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Is there an Archaeological Potential for a Sociology of Landing Sites?

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ABSTRACT:

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Repeatedly, archaeological research on landing sites draws upon the equivalence between a naturally suitable coast and a landing site/harbour. This kind of research emanates from an archaeologically and socially ill-defined landing site concept and has created a basis for arbitrary discussions on the nature of maritime activities of past societies. There is no comprehensive and integrated understanding of the existing variability, character and patterns of landing site behaviour and relations. This article addresses the question of what characterises landing sites for watercrafts in an archaeological and social perspective. If such characteristics can be defined, what are the possibilities of seeing any of these traits in an archaeological material? Defining a landing site as a contact zone where movements and meetings on land and by watercraft take place and are facilitated by the locality as such, a generally applicable model for the archaeological study of landing sites is suggested and checked against three different archaeological case studies from the Baltic Sea region.

KEYWORDS: Archaeology, Baltic Sea region, Fribrødre Å, Harbour, Krogen Island, Landing site, Model of interaction, Maritime archaeology, Maritime cultural landscape, Sociology of landing sites, Tornimäe.

Is there an Archaeological Potential for a Sociology of Landing Sites?

The conventional landing site concept

Travel by water has been practiced almost throughout the history of humankind. Motives have ranged from economic and/or militarily derived demands, leisure, curiosity, a wish to explore, etc. In addition, the agencies of movements by water, i.e. watercrafts, vary almost infinitely. However, irrespective of motivation or vessel, safe landing has always been an integral and important part of water voyages and the ultimate reason why there are landing sites in the first place. Watercraft landing is thus first and foremost a navigational process, where the watercraft approaches the coast/shore from the sea or lake/river to the depth that is safe for the vessel; this course of action often also comprises disembarkation. Therefore, landing sites for watercrafts can be defined as sites in between water and land that people have launched from and reached with different kinds of watercrafts and where they have performed activities associated with this.

A good landing site should offer shelter against winds, waves and swell; such shelter can either be provided by natural features or be enhanced by man. A set of natural physical circumstances allows for a division of landing sites into various categories according to the type of location, such as landing sites at estuaries, delta arms and rivers, protected by islands as well as inland landing sites. (e.g. Morgan 1964:26ff). This can inspire to a geomorphological classification of coasts and shores according to their suitability for landing activity. However, suitable or even optimal settings for a landing site are far from the only requirement for a place to function as a site for landing. This fact comes to the fore when we consider that many naturally sheltered sites, i.e. potential landing sites, were never utilized, despite their proximity to settlements. The existence of a coastal or even insular population, a temptation

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for inferring an adjoining landing site, is not a decisive circumstance. There are several ethnoarchaeological examples of populations abstaining from the possibilities provided by maritime surroundings, the Guanches of the Canary Islands being a case in point. The inhabitants of La Palma ate no fish and did not know how to catch them; on Tenerife, no one needed or desired to swim, and the use of boats was unknown in the whole archipelago (Cook 1900:454). Similarly, the sea remained unknown to the Riff Kabyles, although these Algerian Berbers lived on a coastal massif (de Planhol 2001:137). There are also examples of consciously giving up long-term seafaring traditions. The islanders of Pohnpei in Micronesia, according to the earliest records made by European visitors, did not possess ocean-going sailing vessels and did not venture beyond the barrier reef surrounding the island (Rainbird 2007:102-104). On the Siassi Islands, in the 1970s, after a series of fatal canoe accidents and by order of the Australian administration on humanitarian grounds, an end was put to a thousand year old tradition of inter-island voyaging (Keegan & Diamond 1987:66-67). Thus, a settlement by the water does not automatically establish a landing site in its vicinity. Needless to say, if there are specific maritime signatures in a settlement (and/or in the adjacent waters), there is also reason to ascribe a landing site to the location, or reason to search for a nearby landing site, but the interpretation must always depend on the investigated site. Suspecting the usual is not enough. On the other hand, man-made settings providing shelter for watercrafts or facilitating processes associated with embarkation and disembarkation, are a clear indications of water-bound traffic and a definite sign of landing activity.

Man-made settings connected to landing activity range from anchoring stones and poles, simple depressions and stone-cleared areas on the shoreline, to jetties, landing stages, piers, wharves, quays, etc. Similarly, by using natural physical circumstances for the classification, landing sites can be divided into different types also departing from man-made alterations and installations – for example, categorisation can be based on different kinds of breakwater installations (e.g. Morgan 1964:49-51). The classification of landing sites characterised by man-made settings can be based on other aspects too, e.g. available materials or construction methods are applicable as categorising features. However, as the analysis of landing sites can be based on a great variety of criteria, many other classifications have also been devised and employed, such as classification according to the type of commodity handled or according to the type of carrier (pre)dominating in the traffic (Weigend 1958:190ff). The same landing site may fit more than one classification.

Although the constructional properties of prehistoric watercrafts suggest that landing structures were not compellingly necessary, there is nevertheless archaeological evidence of landing facilities already from Stone Age and onwards (see Ilves submitted). Moreover, from a scholarly point of view, several kinds of techno-practical aspects are possible to investigate, e.g. emanating from shoreline alterations. Evidence can be found in water level

changes (Boon 1980; Ambrosiani 1985; Stanley 1999; Morhange *et al.* 2001; Sivan *et al.* 2001) and waterfront alterations, reclamations and extensions (Brigham & Hillam 1990; Brückner 1997; Höckmann 2003). In addition, different kinds of information on waterfront installations are possible to attain, including knowledge about the availability and origin of building materials, patterns of development of installations and civil engineering (Morel & de Weerd 1981; Blackman 1982a, 1982b, 2003; Milne 1985; Oleson *et al.* 1984, 2004; Oleson 1988; Raban 1988, 1992; Saitowitz *et al.* 1993; Hohlfelder 1997; Kalmring 2008).

Landing sites are optional and regardless of the amount of questions and answers concerning alterations, building phases, progressions and constructional functions, looking at landing sites *merely* from the waterfront point of view would characterise sites only in their capability to assist safe landing. Although structures meant to facilitate landing are important and often physically characteristic to landing sites, they do not tell us about the importance of landing sites in the wider social context (see also Rickman 1985:105-106, 1988:257). Why then are landing sites important for societies? Why are they located where they are, and what decides whether a landing site is a success or not? What can we find out about societies by the study of such sites?

Liminal by linking

Generally, the role of different landing sites in connection with trade and its organisation has been emphasized as one of the most essential aspects for understanding the establishment of landing sites, their situation, their innovations and their importance for societies (e.g. Eneborg 1929; Weigend 1955; Tiik 1957; Morgan 1964; Hoyle 1968; Layton 1981; Milne 1985; Rickman 1988; Turgeon 1998; Bergman 1999; Jackson 2001; Pasquinucci & Weski 2004; Haggi 2006). Additionally, landing sites are sometimes accentuated owing to their political and military significance and their role in urban development (Deasy 1942; Hohenberg & Lees 1995; Lee 1998). Nevertheless, in spite of these frequent ways of contextualizing landing sites in coastal areas, many were never linked to trade or spheres of political and military organisation. Instead, they linked in with fishing, grazing or maritime hunting without being reduced to places facilitating nothing but landing. There are, moreover, landing sites with explicit tasks providing a possibility for interaction and exchange of information. Landing sites are also established solely for technological development or leisure or as strategic hideaways, etc. Yet these aspects are seldom incorporated into scholarly analyses, as they are considered unreachable in terms of source material, which, in turn, emanates, at least partly, from the purely functionalistic and technological reasoning in

the studies of landing sites generalising, for example, the interdependency of shipbuilding and sites for landing.

The pronounced emphasis on trade has created a simplistic and almost deterministic understanding of landing sites. This tendency is especially apparent in archaeological studies (Ilves 2009). To account for inferences to be made on the basis of landing sites, we must deconstruct this rigid discussion and stop thinking about landing sites as mainly related to trade as well as stop deriving conclusions from, and using hypotheses based on the invisibility of landing sites. Instead, we should clarify and come to terms with a much more complex landing site category.

From a general social point of view, embracing men of war as well as children rafting bark boats, one should point out the importance of landing sites in their widest social sense, namely, as contact zones in both a cultural and a topographical sense. Landing sites, created for people using watercrafts, constitute sites for interplay between human beings who meet at a certain kind of border defined as a coast or shore. Only on coasts and shores is interaction made possible on land as well as on watercrafts and I therefore suggest that we look upon landing sites as water-bound contact zones – sites where movements and meetings of various kinds, both on land and by watercraft, are facilitated by situation and place, i.e. by locality (see also Horden & Purcell 2000; Falck 2003). Understanding landing sites in this way, their importance for society would not be trapped in rigorous and deterministic constructions; on the contrary, a wide variety of factors could be included in the subject of the inquiry.

Adapting this perspective, it becomes hypothetically possible to generalize about a diversity of cultural processes involved in landing. Since landing sites enable mobility and displacement both on land and by watercraft, they also constitute places for different kinds of connections, interactions, actions and counteractions as well as separation – landing sites are liminal places of communication. Allowing for coastal societies to be more or less dynamic, constant flows of people from diverse backgrounds probably meet to a much greater extent at landing sites than at many other places of contact. Owing to this quality, the well-known metaphor by which deserts are regarded as seas and oases as islands allows us to a certain degree to discuss landing sites as oases (also Reger 2010) – as the only places to access in the hazardous and unpredictable surroundings, and therefore to be reached by many. A range of analogous experiences and institutions could be hypothesised in this kind of meeting place; notably, a tendency for both landing sites and oases to bring together people of widely different backgrounds temporarily and/or seasonally. Inevitably, these meetings have a strongly confronting and affronting as well as selective and changing nature within the mixed frames of such communities. For example, contacts between people alike could be welcomed to a greater extent than in more detached surroundings, but also abhorred or taken more cautiously between people unlike. However, communication depends on the

dominating nature of social relations, and this also affects the actual places of communication.

Safety from the hazards of nature offered by landing sites is obviously relevant in seafaring societies – it is one of the reasons for establishing many landing sites exactly where they are and one of the main values for their users in general. Socially, however, landing sites are not safe in the same meaning of the word. Despite extensive regulations and laws directed among other things towards ensuring the peace at such places, landing sites and harbours are socially dynamic. Thus, they constitute sites suitable for provoking tension around social rules; counteractions could result in severe violence, and ports, for example, are often associated with frequent crimes and deviant social behaviour (e.g. articles at PortCities London website; <http://www.portcities.org.uk/london/server/show/nav.001001006>).

Nevertheless, inasmuch as social and administrative boundaries are often less fixed in port areas, greater acceptance towards social deviance is also ensured; tolerant attitudes allow for a diversity of lifestyles as well as, e.g., religious expressions. This means that landing sites may have been important for some agents as the only places where they were socially accepted (also Falck 2003).

On the basis of the above, a far from complete and hardly exclusive number of features associated with landing sites become apparent. Mobility, displacement and connectivity are definite constituents of landing sites. However, diversity, selectivity and tolerance can also be presumed. In addition, there are several categories usually kept apart and opposed, which polarize and co-mingle in the case of landing sites, such as safety and insecurity, accessibility and regulations. Thus, there is definitely a potential for a broader understanding of landing sites as a social phenomenon. However, while a historical and narrative sociology of landing sites and harbours is an acknowledged and employed methodological approach (e.g. Knight & Liss 1991; Lane 1997; Brown 2005; de la Fuente 2008; Harris 2010), there is as yet no such thing as a sociology of landing sites that would reach across time and space. Nevertheless, the discussion above has already moved us from seeing landing sites as merely thresholds between two distinct spaces for people coming and going, to seeing them as a space with its own effects and significance. Tentatively, and in important although not identical ways at every landing site, we find the same set of features applicable to each and every site, thus forming the foundation for suggesting a theoretical framework model for the archaeological study and understanding of landing sites for watercrafts (Fig. 1).

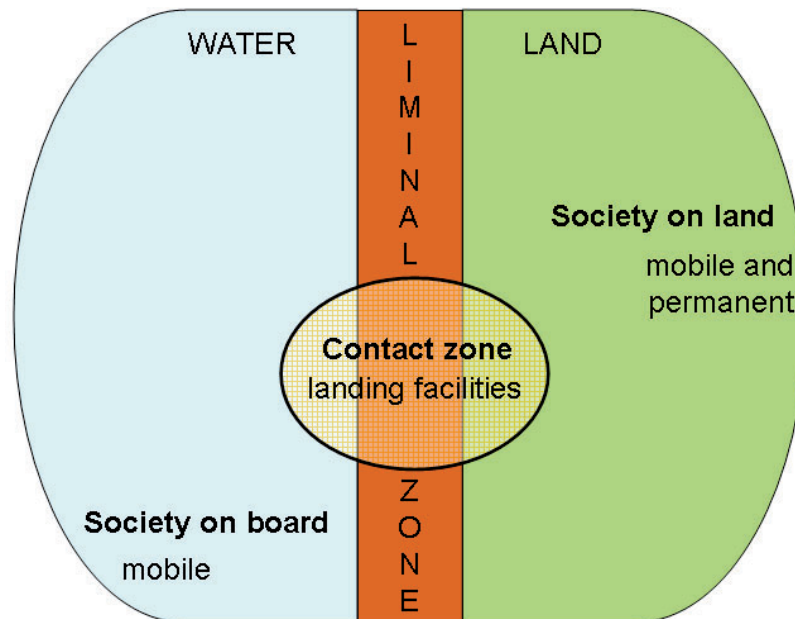


Fig. 1. A model of landing sites as contact zones

http://www.arkeologi.uu.se/digitalAssets/72/72896_IlvesFig.1.pdf

A MODEL OF LANDING SITES AS CONTACT ZONES

Landing sites for watercrafts are situated on the border between water and land. Apart from constructions, alterations or other obvious topographical and/or technological requirements to facilitate processes associated with safe embarkation and disembarkation, landing sites are essentially empty zones; however, they should not be reduced to the scope of watercraft operations only. Landing sites are not simply passive settings for landing, but socially constructed contact zones for both land-based individuals and groups and social units onboard watercrafts. The social function of landing sites is to facilitate movements and various kinds of meetings, both on land and by watercraft. However, in general, social communication at these places has a transitory aspect; thus, landing sites are no “societies”, they are meeting places. Furthermore, it must be stressed that landing sites often operate instrumentally to alter the status of individuals – for example: a housewife becomes a fisher, a seaman a drunkard, a farmer a pirate, etc. – there is a liminal aspect of social situations at landing sites in addition to the more straightforward physical liminality of the situation of the sites. This liminal quality of landing sites is, however, much more difficult to reach and argue for by means of archaeology only, and is thus in need of varying and contrasting studies specifically addressing the question of how the liminal quality was articulated in different cultural settings – something that is not further discussed in this article. However, I still accentuate this aspect in frames of the suggested model as a

new possible stepping stone to consider in further investigations, aspiring towards a richer understanding in landing site studies.

Obviously, in positing any model of broad application, many operation details cannot be specified and adaptations must be developed for specific situations. However, in order to move beyond the realm of trade and exchange and to capacitate the possibility for a comprehensive and integrated picture and an understanding of the existing variability, character and pattern of landing site behaviour and relations, it is justified to test the perspective proposed above. In the next part of the article I will evaluate the potential to study landing sites as contact zones archaeologically by means of three different cases from the Baltic Sea region.

Archaeological landing site signatures

Trade and exchange are important and/or decisive phenomena in many societies. They can easily be studied and evaluated with the help of archaeology (e.g. Callmer 1991; Sindbæk 2005), because commodities of trade are frequently found, and because their source of origin can be determined and distribution patterns thereby observed, etc. Trade and exchange therefore, result in a well-defined source material to start with. The same achievability applies to the study of other issues that have a defined source material. For example, disposal practices can be examined through the study of landing site waterfronts (Lindenlauf 2003; Delgado 2009) and concepts of reuse and recycling in a given society can be examined by using landing sites as a source material (Lemée 2006; Leino submitted). However, in a strictly archaeological context there is usually much less information to work with if we want to understand mobility and communication beyond trade and exchange. The situation is even more complicated since landing sites, especially if not connected to trade and exchange, are generally considered to be highly elusive in the archaeological record.

Landing sites for launching and reaching with different kinds of watercrafts must have been situated right by the shore. The dominating but deficient definition of a landing site, based on the logics of location and drawing the equivalence between a naturally suitable coast/shore and a landing site, is also rooted in this trivial piece of knowledge. Former coasts/shores, however, are not necessarily the same as today – for example, the Baltic Sea region is still influenced by the shore displacement caused by the Ice Age. This has resulted in huge landscape transformations, but natural as well as artificial changes of shorelines are worldwide phenomena. Archaeological methods have been proposed, discussed and tested for establishing the exact spatial relation between a site and the site-contemporary shoreline in areas with shorelines in a modern day terrestrial context (e.g. Ilves & Darmark 2011). However,

knowledge of a site's exact spatial relationship to the site-contemporary shoreline is not enough when it comes to discussions on the character and nature of activities conducted at water-bound sites and in ascribing the functions of landing to a site (see above).

Furthermore, in earlier research, there has been an unclear definition of what kind of activities were carried out at different landing sites; therefore, in terms of archaeology, it has been unclear what kind of archaeological markers one should look for in order to find out which coastal sites were used as landing sites. It is, however, reasonable to suggest that there have been and still are varying types of landing sites ranging from simple anchorage points, roadsteads, moorage, boat-launching sites, shipyards, dockyards, harbours for shelter or fishing to marina, seaports, ports of trade, naval ports, industrial harbours, etc. In general, for example, while anchorage points are used for overnight stay and/or for waiting for suitable sailing conditions, harbours for shelter are mainly connected with escaping hard weather, while shipyards are sites of shipbuilding, boat-launching sites are places for setting watercrafts afloat, etc. In addition, it is reasonable to suggest that different landing sites are also characterised by a generally different nature of social relations, including both foreseen and unforeseen behavioural aspects at the locations. However, comparatively few landing sites perform only one certain task and carry only one certain meaning. Thus, anchorage points can also function as harbours for shelter and harbours for shelter can include anchorage points; boat-launching sites can also have functions of shipyards as shipyards can accommodate boat-launching sites, etc. Various, but often simultaneous functions at landing sites are, however, usually discernible (cf. Lundström 1981:42ff; Herrmann 1997:38ff, 62ff). The issue of separating different functions at a site is much more problematic in case one task is completely replaced by another, or when the nature of social relations has shifted. Thus, for example, the role of a shipyard cannot only merge with but also change into the function of dockyard. Landing sites for fishing have often expanded into trading places, even if fish was never traded; trading places in turn could expand into administrative centres without having a direct economic function (Hasslöf 1985:478) – or the other way around (e.g. Pawson & Buisseret 2000).

From the archaeological study of sites, we infer what activities have been conducted, which should lead us to examine the motives behind and the making of inferences about past societies. Although ancient landing has generally been considered to be invisible in terms of archaeology (however, see Norman 1995), there is an increase in archaeological documentation of landing sites. In the following, I will examine the archaeological material and its social implications from three different, but not exceptional landing sites in the Baltic Sea region – the local, seasonal/temporal Viking Age fishing village at Tornimäe, in Estonia, the late 11th century dockyard at Fribrødre Å, in Denmark, and the post-medieval meeting place at the natural harbour site of Krogen, in Sweden (Fig. 2). In part, the data from these places will be

compared with a number of other coastal sites. The purpose is to discuss the possibility to discern archaeologically specific behavioural aspects of landing sites and to check the general correlation with the suggested model of landing sites as contact zones.

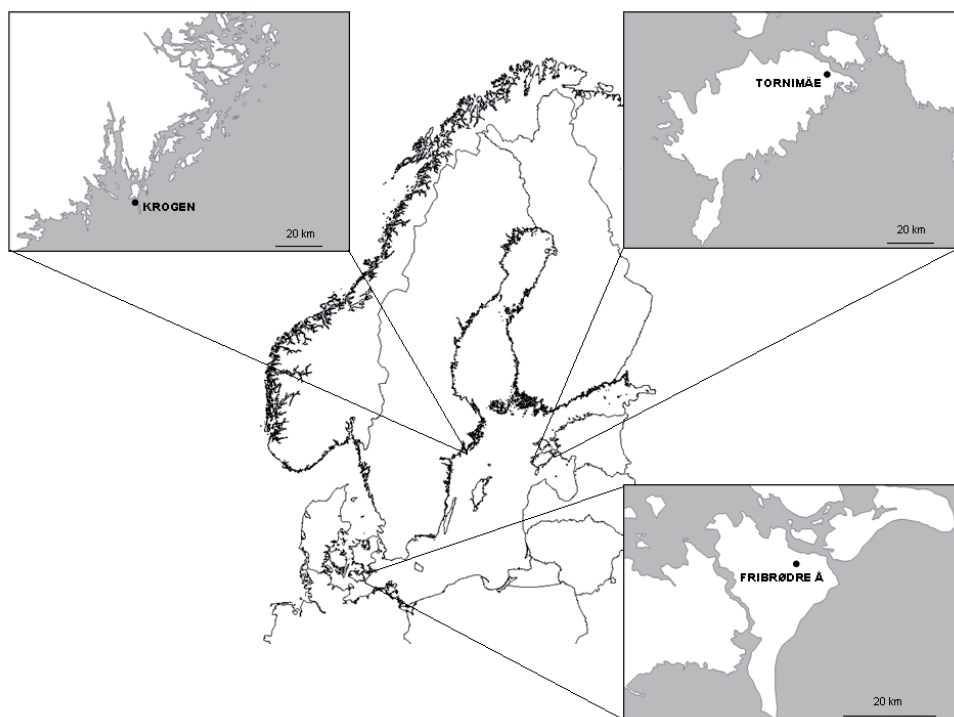


Fig. 2. The location of the sites in the Baltic Sea region discussed in the article

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TORNIMÄE

Tornimäe (Tower Hill) is situated on the Estonian island of Saaremaa, in Pöide parish, which has been called the granary of Saaremaa, as the most fertile agricultural soils of the island are located there. This fact together with the concentration of conspicuous ancient monuments has created an interpretation of this territory as being the most outstanding and richest in the Viking and Early Middle Ages – one of the earliest churches on Saaremaa was also built in Pöide parish. In addition, the contemporary gateway, i.e. the regional landing site is thought to have been located in Tornimäe. Indications that this site was a place for landing in the Viking Age and the Early Middle Ages are strong. It is located on top of a formerly seaside hill that used to overlook the waters and the sea lanes. At some distance, Viking Age graves have been registered, with swords and spearheads among the finds. A medieval manor was located only 1 km west of Tornimäe. Owing to its vicinity to stone graves, the manor is

considered to derive from prehistoric times and to be the unit that possibly had direct control of the landing site at Tornimäe in the Viking Age². During the Middle Ages, the manor became responsible for collecting taxes in the area, and as inferred from the written sources, Tornimäe is thought to have continued as the main landing site of the region for transporting taxes. Construction remains interpreted as a stone jetty, about 500 m north of the Viking Age site (Fig. 3), are considered to belong to the medieval activities. There is also an oral tradition among the local people about ancient landing practices at Tornimäe and even about the find of a ship and maybe of a jetty (Mägi 2005).



Fig. 3. Tornimäe excavation plots in relation to the approximate site-contemporary shoreline drawn with an enhanced dashed line (after Mägi 2005:68). A star up centre on the satellite image marks the location of a stone jetty (© *Maa-amet*, accessed 26-07-2011)

http://www.arkeologi.uu.se/digitalAssets/72/72902_IlvesFig.3.pdf

Minor rescue excavations were carried out twice in the 1960s at Tornimäe, at the spot pointed out for Viking and Early Medieval activities, and in 2004, the first extensive research excavations were undertaken. During

² The stone graves on Saaremaa seem to belong only to elite families and the absolute majority of prehistoric graves have been recorded around manors known from medieval written sources. The graves thus mark the best arable lands, which have been owned by the elite ever since farming became the dominating subsistence. The connection between historical manors, prehistoric stone graves and possible harbour sites has been discussed by the Estonian archaeologist Marika Mägi, who concluded that the connection was obvious (see 2004:143-145).

these fieldworks, a cultural layer (black, greasy and sooty soil) at least 40 cm thick was studied; modest house foundations with traces of rebuilding and seasonal use were suggested. Finds of local pottery, mostly sherds of simple cooking vessels, and a large number of fish bones dominated the find material. Bones of domesticated animals as well as a considerable number of seal bones were also represented, and boat rivets were collected. There were no trenches directly by the former waterfront; instead, they were placed about 30 and 50 m from the approximate shoreline, and thus, the question of the actual landing area was left open. The site was dated by means of the pottery to the 8th/9th-10th centuries (Mägi 2005). Despite the fact that the investigations gave no support for the hypothesis about this site as the “gateway” landing site, it has entered the academic literature in both Estonia and other countries as the central harbour of the Pöide district (e.g. Mägi 2004; Creutz 2003). The archaeological find material discovered only supports the statement that there was a seasonally used local fishing village at Tornimäe.

There are many local fishing sites of a seasonal character known both archaeologically and historically from the Baltic Sea region. As for archaeology, this type of site that has been the subject of the most profound investigations can be found in the entire Baltic archipelago, namely fishing camps consisting of a group of simple buildings/huts, so-called “tomtningar”³. Characteristically, these huts usually lack remains of a stove or chimney. They are situated close to the water, but sheltered from winds. Frequently, these dwelling remains are also connected with visible traces of landing in front of them – narrow stone-cleared areas surrounded by stone walls crossing the (former) shoreline – as well as remains of constructions for storage and for drying nets. Archaeological investigations have discovered sparse, but typical settlement finds at these sites, such as food refuse, flints for fire making, and fishing equipment. High phosphate values at the shoreline contemporary with the camp indicate slaughter and/or gutting activities at the contemporary water’s edge. These types of fishing camps were used from the Iron Age up and until to the beginning of the 20th century. They were not permanent living places, instead, on the basis of their constructional nature and geographical location they have been interpreted as seasonal camps used by the local population. In their Late Iron Age phase, they were connected to developments in the Early Medieval societies in which the consumption of fish was an important part of life (Varenius 1978; Norman 1991, 1993, 1995; Landin & Rönby 2002).

However, Tornimäe is not situated in marginal areas away from arable land as the type of fishing camps mentioned above. Seasonality/temporality at Tornimäe is mostly argued for owing to the absence of oven remains (Mägi

³ It is important to note that there are also special seal hunting camps consisting of “tomtningar” that have been studied archaeologically. In such cases, besides somewhat different archaeological findings and geographical location, there are fewer huts. These are situated higher up in the terrain and not in connection with the shoreline (e.g. Broadbent 1988).

2005:70). Nevertheless, the lack e.g. of objects associated with cattle breeding or cultivation and activities associated with this, such as grinding, also indicates a seasonal/temporal use. Overlapping house constructions, suggested at Tornimäe, could be a sign of houses being used episodically and would raise the questions about the level of attachment to the area. The task of tracing evidence of seasonality/temporality at landing sites would be interesting to discuss further: is it possible to distinguish general criteria of seasonality – what in the archaeological material is the same for all seasons every year, and what is different for each season, but with the same annual pattern? Since seasonal migrations are a common factor in the behaviour of many species of fish, the different ages and sizes of fish will be found in different places during different parts of an annual cycle (Colley 1987:17). A study of both fish bones and fishing gear would therefore be useful for achieving better knowledge about the seasonality of fishing villages. In addition, other osteological remains may contribute (e.g. Olson *et al.* 2008:4). Furthermore, from a social standpoint, certain fishing methods have social implications and may inform about sex roles or the cooperation of large groups of people (Colley 1987:16). The same applies to seal hunting. Thus, a study of the seasonal/temporal usage of Tornimäe fishing village over at least two centuries on the basis of material related to fishing and sealing could be valuable as a source of information about issues of how social identities and relationships were connected to (long-term) seasonality/temporality.

According to the documented archaeological evidence, the Tornimäe site was used by the local inhabitants of the island of Saarmaa. Both the cultural layer and the pottery used by the people at Tornimäe have a counterpart at the contemporary and neighbouring Pöide hill-fort (Mägi 2005:70, 72-73). There is no find material at Tornimäe reflecting overseas connections. As indicated by its rather long use, the site's specialised activity of fishing and seal hunting helped to create and sustain its own social and economic character within the broader social community of the island. Nevertheless, although located immediately by the most fertile arable lands of the whole island and used over two centuries, its lastingly seasonal/temporal character attests that this site was established and maintained as a place of transitory nature, constructed by and for local social units based further inland. It is clear that the seasonal fishing village at Tornimäe did not live outside the forces of historical, social and cultural change and should thus be considered in that context. It is too simple to argue that the abandonment of the Tornimäe site around the year 1000 was due to the changing environmental conditions, which might have made it too difficult to approach the site by ship (cf. Mägi 2005:73), especially as this hypothesis was never tested during the excavations. In addition, historically documented landing activities took place in basically the same area during the Middle Ages. For an alternative perspective, one should also, for example, hypothesize about a possible social conflict that triggered a break in the tradition, or about a competition among different resource users in the same

area. Perhaps returning every year to the village for the fishing/sealing season began to be perceived as a waste of time owing to decreasing catches, etc.

The excavated landing site at Tornimäe should clearly be understood as a seasonally/temporally used fishing village of local importance and not as a “central district harbour”. However, the gateway landing site of the district may still be situated in the vicinity and be visible in the archaeological material. Various, but often simultaneous functions as well as the spatial detachment of activity areas are well-known features at landing sites. The site with the remains of a stone jetty, so far interpreted on the basis of its height in relation to the approximate shoreline as belonging to the historically known medieval activity, may have been in use earlier. It may have been the underwater foundation of a Viking Age and Early Medieval landing facility similar to those recently discovered and investigated, for example, at Birka, on the small island of Björkö, Sweden. Here, the stone constructions are situated right at today’s waterfront and partly incorporated into current landing activities. Therefore they have for a long time been considered to be modern, not least because they are situated rather far away from the Viking Age settlement area. The archaeological excavations of 2010, however, have dated these constructions to the Viking Age (Sw: Pressmeddelande från Södertörns Högskola 2010-10-04; <http://www.forskning.se/pressmeddelanden/pressmeddelanden/marinarkeologi/skafyndibirka.5.2ac1d9f612b59a0254b8000386.html>). If the stone constructions at Birka or Tornimäe belong to landing facilities also used during the Viking Age as hypothesized, this would surely open an additional perspective on how to search for and study prehistoric landing sites – alterations belonging to landing activities would be possible to find tens of metres from the activities-contemporary shoreline.

Different but contemporaneous landing sites in the same area, situated side by side, can be observed in the Baltic Sea region first and foremost at the archaeologically well-studied Viking Age and Early Medieval trading centres, such as Birka. By the Viking Age shoreline on Birka different kinds of shoreline alterations and remains of other construction are still visible (Heamägi 2006). Surely these landing sites had different functions as did their nearby activity areas. In addition to the extensive and varying constructions for landing activities in front of the main settlement area, and also in the more marginal areas (Hansson 2004), the hypothesis of different use can be suggested on the basis of the archaeologically studied location used by the Birka garrison, where the associated stone-constructed landing stage has been documented (Lindström 2003). Landing sites of different function on Björkö are also possible to consider on the basis of the calculations of the transport needs connected with e.g. requirements for wood or for waste management (Wiklund 2009). Thus, in the case of Tornimäe, rather than “making” the site of a local Viking Age fishing village of seasonal character into the central district harbour (cf. Mägi 2008:101), one should test and investigate the hypothesis of the

existence of different landing sites in the same area and their relation to each other – differentiation is a way of regulating connectivity.

Above all, however, the study of the Tornimäe Viking Age fishing village should be pursued further in its regional context. It would be unfortunate to disregard landing sites of such an ‘unimportant’ character in the interpretations of the past societies. The Viking Age population at Tornimäe did not constitute a haphazard community that only occasionally fished or hunted seals. The same site was used throughout centuries and, thus by several generations, although temporal and spatial patterns seem to remain the same until the abandonment. The persistence of cultural practices at this Viking Age seasonal fishing village, maybe parallel to activities at other landing sites in the same area, offers an opportunity to investigate the causes and dynamics of the region’s social character.

FRIBRØDRE Å

In the beginning of the 1980s, a late 11th century dockyard for breaking up and repairing watercrafts was discovered and investigated on the Danish island of Falster a couple of kilometres from the sea along the western shore of the Fribrødre River (Fig. 4).

Loose parts from a number of vessels were scattered along the river in no particular order, but in places constituting layers up to 1 m thick and 7 m wide. Layers stretched several hundred metres along the shore, which had partly – at the so-called entry to the yard-site – been stabilised by means of a wattle construction. Almost all discovered ship parts were worn and damaged, showing signs of coming from ships that had been partly broken up. Vast amounts of chippings as well as waste timber were spread in among the ship parts. Many fully finished but unused wooden nails were discovered. The site also yielded various tools, such as knives, whetstones, wooden wedges, bailers, pins and stilettos, potsherds of so-called Baltic ware were scattered throughout the entire find-layer. When the site was in use the whole activity area was below the low water level. A vast numbers of posts were hammered into the river bed at the excavated portion of the site, constituting among other things remains of narrow foot-bridges. No adjacent contemporary settlement has been located, but there were traces of a hollow road leading down to the yard area. Notably, the highest phosphate values of the areas around the Fribrødre River were documented at the dockyard activities (Skamby Madsen 1984a, 1984b, 1991; Skamby Madsen & Klassen 2010).



Fig. 4. Fribrodrø Å excavation plots in relation to the current river bed (Skamby Madsen 1991:188). Main dockyard activities indicated with a cross on the satellite image (© Google Earth. 54°52'11.64" N and 12°03'00.91" E, image 1-1-2006, accessed 26-07-2011)

http://www.arkeologi.uu.se/digitalAssets/72/72904_IlvesFig.4.pdf

Throughout the age of wooden ships, it was a necessary practice in areas with a frequent shortage of (seasoned) timber to break up worn-out vessels in the dockyards and to work all the material that was still serviceable into new hulls. In addition, this saved the trouble and labour of making new parts. The archaeological material from Fribrodrø Å clearly indicates breaking activity, but not of entire vessels, only partial breaking of watercrafts was executed. Although the find layer is densely packed with wooden chips as well as pieces of wood and branches in various stages of processing and many unused loose wooden nails were discovered, this is evidence of repairs, rather than proof of the site's role also for shipbuilding. Furthermore, no tools characteristic for shipbuilders were found at the site. Dockyard functions, the intensity of which is suggested by the extensive find-layer, seem however to have been planned and not of a spontaneous nature (as suggested by Skamby Madsen & Klassen 2010:299). This is possible to infer, for example, from the site's inland location, which made it less than easy to access, as well as from the hollow road and the carefully repaired and maintained wattle construction.

The dockyard activities at Fribrodrø Å are often compared to the activities at Viking Age Paviken on the island of Gotland (e.g. Skamby Madsen 1984a:9, 1984b:273). A major site has been studied at Paviken, plentiful industrial activities have been suggested, including glass-bead production, metalworking and also shipbuilding. Activities connected to yard are spatially clearly restricted to the beach, where also two parallel slipways, 20 m long, 2 m wide and 0.5 m deep, have been documented. The associated find material consists

mainly of thousands of boat rivets and nails, often deliberately broken, but unused iron nails and rivets were also discovered. Of tools, pointed chisels, nail punches and one special nail puller tool have been found (Lundström 1981:68-72). The shipbuilding suggested by the investigators is not actually provable in the archaeological find material and thereby only speculatively considered. However, at Paviken, there is clear evidence of boat repairs, similar to the evidence at Fribrødre Å, although the technological practise exercised was probably of a different nature.

The watercrafts broken up and repaired at Fribrødre Å were of Viking Age Northern-European tradition. Since the parts of the vessels documented show that the strakes of ships were not fastened together with iron rivets common in Scandinavian shipbuilding, but with wooden nails, and since there are finds of caulking material consisting of a mixture of lamb's-wool and moss, the activity in this Scandinavian area is assigned to Slav people. The occurrence of Slavic shipbuilding features does not in itself mean that the users of the boats or the breakers/repairers were Slavs, because the same features were also used by Scandinavians. Neither is the discovery of pottery of the Baltic type with Slavic origins evidence of Slavic presence here, because such pottery was also copied and produced locally at number of sites in Scandinavia. However, there are several other finds from the site, such as the mounts from knife sheaths, an earring and at least one knife with finely engraved decoration on its shaft, which is associated with a West Slavic origin. In addition, a number of place-names in the area constitute West Slavic element (Skamby Madsen 1991:197ff).

As it has been pointed out repeatedly in medieval written sources, the difference between the Slavic and Scandinavian areas in the western and southern Baltic in the Late Iron Age and Early Middle Ages is linguistically clear; furthermore, an overwhelming proportion of the material culture respects this linguistic border (see Sindbæk 2008). At Fribrødre Å, however, several features intermingle and imply a Western Slavic presence during the time of the dockyard activities. A Slavic presence in Danish areas during late 11th century is not surprising, since there were multi-faceted contacts between these regions in the Viking Age and Early Middle Ages (Jensen *et al.* 2000; Urbańczyk 2010). In fact, the presence of advanced relationships and contact between different groups and cultures around the whole Baltic Sea region during this time has repeatedly been highlighted through archaeological studies (e.g. Wyszomirska-Werbart 1991, Callmer 1992). However, since the material at Fribrødre Å is rather mixed, it seems speculative to state that the actors were exclusively Slavs. Despite that fact, the site is often treated as Slavic, recently by Naum, who even states that inhabitants of Fribrødre Å “have chosen to actively sustain traditions and separate identities” (cf. 2010:116).

Based on the archaeological material available, Fribrødre Å was a site with narrow foot-bridges in the water and a partial shoreline reinforcement, but otherwise empty. It was a locality where special technological knowledge and

mastery were used together with other resources needed for dockyard activities, such as available timber. It may have been a yard connected with one or a few specific military campaigns stretching over a few decades (cf. Skamby Madsen & Klassen 2010:305, 359), or an open neutral dockyard. In any case, the Fribrødre Å dockyard was a site in a specific location planned for facilitating meetings connected to the demands of repairment technology, not ethnicity. Furthermore, being a site of its own significance, established on the waterfront for the meetings in-between people coming with watercrafts and those living further inland, the Fribrødre Å dockyard definitely correlates with the contact zone model.

KROGEN

On the 26th of March 1860 about forty rigs and full-rigged vessels from many different places in Northern Europe were anchored on the eastern side of the small island of Krogen, in the archipelago of Stockholm in eastern central Sweden waiting for the break-up of the ice (Öberg 1987). Today, only 150 years later, it is impossible at first sight even to imagine a maritime encounter of that scale at this modest spot. The island of Krogen (“the Tavern”) – approximately 600 x 300 m in size, quite a rocky place with insignificant extent of land to cultivate – is situated in a cluster of similar skerries and islets in the southern part of the Stockholm archipelago. Emanating from written, cartographical and ethnographical sources, Krogen is mainly associated with its suitable geographical position on the crossroads of the inner and outer sailing routes in the Stockholm archipelago and with the tavern that existed on the island from the end of the 17th century and onwards. During the 18th century, it was run co-operatively with the customs station on the neighbouring island of Läckär. During the 19th century, both the customs station on Läckär and the tavern on Krogen were abandoned. The customs services were moved to the southernmost island in the Stockholm archipelago, Landsort, where a co-operation between the customs officers and the pilots was established (Roque 1998:52).

There are only few and sometimes barely visible remains left on dry land of the former activities on the islands of Krogen (and Läckär). There are several house foundations on the island, among others the remains of the 17th and 18th century taverns have been identified. The garbage mound of the tavern(s), consisting of household utensils such as forks and broken pottery, has been located. Furthermore, a detached cellar or storage room was situated in the proximity of the tavern as well as remains of what is possibly a well. In addition to the building foundations and other traces of settlement, there are archaeological features clearly signifying the maritime role of the island, such as shoreline alterations and remains of jetties. From the centre of the island, departing from the house foundations, there are pathways leading to and from the coast in three directions. However, the understanding of the extent of the

former maritime importance of this island is considerably enlarged if the underwater scene is considered. There are thick and rich underwater cultural layers at several places around the island. Thousands of clay pipe fragments representing a time-span from the 17th to the 19th century, as well as potsherds and bones, far beyond the amount that would have been produced by the activity of the simple tavern, have been collected at different occasions from the seabed by local people, scholars and divers. Stone foundations and burned pieces of wood, loose timber – some of them carved, are recorded under water as well as a number of anchors. To date, there are 12 shipwrecks known from the area, intentionally drowned or abandoned as well as accidentally sunken (Fig. 5) (Roque 1998).

Krogen is one of many similar sites of the period in the Stockholm archipelago, combining good anchoring grounds of a natural harbour site with the activities of taverns, customs and often also piloting stations run by local people (Westerdahl 1989; Kutuonen 1993). Furthermore, and characteristic of such sites only, they often functioned as informal postal stations used by local inhabitants to send messages in the two possible main directions along the route (C.Westerdahl, personal communication, September 5, 2011).

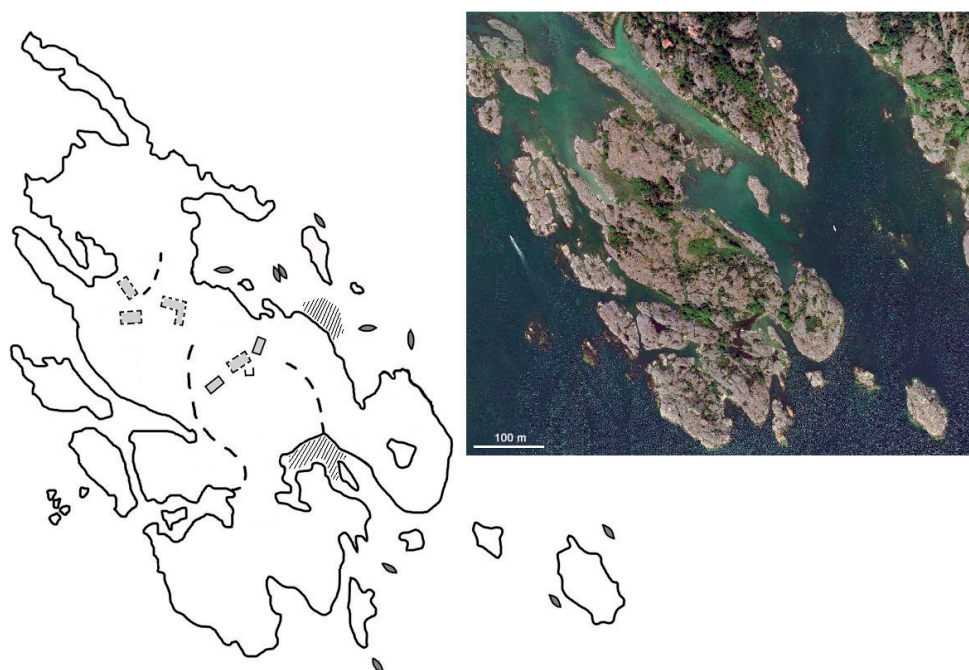


Fig. 5. A sketch map of Krogen. House remains and possible house remains as well as pathways marked on land; most of the discovered wrecks and find concentration areas marked underwater (after Roque 1998:30-31; © *Google Earth*. 58°47'38.71"N and 17°50'40.00"E, image 8-7-2010, accessed 26-07-2011).

http://www.arkeologi.uu.se/digitalAssets/72/72906_IlvesFig.5.pdf

Thick habitational debris around the island carry evidence of intensive use, and not only for escaping bad weather, or for over-night stops at the

tavern, or for picking up a pilot, but also for longer stays, such as passing the winter or for gathering into seasonal convoys for travel. Furthermore, the very existence of the tavern indicates that the maritime activity around the island was not seen as temporary or accidental; it is a reasonable hypothesis that the tavern and customs station were established by the state as a reaction to the already routinized use of the natural harbour site by people sailing to and from Stockholm. Thereafter, the public forum for both locals and visitors was naturally embodied in the tavern and, in consequence, more public forms of socialization were exercised. Meetings were facilitated in the socially acceptable context of the tavern. In addition to their recreational value, these encounters could shape the attitudes and manners of all parties and function as instructions for encounters to come. Obviously, there is a need for profound archaeological studies for specific discussions of the nature of meetings at this locality and of other social aspects. But as an example of the potential, already the analysis of the thousands of clay pipe can shed light on issues of possibly changing consumerism, spending habits and social trends of the interacting inhabitants and transients of Krogen in the 17th to 19th centuries (as in Fox 2002).

The interaction of the natural harbour site with the activities of the tavern and the piloting and customs station were also increasingly reflected in the power relations – places where so many people and activities assemble on a regular basis almost immediately create an opportunity to also monitor or negotiate norms. The transfer of the functions of Krogen in the 19th century to Landsort is a direct reflection of the transformative effects of the routinized meetings to become further regulated by the state when feared to be developing into meetings of a nature not benefiting the state. Emanating from the contact zone model, the transfer of functions is also to be understood as means of keeping Krogen merely as a meeting place between people sailing to and from Stockholm and not allowing it to naturally develop into the place of further economic significance and more, thereby possibly threatening the position of Stockholm.

Comparable developments of similar principle could probably be investigated at several places that have combined good anchoring grounds of a natural harbour with other kinds of interacting activities. The potential is already scholarly acknowledged, for example, in the case of the historically well-documented medieval/post-medieval naval base of Djurhamn, also situated on an island in the Stockholm archipelago – in 2008, a special foundation was established to promote scientific studies of this site (Sw: Stiftelsen Vasakungarnas Djurhamn; <http://www.vasakungarna.se/wcm/content/index>). According to the written sources, the activity at Djurhamn began in the middle of the 15th century, when the natural harbour site on the southern side of the island of Djurö was taken into use as a meeting station/base for grand military fleets of both Swedish and other origin. The village of Djurö was established later, whereby the existence of a naval station was one of the factors that contributed to

the location and formation of the village (Rundkvist 2009:142, 146). In 1680, however, the base for the military fleet was moved away from Djurö (Glete 2009). In terms of the archaeological material, even in the case of Djurhamn, the former maritime importance of the location is not so much visible on land as under water. Some burial places are known immediately on the medieval/post-medieval shoreline and a few finds are documented, including a battle-damaged early 16th-century sword (Rundkvist 2008), but there is an extensive cultural layer with thousands of finds under water. In addition, so far three wrecks have been discovered (Sw: Bulletin Djurhamn, No. 1, 2010; <http://www.vasakungarna.se/wcm/WeceemFiles/ROOT/Bulletin%20Djurhamn%20nr%201%202010.pdf>).

It is not self-evident that natural harbour sites at sailing routes and/or naval stations have many ships ending up as wrecks in the area. It surely seems not to be the case, for example, with the archaeologically investigated medieval naval base at the crossroads of both ancient and modern sailing routes by the tiny island of Högholmen in the outer archipelago of south-western Finland, where extensive constructions both on land and under water have been documented (Edgren 1979, 2005; Ericsson 1989). However, accidents do occur even in the sheltered surroundings of landing sites (e.g. Casson 1965:32-33), and that has been the case with some ships discovered around Krogen. Among other things, these shipwrecks show signs of collision with an islet or a rock. At Krogen, there are also several shipwrecks that were deliberately abandoned and intentionally drowned, as suggested by their location in very shallow water in the innermost parts of the natural harbour and their state of preservation. These vessels were obviously estimated to have no further value and were therefore carefully “lost” in an out-of-the-way place. The questions of the culture of abandonment while moving brought to a place and a halt are definitely hypothesisable on that basis and can also be relevant in the discussions of the establishment of control over discharge practices, which is so typical of today.

Although roughly sketched, there is no doubt that the small island of Krogen was an important place for navigation – a meeting place in maritime surroundings for both local people and visiting sailors, leaving imprints on both sides. With their potentially accumulating economic activities so large that they would otherwise have been regulated as a closed town, an archaeological study of such locations can be useful in understanding them as social phenomena.

Conclusions

In the Baltic Sea region, the sea and other bodies of water are features of central importance and they have repeatedly played an essential role during history.

Thus, landing sites for watercrafts have created inevitable spots for societies. The study of these spots has a potentially high value when understanding the maritime aspects of past societies. In the archaeological investigations of landing sites, however, hypothesis testing has often been replaced by colourful “might-have-beens” based on data carefully selected for the occasion, whereby the divide between observation and assumption is erased. Instead of empirical material, scholars’ pre-understanding of the invisibility of landing activity has turned into well-known, accepted and self-evident part of archaeological knowledge. Nevertheless, there have been many different kinds of landing sites that have left various kinds of archaeological evidence, as demonstrated by the sites examined in this article. Obviously, there are also landing sites that will remain elusive in the archaeological material. However, no one is building up an argument e.g. based on (as yet) archaeologically invisible heart attacks as the main cause for death in prehistoric times, despite the likelihood that people died also of heart attacks. Studying the reason why people have died emanates from the available material and has the purpose to work towards defining the visibility of different diseases as well as other fatal causes, and in suggesting methods and models for the further investigations (e.g. Gräslund 1973). Similarly, emanating from the archaeological material available, it has been my aim to analyze the possibility to discern archaeologically the specific landing-site behavioural aspects, to illustrate the potential to separate different landing sites as well as to examine the varying materiality of social relations at different kinds of locations. A theoretical framework model of landing sites as contact zones was suggested in order to capacitate a comprehensive and integrated understanding of the existing variability, character and patterns in landing site behaviour and relations.

The three sites differ in many respects – from the range of archaeological inputs of study to discovered traces and interpretations on the sites’ character – but they all correlate with the suggested model, according to which landing sites are explainable as contact zones of their own significance. Archaeologically, a variety of traces connected to launching and reaching with different kinds of watercrafts and activities associated with that have been discovered at former waterfronts (and/or clearly indicated at former waterfronts) as well as under water. The examination of the available material showed diverging archaeological features that indicated different types of activities carried out at these landing sites. Among other things, they suggested the use of differentiation as a method for organizing the data and achieving a definite archaeological understanding on diverse landing sites in general. However, finds of a nature other than that connected to various landing activities were of accidental quality only. This accidental presence is explained by the fact that landing sites were places established and maintained for movements and meetings. The main part of human life took places either on board watercrafts (also Bjerck 2009) and/or on land, not at the landing site. However, it is reasonable to hypothesize that even in those cases where landing

sites were spatially speaking tightly integrated into settlement areas, they, as dynamic places, were kept open only for transitional encounters. Indeed, they still are.

The model presented in this article and tested through the analyses of the archaeological material and its social implications from three different landing sites, is the first attempt to make sense of the landing site notion in a wider social context. It is suggested as a tool for explaining the variability of the archaeological data seeking to pose new key questions in the studies of landing sites. It is an attempted step towards a general model and a theory for the sociology of landing sites that would reach across time and space.

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