Low German or Dutch. A pole or a wooden fundament on several poles could be provided with a *tunna*, *tonne*, *tønne* or *tønne*, 'barrel,' *kula*, *kugle*, 'ball' (Kugel), *tavla*, 'board,' *galge*, 'gallows,' *arm*, *spira* 'spar,' 'mast,' *kärve*, 'vase,' *snes*, 'sheaf,' or *kvast/kost*, 'broom.' Some others are *bakke*, *bak(e)*, a general term for sea mark, in the water, e.g. a barrel, or on land, *remmare*, a kind of big pole in the water, *lygte*, *lykta*, 'light,' and *ballong*, 'balloon.' All these are found in sea mark names that I have registered. Even here several seem to derive from Low German or Dutch prototypes. At least *bakke* (*bak*, *båk*) and *prick* seem to be early loans.<sup>215</sup> Their meanings as regards constructions seem to be general in the North, but certain local or dialectal variations do exist.

*Prick/en* was in Holland or North Germany the term for the most simple type of sea mark, tree branches or spars put into the mud at ship channels, in least in the *Waddenzee* (Dutch), *Wattenmeer* (German), *Vadehavet* (Danish), the shallow marshes at the North Sea. Gradually these were placed on poles. This is apparently the stage when they became known in Sweden. The sea routes were to "stickas upp", to be marked by such poles or spars, sometimes very simple and rude. Such a mark could also be bound up more elaborately like a broom, *kvast* (Norw. *kost*), and were then called *kvastprick* (Swed.). A slight difference may be marked by the term *ruska*, but basically this refers to the same broom-like top, and the category could be called *ruskprickar* in the plural. Other top signs on poles in Germany and very likely to some extent

in the south part of Scandinavia could be ornaments resembling baskets, small barrels and crowns. In Germany a favourite appears to have been that round wooden ball, the *Kugeltopfzeichen*. As mentioned above, a *kula* or *kugle* occurs as an element in Nordic sea mark terminology or place names. Another German variety mentioned was the crown. It might have been the basis for a *kärve*, 'sheaf,' or *snes* in Sweden.

My examples of probable place names denoting sea marks in Vest-Agder in south Norway include *Tønnane*, at Møvik, *Tunnholmen*, *Tonnehola*, *Tynnodden* in Søgne. On land these barrel names may appear as an indication of storage at a port, e.g. *Tønnevoll* in this area. The usual meaning would simply be packing material for transport. But the oldest meaning in connection with the marking of sea routes refers to the floating barrels anchored to rocks or to poles along the shallow edges of a channel. Sometimes, however, a stone cairn or beacon on land may look like a small barrel from a distance, and thus be called a half-barrel, *halvtønne* (Norway).<sup>216</sup> This means that among such localities on rocky and deep coastlines we need not *a priori* assume any kind of floating barrel.

As can be seen from the quotation from the letter of Gustavus Vasa in 1550 floating barrels (see fig. 17, Hamburger Tonne) are indeed specifically mentioned. This may be among the earliest dated occurrences in the North. But at least in AD 1446 a barrel was demonstrably afloat outside *Scharhoorn* at the entrance of the Elbe. These wooden barrels were constructed entirely for this purpose. They were large and extremely well built, often double-ended and not at all like packing barrels. They were thoroughly saturated with tar or pitch. Olaus Magnus describes such large floating barrels moored to iron chains: "It is possible to see huge barrels, coated with tar both inside and outside, which are made fast to the sea bottom with iron chains and anchors, and which during daytime, and in winter even during full moon, guide irresolute sailors to where the ships can put in."<sup>217</sup> The areas referred to are the North Sea and the Baltic.

A barrel could also be put on a pole. Such a mark was standing close to *Neuwerk* (fig. 18) at the Scharhoorn reef in a drawing from AD 1568.<sup>218</sup> There it was called *Hamborger Baecke* (*Bake*). Any kind of barrel could also be put into a cairn or beacon, like any other kind of wooden construction. Possibly this is referred to in a note by Benedicht in the same year as above, in a chart, *Søkartet over Øster og Vester Søen*. In the vicinity of Lyngør is a rock "and on it stands a Vaarde with a barrel. Keep that land well (away) where the barrel stands."<sup>219</sup>

Barrels could also be associated with fire beacons, but with another purpose. In this case they may have been visible inside or on the pile of wood, but their function was to set the beacon rapidly alight, if there was need.<sup>220</sup> Their former presence may be indicated by similar place names as those of the sea marks with a background in barrels, by way of the elements *Tunn*, *Tønn-*, *Tynn-*, *Tonn-*. Of course their location does not make them easily confused with sea marks of this kind.

The classic example in the North of a barrel-related place name is *Tønsberg Tønne* in south Norway where the spit is named *Tønneskagen*. It is situated at the entrance to the medieval town of Tønsberg, in many respects the royal capital of Norway. It existed at least in AD 1200 according to a source which is almost contemporary.<sup>221</sup> Roald Morcken has an interesting discussion on the concept 'barrel' in certain place names indicating sea marks.<sup>222</sup> The starting point is the sea mark Nødingen at Lillesand in Aust-Agder. This is a stone beacon formed like a barrel, conical and with the narrow part on top. He imagines that *Tønsberg Tønne* got its name from a similar form. From the beginning it might have been a wooden barrel, but it was very likely soon made permanent. On the other hand it may have been made of stone from the start. The similarity would have been apparent in any case. Maybe the term *halvtønne*, 'half barrel' also indicates an original maritime meaning of 'barrel.'

An important stage harbour on the sea route across the Baltic by way of Åland and Kökar towards Åboland and the Bay of Finland was *Tunnhamn* in Hitis (Finn. Hiitinen), mentioned for





Fig. 53 Sketch on the use of transit lines, based on a rather similar situation in reality. Close to the coast are shallows, but it is well known that they extend to the islet D and further out. To avoid those the skipper goes in line with A-B-C at first, but at A he turns to port in order to go towards D, but, as he already knows, not too close to D. To know where to turn next time he fixes his gaze towards I-J and F-G. He then could sail quite close to the steep island H. The points given letters are all named in the formula of the transit lines and represent an important part of the place name flora in the maritime landscape. (Drawing: Christer Westerdahl & Erik Hoops)

the first time in the 17<sup>th</sup> century by Petrus Gyllenius.<sup>223</sup> In Finland Zilliacus furthermore mentions *Tunngrund/et* at the entrance to Mariehamn, Åland. The same name reappears also in the parishes Houtsjär, Nagu and Tvärminne. There is a *Tunnholm/en* in Föglö and Borgå and a *Tunnklobben* in Ingå parish. It is remarkable that Stahre<sup>224</sup> does not mention any such names from the archipelago of Stockholm in his exhaustive work, but they do exist in my area. They only denote insignificant localities and often have to be extracted from interviews with local people. They are seldom registered in place name archives.<sup>225</sup> Some of them point to the cargo of a shipwreck.

In Denmark coastal place names may also include the first elements *rå*, *stik* and *met*.<sup>226</sup> *Rå* is apparently to be compared to the identical term for border mark on land, or possibly to *rå*, 'spar' or like a *rå*, 'yard' in a rig. The term *stik* reappears in the verb "att sticka upp" in Swedish, which refers to the original meaning of 'prick,' German *Prick/en*, above, simple marks of twigs and branches, which actually are still set out on the ice to mark the winter road in parts of the Northern Baltic. This term, however, can also refer to drying stands for nets.<sup>227</sup> Another variety derived from the original meaning denotes pilings for defensive purposes. This meaning is well attested to in common nouns in medieval times and in existing place names.<sup>228</sup>

The transit lines for navigation may require a *varde* or a raised pole at strategic places. The meeting point of the transit lines is in all Nordic languages called a *med*, *me(t)* (or *mej*). This phenomenon has been treated most exhaustively in Norway by Per Hovda.<sup>229</sup> A *me(d)* is observed by way of a sighting line across at least two permanent marks, natural or artificial, and together with another transit line to the opposite side, thus pointing to an exact spot in the sea. This is where action of some kind was required, e.g. to anchor to fish on a good fishing ground or to turn

upwind to avoid an invisible rock or to strike a straight route into a protected haven. Such a meaning may be contained in names with *me(d)*, *met* etc., thus with a secondary meaning of a sea mark used in this procedure. The entire compound of transit lines was also called a *me(d)*.

The observation of transit lines has been the most important method for detailed navigation presumably for thousands of years and if properly applied it is still more reliable than GPS. But the actual knowledge of many localized *me(d)* was closely guarded, especially by fishermen and pilots. They depended on *me(d)* to carry out their own occupation with success. Some of them were handed over to the next generation by way of formulas, possibly even rhymes. Others had to be common knowledge and were in due time written down in so-called *meböcker* (sing. *mebok*; personal hand-written note-books)<sup>230</sup> and possibly even published in an elementary form in sailing descriptions. But basically this was oral by-heart knowledge. Some of them concerned the exact point where to re-anchor a sea mark taken down during winter, e.g. a barrel, a buoy, a broom or something similar. In this way the *me(d)* could be considered a *verbal sea mark*.

Terms for poles, like *stång*, or *stake*, *stolpe* or *stav*, all with almost identical meanings, are by far the most common of all name elements denoting sea marks in my survey area. In Vest-Agder I have found in central areas names like *Stangefjell*, *Stangenenes*, *Stangödden* and *Stangholmen*. A possible example of *stav*- names is *Ægistafr*, mentioned during the Middle Ages,<sup>231</sup> which is the name of a traditional border (mark?) in the northernmost part of Norway closest to Russia. Its actual location is not known. *Stav*- is also found in the place name *Stabbo udde*, an important sighting point, a spit of land along the mainland-bound sea route north of Stockholm. Here, the meaning is not quite clear. The wide range of meanings of these terms, including *spira* and *mast* above, could also have been used to indicate finds made of stranded spars, yards, masts etc.<sup>232</sup> In the case of *Mast*- names a rigging site may have been intended.<sup>233</sup>

However, some of these names, especially those based on *Stång*-, may also refer to net-hunting of sea-fowl, mostly eider-ducks. This explanation is of current interest only in the wide breeding grounds of the archipelagos and the migratory passages from Sweden across the sea of Åland to south western Finland. The poles were set up in early morning in spring with huge nets hauled out just above the water between them in narrow sounds between islands, often called *Stångskär*, where for centuries mass flights had been observed. Hundreds of birds were caught. This hunting method is found in many places in Eurasia, and is known from at least the Viking Age.<sup>234</sup> The sites of the poles were only used during a very short season and could thus not be relied on as permanent positions for secondary sea marks. In any case all of these poles presuppose some kind of stone cairn<sup>235</sup> as a foundation, very likely additionally supported by a crevice in the rock.

Sea marks called 'gallows,' *Galg/e*-, were of course similar to such constructions. Apart from the fact that many actual gallows were known along the sea routes, especially at port cities<sup>236</sup>, their shape was familiar from execution sites at the land roads. At Kristiansand in Vest-Agder lies *Galgeberget* at the mouth of the river Otra. This was in fact an important harbour and loading-place as well. Many could have had nothing to do with executions, however. At Ny-Hellesund, also in Vest-Agder, we find *Galgeholmen* with the broom site *Galgekosten*. There are many others. The arm of the gallows tree was supposed to point to the right route past the skerry where it stood. The important rest haven inside (east of) Hallands Väderö in Skåne had several gallows at the end of the 18<sup>th</sup> century<sup>237</sup> (fig. 54).

The place name element *Arm*-, *-arm/en* can be tricky to interpret correctly.<sup>238</sup> Sven Andersson argues successfully in favour of a macro-perspective of nature in the case of *Söderarm*, 'southern arm,' Roslagen, Uppland, Sweden.<sup>239</sup> This is the name of an extensive archipelago jutting out in the Sea of Åland. Obviously the whole area has been understood as a gigantic southern 'arm' of skerries. In fact there existed in tradition a northern 'arm' as well, but this term is no longer alive.<sup>240</sup>



Fig. 54 Sea mark in the form of a gallows at HallandsVäderö, Skåne, Sweden. (Lövenörn 1800)



Fig. 55 Iron pillar sea mark at Lillebåen (Bjørnebåen), Hille, Vest-Agder, where the paddle steamer *Bergen* struck 8 October, 1871.

In Finnish, *tanko* means ‘pole’ or ‘staff.’ This is probably the background of *Tankarholmen*, or just *Tankar*, today with an important lighthouse<sup>241</sup>, situated at the approaches of Gamla Karleby, Finn. Kokkola, in Österbotten.

A special case is illustrated by the composition *Stavrum* or *Stavsrum*. It occurs as a place name in my area at the coast of Hälsingland, Gästrikland and Uppland. This term exists in Norway as well. Since it is actually a measure of firewood it appears to have denoted a kind of wood pile used either as a primary sea mark, or (possibly) as a warning fire beacon.

Most of the variants of sea mark constructions based primarily on the German prototypes were still illustrated in pilot books in Sweden in 1842 and 1852. Examples are: *balls*, *rhomboids*, *stars*, *pennants*, *gallows*, *small barrels*, *boards*, *double boards*, apart from variants of *masts*, *stone beacons*, *cairns*, *small towers*, sometimes like *houses* etc. In the same way the wide range of them was illustrated in Norway.<sup>242</sup>

In Norway were mentioned basically the same types, but with a later emphasis on iron pillars (fig. 55), boards and balloon-formed upper parts.<sup>243</sup> There is generally speaking a considerable agreement in Scandinavia however. The variation of sea marks is almost infinite, both the official and the unofficial signs. Every mark is special and has been made that way intentionally. Moreover, the organization of sea marks is a national undertaking and should be recognized as such.

## Ritual Names – Cognitive Sea Marks

“Cognitive” in this context means an immaterial phenomenon, that is, sea marks which do not exist in material reality but work as sea marks anyway. The important consideration is the naming of the place. The maintenance of these sea marks is a certain social – or perhaps rather ritual – behaviour which has its roots in maritime culture.

In ancient maritime culture – at least in most of Northern Europe – there was a “cosmologically” based opposition between sea and land.<sup>244</sup> Most of the significant elements of land could not be mentioned at sea with the same word or term as that used on land. They were strictly taboo. This concerned in particular females of any kind, land animals and certain birds. Instead another word, term or name had to be used, a so-called *noa*-word or *noa*-name. The replacement of terms reached such proportions that a certain “sea-language” (*sjömål*) appeared, at least as a vocabulary, but with certain syntactic additions as well. It was also taboo to take onboard any of these females, animals etc. This “cosmology” was wide-ranging: a colour representing land, i.e. black, was forbidden at sea, hence priests were taboo.

An adult fisherman was supposed to remember such *taboo* names of places or sites at sea and this memory had a very specific significance. These localities were dangerous in some way or other. If the name was used in spite of the *taboo* the sailor would have been shocked. In this way the names serve as *mnemotechnic pegs* or *memorization points*. In a metaphorical sense the *taboo* acquired particular power during the passage in the area where the taboos were valid, the sea. But even the path down to the boat was an ambiguous passage, where all kinds of unlucky things could happen. The border between sea and land was a *liminal zone* in the cosmological sense.

I have suggested that this idea of the opposition between land and sea exists even in pre-history.<sup>245</sup> It appears to me to be the ultimate explanation for the location of profoundly ritual monuments at the shores, rock carvings during the Stone and Bronze Ages, burial cairns during the Bronze and Iron Ages and stone mazes during medieval and early modern times. Among the dominant figurative motifs of rock carvings we find the great land animals, elks and horses, and sea-related phenomena such as ships and also the great sea mammals, whales. The fundamental function of these would be the reinforcement of magic. Land is working strong magic at sea, the sea is working strong magic on land, by way of these phenomena. When they metaphorically pass the border, the liminal zone at the shore, to the other element they are transformed to *liminal agents*. I suppose that they were considered extremely dangerous as such but with an intentional act, a ritual, they could be rendered helpful and advantageous.

In historical times these words, terms and the denoted persons, animals etc. could be considered liminal agents as well. They were taboo, and accordingly dangerous. But they could apparently be used at sea to the benefit of maritime culture, albeit only with strong reservations: the actions needed always to be intentional, not mistakes. To ensure this a ritual behaviour was applied. A young novice in fishing was taught conventions the hard way. This was part of socialization, to get admission to the team. He was accordingly tricked into breaking the taboo by his more experienced elders. Normally this break consisted of pronouncing the wrong name of a site. Immediately danger had to be warded off, by different means, including saying something apotropaeic, cross, cold iron etc. But more importantly, the novice had to pay or offer something, at least in later days, often consisting of a dram for his elders. This ceremony could also end in a kind of sacrifice to the sea. This was accordingly a ceremony of initiation.

This ritual is in my opinion the background of the baptism of sailors.<sup>246</sup> The same kind of taboo was broken and another novice had to ‘pay his footing,’ – Danish and Norwegian *hølse*, German *hänseln*, Swed. *sota* etc. The details are less clear since they have come down to us only in fragments, but most of the sites where baptism took place were surrounded by taboos<sup>247</sup>, that is, before the ceremony was monopolized and rendered commonplace by the baptism at the line (the Equator).

Obviously, this ritual started along the coasts, perhaps primarily in northern Europe where the sites are most common. Their locations mark stages, important points, reached during a journey, such as *Kullen* (Skåne), *Lindesnes* (The Naze in Vest-Agder), *Skagen* (the Skaw) of Jutland, *Bornholm*, *Blå Jungfrun* (Schwedische Jungfrau, Kalmarsund: fig. 56), *Revekol* (Pomerania), *Domesnäs* (Kolkas rags, Latvia), *Hoburgen* (Gotland) etc.





Fig. 56 Blå Jungfrun, the famous rock in Kalmarsund where the witches meet. Its real name is Blåkulla, which is *taboo* at sea. According to Olaus Magnus the water outside is site of offerings to the mermaid (*Historia* 2:23). (Photo: Christer Westerdahl)



Fig. 57 The rocky islet *Bonden* south of Umeå, Sweden. One of several localities named *Bonden* (*The Peasant*) in keeping with the system of the gendered relationship between sea and land. (Photo: Rabbe Sjöberg, Umeå)

Taboos concerned magic names like the famous *Bonden* (site of baptism), known as *The Peasant*, *der Bauer*, *de Boer*, the *noa* name of *Kullen*<sup>248</sup>, *Landet Gode* or *Landego*, literally ‘land good’ = ‘the good land,’ the *noa* name of *Jomfruland* in south Norway, but also found elsewhere, and *Blå Jungfrun* (site of baptism and also a sacrificial place), the *noa* name for *Blåkulla*, the meeting place of witches, i.e. both these complexes referring to gender, and *Holmen Grå*, ‘gray holm,’ which refers to the liminal colour between black and white, i.e. between land and sea, respectively.<sup>249</sup> The *initiation* ceremony among fishermen thus also became a *passage rite* in a double sense among sailors. In maritime culture the primary occupation has always been fishing.<sup>250</sup>

As mentioned these names each occur at many places in Scandinavia, *Jungfru* (Virgin)-names referring rather to the fickle Mermaid than to the Virgin Mary. *Bonden* is found at Arendal in South Norway, interestingly with a sea mark, but also in Lake Vänern, the hill of Kinnekulle, the most important sighting point around the entire lake, several significant islands in Bohuslän, west Sweden, most provided with sea marks today, and in Västerbotten, north Sweden (a lighthouse site; fig. 57). Among these sites are found a striking number of names alluding to horses, reminding us of the liminal character of this animal and generally also to female beings. The main

difference between these sites and those of baptism is that they occur at small localities directly situated on the routes: “We have here a certain guiding rule to chart the ancient fairways along our coast.”<sup>251</sup> In a society where oral and tactile transfer of knowledge was the rule, the sites marked by taboos and *their names functioned as cognitive or immaterial sea marks*.

A more systematic list gives us a good guide to the categories of our cognitive sea mark names. What was mainly *taboo* to name at sea or to take onboard was above all females, but also children, the tools of a craft or small farm, its products, such as butter. Also taboo were the boat-house, the priest/parson as mentioned, any kind of land-living mammal, domesticates like horse, cow, sheep, goat, pig, dog and not least any kind of clawed animal, like cats and wolves. This includes wild animals such as bear, fox, hare, rabbit, otter, mouse and rat, and birds, not least those of prey and carrion eaters: cormorant, eagle, raven, crow, these last two in particular, presumably because of their colour.

The church and any name of divine association, like that of God or the devil, were also taboo, but also those of the authorities, the bailiff, the county sheriff and their secretaries. The later could be called ‘wolves,’ indicating that they were “the wolves walking on two legs.”<sup>252</sup>

To understand the cognitive landscape in depth these principles have to be applied. One of the few who has done so, is the above-mentioned Reidar Marmøy, in his book on the archipelago of

Grimstad. He maintains that he has found *that all the names of this kind registered by him occur on just one of two possible sides of the route*. The reasons for considering precisely those sites as particularly charged or dangerous is discussed. In this case the first elements are *Hund/e-* (dog), *Hest/e*, *Ros/se-* (both horse), and *Skarv/e* (cormorant). Additionally there are several *Galten* (boar) and *Bjørnen* (bear).

In Vest-Agder I have noted these names in particular in the area of Kristiansand and Søgne. They point to bears, swine (sows), and dogs, and the references to cats are very common. But there is a distinctly humorous strain in many of these seemingly rather recent names, and the obvious risk is absurdly to overestimate their possible other significance. The isolated and dangerous rock of *Bjørnen* at the approaches to Mandal is definitely a case in point as well as the skerries of *Lille* and *Store Kråga* (Crow) at Hillesund and the other pair *Vestre* and *Østre Kråga* east of Ryvingen (lighthouse) at Mandal. *Lille Kråga* has a *varde* today, but that is not really the point. All these names definitely denote something exceedingly dangerous to shipping. Descriptions of shipwrecks and the sites of wrecks give ample material for such evaluations, apart from an evident source material in oral traditions and experiences.

An important principle in the interpretation of such sites is simply to ensure that the names would not have another more reasonable or functional explanation. The localities should definitely be small rocks, skerries and holms, preferably surrounded by water, and directly connected to documented sea routes.

## The Confusing Conflation of Denotation in Particular Between Fire Beacons and Sea Marks

It appears from these studies that among name types indicating sea marks a shift has occurred in meaning or denotation. This conflation is so obvious that it could be raised to the level of a linguistic or impartial norm. It goes for all place name elements, which either originally, as appellatives, or in a transferred meaning denoted an important 'mark,' 'sign' or suchlike. In many cases a metaphor looms at the horizon, i.e. the concept expresses more or less a "poetic" kind of language model, in concepts like *båk*, 'beacon,' *kummel*, 'stone cairn,' *vård/kase*, 'fire beacon,' *kors*, 'cross,' *varde*, 'cairn,' *vete*, 'fire beacon,' yes, even *fyr*, 'lighthouse.'

Per Hultqvist treats a number of such polysemous names in Lake Vänern.<sup>253</sup> In the same way Nils-Gustaf Stahre analyzes ambiguous names and their shifts of meaning. His subject is the *Kummel* and *Märke* names in Sweden.<sup>254</sup> Apart from sea marks they could denote *burial cairns*, *clearing cairns*, *offering (votive) heaps* and *border markings*. This makes the interpretation quite problematic. Only the context and a profound analysis can bring us closer to an intelligent result.

One of the most obvious of these shifts or conflations concerns the names of fire beacons (figs 58–59) in relation to sea mark names.<sup>255</sup> A number of place name types have, apart from marking localities for sea marks, also been used for fire beacons in the early warning system, and vice versa. These shifts are clearly apparent in Swedish *kase*, *varde*, *vårdkase*, *vet(t)e*.<sup>256</sup> It does not seem probable that the sea mark has been replaced by a pile of wood. But it is of course possible that sea marks once looked like such a pile, maybe only from a distance. In Norwegian there is exactly the same tendency of a shift from *varde* in relation to *vete* and the reverse. The same development or shift is well illustrated by English *beacon* which indeed could mean both. The original meaning in literate times of *varde*, *vard/e/r*, Old Dan. *warth*, is 'look-out, watch, guard.' Norw. *viti*, *vete*, and Swed. *vård/kase*, mean a fire beacon in a high place, only *kase* a 'pile of wood.' The elevated site of the fire beacon was self-evident for a look-out. Sometimes the guard was, according to traditions, sitting or standing on the *kase* etc. to get as



Fig. 58 A reconstructed fire beacon at Södertöm, south of Stockholm. (Photo: Christer Westerdahl, 1998)

high as possible. In addition to philological arguments a similar function can be suggested for both concepts, in spite of the fact that *varder* and *kasar* now also denote very low places, near the water (*underlandsmerker*). Another socially based explanation derives from their parallel roles and relationships in wartime. Language and words are also an expression of society. The visual change is found in the living language and the signification of appellatives.

Evidently, fire beacons, the wood piles, were used secondarily as sea marks. They were officially still recognized as such during the 19<sup>th</sup> century in the area of my inventory of Norrland. Some examples were the *kasar* at Kallviken in northern Västerbotten, those of the islands Ulvön, Hemsön, Härnön and the



Fig. 59 A fire beacon, rebuilt in later times, at Skags udde, Ångermanland, Sweden. (Photo: Christer Westerdahl, 1983)

rock Vålhuvud in Ångermanland and that of Dalund on Vaddö island in the northern part of the Stockholm archipelago. We can rest assured that when the Danish-Norwegian king Christian IV in AD 1604 ordered renovation of the *vete* system by way of a law for Norway, this was as well an impetus for the maintenance and repair of sea marks.

Because of this confusion a selected Nordic bibliography on warning fire systems has been added as an appendix to the text and its references.

## Summary and Conclusions

Sea marks appear as dynamic features in the maritime cultural landscape. They have been transformed from immaterial to material and back again. They have been moved, taken down, obliterated, re-erected to duplicate their previous form and/or location, or changed to a completely different shape (such as a lighthouse), or moved to a different site. They have been enlarged so considerably that what possibly was there from the beginning is now completely incorporated in the new construction. Still, there are remains of ancient structures, sometimes of substantial material, sometimes just a place name, of the spot itself, and/or indications of an old system. Their primary functions appear to have been monuments, identification marks, for harbours and crossways. They signalled dangerous places. In many ways they formed counterparts, presumably also contemporary, to markings along the roads, just as there existed a parallel between land roads and sea routes.<sup>257</sup>

There are two categories of constructions which originally had nothing to do with sea marks but which secondarily often became quite important as such, *burial cairns* from the Bronze and Iron Ages and *fire beacons*, wooden piles on hill-tops. This is explicable. Anything that easily distinguished the site could work.

Place names reveal aspects hitherto not quite consciously observed as important parts in maritime culture. We have seen that sea marks themselves became or even from the start could have been a part of the *ritual landscape*. Inversely, parts of the ritual landscape worked as *cognitive sea marks*. The sea marks developed into human and supernatural beings in the popular imagination. The *me(d)*, a description of a system of transit lines at a spot at the coast could be called a *verbal sea mark*.

From a North European perspective there is a great variation in sea marks, partly even in their function. This variation is mainly due to natural conditions. The extraordinary variety is mainly due to the extensive archipelagos and deeply indented coastlines, if compared to those of Atlantic Europe or the Mediterranean. In the South, the low and normally regularly undulating or straighter sedimentary coasts required other types of marking than those of the rocky North. In particular this concerned floating barrels and piles along the dangerous banks, signalling dangerous places. In river mouths and tidal marshlands shipping had to follow very limited channels to the harbours. The marks became extremely dense and maintenance had to be frequent. In the North navigation in macro-scale (e.g. in a mist) could be conducted along lines following the tops of high mountains and rocks, which partly explains the confusion of sea marks and the warning fire beacons often placed on such tops. The waters are fairly deep but the bottoms are undulating. Closer to the water level spits and spurs of the land and islands, and sometimes small rocks and skerries are likely to have had the first sea mark cairns. Maintenance was urgent. The need for harbour marks is the same in both the main areas. In the North this is apparent in the earliest term for a sea mark, *harbour cross*.

Most of the place names with such name elements which could indicate early sea marks are surprisingly well coordinated not only with e.g. medieval sea routes, but also with routes used up to and into modern times. Some may provide arguments for early routes which ran in what



have become present-day wetlands and dried-up areas, raised by the land-uplift since the last Ice Age. In other areas the place names mark sites which are still dangerous to shipping. In such places we often find modern sea marks and lighthouses. Different types of marks seem to have succeeded each other at the same spot even in early modern times (e.g. *kors*, *varde*, *stang*). To strengthen the interpretation of a possible sea mark name its name milieu must be investigated in depth together with archaeological and historical sources on sea routes and harbours. The concept of *centres of maritime culture* may be useful.

Apart from a few sites the general idea of more or less coherent sea mark systems was introduced in the North from Germany and Holland. In particular it appears that the Hanseatic League was the most important single factor. Sometimes the League instigated systems quite tangibly at important points and harbours. If reflected upon it appears that the lack of contact and similarity with e.g. France (sea marks = *les balises*) and other maritime areas in South Europe, in particular the Mediterranean, is striking. After all, the community of sailors is international and the basic maritime cognition and its folklore recurs almost everywhere. But this may reflect the fundamentally regional character – from the beginnings – of sea mark systems, coupled with the linguistic coherence of the Germanic languages. Besides, as a maritime area, the North Sea and the Baltic have so much in common as to make it a logical choice for a particular maritime identity<sup>258</sup>, a compound of transport zones on a macro-scale.

The first sea marks of a “non-private” nature seem to have been introduced by the inception of a feudal state. The next important period is that of a new ship technology, including architecture, several masts with new kinds of rigging and deeper draught, requiring other routes than before and secure mooring (iron rings in the North). The source value of Olaus Magnus’ works (1539, 1555), an epitome of the Late Middle Ages, is obvious. What follows afterwards is basically a slow, discontinuous but steady build-up during several centuries, interrupted by wars and by more or less vigorous rulers.

Sea marks are not only a part of the ritual landscape. They are very obviously a part of the social landscape. They reflect social prejudice and social classes. The early states prohibited other harbours and routes than those which they endorsed. Others were not provided with official service, like sea marks and iron rings. The authorities intended to keep absolute control but never succeeded entirely. Centrifugal tendencies and divided loyalties played important roles. As we have seen, there are reasons to believe that local initiatives to set up marks even at prohibited sites can be discerned in sea mark names. The best example appears to be the *Grim(me)*- sites, as irregular in naming as in meaning.

Thus, for several converging reasons there appear to be in particular three active periods in the history of ancient sea mark building in the North, 1) c. 1100–1200, 2) c. 1450–1550, 3) probably after 1725 (with the organization of pilotage) and 4) immediately after the Napoleonic Wars, c. 1815 and onward.

The latest – and only to a certain extent studied for this text – would be from c. 1850 to 1914, but this is not the theme dealt with here. This is when the majority of now existing sea marks, including lighthouses, were established.

The significance of national states, strong rulers and organized class societies appears equally decisive in the formation of systems of marks. Marks are social constructs. Probably the sea marks could be classified in a kind of contextual hierarchy changing over time, from local, regional and national to international significance. Only in the later centuries have sea marks been permanent and been intended to remain so. The expectation of wars, privateering and piracy may have prohibited any kind of permanence before. This is partly shown by the fact that apparently the most common material used was wood.

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## Appendix: Selected Literature on Warning Fire Beacons

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## Notes:

- 1 Author's translation of a detail in Henrik Ibsen: Terje Vigen.
- 2 Westerdahl 2006c.
- 3 Westerdahl 1980, 1986, 1992.
- 4 Westerdahl 1987, 1989.
- 5 I have also been able to insert experiences from my surveys in Lake Vänern, which have not had sea marks as their goal, but rather harbours, ship yards, sea inns, and to some extent ship wrecks (Westerdahl 2003).
- 6 Another case of striking similarities is the archipelago chapels of the North; cf. Westerdahl 2006b.
- 7 Harris 1969, Hutchinson 1994.
- 8 Naish 1985, I:14.
- 9 Westerdahl 2002a. For the concept *böte* and names based on it, esp. Modéer 1937. Their earliest mention in place names in Sweden is dated c. 1300 (Fries 1987).
- 10 Fries 1987 on *böte*.
- 11 Magnussønnes saga, Ch. 21; Norges Kongesagaer 1979: 254.
- 12 The original version in Snorri Sturluson: Heimskringla III. Íslenzk Fornrit XXVIII. Reykjavík: 261, says: "Eysteinn konungur svarar: 'Spurt hefi ek þat, at þú áttir orrustur nökkurar útan lands, en nýtsamligra var hitt landit váru, er ek gerða meðan: Ek reista fimm kirkjur af grundvelli, ok gerða ek höfn við Agðanes, er ádr var oræfi ok hvers manns fór, þá er ferr norðr eða suðr með landi. Ek gerða ok stöpulinn i Sinhólmssundi ok höllina i Björgyn, /meðan þú brytjaðir blámenn fyrir fjáðann á Serklandi'" (author's transl. above).
- 13 Morkinskinna. Norske kongesoger 1030–1157 (2001): 275 (author's transl. above).
- 14 Jasinski 1995, 2004.
- 15 Westerdahl 1995a, esp. 1997, 2001.
- 16 The connection to pagan central places may still be a bone of contention, but most important in the location would be communication on land and on water (cf. Brink 1990).
- 17 Lincoln 1995.
- 18 Gren 1989: 64; cf. Gren 1994. Transl.: the author.
- 19 André 1989: 587.
- 20 Westerdahl 1995b.
- 21 Westerdahl 2002b, 2008; cf. on the road as a ritual arena Rudebeck 2002.
- 22 Medieval, feudal, mentality and modes of production may have persisted into the 18th century in central Europa, LeGoff 1988.
- 23 Lindkvist 1990 (1988), a seminal work.
- 24 This is apparent in Vest-Agder as well as in parts of Norrland.
- 25 Traditional Nordic beacon names, like *Vete* (*vede*), *Bavn*, *Böte*, *Varde* and similar forms will them have meant 'hill-top, the highest place in a mountain or hilly unit.'
- 26 Valtavuori-Pfeifer 1987: 179f.
- 27 Olaus Magnus Historia 2:27.
- 28 The early "civilian" map forms seldom included artificial marks, cf. e.g. Waghenae 1574–83, Blaeu 1612.
- 29 Medin 1952, Bergman 1994.
- 30 André 1989: 600.
- 31 Bill e.g. 1997, 1999a.
- 32 The best survey is still found in Fyhrvall 1882.
- 33 The latter was the only route of which any illicit use was not expected to be controlled.
- 34 This is a view expressed by this author, based partly on Modéer 1936: 78 on the Småland coast, but also on other sites than those mentioned there.
- 35 See the poem on Helge Hjørvardson: *Dagr er nú Hrimgerðr/ en þik dvalða hefr/ Atli til aldraga/ hafnar mark/ þykkir hjæglíkt vera/ þars þú í steins líki stendr* (Helgakviða Hiorvarzsonar 30) och Bisk. sögur : 563: *þessu næst koma þeir í góða höfn við ey þá Sandey heitir, ok þar reistu kaupmenn hafnarmark*. In the fornaldarsaga *Áns saga* Bogsveigis the following: *þórir kveðst vilja at hann færi. ok halda þeir norðr með konungi ok liggja undir eyjum nökkuru. þá mælti konungur, at skyldi reisa hafnarmerki* (Modéer 1936: 74; partly Fritznér 1867 (1973): hafnarmark.
- 36 Horstmann 1971.
- 37 Norway; Bjerck 1989: 93.
- 38 Denmark; Fischer 1995: 374.
- 39 Blue 1997: 33f.
- 40 Bill 1999b: 254.
- 41 Morcken 1970: 11f.

- 42 "Ret ud for Søgnedal ½ Miel fra Landet, imellem Øerne ligger den Hafn Heliesund, en Miel vester for Flekkerø, huilken Hafn er oc saare berømt for sin Beleiligheds Skyld, der hos paa den søndre Side ere opmurede 2 de største Stenvaarder som i Norrige findis oc sigis at S. Oluff Haraldsson hafuer ladet dennem bygge; der hos staar oc et Compas udhuggen i den haarde Klippe, oc er huer aff samme Varde neden ved 12 Alne høye." (c. 1600; Peder Clausson Friis; Friis 1881: 307; another version, p. 447). Other literature includes Morcken 1970 and Andreassen 1991.
- 43 Bø 1955.
- 44 Löwenörn says that they were built then, not rebuilt, and he does not mention the war, but this is most probable; in his own time they were strengthened with mortar and painted white, Löwenörn 1800: 35.
- 45 Viking Age in Birkeli 1973, Morcken 1979; a recent more conservative and likely estimate in Gabrielsen 2002.
- 46 Löwenörn provided such not only here but also at "Hvidingsø" i.e. Kvitsøy at Stavanger, and "Højwarde" at Koper-vik, Karmøy (Haugesund). Bjerg 1984: 145.
- 47 I have read and quoted the latest Norwegian translation by Aulen in Wold 1991: 144.
- 48 Transl. by the author.
- 49 Modéer 1936: 110f. Transl. by the author.
- 50 The submission of Reval to Swedish protection occurs in 1561, and Narva is conquered in 1582.
- 51 20/8 1550, Konung Gustaf I: s bref, riksregistratur, XXI: 317: "Och effther vij haffve besportt, att udi leden, som mann schall löpe inn aff openbare siön till för:ne Helsingefors, liggie väll någre grundh, som tileffventyrs schadelige vare kunde, dherföre vill vare förnöden, att mann seer och någett ther medt. Och upå ther skipzleden måtte bliffve väll uthmercht och kunnogh, dherföre må i sampt Erich Spore finne radh till att lathe utmerckie samma schepleedh, ther någre grundh heller farligheter opå färde ähre, medt kumbler eller, ther diupe grundh ähr, medt flytende tunner och offven upå them någett högtt, som mann kunne see någett longtt i siön, lijke som annerstedz i Tyskland skeer ..."
- 52 1562; *saköreslängd*, fine list, of Västerbotten, Kammararkivet, Riksarkivet, Stockholm, 1562:7. Torneå was made a town in 1621. The market site was visited in 1519 by Olaus Magnus. In 1809 Torneå was ceded to Russia, but the village of Vuono remained on the Swedish side of the Torne river estuary.
- 53 The verb "upsticka."
- 54 The *olla vulcani*, cf. Filipowiak 1985, where a prototype is found in the east, at Vitichev on the Dniepr.
- 55 Ellmers 1976.
- 56 According to the text – *Diplomatarium Suecanum/Svenskt Diplomatarium I*: nr. 828, p. 687 – *signum aliquod discretivum pro vitando periculo navigancium*.
- 57 The site is well-known, and later was called *Kolabacken*, 'the charcoal hill,' later being fired with actual coal. It is not far from the later light-tower of Falsterbo, still standing.
- 58 Hague and Christie 1975, Hutchinson 1994: 173.
- 59 Morcken 1970: 45, with reference to Taylor, here 2nd ed., 1971.
- 60 Morcken (op. cit.) has made a case for a transfer of the *league* from the north to the south. I have strongly doubted this formerly but I am no longer sure of anything.
- 61 Morton 2001.
- 62 Semple 1927.
- 63 Westerdahl in print.
- 64 The Chronicle of Henry of Livonia 2003: IV:5, p. 39 (AD 1200), XXV:2 (AD 1221).
- 65 For Britain cf. Harris 1969, Hutchinson 1994.
- 66 Naish 1985: 28.
- 67 Cf. the British Trinity House of Deptford (Harris 1969).
- 68 Heres 1982, 1983.
- 69 Wijsenbeek 1996.
- 70 Naish 1985: 31.
- 71 Modéer 1936: 116, quoting the Old Danish dictionary (Ordbog) of Kalkar, I: 95. In the same way *ringpenge* were supposed to be paid by the users of iron rings (below), in later times directly to the private owners of such. This income was highly valued and rings were inherited and in certain cases giving an annual income corresponding to the price of a big fishing boat (according to estate inventories from Vest-Agder in the early 19th century).
- 72 Jensen 1999.
- 73 Gardiner (ed.) 1994, Adams 2003.
- 74 Cf. Langfeldt 2008 on Vest-Agder, Norway. Mooring rings were fairly common in Sweden too, but their emergence is more difficult to date than in Norway.
- 75 There is in fact a place name, *Barsagrundet*, ostensibly 'the barsa shoal,' a ballast site in the important maritime town of Gävle, known from AD 1446. However it might have been a corruption of an original *Bastiansgrundet* (Wickberg 1954: 76).
- 76 Hansson 1960, Fischer 1983.
- 77 Lindberg 1985.
- 78 Hedenstierna 1949: 267. The old route was a very winding inshore passage through *Vindö strömmar*. At the entrance from the south was a well-known harbour at Djurhamn with chapel and inn. It was pointed out still in 1652 that most vessels must stop there "for the windings of the shipping route" (Westerdahl 1989: 99, quoting

- Hedenstierna and Palmskiöldska saml., Topographica XXI: 839, University Library of Uppsala). The farmer from Sollenkroka who lived at the new route discovered had possibly been a pilot in his own area. He got freedom from taxes according to Riksregistraturet (RR) 7/6 1616.
- 79 The wreck of a Swedish crown *bojort*, probably *Kråkan*, built 1636, was identified and documented in Kalmar by Åkerlund 1961: 92ff. On a foundering by another crown *bojort* in 1643 see Westerdahl 1989: 228ff.; the oldest specific record of any such foundering in the north of Sweden.
- 80 Hagedorn 1914: 80f.
- 81 It was imported as a concept to Lake Vänern, which at the time had no direct connection to the sea. There it became one of the main ship types in its adapted version, appearing on the seal prototypes of the two new towns Kristinehamn and Vänersborg 1642–46. (Westerdahl 2003: 123ff.). Fig. 24.
- 82 In this case ‘rightful,’ Swed. *rättsinnig*, means that the vessel rather should be a “genuine,” well-built *bojort*. This quotation was provided by Pekka Toivanen, Jakobstad, Finland.
- 83 With traditions back to the Iron Age, e.g. the Nydam ship.
- 84 Cullberg 1998, Westerdahl 2003: 113.
- 85 Modéer 1933a: 226.
- 86 Friis 1881: 337.
- 87 E.g. the skerry name *Tyskobb* in the archipelago of Stockholm; Westerdahl 1989: 160.
- 88 There is in the vicinity a skerry called *Stångskär*, probably indicating a pole in a cairn.
- 89 The close connections with Holland and the area of Flekkefjord in Vest-Agder in the 17th century were treated in Andersen (et al., ed.) 2001.
- 90 Modéer 1936: 38.
- 91 Stylegar/Vägen 2001: 92. Comment in Westerdahl 2006c: 129, note 60.
- 92 Modéer 1936: 109f., Sahlgren 1957.
- 93 Reloading was mentioned first: “In 1536 werd in de Staten van Holland betoogt dat lading van voor Amsterdam bestemde graanschepen in het Friese of Wieringer Vlak of bij Pampus in kleine schepen vergeladen moest worden. Acht jaar later vardigde Karel V een plakaat uit waarin het uitwerpen van ballast bij het Pampus werd verder te beschlechteren” (Sigmond 1980: 49 with further references).
- 94 Modéer loc. cit.
- 95 “Adjø far! Butten ligger i tina/ pass deg no bare for Pampus og Blinda” (Modéer loc. cit.).
- 96 Olaus Magnus, *Historia* 2:13.
- 97 Friis 1881: 334f.: “Imellem disse Øer er *Bergerlidt* (Bergens led) det er Skibsløb igiennem fra Karmsund oc til Bergen, oc ere udi Holmene oc Klipperne, Sund oc Hafner faste, store oc stercke Jærnringe istøbte met Bly, udi huilcke Skibsfolkene met en Hast kunde giøre et lang Tog fast, naar de komme seglendis oc behøfue at tage Haffn, oc kand 2 eller 3 Skib eller flere belegge i huer Ring; somme Ringe ere saa vijde som en Giord (ett band) aff en grov Tønde oc saa tyck oc stor, at en sterk Karl neppelig kand opreise dem paa Kantene.”
- 98 Langfeldt 2008.
- 99 On the payment of fees and the value of private rings see above, note 71.
- 100 Stylegar & Grimm 2003: 87.
- 101 Dagr er nú Hrimgerðr/ en þik dvalða hefr/ Atli til aldraga/ hafnar mark/ þykkir hjæglikt vera/ þars þú í steins líki stendr.” (Helgakviða Hiorvarzsonar 30; Modéer 1936: 74, Fritzner 1867 (1973): *hafnar*mark).
- 102 Hanssen 2000: 74.
- 103 Note 124.
- 104 Modéer 1933a: 214f., 229f., Westerdahl 1989: 171f.
- 105 On Norway e.g. Morcken 1970: 11, note. In Sweden the prolific *Käring*- names denote in particular beacons in the form of stone cairns, such as *Stenkärringen* etc. Otherwise you also find several *Gumman*, ‘old woman.’ In my survey area in S. Norway there are scores of *Kjerring*- and *Kjelling*- names with this and maybe other meanings: *Kjerringodden*, *Kjerringviga*, *Kjerringhåla*, *Kjerringskjeret*, *Kjerringgraua*. Cf. Hovda 1941a, where it is emphasized that the *Kjerring*- names not only are found associated with sea marks. There are other explanations of a more magic character (below).
- 106 Hanssen loc. cit.
- 107 Fries 1989, Falck-Kjällqvist 2006, Westerdahl 2004 etc. on the ritual landscape at sea.
- 108 In particular in the parish/commune of Søgne.
- 109 *Karl*, *kall*, defin. form *kaln*, dialectal, north Sweden. The same image was conjured up in something rising up in fanciful forms, like the ice walls at the beach: Wennstedt 1988: 26f. Other related meanings in Modéer 1937: 88, note 4.
- 110 Westerdahl 1989: 171, 1991, *passim*.
- 111 Most of them conform to what is called *rauk* in Gotlandic, a geological term, a free-standing rock eroded from the klint (escarpment) by the sea, in this case of limestone.
- 112 Westerdahl 2002c, 2004, 2005a, 2006a, b,c, 2007. This may, as can be seen there, refer to male names as well, esp. *Bonden*.
- 113 Below on ritual names; *liminal agents*.
- 114 *Historia* 2:5.Cf. der Mönch, The Monk, at Helgoland; see fig. 16.
- 115 Marmøy 1991: 30ff.

- 116 Olaus Magnus Historia 1:31. Author's transl. above from the Swedish version.
- 117 Fritzner 1867 I: 687 (*hafnarmark*). Transl. by the author.
- 118 Sturtzenbecker 1947: 11. (30/5 1785): »Börgades med Rågn och motvind som dagen förut; men blef blidare mot middagen, då vi kl. 11 begåfvo oss från Stranden och kommo på 3 mil när Åbo kl. 9 e.m. här börgade på Styrbords sidan förekomma Gubbar utklädda af trä, här och där på Stranden stående i häftiga Posityrer och tämmeligen hiskelige, desse skulle fördrifva Vargarna från denna Sidan, eller möta dem som kommo från andra Sidan; men jag tror at största effecten de gjorde var på folk som seglade förbi, i det at somlige förargas åt dem, andra roa sig, andra häpne drömma om dem, andra undra öfver dårskapen vi seglade kl. 12 e.m. förbi.»
- 119 Diar. Gyll. 138: "Sandö uddh, på hvilcken åhr ett stort kumbel aff ryseserne 1651 upweetat, tå the thår sin skuta mist hade."
- 120 Espeland 1933.
- 121 E.g. Modéer 1936: 117f.
- 122 Indrebø 1929.
- 123 Westerdahl 1989: 76ff.
- 124 A partially sceptical version is that of Eckstorm 1792: "Om det skal være et vittigt Indfald af Naboerne, eller om dette skal være eller og have været Sandhed, som bebreides de saa kaldte *Listeriuus*, at de hænge løgter i halene paa halte Hopper, og lade disse gaae paa det flakke, langt i Søen udstikkende Land, for at faae Søefarende – der holde detta for lys i andre Skibes Kahytter, og dristig følge samme Cours – at løbe for fulde Seil lige paa Grund: dette tør jeg hverken benægte eller bekræfte."
- 125 Westerdahl 1989: 76ff.
- 126 Brathurst; lighthouse family Stevenson; pers. comm. Danckert Monrad Krohn, Kristiansand.
- 127 E.g. Broadbent 1984, Sjöberg 1987, 1990, 1991, 1994.
- 128 Enström 1984.
- 129 But see Lundström 1982, where the author maintains just that.
- 130 Huggert 1976.
- 131 From Löwenörn 1800: 22.
- 132 "hvilken har ett Field paa dens ene Ende, som fra alle Sider, hvor man kan see den, ligner en Sukkertop lige fra Søren opad" (Löwenörn loc. cit.).
- 133 At the havens at Svinør and Snik.
- 134 Morcken 1970: 9f.
- 135 J. Svennung even hypothesizes that Siggjo could have been the *Sevo* of Plinius, precisely because of its extraordinary visibility contained in its very name (Svennung 1974: 42ff.). In the same work he thinks that *Rubae* could have referred to Ryvingen near Mandal (op. cit.: 29ff.). It is obvious that classical authors in delineating the Barbarian north may have named entire areas behind such land marks at the coast. Scandinavia (Scandia, Skåne) thus seems to derive from the spit at Falsterbo, in Germanic *skathan-auju*, 'the island of damage,' (Schaden-Insel), in this case the earliest recorded warning name. This name was corrupted slightly by a Roman scribe (Svennung 1963).
- 136 It must be pointed out that right across Hornelen is situated one of the most fascinating sites of probably late Stone Age rock carvings in all Norway, the secluded bay of Vingen. Almost all of several thousand carvings depict stags. On the significance of this proximity e.g. Gro Mandt in Ådlund & Bang (Eds) 2001: 49f.
- 137 Where the highest point is still called *Blåkollen*, reminding us of the tabooed name *Blåkulla* of the island *Blå Jungfrun*, Swedish Virgin or Schwedische Jungfrau, an important ritual spot in the landscape on the west side of Scandinavia. This island in Kalmarsund, Småland, Sweden, was the supreme maritime version of Blocksberg in the Harz, as well as a site of offerings and of sailor's baptism. Cf. Modéer 1927.
- 138 Henningsen 1960.
- 139 Beck 1973: 119f.
- 140 It is mentioned in the 13th century *Saga on bagler og birkebeinere*, Ch. 27, Norges Kongesagaer 3: 316.
- 141 Sørheim 2005: 40.
- 142 Morcken loc. cit.
- 143 In 1839 4.5 norske mil.
- 144 Hanssen 1998: 12, cf. 39; Kystguiden 2003: 195.
- 145 Hanssen op. cit.: 39, Kystguiden 2003: 208. *Daumann/en*, 'dead man,' is a well-known place name type occurring in several archipelagos of Vest-Agder, e.g. *Daumannsholmen* at Flekkerøy. In the area around Ny-Hellesund are found *Daumannsodden*, close to Vassøyane *Daumannsbukta* and on Uvær island *Daumannsglova*. Most probably they indicate finds of corpses from founderings. These names are well-known from my inventory of Norrland as well, names such as *Döde Mannen*, *Dödmans-*, *Döman*, *Likskär*, *Manskär*, at least seemingly meaning the same (Westerdahl 1989: 98f.). On a possible association with the English maritime term *deadman* see note 195.
- 146 The Saga of Håkon Håkonsson, Norges Kongesagaer 4: 280f.
- 147 Cf. above: the arguments in connection with king Øystein and the ideas of Gren (1989).
- 148 For other known details on both sites Hanssens report from Aust-Agder could be consulted, Hanssen 2000: 43.
- 149 Boström 1966, introduction.
- 150 Henningsen 1961: 177.
- 151 Hanssen op. cit.: 14.



- 152 Wikander 1985: 43.  
 153 Wikander op. cit.: 48f.  
 154 Underrättelser 1842, 1852.  
 155 Olaus Magnus Historia 2:23.  
 156 E.g. in Underrättelser 1842, 1853.  
 157 Ultimately he failed in this and fell utterly from royal grace. He ended his life in exile (Prague).  
 158 Morcken 1970: 7.  
 159 Waters 1958: 10.  
 160 Besides, it is not quite irrelevant that the ash is a particularly meaningful species in the cosmology of the North, in pagan times the tree of the worlds was an ash, called *Yggdrasill*, presumably meaning 'the horse of Odinn' (and a few other names). In later times the ash and the rowan are considered to be the most important protective species for homesteads.  
 161 Modéer 1936 passim, esp. 110ff.  
 162 Westerdahl 2010.  
 163 Modéer 1936: 76f.  
 164 Modéer op. cit.: 63f., 1960: 125f.  
 165 Zilliacus 1989: 228.  
 166 Hultqvist 2001: 251ff.  
 167 Modéer 1956: 72, 1956: 130.  
 168 At Paskallavik in Småland (obs the name type *-skall*) Modéer (1936: 81, note) surmises that the skerry *Grind(e)skär* is a corruption of an original *Grimskär*. This thought was taken up by Peter Norman (Norman 1979b: 84) in connection with *Stora* and *Lilla Grindö* in Loftahammar, Småland (here on fig. 39), however, only on the basis of their similarity to *Grind(e)skär*. *Grind-* means 'gate,' or 'wicket.' Sea route passages, especially narrow ones, have certainly been compared to gates, gateways or even portals. Some examples are *Gällnö port* in the archipelago of Stockholm and *Pargas port* in South Finland (*Pargas*, Finn. *Parainen*). In South Norway we find the important medieval harbour *Portør*, ancient *Portyrja*, *port* meaning 'gate' or an adapted Latin *portus*, 'port, harbour,' attached to *aurr*, 'gravelly ground' (Sandnes & Stenshaug 1976: 248). *Grind* could also point to an animal trap. Another possibility is a later sea mark in the form of a *grind*, 'a wicket,' somewhat larger than a *tavla*, 'a board,' the latter substantiated in *Taveludden* provided with precisely such a mark.  
 169 Olaus Magnus Historia 2:6 with vignette illustration of human-like sea marks pointing with their arms (figs 24–25).  
 170 *På-* in *Paskallavik* could actually mean 'peacock,' Mod. Swed. *påfågel*, Old Norse *pá*.  
 171 Cf. Houken 1976; Crumlin-Pedersen e.g. 1978, 1985.  
 172 Modéer 1933b. The implied localities are essentially different. *Salbake* is a large boulder in Småland. *Slätbaken* is a large bay in Östergötland and *Örsbaken* (c. 1300 *orsebac* in the Danish itinerary; Westerdahl 1990) another in Södermanland. Similar names occur in Norway, e.g. *Rombaken*, a fiord in Ofoten, Nordland. Modéer thinks that the basis is the imported *baken*, sea mark (eventually becoming *båk*). *Sal-* in *Salbake* means 'saddle,' which seems reasonable. But the problem is the large waters denoted, such as *Slätbaken*. Gösta Franzén criticizes (Franzén 1977) this derivation and proposes another old name for the bay. On the other hand Franzén does not convince entirely in his other critical views. The sea mark name *baken* must be old in Swedish or even Norse, clearly seen in the Finnish loanword *paakku*, meaning just that. This word is not in use in present-day Finnish (SKES).  
 173 Modéer 1933a: 24, 44, 252, 1936: 112, 116f., 1937: 57.  
 174 Westerdahl 2005a,b,c,d., 2006a, 2007.  
 175 Løseth 2006, using also Tuovinen 2002 as a reference in the analysis of the viewsheds.  
 176 Hjermand 2007.  
 177 This name of course points to the dominant of tradition, St. Olav of Norway, associated with countless and completely different phenomena, not only at the coast (Bø 1955). Thus, this is not necessarily an example of individualized name-giving.  
 178 Krantz 1940.  
 179 Stahre 1952.  
 180 Hellberg 1979.  
 181 The small open water island *Röret*, S. Bromö in Lake Vänern contains the remains of a very large cairn, plundered of a quantity of stones but discernible as a burial by way of its preserved curb stones. An island location for such cairns is neither unknown elsewhere.  
 182 Cf. footnote 228.  
 183 In the case of coastal names denoting horses it should be remembered, as mentioned above, that such name-giving may mean something rather special – maybe of ritual significance – with the site, since the horse is an animal strictly *taboo* to mention at sea.  
 184 Stahre op. cit.  
 185 In fact, Abraham Hülphers (1789: 58) used a word for cairn closely related to Norwegian *vete*, originally 'fire beacon.' He mentions that at Sikeåfjärden (with a harbour) in Västerbotten are two *Kummel* (cairns) or *Wetare* erected at the entrance.  
 186 For Upper Norrland I have noted the occurrence of the element *Tulter-* (cf. Larsson 1931) for 'cairn, stone heap,' found in *Tulterberget* at the harbour of Kallviken (itself from *kall-* or *Karl-* an "anthropomorphic" mark), North-

- ern Västerbotten (1790), *Tultret*, Bjurön, ditto and in *Hamntutterhällan* or *Hamntulterhällan* at the resting haven inside the island Gåsflöten SW Holmön in Southern Västerbotten. It appears that such local and dialectal variants mainly are found at smaller natural havens. Interestingly, in line with the later site is the ancient, now totally disused route leading to a medieval chapel-yard dated at least to the later part of the 15th century, to serve sailors (Huggert 2004). Other alternative explanations of possible sea mark names include geodetic marks of later times; cf. Wennström 2005.
- 187 Horstmann 1971.  
 188 Birkeli 1973: 49.  
 189 Westerdahl 1989, Norrlandsleden I: 167, map p. 170.  
 190 Stylegar & Grimm 2003: 105f.  
 191 Birkeli op. cit.  
 192 Rygh Inledn. 1898: 62, Lindroth 1922: 110f., Knudsen 1931: 114, Ohlsson 1939: 102, Morcken 1970, Crumlin-Pedersen 1978: 66.  
 193 Morcken 1970 and below.  
 194 There are numerous cases in the forests of the North. *Korshuggna hällan*, 'cross-hewn rock,' is the name of the border mark in Hömyra, Nordmaling, Ångermanland, between the villages of Ledusjö and Brattfors and the common land of the iron works at Olofsfors in the 18th century. Lantmäteriverkets arkiv (official map archives of Sweden).  
 195 Cf. *Daumannen* etc. in Norway note 145. However, the name may allude to a *Deadman*, also found in place names, an international maritime term for "a rock, tree, or any stable object that a rope or cable can be attached to and then connected to a vessel in order to heave the ship onto land for careening" (cf. Westerdahl 2010: 313f.).  
 196 Karsten 1921 I: 314f., Zilliacus 1989: 226.  
 197 Sandnes & Stemshaug 1976: 189, Zilliacus loc. cit.  
 198 For Värmland see Ernvik 1955.  
 199 Horstmann 1971.  
 200 Otherwise *hafnarmerki*, *hafnarmark* (Fritzner 1867).  
 201 Förteckning över alla viktiga sjömärken 1817 in Krigsarkivet (War Archives), Stockholm, e.g. illustrated in Eriks-son 1994; Underrättelser 1842, 1852.  
 202 Diploma: Svenskt diplomarium/Diplomarium Suecanum, RBP 217. The grave stones mention important people buried in the Cathedral and in Vårfrukyrkan in Uppsala (Gardell 1945: 250, 267).  
 203 Ellmers 1972/1984: 70.  
 204 Lovén 2001.  
 205 Westerdahl 2003: 46f.  
 206 Bjørnbo & Petersen 1904.  
 207 Birkeli 1973: 250 maintains that the process started in the 11th century. More skeptical is, as has been pointed out as reasonable above, Gabrielsen 2002.  
 208 Morcken 1970: 84, 90f., dates them even earlier than Birkeli, but with little argumentation.  
 209 Stylegar/Grimm 2003. Already in 1867 Fritzner says (I:687, on *hafnarkross*): "Af saadanne Kors er det vel, at forskjellige Havne langs Norges Kyst har faaet Navnet 'Korshavn:' From such crosses it seems that different harbours along the coast of Norway have got the name Korshavn."  
 210 *In cuius littore cruce religiosa ab insula ab incolis cura constructa excidere adorsi sunt/ insigni stiptis ruina maiorem pyratice gloriæ habituri.* "They attacked and cut down a cross, which had been erected on the shore of this sound by the devoted piety of the inhabitants thus ruining a famous landmark to gain the more renown for their piracy ..." Ed. Eric Christiansen XIII 534 fol. CLXXVII, see Saxo Grammaticus.  
 211 The parish Morup is mentioned above in connection with the sea mark *Glomsten*, known from AD 1226. At the site is found a *Kar*- name. This normally denotes a kind of simple caisson used at a medieval harbour pier.  
 212 A probable descendant of rituals at important passages is the baptism of sailors (Westerdahl 2004 etc.).  
 213 An argumentative prototype is offered by Gunnar Pellijeff on two Finnish place names, *Ristikari*, 'Cross Skerry' in Norrbotten, Sweden. It will be referred to here with some additions by this author. Both these name sites are situated along the inner route, now disused, between Kalix and Torneå. Close to the northernmost *Kugg*- name in Sweden and in the same route lies *Korsgrund*, with the same meaning as the Finnish names, in Kalix. At this spot the inner route may also have met an outer, in a crossway or crossroute. On this name Pellijeff states: "is nowadays connected with a shallow land strip with (the island) Vattungen. It cannot be a name based on similarity. Has there been a cross?" In the same inner route we meet *Korsnäset*, the spit which is the utmost point of the sawmill settlement Karlsborg: "neither do we have a similarity name here" (Pellijeff 1985: 94, Westerdahl 1989: 169). Transl. by the author.  
 214 Westerdahl 1980: 322ff., 328, 1986: 48ff., 1992: 7.  
 215 Modéer 1936: 116.  
 216 Morcken 1970.  
 217 Olaus Magnus Historia 12:19.  
 218 A drawing by Lorich; Naish 1985: 27, after Lang 1965.  
 219 Quotation from Morcken 1970: 40, "oc der paa staar en Vaarde met en Tynne. Holder det land vel (unna?) som Tynnen staar paa." Transl.: the author.  
 220 E.g. at the high rock *Tjärtunberget*, from *tjärtunna*, 'tar barrel', in Skuleskogen (National park), Ångermanland, Sweden.

- 221 Sverris saga, 169, Norges Kongesagaer 3: 251.
- 222 Morcken op. cit.
- 223 Diar. Gyll. 1962 (AD 1622–1667).
- 224 Stahre 1986.
- 225 From Lake Vänern can be reported *Korset*, ‘the cross’ and *Tunnan* in the same locality, moreover *Tunnebogen* and *Tunnön* at other striking passages of fairways (Hultqvist 2001: 147, 208, 277).
- 226 Jørgensen 1979: 67. Cf. for Denmark generally Jørgensen 1980–83, Houken 1976 (1956).
- 227 The element *Stiku*, *Steku* in Finn. Swed. Zilliacus 1966: 235; cf. Danish *stejl*, West Swedish *stegel*, in Eastern Sweden mainly called ‘gistgård’ with the same meaning; Stahre 1986: 163f.
- 228 In Styrbjörn Sviakappas saga is retold that the Swedish king Erik (the Victorious), purportedly before the turn of the century AD 1000, was piling the common sea route to obstruct the attack from his nephew Styrbjörn, “skyldi ok láta stika hjoðleið há er til Uppsala lá” (Flateyrbók 1944: 148). The legendary Norwegian king Harald Hárfagri went up the Göta älv river at the end of the 9th century with his fleet as far as it was possible due to a piling, called *stikin* (Heimskringla I. Íslenzk Fornrit Vol. XXVI, 1979: 112).
- Ivar Modéer regarded place names on *Stäk-*, *Stek-*, *Steg-* etc. exclusively to denote fishing weirs, which is the meaning of this element in modern times, at least in parts of Småland in Southeastern Sweden, mostly in rivers (Modéer 1937: 93ff.). This could, however, be shown to be patently wrong in a number of coastal localities in Eastern Sweden in general (Franzén 1978). Ole Crumlin-Pedersen (e.g. 1985) elucidates the denotation of pilings for defensive purposes in Danish *Steg(e)-* names.
- 229 Hovda 1961.
- 230 Hovda op. cit., Westerdahl 2003: 133 referring to Sandklef 1973, where parts of a *mebok* is published.
- 231 Morcken 1970: 22.
- 232 Obviously the case at *Masteskæran* in Vest-Agder, a skerry at Søndre Vassøy between Søgne and Mandal.
- 233 Westerdahl 2010: 314f.
- 234 Storå 1968. Archaeological finds at Björkö, Viking Age Birca, in Lake Mälaren include large amounts of eider bones.
- 235 In addition to possible names for cairns mentioned above Gösta Franzén (1979) has put forward the name element *har(g)* with this meaning.
- 236 Gustav Indrebø points out that all the medieval towns of Norway had a *Tjuvholmen* (Thief’s island) in their vicinity (Indrebø 1928). The gallows sites were often called like that, also in Sweden, including in my survey area (Westerdahl 1989: 190f.).
- 237 Löwenörn mentions “tvende Varder; eller som paa Svensk kaldes Baker ... Armene af dem begge vende imod Östen for at betegne at man skal gaae Östen om disse Skiær; og man kan gaae dem saa nær som man behager” (map of Kattegattet 1808: 14 with a special map of the anchor roads).
- 238 Modéer 1936: 75.
- 239 Andersson 1966.
- 240 *Norra Armen* seems rather to be a name of the regular sea route inside the archipelagos north of Söderarm. The division between the two arms runs at the principal sea route to Finland, at Björkö-Arholma. The part called *Norra Armen* is e.g. in 1786 the official route to Gävle, what I have called *Norrlandsleden* (Westerdahl 1987: maps 33, 34, 35).
- 241 Huldén 1952: 108.
- 242 Kortfatted ... Fyre og Dagmærker; Mærker og Seilmærcker from 1839 etc. Fortegnelse ... 1863 etc.
- 243 Hanssen 2000.
- 244 Solheim 1940, Hovda 1941a & b.
- 245 Westerdahl 2006d.
- 246 Westerdahl 2004.
- 247 In fact Henningsen suggests that the reason why there is no mention of baptism in Europe (during the Middle Ages, only in the later part of the 16th century) lies simply in the nature of the sparse material extant on the subject. “Seamen were not very communicative about the custom, there *may even have been some sort of taboo about it* (my italics), and no scholars before Worm (in Denmark) and Rudbeck (in Sweden) considered it to be of any interest” (Henningsen 1961: 201). *No magic works, anyway, if its details are retold to strangers!*
- 248 In this case we may have another *noa* name (or maybe a tabooed name?) of which the only remainder is the name of the bay Skälderviken (Skjold?), cf. Ljunggren 1943. This name could very well go back to prehistoric times.
- 249 Hovda 1941b and Henningsen 1960 mention several other places with recurring names which appear to be given with purposes of magic.
- 250 Solheim thinks that fishermen and sailors have primarily the same superstitions: “Det er tydeleg at fordomar hjå sjofolk stort sett har vori dei same som hjå fiskarar” (Solheim 1940: 14).
- 251 Solheim op. cit.: 165. Transl. above: the author.
- 252 Solheim op. cit.: 98.
- 253 Hultqvist 2001: 235ff.
- 254 Stahre 1952.
- 255 Modéer 1936: 124ff.
- 256 An originally West Nordic, i.e. Norwegian, form.
- 257 Westerdahl 2007.
- 258 Cf. the scope of Kirby/Hinkkanen 2000.

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## Historische Seezeichen. Eine Sozialgeschichte aus nordeuropäischer Perspektive

### Zusammenfassung

Das Material dieser Studie stammt aus ganz Skandinavien, ihren Hintergrund bilden aber zwei Erfassungen von Seezeichen, nämlich eine im schwedischen Norrland und eine in Vest-Agder im südlichen Norwegen.

Eine Untersuchung mit einer gewissen historischen Tiefe sollte ohne Frage einen Überblick über Zeichen unterschiedlicher Art aus der Zeit vor dem Beginn der regulären staatlichen Seezeichenorganisation im 19. Jahrhundert bieten. Daher konzentriert sich diese Studie auf die Zeit vor dem 19. Jahrhundert, insbesondere auf die Anfänge eines Seezeichensystems im Norden und die späteren Fremdeinflüsse auf Aufbau und Aufstellungsplan der Zeichen. Im Gegensatz zum Gros der Literatur zum Thema erhebt sie den Anspruch, eine gesellschaftliche und soziale Perspektive zu bieten, die auch die Diskontinuitäten aufzeigen soll, ohne eine Entwicklungsgeschichte im traditionellen Sinn darstellen zu wollen.

Die Quellenlage bezüglich des (nordischen) frühen Mittelalters, das erst um 1000 n. Chr. beginnt, ist uneinheitlich, jedoch fragmentarisch in unterschiedliche Erzählungen eingebettet, die eine Reihe politischer und anderer Tendenzen enthalten. Der norwegische Seehistoriker Roald Morcken ist ein Pionier auf diesem Gebiet, doch offensichtlich setzt er die Anfänge der Seezeichen viel zu früh an. Man könnte natürlich die sekundären altnordischen Erzählungen wörtlich nehmen und einige Seezeichen bereits auf das 9. Jahrhundert datieren, doch bestand zur damaligen Zeit keine soziale Formation, die auch nur annähernd ein System hätte umsetzen können. Andererseits haben temporäre Zeichen sicherlich schon vor dem Zeitalter der Wikinger existiert. Es gibt Spekulationen, nach denen bereits in der Bronzezeit Grabhügel an der Küste in sekundärer Funktion als Seezeichen errichtet wurden.

Ein erstes Seezeichenbauwerk, ca. 1100 n. Chr., wird mit dem norwegischen König Øystein assoziiert. Zur gleichen Zeit werden der Bau von Steinkirchen entlang der Küste und einer Hafenerweiterung bei Agdenes am Eingang zum Trondheimsfjord erwähnt. In dieser Zeit kommen mehrere Faktoren bei der Etablierung einer feudalen (im nordischen Sinn) Herrschermacht zusammen, etwa die katholische Kirche und lateinische Bildung, Dokumente und Register, die Anfänge städtischer Strukturen, königliche Wohnsitze u.a.m.

Es ist evident, dass das einheitliche System warnender Leuchtfeuer aus derselben Periode des Mittelalters, ab 1100 und danach, stammt wie andere Phänomene des feudalen Zeitalters mit oft standardisierten Begriffen. Wie beim englischen Wort *beacon* (es hat gemeinsame – möglicherweise friesische – Wurzeln mit dem dänischen *bavn*) verschmilzt die Terminologie diese mit den tatsächlichen Seezeichen, die aus aufeinander geschichteten Steinen ohne Mörtel (*varder, båk, kummel*) errichtet wurden. Da die ersten Leuchtfeuer auch als Seezeichen benutzt wurden, ist diese Verschmelzung nur natürlich. Sie wurden naheliegenderweise auf der Spitze von Hügeln



und Felsen platziert, und so konnten ihre Umrissse auch dann nützlich sein, wenn Nebel die tiefer liegenden *varder* unsichtbar machte. Der venezianische Seefahrer Pietro Quirini, der im Røst-Archipel der Lofoten im Jahr 1432 Schiffbruch erlitt, erwähnte *veter* oder *varder* auf hohen Bergen als Navigationshilfen auf seinem Weg zurück nach Trondheim.

Diese Elemente konnten als Monumente der Macht des Königs betrachtet werden, die sichtbar an der Segelroute lagen, welche die Grundlage des Reichs bildete und es als *Nordroegr*, die Route in den Norden, zusammenhielt. Eine solche maritime Natur der Kontrolle über das Reich gilt auch für die anderen nordischen Königreiche – Dänemark mit Teilen des südlichen Baltikums und Schweden zusammen mit Finnland –, obwohl es in diesem Zusammenhang nirgends Verweise auf Seezeichen gibt. Ein Holzkreuz in Dänemark, das um 1137 von slawischen Piraten niedergerissen wurde, könnte ein Seezeichen gewesen sein. Bei anderen, in altnordischen mittelalterlichen Quellen erwähnten Zeichen (vor allem *hafnar-kross* oder *hafnar-mærki*) handelt es sich um Kennzeichnungen von Häfen.

Wie bei den Straßen an Land scheint die Sicherung und Markierung von Seewegen bis in die jüngere Geschichte hinein von der Stärke despotischer Monarchen abhängig gewesen zu sein. In Zeiten schwacher Führung und von Interregnen zerfiel das System rasch. Dies ist ein gesellschaftliches Phänomen, das sich auf jede Periode anwenden lässt. So finden sich ähnliche Monumente bzw. deren Relikte sowohl auf den Seewegen (Inseln, Küstenlinien) als auch entlang von Straßen und Wegen an Land.

Seezeichen werden im Rahmen dieser Untersuchung nicht nur als zweckdienlich für die Navigation auf dem Seeweg oder im Hafen betrachtet, sondern auch als Mittel genereller Kennzeichnung. Das größte Bedürfnis nach erbauten Seezeichen bestand bei Fremden im Land, nicht bei den Einheimischen, die nichtsdestotrotz in der Lage sein mussten, ihre Küste wiederzuerkennen, nicht zuletzt bei Nebel oder unsichtigem Wetter.

Als rein visuelles Hilfsmittel ist ein Seezeichen laut Definition des »International Dictionary of Aids to Marine Navigation« ein künstliches oder natürliches Objekt von leicht erkennbarer Form und/oder Farbe, das sich in einer solchen Position befindet, dass es auf einer Karte identifiziert oder auf eine bekannte Navigationsanweisung bezogen werden kann (Naish 1985).

Bei den in der Definition angesprochenen natürlichen Objekten handelt es sich sicherlich um die ältesten, und viele von ihnen werden immer noch genutzt. Es sind auffällige Hügel, helle Flecken auf ansonsten grauen oder schwarzen Felsen, Gebäude (dabei vor allem Kirchen) sowie vergänglichere Dinge wie etwa einzelne Bäume. Beispiele dieser Typen finden sich in Texten aus dem gesamten Norden. Alles konnte als Seezeichen dienen, solange man nur ungefähr wusste, wo man war und wohin man wollte. Nur einige wenige wurden extra aufgestellt, meistens errichtet aus Steinen oder Holz. Andererseits gab es aber immer auch immaterielle, »kognitive« Seezeichen. Bei diesen handelt es sich um Gefahren anzeigende Namen oder solche von Landtieren. In Initiationsriten mussten die Neulinge unter den Fischern und Seeleuten sich diese gefährlichen Orte einprägen.

Es sind nur wenige Überreste mittelalterlicher Seezeichenbauten erhalten. Im Übrigen sind sie schwer datierbar, obwohl Lichenometrie und die Messung der Oberflächenerosion möglich sind. Der Hauptgrund für die geringe Zahl von Bauten liegt in der Tatsache, dass die Objekte in Kriegszeiten versetzt oder vollständig abgebaut wurden, um nicht dem Feind zu dienen, eine Maßnahme, auf die schon 1555 von Olaus Magnus hingewiesen wurde.

Die einzig mögliche Suche nach Standorten älterer Seezeichen muss von zur See gehörigen Ortsbezeichnungen ausgehen, die auf solche verweisen. Diese bringen jedoch erhebliche Interpretationsprobleme mit sich. Wichtig ist in diesem Zusammenhang ein Überlieferungskontext über wichtige Seewege und bedeutende Häfen. Eine kleine Gruppe von Namen mit dem Element *Grim* oder *Skall(e)* deutet an, dass einige der ältesten Seezeichenbauten in der Tat eine

Maske oder einen Kopf trugen. Einige von ihnen scheinen auf unerlaubt eingerichtete Häfen hinzuweisen, das heißt die implizierten Seezeichen wurden in Opposition zur offiziellen Macht und ihren Verordnungen errichtet. Eine große Zahl von Namen verweist auf Kreuze (*Kors-*, *Kross-*), unter ihnen *Korshamn*, der Hafen des Kreuzes, das im 14. und (vorwiegend) 15. Jahrhundert in mindestens vier Fällen schriftlich belegt ist. Diese Namen können aber auch den vom König garantierten Marktfrieden bezeichnet haben. Es gibt außerdem eine Reihe von Namens-typen, die auf steinerne Seezeichen oder das Steinfundament für einen hölzernen Pfahl mit einem Kreuz oder anderen Zeichen an der Spitze verweisen.

Es ist ein durchgehendes Charakteristikum der Geschichte nordischer Seezeichen, dass sie als menschliche Gestalten verstanden wurden. An Olaus Magnus' Holzschnitten aus der Mitte des 16. Jahrhunderts (1539, 1555) wird dies deutlich sichtbar, es zeigt sich aber auch in Ortsnamen und Werken der frühen nordischen Literatur. Namen wie *Karl-* (*Kall*) und *Kjerring*, *Gumman*, *Gubben* umfassen sowohl Männer als auch Frauen eher fortgeschrittenen Alters, während auf Jugendliche unter Bezeichnungen wie *Dreng* oder *Jomfru* Bezug genommen wird. Hierin kommen bis zu einem gewissen Grad Geschlechter- und andere soziale Vorurteile zum Ausdruck.

Eine weitere Terminologie stammt aus späterer Zeit und ist oftmals von anderen Ländern übernommen worden oder beschreibt von außen übernommene Formen, so *prick* (deutsch), *boj* (holländisch) und *stang* (Pfahl), oder die darauf angebrachten Zeichen wie *tunna/tonne* (Fass), *kula*, *kugle* (Ball), *tavla* (Tisch, Brett), *galge* (Galgen), *arm*, *spira* (Spiere), *mast* und *kärve* (Garbe) sowie einige andere Varianten. Diese Begriffe tauchen in der zweiten wichtigen Phase des Seezeichenbaus auf, der Zeit zwischen 1450 und 1550. Die Einflüsse kamen eher aus den Niederlanden und Deutschland als aus England oder Schottland, obwohl die alten Kontakte zu letzteren beiden erhalten blieben. Die Pioniere in diesem Prozess waren die großen Hansestädte an der Nordsee oder im Ostseeraum. In beiden Gebieten wurden seit dem 14. Jahrhundert in den flachen Gewässern Systeme aus Tonnen, Baken und Leuchttürmen errichtet.

Die ältesten Leuchtfeuer im Bereich der Ostsee brannten in Travemünde/Lübeck und Falsterbo (Skåne) während der ersten Hälfte des 13. Jahrhunderts. Sie gingen zweifellos auf Initiative der Hansestädte zurück. Wie aus einem Brief Gustav Wasas aus dem Jahr 1550 mit Instruktionen für die neue Stadt Helsingfors (Helsinki) hervorgeht, hat er sich persönlich für die Errichtung von Seezeichen eingesetzt, sowohl steinerner Leuchtfeuer auf Schären und vorgelagerten Hügeln als auch im Wasser schwimmender Tonnen mit Spieren nach deutschem Muster.

Die Verantwortung für die Pflege und Wartung solcher Zeichen wurde offensichtlich den Bauern und Fischern an der Küste übertragen, ursprünglich möglicherweise als Teil ihrer Verpflichtungen dem Feudalherrn gegenüber. Später wurden Lotsen mit dieser Aufgabe betraut, die zum Großteil unter den Fischern mit ihrer langen Segelerfahrung rekrutiert wurden.

Wir wissen wenig über die konkrete Umsetzung, doch wurden viele dieser Zeichen, wie man vermuten darf, insbesondere an Hafeneingängen und innerhalb städtischer Häfen errichtet. In der Tat tauchten in diesem Zeitraum größere Schiffe mit zwei oder drei Masten und größerem Tiefgang in den nördlichen Gewässern auf, was zum Teil neue und tiefere Schifffahrtsstraßen erforderlich machte. Olaus Magnus stellte bereits 1539 die Eisenringe zum Festmachen von Schiffen als ein typisches Element des Seewegs nach Bergen dar, und es ist kein Zufall, dass solche Einrichtungen entlang der Route zu den wichtigsten Hansestädten im Norden installiert wurden. Später waren Tausende von Ankerringen überall an den felsigen Küsten Skandinaviens zu finden, beaufsichtigt in den meisten Fällen von Privatleuten, die von den Schiffsführern Anlegegebühren verlangten.

Die große Bedeutung der deutschen und holländischen Seezeichenordnung legt eine Verbindung der hanseatischen Händler mit den Einheimischen aus dem Norden insbesondere in dieser

Sparte der Nautik nahe. Der gebräuchliche nordische Name für »deutsch« war damals *garp/er*. Es gibt in der Tat eine ganze Reihe von Inseln sowie Ortsbezeichnungen auf Inseln in Schweden und Norwegen, die *Garpen* genannt werden. Manche von diesen finden sich entlang für Fremde verbotener Routen und verweisen daher möglicherweise auf einen bestehenden Schleichhandel. In mehreren Fällen bestätigt die mündliche Überlieferung die Existenz von Leuchtfeuern an diesen Stellen. Es ist also möglich, dass *Hollender*-Namen einen ähnlichen holländischen Einfluss auf die Orte von Seezeichen anzeigen, jedoch weniger wahrscheinlich, denn sie scheinen meistens auf Häfen bzw. Ladestellen oder auf Örtlichkeiten hinzuweisen, an denen Schiffe gesunken sind. *Pampus*, ein weiterer wandernder Ortsname, stammt von einem bekannten Riff im Hafen von Amsterdam. Es gibt mehrere Schären und Untiefen in der Nähe von Häfen im Norden, die *Pampus* genannt werden.

Schließlich ist zu bemerken, dass der Große Nordische Krieg 1700–1721 eine Periode fast weltweiter Seekriege war, in der viele alte Seezeichen entfernt und andere vielleicht nur für eine gewisse Zeit errichtet wurden. Die Rückkehr zu Friedensbedingungen machte den Wiederaufbau eines Seezeichensystems und erstmals den Aufbau eines professionellen Lotsensystems möglich. Diese aus Fischern rekrutierten Lotsen waren mit der Wartung der Seezeichen betraut. In der Folge wurden ab 1725 im gesamten Gebiet des Nordens dauerhafte Lotsenorganisationen aufgebaut. Dies ist die dritte im Text angesprochene Periode. Die vierte wichtige Periode, die jedoch nicht näher in den Blick genommen wird, ist die nach den Napoleonischen Kriegen ab ca. 1815.

## Signalisation maritime historique. Une histoire sociale d'un point de vue d'Europe septentrionale

### Résumé

La matière de cette étude provient de l'ensemble de la Scandinavie, mais deux relevés de signalisation maritime, un dans le Norrland suédois et un dans la région du Vest-Agder dans le sud de la Norvège, en sont à la base.

Un examen faisant preuve d'une certaine profondeur historique ne devrait pas manquer d'offrir un panorama sur différents types de signalisation de l'époque précédant le début de l'organisation nationale régulière de la signalisation maritime au XIX<sup>e</sup> siècle. C'est pour cette raison que cette étude se concentre sur l'époque avant le XIX<sup>e</sup> siècle, en particulier sur les débuts d'un système de signalisation maritime dans le Nord et l'influence étrangère ultérieure sur l'élaboration et le plan de répartition des signaux. Contrairement au gros de la littérature sur le sujet, elle prétend proposer une perspective sociétale et sociale, qui devrait montrer également les discontinuités, sans pour autant vouloir présenter une genèse dans le sens traditionnel du terme.

La situation des sources se rapportant au début du Moyen Âge (nordique), qui ne commence qu'aux alentours de l'an 1000 après J.-C., est hétéroclite, mais néanmoins enchâssée de manière fragmentaire dans différents récits qui comportent une série de tendances politiques et autres. L'historien maritime norvégien Roald Morcken est un pionnier dans ce domaine, cependant, il place les débuts de la signalisation maritime apparemment beaucoup trop tôt. On pourrait évidemment prendre au pied de la lettre les récits secondaires en norois et dater déjà quelques signaux maritimes du IX<sup>e</sup> siècle, toutefois, il n'existait pas de formation sociale à l'époque qui aurait pu, même de loin, appliquer un tel système. D'un autre côté, des signaux temporaires ont certainement existé avant l'âge des Vikings. Il existe des spéculations selon lesquelles à l'âge du bronze déjà, les tumulus sur la côte étaient érigés pour servir, secondairement, de signalisation maritime.

Un premier édifice de signalisation maritime, environ 1100 après J.-C., est associé au roi norvégien Øystein. À la même époque sont évoquées la construction d'églises en pierre le long de la côte et une digue portuaire près d'Agdenes à l'entrée du fjord de Trondheim. À cette époque se rencontrent plusieurs facteurs lors de l'établissement d'un pouvoir régnant féodal (dans le sens nordique du terme), comme l'Église catholique et l'éducation, ainsi que les documents et les registres en latin, les débuts des structures urbaines, les résidences royales, et bien d'autres encore.

Il est évident que le système homogène de phares mettant en garde provient de la même période du Moyen Âge, à partir de 1100 et ultérieurement, comme d'autres phénomènes de l'époque féodale, avec des termes souvent standardisés. Comme dans le mot anglais *beacon* (il a des racines communes – probablement frisonnes – avec le danois *bavn*), la terminologie de ceux-ci se fond avec les véritables signaux, qui furent érigés à partir de pierres empilées sans mortier (*varder, båk, kummel*). Comme les premiers phares furent également employés en tant qu'amers, cet amalgame n'en est que plus naturel. Ils furent placés de manière à être proches au sommet de collines ou de rochers, et ainsi, leurs contours pouvaient aussi être utiles lorsque le brouillard rendaient les *varder*, situés plus bas, invisibles. Le navigateur vénitien Pietro Quirini, qui fit naufrage dans l'archipel Røst des îles Lofoten en 1432, évoquait *veter* ou *varder* sur de hautes montagnes comme aide à la navigation sur sa route de retour vers Trondheim.

Ces éléments, qui se trouvaient visibles le long de la route de navigation qui formait la base du royaume, et en tant que *Nordrvegr*, la route vers le Nord, la maintenaient, pouvaient être considérés comme des monuments du pouvoir royal. Une telle nature maritime des contrôles sur le royaume est également valable pour les autres royaumes nordiques – le Danemark avec des parties de la Baltique du Sud et la Suède avec la Finlande –, bien que dans ce contexte précis, il n'existe nulle part de références à des amers. Une croix en bois au Danemark, qui fut abattue vers 1137 par des pirates slaves, aurait pu être un amer. Pour d'autres signaux, évoqués dans des sources médiévales norroises (avant tout *hafnar-kross* ou *hafnar-mærki*), il s'agit de la signalisation de ports.

Comme pour les routes sur terre, la garantie et le marquage des routes navigables semblent être dépendants de la force des monarques despotiques, jusque dans l'histoire plus récente. Aux époques de gouvernements faibles et de règnes intermédiaires, le système s'effritait rapidement. Ceci est un phénomène social qui peut s'appliquer à chaque période. Des monuments semblables ou leurs vestiges se trouvent ainsi aussi bien sur les routes navigables (îles, côtes) que le long des routes et chemins terrestres.

Dans le cadre de cette analyse, les amers ne sont pas considérés uniquement pour leur utilité dans la navigation sur les routes navigables ou dans les ports, mais également comme moyens de signalisation générale. Le plus grand besoin d'amers construits était ressenti par les étrangers dans le pays, pas par les autochtones qui, néanmoins, devaient être en mesure de reconnaître leurs côtes, non seulement par brouillard ou temps peu clair.

Selon la définition de *l'International Dictionary of Aids to Marine Navigation*, un amer purement visuel est « un objet factice ou naturel de forme et/ou de couleur facilement reconnaissable, se trouvant dans une position telle qu'il puisse être identifié sur une carte ou tiré de consignes de navigation connues (Naish 1985) ».

En ce qui concerne les objets naturels évoqués dans la définition, il s'agit certainement des plus anciens, et nombre d'entre eux sont encore utilisés. Ce sont des collines frappantes, des taches claires sur des rochers sinon gris ou noirs, des édifices (avant tout des églises), ainsi que des choses plus périssables comme des arbres isolés. Des exemples de ce type figurent dans des textes de l'ensemble du Nord. Tout pouvait servir d'amer, tant que l'on savait à peu près où l'on se trouvait et où l'on voulait aller. Seuls quelques-uns ont été érigés exprès, la plupart en pierre



ou en bois. D'un autre côté, il y eut toujours des amers immatériels, « cognitifs ». Il s'agit là de noms indiquant des dangers ou ceux d'animaux terrestres. Dans des rites d'initiation, les néophytes parmi les pêcheurs et les marins devaient se mémoriser ces lieux dangereux.

Il ne reste que peu de vestiges d'édifices médiévaux ayant servi d'amers. Au demeurant, ils sont difficilement datables, bien que la lichénométrie et les relevés de l'érosion des surfaces soient possibles. La raison principale du peu d'édifices est due au fait que les objets, au cours des guerres, étaient déplacés ou totalement démontés, afin de ne pas servir à l'ennemi, une mesure qui est déjà citée en 1555 par Olaus Magnus.

L'unique recherche possible des emplacements d'amers plus anciens doit partir de noms de lieux ayant trait à la mer, et qui les évoquent. Ceux-ci présentent toutefois de graves problèmes d'interprétation. Dans ce contexte, il est important d'avoir recours à un contexte de tradition des principales routes de navigation et des ports importants. Un petit groupe de noms comportant l'élément *Grim* ou *Skall(e)* indique que certains des anciens amers portaient effectivement un masque ou une tête. Quelques-uns d'entre eux semblent indiquer des ports établis sans permission, ce qui signifie que les amers impliqués furent érigés en opposition au pouvoir en place et à ses décrets. Un grand nombre de noms indique des croix (*Kors-*, *Kross-*), parmi eux *Korshamn*, le port de la croix, qui est confirmé par écrit aux XIV<sup>e</sup> et (surtout) XV<sup>e</sup> siècles dans au moins quatre cas. Ces noms pourraient également avoir désigné les droits de marchés garantis par le roi. Il existe en outre une série de types de noms qui indique des amers en pierre ou des fondements en pierre pour un pieu en bois avec une croix ou un autre signe à sa pointe.

Une caractéristique continue de l'histoire des amers maritimes nordiques est qu'ils ont été compris comme des figures humaines. C'est nettement visible sur les gravures sur bois d'Olaus Magnus du milieu du XVI<sup>e</sup> siècle (1539, 1555), mais également dans les noms de lieux et les œuvres de l'ancienne littérature norroise. Des noms comme *Karl-* (*Kall*) et *Kjerring*, *Gumman*, *Gubben* comprennent aussi bien des hommes que des femmes d'un âge plutôt avancé, tandis que des désignations comme *Dreng* ou *Jomfru* font plutôt allusion à des jeunes. Ici se manifestent, jusqu'à un certain point, des préjugés concernant le genre ou encore d'autres préjugés sociaux.

Une autre terminologie provient d'une période plus tardive, et elle est fréquemment reprise par d'autres pays, ou décrit des formes reprises de l'extérieur, comme *prick* (allemand), *boj* (hollandais) et *stang* (pieu) ou les signes installés dessus comme *tunna/tonne* (tonneau), *kula*, *kugle* (balle), *tavla* (table, planche), *galge* (gibet), *arm*, *spira* (espar), *mast* et *kärve* (gerbe) ainsi que quelques autres variantes. Ces termes surgissent dans la deuxième période importante de l'établissement d'amers, entre 1450 et 1550. Les influences provenaient plus des Pays-Bas et d'Allemagne que d'Angleterre ou d'Écosse, bien que les anciens contacts avec ces deux dernières aient été maintenus. Les pionnières dans ce processus furent les grandes villes de la Hanse sur la mer du Nord et dans la région de la Baltique. Dans les deux régions étaient érigés des systèmes de tonneaux, de balises et de phares dans les eaux plates depuis le XIV<sup>e</sup> siècle.

Les plus anciens phares dans la région de la Baltique brillèrent à Travemünde/Lübeck et à Falsäterbo (Skåne) durant la première moitié du XIII<sup>e</sup> siècle. Ils sont indubitablement nés d'une initiative des villes hanséatiques. Comme il en ressort d'une lettre de Gustav Wasa de 1550, comportant des instructions pour la nouvelle ville d'Helsingfors (Helsinki), il a personnellement veillé à l'établissement d'amers, aussi bien des phares en pierre sur des roches moutonnées et des promontoires que des tonneaux flottant en mer avec des espars selon le modèle allemand.

La responsabilité de l'entretien de tels signaux fut visiblement déléguée aux paysans et pêcheurs de la côte, à l'origine comme faisant probablement partie de leurs obligations vis-à-vis du seigneur féodal. Plus tard, c'est à des pilotes, qui étaient en grande partie recrutés parmi les pêcheurs avec leur longue expérience de navigation, que fut confiée cette tâche.

Nous savons peu de choses sur la concrétisation, toutefois, de nombreux signaux furent en

particulier érigés, comme on peut le supposer, à l'entrée des ports et à l'intérieur des ports urbains. En effet, c'est à cette époque que font leur apparition dans les eaux nordiques des navires plus grands à deux ou trois mâts et d'un tirant d'eau plus important, ce qui rendit nécessaires des voies nouvelles et plus profondes. Olaus Magnus représente déjà en 1539 les anneaux de fer pour amarrer les navires comme un élément typique de la route vers Bergen, et ce n'est pas un hasard que de telles installations aient vu le jour le long de la route vers les plus importantes villes hanséatiques du Nord. Plus tard, on trouvait sur les côtes rocheuses de la Scandinavie des milliers d'anneaux d'ancrage, dont la plupart étaient surveillés par des personnes privées qui exigeaient des capitaines des taxes d'ancrage.

La grande importance de la réglementation de la signalisation maritime allemande et hollandaise suggère une relation des marchands hanséatiques avec les autochtones du Nord, en particulier dans ce domaine de la navigation. Le nom courant nordique pour « allemand » était autrefois *garp/er*. Il existe en effet toute une série d'îles ainsi que de désignations de lieux sur des îles en Suède et en Norvège qui sont nommés *Garpen*. Certains d'entre eux se trouvent situés le long de routes interdites aux étrangers et indiquent donc probablement l'existence d'une contrebande. Dans de nombreux cas, la tradition orale confirme l'existence de phares à cet endroit. Il est aussi possible que des noms *Hollender* annoncent une influence hollandaise semblable sur les emplacements de signaux, cependant moins probable car ils semblent la plupart du temps indiquer des ports ou des endroits de chargement ou des lieux qui ont vu sombrer des navires. *Pampus*, un autre nom de lieu itinérant, provient d'un récif connu dans le port d'Amsterdam. Il existe plusieurs roches moutonnées et bas-fonds à proximité des ports du Nord qui sont nommés *Pampus*.

Pour finir, il faut remarquer que la grande guerre du Nord de 1700–1721 fut une période de guerre navale, étendue sur presque toutes les mers, au cours de laquelle de nombreux anciens amers furent enlevés et d'autres érigés peut-être temporairement. Le retour aux conditions de paix rendit possible la reconstruction d'un système de signalisation maritime et, pour la première fois, l'établissement d'un système professionnel de pilotage. C'est à ces pilotes recrutés parmi les pêcheurs qu'incombait l'entretien des amers. Dans la foulée, des organisations de pilotes durables furent établies à partir de 1725 dans l'ensemble de la région du Nord. C'est la troisième période évoquée dans le texte. La quatrième période importante, qui ne sera toutefois pas analysée en détail, est celle débutant après les guerres napoléoniennes à partir d'environ 1815.