

AROUND THE BARBARIAN SEA:
SETTLEMENTS AND OUTCOMES IN THE EARLY
MEDIEVAL BALTIC

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I would like to acknowledge and pay respect to the traditional owners of the land upon which this work has been produced; the Gadigal people of the Eora Nation. It is upon their ancestral lands that the University of Sydney is built.

As we share our own knowledge, teaching, learning and research practices within this university may we also pay respect to the knowledge embedded forever within the Aboriginal Custodianship of Country.

This work is dedicated to the memory of my grandmothers.

To Gertrud Lovelock (1913-2006)

To Pauline Burfitt (1925-2004)

“She hadn’t done nice. She’d done what was needed.”

ABSTRACT

The development of urbanism in the Viking Age is undoubtedly one of the best-studied fields in the archaeology of the period. The Viking towns of Birka, Kaupang, Hedeby and Ribe have captured the imagination of archaeologists and the public alike, presenting the lives of their enigmatic inhabitants. Discussed in the literature but only occasionally discussed comparatively are a significant number of other settlements founded across the Baltic coast in the Early Medieval Period, from northern Germany to the tributary rivers of north-western Russia. These settlements appear across the *Mare Barbarum* at a very similar time, in similar forms, in response to ostensibly similar circumstances. Some survive through to today, most meet a variety of different ends, but all transformed in some way into the world of the later, more easily recognisable High Medieval town.

This thesis presents a model of Early Medieval settlement in the Baltic region, acknowledging the modern day historical and political reasons for the lack of representation of the southern and eastern Baltic countries and emphasising a comparative approach to remove these barriers of recent history. Thirteen settlements have been chosen for analysis, selected for the availability of information for the development of a quantitative model of settlement trajectory. Despite their similar beginnings, the settlements all met very different ends, and a triadic framework of settlement analysis is applied to this problem, highlighting interconnection between material form, social operation, and settlement outcome. Regardless of just what these settlements were, as indeed discussions around the terminology of urbanism have predominated in recent years, they undoubtedly *were* something, strangers in an overwhelmingly rural and agricultural landscape, situated outside contemporary political and social systems. As the Viking-centric focus on archaeology of the Early Medieval period in Northern Europe begins to change, this thesis illustrates the role of comparative analysis in revealing the importance of sites less well-studied.

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CHAPTER OUTLINE

- Chapter 1: Presents the logic behind and justification of the study, as well as an introduction to the theoretical and methodological considerations which frame and contextualise this thesis.
- Chapter 2: Contextualises the academic background to this study, including the ways in which historical and archaeological work has approached the settlements of the Early Medieval Baltic. Also outlines the major literature which will be utilised in the presentation of information and contextualisation of findings.
- Chapter 3: Presents the considerations of this this work, theoretical, operational and historical, as well as the logic behind the presentation of data in subsequent chapters.
- Chapter 4: Presents the settlements of the western Baltic chosen for analysis.
- Chapter 5: Presents the settlements of the southern Baltic chosen for analysis.
- Chapter 6: Presents the settlements of the eastern Baltic chosen for analysis.
- Chapter 7: Presents a summary and interpretation of the data presented in the previous chapters, as well as major emergent themes and trends.
- Chapter 8: Summarises the study and presents areas for future work.

PREFACE

As with all PhD theses, and all indeed academic work, this thesis has transformed through a number of phases and iterations. The plan for this thesis arose as an intersection of my interest in Viking Age archaeology and my supervisor Professor Roland Fletcher's particular expertise in the study of settlement growth and decline, and the analysis of large-scale cultural phenomena over time.

My initial plan was to conduct a comparative analysis of the settlements of the Early Medieval Baltic in order to categorise and classify them based on quantitative characteristics. Of course, I quickly realised that this was somewhat of an old-school approach to the topic, and seeing young scholars move away from this debate, wanted to do the same. Instead, when conducting background research, I noticed that the settlements of Germany (with the exception of Hedeby), Poland, Russia, Lithuania, Estonia, and Latvia, looked incredibly similar to those of Sweden, Denmark and Norway, yet were underrepresented in literature discussing urban (though I use that term loosely) trends in the region. The archaeology of the Viking Age looms large across the Baltic, despite the fact that the Viking homelands are only those of the Western Baltic. The primary conceptualisation of the wider Baltic during the Early Medieval period as being part of the Viking sphere, I think, reduces the East and South to a peripheral role, and does not acknowledge the incredible diversity and cultural change also present across the region. An extensive amount of time and energy has been spent by archaeologists removing Viking Age archaeology from a British-centric conceptualisation, and now it seems to the time to push for the same across the Baltic. This is not to say that there are not dedicated scholars who spend much time and effort working on the Early Medieval southern and western Baltic without utilising a Viking lens, of course there are. Regionally comparative work, however, is largely western Baltic-centric, and it was my aim in this work to change this focus and review the implications.

One of the primary reasons put forward here for how and why Western Baltic development has been prioritised over that of the South and the East is that the legacy of recent history looms large across the Baltic. The Scandinavian countries were comparatively unaffected by the aftermath of World War II, whereas the political disruption in the South and the East meant that archaeological enquiry was of particularly low-priority and was affected by serious socio-political pressures. This has led to a significantly lower representation of available archaeological work in those regions and of low visibility in the English-language corpus, something which will become evident in the much higher-resolution information available for the settlements of the Western Baltic discussed here. Despite this, it is thought that the steps taken here to counter this by seeking cross-comparable data on major characteristics of the settlements and their outcomes, as discussed within the thesis will suffice for an initial overview analysis. I also hope that the focus in this thesis on the conditions under which archaeological research was done in the South and East Baltic will inspire further comparative work that conducts an archaeology of archaeology, as it were, to investigate disparities in representation in conflict zones across the world. Analysis of the outcomes of the settlements in question is a curiously egalitarian way of approaching comparative archaeology as, in general, it is a readily visible part of the archaeological record.

All of these elements combined have led to what I hope is an interesting, comprehensive, and ultimately thought-provoking piece of work.

Ultimately, however, that is for you to decide...

Alix Thoeming

Sydney, Australia

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INTRODUCTION

In 1680, the antiquarian Johan Hadorph was the first person to dig into the archaeological stratum at the site of Birka. P. Terperger published “The City of Ribe” in 1736, asserting the presence of the town back to the Viking Age. Norwegian paintings from the 1830s depict Viking duels in front of the pre-modern landscape of Kaupang, and in 1896 Professor Sophus Müller instigated excavations within the rampart at Hedeby. This degree of attention can be attributed to the rich historical records of the sites put forth by authors from England to as far away as Baghdad, excellent preservation conditions at the site, and the unwavering ability of the Vikings to collect beautiful objects that remain impressive even today. The importance of these settlements is clearly known in studies of Viking Age archaeology; the artefacts found at the sites bear witness to long-distance trade, extensive craft production, a multi-ethnic and multi-cultural population, and a measured and well thought-out approach to settlement planning. Slowly, the image of the crazed and barbarous Northmen raiding villages across Europe to spread across the continent as their undeveloped homelands became overpopulated and unliveable, began to lift (Clarke and Ambrosiani, 1995: 46). Indeed for a long while, the period of time after the collapse of the Roman Empire was discussed as the Dark Ages, with continental long-distance trade cut off by Germanic and Viking invaders, leaving mainland Europe to crumble (Knox and McCarthy, 2012: 31–32). Adam of Bremen’s *Mare Barbarum* (*Gesta*, Book 1, Chapter LXII) lived up to its name for a long while in the minds of continental scholars.

As the field of archaeology developed through the 20th century, moving away from collecting artefacts and towards questions of interpretation, about how artefacts could be used to reconstruct the lives of those in the past, so did the profile of the archaeology of the North. While the archaeology of Europe in the first millennium CE still remained predominantly relative to the Roman Empire, Northern Europe became a liminal zone, decisively non-Roman but also integrated into discussions of development and growth in Europe, particularly in terms of urban development (Ennen, 1967). As a very visible

element of the past and often the present landscape, the ‘four towns of the Viking Age’ (Skre, 2007d: 455) have become, it seems, one of the most popular topics for discussion in Viking Age archaeology. The core of this discussion lies in the claim to the urbanity of the settlements, their interpretation as the medieval predecessors of the large cities that cover Scandinavia today.

Large-scale excavations and studies of each of the four sites took place in the mid to late-20th century; Herbert Jankuhn worked at Hedeby in the 1930s (Jankuhn, 1938), Charlotte Blindheim at Kaupang from the 1950s (Blindheim and Tollnes, 1972), Birgit Arrhenius and Björn Ambrosiani on Birka from the 1960s (Ambrosiani, 1992b), and Mogens Bencard uncovered and investigated the earliest phase of Ribe in the 1970s (Bencard, 1978). One of the key areas of discussion for these settlements lies in defining just what they were. The settlements are given many different names; variously referred to as towns (Clarke and Ambrosiani, 1995), emporia (Sindbæk, 2008: 182), *seehandelsplätze* (a literal translation from the German here would be ‘sea trading place’) (Jankuhn, 1938), and proto-towns (Kalmring, 2012), among many others. Whether or not these settlements can indeed be described as towns, however, is uncertain, as most definitions of ‘towns’ are heavily criteria-based, and founded on work conducted on the High Medieval Roman or Romanesque towns of continental Europe and the British Isles (Ennen, 1979: 1–16). This, of course, limits their relevance for the decisively non-Roman Early Medieval settlements of Northern Europe. Historical designations of the sites are also common, including *oppidum*, *civitas*, *urbs*, *portus*, and *vicus*. These, however, are (or derive from) Latin terms applied by authors writing either in medieval Latin or Old English (Kleingärtner, 2014: 177–191), harking back to the same problem as the ‘town’ title.

Irrespective of just *what* they were, the settlements clearly *were* something, a very visible settlement form which appeared in the Western Baltic in the 8th and early 9th centuries¹. The reason for the emergence of these settlements cannot be clearly attributed to one factor, but the political changes occurring in Western Europe, as well as the

¹ Note that Hedeby is here discussed as part of the Scandinavian homelands even though it lies in Germany. The state now known as Schleswig-Holstein, in which it lies, was ceded as part of the Treaty of Vienna to Germany by Denmark in 1864, ending the Second Schleswig War.

establishment and rapid growth of the Islamic Caliphate in the south, undoubtedly contributed². The connection of the Baltic to these developments was a “complicated, mainly indirect, centre-periphery relationship” (Callmer, 1994: 79). They emerged in the landscape of late Iron Age Scandinavia where the majority of the population lived a rural agrarian lifestyle, with identity and kinship heavily tied to local regions. The new settlements, crowded and multi-cultural, engaged directly with long-distance trade and exchange and producing crafts and goods to an export volume, were unprecedented and likely seemed quite alien to the average person (Hillerdal, 2009: 274; Kalmring, 2016: 15). They were placed in spots easily accessed from the Baltic, but with clear concern for defence; Hedeby, Ribe and Birka were fortified, the latter had a significant military presence, and Kaupang was protected geographically. Seasonal markets had long been a part of the landscape (Callmer, 1994: 53), but likely resembled these new settlements to the same degree that a Sunday fruit and vegetable market in a small town resembles London’s Camden Markets. The upstart settlements were incredibly large by local standards, up to 27 hectares in the case of Hedeby. They maintained a year-round population, not just of locals but also of foreigners, with imports both of the luxury goods brought in by the seasonal markets and also objects of daily life (Becker and Grupe, 2012: 256), and the population evolved into one that likely led very different lives to those of their rural counterparts. While there is some evidence of agrarian activity within the settlements, this is mostly in parallel with economic activity (faunal remains that likely saw dual function as food and as furs/bones for working and trade), and none have extensive enough agrarian evidence to show that they were able to completely supply themselves with food and items of everyday need (Croix, 2018: 4). The Viking Age settlements of Scandinavia are a well-studied phenomena, with large research projects even today dedicated to their investigation³, but comparatively little attention has been paid to the very similar processes which were taking place around the rest of the Baltic Sea.

² Though it should be noted that the emergence of sail technology, around 700CE, is likely is a significant and thus far uninvestigated contributor to their appearance (Mogren, personal communication, 2018).

³ Such as the Northern Emporium project studying Ribe.

BRINGING IN THE BALTIC

To the south of Scandinavia lay the West Slavic lands, modern-day Germany and Poland, and to the East the Balts of modern Estonia, Latvia, Lithuania, and Kaliningrad. These were populations that the Scandinavians had long been aware of and interacted with. A Scandinavian population is known to have lived in Latvia long before the formal beginnings of the Viking Age (Megaw, 1961), and even further back, in the Bronze Age, cultural transmission can be seen (Wehlin, 2012: VI). In Germany, the settlements of Groß Strömkendorf, Menzlin, Ralswiek, and Dierkow all appeared in the mid-8th century, and it was the same at Staraya Ladoga in modern Russia. In Poland and the Eastern Baltic States Truso, Wiskiauten and Wolin emerged at the very start of the 9th century. All of these settlements to some degree are known to have maintained a permanent, multi-ethnic population, participated in long-distance trade and exchange, produced crafts, and were similarly alien within their landscapes. Links between these settlements and Scandinavia are now quite clear, as is an understanding that they were involved in the long-distance trade networks that are commonly used to discuss the beginnings of the Scandinavian sites (Noonan, 1982; Sindbæk, 2013). These sites were also of similar size and density, located in places easily accessible from the Baltic, but also easily defended in times of crisis. Given the fact that the primary discussion on the settlements of Scandinavia relates to their proposed place as the earliest form of urbanism in the region, and as a somewhat unexpected appearance on the landscape, the need to integrate these settlements appearing across the southern and eastern Baltic in a discussion is clear. Unprecedented size and an increase in density are conventionally considered as almost inescapably symptomatic of the development of an urban way of life (Childe, 1950: 4), and those two factors alone mandate that site all across the Baltic be included in discussions of early urbanism in Northern Europe.

Somewhat ironically, however, just as the Viking Age settlements of Scandinavian were long overlooked by European archaeologists and historians, so have these settlements been positioned as somewhat lower-priority than the settlements of the western Baltic. A reproduction of a 1994 map in a 2010 journal article entitled 'Central Places around the Baltic Sea' displays only Scandinavian settlements, and has the Kattegatt strait in its

centre, with Paviken on Gotland the easternmost site (Bogucki, 2010b: 159). Indeed this lack of attention, particularly in terms of the conduction of excavations, to the southern and eastern Baltic sites and therefore unfair weighting towards the west, has been well acknowledged (Callmer et al., 2017: 1; Sindbæk, 2007: 67). The Baltic and West Slavic settlements have not been entirely ignored; they are often mentioned in tandem with the settlements of Scandinavia (Bogucki, 2010b; Callmer, 1994; Clarke and Ambrosiani, 1995; Valk, 2012), but the same amount of attention has not been applied. Recent history, in particular World War II and the Soviet occupation of the Baltic States, has greatly affected the research output of and by the countries of the southern and eastern Baltic, and thus despite the clear similarities between the settlements across the region they have not seen as of the same profile.

URBAN THEORY IN ARCHAEOLOGY

“Urban centres are social formations manifest in a physical surrounding that is always changing, while definitions serve archaeologists best when applied to entities that are fixed or are found within relatively fixed parameters”

(Smith, 2003: 8)

One of the most common discussion points for the settlements under investigation in this thesis relates to whether or not they can be decisively identified as ‘urban’. While this is an debate that this thesis does not aim to resolve - since my concern is what they were doing and the consequences of this - their place somewhere upon the trajectory of urbanism necessitates a discussion on the history of urban theory within archaeology. This must, of course, begin with the work of the “founding figure of urban studies within archaeology” (Yoffee, 2009: 265), V. Gordon Childe. In 1950, Childe published an article entitled ‘The Urban Revolution’ in the *Town Planning Review*, in which he created a checklist of sorts, identifying ten criteria which serve to differentiate between the first cities and their earlier counterparts. While Childe does write interchangeably of civilisation, urbanism, and cities, he quite clearly makes the point that he is speaking of a development or settlement form that is a counterpoint to the rural village (Childe, 1950: 3-4). Even though Childe’s choice to use the term ‘revolution’ to describe both the urban revolution and his Neolithic revolution (Childe, 1936) has been criticised

(Mumford, 1961: 31), he does clarify his application of the term, noting that “it is here used for the culmination of a progressive change in the economic structure and social organisation of communities” (Childe, 1950: 3). Its use does not specify a great social uprising, though Childe’s ten criteria (Childe, 1950: 9–16) are clearly intended to convey a great change in the social organisation of communities undergoing the urbanisation process. Childe’s approach in creating these criteria⁴, which was to understand communities as complicated systems within which a complex interplay of social and economic variables combine to ‘kick-start’ the urbanisation process, can undoubtedly be seen as a precursor to the viewpoints of the earlier-emerging British version of the New Archaeology (Trigger, 1980: 181). While a precise application of Childe’s checklist has fallen somewhat out of fashion, the themes of political power and city planning and his focus on variability clearly precede the urban research of today (Smith, 2009: 21).

Three recent edited volumes show just how difficult it is to arrive at a clear definition or characterisation of how the state of “urban” can be reached or identified, particularly when taking a comparative approach. Glenn Storey’s “Urbanism in the Preindustrial World: Cross-Cultural Approaches” (Storey, 2006), Joyce Marcus and Jeremy A. Sabloff’s “The Ancient City: New Perspectives on Urbanism in the Old and New World” (Marcus and Sabloff, 2008), and Monica Smith’s “The Social Construction of Ancient Cities” (Smith, 2003), all show the great variation evident in the criteria used in studies of the urban past, and of the variation evident in *definitions* of past urbanism. Storey defers to the regionalists in his definition of urbanism, stating that a settlement can be considered “urban” when it is agreed to be as such “among the scholars who study that place and its cultural setting” in some form of consensus (Storey, 2006: 2)⁵. Marcus and Sabloff give a broad history of attempts to model the city from a sociological standpoint,

⁴ *Loosely paraphrased, these criteria mandate that urban settlements be the biggest in their region, support specialist occupations through agricultural surplus, that there be taxation, that there be a ruling class supported by the two prior elements, that there be monumental architecture, writing, science, and sophisticated art, that there be long-distance trade networks, and state organisation separate from the links of kinship (Childe, 1950: 9-16).*

⁵ Though he gives an expressly personal opinion that the density of a population need not be particularly high as long as the size of the settlement is in the ‘tens of square kilometres’, with a population of at least five thousand individuals (Storey, 2006: 22).

and to distinguish the city from the non-city, to very effectively avoid providing their own definition. They do also quite clearly emphasise the role of regional experts in their identification of the key area with which their volume is concerned, the 'life cycle' of the city. Case studies are used, then a comparative overview is given, and finally an analysis of the new perspectives and theoretical approaches developed in their volume (Marcus and Sabloff, 2008: 25). Smith quite specifically rejects the possibility of a static development, seeing it as a denial of the dynamism inherent in an urban centre. Circling back to Childe's criteria of 1950, she lauds his comparative and relativistic approach to viewing a place as urban, concluding that the perceptible difference between urban and rural communities and activities should be considered more frequently (Smith, 2003: 8–11). This clearly shows that more recent studies of urbanism are moving away from the checklist or criteria-based approach, away from defining urbanism, and towards characterisation and comparative discussion. Attempting to solve a debate around what is and is not urbanism is beyond the scope for this work. A broad overview article by Bisserka Gaydarska entitled "The City is Dead! Long Live the City!" exploring applications of the concept of urbanism to the Trypillia mega-sites of Ukraine, though very specifically not answering the question of whether or not the sites can be called 'urban' (Gaydarska, 2016), was met with six response papers, each variously supporting and refuting her arguments (Andersson, 2016; Christophersen, 2016; Mazzucato, 2016; Mogren, 2016; Raja, 2016; Ur, 2016).

This difficulty in defining urbanism is, clearly, also not only restricted to archaeology. The geography textbook "Urbanization. An Introduction to Urban Geography", stipulates in its second chapter that students, after reading, will be able to "explain what makes a place "urban"" (Knox and McCarthy, 2012: 19). The chapter discusses preconditions for urbanism and theories of urban origins, the regional origins of urbanism, historical urban expansion, and the industrial revolution, but does not give any meaningful clues about how to clearly and specifically fulfil the requirement posed. This, quite apparently, is a problem. Often the status of the sites under investigation in this thesis, in particular the better-investigated Scandinavian settlements, is described *in relation* to urbanism. For example, the 'four towns of the Viking Age' are variously described as urban (Hedenstierna-Jonson, 2016; Skre, 2007b: 15; Tvauri, 2012: 18) and

proto-urban (Henning, 2003: 269; Kalmring, 2016: 11; Müller-Wille and Tummuscheit, 2004), as well as non-specifically as urban communities or places of urbanity (Christophersen, 2015) and directly following from the “first sparks” of urbanisation in their region (Mogren, 2013). An explanation for this lack of clarity, as it were, is given by Monica Smith, who has observed that the conferral of urban status on a site carries an implication of value and importance in the landscape (Smith, 2003: 8). The term ‘urban’ has cachet, and that factor complicates its use as a label for integrating research.

The initial proposition for this thesis was that a wide-ranging study incorporating previously rarely integrated sites would lead to the reduction of these sites to a particular type, which would identify a unique character, provide them with a solid classification, and answer once and for all, the question of whether or not these sites are urban. Diving into the field and the material, however, it became very clear that this would be the task of a lifetime and one which would ultimately prove futile, as there is already very little academic consensus on any categories or models proposed for this particular spatial and temporal context. To label a site as “urban” involves engagement with an enormous body of literature, the presentation of a strong justification for the classification of the site as such as relative to this body of work, and a pre-emptive response to those who would feel otherwise. The aforementioned *‘Urbanization. An Introduction to Urban Geography’* highlights one main problem with the issue of whether or not the settlements under investigation here can be referred to as “urban”. This is the problem that, comparatively, it is very difficult to ascribe the term to the relatively small sites of the Early Medieval Baltic when the global origins of urbanism, in Mesopotamia, Egypt, the Indus Valley, Northern China, and the Andes and Mesoamerica, are described as being found in these settlements with tens of thousands of people, massive irrigation projects, extensive social stratification, and settlement extents from 1 to 20 square kilometres (Knox and McCarthy, 2012: 23–25). But while each of these regions may have similar “urban” characteristics, they are acknowledged as very different from each other, showing distinct characteristics and developing independently.

Setting aside, therefore, the discussion about whether or not the larger settlements around the Baltic can be called “urban”, it can certainly be agreed upon that they exist

somewhere along a trajectory towards what later became a decisively urban material and culture. The settlements certainly display a character quite different to the rural settlements which dotted the hinterlands (Croix, 2018). “Urban” specifies having “urban institutions and an urban way of life”, while “urbanising” is a developmental process towards decisive urbanism (Callmer, 1994: 50). The former term being debatable and the latter less arguable makes it a very neat characterisation to adopt in this situation. An argument can certainly be made, rather, for these settlements being the “first sparks” of urbanism (Mogren, 2013)⁶, as they are essentially unprecedented in the landscape of the Baltic. Recent literature seems to be moving towards a characterisation of “urbanising” (Croix, 2015) as well as integrating other terminologies new to archaeology, such as Kalmring’s intriguing “Special Economic Zones” (Kalmring, 2016).

⁶ Though note that Mogren uses this term to refer to the earliest stage of these settlements, the seasonal marketplace.

EARLY MEDIEVAL BALTIC SETTLEMENTS

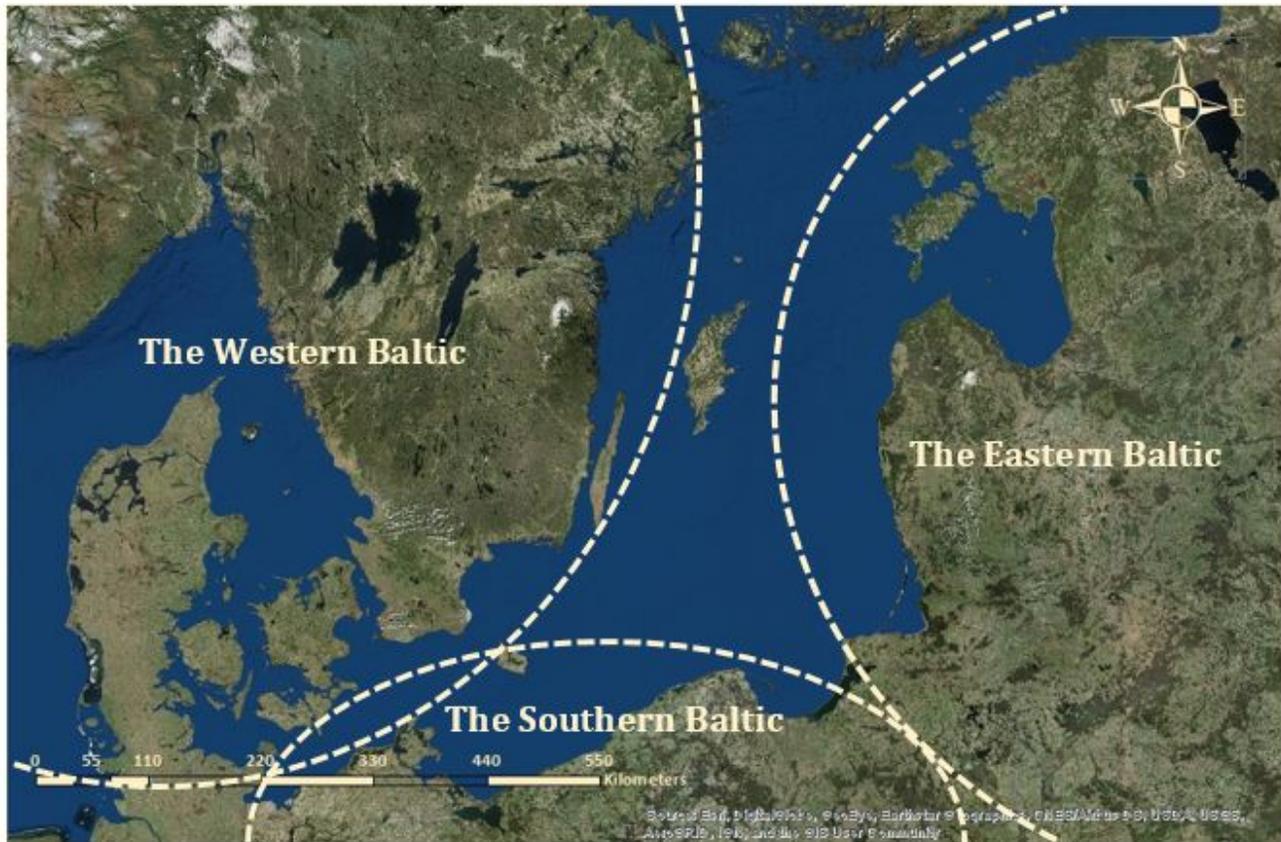


Figure 1.1 - Regions of the Baltic adopted in this work.

The appearance of settlements across the Baltic in the Early Medieval period is a well-researched topic, with many (now very influential) individuals having written PhD theses on singular aspects of the settlements. Anne-Sofie Gräslund wrote on the burial customs of Birka (Gräslund, 1980), Sven Kalmring on the archaeology of the harbour at Hedeby (Kalmring, 2008), Timo Ibsen’s thesis focussed on finding the location of the settlement of Wiskiauten (which he was only partially successful in doing, reflected in the title which loosely translates to “approximately here is the settlement”; Ibsen, 2009), and Søren Sindbæk made a solid effort to work on the Russian settlement of Staraya Ladoga before realising the cooperation required to do so was less than forthcoming (Sindbæk, 2015, personal communication). It must be noted that the current work does not attempt or claim, **in any way** to provide more or better information than that of those who have worked directly on the sites. Multiple volumes have been written on

many of the sites under investigation - three for Kaupang (Skre, 2007b, 2008, 2011d), two for Truso (Brather et al., 2012; Jagodziński, 2010), and five for Ralswiek (Herrmann, 1997, 1998, 2005, 2006; Herrmann and Warnke, 2008). Many of them have been the work of a lifetime for the main investigators; Björn Ambrosiani and Birgit Arrhenius for Birka and Claus Feveile for Ribe to name just a few. The aim of this thesis is, simply, to produce an inclusive synthesis of data on all sites across the Early Medieval Baltic which display urbanising characteristics in an effort to build a Baltic-wide model of the operation of Early Medieval settlements, and to test the use of a particular theoretical model to provide a way of assessing the decline of these settlements between the 9th and 11th centuries.

What this thesis seeks not to do is discuss Scandinavia *and* the Baltic, as has been traditionally seen, or Scandinavia, the West Slavs in Northern Germany and Poland, and the Balts in the Baltic States, but the Baltic as a whole. Instead, these titles will be replaced by a model adopting terms relating strictly to geography – the Western Baltic, the Southern Baltic, and the Eastern Baltic (Figure 1.1). The application of these terms, however, in a nod to tradition, is related to the historical (i.e. Early Medieval) cultural divisions in these regions. Both Germany and Poland are split into two halves, the former with Hedeby assigned to the Western Baltic and Groß Strömkendorf, 140 kilometres away, assigned to the Southern, and the latter with Truso, located in the Bay of Gdansk, assigned to the Eastern Baltic due to its identification as ethnically Pomesian/Old Prussian. Another concern which has informed the adoption of these geographically defined terms is the actuality that recent history has had an impact not only on the academic tradition of the countries concerned, but also on their public perception. At the risk of delving into somewhat ambiguous territory, ‘Scandinavia’ conjures up images of ABBA, IKEA, snow, fashion, and *hygge*, while the Baltic States and Poland are much less well-defined in the minds at least of Australians, and the legacy of World War II and the Soviet Union looms large. By contrast, it is clear that the Swedes, Danes and Norwegians of the Early Medieval Period did not discount those who occupied the southern shores of the Baltic or consider them lesser. Numerous political marriages between the two groups are accounted for in historical literature (note that all of these do carry an air of uncertainty, though their attribution is considered in itself

significant). Harald Bluetooth (ruler of Denmark, c. 958 – c. 986) married Tove/Thora, an Obodrite (Slavic) princess, Eric the Victorious (ruler of Sweden, c. 970 – c. 995) possibly married Świątosława/Sigrid the Haughty, daughter of Mieszko I of Poland, their issue Olof Skötkonong of Sweden (ruler c. 995 – c. 1022), and then later Świątosława was re-married to Sven Forkbeard of Denmark; their issue Canute the Great became King of England, Denmark and Norway (Maleszka, 2001: 104). In another effort to move away from the primacy of Scandinavia in the study of these sites, the period of time referred to will not be the Viking Age, but rather the Early Medieval Period. This is not unprecedented – ‘Early Middle Ages’ was used in Mateusz Bogucki’s discussion of the emporia of the Baltic Sea in deference to the continental European tradition (Bogucki, 2010b: 151). It must be noted that Early Medieval is a continental term, and indeed risks further reducing the Baltic to the periphery of continental Europe (Hillerdal, personal communication, 2018), but for the sake of uniting the Baltic region this risk is accepted.

Selection and Criteria

In 1994 over 80 sites across the Baltic were identified by Johan Callmer to be part of the change in the cultural landscape from the 8th century onwards (Callmer, 1994). This work must be placed in its geopolitical context – the Baltic States had only emerged from the Iron Curtain two years earlier and so are underrepresented in Callmer’s work. The Southern Baltic has seen great benefit from the research attention of research institutions founded after the publication of Callmer’s landmark article⁷. In some cases, while all signs point to settlements discussed in Callmer’s article clearly meeting the criteria for inclusion in this discussion, a lack of English-language publication or simply publication overall meant that they could not be included. The settlement of Rostock-Dierkow, for example, is often mentioned in analyses of the urbanisation of the Baltic and the landscape of northern Germany in the Early Medieval period (Barford, 2005: 75; Bogucki, 2010a: 268, 2012: 108; Sindbæk, 2009: 73) but is sparsely documented in English-language publications. In contrast, the periphery and cemeteries of Wiskiauten⁸ has

⁷ The ZBSA in Schleswig, Germany, is a primary example of this, founded only in 2008 and with strong research interests in the Southern and Eastern Baltic.

⁸ Despite the settlement itself still largely evading discovery.

been studied so extensively (Ibsen, 2009, 2013; Ibsen and Frenzel, 2010) that its inclusion is possible.

A qualitative and quantitative selective framework for the settlements discussed here therefore must be developed and imposed, for the sake of both brevity and the preparation of consistent inter-site descriptions. In terms of the quantitative criteria for selection, all settlements must display year-round occupation in order to maintain the reference to an urbanising tradition, which is to say that they were occupied more than seasonally. This eliminates many of the coastal markets which have been shown to dot the coastline of the western Baltic even before the 7th century; Richard Hodges' 'Type A Emporia' (Hodges, 1989: 50–51). Settlements must also show evidence of being connected to long-distance trade, have extensive craft production, and emerge between the 7th and 9th centuries CE as part of a clear trend. Systematically separating these sites from earlier sites such as the magnate farm of Helgö, which was clearly an important distribution point for items of great value⁹ and also a centre of craft production with a permanent population (Waller, 2007) is where this becomes difficult. Helgö meets all of the criteria expressed above, but is thought to have only been a seasonal market site (Skre, 2011a: 205). The site seems to have been a permanently occupied high-status residence (Frölund and Göthberg, 2017), rather than displaying the "urbanising" lifestyle seen in the larger settlements (Croix, 2018). That being said, this argument cannot feasibly be made for every small settlement which may resemble the larger ones like Birka and Truso, and thus a quantitative framework must also be applied. The framework here employed for the selection and analysis of these settlements also places them in a global context, making clear their place in the wider world of urban analysis and the study of settlement patterns.

⁹ Including a statue of Buddha from India, an Egyptian Coptic cup, and a large bronze cross from Ireland (Waller, 2007: 259)

The Interaction-Communication Matrix

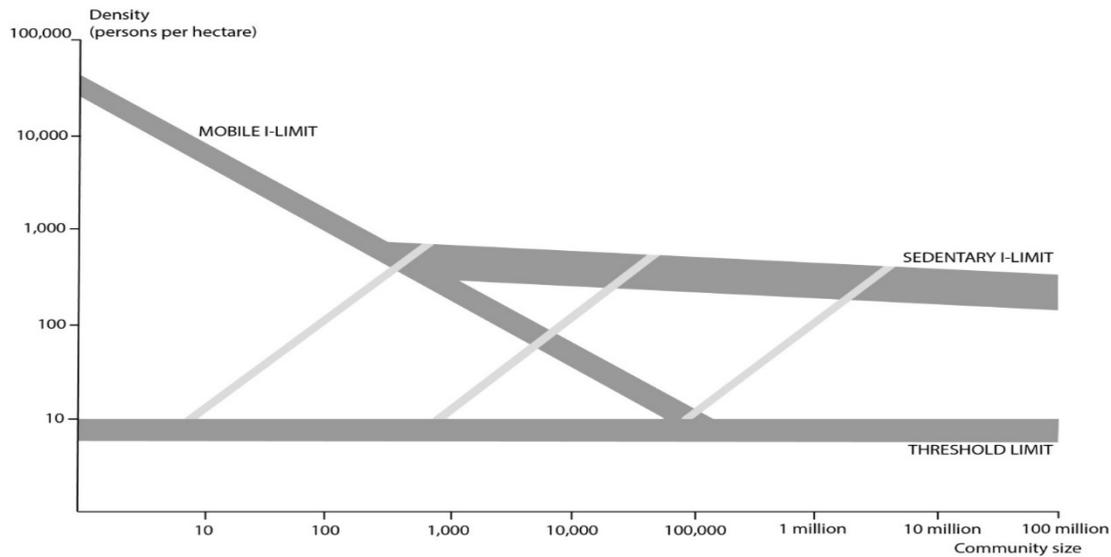


Figure 1.2a - Fletcher's comprehensive I-C Matrix, adapted from Fletcher, 2007:96 with permission

The Interaction-Communication Matrix (Fletcher, 2007) is concerned with the impact that the materiality of residential density and settlement area can have on the growth and decline of communities and the settlements they live in. The impact occurs due to two primary factors; that humans have only a finite capacity for interaction, and that communication systems limit the size of a settlement and population of its community. This is represented in what is called the I-C Matrix (Figure 1.2a, b). The first condition is that the human sensory system is limited in the amount of information it can successfully process (the amount of stress humans can handle), that increasing density magnifies this stress to an eventually critical intensity, and that this thus imposes a limit on the density at which settlements can operate (Fletcher, 2007: 70). This maximum limit, of around 500-1000 individuals per hectare, is known as the I-limit¹⁰, and declines slightly as population size increases (Fletcher, 2007: 74)¹¹. In general, however, settlements lie at lower densities, indicating that the higher densities are very stressful and that the materiality of residential crowding imposes severe strain on the sociality of communities.

¹⁰ Devised by sampling two and a half thousand years of human communities.

¹¹ Very small mobile or nomadic communities (of less than 100 individuals), can survive at greater densities (observed at up to 10,000 individuals/hectare though predicted to potentially even higher) (Fletcher, 2007: 80).

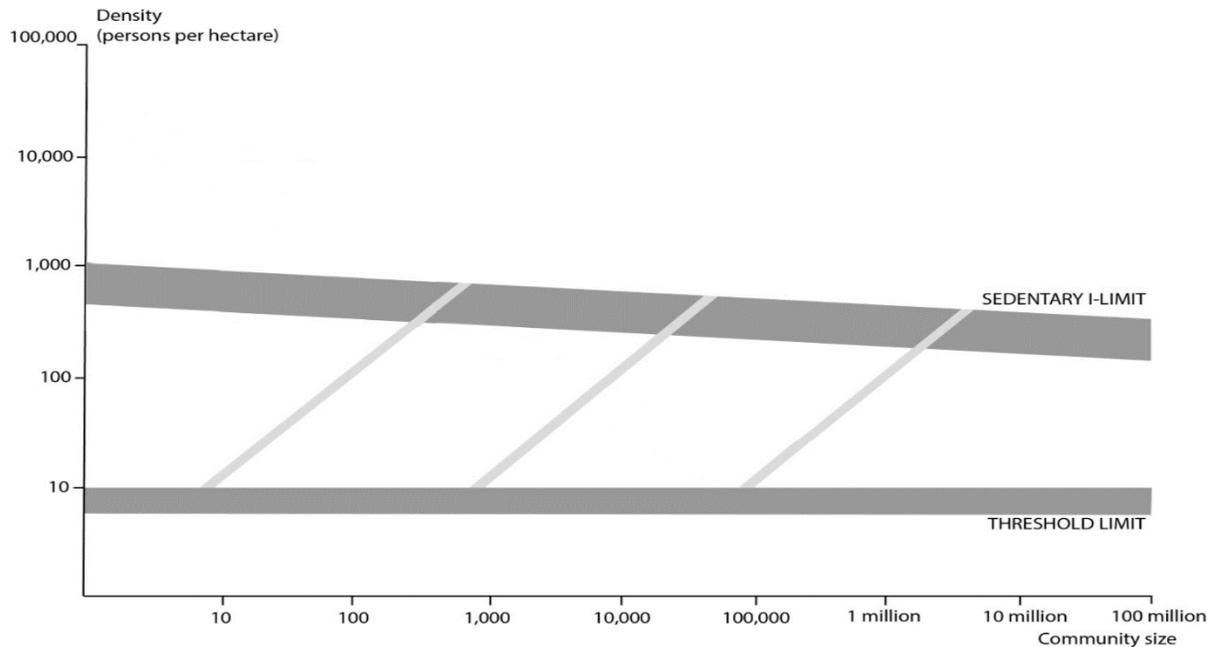


Figure 1.2b - Fletcher's sedentary-only I-C Matrix, adapted from Fletcher, 2007:96 with permission

The second condition is that settlements with denser occupation cannot increase in areal extent and population indefinitely without the development of some sort of technology to manage communication. Fletcher observes three major changes in settlement size – the formation of permanent sedentary communities beyond one hectare in extent, of agrarian urban communities beyond 100 hectares (one square kilometre), and of industrial cities beyond 100 square kilometres in extent (Fletcher, 2007: 88). Each change is bounded by a ‘C (communication)-limit’ (seen marked as grey diagonals in Figures 1.2a and 1.2b above). Settlements approaching combinations of population size and density near both the I and C limit must either drop back or develop a new technology to handle communication problems to cross their C-limit, then allowing the settlement to continue to grow in extent and population (Figure 1.3)¹². Behind a C-limit, as an example the 100 hectare limit, the distribution of settlement size is weighted towards smaller areal extents, with most less than 30 hectares in extent and the majority even below 15 hectares (Figures 1.4a and 1.4b below). This distribution is

¹² Below the Threshold limit there is another set of trajectories to low-density represented by Tikal and Angkor for agrarian urbanism (Fletcher, 2007: 93). Other examples, such as Great Zimbabwe and European Iron Age oppida, are on another of these low-density trajectories to dispersed, low-density settlement form. This is the topic of an ongoing PhD project from The University of Sydney by Kirrily White, due for submission in 2018.

indicative of the high communication stress that the materiality of larger settlement area imposes on the sociality of the community.

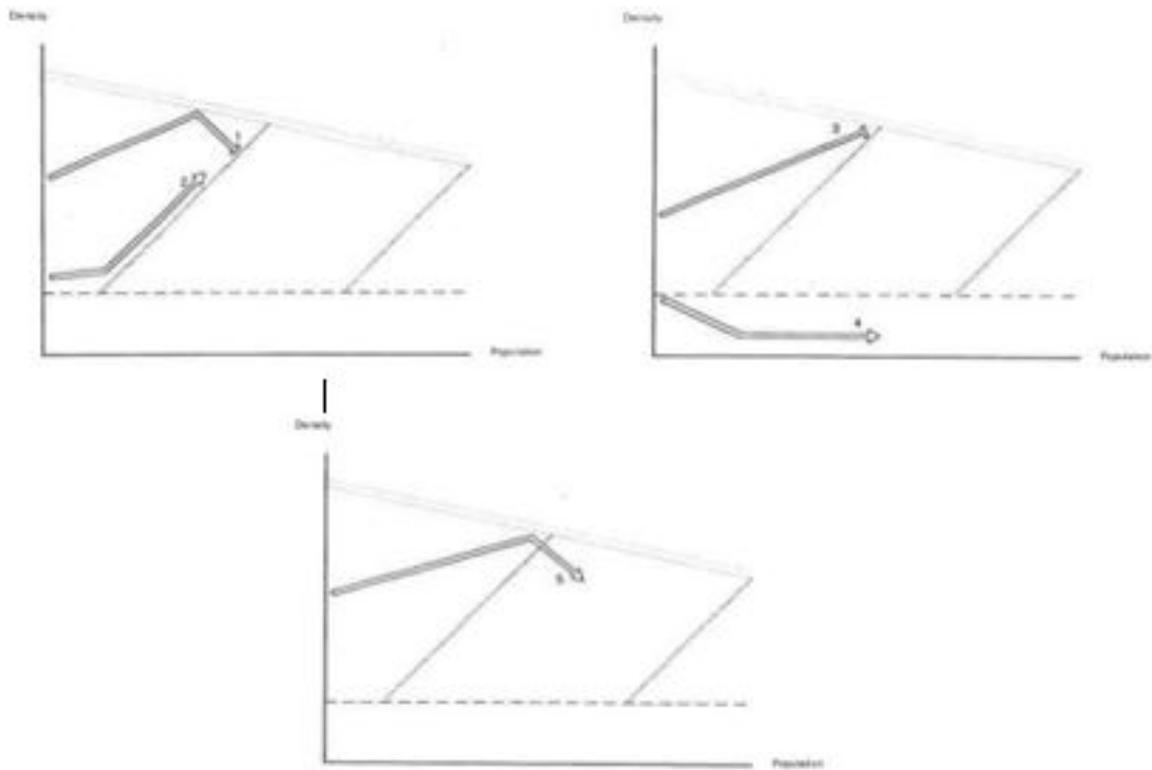


Figure 1.3 - Hypothetical growth trajectories, adapted from Fletcher, 2007:112 with permission.

- Trajectory 1 – stasis
- Trajectory 2 – stasis
- Trajectory 3 – stasis
- Trajectory 4 – bypass
- Trajectory 5 – transition

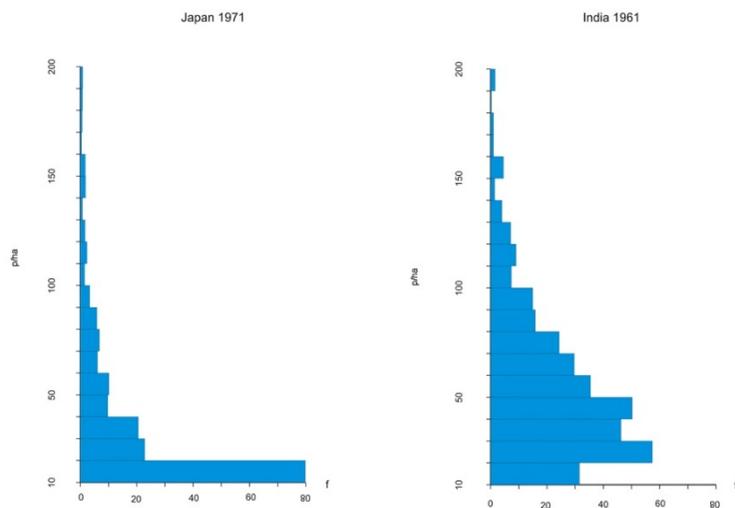


Figure 1.4a - General, distributions below the I-limit for sedentary communities, of the overall densities within settlements. Illustrated by the total set of urban settlements in two regions. Data from modern national statistical records.

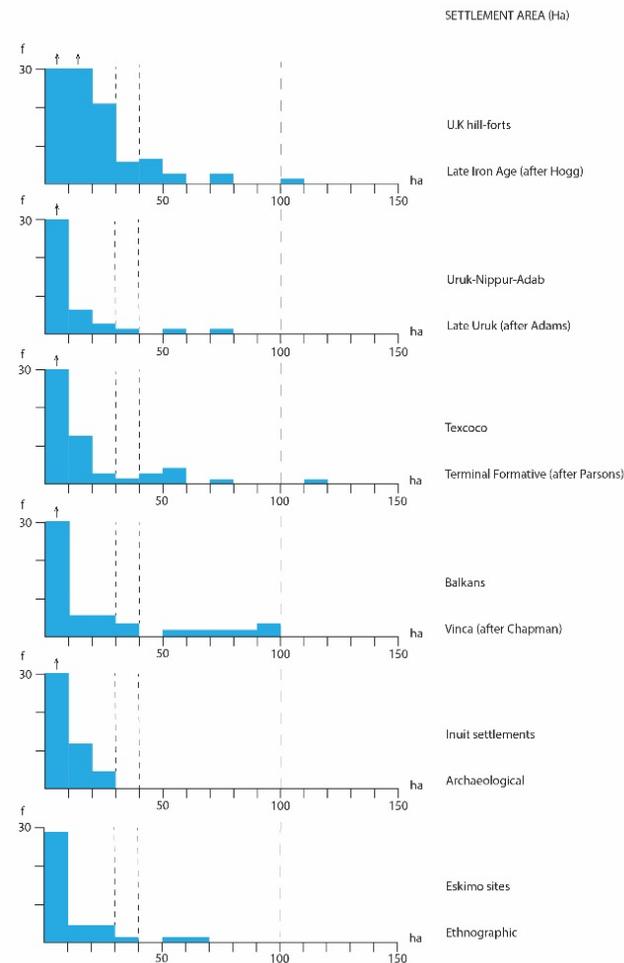


Figure 1.4b - Standard settlement area distribution worldwide for sedentary, agrarian regions. Data compiled from archaeological surveys (Fletcher 2007:102).

The Threshold Limit (Figures 1.2a, 1.2b) defines a lower boundary, below which this thesis does not go. Settlements which exist under the T-limit, a set threshold limit of density (10 people per hectare), are considered to be sufficiently spread out (dispersed, low-density) that there is no significant interaction friction and, in principle, no constraint on their areal expansion below the Threshold limit. This class of settlement is not considered within the current study, as no cases which fit the pattern identified previously are known in the circum-Baltic region. Fletcher's work found that the Threshold Limit corresponds with the maximum densities for rural regional populations (Fletcher, 2007: 92), and as this investigation is primarily concerned with settlements on an urbanising trajectory, a density of 10 individuals per hectare or more therefore becomes the purely quantitative barrier to entry for this work. Very few, if any, of the Early Medieval settlements of the Baltic grew to a size and density where they are affected by the issues of a settlement reaching the 100-hectare C-limit. They were, however, in line with global patterns for settlements behind the 100 hectare C-limit (Figures 1.4a and 1.4b below) described above (Fletcher, 2007: 102–107), a matter which will become relevant later in this study. The I-C Matrix is, therefore, a handy frame of reference, particularly in comparison to other settlements of the same period. In order to map settlements on the I-C Matrix approximations of two pieces of information are required; the areal extent of the settlement and an estimate of community size, i.e. its population, to provide an estimate of population density. Referring again to Wiskiauten, despite the fact that we do not know much precise information about the settlement, the number of graves in the very well-explored cemetery and the physical and temporal area over which artefacts were scattered allows an estimate with a certain amount of confidence. Harking back to a point made earlier, regional specialists are deferred to in their estimates of these numbers and variables, though confirmed through calculations where possible.

MEASURING THE OUTCOME

The first aim of this work is to build a coherent model of urbanising settlements in the Baltic in the Early Medieval Period based on the work of regional specialists and using Fletcher's interaction-communication model. The second is to assess the relationship between settlement histories in an outcome analysis (Fletcher, 2004) - especially the outcome of their Early Medieval Phase in relation to the occupation densities, areal extent, and physical conditions of the settlements and the sociality of their communities. This approach will be elaborated in subsequent chapters, but essentially posits that complementary difference between materiality and sociality - and in some cases, non-correspondence or dissonance between them (Fletcher, 2004: 130) at a variety of scales of magnitude, relates to the outcome, i.e. to what happened to that settlement. This is not a deterministic model. Just as our material conditions today often do not perfectly match our social lives, we should be allowed to assume the same for the past. The social conditions of a settlement can transform much more rapidly than the material conditions, and thus dissonance between these two variables is likely much more common than previously articulated in archaeology. The strength of this proposition lies in its reference to the overall outcome of the settlements rather than detailed specifics. Simply for a settlement to be at or near the bigger than usual areal sizes and at or near the upper, habitual occupation densities would in themselves be factors dissonant with sociality. And while archaeological data rarely offer a completely clear picture of the past, and we may not have or understand every single aspect of the material conditions of the settlement or the exact social conditions operant within it, an outcome is generally quite a singular and recognisable phenomena and can be measured in many ways; such as a settlement's duration, magnitude, and degree of sustainability (Fletcher, 2004: 133). This approach has been conceptualised globally by Fletcher and applied by him to the Greater Angkor region of Cambodia. As of yet it has not been applied to European sites, nor to sites of one single region. This study is the first such application. In order to proceed with this first step, the study must necessarily accept that the information provided by regional experts about the settlements is to be taken at face value. Interregional and global specialists must not seek to upstage local

experts as it pertains to specific detail, otherwise a self-confirming loop develops, in which global theory pre-defines local detail.

To give a hypothetical example, a settlement bounded by fortifications may experience a significant upswing in trade, bringing an increased number of traders and a significant increase in wealth to the site. If the fortifications are particularly necessary, say in the case of abundant piracy in a region, the settlement may not be able to expand its fortified area to keep up with the increase in population, and thus become unsustainably dense. If residents were to move outside the fortified area they run the risk both of attack, and of becoming a liability to the enclosed settlement in the case of an attack, but if they were to stay inside the settlement, conditions would become suffocating. Thus, the social and material conditions of a settlement would become dissonant, and potentially lead to an unfavourable outcome for that particular settlement. Put simply, the proposition which comes from a discussion of these variables is quite simple – settlement discontinuity or collapse can be caused by a dissonance in the relationship between the material elements and social operation of the settlement. Those settlements which continue without issue are operating without conflict, or have found a way to moderate or adapt to any conflict between the variables which may arise.

And while it certainly would be, and hopefully will be, possible to one day build a detailed model of degrees of material-social correspondence (the work being conducted in the field of agent-based modelling and simulation such as that of Mark Lake, 2013 in particular could contribute to this), at this stage the model must be applied in broad terms. Here the outcomes of the settlement histories will be used to assess the degree to which the material and social conditions were operating coherently. Thus, the most important information to have on hand about the settlements chosen for analysis is that of the time in which they operated and their outcome, combined with overall information about their overall material and social conditions. Detailed information is often not available and in some cases even outcomes are obscure. Ribe, for example, has a very uncertain end, with little to nothing known about the settlement in the 10th century, but this is, of course, a known which it is necessary to account for when working with archaeological data.

THE SETTLEMENTS

Taking into account all of the information presented above, thirteen settlements of the Early Medieval Baltic have been chosen for discussion in this thesis (Table 1.1, Figure 1.5). These settlements will be discussed in great detail in the three central chapters of this thesis, with information about the sites, factors affecting their excavation or representation, and data pertaining to the construction of the theoretical model of settlement outcome presented.

Table 1.1 - Settlements to be investigated in this work

WESTERN BALTIC	SOUTHERN BALTIC	EASTERN BALTIC
Birka	Groß Strömkendorf	Truso
Kaupang	Menzlin	Wiskiauten
Ribe	Ralswiek	Grobiņa
Hedeby	Wolin	Staraya Ladoga
Åhus		

It is important to note the huge amount of material available on each individual site studied in this thesis along with an understanding of the scope of this investigation. Limitations must be acknowledged, primarily in terms of the sheer volume of languages in which this corpus has been published; Russian, Estonian, Latvian, Lithuanian, Polish, German, Danish, Norwegian, Swedish and English to name only the most obvious. And while publications in German and the Scandinavian languages are somewhat accessible to a primarily English speaker due to a shared language root, undoubtedly a lot of literature published in the Slavo-Baltic languages has been missed. Any errors or missed information must be understood in this context, but also acknowledged as a limitation by the author. Wherever possible contact with the primary authors on the sites less well-

represented in the English-language corpus has been attempted¹³ though in some cases has been quite unnecessary given the excellent state of publication, as in the case of the Kaupang and Truso volumes.



Figure 1.5 – Settlements selected for discussion

Because the express basic aim of the study is to use quantitative data to initially compare and then build a dataset to test a theoretical model, the raw data presented (mostly) through maps, drawings and numbers, are enough to allow the initial quantitative comparison to proceed. The additional goal of the thesis, an exploration of correspondence and non-correspondence in the material and social elements of the settlements does require more information, particularly that of excavation reports and interpretative articles. The quality of this information varies considerably from the west

¹³ Time spent with Timo Ibsen at the Centre for Baltic and Scandinavian Archaeology in Schleswig, Germany was very helpful in understanding the state of research at Wiskiauten/Mokhovoye in Kaliningrad, as was a day spent with the curators of the Wolin Museum

to the east, for reasons of recent history which will be explored in greater detail in Chapter 3.

CONCLUSIONS

“Medieval towns show no uniformity. It is their variety that makes their history so interesting and at the same time so difficult”

(Ennen, 1967: 182)

This thesis is concerned with the appearance of settlements around the Baltic Sea between the 7th and 9th centuries. These settlements hosted permanent populations, took part in long-distance trade and exchange, produced crafts, and with only a few notable exceptions lasted for no less than 80, and no more than 250 years. Most of those which didn't survive were replaced by settlements fairly easily recognised as High Medieval towns, all of which survive today and many of which are the precursors of either country or regional capital cities. The settlements are a singular phenomena, anomalies in their homelands yet in most cases not operating on the same scale as trade settlements in the North Sea or continental Europe. The inhabitants of these settlements lived very different lives to those who lived in the rural, village-like configurations which dotted Northern Europe; they ate differently (Becker and Grupe, 2012), lived differently (Croix, 2018), and died differently (Hedenstierna-Jonson, 2014). The settlements were short-lived, a blip on the radar, and yet they have captured the imagination of both scholars and the public, made evidence through the inscription of some on the World Heritage List.

Most research thus far has focussed on individual sites, small comparative works, or typological issues, and a comparative model of early urbanism in the Baltic has not yet been attempted. While it cannot be said that all the sites are of a particularly distinct type, their appearance at a similar time, and for similar reasons is undoubtedly in some way related. While a much larger dataset and therefore more comprehensive enquiry is

desirable¹⁴, the scope proposed here is considered acceptable for the particular amount of time and resources available to a PhD project. Fletcher's I-C Matrix (Fletcher, 2007: 96) provides a convenient and relevant framework which complements the selected criteria for analysis, and this thesis is the first large-scale and comparative analysis of his theoretical model proposing the integration of the outcome variable in discussions of material/social correspondence or non-correspondence (Fletcher, 2010). This thesis is not designed to present new, primary archaeological or historical information about the sites under review – that particular responsibility lies with the archaeologists and their associates who have worked tirelessly on sites for many years. It would be absolutely incorrect to accept any information presented here as primary archaeological data over that presented by the relevant parties. A new presentation, integrative interpretation, and method for analysis is the goal of this work. Ideally, however, this work could suggest additional specific site investigations, and future regionally or even globally comparative work. It is hoped that the theoretical approach taken here will be seen as a valuable contribution to the field of Early Medieval Baltic urbanism, and as something to be explored further.

¹⁴ And there are indeed quite obvious extensions of this chosen sample such as the North Sea region (e.g. Sindbæk, 2013) and the globally similar settlements of East Africa and South-East Asia (Mogren, 2013: 81).

APPROACHING BALTIC URBANISM IN THE EARLY MEDIEVAL PERIOD

While the specific approach being taken in this study is new, literature around the topic of the development of settlements in the Baltic in the Early Medieval period is not at all uncommon. Three aspects of the sites are most commonly discussed – their inception, life inside the settlements, and their decline. The development of the settlements has been discussed as indigenous to the region in the context of the western Baltic (Clarke and Ambrosiani, 1995: 46), but the fact that the Baltic had been trading southwards for several thousand years (Gestoso Singer, 2008) suggests that there must have been significant exposure to settlements in greater mainland and southern Europe, thus they were likely not entirely ideologically indigenous. The start of this particular form of settlement is generally attributed, at least in part if not entirely, to an intensification of trade following the decline of the Roman Empire. Supporting this theory is the fact that the settlements are without exception founded near trade routes with trade and craft production as their primary functionality (Bogucki, 2010b: 151; Skre, 2012b: 84–85). Another interpretation is that this trade was perhaps a symptom rather than the cause, that the gathering of wealth and economic potential within communities in the North after the decline of the Roman Empire allowed them to join and establish long-distance trade networks (Jagodziński, 2010: 113). Agricultural overproduction and the development of sophisticated crafting tools may also have led to the ability for specialised occupations and thus the gathering of this wealth (Bogucki, 2012: 84). In the southern Baltic two models of development predominate – the first a local model where these sites emerged organically from rural settlements, remaining connected to local political structures, and the second externally generated, with significant international influence that remained cooperative with local structures (Bogucki, 2010a: 268). There were clearly many factors at play.

Reconstruction of life within the settlements, the second commonly discussed aspect of the settlements, has also increasingly become more viable, with the greater resolution

that more data and clever analysis can afford. Experiential studies have focussed on the individual within the town using social-practice theory (Christophersen, 2015) and information gained from particular single events, most notably burials (Hedenstierna-Jonson, 2014). Economic theory has been applied to the market, social, and economic practices within the settlements (Skre, 2016), and deep and careful analysis of archaeological material, in particular in comparison with rural settlements, has been used to recreate social practice (Croix, 2018). Sarah Croix's 2018 article in particular shows very clearly the substantial depth of understanding that can be gained with very careful analysis.

While the factors involved in the start of the settlements are fairly well agreed-upon, and study of the social aspects of life within the settlements is just beginning, the causes of their various outcomes, and their legacy, is still under great debate. In order to discuss these aspects, the context within which they emerged, especially in contrast to the way in which urban traditions are generally thought to have emerged, must be understood. The debate around just *what* these settlements are will be briefly outlined with particular attention paid to new approaches to the discussion, though no resolution to this issue can be provided. As outlined previously, the general approach to the 'urban status' of these settlements taken here is not that they are *urban*, rather that they are *urbanising*. Several approaches to comparative analysis thus far have shown the relevance of the study of the Baltic as a whole and these, and discussions on the relationship of the Early Medieval settlements to the towns of the High Medieval, have influenced and informed the way in which the argument presented later has developed.

FIRST- AND SECOND-WAVE URBANISING

Globally, the settlements under investigation in this thesis were part of a trend which is here termed "second-wave urbanising". Second-wave urbanising has no clear predecessor, though it is greatly informed and influenced by cultures on its periphery. It develops independently, but is not generated internally as a logical progression from an earlier settlement form, and in this particular situation is greatly affected by large-scale change on a regional and supra-regional scale. Second-wave urbanising rejects the central tenets of the neo-evolutionary stage theory (i.e. that development is progressive

(Birch, 1971)) and instead is a highly mobile and adaptable form of urbanism that can 'skip over' the small developmental phases that are often thought to precede it (Urbańczyk, 1994: 109–110). In continental Europe the *oppida* of the Halstatt and La Tène cultures are often discussed as the first settlements of urban form (Moore et al., 2013: 491). Built in the last two centuries BC as a response to growing population pressure, the term was coined by Julius Caesar to refer to large, fortified administrative centres of the Gallic tribes he encountered north of the Rhine (Malin-Boyce, 2004: 158). The *oppida* were particularly large, over 600 hectares in areal extent in the case of Kelheim in Bavaria, and some may have hosted populations of up to 10,000 individuals (Malin-Boyce, 2004; Moore, 2017: 292). Large quantities of trade goods and evidence of craftworking in the pre-fortified stage of the Celtic *oppida* suggest that a similar impetus may have been present in their development; "that economic initiatives played a major role in the urbanization of Celtic society" (Wendling, 2013: 472). Despite the clear difference in size (the largest Early Medieval Baltic settlement is Haithabu at 27 hectares, and the largest *oppida* are over 600 hectares in extent) there may be similarities between the developments of the two settlement forms. Debate over whether the *oppida* can be assigned the status of 'urban' has long raged, with reference to forms of urbanism evident in the Classical world, the 'urban tests' set forth by scholars such as Childe, and the extremely imprecise "town" terminology commented on by Moore (Moore, 2017: 289–291), but their importance in the cultural landscape of Iron Age Europe is clear. The *oppida* can be perceived as an example of a second-wave urbanising process of a similar form to that seen in the Baltic during the Early Medieval period.

First-wave urbanism, as the counterpoint, is that seen in the Classical and Prehistoric world. It is a largely internally generative process that has no urban predecessors or reference points. Second-wave urbanising does have a reference point; the inhabitants of the Baltic in the Early Medieval period had extensive contacts with the rest of Europe and the Mediterranean, and the Celts had contact with the Roman world¹⁵. The

¹⁵ First-wave urbanism is that of the urbanism discussed by Childe and Mumford (Childe, 1950; Mumford, 1961), pristine settlements of "hitherto unprecedented size" that progress logically, due primarily to population pressure, towards urbanism (Childe, 1950: 3–4). Of course we now understand this framework as overly simplistic. Even in the Fertile Crescent, long thought of as the birthplace of modern 'civilisation',

difference between first-wave urbanism and second-wave urbanising, however, is still quite clear, the key differentiation being whether the foundations of an urban tradition are internally generated or generated in a larger regional context where cities were already operating. Of course, it is to be expected that external factors may influence the development of an urban way of life; urbanism offers protection during periods of environmental and political instability. The distinction between first-wave and second-wave hinges more on the existence of a predecessor or strong urban influence. This framework has been explored in the context of state formation in the Prehistoric Aegean, with the Minoan and Mycenaean states of the Bronze Age discussed as examples of secondary state formation, emerging through contact with their more developmentally elaborate neighbours. The Mycenaean world is generally thought to have taken much from the preceding Minoan society, and the latter were heavily influenced by the “more mature” states of Egypt and the Middle East, a “secondary-interactive process” (Parkinson and Galaty, 2007: 117–118, 124).

EARLY APPROACHES TO MEDIEVAL URBANISM

This differentiation between northern and eastern Europe in the Early Medieval and continental Europe is clearly outlined and understood in historical literature as tied to the Roman world. The influence of Rome as a peripheral interactive force is understood in medieval urban history as a primary developmental factor. Broadly, Europe after the fall of the Roman Empire is split by Edith Ennen into three zones of interaction (Figure 2.1, Ennen, 1967: 175). The first is the Mediterranean, where even though the Roman Empire no longer predominated, its urban traditions persisted without significant interruption. The second is that of northern France, the Rhineland and the Danube Valley, where Roman urban traditions had penetrated, and persisted to some extent. In this region buildings may have remained in use and manufacturing may have continued, but politically the landscape was very different and administrative restructuring meant the priority of the ‘town’ was lost, even though many of the towns remained in existence. The third region encompasses the rest of Europe, east of the Rhine and north to

urbanism is now understood as a highly individualised process, less a progression through developmental stages than a “pulsating phenomenon” (Lawrence and Wilkinson, 2015: 342).

Scandinavia, where no direct Roman influence and thus no Roman urban legacy was in evidence. Ennen discusses the impact of this legacy as related to the ability of an urban network to survive in a landscape; the imposition of an urban network by Rome and its forced integration into a wider network overcame the difficulties faced in the generative phase of the development of that urban tradition. As she puts it, the “nobles of the northern Germanic zone” were “utterly rustic”, and if not threatened then they were just not interested in anything that would challenge their authority (Ennen, 1967: 177). One area not addressed specifically by Ennen is the British Isles, but with their Roman legacy they should be assigned to the second region. This does bring up a question around context in studies comparing the settlements of the Baltic and the North Sea region, a common topic given the similarities between the two networks.

Recent comparative studies have addressed the developmental impact that a significant Roman influence likely had on the development of North Sea settlements such as Dorestad (see Kalmring, 2010); it is important to consider the legacy of history on the development of settlements.

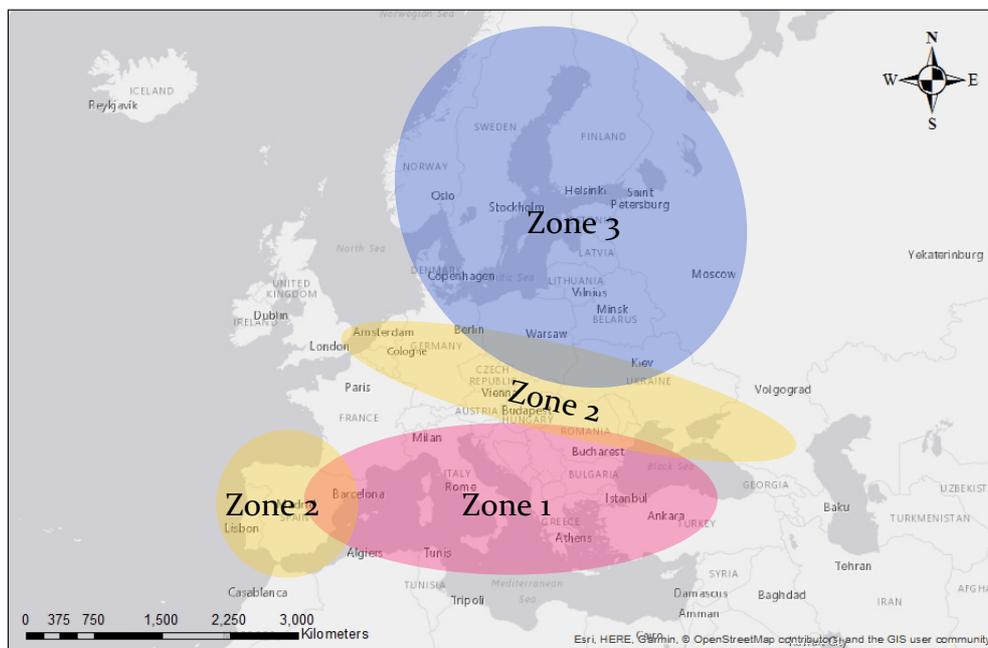


Figure 2.1 - Edith Ennen's zones of interaction (Ennen, 1967: 175)

WHAT SHALL WE CALL THEM?

In order to fully understand and appreciate the theoretical quagmire within which this topic is located, a short summary of the history of discussions about terminology in medieval urbanism is needed. While the discursive conundrum that is the topic of urbanism around the Baltic during the Early Medieval period does not seem to date back much further than the late 1980s and early 1990s, a popular topic of discussion in the preceding literature was the ‘town’, primarily how it can be defined and identified. The work of Richard Hodges from the late 1980s has left a significant legacy in studies of urbanisation across the Baltic. Hodges’ 1982 book ‘Dark Age Economics. The origins of towns and trade AD 600-1000’ aimed to present the archaeology of the Dark Ages free from the “shadow of history”, as it is put in the introduction of the book, integrating evidence from the many extensive excavation projects which had been initiated during the most recent ten or so years (Hodges, 1989: vii–viii). Hodges’ legacy, in the context under investigation here, is his promotion of the term ‘*emporia*’ to describe Early Medieval trade-concerned settlements in north-western Europe. The term is adopted by Hodges, as he puts it, as a sort of middle ground between Karl Polanyi’s ‘ports of trade’ and Kenneth Hirth’s ‘gateway communities’ (Hodges, 1989: 23–24). ‘*Emporia*’ as a term was not invented by Hodges – Latin translations of Bede’s ‘*Ecclesiastical History of England*’ refer to London, York, and Ipswich as *emporia* and both the Royal Frankish Annals and the *Annales Fuldenses* refer to the site of Reric (now known to be Groß Strömkendorf in northern Germany) as an *emporium* (Kleingärtner, 2014: Table 10). Hodges did, however, put forward a typology for the *emporia*, distinguishing three distinct forms which could develop from each other based on detailed observation (Table 2.1).

This typology does fit the pattern seen in the Early Medieval settlements of the Baltic. Ribe, for example, quite clearly seems to move from Type A to Type B, and Hedeby and Birka from Type B to Type C. We must be wary, however, of relying too much on an evolutionary framework for settlement development.

Table 2.1 - Hodges' Emporium Typology (Hodges, 1989: 51-52)

<i>Type</i>	<i>Description</i>
<i>Type A</i>	Seasonal fairs Held in liminal zones
<i>Type B</i>	Permanent settlement Primarily concerned with trade, exchange, and craftwork Foreign population
<i>Type C</i>	Decline in trade Seat of local power Defensive structures necessary

In the case of Ralswiek, for example, there is quite clearly a period of decline where the settlement is no longer in use but the site remains important as burials continue to be laid in the gravefields next to the site. Functionally even if a Type A emporium is not in evidence directly before a Type B emporium, some features of the earlier settlement form are still seen, most notably the selection of a liminal or border-zone for foundation. The move to a Type C emporium, however, is strongly based in the appearance or consolidation of some sort of power structure, something which is quite difficult to decisively identify in the archaeological record. The construction of large building works, such as the extension to the Danevirke that connected the long wall stretching across the Jutland peninsula to Hedeby, is often proposed as evidence of this control, but could represent significant organisation on the part of a local population. Liminal zones are also proposed as a primary motivator for the selection of a location for Type A and consequently Type B emporia, but this would logically suggest either a lack of control, or unstable control in a region. That being said, the sites that moved from a Type C to a High Medieval town form, such as Birka/Sigtuna and Hedeby/ Schleswig, do display administration and control much more clearly than their predecessors. The term has seen great acceptance, perhaps in part due to the detail included in Hodges' chapter dedicated to the different forms of emporia (Hodges, 1989: 47-65). The current year-long excavation taking place at the site of Ribe in Denmark bears the title 'Northern Emporium', and countless other recent discussions on the topic still address Hodges' definition of the term (Christophersen, 2015: 139; Kalmring, 2016: 12-13; Skre, 2007b: 460). Hodges did quite clearly develop this typology in reference to English and North

Sea emporia; the ‘time-slices’ presented later refer to the sixth-seventh centuries, the seventh-eighth centuries, and the eighth-ninth centuries respectively to Types A, B, and C (Hodges, 1996).

Helen Clarke and Björn Ambrosiani’s 1995 volume entitled ‘Towns in the Viking Age’ is very descriptive, and in some ways is an ideological predecessor to the middle sections of this thesis, providing an overview of ‘towns’ in both the Viking homelands and abroad, as well as towns in the Slavonic-Baltic area. A synthesis of the physical structure and economy of the settlements is provided, as well as a short concluding discussion on the state of theoretical concerns (i.e. the emergence of the settlements, their ‘place’ in their cultural landscape, and the various ‘ends’ met by the settlements), but overall the tone of the book is descriptive, presenting the current state of information on the topic (Clarke and Ambrosiani, 1995). One particular exclusion from the book, however, is a discussion on the state of terminology – almost all of the settlements are referred to as ‘towns’ with very little distinction made between early settlements emerging from the 8th century and the High Medieval towns of the 12th and 13th centuries. A brief discussion on the use of *wic* as a term of Anglo-Saxon origin is provided, and *emporía* is occasionally used interchangeably for ‘town’ (Clarke and Ambrosiani, 1995: 16–17), but the titles of chapters two through seven all refer to the settlements under investigation as ‘towns’. This term may have been applied deliberately to avoid being bogged down in problems of terminology. The very general application of the term may also be “sufficiently flexible to fail to exclude any settlement in which the authors may be interested” (MacLeod, 1999: 19), but does indeed set a precedent that has proven difficult to escape. It is suspected that the use of the word ‘town’ is done to play into popular understandings of the term and avoid a discussion on the ‘town-ness’ of every single site discussed. After all a book entitled ‘Settlements in the Viking Age’ sounds somewhat less exciting.

Naming Conventions

While this thesis will quite deliberately avoid delving into the debate around terminology by quite simply referring to the archaeological sites under investigation here as ‘settlements’, an understanding of the terms used to refer to the settlements is

of particular importance in terms of the ideological frameworks from whence interpretations about the sites have come. Despite the fact that these settlements must largely be discussed as part of a period in pre-history, due to a lack of literacy among the populations of the Baltic (Magnusson, 2000: 156), some historical sources do survive. In most cases the writings of these travellers named and gave a title to the sites they passed along their way, and those terms have often been adopted by scholars. The Islamic traveller Ibrāhīm ibn Ya'qūb visited northern Europe around 965 CE and referred to both Wolin and Schleswig (in translation) as large cities (Lunde and Stone, 2012: 162, 166). In Rimbert's account of Ansgar's journey to Birka he uses the term *vicus* to refer to the trading area of the settlement, that being (of course) a Latin term, used in reference to the smallest unit of Roman municipal administration (OUP, 2018). While this term may roughly and imprecisely be an accurate description of the settlement, at least in Rimbert's mind, the associated information that is carried with the term, of Roman municipal administration, is not applicable. Rimbert also refers to the entirety of Birka as a *portus*, and to the garrison which lies to the south of the settlement synonymously as both *urbs* and *civitas* (Chapters XI and XIX). The term *civitas* has also morphed in its application – while in ancient Roman texts it refers to a district surrounding a town its use eventually becomes, as is seen in Rimbert's writings, as synonymous with *urbs*, a term which originally referred to the town within a *civitas*, and is extensively applied by the 9th/10th century Bavarian Geographer to be synonymous with stronghold when describing the socio-geographical landscape of central Europe north of the Danube (Rossignol, 2011).

Sunhild Kleingärtner conducted an extensive examination of the ways in which these terms are used and applied to Early Medieval settlements across the Baltic (though not all of the settlements investigated here) in her habilitation manuscript. Kleingärtner's documentation is extensive and exhaustive; for Birka she records 16 mentions in medieval sources and adds *oppidum* to the above list, as well as giving four different medieval spellings of Schleswig (Kleingärtner, 2014: 177–191). An accurate understanding of the character of these settlements, however, cannot be reached by reading accounts of them through the eyes of a foreigner whose primary goal was certainly not to describe or understand them. Using any of these terms in modern writings will almost certainly

lead to *mutatis mutandis*. This is a conceptual misunderstanding formed by the use of terminology over long periods of time spanning many not inconsequential cultural changes; vocabulary whose origins may lie more than a thousand years in the past was still in use in the medieval period (Rossignol, 2011: 72). Considering the Viking Age as a prehistoric period (Roslund, 2009: 4), while not completely accurate, is not entirely inaccurate; local and contemporary historical sources are largely lacking.

Modern terminologies or names for the sites have often taken from these historical terms, as in the case of the 'Northern Emporium Project', but in many cases new terms have been adopted. Herbert Jankuhn's preferred reference term, 'Seehandelsplätze', refers in a functionalist manner to the opportunities which took place at the site – the literal translation from Germany is 'sea trading place' (Kalmring, 2016: 12). In English-language publications Jankuhn uses the term 'trading-station' (Jankuhn, 1982: 40). The term 'town', as has been discussed previously, is commonly used, though often with no substantial discussion about the reason for adopting that particular designation (Clarke and Ambrosiani, 1995). Casual references to the settlements under investigation here as 'towns' abound (Schietzel, 2014; Skre, 2016: 169; von Carnap-Bornheim et al., 2013: 174). Certainly the use of the term as a counterpoint to the more rural 'village' is logical. This characterisation is given by E. Nosov in his discussion of the settlements, first asserting that the 'town' stands apart from the 'village' as a centre for large-scale craft production, and second that they merge economic and administrative functions (Nosov, 1993: 1). The appearance of the legally-recognised charter town of the European Middle Ages, however, somewhat muddies the waters. The charter model was developed as a legal framework for the administration and governance of towns from the 13th century, and speaks to a highly organised and, in most cases, planned town. Official granting of a charter required the existence of particular planned morphological elements, primarily in reference to the town's market place, and many pre-existing towns required modification before they were granted charter (Koter and Kulesza, 1999: 77; Kulesza, 2009: 233). This clear designation of form is not something that existed in the settlements of the Early Medieval Baltic, and thus it is difficult to assign the same term to both. Other commonly-assigned terms include *entrepôt*, from the French (Ashby et al., 2015: 697), and proto-town (Kalmring, 2012). The perceived 'status' of the settlements

relative to urbanism is very often evident in naming, as they are variously discussed as early urban (Callmer, 1994), proto-urban (Müller-Wille and Tummuscheit, 2004), and pre-urban (Khvoshchinskaya, 2012: 152), as well as simply 'urban' (Skre, 2011a: 209). Discussions about the use and relative relevance of these terms are common (Bogucki, 2010b; Kalmring, 2016), and thus here the various arguments will not be presented in great detail.

Recent discussions about these settlements has led to an interesting change in approach; not so much 'naming' the sites, but rather characterising them. Positioning the settlements conceptually as "special economic zones", place which carry distinct business and trade guidelines in comparison to the wider country, albeit as part of an underdeveloped system, Sven Kalmring somewhat pulls them away from the wider country and the more rural lifestyle still dominant (Kalmring, 2016). This description states their importance for kings and local rulers as places of luxury import, as well as for the diffusion of new ideas and innovations (Kalmring, 2016: 16–17). This characterisation of these types of settlements as an alien phenomena has been touched on before; referring to the early Russian towns which appeared on the Volga and Dnieper waterway routes (from the Baltic to, respectively, the Caspian and the Black Seas) E. N. Nosov positions them as "special phenomena" which grew before the development of structured rural surroundings, conventionally a pre-condition (as per Childe, 1950) for the sustainability of densely-populated settlements (Nosov, 1994: 190). Logistically this definition fits quite well. In comparison with the reciprocity-based economic system that existed (at least) in the Western Baltic before the Early Medieval, the mass-production of goods at these later sites, and the reliance on imported goods for this production, led to market rationality and therefore fiscal standardisation rather than the use of assumed value (Skre, 2016: 171–173). Artefact analysis has shown that the use of foreign and traded objects in these settlements is quite different to that seen in rural settings (Croix, 2018), and the information traditionally proposed as evidence for royal control, in fact should be interpreted as that of "an autonomous, locally-formed cultural identity" (Hillerdal, 2009: 40, 205–275). Regardless, Kalmring's development of this concept adds much to the discussion. Rather than asserting the 'special-ness' of the settlements he delves into the academia behind special economic zones, and puts

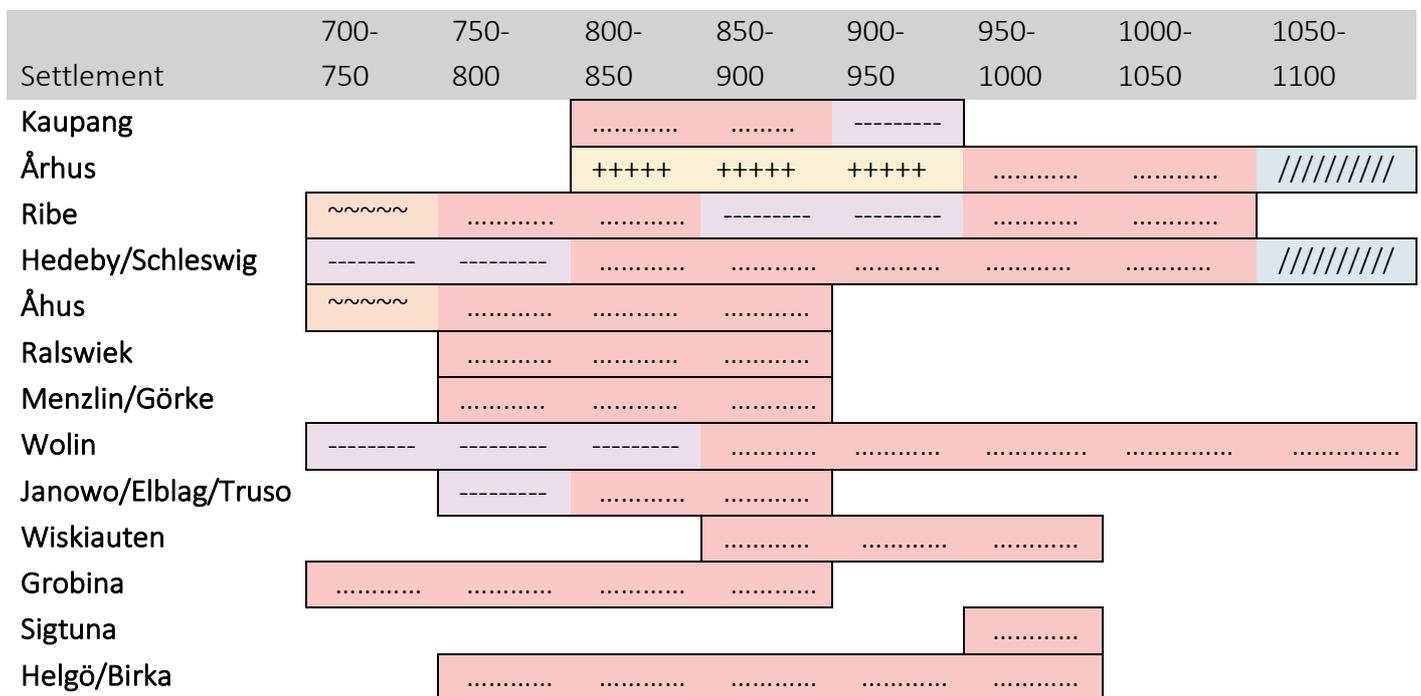
forward the idea that conceptual descriptions and discussions of these settlements will likely prove more fruitful in their characterisation, counter to the search for one single, correct name to give to these sites – as he puts it, the *why* rather than the *what*. However very similarly to the debate around urbanism briefly discussed in chapter one, it is impossible to remove ourselves from language all together, and thus perhaps we must move on (Raja, 2016: 77). Perhaps it would be more fruitful to give the settlements an entirely new name, ‘Georges’, or ‘Zeebops’, instead of continuing to comb history and language for the perfect term, or to opt out entirely by using the lowest common denominator term of ‘settlement’, as is done here.

Trading Places, Centres, and Early Urban Sites

The foundations of comparative analysis of these particular settlements were perhaps unknowingly laid in 1993 at Hässelby Castle in Stockholm, Sweden. The Twelfth Viking Congress brought together many figures of Viking Age archaeology still leading the field today; Judith Jesch, Claus Feveile, Stefan Brink and Björn Ambrosiani, to name just a few. The newly appointed professor of pre- and early history of Humbolt University Berlin, Johan Callmer, presented a paper exploring the urbanization of Scandinavia and the Baltic Region from the 8th to the 12th centuries CE (Callmer, 1994). Ostensibly this paper presented a model of early urbanisation in northern Europe that identified two main site types that preceded early urban communities in the region, trading places and ‘centres’. The former were introduced as places of trade and exchange with elements of control and connection to the landscape surrounding them, and the latter as places of control, “nodal points in networks of dependence and domination” (Callmer, 1994: 52). Seasonal markets (Åhus, Ribe, Herrebro and Paviken) and ringforts (Trelleborg) are also presented, but generally the central thought of the article is that the trading place and centre are the two main predecessors of the first form of settlement which decisively and unquestionably displays urban characteristics, the town. Callmer does present some ten sites of the late 8th and early 9th century as urban, but notes that questioning their urbanity is clearly linked to a western framework for understanding the application of an “urban” label as linked to the development of clear political, administrative, and religious institutions (Callmer, 1994: 79). The ‘town’ form is stated as first appearing in the late 10th century, initially at Oslo, Roskilde, Lund, and Trondheim and modelled on

western European examples (Callmer, 1994: 73). Despite the fact that Callmer explicitly states that permanence is not a significant enough variable to distinguish urbanising sites with rural settlements, it is introduced as a variable for discussion in the category of trading places. 13 sites out of a total of 82 in this model are explicitly presented as “permanent settlements of trading-place character” (Callmer, 1994: 60); seven in the western Baltic, two in the southern Baltic, and four in the eastern Baltic (Table 2.2).

Table 2.2 - Callmer's trading places with permanent settlement, temporal divisions his own (Callmer, 1994)



Several of the sites are presented as initially transitioning to permanent settlements of trading-place character from other types. The most notable examples of these are Aarhus, a trading place for the first 150 years of its existence, Ribe and Åhus as seasonal markets for their first 50 years, and Hedeby, Wolin, and Truso as having some signs of activity that can't conclusively be defined as any of the presented types. In some cases Callmer does suggest a transference of responsibilities between earlier and later sites; as an example he proposes a "gradual takeover" of responsibilities from Truso and Grobiņa to Wiskiauten towards the end of the 9th century (Callmer, 1994: 67–68). Some settlements are clearly presented as continuous to each other, Birka and Sigtuna, and Hedeby and Schleswig for example, with Callmer even going so far as to present Hedeby and Schleswig as the same site (Callmer, 1994: 54–55). It must be noted, however, that recent research at some of the sites presented in the article as impermanent trading places shows that they should now be discussed as permanent settlements. Groß Strömkendorf in Germany, for example, was presented by Callmer as a trading place connected to a permanent regional centre at Mecklenburg (Callmer, 1994: 57)¹⁶. Excavations in the late 1990s and early 2000s showed the site to clearly be a settlement of permanent character through the discovery of a significant number of wells, as well as extensive cemeteries and houses (Brorsson, 2010: 99–100; Müller-Wille, 2001: 24). There is also a clear predominance of western Baltic sites over the other regions, with 72% of the sites presented belonging to the west, as compared to 14% each from the east and south. It is suspected that the numbers of larger sites is represented quite fairly, but that a much higher resolution of 'smaller' sites is seen in the western Baltic, for reasons which will be discussed later.

An interesting final suggestion is given by Callmer in this paper, that the settlements that did 'survive' the 10th century and become towns, did so because they were amalgamations of the centre and the trading place (Callmer, 1994: 80). No amalgamation of a local centre is presented for Schleswig or Wolin, but they are both presented secondarily as sites of local importance, after their prominence as trading

¹⁶ Though, as will be discussed further in the relevant section, this is likely due to the mis-identification of Mecklenburg as the site of the historically documented settlement of Reric. It is now thought that Groß Strömkendorf is the location of the site.

sites. Callmer sees the entire network of Early Medieval sites in the Baltic as being an integral part of the progression towards the stable network of the High Medieval period, that the dispersal of energy even from settlements which declined without a clear successor was fundamental towards eventual success (Callmer, 1994: 79–80). As the first comparative discussion of the urbanisation processes of the Baltic during the High Medieval period, this paper presents and illustrates very well the legitimacy and importance of approaching the Baltic as a whole, as a group of different settlements bound together by similar circumstances.

MODERN COMPARATIVE APPROACHES

Presumably following from the work of Callmer, comparative approaches to studying the Early Medieval settlements of the Baltic have begun to become fairly common, these studies generally focusing on juxtaposing a few sites (see Kalmring, 2010 for Dorestad/Haithabu, MacLeod, 1999 for Birka/York, and Müller-Wille, 2001 for Ribe, Groß Strömkendorf and Hedeby). Michael Müller-Wille's presentation of Groß Strömkendorf as a parallel settlement to Ribe and Hedeby clearly shows the relevance of studying the settlements of the southern Baltic along with those of the west, and logically suggests the need for more studies of this type. There is also a large body of work comparing Early Medieval Scandinavian material culture to that of Russia (Bulkin, 2010; Hedenstierna-Jonson, 2009; Hillerdal, 2010; Stalsberg, 2007), mostly due to a significant Scandinavian presence in the settlements suggested by the archaeology. (Jonsson, 2009: 62). Material evidence has been used as an element for comparison. Discussions of the ninth-century *dirham* (Islamic coin) hoards from the southern and eastern Baltic have shown that the three regions all show such substantially similar coin hoards that they can be classified into a single trend (Noonan, 1986). The dispersal of a particular type of eleventh century coin has also been found to be consistent across the eastern Baltic regions and Sweden (Jonsson, 2009). Søren Sindbæk has conducted preliminary work discussing the possibilities of applying social network analysis to what he terms the 'Northern Emporia' – the wic network of the North Sea and the settlements of the Baltic (which are undoubtedly similar and should ideally be studied in tandem, though this is beyond the scope for the investigation underway in this thesis). His

analysis uses the prevalence of a particular artefact type, cooking pots, to compare the 'weight' of the settlements, i.e. to measure their interconnectivity and identify their role as hubs (Sindbæk, 2015). This work certainly shows the possibilities for large scale archaeological analysis across past networks, but also discusses the extreme rigour and data integrity necessary to undertake a study of this type.

Sindbæk's Network Analysis

Sindbæk's recent network-based work (as he also works extensively on the Danish settlement of Ribe and the ring fortresses of Denmark) follows on from his 2004 PhD, where he analysed 'routinisation' and the structure of exchange networks in northern Europe. His work utilises a methodological framework known as network theory, where mathematical modelling is used to reconstruct connections (primarily trade networks) using archaeological evidence (Sindbæk, 2007, 2013, 2015). This approach is used by Sindbæk and indeed many other mathematically-minded archaeologists (Knappett, 2013b) to pose and answer questions about globalisation and interaction in networks of the past. Most recent contributors to network analysis make use of the methodological and theoretical framework as a way to escape determinism and directionality, though Sindbæk cautions that critical analysis of the data presented must be a conceptual step in the process of conducting such analyses (Knappett, 2013a; Sindbæk, 2015). Framed as a 'black box' problem, network analyses in archaeology need to be very carefully constructed in order to ensure a reliable and not overly generalised output (Sindbæk, 2013: 75–77). The development of network modelling with archaeological data can be used to show the structure of a given network as well as highlight weaknesses and strengths, which can then shed new light on events like network or system collapse (Sindbæk, 2007: 60–62). The relevance for the Baltic in particular is thus clear. Of course these data are always representational, as Sindbæk well acknowledges – arguments are only as strong as the data used in their presentation, something that is well-understood by all archaeologists. This form of analysis, however, is extremely useful in particular for the reconstruction of trade and exchange networks, and should be pursued with greater vigour.

This network analysis, through precise analysis of archaeological data and mathematical approach, in fact may show the Early Medieval network of the Baltic as a somewhat more equally-weighted phenomena. The primary data used for the reconstruction of this network was that of cooking pots, one of the most extensively documented and easily traced forms of artefact found across Northern Europe (Sindbæk, 2013: 78–80). Analysis tracking the origins and prevalence of seven different forms of cooking-ware across the countries chosen for study resulted in a graph showing the links and groupings between settlements of the medieval period (Sindbæk, 2013: 83–86). In addition, energising the graph through the application of a force-directed algorithm enables Sindbæk to display the centrality of sites within the trade network, establishing ‘weight’ or position, with some surprising results. Hedeby is unsurprisingly the single most ‘central’ settlement in the graph, reflecting its well-understood position as a significant hub for international trade, but traditionally lower-priority sites of the southern Baltic such as Menzlin and Starigard-Oldenburg statistically neighbour the larger site. A later run of this analysis with ten cooking-ware types yielded an interesting regional separation – the British Isles, the North Sea, the Channel area, the Netherlands and the Baltic cluster mathematically into distinct networks with Hedeby still at the centre (Sindbæk, 2015: 109). Sindbæk’s sampling method (one site for every 50,000 individuals) excludes some of the sites under investigation in this work, but certainly brings forth interesting questions. While it would be desirable to include all data collected on these particular cooking pot types throughout the entire region, the accuracy of results gained through a population-representative approach should be considered desirable. Detailed and extensive excavation of Hedeby in particular may have ‘enhanced’ the site’s very central position, though disposal and discard patterns of cooking vessels in the medieval period may also have contributed (Sindbæk, 2015: 111).

Sindbæk also shows the discrepancy between the historical and archaeological records, building a network of the ties detailed in Rimbert’s *Vita Anskarii* in contrast to this cooking-pot network analysis. As he states, if history is to be believed, then a few core settlements would be responsible for most communications and connections (Sindbæk, 2007: 63). In reality even though a few core settlements do indeed exist, the settlements on the periphery are also well-connected, and much more weight is ceded to sites in the

southern Baltic (Sindbæk, 2007: 64–67). Northern Europe in the Early Medieval period was indeed a globalised society, and Ansgar's journeys do speak to that. Despite the fact that they weight towards the western Baltic much more heavily this, historically, is logical. The priorities of the See of Hamburg and the Catholic Church in sending Ansgar north were to Christianise the pagan Vikings, rather than the Baltic as a whole. The west Slavs were already aligned and allied with the Carolingians and thus left to their own devices, and the eastern Baltic was likely not seen as heavily populated enough to be worth pursuing. Politically, only the western Baltic was worth pursuing.

MODERN COMPARATIVE THEORETICAL ARCHAEOLOGY

Very few comparative theoretical studies of the early urbanization of the Baltic other than Callmer's seem yet to have been attempted, due perhaps in part to the large number of settlements in the region and the difficulty faced when attempting to group them into concise categories. A conference paper from the late 1980s from E. Nosov proposes the similarities between and validity of studying the Russian and Scandinavian settlements of the Early Medieval period together in the context of early state formation (Nosov, 1993). Recent exceptions, though not comprehensive, are those of Mateusz Bogucki (Bogucki, 2010b, 2012), and Charlotta Hillerdal (Hillerdal, 2010), scholars who do partially integrate settlements from the southern and eastern Baltic into discussions about urbanisation in the Baltic during the Early Medieval period. One reason for this lack of focus on Baltic urbanism as a whole seems due to the 'local' priorities of researchers – Swedes tend to study Sweden (Ambrosiani, 2012), Germans Germany (Müller-Wille, 2001), Russians Russia (Nosov, 1994) and so on (Noonan, 1982: 220). There are also political reasons as to why research on the western Baltic sites has seen primacy over those of the eastern and southern Baltic and this will be discussed further in the chapters to follow. The Soviet occupation of the Baltics until the early 1990s and the emphasis placed on investigating Danish 'Viking' culture as the origin of the Germanic state will be explored in particular. Nationalistic approaches to archaeology in archaeology in Poland in particular have been seen as a reaction to first the German and then the Soviet occupations of the country (Urbańczyk, 2013: 59). Globally comparative approaches to urbanism seeking to integrate examples from the Baltic

region have, however, been taken. The *Entrepôt* project based at Aarhus University employed a comparative approach to maritime urbanism across the medieval world from Northern Europe to Africa (Sindbæk, 2016), and a similar project from Lund University has explored the remarkably similar urbanization processes which took place in Scandinavia and East Africa during the Medieval period, and slightly later in Southeast Asia. This selectivity is a discerning process, using well-selected comparisons of different regions to shed light on each other (Mogren, 2013: 80).

Mogren's 'First Sparks'

The title of Mats Mogren's paper speaks very clearly to his thoughts on the role of the settlements of the Early Medieval Baltic (or more specifically the western Baltic, as is the main case study). Mogren speaks of urbanisation processes, a non-linear, interrupted, abstract, non-criteria based interpretation of the role of these settlements. These "first sparks" of urbanisation in the region are clearly part of the trajectory towards the long-lasting 'establishments' of the 10th-12th centuries, and studying them as part of a process *towards* something, as a general trend deeply rooted in history and deeply invested in the future, indeed seems much more useful than approaching them as an isolated flash-in-the-pan (Mogren, 2013: 73-75). Mogren presents a definition of "becoming urban" rather than "urban", stating that "a place or area is becoming urban when a substantial number of people move together to meet two or more non-agrarian needs, in a context of social plurality" (Mogren, 2013: 74). Definitions of terms as amorphous as 'urban' tend to be rather generic when they seek to be inclusive. Given they are generally rooted in a local understanding of a global process, this approach to investigating a process rather than a phenomena is certainly interesting and helpful. Mogren also makes the proposal that looking out, rather than looking in, may better define the relationship between the western Baltic (or more widely, the whole Baltic) and mainland Europe (Mogren, 2013: 83). What value did Europe and the Caliphate see in the amber, furs, and jewellery that were widely exported, and why was that value seen at the particular time it was?

“Most probably, everyone outside the royal retinue and vassalage in the Middle Ages felt the political structure to be an exogenous implant in their local society... We must therefore acknowledge the possibility of any societal unit having a self-organizing capacity”

(Mogren, 2013: 76).

Mogren rejects the oft-touted idea that royal control or a clear power structure is absolutely necessary for the successful operation of these settlements (Mogren, 2013: 76). As has been observed by Hillerdal, the known fact that royal charter was required to found a town proper in the middle ages has led to the imposition of the term quite unthinkingly upon the period prior, with little acknowledgement of the fact that state formation only widely took place in the 12th century (Hillerdal, 2010: 500; Line, 2007). We know that at least in the western Baltic “ascending government” was the model adopted, meaning that rulers ruled with the consent of their people, and that laws were made by subjects (Mogren, 2013: 77). Despite the fact that many ‘regional centres’ (Bejsebakken/Ålborg, Jelling, Kalmargården, Boeslunde, Lejre, and Uppåkra/Lund being just a few examples, their observed functions as places of royal residence or power) existed *through* the periods that these settlements were in existence (Callmer, 1994), it is thought necessary that a royal decree was needed to place buildings in a row (Mogren, 2013: 77). Tying into his proposal to study the contemporary settlements of East Africa and Southeast Asia are observations made by Alfred Russell Wallace in the mid-19th century, in which he quite clearly describes settlements resembling those of the Baltic in the Early Medieval period. Lying in eastern Indonesia, Wallace clearly describes the settlements as being self-governing and self-organising, with no military presence (Wallace, 1869: Chapter XXX). Is it so far-fetched that this could also be the case for Ribe, Groß Strömkendorf and Hedeby (Mogren, 2013: 79–80)?

WHERE DID THEY GO?

Mateusz Bogucki has proposed that the settlements under investigation should be viewed as a ‘cul-de-sac’ of urbanisation, quite clearly stating that no relationship can be seen between the early and High Medieval towns (Bogucki, 2010b). The leaders of the newly-formed states of the western and southern Baltic closed or destroyed the sites in

order to found their own (Bogucki, 2010b: 162–163). The abandonment of the site of Groß Strömkendorf is very often given over to the historically-documented destruction of the site of Reric in 808 CE (Müller-Wille, 2001, 2009). Ideologically, however, this also forces the idea that the settlements were acknowledged as threats or challenges to the later town does indeed position them as their predecessors in some way. Regardless of their relationship to the later High Medieval towns, almost all of the settlements under investigation here did decline or change form significantly between the 9th and 11th centuries, and an unambiguously clear reason for this phenomena remains debated.

Ulf Näsman argues that the trade networks of the Baltic remained underdeveloped until the High Medieval period, and thus settlements founded in the 8th and 9th centuries were not future-proofed and thus unable to cope with a fully-developed network (Näsman, 1991: 37). The proposal that trade routes in the 9th century were redeveloped and reorganised towards the East upon the decline of the Carolingian Empire (Urbańczyk, 2008: 202) suggests that the strong trade connections that the Baltic had already established in this direction led to a significant jump in the overall volume of goods. Johan Callmer links the 9th century decline of the southern Baltic settlements to a recession in southern Europe and the southern Caliphate as well as political instability across the Baltic, with a second, late tenth-century decline, attributed to an overstrained system (Callmer, 1994: 79). The decline of Menzlin in Poland has been attributed to shifting trade routes, even though the importance of the river on which the site is located continues unabated past the 10th century (Kleingärtner, 2007). In Poland the decline of the settlements on the Baltic coast has been linked to the agenda of the newly self-appointed Piast dynasty, who destroyed or incorporated the sites due to their presumed position as seats of local rulers who threatened their power (Urbańczyk, 2010: 21). The 8th and 9th centuries were also a time of great environmental change across Europe and changing conditions which limited the functionality of the sites certainly contributed. Most of the western Baltic settlements saw a decline in harbour and sailing conditions, and in particular at Hedeby the increasing size of boats may have meant that the narrow access route into what is now Haddeby Noor was too restrictive (Skre, 2012b: 85). At Ralswiek the silting of the lagoon in which the island settlement was located completely restricted sea access to the site (Clarke and

Ambrosiani, 1995: 109), to the point where today the former island isn't even detectable as distinct from the mainland. It must be noted that not all settlements disappeared entirely. Ribe and Staraya Ladoga saw individual periods of decline but resumed functions and still exist today. Wolin was taken over by the Piasts, the first historical dynasty of Poland, and both it and Grobiņa may also see uninterrupted continuity.

Hillerdal's Discontinuity and Divergence

Charlotta Hillerdal's work on the four towns of the Viking Age, a significant part of her PhD thesis, takes a similar approach to Mogren on the discussion around royal control of the urbanising settlements of Early Medieval Scandinavia (Hillerdal, 2009, 2010). In contrast to Bogucki, she does argue a relationship between the old and new settlements; that the autonomy displayed by the old settlements in fact conflicted with the emergence of new politics, that their history had to be 'rewritten' (Hillerdal, 2009: 208). This, conversely, was the reason for the 'success' of the politically hierarchical towns of the High Medieval period (Hillerdal, 2010). Hillerdal notes that the Scandinavian settlements under investigation *do not* appear in geographical proximity to any central places of royal power, instead growing from or in connection to seasonal marketplaces close to residential settlements (such as the magnate farm of Helgö) (Hillerdal, 2010: 508–509). Sigtuna and Schleswig, as the 'successors' of Birka and Hedeby, are discussed almost as challenges to the earlier settlements rather than their ideological successors, the integration of administrative and sacred functions a significant difference, and the lesser-quality buildings in the initial phase proposing a lack of population continuity between the 'earlier' and 'later' sites (Hillerdal, 2010: 511–516). Her work delves deeply into the ways in which royal control is asserted and 'proven' in the four main Scandinavian settlements, showing, in fact, that an alternative interpretation of all of these factors can instead prove significant autonomy (Hillerdal, 2009: 221–249). Hillerdal positions the Early Medieval settlements of the Baltic as a 'middle child' between old and new power structures, as independent developments challenging the status quo (Hillerdal, 2010: 512). In a way, despite Hillerdal's rejection of the early and High Medieval towns as operationally and practically related, this does prove a relationship of some sort. It is not the clear, evolutionary model proposed by stage theory, in terms of one form evolving into another, but it does propose a logical social

evolution. If the later High Medieval towns were indeed founded as a counterpoint to the autonomous and potentially threatening Early Medieval roques founded close to the water, they must be seen as predecessors, though as a reaction rather than an evolution. Hillerdal details their relationship as both discontinuous and interconnected, describing it as “a complex development that allows room for discontinuity and divergence (thereby enabling) a fuller interpretation” (Hillerdal, 2010: 522). Indeed the integration of this proposal into a comparative model of early urbanism across the Baltic would be particularly interesting, as some of the Early Medieval settlements of the southern and eastern regions do survive the 10th century. Following from Hillerdal’s thesis, stable political control should be seen either from the very beginnings of these settlements, or integrating seamlessly into their socio-economic structure. As was the case with their inception, multiple factors were likely at play in the decline of the settlements, and the theoretical model proposed for use in this work will hopefully add much to the discussion.

CONCLUSIONS

If only one thing has become certain throughout this discussion of the Early Medieval towns of the Baltic, it is that very little is certain. In the 1960s and potentially even earlier the place of these settlements as distinct from the urbanisation processes which were taking place in mainland Europe and in the Mediterranean was identified, though until recently little theoretical discussion has been in evidence. The lack of comprehensive historical records of the settlements was a clear factor, as most discussions around urbanism and urban traditions at that time were the responsibility of historians, while archaeology grappled with developing a theoretical identity. When the settlements were discussed later, it was often as ‘towns’, though the foundation laid for the identification of a town by the historians of the 20th century connected the term with the High Medieval chartered town, and thus discussions around terminology took over the field. As a clear middle-ground phenomena, between rural ‘central places’ and later ‘towns’, the settlements here were variously termed ‘proto-town’, *emporia*, ‘pre-urban site’, and *vicus*, and debates around their urbanity were common. Comparative archaeology in the Baltic region did become more common in the last decades of the 20th century in

both a material and theoretical sense (Callmer, 1994; Noonan, 1982), and the foundations for the suggestion that sites across the Baltic could be studied together were laid. Despite this work, the legacy of recent historical events (which will be discussed in the next chapter) clearly affected research output, and as a consequence the archaeology of the Early Medieval Baltic, particularly the English-language corpus, is geared towards the western Baltic. Modern studies of sites in the southern and eastern Baltic still reference the Viking Age, or their Viking-ness (Duczko, 2014; Gardęła, 2015; Ibsen, 2013). Increasingly though, the field is moving away from traditional arguments about terminology and more towards a discussion of the roles of the settlements within their landscape (Kalmring, 2016), and away from phenomenology and towards a more evidence-based social archaeology (Croix, 2018). Conceptualisation of the urban processes of the Baltic during the Early Medieval period is beginning to emerge in a meaningful way (Hillerdal, 2010; Mogren, 2013), based on foundations laid in the last few decades. The analysis and discussion being presented in this thesis aims to build upon the groundwork already conducted, presenting a high definition discussion of the settlements which appeared across the Baltic during the Early Medieval period and the potential reason(s) for their decline.

CONSIDERATIONS

Entire PhDs have been prepared and presented on singular aspects of single settlements under investigation here. The information available about these settlements is variously extensive and limited, as well as being caught up in the problems of recent history, and thus the formation of an appropriate framework is of prime importance. Fletcher's triadic material/social/outcome model provides an operational framework which can be explored for each settlement, along with various quantitative characteristics. Estimates of an operational timeframe, along with settlement size, population size, and thus density has been obtained for almost all settlements, and can be closely approximated for those less well-excavated. This chapter will first present the operational structure of Fletcher's framework adopted here to develop a comparative analysis of the outcome of the early medieval settlements of the Baltic and the outcomes of their Early Medieval phase. The three elements that make up Fletcher's triadic model are materiality, sociality, and outcome. Why these, in particular, are important will be introduced, as well as the way in which they are applied and measured in this thesis described. Outlined next are the specific approaches taken in measuring settlement size and calculating populations, as well as the methodological issues involved in the study. The barriers posed by the political upheavals throughout Europe during broadly the second half of the 20th century will also be explored, as the significant disruption and use of archaeology as a political tool has greatly affected study of both the southern and western Baltic.

THEORETICAL CONSIDERATIONS

Material

To provide some very broad definitions, the 'material' character of a settlement is considered to be its physical characteristics; location, size, walls, density, buildings, etc. For the analytic model applied here, the conceptual premise of the 'material as agent' is required, though of course not as actors or agents with express or deliberate intent.

Fletcher describes the material as “an actor without intent” (Fletcher, 2004: 112). Walls cannot deliberately move themselves, houses cannot grow bigger or smaller, and pots cannot duplicate without human (or at least deliberate) interaction, at least insofar as our current understanding of physics sits! A conventional understanding of ‘material’ within archaeology is that it ‘reflects’ some sort of social process, that it is created as a result of an action brought into being by meaning – understood as meaning that can be verbalised – and plays its role through such meaning (see critique by Fletcher, 2007: xx–xxvi). This is entirely true but substantially incomplete, and a normalised interpretation of this viewpoint ontologically relegates material to the bottom of any analytic sequence. This assumption encourages archaeologists to consider material remains as the realised conceptualisation of thought and action, and even though that may initially be valid, oftentimes does not hold for the ‘life’ of the material. New buildings are clean, but old buildings have vermin. Older settlements have accumulated organic waste, and drainage systems may then become blocked. An understanding of social processes as constantly shifting and changing should logically lead to an understanding that the material structures and frameworks within which people live are also involved in and can affect these changes because they possess both inertia and tend to deteriorate. If material culture is a consequence or by-product of social dynamism in both modern and past lives, should not their relationship, a “continually negotiated conversation” (Dobres and Robb, 2000: 7) should be explored and examined further because material can be reflexive, recursive, or behaviourally autonomous (Fletcher, 2007: 20).

Social

The ‘social’ character of a settlement is made up of many different elements; population size and age, hierarchy, general wealth, primary occupations, religion, regulation, governance, etc. Some of these can come from textual sources which need to be treated with some caution and are sparse, selective, potentially biased and often absent. Any community size has a relationship with burial populations, wealth with deposited items, and trade with known externally derived items and materials. These are not social reflections in the material. In these cases the material is a direct physical operational part of the phenomenon being assessed. A complete mapping or understanding of social processes at play in any particular situation would be akin to a complete

operational simulation, and thus is extremely difficult to do. As archaeologists we are primarily concerned with the material record, and its relationship to the social past using the material left to us. That being said, if we are to accept the premise just presented, the material record will not simply correlate with social dynamics. Social interpretations of material culture must also be understood to be notoriously varied, and while we understand that reconstruction of the past is always somewhat of an incomplete puzzle, anthropology can shed light on variation even within groups. Consider, as an example, different social conceptions of 'far'. The distance between the author's apartment and the local large supermarket is often seen as prohibitively 'far', particularly when it is raining, hot, or I've just had a long day, and more often than not the closer, but much more expensive boutique supermarket with a dedicated counter for expensive cheese is visited. That first supermarket is around 1.6 kilometres away. Across Asia and Africa women walk an average of 6 kilometres per day to collect water, every day, on bad terrain, with at least 20 litres on their backs on the return journey (Caruso, 2016). Even within cultural groups spaces are conceived of differently. An anthropological study of a particular settlement of the pueblo group of San Ildefonso, in New Mexico shows how individuals conceive differently of the space within their pueblo; when compared to an aerial schematic a female subject indicate a significant distance between buildings, whereas a male subject grouped them quite closely (Fletcher, 2007: 27). Both are schematically correct but mathematically incorrect, and the assumption must be that their different interactions with the buildings inform their understanding of distance.

The Outcome Variable

Fletcher's triadic model holds that, at a settlement or household level, the material and the social may not always be perfectly operational in relation to each other; that there is no "universal predetermination" (Fletcher, 2007: 21). The material-social relationship can become prohibitively restrictive, and thus 'outcome' can be introduced to measure their level of correspondence, or lack thereof. This term is not intended to imply a strict end, per se, rather the 'outcome' can be described in terms of magnitude, rate, duration, density, sustainability, etc., (Fletcher, 2004: 133) It may be that a particular settlement becomes constrained by its walls due to growth in size, wealth, or ideology – either the

settlement should adapt its material form or potentially move to a different location. Sudden settlement destruction could be attributed to its material form no longer being able to safely support a growing population, in the case of a sudden fire, or it could become a 'threat' to others in the landscape – able to support but not protect its wealth. In addition, small settlement areas may provide efficiency in communication, but the larger settlements of a cultural system may strain the capacity of everyday communication and weaken social cohesion unless large amounts of energy can be brought in from outside to remedy this problem (Fletcher, 2007: 107). Just because a settlement area becomes larger does not mean that its resident community can cope with or resolve the communication stresses that increased areal extent creates. A particular value of archaeological data is that they are inherently outcome-centric (Fletcher, 2004: 133), in particular as they concern settlements, and thus the integration and measurement of the 'outcome' variable in Fletcher's triadic model is eminently feasible.

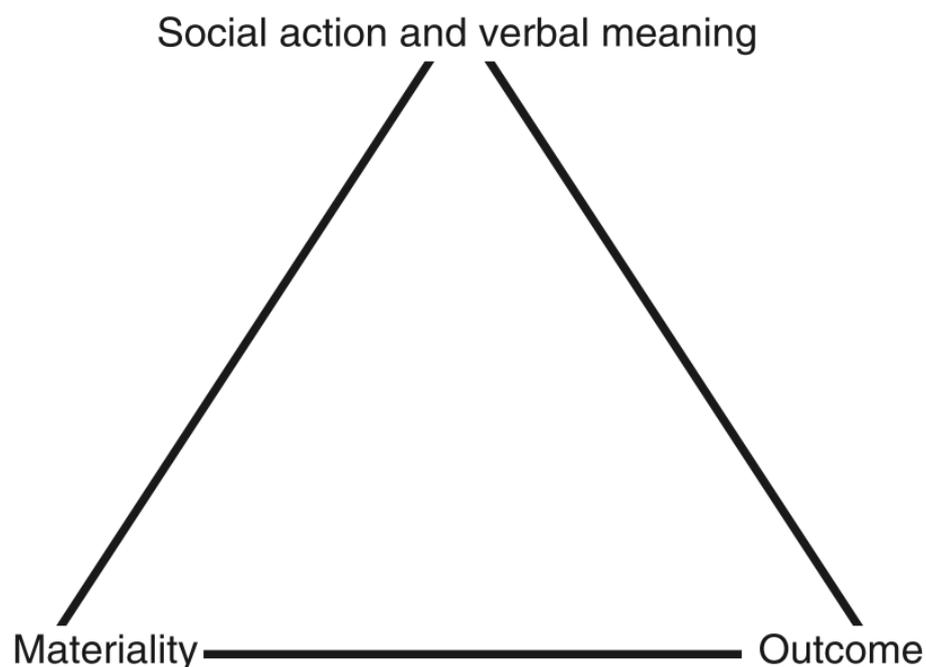


Figure 3.1 - Fletcher's Outcome Triad (Fletcher, 2004: 134)

Material/Social Dissonance in the Baltic

The curious coincidence surrounding these settlements is that they are unprecedented in the landscape; all can be ascribed the character of ‘trade settlement’, but they also have evidence of year-round occupation (earlier trade settlements are seasonal, if there is evidence of occupation at all), their locations are similar internally but dissimilar to other earlier sites (easily accessible but also easily defensible), and they *do not last very long*. Discussions have continued for many years about the urbanity of these sites (from Hillerdal, 2010 to Nosov, 1989), but the only thing that can be said for sure is that they exist somewhere on the trajectory to urbanism – they are at least ‘urbanising’. The key point of interest in regards to these settlements and Fletcher’s approach is that despite their very similar beginnings, they all meet very different ends. It is this paper’s proposal that working backwards, from their ‘outcome’, will allow us to estimate the degree to which the relationship between their material and socio-economic conditions were viable, i.e. whether the material environment was a constraint on the socio-economic development taking place, and also whether the settlements functioned naturally in the social and economic landscape of the early medieval Baltic cultures. It is important to note that in no way should any of these settlements be considered as ‘unsuccessful’; despite the fact that many only last in their initial form for a couple of hundred years all of the settlements persist in some way, though most often with the presumed movement of their populations to a High Medieval settlement around the end of the first millennium CE (Nosov, 1993: 8).

The sudden appearance and almost complete disappearance of the settlements under investigation is certainly significant, and it is suspected that a certain level of material/social dissonance is in evidence. The settlements that succeed these of the early medieval are the easily-recognisable high medieval town, almost all of which still exist to today. In some form or another the settlements therefore continued, and so they can certainly be seen as ‘urbanising’ to some degree, if not the ‘first sparks’ of urbanism in the region (Mogren, 2013). What is interesting is the fact that these next settlements ostensibly succeeded – there was something ‘in’ or ‘to’ them that was not in-place in the eighth century. A comparative approach to this clear disparity in the outcomes of these

early and late medieval ‘towns’ may surely shed significant light on the factors involved in the general lack of continuity in the former.

OPERATIONAL CONSIDERATIONS

Measuring Site Sizes

Site size, as a contributor to density calculation, is an integral data point for this investigation. While most published literature on the sites selected do include an estimate of the size of the settlement, some do not, and so it was decided in the interest of accuracy and consistency (as well as for the creation of visual data for this thesis) that all sites would be re-measured. As the cost of hiring geophysical teams and equipment is somewhat prohibitive for a PhD thesis, site plans included in excavation reports and published works were used. All mapping was conducted in ArcMAP and the correct UTM grid projection selected in order to preserve accuracy in measurement wherever possible (Table 3.1)¹⁷. Maps taken from excavation reports were then rectified onto a basemap and georeferenced, before settlement areas were measured and a calculation of area in hectares generated. ArcMAP is a very powerful tool and it may be possible in future, once more comprehensive data are available, that nearest-neighbour and Thiessen polygon calculations can be undertaken in order to reconstruct trade routes and zones of influence.

Table 3.1 - UTM Grid Zones Used

UTM Grid Reference	Settlement(s)
32N	Hedeby, Ribe, Groß Strömkendorf, Kaupang
33N	Birka, Åhus, Wolin, Ralswiek, Menzlin
34N	Truso, Wiskiauten, Grobiņa
36N	Staraya Ladoga

¹⁷ As using a ‘global’ coordinate system can result in areal measurements being warped. As we well know, the Earth is a sphere, and specifying the UTM grid reference within which the settlement lies allows for the greatest accuracy.

Calculating Population

Wherever possible attempts have been made to independently calculate populations for the settlements under investigation here. Within archaeology two main methods have historically been used to establish population size; the first relating to the availability of natural resources around the site, and the second referencing a density coefficient using the number of dwellings at a site (Zorn, 1994: 32). As there is little information available about natural resources, and a fairly decent amount of information available regarding buildings in the settlements under investigation, the latter is here used. The extensive excavation of burials and cemeteries means that a third approach can be proposed, counting the number of burials uncovered and preparing a calculation that will represent the population size as accurately as possible. Both options also require an operational estimate, i.e. an idea of the period of time the burials cover, or period of time or phase that the buildings were in use. In some cases neither burial grounds nor building remains are evident, and thus the best guess provided by a published work on the topic is adopted.

While historical census data seem an easy place to start, the particularities of the right to be counted as a citizen may make this information less than reliable. Slavery was a significant business in the early medieval Baltic, with perhaps as much as a 25 per cent *þrælar* (old Norse for 'slave') population (Brink, 2012b: 49). Slaves are very well documented in the Icelandic Sagas, given a particular character (small, dark-haired, and ugly), and most importantly had no legal rights (Brink, 2012b: 52), so even if a census were to be conducted or accounted for its accuracy would be questionable. Despite the fact that no census is known to have taken place in the Baltic in the Early Medieval, it should be suspected that women would also not have been counted. Women in Viking society are known to have enjoyed a much higher status than in almost all other parts of the world and yet they had no opportunities to wield power, own land independently, or take action in politics (Magnúsdóttir, 2012: 41).

A 13th century census is known to have been conducted by Denmark including the then-Danish territory of Estonia, though the aim of the census was to calculate taxation based on arable land and so it is more likely to have been a geographical survey rather than

explicit headcount (Kulmar, 2004: 32; Tvauri, 2012: 305–306). From the results of this survey (Nielsen, 1873) estimates of a Latvian population of between 100,000 and 200,000 individuals have been given, based on the number of individuals who would have lived in a house that supported a single plough (Tvauri, 2012: 306). This count was extended back to the middle of the first millennium CE using a mid-point count of 150,000 and population growth formulas, though it is quite accurately pointed out that population growth was likely not constant and would have been (and in fact was at certain points) affected by plague and environmental epidemics causing famine and starvation among other things (Tvauri, 2012: 306–307).

Burials

Burials, along with an assumed life expectancy, are often used for population estimates. Despite the commonly-held assumption that most ‘Vikings’ died in battle as young men, life expectancy for those who reached adulthood was solidly middle-aged. Osteological studies on Iron Age Danish and Norwegian populations showed that for remains of individuals over the age of 20 (assuming a 25% infant mortality rate and then a further 25% mortality rate before reaching the age of 15), the average life expectancy was around 38 years (Benedictow, 2008: 238–239). Timo Ibsen’s calculation of the population of the settlement of Wiskiauten is based on the number of graves in a barrow cemetery, with a use time span of 150–200 years and this average life expectancy of 30–40 years, leading to a suspected permanent population of not more than 150 individuals (Ibsen, 2013: 242). Taking into account burial practices that are somewhat less visible archaeologically, including flat graves and cremations which may or may not have been deposited, this number is acknowledged as a minimum (Ibsen, 2013: 243).

Most population estimates posited in the literature seem to be educated guesses – in only two instances in this particular field are mathematical models proposed for calculating populations based on archaeological data. Anne-Sofie Gräslund’s 1981 thesis on the graves on the island of Björkö (i.e. those of the settlement of Birka) proposes a formula using the variables of the number of graves, their period of use, and an estimate

of life expectancy (Figure 3.3). This formula, using both the known and speculated number of graves at Birka (1100 and 3000 respectively (Gräslund, 1980: 86)), the life expectancy discussed above, and the known period of use of the cemetery at Birka as 220 years, ends in an estimate of between 190 and 518 individuals at any one time. These figures will be discussed further in the relevant chapters to follow, but the upper estimate corresponds roughly to accepted numbers for the population of Birka.

$$\frac{\text{number of graves} \times \text{estimated average lifespan}}{\text{period of use}}$$

Figure 3.2 - Gräslund's equation for population estimates

Helen Clarke and Björn Ambrosiani in their 1995 overview of Viking Age towns propose a model which proposes a minimum estimate of population size utilising data of the number of adult burials at a site, as well as the length of time for which the settlement was in use (Clarke and Ambrosiani, 1995: 156–158). A few assumptions are made in the development of this model. The first is that of a general average annual death rate of 40 individuals per 1000 based on cited work, as well as the fact that graves will generally primarily be those of adults based on the fact that young children are rarely represented in pre-Christian cemeteries (Clarke and Ambrosiani, 1995: 157). The model does call for a count of 'adult graves' rather than just graves, but the lack of comprehensive excavation of settlements and the above point regarding child burials has led to that being an ideal rather than a reality. Here, thus, total burial counts are used. In this formula (Figure 3.4) the *P* value is the result of the calculation, being an estimate of the population at any one time, and the two values required are *G*, corresponding to the number of (adult) burials and *time*, of course referring to the length of time the settlement was in use. If the graveyard was only in use for a limited (known archaeologically) time within the life of the settlement, then it is here proposed the time value should be restricted to that period, to give a more accurate figure of the population of the settlement at that time.

$$\frac{40P}{1000} = \frac{2.5 \times G}{time}$$

Figure 3.3 - Clarke and Ambrosiani's equation for population estimates

These calculations are lent further weight by the fact that testing them with the number of burials at both Birka and Hedeby (both with fairly well-accepted population estimates in the published literature) gave both the expected result (Clarke and Ambrosiani, 1995: 158). The figures also correspond well with the fact that households in the Viking Age would be expected to consist of around 6 individuals, which when converted to a surface area estimate with the average size of a 'house' at Birka and Hedeby corresponds to around half of their enclosed, walled space. Clarke and Ambrosiani's method of calculation, as more recent and extensive than Gräslund's, will be used for the calculations in this thesis. It must, however, be said that further refining of a method for population calculation can and should be sought, as both calculations presented here, due to the nature of the data utilised for them, tend to produce ranges estimates.

Buildings

The other approach taken here, when burial data are not available, requires data on the number of buildings at a certain site, along with an idea of the period of time in which they were in use. Of course the number of buildings at a site will not absolutely correlate to the number of individuals living at that site, but an understanding of early medieval demographics, in particular as related to family size, will approximate this fairly well. Data from Iron Age cemeteries in the Mälaren Valley of Sweden have been statistically evaluated to show that the average family unit consisted of six to eight individuals (Clarke and Ambrosiani, 1995: 158). While these cemeteries are of a rural population rather than the 'urbanising' population seen in the settlements under investigation here, a figure of six individuals per household is taken as an educated guess. Ribe in Denmark is an example of one of the settlements which requires use of this approach. While burial

remains from the Early Medieval are scarce, the plot divisions at the site are particularly well preserved. Plots seem to have been divided into industrial and residential zones (Feveile, 2012: 127), and likely employed at least two individuals. A blacksmith, for example, would have required an apprentice, and surface structure analysis of rune-stone production in Sweden has shown that teams of varying levels of expertise worked together to carve the stones (Kitzler Åhfeldt, 2001). Each plot, thus, can be calculated to support approximately 12 individuals.

HISTORICAL CONSIDERATIONS

As has been identified previously, the data available for settlements in the western Baltic are much more comprehensive than the data available for the south and east, and this has affected their representation in comprehensive studies of the region in the Early Medieval period. Johan Callmer's 1994 survey of urbanising sites in the Baltic from 700-1100 CE discusses 82 sites. 58 of these are from the Medieval western Baltic¹⁸, 12 are from the southern Baltic, and a further 12 from the eastern Baltic (Callmer, 1994: 54-55). A higher percentage is certainly expected to be attributed to the western Baltic, given their higher populations, but this is disproportional. This is not a criticism of Callmer, indeed this paper was remarkable in its presentation of so many archaeological sites outside of Scandinavia proper for its time. These numbers are presented to illustrate that even with the best intentions and thorough research, the legacy of recent history looms large in any discussion of Polish or Eastern Baltic archaeology.

Christoph Kilger raises the point that in Scandinavia the Vikings very much are a living identity. Through their international influence and reputation as both barbarous and savvy they have survived the curse of history and remained in public consciousness, whereas the Slavs are depicted as the "other", the less successful and much less exciting stand-in for ordinary rural life (Kilger, 1998: 110). The generally excellent and comprehensive volume which has in many ways served as a sort of bible for the

¹⁸ The kingdoms of Denmark, Sweden, and Norway – note that until the Second Schleswig War of 1864 the modern German state of Schleswig-Holstein was considered Danish.

development of this thesis, *The Viking World* (Brink and Price, 2012), has no chapters or sections on the southern Baltic. The section named *The Baltic* consists of two chapters; one on Finland in the Viking Age, and one on Vikings in the Eastern Baltic. Despite the fact that this volume is indeed ostensibly focussed on Vikings and Viking activity, one should expect that the significant Scandinavian influence on the settlements of the southern Baltic, and potentially even the influence of the southern Baltic settlements on those of Scandinavia, should garner at least a mention.

Circum-Baltic Archaeology in the early 20th Century

The turbulent first half of the 20th century certainly affected archaeological research (Sklenář, 1983) and no doubt that of other fields – the first casualty of war is, after all, truth. Globally at that time, archaeology more represented antiquarianism, with artefact collecting and a ‘culture-historical’ approach dominating research (Johnson, 2010: 15). In the western Baltic antiquarianism predictably dominated the first half of the 20th century, peppered with some directed archaeological excavation, such as the work of Hjalmar Stolpe in Birka (Culin, 1906). Early Medieval eastern Baltic archaeology was similar and largely directed by foreigners, i.e. the work of Birger Nerman in Grobiņa in the 1930s (Megaw, 1961). The German imperial government, however, favoured research into and reconstruction of the country’s grand Roman past (Sklenář, 1983: 135–136)¹⁹. Thus very little pre-war archaeology can be found on the sites close to the Baltic Sea, which are decidedly non-Roman. The start of World War II, however, drastically changed the character of historical inquiry in the Baltic Region. Very little work was conducted in the intra-war period, with the exception of at the settlement of Hedeby, and independence and thus the ability to direct their own research was not returned to Poland and the Baltic states for almost 50 years.

The Archaeological Legacy of World War II

Despite their shared history, both culturally and linguistically, the pre-war German archaeological agenda of the early 1900s saw a right to lay claim to Poland. This began

¹⁹ This legacy can be seen in the naming of the institute responsible for research into pre- and early history (*Vor- und Frühgeschichte*) the *Römisch-Germanisch Komission* (Roman-Germanic Commission), founded in 1901.

with the work of Gustaf Kossinna (1858-1931) and culminated in the invasion of Poland, and the start of World War II (Sklenář, 1983: 135). Indeed to celebrate the establishment of the Second Polish Republic in 1918, twenty years before the start of the war, Kossinna published an article presenting archaeological evidence ‘proving’ the Germanic claim to the region (Kossinna, 1919). He sent this work to a conference in Versailles in the same year, and unsurprisingly did not receive a response from his peers. It did, however, provoke an argument with one of his former students, Josef Kostrzewski who claimed (correctly) that the material presented by Kossinna was in fact evidence of common Slavic occupation across the two countries (Arnold, 2008: 125). The theoretical and methodological basis of Kossinna’s work was that of *Siedlungsarchäologie*²⁰, an approach which uses the extent of archaeological evidence to define the ethnic boundaries of a certain group. His aim in using this was the establishment of a Germanic claim to the great majority of central Europe, rather than the rigorous application of method proposed by early proponents of the school including Oscar Montelius (Sklenář, 1983: 148).

Archaeology under Germany in the Third Reich was valued and conserved as a field of inquiry to have continued engagement during World War II. Then-head of the Schutzstaffel (SS) Heinrich Himmler held Tacitus’ description of the barbarians of the north in his *Germania* as an inspiration for what he hoped would come about; a “wonderful portrait of how high, pure and capable our ancestors were” (Pringle, 2006: 16). Himmler allocated significant funding to archaeological work tracing a link between modern Germany and this glorious past. Herbert Jankuhn, a member of the SS and eventual head of the Ahnenerbe is listed as an author on 65 pieces of work in the period between 1938 and 1946 (WorldCat, 2017a), most of them on the settlement of Hedeby in then-Germany, which received significant funding from Himmler (Pringle, 2006: 221). Alfred Rosenberg, whose work formed part of the ideological platform for the assertion of Germanic racial superiority (Arnold, 2008: 141), authored 150 works in the same period (WorldCat, 2017b). In comparison, neighbouring countries actively opposed to Germany, and even those which were only passively involved or declared neutral, were

²⁰ Settlement archaeology – though Kossinna used ‘settlement’ as a concept, rather than as the archaeological traces of a sedentary community.

so affected by resource cuts and the need to train and send soldiers to fight, that academic inquiry was all but stopped. Many young and prospective archaeologists died in the war, their obituaries littering archaeological journals throughout the second world war, and decades passed before these losses were replaced (Arnold, 2008: 140).

The policies adopted by the National Socialist (Nazi) Party towards Poland led to significant changes in both the cultural and racial composition of the country. As part of the *evakuieren* (evacuation) and *abschieben* (deportation) plans for the initial extent of the Third Reich's *eindeutschung* (Germanisation) across Germany and Poland, around 85 percent of all Poles and 100 percent of all Jewish citizens were to be removed from their lands and homes (Kallis, 2009: 192). The territorial reorganisation of Poland in only the first year of the war saw around 600,000 Poles 'evacuated' from the western, German-occupied territories, and replaced with the same number of *Volksdeutsche*, German nationals, primarily farmers (Kallis, 2009: 192). This meant that a significant number of the initial group 'removed' from Poland were Christian Poles rather than specifically Jewish Poles, as the former tended to be much more occupied in agriculture and food production than the latter (Kallis, 2009: 180–181). Over 1.7 million ethnic Poles were expelled from their homeland during the course of WWII (Eberhart, 2002: 455). Poland's pre-war population of 35 million was reduced by over ten million due to the extermination camps, injuries sustained in the fight against the Axis, and of course a significant decrease in the number of births in the intra-war period, and the reorganisation of Poland's borders (Szulc, 1947: 3). The damage done in Poland amounted to around 50 billion dollars; 600 billion dollars when inflated to today's economy (Polak and Madejem, 2002). Over half of most major cities were destroyed (55 percent of Gdansk and almost 90 percent of Warsaw are approximate figures), and the economic reconstruction of the country was not really completed until the 1990s (Polak and Madejem, 2002). This, of course, greatly affected archaeological enquiry, not least of all because significant resources were instead directed towards rebuilding the country.

After the war German academics continued to publish their work, Jankuhn past his death in 1990 until the last publication with his name as an author in 2010 (WorldCat, 2017a). Poland, however, struggled to rebuild under the now-Communist government.

University lecturers identified as likely to express anti-Communist²¹ ideologies were removed from their posts by the government and replaced by underqualified government allies (Polak and Madejem, 2002). Indeed the version of history taught in schools was heavily influenced by the communist government. Marxist periodisation was introduced emphasizing social class and in particular lower, slave classes in historical narratives, historical communism was exalted, “modernity” was emphasized over religion²², and a strong and stable historical relationship between Poland and the Soviet Union was presented to students (Wojdon, 2012: 63–70). Of course the reasons for this are historically predictable; the Polish United Workers’ Party, ideologically founded on Marxist-Leninist theory, was put into power by Josef Stalin. As a reaction to both the German and Soviet occupations, nationalistic approaches to archaeology, in particular medieval period archaeology, have dominated in Poland. These approaches strongly affirm the Slavic roots of the region, and the place of the Slavs as the predecessors of the modern Polish state (Urbańczyk, 2013: 59).

The Archaeological Legacy of the Soviet Union

While all three Baltic States were independent during the inter-war period, a secret protocol of the Molotov-Ribbentrop Pact of 1939 divided the countries, along with Poland, Finland, and Romania, into German and Soviet spheres of influence. They were constituent republics of Nazi Germany from 1941 until the surrender of Nazi forces to the USSR in 1945, then becoming Soviet states, and it was only in 1991, with the dissolution of the USSR, that they regained independence (Dreifelds, 1996: 4–5). The Baltic nations have been considered as the ‘best-recovered’ of the former USSR nations due in part to their strong pre-war and long established national histories²³ especially in comparison to other nations such as Belarus and Ukraine, which share cultural history with the Russian Federation (Dreifelds, 1996: 6–7). Despite this, the

²¹ Or more correctly anti-Soviet, given the political alignment of the new government.

²² This, of course, was a losing battle in one of the most heavily Catholic nations outside of Vatican City.

²³ For over 500 years, until the end of the 18th century the Grand Duchy of Lithuania was one of the largest states in Europe.

machinations of the Soviet Union and the succeeding Russian Federation have still ensured a sort of economic subjugation of the Baltic nations (Goble, 1994)²⁴.

Francis Balodis, commonly seen as the father of Latvian archaeology, left Latvia for Sweden not long after the Soviet occupation in 1940, and his successor Eduards Sturms was forced to flee the country less than four years later (Vijups, 1999: 122–123). Archaeological studies at their alma mater, the University of Latvia, were then transformed into a single course entitled “The foundations of the archaeology of the USSR”, and was not taught by actual archaeologists until the mid-1980s (Vijups, 1999: 123). Soviet-era maps were also deliberately misleading, a factor which particularly impacted the search for early medieval settlements, which more often than not lie on the coast (Mägi, 2015: 41). Shoreline regression and transgression in Estonia was not properly understood until the mid-1990s, due to governmental restriction on maps with contour lines (Mägi, 2015: 41–42). Academics were under heavy restrictions, both in terms of travel and in the discussion of issues that may have been seen as politically sensitive (Zvelebil et al., 1998: 1). Some were allowed to continue operating, such as the Estonian Bronze Age specialist Vello Lõugas, but his methods and interpretations are heavily questioned (Sperling, 2014: 395). In addition, the end of World War II saw the destruction and loss of context of a huge amount of archaeological documentation and artefacts, in particular from Königsberg Castle in Kaliningrad (von Carnap-Bornheim et al., 2012: 16; Ibsen, 2016, personal communication).

Only the settlement of Grobiņa was published in the European academic corpus before the start of World War II, thus only the Latvian site is generally integrated into early discussions of Viking Age urbanism in the Baltic. This is likely due to the publication of excavation reports from the site in both German and Swedish (Mägi, 2015: 41). Coming full-circle, it must be considered that Johan Callmer’s 1994 conference paper titled “*Urbanization in Scandinavia and the Baltic Region c AD 700-1100: Trading Places, Centres and Early Urban Sites*”, was only published in 1994, just three years after the end of the Cold War (Callmer, 1994). The lack of representation of the eastern Baltic

²⁴ Consider the huge recovery necessary from the fact that 90% of Lithuanian, Latvian and Estonian trade was with other Soviet nations until the dissolution.

countries in the academic corpus *must* be understood in light of this information. An almost literal Dark Age of archaeological research occurred, shaving off over 50 years of development.

CONCLUSIONS

The early medieval settlements of the Baltic are a dataset ripe for quantitative comparative analysis. Dissonant, complementary, or harmonious relationships between the material and social elements of a settlement can play into a particular outcome, and it is suggested that those settlements which are 'successful', i.e. are not destroyed or abandoned, display a particularly well-balanced relationship between the two. Settlements which are tightly geographically confined, for example, but relentlessly pursue extended trade connections, will likely not last particularly long due to the increase in settlement density that would result from such a situation. Knowledge of the outcome, as is indeed possible to discern from most examples presented here, is suggested to allow us to infer backwards regarding the relationship between the material and social elements of a settlement, to a situation of complementary dissonance, or a discongruous relationship.

This study must also be understood in the context of recent history, which has greatly affected the existing literature and the availability of data. An attempt to mitigate these problems is made in this investigation by using only variables common to all of the settlements the comparative analysis; size, length of occupation, and population growth. Of course the nature of this study means that for some of the settlements even those features are unknown, but 'best guesses' which can be viewed as reliable are used. Not much is known about settlements like Wiskiauten, Grobina, and Åhus, with the existence of their settlements assumed either from or to the exclusion of grave excavations. There is an abundance of evidence supporting the opinions and assumptions of the regional and site specialists, and cross-regional integrative investigation should, properly, with some careful appraisal of divergent opinions, place trust in the work done by those who have dedicated their lives to these projects.

THE WESTERN BALTIC



Figure 4.1 – Map of the settlements of the Western Baltic under investigation in this thesis.

INTRODUCTION

The Western Baltic, an area more generally known as Scandinavia and consisting of Sweden, Denmark, Norway, and modern north-western Germany (Figure 4.2)²⁵, is by far the best-represented region under investigation in this thesis, in terms of both excavations conducted and published literature. While active excavation obviously did not take place in any great volume between 1939 and 1945, the region did not suffer the difficulties faced by the southern and eastern Baltic in terms of political and economic recovery from the Second World War. Research traditions recommenced largely uninterrupted. Hedeby, in fact, saw significant benefit from the war. Herbert Jankuhn, excavation director of the site, was appointed as the chief scientist of the *Ahnenerbe*²⁶ in 1940, and thus significant funding was directed towards the excavation of the site in the interest of demonstrating a link between ancient and modern Germanic culture (Pringle, 2006: 221).

The Western Baltic is undoubtedly the most accessible of the three regions of the Baltic from a scholarly standpoint. The settlements are much more comprehensively excavated, leading therefore to a much more extensive knowledge base, and comparative analysis then can be attempted with much higher resolution. Dagfinn Skre in his eponymous first edited volume²⁷ on the subject of the settlement of Kaupang in Norway, published after 20 years working on the site, notes that he spent his entire first year as director of the Kaupang Research Project reviewing the material collated by the previous director, Charlotte Blindheim (Skre, 2007c: 43). While typically only four sites are discussed as urbanising settlements of the Viking Age (Andrén, 1989), five are presented here with the caveat that, as is the case across the Baltic, others may later be added as more work is completed. Birka, Kaupang, Åhus, Ribe and Hedeby all appear between the start of the eighth and ninth centuries. They were an anomaly in their landscapes; settlement in the Early Medieval period was generally in the form of a

²⁵ As noted earlier, until 1864 southern Jutland was Danish territory, in this year it was ceded to Prussia.

²⁶ The scholarly and scientific wing of the *Schutzstaffel* (SS)

²⁷ Of three!

farmstead unit or agglomeration of farmstead units, magnate estates on two size levels, local and regional/state, and “a few larger towns” (Price, 2015: 326). A short outline of earlier and contemporaneous settlement in the western Baltic will first be given, and then the sites themselves will be presented in detail.



Figure 4.2 – Map of the Western Baltic in the Early Medieval Period.

THE WESTERN BALTIC IN THE EARLY MEDIEVAL PERIOD

The appearance of the settlements under investigation here is intricately connected to the start of Viking activity, typified by the expansion of western Baltic influence across northern Europe; from the North Atlantic to the United Kingdom, and from France to the Islamic Caliphate. The reasons for this are multifaceted, but increasingly seen as linked to internal power struggles and a subsequent intensification of trade (Brink,

2012c: 4). This led to the need for infrastructure at home to support the production of goods for export and the distribution of imported goods. In a curious counterpoint to the long-standing profile of the 'Vikings' as brutal barbarians, internally the Viking Age in the western Baltic actually seems to have been characterised by more cooperation and less violence. Study of a high-status building type known as the *høll*, or hall, shows a significant downswing in their destruction, from half of all halls in the Scandinavian Iron Age to only a quarter in the Viking Age (Carstens, 2015: 21). The rural cultural landscape of the Early Medieval Period in the western Baltic consisted of small villages and farming communities, and was not significantly changed through the entire Late Iron Age (Callmer, 1991). Borup, a typical farming agglomerate of between 3 and 6 farms dated to between 700 and 1000CE had a field system of roughly 50 hectares (Price, 2015: 328), with much of the surrounding regions utilised for agricultural land (Figure 4.2, Svanberg, 2003: 133–135). While Birka, Kaupang, Åhus, Ribe and Hedeby certainly would have stood out as alien in this landscape, their development was intricately connected to this period of cultural intensification and expansion known as the Viking Age. Internal processes continued independently, and can be seen in the construction of other hallmark buildings and settlement forms. While the settlements under investigation here were certainly primarily outward-looking in their focus, their role as part of the wider cultural landscape of the western Baltic and the importance of other culturally significant places and spaces, must be understood. As many as seven separate types of settlement have been identified in Denmark from the 6th to the 11th centuries; variably aristocratic sites, early towns/emporia, landing/trading places, specialized production sites, ordinary settlements, ordinary farms/villages, and fortified sites (Jørgensen, 2003: 175–176). Here the *hallir*, *þing*-sites and magnate farms will be discussed, as many of their functions overlapped with those of the settlements under primary analysis in this thesis. It is thought that this overlap may have caused internal friction within the western Baltic, and could have contributed in some way to the almost outright abandonment of four of the five settlements.

Hallir

Until the later appearance of High Medieval towns, there was ostensibly little to differentiate a high-status residence from the average farmstead, other than a

distinctive *høll*, a large and tall hall or longhouse (Carstens, 2015: 12–15). Around 70 of these are documented across the western Baltic and dated to the Viking Age, and consistency in the construction, locations and artefact finds may either indicate the continuation of an earlier building tradition, as a longhouse tradition dates back at least to the Bronze Age (Carstens, 2015: 15, 22). All of these halls had workshop areas, and may have functioned as central places in primarily rural landscapes. No buildings identified as the distinctive *hallir* have been identified in the settlements under investigation in this thesis. The hall tradition seems to have ended with the Viking Age, replaced by proper royal residences in the “continental fashion” (Carstens, 2015: 20).

Ping-sites and courtyard-sites

An important focal point in the landscape of the Iron Age western Baltic was undoubtedly the *þing*-site. The term refers to a legal assembly, or a place “where people met for legal discussions and settlements” (Brink, 2012a: 24), occurring on both a local and national level. The western Baltic in the medieval period was divided into *hundare*, administrative districts each of which likely had their own *þing*. In Sweden, additionally there were three ‘national’ *þing*-sites; Gamla Uppsala, Skara, and Linköping (Graham-Campbell, 1980: 196–198; Schlyter, 1835: 6–7). Problematically, as written accounts of the western Baltic hardly even describe events back to the Viking Age, and the earliest detailed form of written language in the area comes from the Viking Age rune-stones (e.g. the rune-stone U226 as per Brink, 2008: 26–27, dated to the first half of the 11th century), *þing*-sites are often discussed as a Viking Age phenomena, when in fact they may date back much further. As a further complication, surviving accounts of the Viking Age generally post-date the period significantly, and thus the locations of very few *þing*-sites are known. Archaeological evidence has been used to suggest places of local importance which could be likely candidates (Sanmark and Semple, 2008: 246). Two of the highest-level *þing*-sites in Sweden, Gamla Uppsala and Skara, are historically documented, though they interestingly played very different roles towards the end of the Viking Age. Gamla Uppsala has traces of human activity extending back to the Bronze Age, and was a village-type settlement from the 4th century BCE (Ljungkvist et al., 2011: 572). A ‘royal manor’ likely existed from at least the Viking Age, which fits with Adam of Bremen’s account of the ‘driving out’ of the recently-Christian king Olof

Skötkonung from the pre-Christian religiously important site some 100 years before the end of the period (Book 4, Chapter XXIII, Blomkvist et al., 2007: 191). Skötkonung was, in fact, driven out to Skara, which became a bishop's seat around 1000CE. Gamla Uppsala became Sweden's first archbishopric some time later, in 1164CE.

The physical requirements of the *þing* are historically documented, though again only in documents whose writing post-dates the Viking Age. Egil's Saga, set in Viking Age Norway though likely written by Snorri Sturluson in the first half of the 13th century (Faulkes, 2012), describes a ring-shaped setting in an open space in a village of sorts. The Gulathing and Frostathing laws describe similar round shapes, though it is posts that created the enclosure (Brink, 2012a: 26). Those two sets of laws are, again, attributed to Snorri Sturluson, their descriptions dated to the reign of Hakon the Good of Norway from 935-961 C.E. Four centuries thus separate their purported use and their documentation (Larson, 1935: 7). Also in Norway, a significant number of 'courtyard sites' have been found that fit these criteria. These are described as a group of buildings placed to face each other in a circle or semi-circle arrangement; a "striking distribution pattern" (Grimm and Stylegar, 2004: 111) that dates back to the Roman Iron Age (Olsen, 2015: 45). A suggestion that these may be *þing*-sites is drawn from a parallel between the later Icelandic site of *Þingnes*²⁸. Described as having a very similar spatial arrangement to the courtyard sites, the site plan consists of 12 turf plots facing a circular, central enclosure with a small mound in the middle (Olsen, 2015: 50). One of the Norwegian settlers who travelled to Iceland at the end of the 9th century BC is suggested as having 'carried' the knowledge of *þing* construction, as they originated from a densely-populated area that had at least three of these courtyard sites (Olsen, 2015: 51-52). Material remains from the site suggest that the sites were only set up for temporary accommodation, and it is surely telling that the remains of cooking pits are only found 'behind' the buildings, rather than being in the more socially-conducive centre (Olsen, 2015: 47).

²⁸ The clue there, is unsurprisingly in the name.

Magnate Farms and Royal Residences

The magnate farm is another important variable to consider in the settlement history of the western Baltic, as it has been suggested that they could be a pre-cursor to the settlements under discussion in this thesis (Clarke and Ambrosiani, 1995: 71). Helgö, in particular, is of interest; it immediately pre-dates Birka in that a large number foreign goods dating to the fifth, sixth and seventh centuries have been found, but around 800CE, when activity at Birka intensifies, their import seems to cease (Clarke and Ambrosiani, 1995: 71; Waller, 2007: 259). The two sites were no further than six nautical miles away from each other. Metalworking at Helgö has also been discussed as being resumed directly by Birka (Hjärthner-Holdar et al., 2002: 162). The recently discovered 'home of Herigar' (Kalmring et al., 2017), a high-status residence very close to Birka, may have been a direct or indirect successor of the farm at Helgö. Trade and craft production certainly took place at these sites, but only to supply their own residents (Skre, 2016: 167).

Larger sites of a similar character are generally discussed as royal residences, mostly because of their size and an increased density of finds. The complex at Tissø is the best-documented of the royal residences, lying 7km inland on the west bank of Lake Tissø and stretching across 50 hectares (Albris, 2015: 57). Artefacts of high value have been found at the site, including a 1.8kg gold necklace, and Frankish and English ceremonial items (Jørgensen, 2012: 77). The site can be traced to 550 CE, initially as a large farm and later developing into a proper estate including a two-storied hall of 350m² (Jørgensen, 2012: 79). The existence of large-scale textile manufacture and metalworking from 700 until 1050 CE is very clear (Jørgensen, 2003). Hacksilver and Arabic coins are found distributed across the site, along with one sceatta, four Carolingian coins, and two coins from Hedeby. Large-scale trading activities seem to have been constrained to only short period of time, suggesting short periods of intense activity and thus potentially only seasonal occupation (Brather et al., 2012: 213; Jørgensen, 2012: 81–82). The estate of Gudme on the Danish island of Fünen covered 100 hectares and may have had up to fifty farms between the 3rd and 7th centuries CE (Jørgensen, 2003: 176–177). Gudme declined thereafter but retaining some functions through the Early Medieval. From the 4th century there is a clear division between residential and craftworking

activity at the site as well as the appearance of an aristocratic residence (Jørgensen, 2003: 176–177). The site of Uppåkra also bears mention. Though smaller, at 40 hectares, the site displays settlement continuity across perhaps 1200 years, has evidence of significant surplus goods production, and is clearly central in a landscape of newly-excavated satellite sites (Mogren, personal communication, 2018).

Small ‘royal’ residences are often found lying quite close to the settlements under investigation here – specifically Adelsö near Birka and Vä near Åhus. Towards the end of the Viking Age a major upheaval was seen in the magnate farm and royal residence settlement type. Some, such as Roskilde, Lund and Trondheim, became high medieval towns, while others, many of which had pre-Christian religious functions, including Tisso, Lejre, and Uppåkra, declined markedly (Roesdahl, 2012: 662).

Circular Fortresses

Another important feature of the Viking Age landscape is the circular, or ‘Trelleborg-type’ fortress. Appearing relatively later than the *hallir* or magnate farms and named after the largest of the group, seven of these circular fortresses appear in (then) Denmark during the reign of Harald Bluetooth (c. 959 – c.987 CE, Roesdahl and Sindbæk, 2014: 383). Aggersborg and Fyrkat on Jutland, Nonnebakken on Fyn, Trelleborg on Sjælland, Vallø Borgring near Køge, and Trelleborg and Borgeby in Skåne are all very visible in the landscape; they all occupy conspicuous and easily-defensible positions close to roads and waterways (Roesdahl, 2014: 18). Their appearance is suggested to have been a reaction to growing power in the West Slavic tribal areas of Germany, which matches with the contemporaneous intensification of conflict in that region (Roesdahl, 2011: 352). It has been suggested that Trelleborg in particular may have been built to model the legendary settlement of Jómsborg (Roesdahl and Sindbæk, 2014: 384), though this connection may be more due to the literary picture painted in the sagas than the actual fortress. No archaeological evidence of a construction similar to the circular fortress has been found at the likely ‘actual’ Jómsborg, Wolin in Poland. Aggersborg was built on top of an earlier settlement which may have followed the pattern discussed above as being typical of the Iron Age in the western Baltic – initially

a single farm, before developing into a nucleated multi-farm settlement in the Roman Iron Age (Perdikaris, 2004: 271; Sindbæk, 2014: 133).

The very similar plans of the five fortresses suggests that they were planned either together or by a single builder, and all were constructed primarily as places of protection. Excavation of the fortresses suggests that in at least two 'ordinary' daily life took place, with evidence for small-scale permanent settlement as well as a not insignificant amount of craft production. Royal occupation has been suggested but not confirmed (Roesdahl and Sindbæk, 2014: 391). There is no archaeological evidence to suggest the circular fortresses were used functionally past the end of Bluetooth's reign, but their clear visibility in the landscape even today suggests that they have definitely served their purpose as monuments or memorials of his reign (Roesdahl, 2012: 660).

BIRKA



Figure 4.3 – Map of Birka, Sweden. The 'Black Earth' settlement area and the garrison, with the two burial grounds of Hemlanden (north) and Kvarnbacka (south) indicated in lighter weighting, adapted from Müller-Wille, 2011: 127.

Excavation History

The island of Björkö has long attracted attention as the site of Saint Ansgar's legendary *Birca*. The earliest recorded excavations into its western side were in 1680, those of the Swedish State Antiquarian Johan Hadorph (Ambrosiani, 1992c: 14). 'Modern' investigations were first carried out in Birka almost 200 years ago, when between 1825 and 1828 Alexander Seton roughly excavated approximately a dozen burial mounds (Hyenstrand, 1992: 26–27). Systematic excavations began with Hjalmar Stolpe, a former zoologist who excavated at the site from 1871 until 1895 (Hyenstrand, 1992: 28, 37). Stolpe also first coined the term 'Black Earth' to describe the charcoal-rich residential area of Birka, a term which now lends itself to several volumes discussing the site (Ambrosiani and Clarke, 1992, 1995). Stolpe's early excavations, according to his diaries, covered roughly a third of a hectare of Birka's 'Black Earth' (Figure 4.4). Unfortunately an excavation map corresponding to the work Stolpe completed has not yet been found, so much of the work his team completed, and artefacts they uncovered, cannot be tracked precisely (Hyenstrand, 1992: 44)²⁹. In the 1930s the materials excavated by Stolpe and his team were unpacked, analysed, and published primarily by Holgar Arbman (Ambrosiani, 1992c: 15).

Björn Ambrosiani and Helen Clarke became the next caretakers of the site. Between 1969 and 1971 their work was focussed primarily on the shoreline area, in order to reconstruct the topography of the site and uncover Stolpe's trenches (Ambrosiani, 1992c: 15, 1992b: 71). The former was successful but the latter unsuccessful, and aerial surveying before the next large-scale excavations conducted again by Ambrosiani and Clarke between 1990 and 1995 was thought to have identified one or two of Stolpe's trenches. Those next excavations were situated in Stolpe's 'Black Earth', between his 19th century work and the 1969-1971 excavations (Ambrosiani, 1992a: 88). They revealed the rich history and huge reach of the site, uncovering artefacts of household objects, trade goods, and workshop products (Ambrosiani, 2012: 97). Since then the Department of Archaeology and Classical Studies at Stockholm University has taken over work on the

²⁹ Though with Stolpe's precise documentation it may be possible, in future, to attempt reconstruction of his excavations.

site, primarily under the direction of Lena Holmquist. Recent focus has been on geophysical and remote survey (mostly conducted by the Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology) and the garrison or 'Borg' area, though a small professional excavation in the port area took place between 2015-2016 (Kalmring and Holmquist, 2015: 61; *Statens Historiska Museet, Stockholm*, 2017).

In 1993 Birka and the neighbouring Hovgården were inscribed on the UNESCO World Heritage List, their outstanding universal value attributed to the excellent preservation of structures and the witness they bear to the wide-ranging trade network established by the Vikings during their expansion (*UNESCO World Heritage Centre*, 2017).

Historical Attribution

The most famous source mentioning Birka is, without doubt, Rimbert's *Vita Anskarii* (The Life of Saint Ansgar). Written in the 870s and chronicling Ansgar's travels to the western Baltic in two (eventually successful) attempts to convert the pagan north in the 840s, Rimbert's writings provide significant detail about the settlement. They discuss the presence of a king at Birka (King Björn, who would be roughly contemporaneous), Christian slaves at the settlement (Chapter XI), of public *Þing* assemblies, and of the power of the King in resolving to convert Sweden (Chapter XXVII). Of course the account is not only third hand, in English through two translations, but also is very much the perspective of an outsider with a specific agenda; to laud the achievements of the newly canonised and recently deceased Archbishop of Hamburg and patron saint of Scandinavia. Ansgar in all likelihood did meet the king of Sweden, as it would be a significant and remembered moment, but this cannot be taken as confirmation for royal control over the settlement. In fact in the saga, the king is spoken of as having to gain the permission of his subjects before allowing the missionary to enter the site (Hillerdal, 2009: 256-257). Birka may merely have been a convenient meeting-spot and comfortable for Ansgar given the presence of foreign (and potentially already Christian) merchants. Rimbert's account of Ansgar's journey is a prime example of the naming confusion which afflicts this area of research; Birka is referred to as *portus*, *vicus*, *citivas* and *urbs* (Kleingärtner, 2014, Table 10). These are defined and distinguished between in his account; *portus* as the entire settlement, *vicus* as the traders' area, *civitas* as

(presumably) the garrison, discussed as nearby and fortified though generally unoccupied, and *urbs* as synonymous for *civitas* (Rossignol, 2011: 80). Note that Rimbert does refer to the settlement as ‘Birca’ rather than ‘Birka’. The former is considered the Latinised version and the latter the Scandinavian translation.

Adam of Bremen’s *Gesta Hammaburgensis ecclesiae pontificum* (History of the Archbishops of Hamburg-Bremen) also makes extensive reference to the site. This account was written roughly two hundred years after the decline of Birka, calling somewhat into question the accuracy of his writings.³⁰ Adam recounts some of Ansgar’s movements (Book 1, Chapter XV), judges the prophecy of Gog and Magog as filled upon the conversion of the Norse heathens, (Book 1, Chapter XXVI), describes the surrounding areas as filled with “barbarous tribes” (Book 1, Chapter LX), says that it lies just south of the land of Amazons (Book 4, Chapter XIV), and calls the wider inhabitants of the Baltic Troglodytes (Book 4, Chapter XX) (this translation from Tschan, 1959). While early antiquarians suggested that Ansgar and Adam’s ‘Birca’ may refer to a location other than that on the island of Björkö (Ambrosiani, 1992c: 14), a preponderance of archaeological material and location in the mid-Sweden area corresponding to Adam of Bremen’s account (as detailed in Tschan, 1959: 196) makes it seem unlikely that the last 300 years of archaeological inquiry have been mistaken. No accounts of Birka has yet been identified in the Icelandic sagas.

Environment

The settlement of Birka is located on the western side of the island of Björkö, roughly 30 kilometres west of Stockholm on Lake Mälaren. The lake was originally a bay of the Baltic sea, but due to post-glacial rebound and isostatic lift shorelines in the northern Baltic have regressed roughly five to six metres over the last thousand years (Ambrosiani, 2012: 96). This ‘closed off’ the lake at both the Riddarfjärden bay (located around Gamla Stan in Stockholm) and the Södertälje canal (to the south, though a lock has recently been established to allow shipping). Access to Birka in the Viking Age could thus have been through both the eastern and southern routes, and the exercise of

³⁰ As a reminder: in the year 1818, two hundred years before this thesis was submitted for examination, George III was King of England, General Andrew Jackson invaded Spanish Florida, and both ‘Silent Night’ and Handel’s ‘Messiah’ were first performed.

control or protection on either route would have been easy due to the narrow waterways. The island today is around 600 hectares in total, though would have been considerably smaller in when the settlement was established as falling sea levels have joined what was formerly two islands. The location of Birka on the island is somewhat curious; other much more obvious and larger harbours can be found across its topography, though the island remains quite heavily forested and the water quite shallow in places. The idea of two other harbours (Kughamn and Korshamn on the northern side) functioning as extra landing sites during the Early Medieval period has been proposed (Ambrosiani, 1992c: 16), though reconstruction of the landscape before shoreline transgression, and a lack of cultural material suggesting this particular function, precluded this theory for many years (Kalmring and Holmquist, 2015: 59). Surveys conducted towards the end of 2016 in the Korshamn area revealed that it may, in fact, have played host to a large house, potentially a magnate's residence (Kalmring et al., 2017). The main settlement is located on a slight depression running parallel to the water, and in the Early Medieval period may have an easier and more obvious place to build large structures.

Preservation at the site is particularly good, due mostly to the fact that there has been only limited ploughing on the site, and that the chemical composition of the soil creates a favourably alkaline pH at the site (Hyenstrand, 1992). The calcium content preserves bone and antler, and the phosphate content in the Black Earth prevents the rusting of iron (Hyenstrand, 1992: 42). Geophysical prospection in 2006 revealed numerous structures from multiple phases at the site, as well as extensive evidence of a rampart no longer evident on the surface (Trinks et al., 2014). The regression of the waterline is somewhat of a blessing and a curse; while having harbour remains on dry land is of course advantageous to archaeologists, the wooden structures have degraded while drying. Their only remains are deeply-driven poles which remained in an anaerobic environment, and thus knowledge of the full extent of the harbour is yet to be gained (Kalmring and Holmquist, 2015). While modern farming is clearly evident on the island, it is mostly confined to the middle and eastern sides, skirting the Early Medieval settlement. A magnate farm on the nearby island of Helgö, founded roughly 500 years before Birka, with continual occupation until the end of the Viking Age, is occasionally

discussed as Birka's ideological predecessor (Clarke and Ambrosiani, 1995: 71) due to the presence of rich finds including a Buddha statue from North India, and an Egyptian silver ladle (Lindbom, 2009: 92). House foundations uncovered during the 2016 geophysical survey of the Korshamn area, theorised as that of a royal manor or magnate's farm, are suggested as linked to Vendel Era burials in the *Hemlanden* burial ground which pre-date the settlement of Birka. Other contemporaneous 'horizon' finds from various excavations are suggested as being from this manor, rather than from Birka, and the settlement has been provisionally suggested as that of Rimbert's Herigar (Chapter XI), prefect of the 'town' of Birka and early Christian faithful (Kalmring et al., 2017).

Material

Birka's commencement date is difficult to distinguish with much specificity – while the second half of the 8th century is widely agreed upon as a general range (Callmer, 1994: 62) and the oldest archaeological finds support that date, bad preservation caused by flooding has hindered attempts to refine the range further (MacLeod, 1999: 62). A stone jetty around six metres above the current sea level suggests an *initium ante quem* of around 750 CE (Ambrosiani, 2012: 96). Suggestions that the settlement could date to the first half of the 8th century are not supported by any archaeological evidence (MacLeod, 1999: 62), marking the jetty as potentially one of the earliest constructions on the site. The presence of wasp beads in the second stratigraphic layer³¹ supports a date in the decade before 960 (MacLeod, 1998: 13), leaving the sixth decade of the 8th century as the likely foundation date. The 1990-1995 excavations of a shoreline plot led to the construction of an eight-phase chronology, outlined in Mary MacLeod's 1999 PhD thesis (MacLeod, 1999). MacLeod is reticent to state conclusive dates for these phases due to a lack of archaeological and/or scientific support. Loosely paraphrased, these phases move through construction of a jetty, shoreline reclamation, the occupation of a plot and construction of buildings for both domestic and industrial use, expansion seawards due to water regression, a change from metalworking to glassworking, and the abandonment of the plot in the seventh or eighth decade of the 10th century (MacLeod,

³¹ Produced in Ribe and for only a very limited time.

1999: 59–82). Industrial zoning was likely not present at the site, as evidence of craft production has been found across the entire settlement. Instead, dual-function plots and buildings, such as those found at the shoreline plot, seem to have been the model for the site (MacLeod, 1999: 110–111).



Figure 4.4 - The view from Birka's garrison across the Black Earth area, with the Hemlanden burial grounds seen on the right hand side (Thoeming, 2014)

Geophysical prospection completed by the Ludwig Boltzmann Institute, Vienna, has shed further light on the layout of the settlement. The 2006 investigation revealed plot demarcations, roads, the ramparts surrounding the site, and a significant density of houses, through depth analysis between two and four distinct settlement phases at the site (Trinks et al., 2014). Roads or trackway finds substantiate evidence from the 1990-1995 excavation, which showed the clear existence of a road between the jetty and plot excavated while the former was in use (MacLeod, 1999: 110). Furthermore, the prospection identified buildings whose foundations crossed the ramparts, suggesting the extension of the site at some point, and substantiating a theory that occupation may have at some point extended further than the known ramparts (Trinks et al., 2014: 196).

The arrangement and structure of the town seems to have been done in concert to the shoreline (Hillerdal, 2009: 225).

One of the most distinctive archaeological elements of Birka, its 'Black Earth', is an area of around 13 hectare of particularly dark soil, around 1-2 metres in depth and was first observed during Hjalmar Stolpe's excavations (Ambrosiani, 1992c: 11). High phosphate values were eventually confirmed as the reason for this unique feature, and the now well-studied phenomenon is known to be a consequence of interaction between human activities including but not limited to waste disposal (of all kinds), the breakdown of buildings, and soil extraction, and natural depositional processes (Nicosia et al., 2017: 331-339). Most importantly, this phosphate analysis combined with aerial photography has revealed that the settlement may have extended further north than the 7 hectares enclosed within the rampart and into the area now known as the *Hemlanden* burial grounds (Ambrosiani, 1992c: 15-16). Construction of the rampart, which encloses all but the western shoreline and cliff edge of the settlement, was long dated to the tenth century, though earlier ramparts have been dated to the ninth (Ambrosiani, 2012: 97) and the eighth century (Hedenstierna-Jonson et al., 2013). The rampart extended at least 750 metres around the settled area and had at least six gates, extending out into the water through a series of pile barricades (Hedenstierna-Jonson et al., 2013: 296-294; Trinks et al., 2014: 191). A second major defensive construction was also in place to protect Birka. The fortress traditionally known as *Borg* (Ambrosiani, 1992c: 12) was accompanied by a garrison, and lay around a clearly visible rocky outcrop to the south-west of the settled area. A road identified by geophysical prospection leading southwards out of the settlement rampart is theorised as heading towards *Borg*, as the two ramparts would have butted up against each other (Trinks et al., 2014: 194). At a length of 350 metres the Borg rampart surrounded a densely-utilised area filled with a large smithy and big wooden buildings, and is thought to have been uninhabited and almost entirely martial in character (Hedenstierna-Jonson et al., 2013: 294-297). *Borg* was in use for the entire period of time that Birka was settled. Its rampart construction dates to the end of the eighth century through the late tenth and the biggest internal building, a traditional hall, is dated to the second half of the tenth century (Hedenstierna-Jonson et al., 2013: 297).

A large number of graves and gravesites are known from the site and its surrounds. The biggest, *Hemlanden*, lies to the north-east of the settlement, a leafy grove filled with over 1,000 burial mounds (Figure 4.5). The first prospection on these graves was conducted by Hjalmar Stolpe, who abandoned his investigation of the Black Earth in favour of them, doing so by hammering the ground with a cane to sound out hollow (or hollow-ish) burial chambers (Trinks et al., 2014: 187). Anne-Sofie Gräslund's doctoral thesis presents a systematic analysis of both these excavations and later ones, analysing the types of graves at the site, their structure, and a comparison of the burial traditions with those of the surrounding regions (Gräslund, 1980). Gräslund avoids attributing much by way of ethnicity to most of the burials and concludes that the emergence of Christianity in the region hinders assertions of social status or religion³² (Gräslund, 1980: 80, 86). Recent analyses of inhumation burials from Birka have shown significant differences in diet between groups with various groupings of grave goods (i.e. those with weapons vs. those without), which may relate to the potentially large foreign population resident at Birka (Linderholm et al., 2008). Kvarnbacka is the other major Early Medieval burial ground. It lies to the south, and counts over 400 burials (Clarke and Ambrosiani, 1995: 74). More answers on the origins of the individuals buried at Birka may be forthcoming with the application of new types of scientific analyses.

Social

A significant amount of evidence has been presented to support royal, or at least formalised control of the site, including Gräslund's identification of the difficulties involved in feeding and supplying a relatively dense population on a relatively small island (Gräslund, 1980: 86). The inhabitants of Birka would not have produced their own food and would have needed to rely on surrounding farms to do so, with payment in the form of the goods either produced or traded at the settlement (Ambrosiani, 2012: 98). An estimate specific to Birka calculated that the site would require the produce of one hundred farms to support the resident population, or more accurately the surplus production of around one thousand farms (Broberg, 1990: 114 as cited in Skre, 2011a:

³² Christian burials may seem relatively 'poor' in comparison to earlier burials as they are often unmarked and do not hold burial goods, though it is important to note that in the early years of a Christian Scandinavia there were very few rules and regulations around Christian burial (Sanmark, 2004: 114)

204). The extensive fortifications also suggest a large number of individuals dedicated to the defence of the site, as well as to guarantee safety for the visiting merchants (Hedenstierna-Jonson et al., 2013: 292). They have been suggested as a display of strength and power, designed to signify the presence of a powerful ruler, dissuade any potential attacker, and guarantee safety and stability at the settlement (Hedenstierna-Jonson, 2009b: 161). As discussed above, Saint Ansgar is said by Rimbert to have met with King Bjorn II, whose rule of Sweden dates to the first half of the 10th century (though note that inarguable records of royal control in Sweden do not start until the rule of Olof Skötkoning in 995 CE). A detailed reading of Ansgar's visit to the site shows that this visit was negotiated with Birka's inhabitants rather than directed by the king, and that the riot which killed a missionary suggests that the king's control of the settlement was relatively minor (Hillerdal, 2009: 256–27; Sanmark, 2004: 79). The time before the Christianisation of Sweden in the mid-11th century was politically fraught, and before this time Sweden may have been split into northern and southern halves and ruled accordingly (Thoeming, 2013: 32).

There are also suggestions of control in the traces of everyday life found at the settlement; the 1990-1995 excavations at Birka found a change in plot division midway through the occupation of a plot (MacLeod, 1999: 70). The suggestion implicit here is that we could hardly expect an inhabitant to be willing to cede his land unless on orders from some higher authority. Assumption that the initial establishment of plot boundaries necessitates royal control is surely somewhat unfair to the inhabitants of the town—most rural settlements at this time were nucleated farm agglomerations and thus the individuals moving into Birka from surrounding areas would have understood the importance of boundaries. They may have even been establishing future *odal* familial claims (Zachrisson, 1994) to the land through this demarcation, expecting that the settlement would persist. Waste removal at Birka seems to be, if not operating perfectly, at least in evidence, and this further suggests some form organisation at the site (MacLeod, 1999: 70). Discussions of royal control at the site have thought of it as originating from the site known as Hovgården on the island of Adelsö (Sanmark, 2004: 81), located roughly 3km north-west of Björkö and inscribed on the World Heritage list with Birka. Rimbert speaks of the settlement's royal estate being located some distance

from the town, and Hovgården's large hall and five *Kungshögar* (King's Burial Mounds), contemporaneous with Birka (Bratt, 1988: 86–88) strengthen this claim. The co-occurrence of the settlements and Hovgården's assumed character as a royal site have been traditional arguments for the administration of control of Birka, though the recent discovery of the large manor at Korshamn may provide an alternative option (Kalmring et al., 2017: 11).

Birka's population has long theorised been as between 500 and 600 inhabitants, this calculation made using the number of graves at the site (Gräslund, 1980: 86, 2001: 131). The standard population calculator used in this thesis, with an estimated length of occupation set at 220 years (750-970) and the known number of contemporary burials across Birka's many gravesites set at 3000³³, leads to an average population estimate of around 850 individuals at any one time. The density of the settlement, including the garrison area of 1.8 hectares and the 13.2 hectares of black earth inside and outside the rampart, is thus thought to be around 56 individuals per hectare. While the extent to which the foreigners at Birka were represented within the burials was long questioned, leading to early estimates being taken as minimums (Gräslund, 1980: 86), the development and refining of methods of anatomical analysis, primarily isotopic analysis, have revealed that the permanent population of Birka may actually have been, if not multicultural, then ever-evolving (Hedenstierna-Jonson, 2014). Identifiably foreign burials at Birka are difficult to distinguish, though as stated earlier, much about the burials at the site is difficult to distinguish. As this is the primary way in which ethnicity is determined in less than perfectly-preserved sites the extent to which a permanent foreign population can be claimed is limited, though it has been suggested that foreign merchants may have been stationed at Birka for extended periods (Back, 1997). An extensive study of the bones of the roughly five-year-old, mid-10th century 'Birka Girl', excavated by Hjalmar Stolpe in 1876, was able to begin this discussion. Isotopic analysis revealed the girl had a diet rich in terrestrial animals, quite unlike the fish-based diet that would be expected from the resident of a small island with excellent

³³ While older estimates were set at 2000 (Ambrosiani, 2012: 97; Gräslund, 1980: 86), primarily counting the number of burial mounds visible on the surface, more recent investigations increase the count to the higher number (Hedenstierna-Jonson, 2014).

fishing prospects (Hedenstierna-Jonson, 2014). Hedenstierna-Jonson discusses the wider implications for this discovery as indeed opening up the possibility that entire foreign families may have settled at the site. The social status indicated by the diet and grave goods of a five year-old would have been representative of her entire family, with the study concluding that the Birka Girl must have been the daughter of a wealthy non-local family, recently settled in Birka, with a connection to textiles and trade suggested by the inclusion of a needle-case in her burial (Hedenstierna-Jonson, 2014: 98–99). Whether the Birka Girl came from near or far is uncertain, and Hedenstierna-Jonson gives no more information on that particular subject, but she was buried in a place of importance for her family despite being far from her home.



Figure 4.5 - The Hemlanden burial grounds at Birka (Thoeming, 2014)

While no excavations have yet yielded a locale for the textile production in Birka that the Birka Girl's family were likely involved with, tools and preserved fabric found at the site suggest not only the production of domestic goods, but also activities like tablet-weaving and the production of intricate hairnets (Andersson Strand, 2009). Traces of

glass, comb, and fine metal-work production are found across the site, though evidence of blacksmithing on a large, organised scale is much more substantial (MacLeod, 1999: 109–111). This further suggests the necessity of a good relationship with the hinterland of Birka, as the raw materials necessary for this production could not have been sourced on the island (Ambrosiani, 2012: 98). A significant number of animal bones have been recovered from the site; the 1990-1995 excavations alone yielded six tonnes (Wigh, 2001: Abstract). Analysis of a portion of these remains by Bengt Wigh in his doctoral thesis revealed that animals were sourced from the hinterland of Birka and not only consumed for food; their furs and pelts were also worked and traded across the life of the site (Wigh, 2001). The evidence for these two different uses of animals at the site is not functionally separated, and nothing else yet has been uncovered to counter the assertion that there was no industrial zoning at Birka, that domestic and industrial life co-existed at the site (MacLeod, 1999: 110).

Goods found at Birka demonstrate both incoming and outgoing connections. Amber from the eastern Baltic (likely from Wiskiauten), pottery from the southern Baltic and the Rhineland, whalebone from northern Norway, beads from India or the Caucasus, Islamic coins, and Khazarian (Russian) pottery have been found at the site (Ambrosiani, 2001, 2012: 98), and there is a clear separation of the trade at Birka into two distinct phases. The first phase is dated to c. 750-875, the second to c.875-975 (Gräslund, 2001: 131), and respectively they are thought to indicate Western connections (Dorestad and the Rhineland), and Eastern connections (western Russia, Ukraine, the Black Sea, and the Abbasid Caliphate). This is likely linked to the rise of Hedeby as a major node for trade with the continent and the formalisation of the Russian Dnieper and Volga trade routes by the growing presence of Northern Europeans throughout the region (Hedenstierna-Jonson, 2009b: 164). There also seems to be significant influence from the Eurasian steppe regions on the dress and weaponry found in the garrison at Birka. While the two forms of warfare were very different (horse-mounted in the steppes vs. standard infantry in the Baltic) there was clearly cultural transfer between the two groups as connections were formed (Hedenstierna-Jonson, 2009a). The importance of Birka to the Baltic during the Early Medieval period cannot be overstated – statistical analysis of the places mentioned in Rimbert's *Vita Ansgarii* and their connections to

other sites conducted Søren Sindbæk revealed that Birka, despite being geographically “the far end of the world”, displays a statistical centrality that belies its location (Sindbæk, 2007: 64–65).

Outcome

The specific outcome of the settlement at Birka remains unknown. Several theories have been proposed, but the most commonly cited is that isostatic lift began to silt up the area around the island towards the end of the tenth century and the waterways which would have provided access to Lake Mälaren became more difficult to sail through as bigger boats became more common for trade (Ambrosiani, 2012: 98; Trinks et al., 2014: 186). Another suggestion is that the island had been deforested too extensively over its 200 years for settlement to continue, and that upon a fire raging through the site a decision to abandon was made (Trinks et al., 2014: 186). No archaeological evidence of such a fire has been found in the settlement area. Excavations on the garrison and southern rampart of Birka do show evidence of burning in layers dating to the second half of the tenth century, and a ruinous attack on the garrison is thought to have occurred at the end of the 10th or the beginning of the 11th century (Hedenstierna-Jonson, 2009c: 99, 2009a: 51). While this doesn't further the destruction by fire theory for the settlement it does show that Björkö was not abandoned completely. That being said, no evidence of occupation in the settlement area post-dating the mid-970s has been found, and no theories have been put forward explaining this dearth other than a brief proposal that ploughing may have destroyed the later layers of the site (Trinks et al., 2014: 186). The site's defensive structures seem to have been left in use for those who remained to farm the island or for those who lived on the surrounding islands.

Birka's responsibilities have often been discussed as being taken over by the settlement of Sigtuna (Hillerdal, 2010: 505; Ros, 2012: 140; Sawyer, 2007: 182), which lies roughly 30 kilometres north of Björkö and was settled towards the end of the 10th century (Figure 4.6). There are many similarities between the two sites, most notably in layout and in population (the final population at Birka and the initial population at Sigtuna seem to have been very similar at around 1000 individuals), and the “course of least improbability” points to the latter settlement succeeding the former (MacLeod, 1999:

147-149). While Sigtuna's foundation is attributed to Erik the Victorious (c. 970-995), the first coins issued from the site (in fact the first coins issued in Sweden) were issued on the command of his son Olof Skötkonung (Ros, 2012: 140; Sanmark, 2004: 79), suggesting much more formalised royal control than was present at Birka. Coming full circle, the existence of this very clear royal control at Sigtuna is posited by Charlotta Hillerdal to suggest a lack of royal control at Birka. As power structures changed with the Christianisation of the country and royal control became much more formalised, settlements like Birka could have somehow threatened the emerging powers (Hillerdal, 2010: 521-522). Birka's demise was likely multifaceted in its reasons and potentially just an issue of critical mass; as the environment and ideology of Sweden changed towards the end of the 10th century it became necessary to find a new place for the site. The land which became Sigtuna, located halfway upriver towards the important pagan site of Gamla Uppsala, may have been no more than the best candidate.



Figure 4.6 – Map of Birka and its theorised successor Sigtuna

ÅHUS



Figure 4.7 – Map of Åhus, Sweden. Potential Early Medieval extent, adapted from Callmer, 2002:127.

Excavation History

Often overlooked as a serious contender in discussions of urbanising settlements in the western Baltic during the Early Medieval period, Åhus has not yet been the subject of large-scale excavation. The only excavations on record were conducted by Johan Callmer between 1978-1984 at Åhus I and 1989-1991 at Åhus II, as a result of single stray finds dated to the late Vendel Period and early Viking Age (Callmer, 2002: 126; MacLeod, 1999: 197). While only Åhus II is under investigation here, Åhus I must be mentioned as the two sites are intricately connected. The earlier site existed as a seasonal marketplace with significant evidence of craftworking, from around 700 to 750 CE before duties were moved upstream to the later site, which existed from around 750 to 850 CE, and potentially longer (Callmer, 2002: 127).

Historical Attribution

No known contemporary sources so far discovered mention the Early Medieval settlement of Åhus.

Environment

The two Åhus sites are located in the county of Skåne in modern Sweden. They sit on the Helge Å (Holy River), which meets with the Baltic Sea in the Hanö Bay, Åhus I around 5 kilometres upstream and Åhus II roughly 0.5 kilometres downstream from the earlier site. At least a quarter of the site of Åhus II has been affected extensively by two major building works; the digging of two gravel pits, and the construction of a late medieval water mill, the water channel for which cut directly through the southern half of the site (Callmer, 2002: 127). Approximately 20cm of the top cultural layer was destroyed by farming in the Viking Age, and the half-millennium following (Callmer, 2002: 130).

Material

The site has been dated on the basis of artefacts found at the site, primarily glass and glass beads, and seems to have been in operation from the late 8th century to the late 9th century, with the site's most intensive period seen in its second half, from around 800 to 850 CE (MacLeod, 1999: 200). As excavations have been greatly affected by post-

depositional processes and no geophysical prospection has been conducted on the site it is difficult to say much about the layout of the site. The size of Åhus is generally discussed as at least 12 hectares (Callmer, 1994: 61, 2002: 127). Around 5200 features and 149 sunken-featured buildings have been uncovered at the site, along with post-built structures, but the discovery of 91 hearths and 32 hearth pits unconnected to any known structure suggests that there were many more buildings than currently known (Callmer, 2002: 128; MacLeod, 1999: 197–198). While no plot divisions have yet been found, the concentration of finds at regular intervals following a perpendicular direction from the shoreline is theorised by Johan Callmer as an indication that some sort of division was in evidence (Callmer, 2002: 131–132). A road may have run from north-east to south-west through the site, but no evidence other than a lack of buildings along this particular orientation substantiates this claim (MacLeod, 1999: 200). Density analysis of finds from the site (Callmer, 2002: 129) suggests that goods production and trade activity was centred around the shoreline, with smaller numbers of finds and buildings further inland. No fortifications have been found at the site, and no burial grounds or cemeteries have yet been uncovered.

Social

In the late 8th century the seasonal marketplace of Åhus I moved from its original site around 500m downstream, developing into what seems to be a permanently occupied settlement of more than 12 hectares (Callmer, 1994: 61). The initial location of Åhus has revealed finds suggesting both trade and craft production took place at the site, but nothing to support permanent settlement (Callmer, 2002: 127; Näsman, 2000: 59), placing it neatly into the phenomena of seasonal (likely summer) or nodal markets³⁴. A significant similarity of finds between Åhus I and the early stages of Ribe suggest a link of some sort between the two sites, regardless of their separate trade orientations towards the Baltic and the North Sea respectively (Näsman, 2000: 59). Extensive evidence of amber, antler, textile and glass-working, and bronze and silver-casting is found at Åhus II to a much more extensive degree than would be expected for a rural

³⁴ Ribe's initial phase and Paviken are examples of this, both appearing during the first half of the eighth century (Callmer, 1994: 53–59; Skre, 2011a: 207).

site (Callmer, 2002: 133–145). Long-distance trade connections are also established through finds of ceramics, glass and beads from Western Europe (MacLeod, 1999: 201). One particularly large building, proposed as a manorial establishment, has been found at the site (MacLeod, 1999: 201). Åhus II is suggested to have been connected to the nearby site of Vä, a political and religious hub for the region from the early 8th century (Callmer, 1994: 56). Excavations at Vä have not been published extensively; only one large volume, in Swedish, exists (Thun, 1982), but its decline in the early 10th century is linked to the consolidation of royal power in the region (Callmer, 1994: 71). As no graves or burials are in evidence and geophysical prospection has not been conducted to find traces of all buildings at the site population calculation is difficult; Callmer's theory regarding plot divisions at the site leads to a count of around 100 plots, and with a guesstimate of 5-10 individuals occupying each plot (Callmer, 2002: 148). The population of Åhus II is thus proposed at around 500-1000 individuals. Measuring the site according to Callmer's maps results in an area of around 17.5 hectares for Åhus II (Callmer, 2002: 127). As this seems to be a maximal extent estimate, along with the maximal population estimate the population density of the site seems to be around 57 individuals per hectare.

Outcome

Whether or not Åhus can be compared to the 'big four' sites commonly discussed depends on the scale of reference. The proposed size and density of the site certainly places it in parallel, but the comparatively small amount of data collected through excavations and therefore more speculative nature of that particular data makes conclusions on this point difficult, in particular in comparison with Birka, a site of a very similar size but much more intense activity (MacLeod, 1999: 201). As the purpose of this study is to be as objective as possible in the use of a minimum criteria for inclusion, a criteria that Åhus (in acceptance of Callmer's figures) more than fits, it will therefore be integrated. The end of Åhus II in particular is unknown; the most intense period of the site is the late eighth century, but finds have been dated into the first half of the tenth century (MacLeod, 1999: 200). The medieval town of Åhus is located less than two kilometres away (Figure 4.8), underneath the modern town, and thus the area of Åhus II may have continued to see use into later periods, though Johan Callmer advocates for

abandonment towards the end of the ninth century (Callmer, 1994: 67). In the interest of establishing at least rough dates, Åhus will be dated as operational from 750 CE – 900 CE.



Figure 4.8 – Map of the three stages of Åhus, adapted from Callmer 2002: 127

RIBE



Figure 4.9 – Map of Ribe, Denmark. The settlement area along with the potential presumed extent of the burial grounds indicated in lighter weighting, adapted from Feveile, 2006c: 38.

Excavation History

The earliest mention of earliest Ribe is from 1736, and, though writing of Old Ribe as a counterpoint to current Ribe, situates the earliest town three kilometres south of its currently known location (Feveile, 2006b: 65). Most of the earliest finds of the earliest town were chance discoveries – during the construction of the Ribe Art Gallery, which opened in 1891, a grave and traces of the marketplace were found. Attempts to further investigate the Early Medieval site of Ribe led to two excavations in the 1950s and 1960s and remains of the 11th century High Medieval town and contemporaneous settlements at Dankirke and Okholm (Feveile, 2012: 126). The landmark excavations at Ribe came between 1970-1976 when, under the direction of Mogens Bencard, the Early Medieval settlement was discovered on the north-east bank of the Ribe Å. Between 1984 and 2000 over twenty excavations took place at the newly-found settlement under the direction of Claus Feveile, and since then excavations and re-assessments of earlier excavations on the site have taken place quite regularly³⁵. Excavation is currently underway in a landmark 12-month project being conducted by Aarhus University in a partnership with the Southwest Jutland Museum. The ‘Northern Emporium’ project is centred on the area of the earliest finds at Ribe, next to the Art Gallery, and is scheduled to present a monograph in 2020. In light of this it must be said that almost any information cited here could be completely turned over by the results of this excavation, given the impressive volume of finds already unearthed.

Historical Attribution

The same two main historical sources which are used for the reconstruction of life at Birka also mention Ribe. Adam of Bremen speaks of Ribe as the place where the priest Poppo held a red-hot poker in his hand to show the power of the Christian god to King Eric of Denmark (Book 2, Chapter XXXIII). Confusingly there is no King Eric of Denmark recorded at this time, Harald Bluetooth is generally accepted as responsible for the conversion of Denmark, and he and his son Sven Forkbeard ruled Denmark at the time. Adam also mentions the building of a church in Ribe by Ansgar around 850

³⁵One such example being Sarah Croix’s postdoctoral research, which re-evaluated the marketplace excavations from 1985-1986 in order to explore the question of permanency in the site’s earliest phases (Croix, 2015).

CE (Book 1, Chapter XXXI); though the remains of this church have never been discovered (Feveile, 2013: 59) the appearance of Christian burials in Ribe at around the same time may support this claim (Jesch, 2015: 140). Rimbert's *Vita Anskarii* also details this, speaking of Ansgar having been given permission by King Horik II of Denmark to build a church in Ribe (or Ripa as it seems to have then been known) around the year 855 CE (*Vita Anskarii*, ch. XXXII). While Denmark was not officially Christianised until the reign of Harald Bluetooth in the second half of the tenth century (Sanmark, 2004: 404-405), Horik II was the first king tolerant enough of the faith to allow the building of a church (Bencard, 1981: 22).

Environment

The medieval settlement of Ribe is located quite close comparatively to Haithabu, around 100 kilometres north-north west on the Jutland peninsula. It sits around 11 kilometres from the Wadden Sea, an intertidal zone on the south-eastern North Sea coast, on the Ribe River. While the course of channels through the Wadden Sea is uncertain, as intertidal areas are very prone to significant silt movement, the speculated route, and therefore access to Ribe, could have been controlled (Feveile, 2013: 5). The settlement lies on 'geest-land', a type of land unique to the north-west of the Central European Plain, which is raised above the surrounding countryside but dry, infertile, and commonly surrounded by marshlands. The Early Medieval settlement in particular was established on top of a natural sandbank that was several hundred years old by the time of foundation (Feveile, 2012: 127). Ribe is also surrounded by meadows, and is high enough that it remains largely unaffected by the rising and falling sea levels that so affected Birka (Bencard, 1978: 7), though water level change around the North Sea area is in general less than that experienced by the Baltic (Kliewe and Janke, 1982: 72). The settlement would have been primarily accessed by boat from the Wadden Sea, the speculated route navigating the southern tip of Mandø Island before entering the Ribe Å (Feveile, 2013: 6). A portage, an overland route over which watercraft are carried, may have also been in use during the Early Medieval period. Archaeological evidence of a portage route from Ribe to Kolding (on the Baltic Sea side of Jutland) has been found and dated to the Middle Ages, and a Viking Age portage connecting Hedeby to the North Sea is known to have existed (Bencard, 1978: 17). While the Early Medieval

settlement is located on the north and east banks of the Ribe Å, the course of the river in its first two centuries is unknown, and thus investigations and excavations into the location of the harbour have not taken place (Feveile, 2012: 127). There is some speculation that the harbour could be located in the large artificially enlarged section of the Ribe Å that lies to the south-west of the modern train station, which would place it at the southern end of the settlement (Thomas Birch, personal communication), though diving conducted thus far in the river has been unable to confirm or deny this (Bani-Sadr, 2016: 98–99). The bounds of the settlement, as currently known, to the north and the east are of the rampart constructed in the 10th century (Feveile, 2013: 10–11), and potentially to the south and the west, of the Early Medieval river. While suggestions of an agrarian settlement pre-dating the early 8th century marketplace have been given, Feveile concludes that the traces of plough marks and a few pieces of pottery cited as evidence most likely date to the earliest phase of the settlement in the early 8th century (Feveile, 2006b: 73, 2013: 6).

Material

Ribe is the earliest-founded settlement in the western Baltic included in this study, the foundation date set by dendrochronology at around 705CE (Feveile, 2013: 9; Müller-Wille, 2001: 21). Until very recently it was thought, due to the absence of solid buildings from the earliest phase of the settlement, that the site was only used seasonally until roughly the last quarter of the eighth century (Croix, 2015: 16; Feveile, 2013: 9). Mogens Bencard, the first primary excavator of the site, interpreted refuse from a smithy dated to this time as the earliest traces of permanent settlement (Bencard, 1978: 11). Work recently conducted by Sarah Croix re-analysing the evidence from the excavation of building remains at the site which took place in the mid-1980s has tentatively suggested this permanency from the establishment of the site in the first decade of the 8th century (Croix, 2015). The evidence proposed for the first permanent settlement at Ribe, along with that of Bencard's smithy refuse, is generally that of the plot-divisions dated to end of the 8th century, and a feature for which Ribe is particularly well-known (Feveile, 2013: 9). Regular plots of around 6 to 8 metres wide running south-west to north-east were surrounded by wattle fences, and more specifically four pit houses have been found in the two rows of 17 plots, each facing each other (Feveile, 2006c: 30). Croix proposes that

houses may indeed have existed at the time, explaining that medieval ‘urban’ houses are often constructed with less attention to craftsmanship than those in rural settings. This is likely due to the risk of destruction by fire and lack of long-term connection to the land discussed earlier, as well as because an urban household was likely much smaller than its rural counterpart (Croix, 2015: 16–19). This theory, if true, may greatly affect current understandings of the developmental phases of Ribe.



Figure 4.10 - A reconstruction of a plot, thought to be of an early type, at Ribe Viking Centre, Denmark (Thoeming, 2014)

Five construction phases informed the archaeological understanding of Early Medieval Ribe until very recently (Feveile, 2012: 127–129, 2013: 10–11). The first phase encompassed the first quarter of the 8th century, and was defined by the foundation of the town and the appearance of scattered workshops. The second, in the hundred years afterwards, saw the creation of plot divisions (Figure 4.10) separated by narrow ditches, and two roads running from north-east to south-west, and north-west to south-east. The third ran from c. 825 – c. 865 and saw the appearance of buildings and a ditch surrounding the settlement area, around 12 hectares. The fourth began in c. 865 and saw the fortification of the town’s defences by the building of a town rampart on top of the ditch, as well as the construction of a church on the western bank of the river (though this has

never been found and is only discussed in historical sources). The fifth saw the abandonment or decline of the town between the end of the 9th century and the start of the 11th, though at least 14 graves have been found and dated to this period (Feveile, 2012: 128).

The *Ribe Rosenallé* project, a large excavation campaign which took place over two summer seasons in 2014 and 2015, was aimed towards refining the dates for the rampart which encircles the northern and eastern sides of the settlement. A new method of soil analysis was used to do this, and the rampart was revealed as a 10th century construction, marking a major and theretofore unknown construction phase in the history of Ribe (Sindbæk, 2017b), calling into question the long-accepted phase chronology outlined above. The major significance of this find relates to the timing of the construction – the 10th century in Ribe has long thought to have either been a phase of abandonment or at the very least decline. A monograph in preparation by the excavation team will hopefully deliver some interpretative analysis of this new discovery. Despite the relatively late dates of the construction of this rampart it seems that the geographical boundary then established was understood from much earlier – no traces of settlement activity have been uncovered beyond this rampart, and Ribe’s burial grounds seem to start quite immediately on its outer edge (Feveile, 2013: 61). As Ribe is a modern town the possibilities for further excavation are somewhat limited³⁶ and others are all but inaccessible due to the presence of houses and businesses. Unfortunately the hypothesized place of the Early Medieval burial ground falls almost entirely into the latter category, and thus the gathering information about the inhabitants of the site from their burial remains, as well as a population estimate using a count of the number of graves, is impossible. Forty-seven graves have been excavated and give a small amount of information; around three quarters are dated to the eighth and ninth centuries, and the dating of fourteen graves to the tenth and eleventh centuries support the theory that the settlement was still in use at this time (Feveile, 2012: 128).

³⁶ Certain areas are excavated extensively as they lie under open land, such as the current Northern Emporium project, which is underway on a former carpark between a house and the Ribe art gallery.

Social

The earliest foundation of Ribe shows little evidence of the presence of a ruler. If the town did indeed develop from a seasonal market (which may still be the case even if one does accept Sarah Croix's assertion that the settlement was occupied year-round much earlier than previously thought) it was likely at least initially no different from the thousands of other beach markets across the Baltic and the North Sea. Early artefacts show a strong connection with Frisia, as potentially does Ribe's earliest layout and thus it may be possible that foreigners were responsible for the initial establishment of the settlement (Callmer, 1994: 53; Feveile, 2013: 61). It is possible that the settlement may have been founded upon the decree of a royal power or local ruler, but it is more commonly suggested that a royal or administrative influence was only formalised upon the establishment of a plot system³⁷ and of the minting of coins for the site from around 720 CE (Feveile, 2006b: 75–76)³⁸. There is, however, a debate surrounding just where the Ribe coins were minted (Feveile, 2012: 129), which further calls into question the assumption that royal power is necessary for the operation of these settlements. The construction of the rampart is a significant building project and is said to indicate some sort of administration (Feveile, 2013: 63). The reasons for the founding of the settlement are, as with the others settlements under investigation, very difficult to trace definitively. The primary suggestions, made in the early 1990s, can be summed up thus; a royal power or a local ruler decreed a town be founded, but a strong Frisian influence can be seen in the early years of the settlement, before Danish intervention is seen in the establishment of the plot system and of the minting of coins at Ribe (Feveile, 2013: 4–5). In fact the earliest coins found at the site are sceats of 8th century Frisian origin (Bencard, 1978: 17; Croix, 2018: 3). Whatever the impetus for the foundation of the settlement, it seems certain that Ribe began as a marketplace in a liminal zone between the Frisians and the Danes, between the North Sea and the Baltic, and that the growth

³⁷ Though the arguments presented for Birka surrounding the legitimacy of claiming a plot system mandates royal control also apply here.

³⁸ It should also be noted that the minting of coins is interpreted as being evidence for permanent occupation at the site, further bolstering Sarah Croix's assertion regarding pushing back this date (Croix, 2015: 3).

of the town into a roughly 10 hectare Early Medieval showed some form of organisation, whether that be organic and community-based, or royal.

Given the lack of burial evidence at the site, the best method of estimation for the population of Ribe thus lands on an interpretation of the well-documented and excavated plot divisions³⁹. One estimate, based on a count of one hundred plots, speculated that around five to ten individuals lived on each plot, leading to the calculation of a population of around 500 to 1000 individuals at the site (Callmer, 2002: 133). Where Ribe seems to differ from the test case for this method, however, is in the general layout of the site. Ribe seems, at least in its later stages, to be divided into a plot-laid area towards the (presumed) waterfront with perhaps 40 to 50 plots, with an area filled with pit-houses, post-built houses, and other domestic constructions to the rear (Feveile, 2012: 127). This suggests a division of industrial and domestic functions similar to that seen at Hedeby, and the opposite of that seen at Birka. A detour from the model, based on a site not divided into functional areas, must thus be taken. It seems reasonable to suggest at least two or three individuals employed at each workshop, each supporting a family. Taking 50 plots, with two individuals each supporting a family of five, we come to a population estimate of around **500 individuals** living and working at Ribe. This would place Ribe very much in line with the other settlements of the Western Baltic discussed here, and while it is, again, very much guesswork, will here be used as a population estimate for Ribe. At a total area of 11.4 hectares of settled space between the rampart and Ribe Å River, the density of settlement is thus estimated at 44 individuals per hectare.

The limited excavation which has taken place in the burial grounds at Ribe cannot reveal much about these individuals, but that social stratification was definitely in evidence. Most of the 44 graves uncovered and dated to the settlement period are cremation graves with little by way of grave goods, though two child inhumation graves contain riding equipment and a silver Frankish sword mount (Feveile, 2012: 128). A separate cemetery recently discovered at Ribe is thought to be that of the Christian inhabitants

³⁹ This is based on a similar estimate conducted for the settlement of Åhus in Scania, and is quite speculative in its application.

of the settlement. Several of the burials in this cemetery may date to the ninth century, around a hundred years before the Christian conversion of Denmark, though it is cautioned that these may not necessarily be the graves of local Christians, rather possibly a foreign Christian population in the settlement (Jesch, 2015: 140). Regardless of whether they lived at the site, foreigners would have been drawn to the incredible volume of craft production and trade that took place at Ribe. Imports of millefiori beads from Italy, Merovingian trefoil jugs, ingots from the Rhineland, and drinking glasses from Germany and France show the wide-ranging trade connections and attractiveness of Ribe as a place to trade (Sindbæk, 2011: 58). Importantly we see more than the trade of only elite objects; quernstones of Rhenish basalt have been found in Ribe and all over the Jutish hinterland, suggesting that trade at the site was not only for the rich and powerful (Feveile, 2013: 17–21).

Craft production at the site was even more extensive, and artefact finds skew towards production and sale, with ‘in-process’ objects predominating. Evidence of bead-working, metal-working, horn and antler-working, textile and leather-working, amber-polishing, smithing, fur and bone-working and a small amount of evidence for potting have all been found at the site, with workshops for almost all of these trades uncovered (Ashby et al., 2015; Enghoff, 2006b; Feveile, 2013: 27–47). Faunal refuse from the site does point to the rearing of animals (primarily pigs) and fishing for consumption as well as goods production (fur animals and eagle bones), though there is little to no chance that this was extensive enough to support the entire settlement – there was still a heavy reliance on the hinterland for food supply (Croix, 2018: 4; Enghoff, 2006b, 2006a). Locally-made earthenware pottery speaks to the Frisian influence and western-looking direction of the early days of the settlement, with shapes mimicking those of the North Sea region the most abundant (Bencard, 1978: 23).

Outcome

The ‘end’ of Ribe is somewhat of a curious problem – the town continues through to today but there is a sense of archaeological unease regarding the 9th and 10th centuries with their particularly scarce finds. Only a single find from the 10th century, a coin, exists (Feveile, 2006a: 300). Various theories are proposed by Claus Feveile, primary excavator

of the site since 1989 in his 2006 comprehensive on the site (Feveile, 2006b: 87–88). The first is that the settled area from the late 9th and 10th centuries has not yet been uncovered. This is a possibility, given that Ribe was originally thought to only be a high medieval settlement and only twenty years later was the Early Medieval settlement uncovered (Bencard, 1978: 25). Excavations at the site, however, have been spread fairly evenly across the generally-assumed settlement area encircled by the moat (Feveile and Jensen, 2000: 9), and it is very unlikely that settlement would have existed outside of the rampart at the same time that it was built in the 10th century (Sindbæk, 2017b). Thus at this stage the evidence points against this theory.

Feveile's second theory is that the settlement either disappeared completely or may have moved to another location, citing the examples of Birka moving to Sigtuna and Haithabu to Schleswig (Feveile, 2006b: 87–88). This of course is not an unprecedented phenomenon, but the fact that there is a large high medieval settlement on the other side bank of the river, (Figure 4.11 Feveile, 2006b: 67), renders this theory somewhat improbable. The only likely way this could have occurred is if an event of some sort, natural or cultural, pushed the inhabitants away from the site as a group. There is no evidence of this in the archaeological record. That being said, the land around Ribe is not environmentally well-suited for settlement as the immediate surroundings are overly marshy (Feveile, 2006c), thus it is possible that damp and wood rot became a problem at the site. This is difficult to determine archaeologically, given the lack of wood preservation. The idea that a group of people living an urban lifestyle for at least 150 years, or some seven generations, would find it easy to remove themselves to a rural environment before possibly returning some five generations later, seems odd. Croix's application of the theory of attachment to place, along with Hedenstierna-Jonson's discussions on urban identity, both bolster a suggestion that after the length of time Ribe had been in operation, a strong new Ribe-centric identity would have taken root (Croix, 2018: 7–8; Hedenstierna-Jonson, 2014: 91). Croix does discuss that adaptation to this urban way of life would have been difficult and perhaps never took root – this unease just may have been more widespread than in the other settlements under investigation here. Sindbæk has suggested it is possible that just as the merchants of Reric were taken to Hedeby at the start of the 9th century, the merchants of Ribe may

have also moved to Haithabu or possibly Birka (Søren Sindbæk, 2016, personal communication).

Feveile's third suggestion is an extension of the second, stating that the majority of the functions of the early settlement (i.e. trade, craft production, metalworking etc.) may have moved to another site, but that the ecclesiastical importance of the settlement remained (Feveile, 2006b: 87–88). The monetary economy across the Baltic during the 9th and 10th centuries was that of hacksilver and weights, the lack of finds at Ribe strongly suggesting that the economic function of the town was limited during this period. The 9th and 10th century Christian burials and historical statement that Ansgar built a church at Ribe around 850 CE (*Vita Anskarii*, ch. XXXII) suggests that the site may have become a mission centre for south-west Jutland. Early writings on the 10th century are somewhat non-committal. Bencard acknowledges only a scattering of finds from the north side of the river but also discusses an uncited written source which speaks of the murder in 948 of the first bishop of Ribe, Leofdag, whose remains were then buried by the Christian population in the churchyard of St. Maria (Bencard, 1978: 25).

Recent developments after the excavation of the rampart at Ribe have thrown a further metaphorical spanner into the works of this discussion. The moat surrounding the Viking Age settlement at the Rosenallé excavation site, the successor to an earlier ditch, was long thought to have been constructed sometime in the mid-9th century due, both to pottery finds and similarities with a contemporary phase of construction at the Danevirke (Feveile, 2006b: 84–85). Excavations conducted in 2015 by Aarhus University revealed through organic dating and subsequent Bayesian calibration that the rampart was in fact built in the 10th century, during the period of proposed decline in Ribe (Sindbæk, 2017b). This frames the rampart construction as having taken place at a similar time to that of the construction of fortifications at Haithabu (Clarke and Ambrosiani, 1995: 60–61), and is thought to have been done on royal degree (Morten Søvsvø, 2016, personal communication). This is the only piece of evidence for any significant construction activity⁴⁰ happening at the site in the 10th century. Only a single artefact find can be dated to the 10th century, a single (very badly preserved) sceatta coin

⁴⁰ Or indeed any significant activity at all.

in a Dorestad-imitation style found in the youngest layer of a pithouse in a similar context to 203 sceattas pre-dating the 9th century and 10 pennies from the 9th century (Feveile, 2006a).

The 'outcome' of Ribe is thus quite difficult to state. Either the town continued and we have no evidence, it disappeared completely and the population moved to another site or back to the country, or the site changed character quite distinctly. While one likely solution is a combination of the second and third options, that the merchants and economic functions moved to another site (potentially Hedeby) and the town's importance became primarily ecclesiastical, the fortification of the site does not fit with the second-settlement models we see across the Western Baltic; neither Sigtuna nor Schleswig have rampart constructions surrounding them. Until more evidence can contribute to the discussion we must conclude that the outcome of Ribe remains mysterious. We do know that towards the end of the 11th and beginning of the 12th centuries Ribe once again became a vibrant hub - the settlement on the south-western side of the river was fortified, a castle was constructed, and the construction of houses begins again in earnest (Feveile, 2006b: 88–90). Lübeck took over ecclesiastical responsibilities from Schleswig and thus Ribe once again was of prime importance as the primary link between the North and Baltic Seas⁴¹ (Bencard, 1978: 29). While Ribe today is a sleepy town of 8000 people known primarily for its Viking past, there was clearly something more secure about the secondary, High Medieval phase.

⁴¹ So much so that King Nils of Denmark celebrated his son's wedding at Ribe in 1127 (Bencard, 1978: 29).

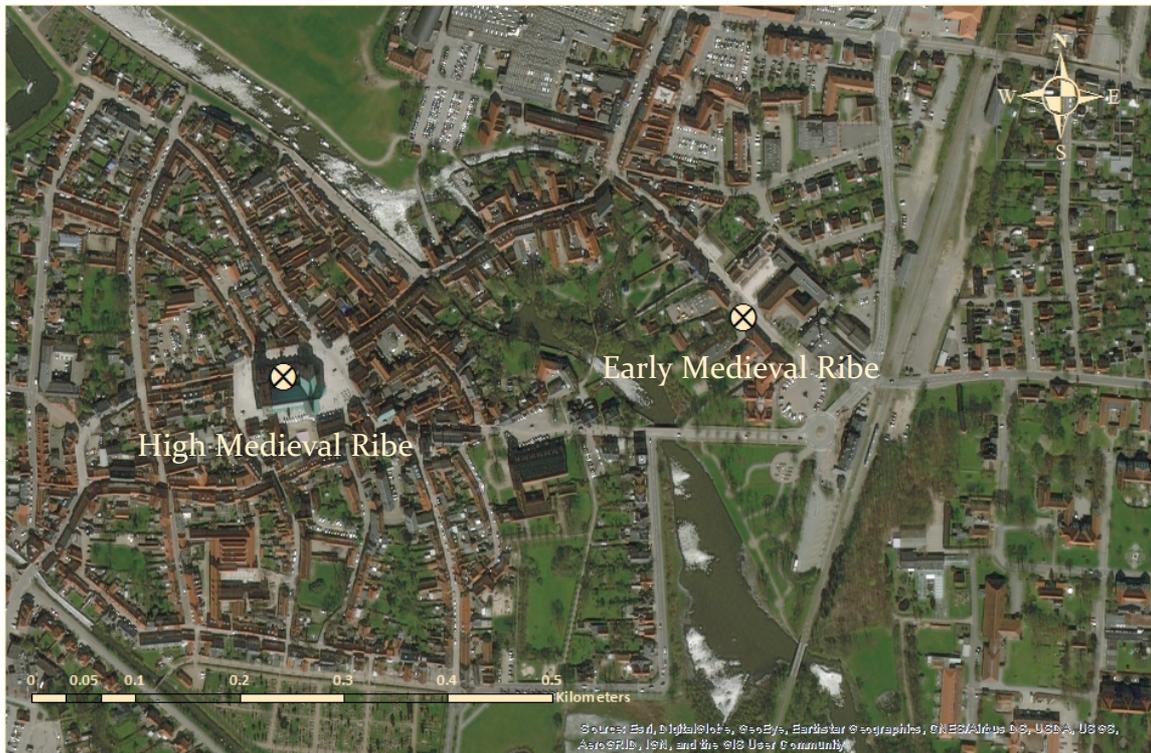


Figure 4.11 Map of Early Medieval and High Medieval Ribe

HEDEBY



Figure 4.12 – Map of Hedeby, Germany. The area within the settlement’s rampart, adapted from Hilberg, 2012:102.

Excavation History

The first excavations at Hedeby began in 1900, following the ‘discovery’ of what is a fairly obvious 27 hectare area inside a well-preserved rampart on the western side of Haddebyer Noor, a lake which in the medieval period was an inlet of the Schlei fjord. Previously thought to have existed under nearby modern-day Schleswig, Professor Sophus Müller suggested the alternative location for Hedeby in 1896 and began excavations shortly afterward (Clarke and Ambrosiani, 1995: 59). Between 1900 and 1921 over 350 small trenches were opened and at least 500 inhumation graves excavated. These excavations are well-documented in reports and drawings held in the local museum’s archives (now the Landesmuseen Schleswig-Holstein), but not well published publicly (Hilberg, 2012: 101). Excavations resumed in 1930 under the aegis of a 26 year old Herbert Jankuhn, his interest in the Teutonic Order having led him into the field of historical archaeology and the only known Viking settlement within the borders of Germany. Hedeby’s history darkens what in 1937 when Heinrich Himmler toured the site and became interested in Jankuhn’s work, offering to subsidise excavations and inviting the young Jankuhn to join the SS and the Ahnenerbe, the latter of which he then became head scientist (Pringle, 2006: 221–222). Despite this unpleasant interlude (the ramifications of which were discussed in chapter three) Jankuhn’s contributions were not insignificant – he excavated a significant area of the site, though excursions to Crimea in Ukraine took him away from the excavations several times. While much of Jankuhn’s work on the site remains unpublished, one large volume providing an overview of the site was published before his death in 1990, and he discussed northern European settlement in the Viking Age quite broadly in several English-language journals (Jankuhn, 1938, 1952, 1977).

Excavations post-World War II have taken place within and outside the rampart, as well as underwater, with around a thousand burials, a number of ships, and around 5% of the settlement inside the rampart uncovered thus far (Hilberg, 2012: 102–103). Significant time and resources at both the local regional museum and the neighbouring *Zentrum für Baltische und Skandinavische Archäologie* (ZBSA – Centre for Baltic and Scandinavian Archaeology) have been directed towards the collection of high-resolution GIS data and 3D modelling projects to ‘map’ the site’s excavations (see 3D

maps prepared by Jörg Nowotny in von Carnap-Bornheim et al., 2014: 243). Geophysical survey has been completed across almost the entire site (von Carnap-Bornheim et al., 2014: 232), and an extensive PhD project both excavating and mapping prior excavations of the harbour has led to the collection of excellent data on Hedeby's shoreline (Kalmring, 2008, 2011; Kalmring and Holmquist, 2015). Smaller excavations of single pit-houses and workshops have been favoured since 2005, in order to verify the results of the geophysical prospection (Hilberg, 2012: 109).

As Hedeby is the biggest and most densely-occupied site of those under investigation here, in addition to being the most comprehensively excavated and well-resourced, there are particular research challenges to investigating the site. Rapid building phases make archaeological interpretation difficult, especially when attempting to discern distinct phases in the town's development, and the exhausting process of recording finds to the standards required for the production of three-dimensional maps (von Carnap-Bornheim et al., 2014: 242), but it is suspected that in the long run this will prove incredibly beneficial for the preservation and documentation of the site. Hedeby, along with the large defensive construction known as the Danevirke, were submitted for consideration for addition to the World Heritage List in 2011⁴².

It is important to note that while this thesis refers to the site as Hedeby, Haithabu is also commonly used for the settlement in German publications (Becker and Grupe, 2012; Jankuhn, 1938). This difference seems to be a consequence of various pronunciations of the Old Norse *Heiðabý*; in Danish Hedeby and German Haithabu, but here for the sake of continuity and clarity (and the fact that the area of the part of Germany in which it lies was Danish until the cession of the region to Prussia at the end of the Second Schleswig War in 1864) this work will use Hedeby.

Historical Attribution

To begin, it is important to note that sources mentioning Schleswig (or a similar name that seems only to have been through a language interpretation) which pre-dating the

⁴² Though given the cloudy recent and political history of the site, having had a former chief excavator as chief scientist of the Ahnenerbe, the length of time the site has sat in the nomination stage can be understood.

later settlement's foundation are generally presumed to refer to Hedeby. The Chronicle of Æthelweard of c. 960CE somewhat explains away this difference, stating that the 'capital town' of Old Anglia is situated between the Saxons and the Jutes, known as *Sleswig* to the Saxons and *Haithaby* to the Danes (Giles, 1906: 5). Adam von Bremen mentions Schleswig, the successor of Hedeby extensively (Book 1, Chapter XLIII, Book 2, Chapter LIV, Book 3, Chapter XI), though his timelines are less than clear and his discussions mostly concerned with politics. Alfred the Great, in his translation of Orosius' *Histories* details the visit of Ohthere and Wulfstan to Hedeby in their travels across the Baltic in the late ninth century, giving very important information for the reconstruction of Early Medieval maritime travel. Referring to the settlement as *Hæthum*, Ohthere and Wulfstan reportedly sailed there from *Sciriges-heal* (Kaupang in Norway) in five days, and then in seven days and nights under full sail on to Truso (Jesch, 2009: 29). Ibrāhīm ibn Ya'qūb in his chronicle of his travels through northern Europe in 965CE details his visit to a large city on the ocean known as *Schalashwīq*, mentioning many springs within the town and animal sacrifices to the gods, as well as a poor climate for grain farming and a tradition involving throwing surplus children into the sea (Lunde and Stone, 2012: 163). Original translations of the Royal Frankish Annals mention the town of *Sliesthorp* as being located on the border of King Godfrid's land and Saxony (account from the year 808 CE), and well as the destination for the uprooted merchants of Reric, the trading settlement he is also said to have destroyed on the Slavic Baltic coast (Holman, 2003: 128; Scholz and Rogers, 1972: 83, 88).

Hedeby is, uniquely, mentioned in Medieval Icelandic sagas. *Hallfreðar saga vandræðaskálds*, the saga of Hallfreðar the troublesome poet (dated to roughly 1000 CE but only preserved in 14th century texts), describes an attack by Olaf Tryggvason south of *Heiðabý* (Jesch, 2001: 109–112). Four rune-stones related to the settlement have been found. The two Sigtrygg rune-stones (DR2 and DR4) are simple commemorative stones with almost identical inscriptions; one was found at the site and one on the ramparts of the nearby Gottorf castle (Lerche Nielsen, 2000: 128). As rune-stones are often found re-used in later building works, it is thought that the second stone was moved from the earlier site rather than being contemporary to Schloss Gottorf's construction. The Stone of Erik (DR1) and the Skarhi Stone (DR3) actually detail the name of the town;

transliterated into Old Norse they both name the site as *Hepaby* (Wills, 2018). All four of these stones are attributed to the RAK style, which dates to c. 990 – 1015 CE (Gräslund, 2006: 126–127). Two nearby rune-stones (DR5 and DR6) are found at Schleswig, dated to the Middle Ages and to the first half of the 11th century (Wills, 2018).

While it has long been thought that *Sliasthorp* was no more than a Latin or Old French translation of Schleswig/Sleswig, and that Schleswig (in the context of historical documents dating to before the actual foundation of the town of Schleswig in the mid-11th century) referred to the non-specific area at the end of the Schlei fjord (Skre, 2007d: 458)⁴³, excavations over the past few years have unearthed an alternative site. Beginning in 2010, excavations led by Andres Dobat around the nearby town of Füsing have been speculated to be those of a separate site, potentially a garrison town or military base. The results of these excavations have not yet been published in an academic journal (a paper listed on Dobat’s research profile entitled “Finding Sliesthorp?” as ‘accepted/in press’ as of 2016 by Antiquity is not listed in their catalogue from that year), and the only sources which mention these discoveries are popular science magazines (Owen, 2012; *The Huffington Post*, 2012).

Environment

The settlement is quite obvious even today in the landscape; the semicircular rampart built in the 10th century still very visible from the air and recognisable even on land. Hedeby lies on the shore of what is now the lake of Haddeby Noor (which has only recently disconnected from the Schlei), at the end of the Schlei Fjord, an inlet which stretches roughly 40 kilometres across the Jutland Peninsula from the Baltic Sea. The location of the settlement is clearly advantageous – it was a most favourable position for capturing both Baltic and North Sea trade. The former through water travel down the fjord and the latter through a portage known to have existed during the Viking Age (Bencard, 1978: 17). Goods likely only travelled from the Baltic Sea to the North Sea through either this portage or the Limfjord near Aalborg in the Early Medieval Period. Passage around the ‘horn’ of Denmark would have little been used before the Late

⁴³ ‘Sles’ referring to the Schlei, and ‘wig’ being an application of the Anglo-Saxon English term ‘wic’, which refers to a settlement characterised by craft and trade.

Medieval period, due to the danger of wrecking on the difficult to navigate western and northern Jutish coasts (Crumlin-Pedersen et al., 1997: 37–38). Hedeby thus was a significant nodal point for trade and exchange. The residents of Hedeby would likely have been protected from water attack by lighthouses or lookouts which were placed along the length of the Schlei fjord, land-based attacks controlled by the Danvirke fortifications, which ran across Denmark's southern medieval borders and connected through a *Forbindelsesvolden* (connecting wall) to Hedeby itself (Clarke and Ambrosiani, 1995: 61; Hilberg, 2016: 67). Carbon dating has established the earliest phase of construction for the Danevirke at around 650CE, and it is known that the wall was in use as recently as the Second Schleswig War of 1864 (Crumlin-Pedersen et al., 1997: 44).

While the site itself is documented to have had a poor climate for farming (Lunde and Stone, 2012: 163), the soils to the east and west of the settlement provide were suitable for farming both cattle and grain (Crumlin-Pedersen et al., 1997: 30–31). Only a small amount of shoreline regression is in evidence, roughly 1.8 metres, and preservation at the site is excellent (Kalmring, 2011: 245; von Steinsdorff and Grupe, 2006: 285). The waterline likely crept up quite slowly and, being quite far from the Baltic Sea, would not have greatly affected the site. Significant silting of the harbour at Hedeby likely took place through the site's lifespan and may have reached a critical point in the middle of the 11th century (Hilberg, 2016: 66). Since the abandonment of the site it has been re-used as farmland which, despite probably disturbing the most recent layers of the site, turned over many finds (von Carnap-Bornheim et al., 2013: 174). While burials and settlements have been found to both the south and north of the site, the lives of Hedeby's inhabitants were likely bound initially by a ditch or possibly earthworks which in the 10th century were built into a rampart which eventually reached 10 metres in height (Clarke and Ambrosiani, 1995: 59–60). There is no suggestion that formalised settlement is in evidence at Hedeby before the Early Medieval period (Bogucki, 2010a: 268), though a small settlement or potentially small trading place may have been in evidence in the *Südsiedlung* (southern settlement) (Clarke and Ambrosiani, 1995: 61; Janssen, 2001: 150). Burial mounds at the *Hochburg* hillfort have recently been dated to the second half of the 7th century (Viberg and Kalmring, 2016: 87).

Material

While written records speak of the site from 804 CE, the first archaeological evidence uncovered from the site thus far is dated to 'before 817 CE'. The dates have been provided from a layer of brushwood and a ditch in the northern shore area which is tentatively discussed as a 'Ribe phase', referring to the plot divisions seen at the earlier site (Kalmring, 2011: 248). While the earliest days of the site are not discussed extensively, likely due to the difficulty in distinguishing phases in the densely-settled site, a foundation date of around 800CE is generally accepted⁴⁴ (Clarke and Ambrosiani, 1995: 62). Frisian urn cremations dated to the 8th century suggest that the southern cemetery, at least, was in use before this date (Eisenschmidt, 2011: 97). It has been very difficult to establish a phase chronology at Hedeby using building remains, as they rotted very easily, necessitating rebuilding every 10-20 years and this left a densely packed archaeological sequence (Clarke and Ambrosiani, 1995: 59). In the southwest corner of the site geophysical prospection has identified pit houses and graves overlying each other, excavations from the mid-20th century state that the use of the land for housing activities seems to have started in the 10th century. Modern excavation has yet to support this conclusion (Hilberg, 2012: 107). Given this prohibitive density of artefacts, the recreation of a phase chronology for the site must then be done in other ways. Further dendrochronological dating may reveal 'spikes' in building construction, the start and end of settlement and the use of land for particular functions in specific areas.

The earliest days of the site likely resembled a beach market, with buildings and warehouses located back from the harbour (Kalmring, 2010: 79). Plot-divided building construction in the area close to the harbour began around 830 CE, suggesting from the initial settlement of the site goods were moved away from the harbour to an area behind the north-south oriented street in the central part of the site (von Carnap-Bornheim et al., 2014: 239). The movement of soil and construction of buildings moving towards the shoreline took place in the north and south of the settlement from then until the end

⁴⁴ In fact the moving/kidnapping of merchants from Reric by the Danish King Godfrid has been mentioned as the impetus for the site's construction. This is theoretically dated to the first decade of the 9th century.

of the ninth century (Kalmring, 2011: 248). Analysis of C14 dates taken from the front half of the site show a major spike in building construction shortly after 820 CE, and so the very start of the second quarter of the 9th century marks the beginning of significant building projects at Hedeby. While little to no intensive chopping of timbers is seen later, it is suspected that the younger layers have been destroyed or have degraded, as deeply-set structures such as the wells and the occasional pole prove continued use through the 10th and early 11th centuries (von Carnap-Bornheim et al., 2014: 236–237). The harbour remained in use consistently from the earliest days of the settlement, but systematic construction of jetties only took place from the third quarter of the 9th century, with a second significant expansion at the end of the 10th and beginning of the 11th centuries (Kalmring, 2011: 249). A phase chronology can also be seen in development of housing styles across the lifespan of the settlement (von Carnap-Bornheim et al., 2014: 238). The earliest houses from the 9th century in Hedeby are radically different in construction to those found in rural settings, their layout clearly adapted to remove features necessary for carrying out agricultural duties but lacking structural stability. A Frisian-Westphalian style was then adopted in the late 9th century and seen replicated across southern Denmark, though the exposure of structural beams to wet conditions resulted in these houses being of limited lifespan. The youngest (though also most destroyed by modern farming) buildings are seen in the 10th and 11th centuries, technically complex and structurally sound.

Geophysical prospection has revealed that the plan of the settlement is quite simple – a main road over 600 metres in length runs parallel to the shore around 250 metres away from it, plots extend towards the shore with small streets between them and a second road running to the east from the main road bisects the ‘back’ half of the settlement, and a trackway is clearly seen in the northwest quadrant (Hilberg, 2012: 107; von Carnap-Bornheim et al., 2013: 174). While a basic interpretation of the geophysical prospection results and artefact analysis would hold that the ‘front’ half of the settlement was used for trade and craft production, and that the ‘back’ was used for housing and burials (the map on the German-language Wikipedia page for Hedeby being a good example of this), without more excavation it is hard to further identify ‘zones’ at the site. Particular artefact finds are also scattered fairly evenly across the site – coins are found all across

the sites and only objects found in very small quantities (for example single pieces of particular weaponry or jewellery) can be identified as localised (Hilberg, 2016: 71, 73). Sven Kalmring in his PhD thesis suggested that the continually expanding jetties and platforms in the harbour at Hedeby could be interpreted as the marketplace for the site (Kalmring, 2011: 255), and as no distinct marketplace has yet been uncovered this seems a logical conclusion.

While the rampart (Figure 4.13) is the largest and most obvious construction left as a sign of the impressive settlement which once lay on the shores of the Schlei, it was only constructed relatively late in the site's life. The 10-metre high defensive construction was only finished in the middle of the 10th century, possibly due to developments in the Ottonian empire to the south, and was connected to the final phase of construction at the Danevirke around 968 CE, complemented by an underwater palisade in the Schlei (Clarke and Ambrosiani, 1995: 60–61). Before the rampart was built, the northern hillfort known as *Hochburg* may have been a refuge for inhabitants of the town (Clarke and Ambrosiani, 1995: 60–61). The southern wall of the rampart was also constructed over an earlier settlement⁴⁵ and later burial ground, termed the *südsiedlung* (Janssen, 2001: 150). Larger-scale excavations have taken place here, with the primary research output being on the approximately 1000 graves found, rather than the settlement itself (Janssen, 2001). Around 1350 graves have been conclusively identified both inside and just outside of the rampart⁴⁶, with interpretations of the geophysical prospection suggesting that the entire south-western quadrant of the site may have been used for burials in the early days of the settlement (Hilberg, 2012: 107). Three excavation areas with burials have been identified; located on the very visible *Hochburg* hill to the north of the rampart, inside the rampart spread across the southern half of the settlement, and to the south around the *Südsiedlung* (Eisenschmidt, 2011: 84). There are surely more than 1350 burials at Hedeby, and as the estimate of 10,000 burials was put forth by Heiko Steuer (Steuer, 1974), who with 352 publications across his career should be considered as quite

⁴⁵ Though the possibility that this may pre-date the settlement is uncertain.

⁴⁶ Though estimates ranging to over 10,000 have been posed for the site (Eisenschmidt, 2011: 83)

reputable, it seems fairly safe to say that this estimate is likely as close to accurate as anyone will get.



*Figure 4.13 - View across the settlement from atop the north-western corner of Hedeby's rampart
(Thoeming, 2014)*

Social

The construction of the Danevirke is often used to support a theory around royal control of Hedeby, particularly by Harald Bluetooth (Skre, 2007d: 457). Bluetooth is widely accepted as the instigator of the Danevirke extension in the second half of the tenth century, and it was this phase that seems to have connected Hedeby to the formidable wall (Hvass, 2015: 47). The possibility that Hedeby operated autonomously but cooperatively, however, cannot be rejected. The building of this extension of the Danevirke to incorporate Hedeby has been suggested as the moment of incorporation of the “quasi-urban, multiethnic and multinational” settlement into the Jelling Dynasty (Dobat, 2009: 75). The theory that the impetus for the site’s founding as a port of Viking Age trade was the kidnapping of merchants from the competing Reric (Groß

Strömkendorf) by King Godfrid also supports the notion of royal control (Scholz and Rogers, 1972: 88), but no archaeological evidence other than a decline in archaeological material in the early 9th century can be matched to that assertion. One of the Jelling rune-stones, dedicated to his parents, does state that Harald “won for himself all of Denmark and Norway” (Jelling II / Rundata DR42)⁴⁷. The 10th century was a time of great upheaval for the settlement. From the fourth decade of the penultimate century of Hedeby’s existence German dominance at the site is discussed, and between 974 and 983 CE the settlement was under the control of the German emperor Otto II (Hilberg, 2007: 84; Roesdahl, 2012: 657).

More information about the shrouded-in-myth site of Sliesthorp, uncovered in 2003 but remaining unpublished by principal investigator Andres Dobat, may shed light on this discussion (Dobat, 2016). If the settlement was indeed a military base and seat for a local elite or even the king of Denmark (Owen, 2012) it could point either for or against royal control of Hedeby; either Sliasthorp controlled the site, or they existed side-by-side as functionally distinct settlements. Until publications on the excavations at Füsing are put forth not much more can be said. Archaeologically there is no obvious evidence of a royal presence at Hedeby. No particularly large buildings, traditionally used in the Viking age to fulfill political or religious functions, have been found at the site (von Carnap-Bornheim and Hilberg, 2007: 208–209). Hedeby certainly needed supply from the hinterland to support its population, and a significant increase in the number of agrarian settlements in the surrounding area, as well as a predominance of local pottery over imports in the early phases, corresponds with the growth of Hedeby (Brorsson, 2010: 38). Approximately 600 square kilometres of surrounding land would have been required to ensure food supply at Hedeby (Randsborg, 1980: 83–85). Despite Ibrāhīm ibn Ya’qūb’s assertion that the inhabitants of the site ate mostly fish (Lunde and Stone, 2012: 163), analysis of animal bones from both Schleswig and Hedeby indicate a reliance on terrestrial animals (von Steinsdorff and Grupe, 2006).

⁴⁷ But to be fair and in the spirit of kingly propaganda Kim Jong-il of North Korea was said to be able to alter the weather with his mind (Ryall, 2011).

While the orientation of the graves at the site is thought to indicate Christian burials and thus a significant Christian population (Clarke and Ambrosiani, 1995: 61), this may have been a consequence of the shape of the site. Hedeby is oriented east to west, with the port to the east and the hinterland to the west, and thus this could have been the most influential factor in their placement. Burial goods are generally rare, found in only 21% of the central graves (most with a single artefact). It is difficult to say any more with certainty about the ethnicity of those buried in the settlement other than that a Frisian population can almost certainly be established in the early days of the settlement through the appearance of urn cremations in the 8th century (Eisenschmidt, 2011: 87, 97). While the earliest buildings at the site seem to be urbanising adaptations of rural house-forms, a secondary phase dated to the late-9th century is strongly influenced by, and may even have copied, Frisian-Westphalian houses (von Carnap-Bornheim et al., 2014: 238), reinforcing a Saxon/Frisian presence at the settlement. Despite the lack of large buildings one particularly impressive grave, dated to the mid-9th century and incorporating a boat, extensive grave goods, and three heavily-armed men, may be evidence of social stratification at the site (Clarke and Ambrosiani, 1995: 61; Eisenschmidt, 2011: 100). The burial goods uncovered in other graves at the site do also suggest this, though the number of burials which are complex and include large numbers of grave goods is relatively small (Eisenschmidt, 2011: 100). Population calculation using the number of burials at Hedeby, along with a rough site lifespan of 250 years, results in an estimate of an average population of 2500 individuals. If we are to constrain the population of Hedeby to within the walls of the rampart, this results in a density estimate of around 92 individuals per hectare. Given the rampart was only constructed 'halfway' through the life of the settlement, the population may have not initially been constrained to within the known area within the rampart, so this should be considered a maximal density estimate.

The inhabitants of Hedeby were engaged in many different kinds of crafts across the site, and that there does not seem to have been any significant functional division of the site. Houses and workshops (Figure 4.14) were clustered tightly together. A high amount of iron slag at one excavation points to iron processing, workshops for metal casting and glass production have been found, loom weights and spindle-whorls indicate textile

manufacturing, and refuse of antler, bone, and horn speak to the manufacture of combs, pins, and potentially jewellery (Andersson Strand, 2009; Clarke and Ambrosiani, 1995: 62; Hilberg, 2012: 104–105). Coin finds at the site detail trade contacts, with a predominance of Kufic, Scandinavian, German, and Anglo-Saxon currencies (Merkel et al., 2015: 198). Isotopic analysis of Danish-manufactured coins from the second half of the 10th century revealed composition very similar to both the *Sachsenpfennige* of Magdeburg and *dirham* from the Samanid Empire; silver was commonly melted down and re-made and thus the Danish coins may have been of mixed origin (Merkel et al., 2015: 204). The remains of three large wrecks found in the harbour at Hedeby speak to the multiple functions performed by the site. Wreck 1 likely held around 62 rowers and was for high-speed sailing, Wreck 2 is a medium-sized local working boat and was likely made locally but of Saxon/Slavonic woods, and Wreck 3 is a cargo-carrying vessel, also locally built, but of foreign woods (Crumlin-Pedersen et al., 1997).



Figure 4.14 - Reconstructed building in situ at the Hedeby Viking Museum (Thoeming, 2014)

Hedeby's size and influence are reinforced by its central position in Northern European trade network analysis – it is one of only three sites in Søren Sindbæk's 'cooking-pot network' to show evidence of five different regional types of pots (Sindbæk, 2013: 13). The geographical distribution of the pots places it as the most 'central' site in the North Sea and adjacent region network (in the other settlements which have five links, mainland European pots predominate), a particularly striking fact given Hedeby's connections to the North Sea were, given a paucity of archaeological finds, relatively limited (Clarke and Ambrosiani, 1995: 62).

Outcome

Hedeby lasted the latest out of all of the early Viking Age settlements, with its abandonment and the founding of the high medieval town of Schleswig - just two kilometres as the crow flies and with all the benefits of Hedeby's location - across the Schlei fjord occurring in the mid-11th century (Rösch, 2016: 44). Continuity from Hedeby to Schleswig can be interpreted in the construction of houses at both sites (von Carnap-Bornheim et al., 2013: 176–178). Precise timing for the 'end' of Hedeby is uncertain; the settlement was more than likely abandoned by the late 11th century following an attack by Harald Harðraða in 1050 and another by the West Slavs in 1066 CE (Graham-Campbell, 1980: 94). Archaeological evidence also points to attacks on the settlement, what remains of Wreck 1, a warship, was burnt to the waterline and found in front of the jetties. The most common interpretation of this evidence is that it was set on fire and launched towards the town between 990 and 1010 CE (Hilberg, 2012: 103; Jesch, 2001: 109). The remains of a 12th century barge support Crumlin-Pedersen's assertion that the old settlement remained in use for 'laid-up ships' after its abandonment (Crumlin-Pedersen et al., 1997: 43). As a ballpark figure, the dates of 800 CE to 1050 CE are used for the occupation and settlement of Hedeby.

An extensive discussion of the decline of Hedeby is provided by an excellent article written by Volker Hilberg. The decline of Hedeby and founding of Schleswig are likely linked to the quick decline in silver supplies from Saxony around 1040, the need for kings and bishops to assert their power and recognise sites fit for their purpose, and the new demands of increasingly professional long-distance trade in the 11th century

(Hilberg, 2016). As is likely the case for all settlements under investigation here the reasons are indeed complex and cannot be attributed to a single cause or event; Hedeby lasted the longest but ultimately was abandoned. An early theory for the decline of Hedeby, though now known to be inaccurate date-wise⁴⁸, theorised that the settlement may have been abandoned in the 10th century, as in 990CE a mint-building program embarked upon by the Danish king Sven Forkbeard did not include Hedeby – thus the settlement must have been of particularly low profile (Crumlin-Pedersen et al., 1997: 43). Regardless of whether this ‘decline’ date is correct, the fact that a site as large as Hedeby was left out of such a significant program as the introduction of coinage is significant. This could be interpreted to mean there was no royal control at the site, and thus the lack of a mint was a political statement. The decline of Hedeby may be just as linked to the internal changing political climate of Denmark in the establishment of clear monarchical power, as it was to the external factor of attack.



Figure 4.15 – Map of Early Medieval Hedeby and High Medieval Schleswig

⁴⁸ Proven so incorrect by Sven Kalmring’s work on the harbour area; building construction took place into the first decades of the 11th century (Kalmring, 2011).

KAUPANG



Figure 4.16 – Map of Kaupang, Norway. The total settlement area with burials indicated in lighter weighting, adapted from Skre, 2011a:19

Excavation History

The story surrounding the first ‘modern’ accounts of Kaupang suggest that the location of the Early Medieval settlement has been long known. Paintings by the artist Johannes Flintoe from the 1830s depict the contemporary landscape with a ‘Viking’ duel taking place in the foreground and the settlement in the background, to a surprising degree of accuracy (Skre and Stylegar, 2004: 5). At around the same time the antiquarian Gerhard Munthe, in preparing notes on the geographical information presented in Snorri Sturluson’s *Heimskringla*, located the port of *Sciringes heal* from accounts of the Norwegian traveller Ohthere to the same place (Skre, 2007b: 29, 2012a: 112–113). The very first excavations at the site took place in 1867 under the supervision of Nicolay Nicolaysen, in which 79 barrows were excavated and, to Nicolaysen’s disappointment, very little of ‘interest’⁴⁹ was found (Skre, 2007b: 36). The next large-scale excavations were conducted between 1950 and 1974 by Charlotte Blindheim, in which 74 graves and around 1,500m² of the newly discovered settlement area were excavated, dating the settlement through both comparative and radiocarbon dating to the ninth century (Blindheim and Tollnes, 1972: 100; Skre, 2012a: 114–116). Despite significant problems with the work, most notably poor excavation conditions and an ideological desire to ‘remove’ both Kaupang and her work away from a Central European context in the aftermath of World War II, the current director of excavation at the site, Professor Dagfinn Skre, is clear in the debt of gratitude owed to her efforts (Skre, 2007b: 42). Skre’s term as leader of the Kaupang Research Project began in 1997, and comprehensive excavation took place from 2000–2003 with the aim of investigating both the community at Kaupang, and the social, economic, material and structural character of the settlement as part of the “earliest phase of urbanization in Scandinavia” (Skre, 2007b: 50–51). Around 1,100m² was excavated, chosen specifically because of its centrality relative to the (assumed) layout of the settlement including an early extension covering the Early Medieval shoreline to investigate environmental issues (Skre, 2007b: 153). This work has resulted in the publication of three excellent volumes covering the history of the site, all (documented) archaeological work conducted thus far, and

⁴⁹ To a late-19th century antiquarian, that is.

contextualisation and interpretations of the world in which Kaupang existed (Skre, 2007b, 2008, 2011d).

Historical Attribution

As mentioned above, the initial impetus for the discovery of the site was its prominence in accounts of the travels of the 9th-century Norwegian traveller Ohthere, delivered to Alfred the Great of Wessex. Ohthere's account tells of his journey from his hometown in Hålogaland, near Tromsø in Norway, to Hedeby in then-Denmark via the place now known as Kaupang, and is often used as a geographic, or descriptive map of Norway during the 9th century CE (Bammesberger, 2010: 1). Translation of Ohthere's account (written originally in Old English) is the subject of much debate, but the section pertaining to *Sciringes heal* quite clearly refers to it as a port, or trading town, and that it lay on the port side of the ship, on the coast of Norway (Bammesberger, 2010; Bosworth and Hampson, 1855: 14). Several of the sagas, most notably Snorri Sturluson's *Ynglinga saga* mention the site, and both the contextual meaning in its description and the ending of the word (-*salr*) denote it as a hall, mistranslated in Old English to *Sciringes heal* (Skre, 2007b: 60–62). This has led to the assumption that *Sciringes heal*, or *Skíringssalr* in Old Norse, actually referred to an influential hall in the landscape, owned and perhaps occupied by a local king or chieftain, which then became a territorial name for the region (Skre, 2007b: 61). Thus *Sciringes heal* was likely separated from but related to Kaupang, the (current) name for the port and trading settlement. Either Ohthere misidentified the contextually significant *Skíringssalr* as Kaupang, given its easily identifiable location in the Vestfold (most likely given his description of the place as a 'port'), or was indeed referring to *Skíringssalr*, but the prominence of artefacts at the trading settlement in comparison with the hall led to its misidentification by early scholars of the place. The name *Kaupang* is likely organic (Skre, 2007b: 63, 2008: 9), as *kaup* translates variously to 'buy' or 'bargain', and *kaupmaðr* to 'merchant' (Arthur, 2002: 11, 93).

Environment

Kaupang is located in Norway, in Vestfold County, to the west of the Oslofjord. Similarly to many of the settlements here Kaupang is not located *on* the Baltic, but rather

connects to the Baltic by way of the Skagerrak Strait, which, with the Kattegatt Strait, connects the North Sea to the Baltic Sea. The location of the settlement seems to have been chosen carefully, as it lay on a relatively flat piece of land between a rocky outcrop (now forested with a few residential dwellings) and a now-silted natural harbour, around 400 metres from the mouth of an inlet which connects directly to the Oslofjord. Access to Kaupang would have involved either navigating the coast of Norway, sailing north-east from its southernmost tip, sailing northwards from the Jutland Peninsula, or sailing north-west from the south-western coast of Sweden. Small boats from the inner Oslofjord would also have been able to navigate to Kaupang, and the nearby Lågen River provided water access into the hinterland (Pilø, 2007b: 162). The total elevation of the site from the shoreline to the site's perceived extent is around 10 metres, with the settlement's design taking this elevation into account (Skre, 2012a: 119). The relatively steep profile of Kaupang is not unprecedented – the 'garrison' at Birka is located on a hill 20m above sea level – and is in fact relatively gradual compared to the surrounds, with the highest elevation point on the rocky outcrop behind the settlement around 37 metres above sea level. This rocky outcrop defined the western boundary of the settlement, with the east at the sea and the north and south bounded by the settlement's two main cemeteries. Sea levels in this particular area of Norway have fallen around three metres (Clarke and Ambrosiani, 1995: 67), and the particularly shallow nature of the former harbour has meant that around 50 metres of land previously underwater now lies exposed, handily allowing access previously underwater parts of the settlement, such as the extant remains of the site's jetties. Unfortunately in the centuries since the settlement's abandonment the area has been used for farming, thus destroying and disrupting much of the archaeological evidence which may have remained (Pilø, 2007b). No earlier human activities are found at the site, as until the mid-first millennium the land, due to isostatic lift and its proximity to the Oslofjord (rather than on a river), was uninhabitable (Sørensen et al., 2007: 267–270).

Material

Modern excavations have used both relative and scientific dating to date the beginnings of Kaupang to around 800 CE (Pilø, 2007b). Wooden posts at the medieval shoreline

date to 803 CE, and glass beads in the lower settlement layers have been dated relatively to the same period. Three main settlement phases can be discerned at the site (Pilø, 2007a: 192–203). The first is of a short seasonal occupation, with few building remains suggesting that it was not occupied during winter, and the second phase of permanent settlement, with the bulk of cultural material, dating until the mid-9th century. The last phase has been discussed conservatively due to the significant plough damage at the site, though settlement and burial evidence suggest that permanent settlement continued at least into the first few decades of the 10th century (Pilø, 2007a: 192–203). In analysing the use of plots at the site, it can certainly be seen that in the early 9th century the use of individual buildings at the site changed. While initially buildings at the site seem to have seen primary use as workshops, soon after they became both residential and industrial, housing families for potentially decades (Skre, 2011b: 397). There is no evidence of any fortifications or defensive constructions around the site (Skre, 2012a: 118), nor is there any evidence of violent warfare or attack.

The settled or occupied area was topographically defined, and stretched diagonally along the coast for around 750 metres (Pilø, 2007b: 163, 178). Identification of the settlement area has been done through find analysis, which has subsequently allowed for the division of the site into a central and a peripheral area. Between 90 and 100 plot divisions have been identified in the central area of Kaupang (Skre, 2012a: 118), though excavation documentation does acknowledge that the excavations that have been conducted thus far favour the discovery of the presence of settlement through small artefact findings rather than that of the ‘plan’ of the site (Pilø, 2007b: 164). It is therefore possible that the central area could be larger than presently thought. The central, plot-divided part of the town has been estimated at around two hectares, and the full extent of the town at 5.4 hectares. Division of the central and peripheral areas of the site hinges on the identification of settlement structures. Within the central two hectares post holes and pits have been found, indicating permanent structures, whereas in the surrounding three and a half hectares finds are primarily those of craft and trade, suggesting seasonal extension of the town during peak market times of year (Skre, 2012a: 117–118). The central two hectares have been further divided into three separate areas, comprised of a northern and a southern settlement area, and a central plateau. The two

settlement areas are similarly plot-divided, but the central area is only plot-divided in its rear half, with the front half a large, open area on the beach (Pilø, 2007b: 164–169; Skre, 2012a: 119). This open space may have been left open deliberately, used for markets, meetings, or the pitching of tents in summer, or it may have played host to another form of settlement of which we have found no trace (Pilø, 2007b: 167–168). At some early point a northern extension was possibly occupied and used for smithing⁵⁰, though it later became a burial area (Pilø, 2007b: 172).

Kaupang's coastal surrounds were used for burial grounds. Two barrow cemeteries (one to the north and one on the then-island of Lamøya), one flat-grave cemetery, and five smaller burial areas at which around 700 monuments are today visible have thus far been discovered (Stylegar, 2007: 65). From their layout, size, and length of use, the two barrow cemeteries of Nordre Kaupang (with approximately 263 burials) and Lamøya (with approximately 200 burials) seem to have been the 'planned' cemeteries, though the flat-grave cemetery of Bikjholberget (with approximately 160 burials) is particularly dense and may also fit this assumption (Stylegar, 2007). The very limited amount of space available to the residents of Kaupang was capitalised upon by the five small cemeteries scattered around the settlement, suggesting particular residential density pressure at the site.

Social

Despite the site's location in modern Norway, the settlement of Kaupang was likely under Danish control. In the *Royal Frankish Annals* the Vestfold area is described in 813 CE as "the remotest part of their (the Danish kings') empire" (account from the year 813 CE), though the degree to which the less central parts of the Danish kingdom were under direct or just nominal control is uncertain (Lund, 1997: 156). The rise of the Norwegian king Harald Finehair towards the end of the ninth century has been suggested as related to the end of Kaupang; while he was likely based in Bergen in the northwest he had aspirations to control the entirety of what is now modern Norway, and accounts of the battle of Hafrsfjord at this time speak of it as the moment of unification (Lund, 1997: 158). If Kaupang was indeed either Danish or at least under

⁵⁰ Which, being highly flammable and thus dangerous is an activity often found isolated.

Danish control, the decision to move the settlement upon the resumption of Norwegian control is logical.

The idea of a companion royal site for Kaupang has been raised. One kilometre north of the settlement, at a local farm, a hall of 400 square metres has been found. It has been excavated, dated to the end of the eighth century, and named as Huseby (Clarke and Ambrosiani, 1995: 67). Skre raises the suggestion that this is where the name *Skíringssalr* may have come from; the hall pre-dates the town and was in all likelihood owned by someone of importance, perhaps a local chieftain, and potentially an individual who had a role in the establishment of Kaupang (Skre, 2012a: 118). Though Skre goes on to suggest that the establishment of this town in the medieval border zone of Denmark and Norway likely indicates royal control, here it could be suggested the impetus for the settlement was generated by someone of local importance. The occupants of the hall just north of Kaupang at Huseby, as it pre-dates the settlement, may have previously used the spot as a landing site and thus played a part in its establishment (Pilø, 2007b: 172). The topography of the area is such that the only way to leave Kaupang by land is to travel north, and as such the hall at Huseby, located on the highest point in the surrounding landscape (Skre, 2007a: 225), would have been a very obvious marker of control of the landscape.

Estimated with both the number of burials along with the number of households, and a general idea of the size of a household, the town's population was likely between 400 and 1000 individuals (Skre, 2012a; Stylegar, 2007). With an early estimation of around 1000 graves at the site, (Skre, 2012a: 114), a population calculation using the method adopted in this thesis gives a count of around 420 individuals at any given time, leaving the population density at around 74 people per hectare. This number likely represents the permanent population at Kaupang, as 'casual visitors' are generally thought to have been underrepresented (if represented at all) in the burial evidence of settlements of this type (Gräslund, 1980; Stylegar, 2007), and thus should be considered a minimum density estimate. It is also important to note that the grave count is quite speculative – modern excavations only document around 204 graves and estimate 700, attributing the significant loss to environmental degradation. The flat graves in both Bikjholberget and

scattered across the settlement are also very hard to see, and some may still lie undisrupted or have fallen prey to looters (Stylegar, 2007: 75–77).

One factor unique to Kaupang which could shed some light on the variable ‘tolerability’ of the settlement at any point in time is the fact that we have good information about the space occupied by the resident ‘permanent’ population, in comparison with the space occupied by each year’s visitors. If we are to take a permanent population of 400 individuals living in the central two hectares of the site we calculate a density of 200 individuals/hectare; comparatively very dense but with the benefit of the extra space afforded by the departed seasonal population for movement (and Fletcher states that the total size of the settlement should be considered rather than just the occupied area (Roland Fletcher, 2017, personal communication), leaving a ‘real’ density of 74 individuals/ha. During market times, presumably the summer months, the inflation of the population to 1000 individuals per hectare leaves the quite geographically bounded Kaupang at a density of 185 individuals per hectare, suggesting that the carrying capacity of the settlement can stretch to more than double its comfortable level, but only for a limited time. Stylegar does suggest that in the 10th century the population of the site could have risen to as high as 800 resident individuals, as there is a preponderance of burials from this time (Stylegar, 2007: 65), and this would have potentially caused great pressure.

The burials in the graveyards, as noted above, are likely those of the permanent population, thought overwhelmingly to be local; almost all of the identifiably female-gendered burials contain the oval-shaped brooches that were very common at the time, and weapons in both the male- and female-gendered burials resemble others dated to a similar time in the Vestfold region (Stylegar, 2007: 83–85). Four female graves are discussed as *potentially* belonging to individuals of foreign origin (Stylegar, 2007: 83–85). Stylegar rejects the assertion that Christianity can be divined from any of the burials at Kaupang, though one of the reasons proffered for the decline of Kaupang in the mid-10th century is the beginnings of Christianity in the region, and the burials across the southern Vestfold are seen to change at this time (Skre, 2007d: 268–269, Stylegar, 2007: 99). While there is far from an established link between the two, if the Christianisation

of the region can indeed be attributed to the mid-10th century it would seem the earliest acceptance of Christianity in Norway⁵¹.

In Sindbæk's social network analysis, statistically Kaupang is significantly similar to the southern Baltic settlements of Menzlin and Starigard-Oldenburg, with a predominance of local steatite vessels along with Slavic Fresendorf and Muschelgrus wares (Sindbæk, 2013: 85). It has been pointed out by Lars Pilø that pottery at Kaupang seems to have been an incidental rather than a primary import, pragmatically re-used but rarely traded on (Pilø, 2011: 281). The inhabitants of the town were engaged in metal- and glass-working, blacksmithing, and amber-working (Skre, 2011b: 397). Despite the settlement's location as the westernmost, and North Sea-facing location these pottery types suggest, unlike the nearby settlements of Ribe and Hedeby, a strongest relationship with the Baltic rather than the North Sea area. The practical reasons for this are uncertain, but it could be due to a relative lack of connection to continental Europe and the British Isles when compared to the Danish mainland, in favour of burgeoning Norwegian connections with Iceland (Thoeming, 2013: 23)⁵². Interestingly, it seems that the settlement was all but cut off from the North Sea region midway through its life. Foreign goods found at the site suggest that trade with the Frankish and Frisian regions was common until the middle of the 9th century, when it declined sharply (Skre, 2011c: 417). Individuals from the southern Baltic are suggested as present, though not permanently nor in a capacity as traders, as finds of West Slavic artefacts are relatively rare – Skre suggests they could have been working as craftspeople (Skre, 2011c: 434–435). Settlers from across the western Baltic certainly lived at Kaupang (Skre, 2011c: 435). While the area may have been under Danish control, the burial customs discussed above do show a regionally distinct pattern, and a fair amount of autonomy seems to have been exercised by the inhabitants of the settlement in deciding where to trade. The control exercised by Ribe and Hedeby over their respective regions of influence may have been either prohibitive or off-putting to the residents of Kaupang.

⁵¹ As the generally accepted period of time for the religious conversion is between 995 – 1030 CE, by decree of the 'missionary kings' of Norway (Bagge and Nordeide, 2007: 135–141).

⁵² Though it must be stated that there are no suggestions of Icelandic connections at Kaupang.

Despite the distinction between the trade connections of Kaupang and the clearly Danish settlements of Ribe and Hedeby, the Christian burials detailed above may actually support a Danish connection as the Danish Christianisation took place at a much earlier date⁵³ (Sanmark, 2004: 404–405), much more closely resembling Kaupang's Christian burials. A clear understanding of Kaupang's place in the political climate of the Early Medieval world is thus less than clear, but its relevance to the model under discussion here is clear.

Outcome

The end date of the settlement is not precise, as both cultural and environmental factors have disturbed a great deal of the highest, and therefore most recent stratigraphic layers. Dendrochronology is available but not useful to this end due to the disturbance - the latest dates provided are in the mid-9th century (Pilø, 2007b: 177). This significant disturbance of the site has meant that very few traces of settlement activity survive in the continually occupied settlement area past the mid-9th century, though evidence found in the harbour area conclusively proves continuity at least until the first few decades of the 10th century (Pilø, 2007a). Weights generally post-dating 860 CE are found in graves dated to the early 10th century, along with beads in the settlement area dated to the third quarter (Pilø, 2007b). This evidence, along with artefacts found in the plough layer (meaning that their stratigraphic context has been lost) suggests that the trade and craft production in evidence from the hundred years previous continued uninterrupted (Skre, 2012a: 116).

While traces of the settlement decline at the start of the 10th century, an upswing in burials at Kaupang's many cemeteries suggest the first half of the 10th century in fact saw the largest population at Kaupang – of the 116 dateable burials, 43 are dated to the 9th century, 53 to the first half of the 10th century, and only two (conclusively) to the second half of the 10th century (Stylegar, 2007: 80–81). Curiously this is fairly common for the Vestfold area of Norway, burials as a whole are relatively rare after the mid-10th century (Stylegar, 2007: 81), potentially attributable to the Christianisation of the region.

⁵³ King Harald Bluetooth is generally considered responsible for spearheading Denmark's Christianisation from the start of his reign in 958 CE (Sanmark, 2004: 404–405)..

Dagfinn Skre rejects earlier theories that the settlement ‘regressed’ to a market town around the start of the 10th century, arguing instead that a series of unfortunate events, primarily a decline in human and craft-working activities that leave huge amounts of archaeological evidence, as well as presumably the more recent agricultural disturbance of the site, have left it in less than Pompeii-esque condition (Skre, 2007d: 468).

Setting aside squabbles around the precise end date of Kaupang, it seems unquestionably accepted throughout Skre’s volume that the 10th century, most likely the second half, saw the decline of the settlement (Skre, 2007b). A few different factors are proposed as contributors to this process. The first factor is one of politics, relating to a break in Danish control of Viken/the Vestfold around the turn of the century beginning a time of quarrel in the border zone, adversely affecting the region as a trading hub. The second factor is one of economics, with less evidence of long-distance trade seen towards the end suggesting a forced change of character. The third factor is one of religion, related to the beginnings of the Christianisation of Norway around the middle of the 10th century, the abrupt change in burial practice in Vestfold, and thus the importance of Skíringssal as a place of pilgrimage for the Old Norse devout of the region is thus lost (Skre, 2007d: 268–269). In the interest of conservatism, we thus accept an ‘end’ date for Kaupang at 950 CE, but leave the reasons for its end as uncertain.

The possibility that Kaupang was succeeded by the nearby town of Tønsberg, which lies still today around 32 kilometres north north-east, has been raised (Nosov, 1993: 8) and this may fit into the broader pattern of settlement re-location towards the end of the Viking Age in the western Baltic (Figure 4.17). The later site is identified as a town in Snorri Sturlusen’s *Heimskringla* at around 870CE, even though the archaeological evidence which has been dated to earlier than the start of the twelfth century is that of a rural agrarian settlement or group (Eriksson, 1990; Wienberg, 1991: 334). Four graves dated to the Viking Age are often used as evidence of a ‘Viking city’, to legitimise Tønsberg’s tourism-attracting claim to being the oldest continually occupied town in Scandinavia (GoNorway, 2017), though of course it is well known that a Viking is just as, if not more likely, to hark from a small farm than one of the settlements under investigation here. The early days of Tønsberg were clearly strongly tied to a newly Christian Norway; ten ecclesiastical buildings have been dated to the medieval town

(Wienberg, 1991: 334). The gap in dense settlement between Kaupang and Tønsberg forces a rejection of the suggestion that the two are directly connected, but the process of movement may have been slow in comparison to the clear 'end' and 'resumption' of sites like Hedeby and Schleswig.

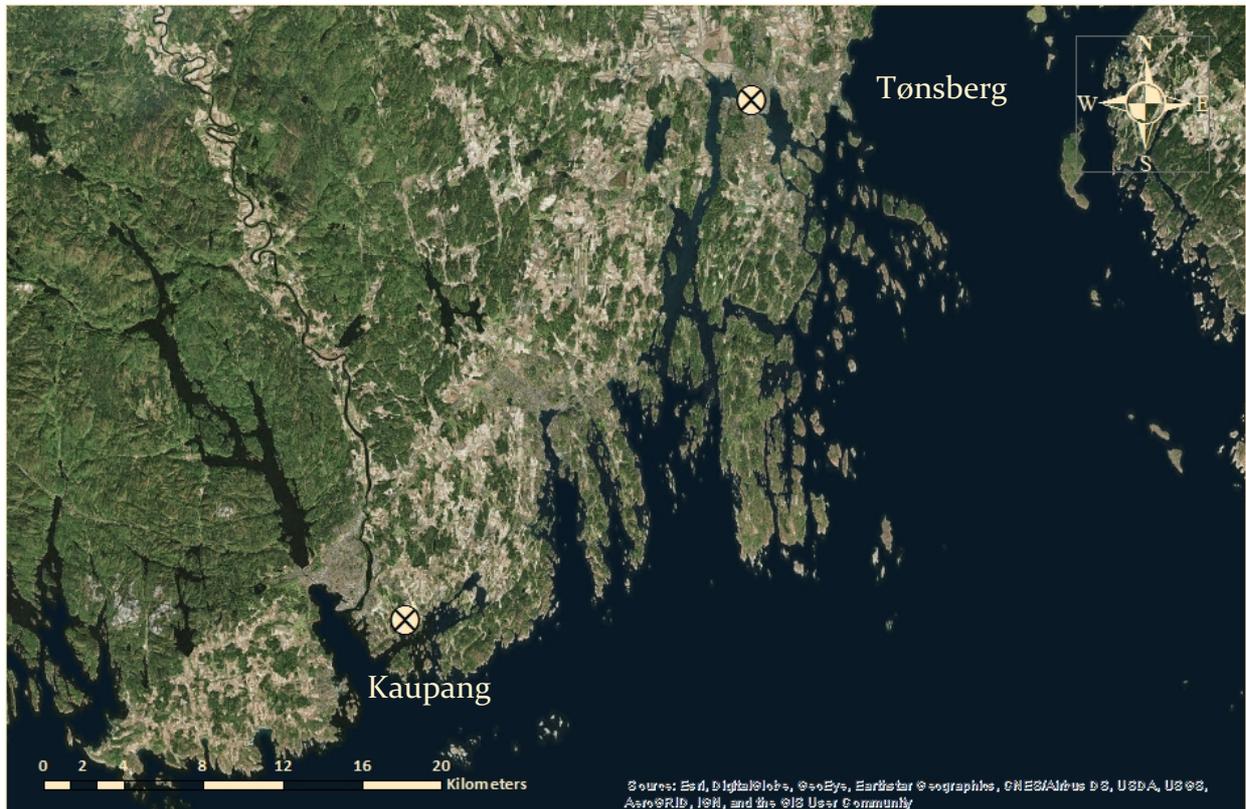


Figure 4.17 – Map of Early Medieval Kaupang and High Medieval Tønsberg

OTHER SETTLEMENTS



Figure 4.18 – Map of other settlements of interest in the western Baltic

Paviken/Västergarn

Paviken is mentioned as a trading place in the late 8th century and Västergarn in the late 10th century (Callmer, 1994: 61, 73). Geographically there is little separation between the two sites and the different names refer only to separate iterations of settlement at the site. Graves are known at the site and early excavations are noted to have presented evidence for the existence of house foundations and workshops (Carlsson, 2013). The location has been mapped at around 1.5 hectares, and 40 weights and 122 silver coins from the late 10th and early 11th centuries, including Arabic, Carolingian and English coins, have been documented (Brather et al., 2012: 214). Herculean efforts from Dan Carlsson on the site notwithstanding, Paviken at this stage can only be considered a site for trade and perhaps a small amount of manufacturing, rather than as a permanently settled site. The island of Gotland is thus unfortunately excluded from this discussion,

though it is exceedingly likely that a settlement of the type investigated in this thesis may yet be uncovered, given the dominance of its capital Visby in the Hanseatic League from the 14th century onwards.

Aros/Aarhus

Aros is less of a certainty when it comes to the model of Early Medieval Baltic settlements, as it may have more in common with the later-stage high medieval towns like Schleswig and Sigtuna. While it certainly existed during the early Viking Age, whether or not Aros' level of influence met that of Ribe or Hedeby is uncertain, and thus will be discussed here. The medieval settlement lies directly underneath *store torv*, the 'old square', of modern Aarhus. The name Aros is attested from coins dating to the reigns of King Harthacnut and Magnus the Good, in the mid-11th century (Skov, 2005: 15). Location-wise it is comparatively less sheltered than the other settlements discussed here, sitting directly on the natural harbour of the Bay of Aarhus and facing the Kattegatt, a semi-enclosed oceanic basin (Fogelqvist and Krysell, 1991) into which the Baltic Sea drains, connected through the more northern Skagerrak strait to the North Sea⁵⁴. Sea access to Aarhus, therefore, at least appears relatively easy when compared with access to Haithabu or Ribe, which required long journeys through narrow shipping channels. While Sindbæk highlights the introduction of larger, slower vessels for goods transport as evidence of more systematised control and protection of and for the 'second-wave' settlements, their locations are also significant (Sindbæk, 2012: 152). While all of the 'first-wave' settlements are placed in particularly strategic locations, able to be protected by 'lighthouses' on narrow access routes, the second-wave are not. Medieval Aros (modern Aarhus) as discussed earlier is a good example – it is essentially located right on the Kattegatt with no significant protection afforded by the geography of the Danish Straits, the narrowest access point was no less than 600m across.

The question of whether Aros should be considered in this model of Early Medieval Baltic settlement development strikes to the heart of the debate about urban development – when is a settlement considered an emporia/proto-town/*handelsplatz*?

⁵⁴ This location leading to a suspicion that the location of the fictional town of Kattegatt from the TV show *Vikings* is modelled on Early Medieval Aros

Aros was certainly permanently settled in some way from the mid-8th century but no excavation at the settlement, stretching not more than a couple of hundred metres from the mouth of the Kattegatt down the Aarhus Å (Skov, 2005: 16), has discovered archaeological evidence to the extent seen at the other settlements. Rather the fortification of Aros in the second half of the 10th century (likely by Harald Bluetooth and evidenced by dendrochronological dating of an extant plank (Skov, 2005: 16)), along with its major development following the 10th century, places the settlement with the 'second-stage' high medieval towns of Schleswig and Sigtuna (Sindbæk, 2012: 152; Skre, 2012b: 85). Aros in the Early Medieval period likely functioned as more of a central place – while permanent settlement and perhaps seasonal trade are very evident throughout the period, the settlement did not reach the prominence of settlements like Hedeby and Ribe at this time.

CONCLUSIONS

The western Baltic in the Early Medieval period was clearly a period of great change. While the High Medieval period was a time of state-formation and stability, it is important that the preceding phase is not viewed as a period of instability, but rather a preceding phase in the development of societies attempting to establish themselves on the northern fringe of Europe proper. Four of the five settlements presented here do not continue past the Early Medieval period, but their successors (where these can be discerned) were highly influential during the following period and, particularly importantly, all continue through to today. Schleswig and Sigtuna seem to clearly follow from Hedeby and Birka. High Medieval Ribe, whether one accepts continuation, abandonment, or a decline from Early Medieval Ribe, is clearly different from its predecessor in both location and function. An inarguable link between Kaupang and Tønsberg is yet to be established, but a decline at the earlier site is obvious and either an earlier phase at the older site or an intermediary settlement may yet be found. Curiously Åhus, the one settlement included here in contravention of the traditional 'four towns' of the period, is the only western Baltic settlement that could be said to experience continuity. Its successor continues through to today. The stages of

occupation at the site, specifically the transition from Åhus I to Åhus II, also heavily parallel those of Ribe, and some of the sites of the Southern Baltic.

Whether the cultural landscape of the western Baltic was indeed more complicated than that of the east and south remains to be seen, and may indeed be no more than a product of a number of circumstances. The much longer and more continuous excavation history clearly evident in Norway, Sweden, Denmark and Germany, and the issues faced by these settlements in establishing their own identity in the shadow of the many other important sites scattering the landscape both before and into the Early Medieval period; halls, *þing*-sites, and royal residences are just two of the possibilities. It is very possible that the functions being performed by these settlements, especially those of goods production and distribution, were also being fulfilled by these other sites, and that the Early Medieval settlements were somewhat overambitious in their aspirations. The emergence of circular fortresses within the Viking Age proper (i.e. after the settlements under investigation here) is also significant; could they, in their emergence in late tenth century Scandinavia, have served as challengers to the settlements under investigation here?

A central question here thus is that of the issue of royal control. The other Early Medieval settlement forms clearly bear hallmarks of aristocratic, if not outright royal, control, and the settlements under investigation here may have unwittingly become direct competition. This will be explored further later in the comparative application of the triadic conceptual framework. It is clear that at least some dissonance occurred within them; either internally within settlements or externally between the settlement and the cultural (political, religious, economic) landscapes which surrounded them.

THE SOUTHERN BALTIC



Figure 5.1 – Map of the settlements of the Southern Baltic under investigation in this thesis

INTRODUCTION

Broadly encompassing the areas of the Baltic Sea coasts of Germany and Poland, from the base of the Jutland Peninsula to the Bay of Gdansk, the southern Baltic in the Early Medieval period (Figure 5.1) was a place of great change and connection. The expansion of the Slavs between the 5th and 7th centuries meant that eastern Germany and Poland were newly 'West Slavic', and the new settlers brought with them old traditions to be imposed on a new landscape. Slavic colonisation of the Baltic Sea area began in the 7th century, and from the beginnings of the 8th century there is clear evidence of contact with the western Baltic (Callmer, 2012: 448–449). Settlements in the West Slavic cultural area spread across the coast of the modern German state of Mecklenburg-Vorpommern and the modern Polish Western Pomeranian Province, from roughly Wismar in the west (roughly 45 kilometres east of Lübeck) to Kołobrzeg in the east. While the distance as the crow flies between the two is no more than 270 kilometres, the coast in places is particularly craggy, littered with inlets, bays, coves, and islands, including Rügen and Usedom in Germany, and Wolin in western Poland. Further east in Poland the coast is smooth and uninterrupted and thus not suitable for an Early Medieval settlement for which defence is a concern. Truso, an Old Prussian settlement, is found on the eastern Baltic coast, but culturally is more Baltic than West Slavic. To the west, no major settlements are in evidence until Hedeby. This is presumably due to the sphere of influence surrounding the settlement, and the fact that ships leaving the settlement to sail east would have followed the coast until at least the island of Fehmarn, where horizontal visibility on a clear day would have allowed travellers to bypass the *Lübcker Bucht*, the Bay of Lübeck.

While the West Slavic region remained largely independent throughout the Early Medieval period, maps and descriptions of northern Germany during the Carolingian Empire often place the region under the control of Charlemagne (Mackay and Ditchburn, 1997: 19). Despite its independence the region was well-connected. The Oder, Vistula and Niemen rivers connect the Baltic coasts with greater Poland, Slovakia, and further east with Ukraine, and finds from each of the settlements under investigation here are a testament to the use of these waterways. Early Slavic settlements

tended to be located close to water and in areas with fertile meadows due to livestock rearing (Buko, 2008: 67), and thus the settlements under investigation here are generally not located directly on the Baltic sea, rather on or very close to tributary rivers which flowed into the Baltic. These settlements (figure 5.1), along with those in the eastern Baltic, have long been characterised as ‘second-level’ trading sites (Barford, 2005: 75; Brather et al., 2012: 319). While there are certainly differences between the regions, taking into account their differing political, social and economic histories the value of considering the settlements all together as a network of simultaneous ‘urbanising’ growth is evident. Barford highlights this relative neglect of the Early Medieval sites in the southern Baltic despite their clear connections to the well-documented settlements of the western Baltic (Barford, 2005: 74–75). A paper recently published by Søren Sindbæk on network analysis using archaeological data also counters this assertion, revealing that some of these settlements have the most ‘central’ position in his analysis of the sites of both the Baltic and the Black Sea, suggesting that they may in fact have been important nodal points for long-distance communication and trade (Sindbæk, 2013).

THE SOUTHERN BALTIC IN THE EARLY MEDIEVAL

The cultural landscape of the southern Baltic during the Early Medieval period was one of great change - Slavic populations had moved in and were only beginning to establish themselves in a new landscape. Broadly, West Slavic tribal groups covered the area of modern-day Poland and eastern Germany, though the easternmost part of Poland was Prussian (Melleno, 2017: 362). To the southwest lay the Frankish Empire. To the west lay the Saxons and the Danes. In 750 CE the Merovingian Dynasty was overthrown by the Carolingian Dynasty which, led by Charlemagne, marched north in 789 CE to demand the submission of the western-most Obodrite Slavs.. History holds that afterwards, in 798 CE, the Obodrites fought and defeated the Saxons as Charlemagne’s allies (Melleno, 2017: 359), and in reaction King Godfrid of Denmark extended the Danevirke wall to protect against the southern forces (Ulriksen, 2006: 237). Despite this, trade connected the two regions, and there seems to have been significant influence on the southern Baltic from the western. There is significant evidence of connection in the

material culture of the two regions⁵⁵, and the development of political structures in the southern Baltic in the 9th century is suggested to have taken much from the western Baltic (Callmer, 2012: 449–450).



Figure 5.2 – Tribal landscape of the Southern Baltic in the Early and High Medieval Periods.

Prepared from Tvauri, 2012: 26 and Buko, 2008: 77

Joachim Herrmann characterises the settlements under investigation here, which he names as the “Slavic maritime trading stations” thus;

- Formation began in the 8th century and settlements were well-established by the 9th.
- Merchants were either permanently resident or present year-round.
- They were centres of craft production, certainly locally and probably internationally.

⁵⁵ Specifically in house and building construction, jewellery-making, and pottery production (Callmer, 2012: 449–450)

- Centres were in close contact with local political concerns, potentially even as centres for ruling classes, which may have resulted in social stratification.
- The populations were multi-ethnic, all with a significant number of Scandinavians.

(Herrmann, 1985a: 265)

Mateusz Bogucki outlines general trends in published literature, related to the identification of these settlements into sub-groups, though concludes that this method of investigating settlements isn't entirely helpful, and that each site should be studied individually;

- The 'Slavic' model, in which rural settlements changed character to become early towns, remaining anchored in their landscape but with the evolution linked to changes in societal norms (Bardy-Świelubie is an example of this).
- Early towns which emerged due to foreign influence, primarily Scandinavian, with social stratification in evidence from their inception (Menzlin and Ralswiek as examples of this).
- Settlements which were combinations of both of these – Wolin is given as the only example of this, and sits somewhere in the middle due to the fact that it emerged from an earlier settlement but a great amount of Scandinavian influence is clear.

(Bogucki, 2010a: 268)

Bogucki's conclusion that each site should be studied individually is absolutely correct and incredibly important – while the work being attempted here is comparative and does therefore select information common across all of the settlements, individual details and features are incredibly important and, it is hoped, could eventually be built into this model.

Hillforts

At the start of the Early Medieval period, the cultural landscape of the southern Baltic was busy responding to change spurred by the appearance of the Slavs in the region. Around the 7th century in the southern Baltic "tribal-geographic units" began to form

(Gojda, 1991: 18), and the construction of hillforts (alternatively *Burgwälle* in German, also referred to as strongholds) in the region began, quantifiably similar to the hillforts which developed earlier in the Eastern Baltic. The earliest strongholds in Poland are dated to the late 6th and early 7th centuries, though the tradition only reached northern Poland around the mid-7th century (Kobyliński, 1990: 147)⁵⁶. In contrast to the Eastern Baltic, however, settlements do not seem to have been established *at* hillforts, rather they were strategically placed as defensive constructions. Rural settlement was likely primarily in the form of nucleated villages (though these more closely resembled groupings of farmsteads than anything that would easily be recognised as a village today), and the hillforts were places of refuge for local populations, who travelled to them in times of conflict (Clarke and Ambrosiani, 1995: 108). All of the settlements under investigation in this chapter were in close proximity to one or more hillfort(s) (Kleingärtner, 2014: 144). The Arabic writer Al-Gardhizi reported that southern Slavic fortresses⁵⁷ were only occupied during times when the population was under threat from the Magyars (Kobyliński, 1990: 151). While this phenomenon in Northern Europe is not exclusive to the southern and eastern Baltic⁵⁸, the functions of the hillforts of the western Baltic were somewhat different (Hedenstierna-Jonson et al., 2013: 285–287). Spatial and agricultural carrying capacity analysis has also shown that stronghold distribution in northern Poland is highly correlated with agricultural productivity (Kobyliński, 1990: 153). They are incredibly populous in the landscape; at least 200 *Burgwälle* have been documented in just the region of Mecklenburg- West Pomerania (Kleingärtner and Tummuscheit, 2007: 247). The hillfort tradition has been discussed as the reason for an increased demand for trade with wider Europe, perhaps due to their roles as central places, as points for goods distribution (Bogucki, 2012: 84). In many ways the prominent hillforts carry out many similar functions to those of the settlements which with this work is primarily concerned, and are often even discussed in the same

⁵⁶ The hillfort tradition is often used as one of the key points in arguments about the diffusion of the West Slavic culture into Poland. Belarusian strongholds appear from around the 2nd-4th century CE, and there are clear structural and stylistic similarities between these and the Polish hillforts, though the same has been said for the contemporaneous Latvian hillforts (Kobyliński, 1990: 154).

⁵⁷ Note this refers to the hillforts of southern Europe, between the Balkan Peninsula and the Eastern Alps.

⁵⁸ As ramparts and hillforts are also seen in very close proximity to medieval Swedish, Danish, and English settlements (Kleingärtner, 2014: 144).

breath (Clarke and Ambrosiani, 1995: 108–109). One of the highest profile hillforts, discussed as the royal centre of the Obotrite tribe, was Starigard/Oldenburg. Extensively excavated and well-documented, this hillfort illustrates well the likely role of this settlement form in the landscape.

A Southern Baltic Hillfort - Starigard/Oldenburg

The settlement of Oldenburg ('old town' in German) or Starigard ('old settlement/town/city' in Slavic), known as *Brandehuse* (suggestively translated as *burned houses*) to the Scandinavians (Christiansen, 1997), has been very well-excavated and thus is a good example for the hillforts or *Burgwälle* that dotted the southern Baltic coast. It is mentioned by Adam as being the 'city by the sea' of the Wagiri, the 'first, (of the Slavic peoples) beginning in the west' (Book 2, Chapter XXI), and by Helmold von Bosau as being an ancient city ("*antiqua civitas*") known as Aldenburg, or Starigard in the Slavic language (Gabriel, 1984: 11). The hillfort is located on a channel which cut across eastern Holstein, now silted-up but still visible on the landscape, around 50km east of Kiel by land and around the same distance westwards directly from Groß Strömkendorf. Now sitting roughly 5km from the sea, the town was positioned approximately 10m above sea level on a hilly peninsula, surrounded by wet lowlands and inlets from the channel (Gabriel, 1984: 10). The location was clearly chosen for defensive reasons, as it could be reached by boat but was protected by sea-borne attacks by its inland location, and the narrow waterway which led to the site would have been easily obstructed (Herrmann, 1985a: 251).

Foundation of the centre is generally suggested as having occurred around 700 CE (Clarke and Ambrosiani, 1995: 108); no absolute date has been presented. Heavy burning in layers dated to around or a few decades after 800 CE suggest an attack of some sort on the settlement at this time (Clarke and Ambrosiani, 1995: 108; Gabriel and Kempke, 1989: 53), as do layers dating to roughly the end of the tenth century (Biermann, 2012: 209). This corresponds with the Slavonic pagan revolt of 983 CE (Curta, 2017), which ended with the destruction of the site of Mecklenburg in 995 CE by Otto III (Petersohn, 2003: 136). The settlement is primarily known as the seat of one of the earliest (and shortest-lived) bishoprics in Northern Germany, beginning with its

establishment as a see in 970 CE and ending with the destruction of the Bishop's Church at Oldenburg in 983 (Petersohn, 2003: 101–102). Five main phases are observed in the development of the settlement, from roughly 700 CE through to 1260 CE (Gabriel, 1984: 18–33). The first phase consisted structurally of two concentric fortified ring-walls, enclosing an area of roughly 1.4 hectares. The second phase lasted from around 720 – 750 CE, and saw the settlement expand to the east, using the same fortifications as the outer circle of the first phase in the west, but with new walls built for the other sides. The third phase saw the settlement reach its full Early Medieval extent, roughly 2.5 hectares extending out towards the eastern side of the hilltop. Lasting from 750–970 CE, this phase included the “*Brandkatastrophe 800*” (fire of 800CE) event, suggesting some sort of attack on the settlement - the *Fürstenhof* (princely residence) was burnt down at around this time but then rebuilt in almost exactly the same place (Gabriel, 1984: 26). Pottery attributed to the first two centuries of this period is mostly local, and is of Sukow and Feldburger-type (Gabriel and Kempke, 1989: 52). 100 burials from the ‘Northern Grave Field’, dated from 930CE onwards (in fact one of the earliest inhumation gravefields in North-Western Germany) have been excavated, and the grave goods of the individuals uncovered are thought to be those of a local ruling class who had converted to Christianity (Biermann, 2012: 208–209). The fourth phase did not see significant structural changes to the hillfort, and ended in the mid-12th century. A fire event took place during this phase, likely the burning of the Bishop's residence, dated to 983CE. One last phase follows this one, with the establishment of a Danish or German fortified castle with a full extent of around three hectares (Gabriel and Kempke, 1989: 48), but the abandonment of the hillfort by the original population seems to date to around 1137 – no finds are in evidence after this until the commencement last phase (Gabriel, 1984: 30).

Despite the attribution of Oldenburg as a princely residence there is evidence for settlement, or a *suburbium* from its earliest days; this is in evidence from the first phase, was brought into the fortifications in the expansion of the second phase, and expanded with a second suburb in the third phase (Herrmann, 1985a: 251). Curiously some bronze fibulae dated to the 7th century and of Southern Scandinavian origin have been found at the settlement (Lerche Nielsen et al., 2000: 238), and are presumably thought to have

been traded in the early days of the settlement or brought over by early western settlers. Runic inscriptions and graffiti are found from the very start of the 12th century, this connection suggested as being related to the 're-Christianisation' of the region at around this time and thus improved cooperation with the then-comprehensively Christian Scandinavia (Lerche Nielsen et al., 2000: 238). Artefacts found at the site indicate an important centre of long-distance trade, including objects from Russia ('Resurrection eggs' and jewellery), western Baltic jewellery and pottery, and a significant amount of local ceramics (Clarke and Ambrosiani, 1995: 109).

It is entirely possible that, upon expansion of this study, the settlement of Starigard/Oldenburg should be included. Unfortunately despite its very well-published pedigree, all of the first-hand accounts of the site have been published only in German, thus affecting the accessibility of the site for discussions on the Early Medieval urban development of the Baltic. The site is often mentioned in literature discussing the urban development of the Baltic in the Early Medieval period (Bogucki, 2012: 88; Clarke and Ambrosiani, 1995: 108–109; Kipling, 2000: 201), but is rarely given significant attention in the discussion. Also characterised as a 'princely hillfort' (Brather, 2011: 464), the settlement does indeed seem to have been a significant force in the landscape. Sindbæk's work reconstructing the social networks of Northern Europe using cooking pots interestingly indicates that the settlement may have even been a significant force on the circum-Baltic landscape. The pottery uncovered at the settlement is identified as of the steatite, Fresendorf, and Muschelgrus types, indicating contact respectively with Norway, local Slavonic populations, and Frisia, as well as placing the site in quite a 'central' location, both in the graph and in its context (Sindbæk, 2013: 85).

GROß STRÖMKENDORF



Figure 5.3 – Map of Groß Strömkendorf, Germany. The theorised extent of the settlement in the second half of the Early Medieval period, adapted from Tummuscheit, 2013: 210.

The cemetery (the settlement during the first half of the Early Medieval period) is indicated in lighter weighting.

Excavation History

While this settlement is now known by its modern name of Groß Strömkendorf, during the primary years of its operation in the 8th century it was likely known as Reric, a name which originates in the Frankish Annals (Scholz and Rogers, 1972). The reasons for the preferential publishing of this settlement as Groß Strömkendorf rather than Reric is uncertain, but it may be due to the fact that while the town is in Germany, the attribution is said to be Danish, published in a French chronicle (Scholz and Rogers, 1972: 88). It may also be due to the fact that the first attempts to locate the site were in 1937, funded by the then-incumbent Nazi party, and ended in the changing of the name of the nearby town of Alt Gaarz to Rerik, despite what is now known as a misattribution. The location of the town was under debate until excavations speculated that the town “lost to history” (Cowen, 1999) was located 20 kilometres south of its modern namesake, though the possibility of finding another settlement in the area of the Obotrites has been left open (Brather, 2003: 514–515). Despite excavations at the site having taken place from the 1930s, it was not until the 1980s that Groß Strömkendorf was identified as the historic site of Reric, with the first more detailed excavations taking place between 1989 and 1993 (Tummuscheit, 2003: 208–210). Primary excavation on the site took place between 1995 and 1999, with 8750m² in a four hectare area excavated jointly by the University of Kiel and the Mecklenburg-Vorpommern state museum (Brorsson, 2010: 8). Despite the seemingly quite detailed excavations, reports from these four years of excavation have only been published sparingly.

Historical Attribution

The Royal Frankish Annals describe the destruction of the town in 808 CE (the facts of which will be discussed later) by the Danish king Godfrid (account from the year 808), who set out to occupy the territory of the Obotrites, which stretched from the Kiel Fjord to the Bay of Wismar (Tummuscheit, 2003: 219). Godfrid’s victory was a Pyrrhic one, and the annals record him killing the duke of the Obodrites and destroying Reric on his return journey to Denmark, relocating the settlement’s merchants to Schleswig (Scholz and Rogers, 1972: 88). This date indicates that, if indeed true, it was likely Hedeby and

not Schleswig⁵⁹. The foreword of the translation of the Royal Frankish Annals used here notes that Reric was resettled and the merchants incorporated into the territory of the Danish king due to the tax that the town paid – presumably so that he could solicit more tax (Scholz and Rogers, 1972: 10).

Environment

The settlement today lies on the eastern shore of the Bay of Wismar, under farming land just 500m south of the modern town of Groß Strömkendorf. Entry into the Bay of Wismar by sea along the coast from involves (from the west only) rounding the island of Fehmar, before entering first the Mecklenburg Bight and then the Bay. This entrance route was likely the preferred one –shoreline reconstruction has suggested that during the medieval period the Breitling channel, between the island of Poel and the mainland, either did not exist or was very shallow (Müller-Wille, 2009). Groß Strömkendorf is tucked into the eastern shore, and would have been hidden visibly by its location ‘behind’ the south-eastern lobe of Poel. A water level rise of around one metre since the Early Medieval (Kleingärtner, 2014; Müller-Wille, 2009) has meant that though the harbour upon which the Early Medieval settlement was located is now underwater, though the harbour is still very visible on satellite imagery (see Figure 5.3). A narrow channel 400m long and not more than 20m across at its narrowest point extended from the Bay of Wismar into the harbor basin, and was likely used as a harbour entrance (Müller-Wille, 2009).

Reric was located on the northern end of the harbour and the occupation area and grave fields extended (according to the excavations of 1995-1999) north-eastwards, perhaps 800 metres. The settlement like sat in this particular location due to the aforementioned lack of visibility, due to being ‘hidden’ behind Poel Island. Rising water levels and coastal erosion have destroyed the western part of the settlement, and agricultural use has levelled burial mounds in the northernmost gravefields. Only around 10% of the settlement has been exposed and thus has been accessible for excavation thus far, and

⁵⁹ The etymological confusion around which is explained in the relevant section of Chapter 4.

at least 40% of the site must be considered destroyed by erosion (Tummuscheit, 2003: 212).

Material

Three stages of development have been identified at Groß Strömkendorf through carbon dating of well pit remains, the results of which have been agreed upon with investigation of the ceramic material (Tummuscheit, 2003). The initial stage seems to have been of scattered, unplanned settlements in the 'North Eastern' area (which later became the burial ground), and has been given an *ante quem* date of 730 CE from Scandinavian and Slavic coin-finds, with the earliest dendrochronological date sitting at 735 CE (Tummuscheit, 2003: 217). The second phase dates from around 760 CE, and is a period of establishment in which the formerly settled area becomes a cemetery, and the settlement moves both westward (to the 'Northern' area) and south-west (to the 'Central' area) (Brorsson, 2010: 9). Around 20 years later the 'Central' area expanded further into the 'Southern' area; this secondary settlement shows clear evidence of planning and organisation (Tummuscheit, 2003: 217). Only five wells are dated to the ninth century, and the latest tree-ring date is given at 811 CE (Brorsson, 2010: 99; Kleingärtner, 2014). Significant traces of the Central/Southern settlement were found despite the bad preservation at the site – over a four hectare area the site is presumed to have extended excavated features suggest the presence of at least 100 pit houses and 240 burials (Kleingärtner, 2014: 303). Houses in the southern and central areas of the site were arranged in either double or single rows, both parallel and perpendicular to the shoreline (Tummuscheit, 2003: 213). Despite this organisation there is little evidence of constructions separating the houses, though they seem to have been arranged in an organised fashion, with wells and pits evenly spaced (Tummuscheit, 2003: 213). It has thus far not been possible to determine whether industrial zoning was present at Groß Strömkendorf. Generally if residential and industrial activities were separated at a site we should expect to see either zoning, or multiple buildings of different sizes located close-by, but the evidence uncovered to now do not suggest either possibility. Astrid Tummuscheit notes that workshop activities could indeed have taken place in the houses found, but cautions that their very small size, approximately 10m², would be extremely restrictive and uncomfortable for residential activities (Tummuscheit, 2003:

216). The overall size of the lived area of the trading settlement, measured with Kleingärtner and Tummuscheit's maps, is estimated at around 6.5 hectares, though including the cemetery was around 20 hectares.

Groß Strömkendorf was not surrounded by fortifications or ramparts, with the closest contemporary places of refuge located 8 kilometres to the east at Ilow and 14 kilometres to the south at Mecklenburg (Kleingärtner, 2014: 144). Following modern walking routes these *burgwälle* would take two and a half, and three and a half hours to get to respectively, and thus it would be fair to presume that with fair warning, and wagons and horses, the inhabitants of the town could be evacuated quickly to the strongholds. Given the relatively sheltered position of the settlement within the Bay of Wismar it is not outside the realm of possibility that lookouts could have been stationed on the shores of the Baltic to warn the occupants of the settlement in the case of an attack. Gravefields have been found to the north of the settlement, but there has been significant loss due to the re-purposing of the land for agriculture in more recent times. Around 240 burials have been discovered, but only dated to the later period - burials from the earlier period, when the settlement was located further to the north-east, have not been discovered (Müller-Wille, 2009).

Social

There is no evidence of control of Groß Strömkendorf by one particular party or group, though the location of the settlement may have formed a "*Scharnierstelle*" (hinge point) between Obodritic, Danish, and potentially also Frankish influences (Müller-Wille, 2009). The structured layout in the second phase of the settlement, in the move south, has been proposed as evidence of a controlling authority (Tummuscheit, 2003: 220). Extensive destruction in the gravefield of the settlement has made population calculation somewhat difficult, though it can be attempted based on the burials found and the known fact that they can only date from the mid-8th century due to the movement of the site to the south. 240 burials over a roughly 60-year timespan in a settlement of around four hectares in size leads to a population calculation of around 250 individuals, and a settlement density of roughly 62 individuals per hectare. Excavation of the settlement area uncovered at least 100 pit houses and an application of the figure of six individuals per household in the western Baltic during the Viking

Age (Clarke and Ambrosiani, 1995: 158) leads to a population of around 600 individuals and a population density of around 92 persons per hectare – relatively dense. This does not, however, take into account the fact that pit houses may have only been in use for a short period of time – the well-building activity suggests that wooden structures did not survive particularly well and needed to be re-built – though it is possible that pit houses were rebuilt at their old location. Therefore all that can be assumed for the population of Groß Strömkendorf is that it was greater than 250 and probably less than 600 at the settlement's greatest extent. A mid-range estimate of 425 individuals thus leads to a density estimate of around 65 individuals per hectare.

The ethnic character of the settlement can be approximated from the house-types and coin finds from the site. Buildings dated to the first half of the 8th century are interchangeably of Scandinavian (pit-house) type, as well as Slavic (block-house) type, though it is noted that the latter form is difficult to recognise archaeologically as they were not sunken (Müller-Wille, 2009; Tummuscheit, 2003: 215–216). During the second phase a 'checkerboard' patterning of the settlement area appears, and the house types erected suggesting an increasing western Baltic population, and potentially a declining Slavic population (no traces of Slavic house types are found after this date (Müller-Wille, 2009), though of course whether the former simply became the preferred house type for all inhabitants must be mentioned as a possibility. Burial good types from the later phases support the possibility of an increasingly foreign population from the Western Baltic, as well as the growth of a high-status artisan class. These burials were found separated from the majority of the burials, which are quite simple, by the inclusion of high-status Scandinavian, Slavic, and Frankish items; jewellery and horse ornaments (Müller-Wille, 2009). A number of dog and horse burials have been found in liminal burial areas at Groß Strömkendorf. The burials of seven dogs and two horses, a relatively common phenomena found in North- Western Slavic settlements are suggested to be linked to Indo-European mythology which perceived dogs as guardians or protectors against unfriendly forces (Kajkowski, 2015).

Excavated artefacts suggest a significant amount of craft production, in the form of antler and bone working, glass production and working, textile crafts and metal work (Brorsson, 2010: 8). The few known coin finds suggest international connections, with

three sceattas, two Frankish deniers, and three Arabic dirhams known, as well as a few hackweights (Brather et al., 2012: 205). Two main areas of origin are suggested for the international finds at the site, both mainland Europe, Saxony and Frisia, and Scandinavia (Tummuscheit, 2003: 212–213). An extensive survey conducted on the more than 62,000 pottery sherds from Groß Strömkendorf - of which 90% are local/Slavonic - revealed very little change in local pottery between the early 8th and 10th centuries, including in comparison to contemporaneous Scandinavian pottery (Brorsson, 2010: 91–93). It is important to note that there seems to be very little difference between Scandinavian and Slavonic pottery especially when comparing the functional quality between the two, and the author suggests that they would be easily interchangeable (Brorsson, 2010: 91). This, along with the fact that some of the burial remains at the settlement's cemetery may be those of people from the Western Baltic, again brings up the fact that the 'Age of Viking' started long before the 793 CE raid on Lindisfarne (Brorsson, 2010: 93). The imported pottery, from the western Baltic, mainland Europe, Latvia, and Russia, also speaks to the multi-ethnic character of the settlement (Brorsson, 2010: 39).

Outcome

Interpretations of the outcome of the settlement at Groß Strömkendorf have been highly coloured by the historical account of the site's destruction in c. 808 CE by King Godfrid of Denmark discussed earlier. Maleszka suggests that the destruction of Reric by Godfrid points to its success rather than failure, that the settlement's success had led to it becoming a threat (Maleszka, 2001: 105). Though no evidence of violent destruction has been found, this date for the end of the settlement aligns roughly with the one proposed in the Frankish Annals, as no evidence of construction has been found to post-date 811 CE (Brorsson, 2010: 99–101). Godfrid's 'destruction' of Reric is proposed by Müller-Wille as being somewhat metaphorical -the removal or kidnapping of the settlement's merchants, its most important resource, was tantamount to a complete physical destruction (Müller-Wille, 2009). That being said, there is no evidence for large-scale destruction at the site. Material remains decline sharply after the start of the ninth century and dendrochronology has revealed that only five wells were constructed after 800 CE (Brorsson, 2010: 99–101). The latest date found at the site is 811 CE

(Brorsson, 2010: 99), and at this stage, with the knowledge gained from excavations conducted thus far, that must be considered the endpoint for the settlement. Hedeby's appearance on the international stage at around this time may be highly relevant, but the lack of evidence for destruction at the site means that the outcome must be listed simply as 'decline and abandonment'.



Figure 5.4 – Map of Groß Strömendorf and its historically theorised successor Hedeby.

RALSWIEK



Figure 5.5 – Map of Ralswiek, Germany. This has been rectified as best as possible using maps from Herrmann, 19885 and 1978, but it is suspected, looking at the topography, that the settlement likely lay slightly westwards. As the area lies very close to sea level and has experienced significant change in sea levels since the Early Medieval period, reconstruction of the exact location of Ralswiek on a modern topography is difficult.

Excavation history

Preliminary excavations at Ralswiek were conducted between 1967 and 1973 and uncovered scattered signs of craft production, as well as the first of four boats found thus far at the site (Gülland, 2016; Herrmann, 1985a: 258). Between 1972 and 1985, excavations under the direction of Joachim Herrmann identified the harbour area of the Early Medieval settlement as well as uncovering around one hundred buildings; houses, industrial activity, and workshop remains (Herrmann, 1985a: 258). Herrmann was the main excavator on the site and before his death in 2010 published five monographs on the excavations he oversaw at the site, covering the settlement and its finds, the sanctuary, the boats, and the silver finds, the last published with burial expert Dieter Warnke on the cemetery and burial traditions at the site (Herrmann, 1997, 1998, 2005, 2006; Herrmann and Warnke, 2008). While these were all published in German, it is hoped that the information taken from them here has been translated and understood correctly. Enough has been published in English to confidently include Ralswiek in this model of Early Medieval settlement in the Baltic.

Historical Attribution

There are no known historical mentions of Ralswiek. The name of the site may be a portmanteau for 'Gravel Bay', 'ral' being Danish for small stone or pebble, and 'wiek' coming from the English 'wic', meaning town, which became the Scandinavian 'wik' or 'vik', connected to a Danish conquest of the site in 1168 (Kleingärtner, 2014: 332).

Environment

The settlement is located on Rügen Island, in the modern German state of Mecklenburg-West Pomerania. Lying within the eponymous Ralswiek harbour on the Großer Jasmunder Bodden⁶⁰, it was strategically well-placed, and likely accessed by navigating the twists and turns of the various Bodden of the island, entering either to the north or south of Hiddensee Island. During the Early Medieval period the settlement was located on what could either be a small island or a raised beach ridge, just off the island's coast (Clarke and Ambrosiani, 1995: 109). Marine regression has now connected the area to

⁶⁰ A 'Bodden' being a type of lagoon most commonly found in northern Germany.

the mainland of the island, and it is now partially covered by a modern town of the same name. The settlement seems to have been heavily constrained by the size of the island, with marshy and peaty land both on the small island and Rügen island, as well as the uneven topography of the big island (Herrmann, 1985a: 255, 1997: 25). While water levels in this area have not increased or decreased significantly overall, small changes have occurred over the last two thousand years, and this has greatly affected preservation at the site (Herrmann, 1997: 31). No traces of settlement at this site before the mid-8th century have been found.

Material

The earliest dates for the settlement come from the mid-8th century (Callmer, 1994: 60), but the earliest absolute dating at the site comes from c. 868 CE (Kleingärtner, 2011: 187). The site's development is commonly spoken of in five periods; Period A from the second half of the 8th century to the very start of the 9th century, Period B lasting until precisely the mid-9th century, Period C starting in the mid-10th century, Period D lasting from the 11th until the end of the 12th centuries, and Period E being the late 12th and early 13th centuries (Brather et al., 2012: 217; Kleingärtner, 2014: 333). Here we are concerned with Period A and Period B. A large fire in the mid-9th century seems to have led to a decline of the settlement around this time (Herrmann, 1997: 35). There is a clear separation between Periods B and C, not just temporally but also culturally – Periods C and D are spoken of specifically as Slavic settlement (Herrmann, 1997: 37).

The settlement seems to have had a cohesive structure, with individual parcels of land (it is difficult to conclude plot divisions as it seems none as obvious as those at Ribe have been found at Ralswiek) near the shoreline comprising of dwellings, craft workshops, large amounts of pottery, and one or two landing sites (Clarke and Ambrosiani, 1995: 109; Herrmann, 1985b: 59). 10-15 of these parcels can be seen, and 5-6 of them have been excavated, to the extent that we have a fairly good understanding of the structure of the site towards the shoreline (Herrmann, 1997: 41). One main building is seen in each of these parcels, likely belonging to the 'owner' of the plot, with various other houses for workers and servants (Herrmann, 1997: 41; Kleingärtner, 2014: 333). The settlement in the 9th and 10th centuries was roughly 2.6 hectares in size, but increased to up to four

hectares in periods C and D (Herrmann, 1997: 33). A small secondary settlement existed on the mainland, just to the south-east of the main settlement (Herrmann, 1985a: 256), though the role and functions fulfilled by this settlement, and its relationship to the main settlement, remain unknown. No fortifications are known for either of the settlements, though the *Burgwalle* of Rudgard is located roughly 6 kilometres south of Ralswiek (Kleingärtner, 2014: 339). Around 400 graves are located in the Schwarzenbergen cemetery on the mainland on the hills overlooking the harbour, most to the east and some to the west, and these are presumed to be at least initially contemporaneous with the Viking Age settlement (Clarke and Ambrosiani, 1995: 109; Herrmann, 1985a: 255). The lack of clear dating for the burials means that population calculations using them is impossible with any concrete reliability, as they continue on beyond the 10th century.

Social

The sanctuary of Arkona, an important religious site and probably seasonal trade site on the tip of Rügen Island is located roughly 23 kilometers away to the north. There is very little discussion about royal control of the site, but as part of north-eastern Germany it likely existed under the influence, if not control, of the West Slavic Rani tribe. The political centre of the Rani at Rudgard is roughly six kilometres away from Ralswiek, and as finds at Rudgard stretch back to the ninth century Herrmann suggests a relationship of some sort between the two sites (Herrmann, 1985a: 263). Rudgard, as the closest *Burgwalle* to Ralswiek, was likely well-known by the inhabitants of the settlement. Both imports from the Baltic and goods produced and sourced locally are found in the assemblage. While many of the imported objects cannot be sourced, Jelling-style boneware almost definitely comes from Denmark⁶¹ and Arabic coins dated to the 9th century provide a few clues (Herrmann, 1985a: 259–261). Iron, amber, silver, and antler-working has been archaeologically documented at the site, and it is presumed by Herrmann that the presence of the four locally-made boats driven ashore at the site points to shipbuilding as another function of Ralswiek (Herrmann, 1985a:

⁶¹ Though the style dates it to the later phases of the settlement, as Jelling-style was most popular in the 10th and 11th centuries.

259–261). This may be significant and speak to west Baltic contact. Despite the fact that western and southern Baltic-built boats do have characteristic differences, they were constructed similarly, and the Slavs likely had very little reason to build boats before they reached the Baltic coast (Callmer, 2012: 449). Craft production is ranked above trade and exchange by Herrmann as the primary activity at the site (Herrmann, 1985a: 261). Steatite and Fresendorf ceramics dominate the pottery assemblage, placing Ralswiek in a very similar position to Wolin (Sindbæk, 2013: 85), with ceramics seemingly to be sourced locally.

The graveyard at the site has been excavated extensively, with roughly 75% of the 400 burial mounds documented. The type of burials, urn depositions under low mounds, are of a Slavonic tradition (Herrmann, 1985a: 261). Some of the very few grave goods found are of Scandinavian origin (Clarke and Ambrosiani, 1995: 110), suggesting either a foreign population or links with the western Baltic. Almost all of these, however, date to the tenth and eleventh century, and thus cannot be discussed as related to the eighth and ninth century settlement (Gerds, 2006: 155). Population calculation here is thus difficult and highly speculative, but not impossible. Well-documented excavation has been conducted on the shoreline area between boatyards 216-112 (9 of 17 total boatyards) and seven houses are thought to have existed out of the 29 buildings/constructions found in this area (Herrmann, 1997: 41). The entire excavated area is approximately 0.3 hectares, or 11.5% of the total settlement area. If house density is proportional and consistent across the settled area, then there should be 63 houses across the entire settlement, resulting in a potential population (with the aforementioned assumed number of six individuals per house) of 378 people and a settlement density of 145 individuals per hectare. This would make Ralswiek the densest settlement of the Early Medieval Baltic, and signs of structures developed to deal with this density would surely be in evidence, likely either walls or plot divisions. The ‘courts’ likely only existed on the shoreline of the settlement, as they seem to have been constructed in line with the jetties/landing sites, and thus the ‘rear’ part of the settlement may have seen less, or different, use. Sunhild Kleingärtner states that in the 8th century, i.e. the earliest stage of the settlement, there were likely 10-15 ‘courts’ at the settlement, consisting of a central house, workshop(s) and dwellings for workers/servants (Kleingärtner, 2014: 333). This

correlates well to the number of landing site-associated buildings excavated, approximately 50%, as seven courts have been found there. If we are to assume one family of six inhabitants in each house and perhaps four other workers, then with 15 courts the population of Ralswiek may have been around 150 people, which arrives at a population density of roughly 57 individuals per hectare.

Outcome

Ralswiek seems to have been affected greatly by a fire towards the end of the ninth century and does not seem to have been rebuilt immediately, making it relatively one of the most short-lived sites under investigation (Clarke and Ambrosiani, 1995: 109). The end date of 850 CE is given by a hoard of Arabic coins, the latest of which was minted in that same year, thought to have been deposited in the second phase of the settlement for protection from the great fire (Clarke and Ambrosiani, 1995: 109; Herrmann, 1985a: 261). Opinions differ on the extent to which the site was abandoned after the fire. Clarke and Ambrosiani state that the settlement was not rebuilt afterwards, with the assumption that the settlement was abandoned (Clarke and Ambrosiani, 1995: 109). In contrast Kleingärtner's more recent work notes no gap in the occupation of the settlement, stating that re-building began almost immediately after, though that the settlement began to decline afterwards in the mid-9th century (Kleingärtner, 2014: 334). Joachim Herrmann, primary excavator of the site from the 1970s, states only that the entire residential area was destroyed and rebuilt between Periods A and B, but that the jetties and harbour constructions were maintained (Herrmann, 1997: 35). Ostensibly the buildings of Period B were also burned, but not in a single event as they were at the end of Period A (Herrmann, 1997: 35). Herrmann's discussion of the settlement periods divides the settlement phases into three '*Großperiode*' ('Big' periods), and the temporal separation between *Großperiode* 1 and 2 (roughly 100 years) as well as the cultural change to an identifiably Slavic settlement, clearly cuts off the first settlement from the latter redevelopments (Herrmann, 1997: 37). It is possible that the responsibilities of Ralswiek were taken up by Wolin after its decline, but as the cemetery was in use until the mid-11th century, the population certainly did not disperse entirely (Callmer, 1994: 66; Clarke and Ambrosiani, 1995: 109). Put simply, the settlement declines significant, and the resulting population movement is uncertain.

MENZLIN/GÖRKE



Figure 5.6 –Map of Menzlin and Görke, Germany. Both areas are maximal, based on site walking rather than excavation, adapted from Kleingärtner, 2014:399.

The cemetery at Menzlin is indicated in lighter weighting.

Excavation History

The first traces of an Early Medieval settlement at Menzlin came to light in 1929, with the discovery of some pottery, a spindlewhorl, beads, and broken weaponry (Kleingärtner, 2014: 346). The excavation of a purportedly Bronze Age hill in 1938 records the finding of a Slavic urn but it was only in 1963, with the discovery of another Slavic urn, that formal excavations were initiated (Kleingärtner, 2014: 346). These excavations, under the direction of Ulrich Schoknecht, dug the remains of four houses, as well as part of the graveyard, and the first traces of a roadway through the settlement (Kleingärtner, 2011: 178). Excavation resumed in the 1990s and over the next twenty years numerous small excavations were carried out mapping the site and its functions (Herrmann, 1985a; Kleingärtner, 2014: 346–347). Geophysical prospection began in the early 2000s, conducted by a team from Christian-Albrechts University in Kiel, and though conditions at the site have hindered the production of good results, an area of around 12 hectares has been prospected (Kleingärtner, 2011: 178). Menzlin's 'companion site', Görke, has also not been excavated extensively. The first finds at Görke were uncovered in 1927. No work was then conducted at the site until 1958, and since that date only surface prospection, site-walking, and a small amount of rescue archaeology has taken place. The only known traces of Menzlin are of scattered artefacts across a 30 hectare area (Kleingärtner, 2014: 389).

For this site in particular it is important to note that inconsistencies in the data presented here may occur, as overwhelmingly the site has mostly been published in German, and occasionally Polish. As an example, only three references out of 58 in Donat Wehner's comparative analysis of Menzlin and Wolin are English-language publications, two of which are palaeobotanical studies (very important but ultimately outside the scope of this analysis), and the other a citation of an exhibition from the National Museum of Lithuania (Wehner, 2010: 264–266). Some translations have been possible, and the minimum amount of information necessary to complete this analysis has been gathered, but some information has almost certainly been missed.

Historical Attribution

The contemporary (Early Medieval) name of the settlement is unknown, as there are no known written records. Discussions of the settlement are thus the responsibility of archaeology, as there was no historic town to search for as in the cases of Reric/Groß Strömkendorf and Jumne/Wolin.

Environment

Menzlin and Görke are located in Germany, not on the Baltic coast, but on the River Peene. Menzlin lies slightly north (this distance being necessary because of the particularly marshy land in the Mecklenburg-West Pomerania region) on a sandy ridge, with a cemetery located not more than 50m to the east on a rocky outcrop. The sites known as Görke extends down the western side of a smaller river just to the south of the Peene (Clarke and Ambrosiani, 1995: 112). The River Peene is a significant tributary of the Szczecin or Oder lagoon, lying 15km upstream of the only large western-flowing river of the lagoon. The site is also suspected to lie on an Iron Age road which connected the Elbe region to the mouth of the Oder, at its confluence with the River Peene (Herrmann, 1985a: 261). The small river to the south of Menzlin, which cuts through the theorised settled area of Görke is thought to have provided a link to inland waterways spreading across the region, providing access to the hinterland (Kleingärtner, 2011: 177).

Preservation conditions at the settlement have greatly impacted the possibilities for archaeological excavation. It has been greatly affected by both agricultural erosion (though the specific area is no longer farmed), and the fact that a railway for beet transportation from the modern village of Menzlin to the river built at the end of the 19th century cuts through the site (Kleingärtner, 2014: 348). The graveyard to the east has been impacted by gravel mining and sand extraction, and even the future potential for excavation of the settlement, including further geophysical prospection, is not promising (Kleingärtner, 2014: 348). This lack of extensive excavation due to environmental damage has likely affected the position of Menzlin in the currently-understood hierarchy of Early Medieval settlements in the Baltic (Sindbæk, 2007: 67).

Material

The earliest dates at Menzlin come from the mid-8th century, and are supported by both dendrochronological dates and artefact finds (Kleingärtner, 2011: 187). A single brooch from the western Baltic, dated at the start of the 7th century has been found, but in the absence of any other evidence for that date the brooch must be considered an item that was in use for an extensive amount of time (Wehner, 2010: 258). A phase chronology of the site has been difficult to ascertain, given the bad preservation at the site, but it is thought that the settlement was divided into parcels or quarters, connected to each other by some sort of planned road system running across the settlement from southwest to northeast (Kleingärtner, 2007, 2014: 348). Workshop houses have been found, for various crafts including leatherworking, ironworking, and textile manufacturing, though no economic or function division of the parcelling of the site can be accounted for. A large harbour or port was also likely in operation, but no traces of any related constructions have been found (Kleingärtner, 2007). While no fortifications have been found at the site, a roadway leading out of the site to the south has been found, connected to the remains of a bridge over the River Peene (Kleingärtner, 2011: 178). Though it has clearly been difficult due to the preservation conditions to establish an 'area' for the Early Medieval settlement, analysis of artefact scatter indicates that the site could have been up to 26 hectares in areal extent, slightly smaller than the 30 hectares over which artefacts have been found (Kleingärtner, 2014: 399). A burial area to the east of the settlement is known, but only 33 cremation graves inside eight boat-shaped stone-settings have been excavated (Gerds, 2006: 154), though geophysical survey has thus far counted between 500 and 700 burials at the site (Kleingärtner, 2011: 178).

Compilation and publication of the finds from Görke is said to be in progress, but no burials or structures are known from the site. The finds thus far suggest a centre involved in supra-regional trade, at about the same time as Menzlin (Kleingärtner, 2011: 177). Site-walking at the site indicates a maximal areal extent of up to 40 hectares (Figure 5.6).

Social

International (i.e. western Baltic) control of the settlement has been suggested, as there is no evidence of self-governance (the large building projects of fortification or infrastructure usually provided as proof of a ruler) (Wehner, 2010: 258–259, 264). This is echoed by Mateusz Bogucki, who sees Menzlin along with related settlements on the northern German coast as having been established by foreign Scandinavian powers in co-operation with the locals in the region – the logic proposed here suggests that the social structure of the ‘emporia’ (i.e. relatively egalitarian) was not familiar to the local Slavs (Bogucki, 2012: 108). As has been suggested for the other settlements and Burgwälle on the northern Germanic coast, a connection between Menzlin and the nearby ramparts of Grüttau, around 8 kilometres away, has been proposed (Kleingärtner, 2014: 144). The dating of Grüttau, though not attributed with much certainty in the literature, is tentatively set at around 100 years after the emergence of Menzlin (Wehner, 2010: 258), which may more than anything speak to the emergent properties of the cultural landscape of Mecklenburg-Vorpommern in the context of Slavic expansion. While indeed 8km is not a particularly difficult distance to travel in an emergency situation (such is the relationship between the two suggested by Kleingärtner), the ease of loading and transporting the volume of goods that would have been present at any particular moment in a settlement such as Menzlin must be questioned. There is no archaeological evidence (thus uncovered) of attacks on Menzlin, but there must have been an awareness of those events at that neighbouring settlement.

Two obvious possibilities present themselves here (or indeed some combination of the two) – either these trade settlements were rogues, operating outside of the command and thus protection of local powers, or they were not seen as worth the effort of rampart construction. This endeavour, the construction of ramparts or enclosing walls, is generally seen at least in the western Baltic as evidence of kingly or centralised power (Roesdahl, 2012: 655), and thus here it is suggested that the lack of fortification at Menzlin is evidence of an emerging cultural landscape. The first stages of construction at Menzlin and the related settlements in the region is suggested as being “almost contemporaneous” with the first movements of Slavic peoples into the shores of the

southern Baltic (Kempke, 2001: 13, as cited in Wehner, 2010: 259), thus their initial form was perhaps not more than an opportunistic seizing of the advantages of the coastal exposure these groups now had. A later relationship between Menzlin and Grütto is certain (Wehner, 2010: 259), and a lack of fortification in the initial phase is hardly unprecedented in this investigation. The population of Menzlin, using the upper number of graves currently counted and an operation timeline of 745 CE (the earliest dendrochronological date) to roughly 900 CE gives a minimum population estimate of around 282 individuals.

The economic character of Menzlin is noted as being quite similar to that of Ralswiek (Herrmann, 1985a: 261) though considerably larger, with accounts of the size of the settlement varying from 10 hectares (Clarke and Ambrosiani, 1995: 110) to over 12 hectares (Callmer, 1994: 61; Wehner, 2010: 258). Finds of animals used for both consumption and craftworking suggests local provenance, though whether they were brought in from the hinterland or kept at the site is uncertain (Wehner, 2010: 263). Artefacts unearthed at the site show evidence of comb, amber, and knife production, and a significant amount of bronze and iron goods suggest Menzlin as a centre for metal-working (Callmer, 1994: 61; Herrmann, 1985a: 262–263). Raw material from the fertile surrounding areas, including horn, antler, furs, honey, herring, wax, and salt, were brought to the settlement for processing using foreign tools, such as spindlewhorls and grindstones, though in the case of glass and precious stones raw material was imported from abroad to be worked and redistributed (Kleingärtner, 2011: 183). Sindbæk's 'Black Box' network analysis of ceramic cooking vessels notes Fresendorf-type, steatite, and Muschelgrus-type pottery respectively at the site, suggesting contact with local Slavic potters, Norway, and Frisia (Sindbæk, 2013). This analysis, which indicates a certain amount of similarity with the settlements of Kaupang, Jarrestad, and Starigard-Oldenburg and places Menzlin in quite a central position, thus suggests the settlement as a location with a particular importance for or relationship to long-distance trade (Sindbæk, 2013: 85–86). Glass vessels, carnelian beads, Scandinavian jewellery and jars from Birka, albeit mostly fragmentary, have also been found at the site (Herrmann, 1985a: 261). This is questioned by Bogucki, who notes that the role of Menzlin in international trade may be low-level, as only one dirham has been found at Menzlin

(Bogucki, 2010a: 270), but a later point about the silver economy likely spilling over into the hinterland at high-profile sites like Truso may lead to this being a comment on the character of the hinterland rather than of the settlement. As there was no standardised currency across the Baltic during the Early Medieval period it is entirely possible that a recently-arrived or more subsistence-based population would be more interested in barter than monetary wealth. In the area of the trade settlement 14 later-period weights, often used for currency have been found thus far, though new finds appear every year (Brather et al., 2012: 218).

The cemetery at Menzlin contains both burial mounds very similar to those found in particular on Jutland in Denmark and small stone ships, boat-shaped stone circles which appear across the Baltic from the Bronze Age, thought to symbolically represent an individual's journey from life to death (as of course most long journeys were conducted over sea) (Clarke and Ambrosiani, 1995: 110; Skoglund, 2008: 399). It is important to note that, despite suggestions to the contrary (Callmer, 1994: 61; Herrmann, 1985a: 263; Wehner, 2010: 258), the presence of stone ships does not mean western Baltic control. Stone ships are found across the Baltic from the Bronze Age. In fact in their 'first appearance', as they seem to appear in two main phases, they are primarily seen in four regions; Gotland in modern Sweden, Saaremaa in modern Estonia, Bornholm in modern Denmark, and the Åland Islands, now Finland (Wehlin, 2012: 198). The considerable presence of Scandinavian grave goods and cobble-stone street paving certainly suggests a western Baltic presence, but there is a mix of Scandinavian and Slavonic items are found in the graves at Menzlin (Callmer, 1994: 61; Wehner, 2010: 258). Burial goods found in graves at Görke indicate occupants of a higher social status, and it has been suggested that the individuals residing there may have controlled the trade which took place at Menzlin (Clarke and Ambrosiani, 1995: 110–112). The Görke settlement is suggested by Herrmann as the predecessor of Menzlin due to the pottery evidence (no more clarity is given) (Herrmann, 1985a: 264), though in general it seems like a significant lack of excavation at the southern settlement has hampered the gathering of more context. The bad preservation conditions at Menzlin are likely replicated at Görke, so this is unlikely to be resolved any time soon.

Outcome

The latest dendrochronology dates at Menzlin come from 846 CE, though finds in the cemetery speak to the existence of the site through to the end of the 9th century, tentatively dating the ‘end’ of the settlement to around 900 CE (Kleingärtner, 2011: 186–187). The settlement of Usedom, around 20km away on an island of the same name, seems to emerge at around about the same time that Menzlin declines, and the evidence present at both sites suggests a highly mobile population that relocated (Kleingärtner, 2007). Both settlements (Figure 5.6) share a strong western Baltic influence in burial practices, similar trade connections, and clear connections to the hinterland, discarding the possibility that a change in external circumstances or the environmental situation influenced the decision to shift the location of the site (Kleingärtner, 2007). The possibility that the trade connections at Menzlin were transferred to Wolin has also been proposed (Bogucki, 2013: 356). Other than a theory that the end of Menzlin was connected to the end of Groß Strömkendorf and Rostock/Dierkow (Gerds, 2001: 118)⁶², no specific theories for the decline of the settlement are proposed.



Figure 5.7 – Map of Menzlin and its theorised possible successors, Usedom and Wolin.

⁶² Which is difficult to quantify given the former did not last past the first decade of the ninth century.

Excavation History

Known historically as Jumne, the home of the legendary Jomsvikings, Wolin is located on an island of the same name, close to the Polish-German border on the Dziwna River. Research into and excavation of this settlement began in the 19th century, and true to the archaeological priorities of the day, it was identified as the legendary city (Buko, 2008: 247–248). Excavations were conducted throughout the pre- and post-war periods but modern work has generally been rescue excavation as the town still hosts a population of roughly 5000 people (Filipowiak, 2004: 47). The High Medieval harbour was discovered in 1952 when a bridge over the Dziwna river was constructed to connect the island with the mainland (Janowski, 2013: 45). Due to the fact that the Wolin of today covers the Early Medieval settlement to a fairly significant extent, non-rescue excavations from the mid-1980s until recently have been focussed on the harbour, establishing dates for the earliest wharves, mapping the palisades and other harbour constructions, and uncovering a shipwreck from the Early Medieval period (Janowski, 2013: 46–49). No monograph about the site has been published, though it has been the subject of many book chapters and journal articles (Buko, 2008: 248).

Historical Attribution

Well-acknowledged in the literature, the settlement has been known known by many names⁶³; Jumne is given by Adam of Bremen (“a most noble city... a very widely known trading centre” (Book 2, Chapter XXII)), *Julinuim* by Saxo Grammaticus (Petrulevich, 2009: 66), and *Jomsbórg* by an anonymous Icelandic author in the *Jómsvíkinga Saga* (Blake, 1962: vii). Ibrahim ibn Ya’qūb (alternatively Abraham ben Jacob), a Jewish traveller from Tortosa in Spain (Ashtor, 2007) mentions a community of Slavs known as Walītābā, presumed to be Wolinians, as having “a big town on the surrounding sea, which has twelve gates and a harbour, and they have there very good rules for their port” (Rapoport, 1929: 337). In this same text Ibn Ya’qūb mentions that the inhabitants of this town are at war with ‘Meshek’, presumably referring Mieszko, the first ruler of Poland who attempted to conquer Wolin in 967 CE (Filipowiak, 2004: 68). Adam of Bremen tells that King Harald Bluetooth of Denmark fled to Jumne in 986 after being betrayed

⁶³ A full list, etymology of, and discussion of these is given by Petrulevich, 2009)

and attacked by his son Sven Forkbeard in a religious revolt, dying there shortly afterwards (Book 2, Chapter XXV). Due to this extensive history and also to an excellent regional museum the site has received a significant amount of research funding and attention, with a reconstruction of the settlement built just across the Dziwna River from the archaeological site open for public visits and hosting a yearly Viking festival.

Environment

Located on the Dziwna River, five kilometres upstream from the Szczecin/Oder Lagoon, Wolin lies in a strategic and well-protected location. The entry point to the Dziwna from the Baltic is roughly 25 kilometres away, with only two other entry points into the lagoon at Swinoujście (in Poland) and Peenemünde (Germany) available. Many small rivers feed into the lagoon, including the Peene, the Ziese and the Uecker, but the largest and strategically most important is the Oder, which rises in the Czech Republic, navigates the length of Poland to the Baltic, and has a total length of 854 kilometres. Despite the fact that in general shorelines in the southern Baltic have not changed greatly since the medieval period, Wolin and the general Oder area seem to have suffered greatly from shoreline degradation which has affected archaeological research. While an extensive rescue analysis has not been conducted on the site in particular, Wolin Island has been shown to erode particularly badly – the nearby hillfort of the medieval town of Lubin on the western coast of the lagoon, once hundreds of metres back, is now falling into it (Krajewski, 2013: 19). Most maps of the settlement in fact indicate a regression of the waterline of up to 150 metres at the southern part end (Janowski, 2013: 46). Settlement in the area stretches back at least to the early Iron Age, with traces of habitation found near the village of Reclaw, just across the river from Wolin. Filipowiak suggests the existence of a latitudinal trade route running parallel to the southern shore of the Baltic, using evidence from Adam of Bremen's description of an overland trade route from Hamburg to Wolin (Filipowiak, 2015: 324).

Material

It is generally thought that settlement at Wolin dates at least to the 5th century, with a thick layer of charcoal dated to 450 CE (Filipowiak, 2004: 47). Later fragmented finds of Polish pottery contemporaneous with burials at Mecklenburg are dated to the end of

the 5th and early 6th centuries CE, but the destruction of these earlier traces of settlement due to 8th and 9th century levelling leave not much more to be divined about migration period Wolin (Bogucki, 2012: 91; Filipowiak, 2004: 47–49). Carbon dating indicates that Wolin was certainly occupied from the mid-7th century onwards, but the first building traces of the Early Medieval settlement are the remains of a palisade in the central part of the settlement, dated to the early 9th century (Filipowiak, 2004: 50). The entire central area of the settlement, at 6.4 hectares, was fortified towards the end of the 9th century, and shortly afterwards two suburban areas began to grow. One towards the south, in an area between the marshes below the central settlement and the banks of the Dziwna, which was itself fortified at the start of the 10th century (5.3 hectares), and one in the northern part of the central settlement (10.9 hectares), which was protected by a late 9th/ early 10th-century palisade (Bogucki, 2012: 92; Filipowiak, 2004: 50–51). Overall, Wolin over the three fortified areas was around 22.6 hectares in size. At the beginning of the 10th century the fortifications at the central settlement were re-built, with a palisade constructed of large split logs hewn into an earthen rampart making fortifications 4.5 metres high. All of these fortifications left the encircled areas open to the Dziwna River, protecting them only from the land side (Filipowiak, 2004: 51–52). These data suggest that the ‘official’ Early Medieval settlement began at the start of the 9th century with the filling and levelling of the migration period stratigraphy, dated by the presence of Germanic-type pottery within the fill layer, but it is entirely likely that Slavic settlement began at the site around 200 years earlier. A street which ran perpendicular to the shoreline, connecting the central part of the settlement to a wooden jetty, was also re-built twice between 900 and 995 CE (Bogucki, 2012: 92). Cemeteries and burial mounds are found to the west, south, and the north of the main settlement areas at Wolin though not much is known about them. The northern cemetery, named as Młynówka, contains at a minimum two thousand graves dated to the 10th and 12th centuries, while the southern cemetery is much smaller (Clarke and Ambrosiani, 1995: 114–115). The difficulty inherent in excavating the medieval layers of a modern town is represented in the distinct lack of specificity around early Wolin; “the large area of the urban complex still hides many secrets” (Filipowiak, 2004: 50).

Social

Despite the ‘foundation’ of Early Medieval Wolin taking place around the early 9th century, the site only really became recognisable as a settlement of the type discussed here towards the end of that century, with the construction of fortifications and the appearance of items suggesting long-distance trade. Mateusz Bogucki considers the site as being of *emporium* character from the 9th century, and thus here a commencement date of 800 CE is accepted, with the caveat that it is a murky figure. Alternatively, it has been proposed that before the 10th century the functions fulfilled by the site were likely much more those of a central place rather than a ‘nodal point’, with little evidence of long-distance trade and a topographic logic of ‘accessibility’ rather than ‘defensibility’ (Sindbæk, 2009: 76). There is a lot of discussion of royal control of Wolin, including a rather odd proposal in a translation of Adam of Bremen’s *Gesta* that Harald Bluetooth founded the site in the 10th century (Tschan, 1959: 66). While control of Wolin after the second half of the 10th century clearly is accepted as being wielded by Mieszko of Poland (Filipowiak, 2004: 68–69), the extensive fortifications and the re-building of both these fortifications and public infrastructure suggests, if not royal control, then at least some form of administration. Hook-construction ramparts constructed during Mieszko’s rule are commonly used as archaeological support for his control of the site (Filipowiak, 2004: 68; Urbańczyk, 2013: 66) The discussion of the site’s foundation in the *Gesta* likely refers to the theorised ‘Danish domination’ of Wolin, which took the settlement from Mieszko’s control around 983CE in the third phase of control at the site. This ended in 987 CE with control of Sven Forkbeard’s kingdoms being taken by Eric the Victorious, transferring his lands to Swedish ownership, which in turn came to an end in 995 CE with Eric’s death, ending in a period of relative uncertainty (Urbańczyk, 2013: 66–67). One suspects this history is more related to the sphere of influence wielded by each king rather than the clear establishment of rule over the settlement, that the sites were surveilled by the relevant parties and not much more. Urbańczyk’s much cleaner description of a “changing politico-military dominance of various powers interesting in controlling this strategic place...a rather declarative than factual domination” (Urbańczyk, 2013: 66–67) seems to fit well. The lack of a wielding of clear and formalised power at the site is supported by Ibrahim ibn Ya’qūb’s note that the inhabitants of

Walītābā “have no king and trade with no one. Their judges are their old men” (Lunde and Stone, 2012: 166).



Figure 5.9 - Modern view looking south from Wolin's central settlement.

To the right, in the grassed area, the town would have lay (Thoeming, 2015).

Calculating the population of Wolin is difficult, given the lack of information about burials dated to the 9th century. The fact that the modern town lies on top of the Early Medieval one makes counting of plots or house foundations equally difficult. One particular report on the demise of the settlement in the mid-11th century estimates the population of the town at 8000 individuals on palaeobotanical evidence (Broich, 2015). No source is given for this evidence, and despite the fact that this number of inhabitants would explain the town's downfall (the I-C Matrix suggests that a settlement with a density approaching 1000 individuals per hectare, regardless of its size, is

problematically dense), this number is particularly incongruous when compared to the larger and more influential settlements of Hedeby and Birka, with populations of no more than 1500 individuals. The Młynówka cemetery dated to the 10th and 12th centuries with 2000 burials is about the only possibility for this calculation and, assuming operation over the entire three hundred-year period, facilitates a population estimate of around 420 individuals. The population density of the site during the 10th and 12th centuries is thus only around 19 individuals per hectare, disproportionately small for its size and the objects being traded and produced. It is suspected in the case of Wolin that the necessary information is not yet available to make a conclusive estimate of population and population density, and must be considered very much a minimum estimate. Objects related to blacksmithing (though finds of iron slag), goldsmithing, leather, textile, amber and horn-working throughout the site provides evidence of the activities that those inhabitants were involved with on a day-to-day basis (Bogucki, 2012: 92; Clarke and Ambrosiani, 1995: 115), and evidence of Rhenish techniques in glassworking in particular suggests that either there were very strong connections with western Germany, or that merchants from that region lived at Wolin – Saxon workers were certainly resident at the site (Filipowiak, 2004: 59). A set of military items found and dated to the last quarter of the 10th century suggests that Danish soldiers may have also lived there (Filipowiak, 2004: 68), suggesting a significant multiethnic character to the site.

A hoard of Byzantine *solidi* coins found near to Wolin, dated to the period pre-dating the formal establishment of the settlement, speaks to the trade connections of the site even in its early years (Bogucki, 2012: 91–92). The pottery found at the site during its earlier periods is mostly Slavic, but Frisian pottery and Rhineland Tating-ware appear later on (Filipowiak, 2004: 49). The wreck of a clinker-style ship (similar to a Scandinavian *knarr*) dated to the second half of the twelfth century has been used to discuss Wolin's relationship with its hinterland. The style of ship and modifications optimise it for river travel (and sea travel if sails were raised), and the wood used in construction is local, suggesting materials for the ship were sourced locally, and that the ship in turn was used to carry goods up and down waterways in the local area (Filipowiak, 2015). Several stave-built houses found at the settlement are made of non-

local wood, probably oak from near Szczecin, highlighting connections even further than the immediate hinterland (Filipowiak, 2004: 53).

Outcome

The end of the Early Medieval settlement, though not of the settlement by any means, is dated to 967 CE, with the capture of the settlement by Mieszko I of Poland. The decision to attack and take over the site may have been due to the connections it maintained with the Baltic Sea, and the wider trade networks of the region. Mieszko, as the first of the Piast dynasty, had established rule over Greater Poland and an intensification of trade with both this region and the Western Baltic, as seen in archaeological evidence dated to the 10th century, may be evidence of this transfer of leadership (Filipowiak, 2004: 68). The flow of Arabic silver from the western Baltic would have served as a clear incentive for his movement on Wolin, as well as on the other important stronghold on the southern side of the Szczecin Lagoon, Szczecin, which with its strong inland connections with the other Slavic tribes, was likely an obvious complement to the outward-focused Wolin, thus completing an expansive strategy (Urbańczyk, 2013: 64). Alternatively, aggression from the Pomeranian region directed towards Mieszko and interpreted as challenging the growing Polish state as a hub of resistance may have incited the attack (Leciejewicz, 1997a: 96). Despite the succeeding changes in rule discussed earlier, Wolin seems to have flourished economically, this period suspected as being the one which inspired the legend of the Jomsvikings of Wolin (Leciejewicz, 1997a: 97). The actual settlement may have been destroyed or at least significantly damaged in 1043 CE by King Magnus of Norway (Duczko, 2014: 144). This was perhaps more an end to the period of economic prosperity experienced by Wolin rather than the end of the settlement itself (Urbańczyk, 2013: 67), which certainly continued into the twelfth century. In 1140 CE Pope Innocent II created a diocese centered at Wolin, in 1181 the dukes of Pomerania pledged their loyalty to the Holy Roman Emperor rather than the Polish King, and the cemeteries were used well into the 12th century. The modern town bears the same name, and thus the settlement may have unbroken continuity to today. Wolin must thus be considered as a settlement with two phases, the first fairly autonomous and internally generative, the second

characterised by significant attention from external sources, the settlement reaping the benefits of this increased importance.

OTHER SETTLEMENTS



Figure 5.10 – Map of other settlements of interest in the southern Baltic.

There are several settlements which may, with more attention and excavation, reveal themselves as settlements of the same type on which this thesis is focussed. Mecklenburg, located near Wismar, is known to have been the princely seat of the Obodrite confederation from the migration period, and was thought before the discovery of Groß Strömkendorf to have been the location of the historically important site of Reric (Callmer, 1994: 57). Fortifications enclosing 1.85 hectares of space were built and subsequently re-built at the site in the seventh century. Traces of settlement have been uncovered, but the placement of a cemetery on top of the stronghold in the 19th century and use of the surrounding areas (thought to be a *suburbium*) for agriculture have greatly affected the potential for excavation (Herrmann, 1985a: 251). The settlement of Dierkow, despite being mentioned often in literature discussing this phenomenon across the Baltic and in the context of the southern Baltic landscape in the

Early Medieval period (Barford, 2005: 75; Bogucki, 2010a: 268, 2012: 108; Sindbæk, 2009: 73), is rarely discussed extensively, at least in English-language publications. At around 4 hectares with permanent occupation in the late 8th century before seeing decline in the second half of the 9th century (at around about the same time as Ralswiek and Menzlin, potentially due to the rise of Wolin, which would be a very interesting hypothesis to test), the settlement fits well into the model being explored here (Callmer, 1994: 61, 66). Rough dates for a few of these sites are known, however, and so they can be integrated into basic discussions of the settlements under investigation here. The sites of Bardy-Świelubie and Arkona have been excavated to a degree approaching those under investigation here and thus their potential for inclusion in this model will be discussed briefly.

Bardy-Świelubie / Kołobrzeg

The site of Bardy-Świelubie is mentioned often, but information is sparse – the two names refer to two different sites that are thought to have operated in tandem; a stronghold known as Bardy, and a cemetery given the name Świelubie (Bogucki, 2012: 97). The site complex likely developed in the first half of the ninth century (Callmer, 1994: 65) and may have been of multi-ethnic character (Buko, 2008: 89). 106 burial mounds are known from the cemetery associated with the settlement, several of which include Scandinavian burial goods, though whether or not this suggests western Baltic settlement or merely western Baltic influence is debated (Bogucki, 2012: 97; Clarke and Ambrosiani, 1995: 115; Maleszka, 2001: 105). The complex lies roughly 5 kilometres from the Baltic Sea on the Parczęta river. There seem to be several settlement clusters on that stretch of river including a small fortress (Leciejewicz and Rębkowski, 2004: 37), and primary local resource was likely the salt-pans near the Baltic confluence (Bogucki, 2012: 97). This could speak to an interesting variant in the pattern being discussed here; the foundation of settlements that ostensibly fit the pattern being presented and discussed here, but with natural resources a primary concern in the selection of the site. This was perhaps the case at Wiskiauten with its abundant natural amber resources. With more information it could certainly be possible to include sites of this type into the model being examined and tested in this thesis, though more in the context of the settlement form which followed this one. Similarities between the high medieval successor town of

Kołobrzeg and the towns of the western Baltic (Schleswig, Sigtuna, etc.) are clear (Bogucki, 2012; Leciejewicz, 1997b: 97–99). Kołobrzeg was first a stronghold, built in the mid-9th century, before the settlement took on workshop characteristics at the turn of the 9th and 10th centuries (Leciejewicz, 1997b: 134). With the small amount of information currently accessible Bardy-Świelubie and Kołobrzeg are hard to discuss extensively, though the potential has not gone unnoticed (Barford, 2005: 76).

Arkona

Though traditionally viewed as a sanctuary or cult site, the status of the site of Arkona, or Jaromarsburg, as a trade settlement has been proposed (Herrmann, 1985a). Saxo Grammaticus details a visit to the site in the 12th century presumably just before its destruction in 1168 or 1169 CE, noting a large log-built temple, inside it a statue of the Slavic god Svantovit and outside an intricately carved fence enclosing a large yard, (Book XIV, 39.34). The ritual activities described by Saxo seem to match the archaeological evidence since unearthed, and has been a major factor in the decision to excavate the site over the years (Tummuscheit, 2006: 236). The site of Arkona is located on the Wittow Peninsula, the north-westernmost tip of Rügen Island, jutting into the Baltic Sea. The area has been badly affected by erosion, with the 50 metre high chalk cliff upon which the site was previously located having been lost at a rate of up to 50 centimetres per year between 1860 and 1999, leaving the remaining traces in an almost beach-like location – in 1000 CE the land likely extended between 100 and 200 metres further into the Baltic Sea (Tummuscheit, 2006: 234). The site is thought to have had two ramparts, an inner rampart from the 9th and 10th centuries and an outer rampart of uncertain date – the entirety of the land inside the inner rampart has been lost due to the erosion (Herrmann, 1985a: 252).

Excavations at the site thus far have been inconclusive as far as the character of the site was concerned – historical sources suggest a cult site, some archaeological evidence suggests cultic or sacrificial activity, the rampart suggests use as a *Burgwalle*, and the loss of at least half of the site due to coastal erosion likely means that no conclusion will be made any time soon. Joachim Herrmann cites finds from the ninth-twelfth century from the Baltic and the British Isles as evidence of trading activities taking place at the

site, but notes that the only traces of settlement likely are that of tents or very temporary buildings being erected inside the ramparts of the settlement (Herrmann, 1985a: 254). These artefacts could have been left as tributes or gifts at the cult site, and the 'settlement' not more than temporary relocation to the site as a stronghold in times of crisis. This interpretation could be made due to not only the small number of finds and very small size of the stronghold, but also the nearby site of Ralswiek, less than three kilometres away. The primary evidence of settlement activity between the ninth and twelfth centuries being fire-pits (Tummuscheit, 2006: 235) speaks to this, rather than postholes or significant traces of food waste. Tummuscheit also notes that house structures could have been those of the Slavonic log-cabin which did not leave post-holes or remains similar to the Scandinavian sunken-floored pit-houses found across the rest of the Baltic (Tummuscheit, 2006: 237), but one should perhaps expect some evidence of human activity through either dark earth or other settlement activities (food wastage, craft production, etc.), and notably no pottery has been found at the site. Two phases of rampart construction are in evidence, with the first rampart constructed in the first half of the ninth century and destroyed in the last half of the tenth, a second rampart was built before the end of the tenth century and is extant (Tummuscheit, 2006: 235). Arkona's defences were clearly very important given the possibly immediate reconstruction of the rampart and this could be explained in several ways; there could have been a resident population who needed protection from the marauders of the *Mare Barbaricum*, the rampart may have been the closest refuge point for the local rural population, or the religious importance of the site may have been particularly significant (among of course many other possibilities). It is possible that Arkona could have taken up the trade concerns of Ralswiek, roughly 23 kilometres away, after its end in the mid-9th century; the timelines match up.

CONCLUSIONS

Just as in the western Baltic, in the southern Baltic the cultural landscape was far from simple. In addition to the settlement types discussed here there were at least two other forms visible on the landscape, as well as the rural villages which likely dotted the southern Baltic coast and areas immediately inland. *Burgwalle* or *Gords* were very

common across southern Baltic, as well as political or royal centres (likely strategically adopted *burgwalle* of great influence). The functions of both of these likely overlapped with the settlements under investigation here, in particular in the production of crafts and distribution of traded objects (Clarke and Ambrosiani, 1995: 108–109). Ralswiek and the political centre at Rugard are speculated to have been particularly closely connected, though a stated similar connection between Menzlin and Görke seems less well-supported, archaeologically (Herrmann, 1985a: 263–264). A three-part relationship is even suggested between Menzlin⁶⁴, Wolin, and Szczecin, each taking over the others' responsibilities, relatively in the early to mid-10th century and the beginning of the 12th century (Bogucki, 2013: 356).

High Medieval settlements in the southern Baltic, *Burgstädte*, are often discussed as multifunctional amalgamations of two earlier settlement types; those under discussion here and the *Burgwalle* which dotted the country (Kleingärtner, 2011). There are a few clear examples of this; Alt-Lübeck, which emerged around 1000 CE, was connected with the *Burgwalle* of a local Obotrite prince, and the legend of its destruction by a Slavic prince from Rugen in 1138 CE speaks to the political importance of the town (Callmer, 1994: 75; Fehring, 1985: 271). Curiously despite the lack of fortification for all of the settlements discussed here other than Wolin, the *Burgstädte* are almost without exception fortified (Leciejewicz, 1985: 342–343). This strengthens the proposal made throughout this chapter that proximity to hillforts was of primary concern to the Early Medieval settlements. In addition, the earlier *Burgwalle* are thought to have been places of gathering and community (Kobyliński, 1990: 153), and the high medieval towns are thought to have been strategically established by Polanian dukes in places of importance (Leciejewicz, 1985: 342). Kleingärtner specifically raises a concern that these processes are being understood as parallel to, or in the same framework as the consolidation processes which were taking place on the western Baltic coast at roughly the same time, that the *Burgstädte* are being understood as a Slavonic interpretation of the western Baltic settlement with a closely-connected administrative centre, such as Birka and Adelsö, or the later, consolidated town of Sigtuna (Kleingärtner, 2011: 182).

⁶⁴ Rather than the earlier proposed takeover of responsibilities by Usedom.

This supposition presents a worrying idea, that our arguably 'better' (due to more extensive excavation) understanding of the settlements of the western Baltic has coloured our interpretation of those on the southern Baltic coast, when both historically and socio-politically they were regions under very different circumstances. It is of paramount importance to note that this thesis attempts to move away from the legacy of history, presenting a comparative framework for understanding the decline of the settlements under investigation here, and leaving a deep contextual interpretation of the processes involved in their lifespans and trajectories to their experts. Regardless, the settlements of the southern Baltic show clear similarities to those of the western Baltic, and thus are placed well for comparative analysis.

THE EASTERN BALTIC



Figure 6.1 – Map of the settlements of the Eastern Baltic under investigation in this thesis.

INTRODUCTION

To avoid confusion, this region will be referred to as the Eastern Baltic, rather than the Baltic region, despite the fact that today when one refers to the Baltic countries Estonia, Latvia and Lithuania would be brought to mind. The region referenced here is that of these three countries, as well as both eastern Poland and the area now known as the Kaliningrad oblast of the Russian Federation. Culturally (in the medieval period) the area should be seen as bounded roughly by the Baltic Sea in the west, the Elbląg river near the Vistula lagoon in the south, the Gulf of Finland in the north and the current Belarusian/Russian border in the east. These areas are all highly interrelated; ethnographic studies of eastern Russia even until the middle of the 19th century still show a significant Baltic character, and place and river-names of a Baltic character stretch long beyond the Baltic states from the western border of Poland, to Kiev in the south, Moscow in the east, and the Berzha river in the north-east (Gimbutas, 1963:30-31).

Archaeological enquiry into the past of the eastern Baltic has been greatly affected through the second half of the 20th century, due primarily to the incorporation of the three Baltic states into the Soviet Union following the end of World War II. The political machinations of the Soviet Union led to, among other things, the restriction of access to environmental data (Mägi, 2015: 41–42), the use of archaeological enquiry for political gain (Sperling, 2014: 395), and to many archaeologists fleeing their home countries (Vijups, 1999: 122–123)⁶⁵. When Baltic settlements such as Grobiņa were published, the lack of attention given to local artefacts and emphasis on foreign (Scandinavian) artefacts shows a desire to confirm a narrative, rather than engage in objective archaeological enquiry (Virse and Ritums, 2012: 37). Four settlements will be discussed here; the Polish settlement of Truso, the Kaliningrad Oblast settlement of Wiskiauten, the Latvian Grobiņa, and the Russian settlement of Staraya Ladoga. While the last settlement is indeed not part of the eastern Baltic proper as described above, its inclusion is very relevant⁶⁶ and, geographically, it lies to the east of the Baltic.

⁶⁵ Discussed in much greater detail in chapter 3 of this thesis.

⁶⁶ For reasons which will become apparent later on in this chapter.

In future it may be desirable to include the Russian settlements of Ryuriko Gorodischche, Gnezdovo, and even Kiev in this model, as their inception and trajectory strongly mirrors the Early Medieval settlements of the Baltic (Androshchuk, 2013; Nosov, 1993). Technically it would be appropriate to also include Finland, but there has thus far been no evidence found to support the existence of urbanising settlements during the Early Medieval period. Small isolated settlements did exist, and churches were built within them during the High Medieval period mirroring the pattern in the Western Baltic (Edgren, 2012: 470,472), but no settlements of the same type as those explored primarily in this thesis have yet been found.

THE EASTERN BALTIC IN THE EARLY MEDIEVAL

The cultural landscape of the Eastern Baltic was quite different to that of the west and the south. Ethnic diversity was much broader and the abundance of distinct tribes in the region meant that control of well-placed and well-resourced harbours was likely much-contested (Mägi, 2015: 42). In the coastal regions of Estonia, Latvia, and Lithuania alone there were three main tribal groups, the Estonians, the Livs, and the Curonians, and each had their own internal dynamics (Valk, 2012: 486). 9th century sources attest to at least five distinct 'states' within Curonia (Gimbutas, 1963:171). An increase in piracy saw coastal settlements all but disappear in the period preceding the Early Medieval, and it was only in the High Medieval period that settlements were re-established directly on the Baltic Sea (Mägi, 2015: 42–43). The settlement landscape in the Early Medieval period was much like what can be seen in the western Baltic in the period prior; 'village-like' concentrations of farmhouses scattered throughout the country with no significant population density to be found (Plakans, 2011: 14). In general, the interpretation of burial grounds suggests that social life in the eastern Baltic during the Early Medieval period was strongly collectivist, with 'clan' groupings of families (Mägi, 2015: 45). At least a low level of social stratification can be assumed from the presence of specialist craftworkers (Plakans, 2011: 17–19). Hillforts are found spread across the country, and an increase in their number in the Early Medieval Period (Plakans, 2011: 14) may be evidence of localised warfare, functioning as sanctuaries rather than settlement places (Gimbutas, 1963: 180).



Figure 6.2 – Tribal landscape of the Eastern Baltic in the Early and High Medieval Periods.

Prepared from Mägi, 2015:43 and Tvauri, 2012: 26.

The number of settlements in the region is comparatively very low; the lower populations of the countries mentioned and the relatively comprehensively agrarian pre-medieval settlement situation likely contributed to this. Estonia is a particularly curious case– there are no settlements that fit the model being investigated here across the entire country, though this could be due to the heavy restrictions placed on archaeologists by their Soviet-era government (Mägi, 2015: 42). The country is not truly ethnically Baltic (or more correctly Indo-European); the language spoken in the region is Finno-Ugric (as discussed above, this was likely the original language group occupying the area before being pushed north by the Indo-European forefathers of Lithuania and Latvia) and despite the country now being considered as one of the Baltic States the origin of its language excludes it from any discussion of being Baltic in prehistory (Gimbutas, 1963: 21). Viking Age trade certainly passed around and through Estonia and the Finnic lands, particularly through their rivers (Valk, 2012: 486), and large dirham and western European hoards have been found in the country, a significant number more than in either of the other two eastern Baltic countries (Noonan, 1982: 222; Valk, 2012: 487).



Figure 6.3 - A memorial placed on the site of the Salme ship excavations (Thoeming, 2016)

Two large ship burials on the Estonian island of Saaremaa dated to the second half of the 8th century and carrying the remains of at least 42 slain Scandinavians (Allmäe, 2012; Peets, 2013) testifies to the contact and attention that was paid to the region by the inhabitants of the western Baltic (Figure 6.3). Priit Ligi theorised that the island may have not attracted significant attention because of its relatively sparse productivity, but also may have partly controlled the Daugava river trade route as an intermediary. There thus was no need for the permanent marketplaces seen across the rest of the Baltic (Ligi, 1995). The Salme ships suggest that, despite the lack of permanent settlement, there was clearly something valuable on Saaremaa. The appearance of weapons in cemeteries as well as an abundance of hillforts on the island also suggests that the society was strongly hierarchical (Mägi, 2015: 46). On the Estonian mainland, while around 20 fort-and-settlement complexes and 50 settlement sites overall are known from the Early Medieval period (note that here settlement is used only to describe traces of sedentary activity), most Estonians in the Early Medieval period still lived mostly agrarian lives, away from

forts and formal settlements of any kind (Tvauri, 2012: 39–65). Evidence for long-distance trade and exchange in Estonia is concentrated in the hillfort complexes rather than in specialised trading settlements (Tvauri, 2012: 238–239) – perhaps conducted much as it was in the western Baltic, in magnate farms and central places, before the Early Medieval period. A comment in a 2016 exhibition on the Viking Age at the Estonian Maritime Museum in Tallinn by Professor Evald Tõnisson noted that “not a single Varangian could have travelled from the Baltic Sea deep into Europe without passing through (Estonia) and meeting its people”. Surely the possibility that a trade-focussed settlement existed in the strategically important Gulf of Finland, on perhaps the Jägala or Pirita Rivers, cannot be discounted, but at this stage there is no significant evidence supporting the existence of similar settlements. There is evidence for significant contact between Finnic populations and the western Baltic in the Early Medieval, due in part to the resources available in the heavily-forested Finland, though in the High Medieval period Finnic trade was re-oriented towards the emerging Kievan Rus’ state. Language has been suggested as a curious explanation for the lack of settlements. Long-distance trade connections were at the very least a major contributing factor to the development of these settlements, but trade is facilitated by language. The Baltic-Finnish languages, belonging to the Uralic rather than Indo-European language family from whence the Scandinavian and Slavic languages originated, likely made this communication difficult (Mägi, 2015: 46).

Hillforts

A significant part of the cultural landscape of the eastern Baltic during the Early Medieval period was the hillforts which dotted the region. In total, 995 hillforts are known from Lithuania, approximately 500 from Latvia, 133 in Estonia, and around 160 in the Kaliningrad region, though it is thought that only 37 of the 133 Estonian hillforts were in use during the Early Medieval period (Bliujienė et al., 2012: 101; Tvauri, 2012: 45). The hillforts thus far known functioned as central places for local communities, developing and displaying social systems and establishing regional boundaries and areas of influence (von Carnap-Bornheim et al., 2012: 18). In contrast to the southern Baltic, most hillforts in the eastern Baltic have settlements, if not directly adjoining

them, then very close by (Tvauri, 2012: 41). Of the settlements discussed here only Grobiņa and Žardē-Bandužiai have hillforts either inside or very close to them.

Mežotne, situated on the River Lielupe in Latvia, consists of two hillforts with a settlement between them. The hillfort complex mentioned extensively in texts from the 13th century, and has a settlement area ranging across 13 hectares dated to between the 9th and 13th centuries, though rather than having urbanising characteristics seems to be a large rural settlement (Jarockis, 2001; Radinš, 2001: 91). Jersika, on the right bank of the Daugava River in Latvia consists of a 2 hectare hillfort with a fortified 10 hectare settlement surrounding it (Gimbutas, 1963: 169–170). The location was in use from at least 1000 BCE, but fortifications were only added to the settlement in the 10th century (Messal, 2001: 75). Archaeological remains point to the settlement likely being a local administrative centre, with the small number of objects representing long-distance trade suggested as being only representative of social stratification (Radinš, 2001: 92; Valk, 2012: 489). Daugmale is another large hillfort, with habitation in evidence on the hill since around 1000 BCE. Its major growth period was between the 10th and 12th centuries, perhaps in response to increasing tension and warfare across the Baltic (Radinš, 2001: 90; Valk, 2012: 489). Hillforts were markers of local power for the rural communities which dotted the eastern Baltic, functioning as points of contact with regional and supra-regional rulers, points of distribution for goods, and as defensive structures in times of warfare.

TRUSO



Figure 6.4 – Map of Truso, Poland. The western edge of the settlement has been aligned with the Early Medieval shoreline.

Adapted from Bogucki, 2004: 113

Excavation History

The first attempts at locating Truso began in the 16th century, and many sites in the Vistula Lagoon region were proposed as being that of the settlement in subsequent years (Bogucki, 2004: 113; Kalmring, 2015: 397). The location now thought to have been that of Wulfstan's 'almost legendary' Truso was only identified in 1982, the result of a project undertaken by Polish archaeologists to catalogue and register all objects and sites of archaeological significance, and small-scale excavations took place over the following 10 years (Jagodziński, 2010: 40–45). The bulk of excavations (involving aerial photography, geophysical prospection, and formal excavation) at Truso were conducted in the years between 2004 and 2008, with roughly 600 square metres of land investigated (Brather et al., 2012: 337). The preliminary results of these excavations at the site have been fairly extensively published in two volumes, in English, Polish, and German (Brather et al., 2012; Jagodziński, 2010), though disagreement in deep interpretations of the site are clear in the later, more extensive volume (Kalmring, 2015: 401).

Historical Attribution

The settlement is attested historically, mentioned in the travel accounts of Wulfstan of Hedeby and Ohthere of Hålogaland in Norway. Their journey, dated to the late ninth century, describes the settlement as lying seven days and seven nights' sail from Hedeby on the banks of the river Estmere, into which flows the river Ilfing (Elbląg in Polish) (Jesch, 2009: 32). No more information is given the site, and thus the reasons for Wulfstan's journey are unclear. Curiously Wulfstan and Ohthere place Truso in 'Eastland', and account of the customs of the Ests (Estonians), though this could be either a misunderstanding on their part, or a mistranslation on the part of Alfred the Great, to whom the original translation is attested.

Environment

Sitting on the south-eastern shore of the Baltic, Truso is considered ethnically Pomesian/Old Prussian despite being located in the Polish Bay of Gdansk (35 kilometres from the modern Russian border) and thus is considered to belong to the eastern Baltic. The Early Medieval settlement lies below a modern town named Janów Pomorski, or simply Janów (Brather et al., 2012). Truso's nearest contemporary to the west is Wolin,

roughly some three days away, i.e. 3/7ths of the distance from Hedeby, by boat. This significant distance between the two sites is thought to be due to the particularly smooth and relatively unbroken coastline of northern Poland (Hanus, 2015, personal communication). The only two major ‘breaks’ of the Polish Baltic coastline are the aforementioned Gdansk Bay in the far northeast of the country, and Szczecin Lagoon on the German border in the north-west, where the site of Wolin is found. The remains of Truso are found on the former shore of Lake Druzno, which is connected to the Baltic by the Elbląg River. In the 19th century the shoreline of the lake was moved several hundred metres to the southwest due to the polderization of the basin (Jagodziński, 2010: 70). Visitors to the settlement had quite a journey to get to Truso – after entering the Vistula Lagoon ships navigated another sixty kilometres down the coast to reach the mouth of the Elbląg. An easier route may have involved portaging boats across the single kilometre of the Vistula Spit, though no evidence for this has been found. Excavations and reconstructions have been greatly affected by the construction of the Teutonic Hansdorf estate on top of the settlement in the 14th century, the large-scale destruction of historical documents at both provincial and municipal museums during World War II, more recently the illegal collection of artefacts through metal detection, and a generally soggy landscape (Jagodziński, 2010: 47–64, 77). Historical maps also show that the settlement’s rampart was cut through by the construction of a train track, which still today crosses the northern half of the site (Bogucki, 2012: 101).

Material

A concrete start date for Truso is hard to assign. The earliest traces of activity at the site date to the mid-7th century, though permanent occupation at the site is interpreted as being in evidence from the early to mid-9th century (Jagodziński, 2010: 99, 108). Poor preservation at the site has inhibited the use of dendrochronological analysis, traditionally used to date the beginnings of settlement construction, and thus a specific date remains elusive. Jagodziński’s early-9th century start date, along with Mateusz Bogucki’s proposal that perhaps the last quarter of the 8th century could have seen the start of permanent settlement (Bogucki, 2004: 114), have both lead to a hopefully fairly agreeable date of 800 CE taken here. Disagreement is also in evidence in the construction of a phase chronology for the site. In his 2010 publication Jagodziński

favours three phases; the first from the 7th century to the early 9th characterised by seasonal occupation and the production of handicrafts, the second until the mid-9th century characterised by the development of the structure of the site and a permanent character, and the third, until the end of the 10th century, saw the construction of larger buildings and port infrastructure (Jagodziński, 2010: 108). This is further developed and re-framed to the late 8th – early 11th century in his 2012 publication, but countered by an assertion by Sebastian Brather that the development of a chronology with any more specificity than the existence of the site between the early 9th and mid-10th century is not possible (Brather et al., 2012: 300–301; Kalmring, 2015: 401).

A boundary ditch surrounded the site, likely from the date of the first permanent settlement, and a semi-circular rampart around the land-facing boundary is thought to have been in existence during Truso's heyday (Bogucki, 2004: 113; Jagodziński, 2010: 109–110). Regardless, the extent of the site is now well-acknowledged, with the maximal size of the settlement estimated initially at 25 hectares (Jagodziński, 2010: 77, 203) and later at between 12 and 15 hectares (Brather et al., 2012: 296, 336). The earlier estimate seems to be somewhat of a guess, but the latter is said to have been arrived at due to land survey and superficial finds, likely representing a more refined dataset. Taking into account the current level of the Baltic Sea, calculations of the area over which artefact scatter has been found and encircled by the proposed rampart, estimates the size of the settled (land) area at around 26.5 hectares (Brather et al., 2012: 31).

This is certainly a significant size for a dense settlement, perhaps not quite rivalling the size of Hedeby (at 27 hectares), but certainly supports speculation that Truso was the Haithabu or Vineta (Wolin) of east Prussia (Gimbutas, 1963: 143). The structure of the settlement seems particularly similar to other ramparted settlements under investigation here, with a central ditch/stream - potentially re-directed to create this nice division (Brather et al., 2012: 102–103) - running the length of the settlement roughly north to south at its deepest point. A 'communication route' also divided the front and back halves of the settlement into convenient zones (Jagodziński, 2010: 109). Interpretations of landing places at the site before its extensive excavations were that ships were merely beached directly on the sand (Bogucki, 2004: 113). A later settlement plan along with an interpretation given by Jagodziński shows palisades jutting out into

the former lake as well as the deepening of natural trenches to form harbours (Jagodziński, 2010: 108–109). It must be acknowledged that despite the clear focus on the interpretation and identification of infrastructure and features over artefacts in more recent excavations, poor preservation conditions have proved a hindrance, and artefact finds remain the primary source of information on the site (Kalmring, 2015: 401). No cemeteries have been found or excavated in the recent history of the site. A report dated to 1878 discusses finds of horse and human skeletons on the grounds of the Teutonic estate, but no remains were preserved and this graveyard remains elusive (Jagodziński, 2010: 55)

Social

Control of the site is attributed by Jagodziński to Danish settlers, who may have noticed the significant local resources of the site in pre-Medieval visits to the region (Jagodziński, 2010: 202–203). The similarities of the layout of the site with Hedeby cannot be ignored, but this deterministic interpretation must be cautioned. Despite the fact that houses at the site have been interpreted as those of a Scandinavian tradition (Bogucki, 2004: 113) preservation conditions at the site call this clear identification into question (Kalmring, 2015: 402), and it is hard to make this an unquestionable interpretation, though of course it is possible and not unlikely. The discovery of cemeteries and burial remains would go a long way in identifying the ethnicity of the Truso's inhabitants, but until then caution is advised. Truso's population likely changed seasonally, but during peak times a population of 500-1000 individuals is proposed (Brather et al., 2012: 296). It is important to note that without cemeteries or a clear geophysical plan of buildings at the site, this is very much an estimate. With a median estimate of 750 individuals and a 15 hectare settlement, a density of 50 individuals per hectare can be stated. This population within a settlement of 15 hectares would have been particularly dense, rivalling Hedeby and Birka. Given that the measurement conducted as part of this thesis shows a site of 26 hectares, and applying a population of 750 to that size gives a population density of 29 individuals per hectare.

The settlement seems to have been divided into zones, with excavations in the outer (northern) part of the enclosed area (or '*Zentralfläche*') revealing particularly sparse

finds. The 'outer' area of Truso was likely comprised of scattered farmsteads, which had no commercial activities in evidence (Jagodziński, 2010: 109, 398). Significant numbers of weights, coins, and ingots have been found closer to the harbour (Jagodziński, 2010: 109), suggesting that residential and commercial activities were separate. Very clear traces of craftworking has been uncovered at Truso. In particular there is good evidence of blacksmithing, goldsmithing, amber-working (over 10 kilograms have been recorded), and boat-building (with hundreds of rivets and nails found), along with the comb, glass, and textile-working so abundantly recorded in these Early Medieval settlements (Bogucki, 2004: 114). Coin finds at the site establish either direct or indirect trade connections with the Abbasid Caliphate, and Pingsdorf Ware ceramics speak to the international character of the settlement (Brather et al., 2012: 128, 166). The roughly 350 weights and scales found at Truso speak to an involvement with the wider Baltic network which suffered from a lack of coins in the later Early Medieval, thus turning to hacking up both coins and these scales and weights in order to create currency (Jagodziński, 2010: 141).

The settlement is interpreted by its primary excavator, Marek Jagodziński, as a proto-town belonging to the Early Medieval *Seehandelsplätze* phenomenon with developmental phases chronicling western Baltic contact in the earliest phase of the settlement from the mid-7th century (Jagodziński, 2010: 99). Later 9th-century artefacts, millefiori beads likely originating in Italy and Badorf-type pottery suggest contact and/or trade with Christian missionaries, before typically Viking-type finds (as well as possibly their production) and hackweights begin to dominate in the late 9th – late 11th centuries (Jagodziński, 2010: 99–108). Jagodziński's volume shows a clear desire to show parallels to Hedeby or Birka, though it is pointed out by Kalmring that the significant environmental degradation at the site may inhibit his support for the conclusions made about the layout of Truso and its developmental phases (Jagodziński, 2010: 108; Kalmring, 2015: 402).

Outcome

It has been suggested that the settlement was dismantled by the Polish Piasts, (Bogucki, 2012: 102) to whom both the establishment of Poland's geographical borders as they

(roughly) remain today, as well as Poland's integration into the world of Latin Europe is attributed (Pilat, 2002). In the same way that the move from Birka to Sigtuna is attributed to the Christianisation of the region, Piast dynasty perhaps wanted to establish his legitimacy by conquering or destroying 'pagan' strongholds - if Truso could not be conquered, it must therefore be destroyed (Bogucki, 2010b: 162). Archaeologically, the end of the site is thought to date to around the third quarter of the 10th century. Mieszko's theorised destruction of the site is not scientifically, and this date is arrived at by a significant dropoff in finds, with only very few dated to the 11th century (Bogucki, 2004: 114; Jagodziński, 2010: 107). It is generally agreed upon that the site was not abandoned completely, but that its function changed significantly (Bogucki, 2004: 114; Jagodziński, 2010: 108). Despite the relatively smaller amount of excavation conducted at Truso when compared with the bigger sites in the Western Baltic, Truso is widely accepted as a significant player in the Early Medieval landscape of the Baltic (Sindbæk, 2009: 76).

WISKIAUTEN



Figure 6.5 – Map of Wiskiauten, Kaliningrad Oblast, Russia.

Showing areas discussed in the text, adapted from Ibsen and Frenzel, 2010.

Each area noted may have been in use in the Early Medieval Period.

Excavation History

Wiskiauten⁶⁷, located in the Curonian lagoon in the now Kaliningrad Oblast of Russia, has an excavation history dating back to 1865. The first excavations took place in that year upon the discovery of a pair of rusty swords and stirrups by a German military officer, and uncovered the remains of an Early Medieval cemetery (Ibsen, 2013: 241). Similarly to Grobiņa, the burial mounds which predominate the site were interpreted as the remains of a western Baltic colony, exploiting the naturally advantageous defensive position of the Curonian Spit (Ibsen and Frenzel, 2010: 47). A lot is still unknown about the work conducted on the site between then and the post-war period, due to both a lack of early publication and attempts to hide reports and documentation before the destruction of Königsberg Castle during the Second World War. The recovery and the reconstruction of some sort of order to the reports hidden all over the region has significantly hampered further excavation efforts (Ibsen, 2015, personal communication, Ibsen and Frenzel, 2010: 49). Excavations continued through the 1950s and 1970s, but it was only in 1979 that the possibility that a settlement may have existed near the cemeteries was raised by V.I. Kulakov and named as *Kaup* (Ibsen and Frenzel, 2010: 50). Timo Ibsen's recently published PhD thesis set out to address this potential of the site, discussing both the existing research into the settlement (most notably that of Kulakov), and the results of geophysical survey and excavation conducted by the University of Kiel from 2005. The title of the thesis, "*Etwa hier die Siedlung*", or "The settlement is approximately here" in English, is somewhat of a giveaway as to its results. Despite the lack of large-scale evidence for the extent or exact layout of the settlement, the thesis concluded that a Viking Age settlement was likely located very near to, or in the same place as the burial mounds. Ibsen reveals evidence for pre-Viking settlement in the 6th-8th centuries towards the north and the east of the mounds, as well as faint indications of Viking Age (9th-mid 11th century) and finally a high medieval 11th - 13th century occupation (Ibsen, 2009). Since the site's discovery in 1865, around 325 of the 500 mounds in evidence have been excavated "more or less professionally", with many others showing evidence of somewhat less professional excavation (Ibsen, 2013: 241;

⁶⁷ A German name, as the area was East Prussian until 1945, renamed as Mokhovoye by the Soviet government.

Ibsen and Frenzel, 2010: 47). A large Russian/German/Lithuanian excavation in took place in 2014, focussed on the eastern edge of the cemetery (Randsborg et al., 2016: 90).

Historical Attribution

Kaup, or Wiskiauten, is never specifically mentioned in any historical sources. A raid on the Sambian peninsula by Haakon of Denmark is attested during the mid-tenth century, but the only specific reference to the region is about its abundance of amber (Kendrick, 2012). Curiously, the lack of evidence for a settlement (until very recently) has not historically deterred authors from referring to Wiskiauten as a trading post in the same way as Truso; Gimbutas quite specifically names the site a trading centre quite, noting that early finds at the site provide evidence of East Prussian trade and commerce with the western Baltic (Gimbutas, 1963: 143, 158). Despite a lack of substantive evidence for buildings or fortifications nearby, it seems to have always been assumed that there was a settlement in existence contemporary to the cemetery, presumably given its extensive size.

Environment

Wiskiauten lies around 3 kilometres from the Baltic Sea, very close to the now silted-up Brokist Bay. The bay may have been used to block trade vessels from entering the settlement by lining up knarr-type vessels (the slow, heavy trading ships mentioned in earlier chapters), exacting tax or tribute before they were allowed to enter the region (Kulakov, 2007: 40–41). The site also lies very close to the southernmost end of the Curonian Spit, which can only be entered through a narrow channel to its north near the modern Lithuanian town of Klaipėda. Whether the town was accessed directly from the Baltic or through the spit is uncertain, but modern waterways suggest that direct water access was only possible through the spit, and it is unlikely that large knarr-type shipping vessels would have been suitable for portage. Shoreline reconstruction suggests that the Curonian Lagoon in the Early Medieval period extended westwards to the settlement (Ibsen, 2009: 154). Regardless, the location is both accessible and defensible. A confluence with the River Neman at the Lithuanian/Russian border also links the Baltic to southern Belarus and the southern Russian rivers of the Pripyat and

Dnieper, and west Baltic traders are known to have used the Baltic rivers to travel further east (Plakans, 2011: 26).

The situation of Wiskiauten in this specific location is likely due to the natural resources; the Sambian Peninsula is the richest source of amber in the world (Ibsen and Frenzel, 2010: 47). Baltic amber was traded across Europe and all the way to Egypt as early as the Bronze Age (Gestoso Singer, 2008). Use of the site is known to date back at least to the Neolithic, with a 2014 field season focussing on a large barrow (14 metres in diameter), dated to that period (Randsborg et al., 2016). First excavated in 1893, the mound was then found to contain two adult males in flexed positions, though neither the remains nor the grave goods mentioned in excavation reports (a bronze dress pin and axe) seem to have survived World War II (Randsborg et al., 2016: 90–94). The grave goods found in the mound in 2014 are contemporaneous culturally and temporally with those found in other mounds in the eastern Baltic, with no suggestion therefore that Scandinavian colonisation dates back to the third millennium BCE (Randsborg et al., 2016: 88). While there is no expectation that further Neolithic barrows will be found, the authors of the study suggest that the place was in some way exceptional, noting in particular the existence of large postholes surrounding the barrow marking it in the landscape (Randsborg et al., 2016: 116–117). Geophysical survey has been used extensively in an attempt to find the location of the *Kaup* settlement and thus far traces from the Neolithic to the 16th century have been uncovered, most of which date to between the 6th and 13th century (Ibsen and Frenzel, 2010: 50–53).

Material

Given the long duration of occupation at the site and the lack of settlement remains, ascertaining a start date for the Early Medieval settlement has been difficult. Ibsen's discussion of the very limited information about the settlement detailed thus far reveals three main settlement phases, aligned with cemeteries at the site. The Early Medieval settlement is discussed as contemporary with the barrow cemetery, which has been dated from the late 8th or early 9th century until the early/mid-11th century (Ibsen, 2013: 244). Thus a tentative start date for the Early Medieval settlement is given as 800CE, although though occupation may have been consistent from the 6th to the 13th century

(Ibsen and Frenzel, 2010: 50–53). Traces of settlement activity have been found in 14 separate parts of the settlement, and carbon dating of remains found has been used to loosely date each of the activity clusters (Ibsen and Frenzel, 2010). These have been combined into three area groups, with areas 1 and 2 showing evidence of artefact finds from the 6th and 8th centuries, as well as minor indications of use in the 9th and 10th centuries (Figure X above, from Ibsen and Frenzel, 2010: 54). Area 3 shows cultural layers which can be dated to between the 6th and 10th centuries, and area 4 seems to have seen primary use in the 11th and 12th centuries, though there are hints of earlier constructions (Ibsen and Frenzel, 2010: 54–56).

Aerial photography from the mid-2000s theoretically revealed a semicircular rampart enclosing an area of around 6 hectares (Ibsen, 2013: 243). Ibsen does not reproduce these photographs or discuss them any further, and it seems that this assertion is being treated sceptically. In the absence of any other information, however, this seems the only option for an assertion of the areal extent of Wiskiauten. This is thought to have been the Early Medieval settlement, and would fit very well into the model of semicircular ramparts across the Baltic during the Early Medieval period, thus is accepted as the best possible guess for the extent of the settlement area. Furthermore, the settlement area is naturally bounded on one side by an inland lake. Very little evidence of building remains have been found at Wiskiauten, and thus the reconstruction of a settlement plan has proven difficult. When they are discussed, it is done cautiously, with objects referred to as ‘settlement objects’ indicating a ‘dwelling site’, and thus extrapolation on the size or populations of the settlement is made difficult (Ibsen, 2009: 363, 2013: 244). The large burial ground consists of approximately 500 burial mounds and a few flat graves, and is roughly contemporaneous with the Early Medieval settlement (Ibsen and Frenzel, 2010: 47–48). The appearance of both Neolithic and Bronze Age artefacts, however, suggests that the earlier cemeteries saw re-use (Randsborg et al., 2016: 90–96)

Social

Most literature on the topic of Wiskiauten has been directed towards information which could be extrapolated from the extensive excavations which took place at the cemetery

(Androshchuk, 2012: 517). The character of the cemetery, generally dated to the 9th-11th centuries by burial goods, suggests that the population was both local and foreign-influenced; burial mounds rather than the inhumations generally found in the region, (Dworschak, 2014: 29), a large number of female-identified graves (Ibsen and Frenzel, 2010: 48), and a significant number of (though not exclusively) Gotlandic and Swedish burial goods (Ibsen, 2013: 242). It is noted that more flat graves may be in evidence within the barrow cemetery, and so the counts provided of burials and contributing to population estimates are very much minimums. Overall, archaeological finds suggest the existence of a settlement of international character, though little information about craftworking and trade connections is known. The strong western Baltic character and time depth of the burial ground certainly suggests a resident population. If it merely represented an invasion or attack on a local population, a situation more like that of the Salme ship burials on Saaremaa in Estonia (Peets, 2013) should be expected. Ibsen's population and settlement size estimates (6 hectares and 150 people permanently in residence) (Ibsen, 2009, 2013: 243) based on the burial grounds reveal as population estimate of roughly 25 individuals per hectare.

Unfortunately for archaeologists, amber working, thought to have been one of the primary occupations of the residents of Wiskiauten leaves very little trace (Ibsen, 2013: 246). The raw material is merely removed from the shores of the Baltic and tributary rivers, where it can then be either traded in unworked form, or worked with simple tools into a bead shape. The small reduced flakes that were produced could quite easily have ended up back in the sea, or are so small that they are difficult to see in an assemblage. Thus, unfortunately, the chosen craft of the eastern Baltics makes finding obvious traces of their occupation much more difficult for archaeologists (Ibsen, 2015, personal communication). After field seasons post-dating Ibsen's thesis more information on the settlement was unearthed, in particular on the eastern 'settlement', 800 metres away by the former riverbank. Fireplaces, waste pits, and postholes carbon dated to the 9th and 10th centuries along with pottery, bone, and amber fragments were found (Ibsen, 2013). While western Baltic-linked artefacts are present in the assemblage, not much more can be assumed about the ancestry of the inhabitants other than that they were certainly at least peripherally connected with the West, whether that be by incidental or direct

trade, or heritage (Ibsen, 2013: 245–246). A second settlement cluster at Wiskiauten is contemporaneous to the main Early Medieval one, but also post-dates it with an abundance of evidence for occupation in the high medieval period. The material traces are speculated to indicate a Prussian population actively engaging in long-distance trade, and seem to be connected with the later, local graves found in the necropolis (Ibsen, 2013: 246–247).

Outcome

The integration of Wiskiauten into a model of urban development in the Baltic has not been particularly common. While Callmer mentions the settlement and cemetery as a late-ninth century development it is largely framed as slowly becoming the successor of Truso (with the two speculated to exist contemporaneously for at least a while), and relies heavily on Kulakov's somewhat dated cemetery excavations of the late 1970s and 1980s (Callmer, 1994: 67; Ibsen, 2013: 243). The settlement has also been discussed as the successor of Grobina, the other of the two most prominent eastern Baltic settlements (Dworschak, 2014: 31). The distance between the three settlements may have, however, been prohibitive for both of these suggestions, with Truso 100 kilometres away and the distance to Grobina twice that. The tribal affiliations of the various regions makes it further unlikely that the inhabitants would have easily moved, with the Curonians occupying the Lithuanian coast and the Prussians in modern Poland. It seems, though, that after the Slavic expansion of the mid-first millennium CE the Baltic tribes were more uniform than they had been in the Iron Age (Gimbutas, 1963: 83, 151). Thus far the archaeology of the site does not suggest a discontinuity between the early and high medieval settlements, and Wiskiauten must then be discussed as a 'continuing' settlement, though this must be understood as a yet-to-be-confirmed working hypothesis (Ibsen, 2013: 244).

GROBIŅA



Figure 6.6 - Map of archaeological evidence of activity around Grobiņa, Latvia between 650 and 850 CE.

Note that the exact location of the settlement is still unknown, though traces of settlement activity have been found across the river from the Grobiņa hillfort, and one sunken-featured building was found to the west of the Priediens burial grounds. Adapted from information presented in Virse and Ritums, 2012.

Excavation History

The first excavations at Grobiņa were conducted in 1929 by Birger Nerman, a Swedish archaeologist, along with a Latvian contingency. Excavations were concentrated on two groups of particularly conspicuous burial mounds and an area named as “the citadel” (Megaw, 1961). Latvian archaeology was very much in its infancy in the pre-war period, thus the appointment of a Swedish archaeologist as primary investigator. The first Latvian statute for the protection of ancient monuments was made law only six years prior, and early archaeology was heavily influenced by the agenda permeating Europe at the time, to demonstrate Germanic dominance (Gunnarsson, 2012: 8). 100 burial mounds were excavated in this season (it is suspected that there may be up to 3000 in the area) along with what is now known to be the high medieval citadel, and a layer of black earth was noted (Megaw, 1961: 201; Virse and Ritums, 2012: 34; Waller, 2007: 256). These excavations were highly influenced by stories presented in the Icelandic *Ynglign Saga*, which traces the legendary Swedish kings of the Viking Age, and their presentation shows a certain desire to claim Swedish supremacy across the Baltic at the time of Grobiņa’s foundation, in the mid-7th century (Megaw, 1961). High-level archaeological interpretation at Grobiņa was largely ignored during the Soviet occupation, as the occupying government saw historical enquiry as more valuable (Gunnarsson, 2012: 9). Excavations resumed in the mid-1980s on the western Baltic burial grounds under the supervision of Valery Petrenko, and the burial grounds continued to receive significant attention until around 1990 (Virse and Ritums, 2012: 34). Recently, both Latvian archaeologists and the Centre for Baltic and Scandinavian Archaeology (Schleswig, Germany) have taken over responsibility for the site, with excavations set to be focussed on the area of black earth discovered by Nerman (Virse and Ritums, 2012: 35). In mid-2017 Grobiņa was nominated to the World Heritage List by the Latvian government.

Historical Attribution

The town is mentioned extensively in Rimbert’s *Vita Anskarii*, in the context of the revolt of the ‘Cori’ (Curonians) against Sweden. Saint Ansgar either witnessed or heard of a group of Danish Vikings who saw an opportunity to re-subjugate the rebellious Balts

(who had previously been under Swedish tribute but had one day decided this was no longer desirable). They were summarily rebuffed and massacred by the locals, after which the Swedes returned with much greater forces and ‘ravaged, despoiled and burnt’ the *urbs* of Seeburg (Rimbert, *Life of Ansgar*, Ch. XXX). Rimbert mentions a fighting force of 7,000 men at Seeburg and 15,000 at a later battle which took place five days’ march away at (probably) the hillfort of Apuolè. If population estimates of the entirety of Latvia at the time are accurate, one tenth of the entire country was present for the battles (Plakans, 2011: 14), somewhat calling into question the historical accuracy of Rimbert’s account. While the population of Grobiņa certainly didn’t approach this number in any way it is possible that forces were called in, though seems unlikely given the lack of unified state formation at the time. More than likely the numbers were somewhat inflated by the Swedes returning from their victory, retelling the story around a fire to their captive audience.

The identification of Grobiņa as Rimbert’s *Seeburg* was made by Birger Nerman, based on excavations conducted at Apuolè at the same time (more than likely Rimbert’s Aputra/Apulia) where a number of arrowheads were found seemingly supporting the occasion of a battle in the mid-9th century (Gunnarsson, 2012: 16). Seeburg is described as having been coastal (the name somewhat giving that away) and the distance between the town and Aputra in the *Vita* is described as “a fivedays journey... hastened with savage intent” (Rimbert, *Life of Ansgar*, Ch. XXX). Whether the forty kilometre distance between the two corresponds exactly to a five day journey is uncertain, but if we are to consider that the Swedes likely came only prepared for a battle within close proximity to their ships, in armour, with weapons, and unprepared for an overland trek, a maximal travelling distance of eight kilometres per day doesn’t seem so unlikely. The historical mantle has been taken up happily by the locals, who every May host a Seeburg Viking festival, as well as the ‘Seeburg Bikerland’ motorcycle festival⁶⁸.

⁶⁸ This festival is held each August, the dates of which unfortunately coincided with a visit to the town by the author of this thesis in 2016, resulting in a hasty, Danish-esque escape to Liepāja.

Environment

Grobiņa is located roughly 11 kilometres inland from the Baltic coast, near the Latvian coastal town of Liepāja in the Kurzeme/Courland municipality. The settlement is located on the Ālande River, which connects to the Baltic by way of Lake Liepāja, and is thought to have had a western Baltic population from the 7th century. Similarly to Wiskiauten in Kaliningrad, the settlement itself has been difficult to place precisely, and early excavations concentrated on particularly conspicuous burial mounds (Virse and Ritums, 2012: 34; Waller, 2007: 256). This position as a very early settlement, the earliest that fits the model under investigation in the Baltic region, highlights Grobiņa as particularly unique. The fact that Grobiņa remained potentially the only settlement on the Lithuanian/Latvian Baltic coast is due to the geography of the region. From the Curonian strait to the Gulf of Riga there are really only two rivers which venture significantly inland – at Ventspils in the north, and at Liepāja. It is speculated that the Venta River, despite being much closer to Grobiņa, was perhaps too large a waterway to navigate safely – today towns line the banks of the 350 kilometre-long river. Climate deterioration may have led to the depopulation of this particular part of Latvia before the start of the Early Medieval period, and this thus may have been the impetus for the settlement of the area by visitors from the western Baltic (Virse and Ritums, 2012: 38).

The existence of a picture stone of Gotlandic style in the *Priedens* burial mound field dated to between the 6th and 7th centuries (Petrenko, 1991) may speak to the existence of an early Gotlandic population of some description. As recent innovations in rune-stone research, such as the laser-scanning done by Laila Kitzler-Åhfeldt (Kitzler Åhfeldt, 2001) have not been applied to the stone, its authenticity⁶⁹ as evidence of a Gotlandic population cannot be confirmed. Indeed despite Petrenko's 1991 article cited above, the stone seems to have been lost to history; it cannot be found in the *Rundata* catalogue, and its last known location in the Liepāja Historical and Arts museum (Petrenko, 1991: 3) cannot be verified⁷⁰. A large part of the burial ground has been destroyed by the construction of gravel pits, and almost all of the black earth settlement area has been

⁶⁹ Considering there are many shades within this – the stone could have been hastily carved by a visitor, professionally by an itinerant craftsman, or by a Gotlandic settler.

⁷⁰ I.e. I went there and asked around and it wasn't there.

destroyed or at the very least disturbed by modern building construction (Gunnarsson, 2012: 17; Virse and Ritums, 2012: 34–35). While it has long been thought that no predecessor or earlier occupation of the land is known (Clarke and Ambrosiani, 1995: 174), a systematic analysis of the earliest excavations at the site have found that the geological drilling which took place may not have been sunk deep enough to reach an uninhabited layer. Drilling from a 2010–2011 excavation season at the hillfort obtained organic samples which date back to the fifth century (Virse and Ritums, 2012: 37–38). The extrapolation from this, despite no formal excavation or analysis yet having taken place on this earliest stratigraphic layer, seems to be that a local Curonian population may have occupied a hillfort at the site in the fifth century (Virse and Ritums, 2012: 37–38).

Material

The foundation date of Grobiņa has been established in reference to the burial grounds. While burials have been found dating to the 3rd century CE, a significant increase in the number of burials from around the mid-7th century establish this as having taken place around 650 CE (Gunnarsson, 2012: 26; Virse and Ritums, 2012: 38). Very little about the settlement is yet known, due mostly to the overwhelming archaeological focus on the burial complexes, and lack of settlement-related finds. Even recent publications focus almost exclusively on this evidence (Bogucki, 2006; Gunnarsson, 2012; Virse and Ritums, 2012). Nerman's early excavations on the burial grounds set in motion the agenda which has informed excavations at Grobiņa ever since⁷¹. The entire complex is thought to have consisted of a settlement, a cult place, a hillfort, and six cemeteries (Bogucki, 2006: 94–95). Settlement artefacts found over a roughly 20 hectare area between Bārta St and the Ālande river potentially place the settlement across the river from the hillfort (Virse and Ritums, 2012: 35). Further excavations in both of these cases are made difficult by the fact that modern houses cover a lot of this space.

⁷¹ This is certainly understandable – the more interesting information brought to light by the excavation of artefact-rich burial grounds, the more focus is likely to be paid to the burial grounds.



Figure 6.7 – Map of Grobiņa, the roughly 20 hectares between Bārta St and the Ālande River over which settlement artefacts have been found.

Very little is known about the structure or layout of Grobiņa, as other than the remains of one rectangular house (Bogucki, 2006: 97) very few traces have been found. Stray finds give the only clues to the character of the settlement and the activities which took place there. No building phases are able to be discussed for Grobiņa, though the burial grounds have been used as evidence of demographic changes (Virse and Ritums, 2012: 38). The hillfort is somewhat of an exception to this as it is more evident today, it had walls of roughly 22 metres and encompassed an area of around 0.6 hectares (Bogucki, 2006: 97). The burial grounds at the site suggest that a local community existed at the site until the mid-7th century, when a western Baltic population appeared and merged in some way with the local population; brooches made with characteristics of both populations as well as syncretic burial customs speak to this (Virse and Ritums, 2012:

39). Strong evidence of a Gotlandic and mainland Swedish population is seen through the next two hundred years, though the western Baltic burial grounds see no further use after the mid-9th century (Virse and Ritums, 2012: 38–40).

Social

Remains from the two pre-Medieval burial grounds at the site indicate that before the seventh century the Grobiņa area was likely inhabited by a community of up to 90 individuals, similar to the overall character of Latvian communities preceding the medieval period (Zarina, 2009:75 as cited in Virse and Ritums, 2012: 38). Recent radiocarbon dating supports a construction date for the hillfort in the 5th century, bringing to light an interesting possibility. Instead of being pioneering settlers from the western Baltic, the individuals who came to Grobiņa in the mid-7th century may have been drawn by the hillfort, for either peaceful or warring purposes, instead settling (Gunnarsson, 2012: 20–21; Virse and Ritums, 2012: 37–38). The dating of the later burials indicates that the area was then occupied by a significantly larger population from the mid-7th to the mid-9th century, encompassing both the migration period, or *Vendelid* as it is known in the region, and the first century of the Early Medieval period. The richness of the burials is somewhat unprecedented in Latvia for the time as the eastern Baltic was largely unaffected by the flow of wealth into the periphery after the collapse of the Roman Empire, and it may be possible that this alone supported Birger Nerman's conclusion that the site was that of a Scandinavian colony (Megaw, 1961). In general the character of the supposed settlement is overwhelmingly discussed as being Scandinavian from the burial evidence found in the metre-thick cultural layer (Virse and Ritums, 2012: 34–35). Even today at the burial grounds a sign reads 'Nordic burial mounds or tumuli, between the 7th and 9th centuries' (figure 6.8). It is thought that up to 3000 Scandinavian burials may have existed at the site (Virse and Ritums, 2012: 35). Paleodemographic calculations estimate a population of 300–500 persons at any one point in time. This along with the roughly 20 hectares of dark earth (Virse and Ritums, 2012: 35) indicating a cultural layer, leads to a population estimate of between 15–25 individuals per hectare.



Figure 6.8 - Sign at the Smukumi burial grounds to the south of modern Grobiņa (Thoeming, 2016).

In the literature Grobiņa seems very much defined by its Scandinavian character – described in earlier literature as a “centre of Scandinavian settlement in the Baltic countries” (Clarke and Ambrosiani, 1995: 115), as a Gotlandic site (Megaw, 1961: 201), and even still recently as a Scandinavian colony (Androshchuk, 2012: 488). Birger Nerman’s strong desire to uncover a purely Scandinavian colony in the eastern Baltic may, however, have led him towards a false conclusion about the site - characteristic Curonian finds were ignored in his early work at Grobiņa (Virse and Ritums, 2012: 37). While the site is very well-discussed as a port of international trade, it is possible that the attention paid by Nerman’s excavations and then the profile of the site afforded by this extensive work has led to a misleading conclusion, as there is in fact very little evidence of craft production and trade at the site. A few traces of ceramics, and arrowhead, and a couple of pieces of jewellery have been found in an occupation layer

at the Skabarza hillfort (Bogucki, 2006: 97), but other than that very little evidence of the character of everyday life at Grobiņa has been found. The settlement is thus included tentatively in the model proposed by this thesis.

Outcome

Grobiņa is the earliest settlement of the type being investigated in this thesis, not only in the eastern Baltic but across the entire region, thus showing that the period of Scandinavian expansion commonly known as the Viking Age, and the changes in both material and urbanising culture across the region, began long before 793 CE (Bogucki, 2006: 95). The 'claim' of Grobiņa to being an important settlement in the Baltic during the Early Medieval period comes from the large burial grounds and extensive finds, speaking to a strong Swedish and Gotlandic influence at the site. In addition to the six large burial grounds associated directly with Grobiņa, four more burial grounds with Scandinavian burial goods are found over a 20 kilometre radius, suggesting a significant range of influence and perhaps even control on the hinterland (Virse and Ritums, 2012: 40). It is the only settlement in Latvia that fits the pattern under investigation in this thesis (Radinš, 2001: 90), but even then that may be questioned by the lack of finds of significant international character, though may in turn be due to a lack of excavation in the settlement area (Bogucki, 2006: 99). It is thought that continuity of the site to today, as indeed Grobiņa is a modern town, may be possible. Despite Birger Nerman's claim that the settlement was destroyed in the Curonian rebellion of 800 CE, the Scandinavian burial grounds remain well in use until the mid-9th century, and no evidence of this destruction, where the hillfort was "completely plundered and burned" can be found (Virse and Ritums, 2012: 41). A statement of complete continuity cannot be made, as the burials of western Baltic character and thus the international character of the settlement, drop off around 850 CE, but no significant destruction event or evidence of abandonment can be proffered to make the claim of a clear and distinct 'end' to the settlement (Gunnarsson, 2012: 26). Thus the settlement is considered to enter a period of decline until the foundation of the 'modern' Grobiņa in 1253 CE (Gunnarsson, 2012: 21).

STARAYA LADOGA

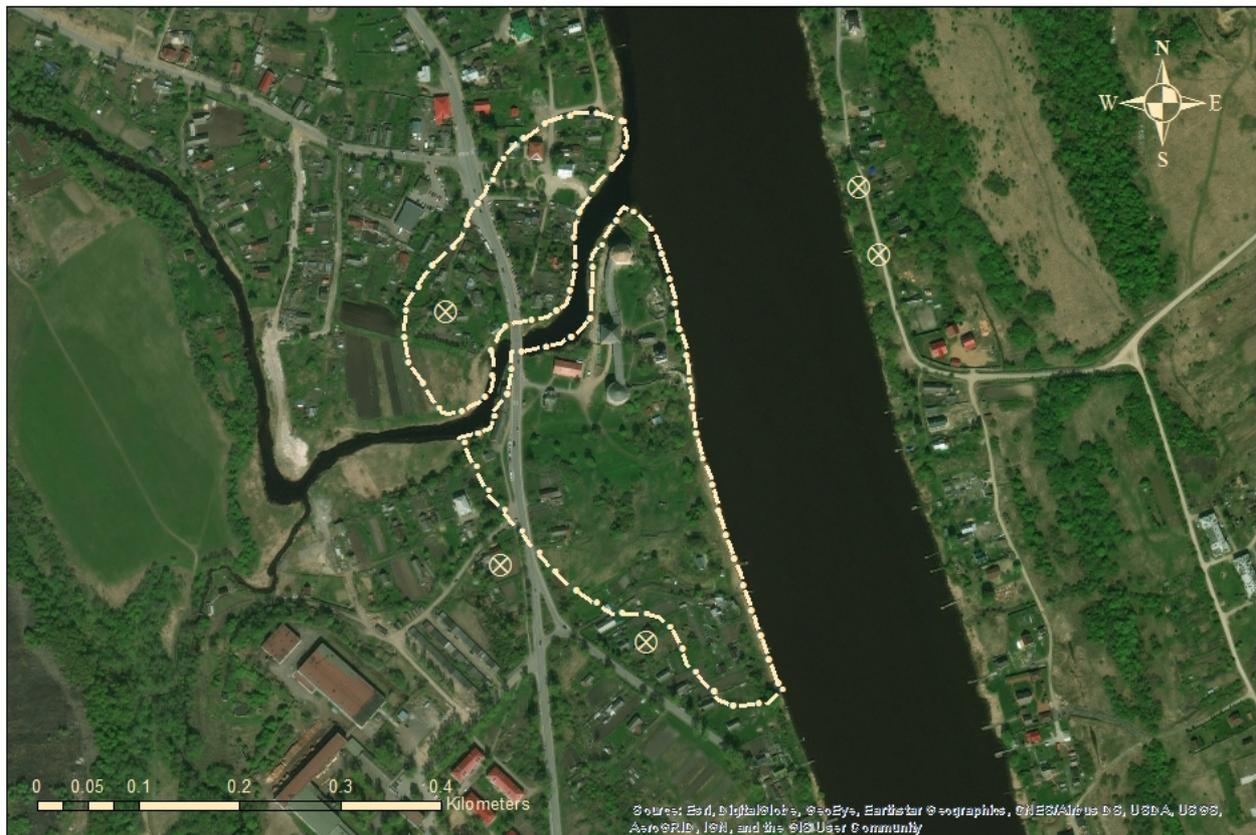


Figure 6.9 - Map of Staraya Ladoga, Russia. The presumed extent of the Early Medieval settlement, indicated along with the locations of various burial mounds and burial sites around and inside the settlement.

Amended from data presented in Carlsson, 2012: 28 and Gubchevskaya and Kirpichnikov, 2012: 54.

Excavation History

Excavation at Staraya Ladoga began in 1909 under the direction of Nikolay Repnikov from the Russian Academy of Sciences in St. Petersburg, Russia. It was continued briefly before and after the Second World War by V. I. Ravdonikas, and was taken up in 1972 by A. N. Kirpičnikov from the same institution (Clarke and Ambrosiani, 1995: 120). The site is still under active excavation (Figure 6.10) and currently serves as a training ground for archaeology students from Russia (Kirpichnikov and Gubchevskaya, 2012: 15–17) and indeed across the world; Professor MSO Søren Sindbæk from Aarhus University excavated at the settlement as an undergraduate student.

Historical Attribution

Staraya Ladoga is mentioned extensively in historical accounts from both eastern and western Europe, supporting the settlement's importance in the Early Medieval period. In the Russian Primary Chronicle, a history of the Kievan Rus', Ladoga is described having been taken over by the Varangian chieftain Rurik (Book 162, Cross and Sherbowitz-Wetzor, 1953: 233), the first of the Rurikid dynasty who ruled first Western Russia, and then the entirety of the country. The settlement is also mentioned around forty times in the Icelandic Sagas as *Aldeigjuborg* (the link between these two separate names being well-established), though the general accuracy of these sources as to descriptions of Russia is thought to be less than reliable due to the relatively peripheral nature of the region in the context of stories written down some 300 or more years later in a place over 3000 kilometres away (Jackson, 2009). The Saga of Halfdan Eyesteinsson mentions the settlement prominently, as having been taken over by the father of the eponymous protagonist and ruled by Eyesteinsson (Book 2, Pálsson and Edwards, 1985: 171–198). While the sagas are mostly legendary, by virtue of being oral tradition, this saga is thought to belong to the 9th century (Pálsson and Edwards, 1985: 2), when Staraya Ladoga was prominent. Accounts of *Aldeigjuborg* in the sagas position the settlement as a sort of transitory point between the Baltic and the Russian rivers, a station where travellers would rest and change boats (Jackson, 2009: 438–439).

Environment

Staraya Ladoga ('Old' Ladoga in contrast to Novaya or New Ladoga which lies slightly north) is located in modern Russia, roughly 110 kilometres directly east of St. Petersburg. The settlement lies directly on the Volkhov River, 17 kilometres upstream from the mouth of the river at Lake Ladoga, and just over 200 kilometres downstream from the river's source at Lake Ilmen. The settlement was almost certainly the first stopping-point for visitors from the Baltic seeking to travel south, either to Byzantium via the Dnieper River to the Black Sea⁷² or via the Volga River to the Caspian Sea and thence to Baghdad and the Abbasid Caliphate (Sindbæk, 2017a: 78). From the Gulf of Finland, trading vessels would have sailed east through the 75 kilometres of the Neva River before entering Lake Ladoga. While not particularly well-protected from travellers moving down the river, stopping and lookout points functioning to warn residence of any impending attack were likely located roughly every 10 kilometres on the Volkhov and Dnieper rivers (Novikov, 2014, personal communication)⁷³. The formal Early Medieval settlement was mostly restricted to the western bank of the Volkhov, with the source of the Ladozhka River running through the middle of the settlement area, restricting visibility to possible approaches from the north. Strategically, the location of Staraya Ladoga is exceptional. The settlement is located on the only ninety-degree angle bend on the Volkhov River for 60 kilometres, and at the confluence of the Volkhov and Ladozhka rivers (an east-flowing tributary of the former which feeds into Lake Ladoga) and so deliberate thought seems to have gone into the location of the site, especially when the quality of the soil in the watershed seems to have been non-optimal for agricultural use (Jansson, 1997: 27).

A small settlement (only 0.18 hectares) known as Lyubsha and dating to between the 6th and 10th centuries has been discovered on the Volkhov 'bend' just two kilometres north of Ladoga (Yanin, 2013: 212). Despite Lyubsha's small size there is significant evidence of trade and craft production as well as ship repair, and while significant competition

⁷² As part of the legendary 'Road from the Varangians to the Greeks', though both terms are anachronistic.

⁷³ Just as was seen on the Daugava River every 20-40 kilometres (Radinš, 2001: 93).

with Ladoga is suggested (Rjabinin and Korotenko, 2003: 31–32), the settlement may have been one of the lookout sites mentioned earlier.

Material

While Veliky Novgorod is given the attribution of the ‘first town of Russia’, dendrochronology supporting a date of mid-8th century at the latest and archaeology suggesting a population not long after of around 1000 individuals suggest that, in fact, Staraya Ladoga deserves that attribution. An *ante quem* date for the settlement of 753 CE is given by dendrochronological dating (Chernykh, 1985: 79; Kirpichnikov and Gubchevskaya, 2012: 19) with evidence of a pre-existing population only sparsely settled by “people from northern Europe” (Androshchuk, 2012: 520)⁷⁴. Occupation possibly pre-dating the formal settlement layer was laid out by Ravdonikas in his investigation of the earliest phase, interpreted as that of an agricultural population, with evidence of craft specialisation, Vendel-period western Baltic contact (Stalsberg, 2007: 272)⁷⁵. The production of Eastern Baltic 6th and 7th century-analogous goods has been asserted through the discovery of a pendant mould (Androshchuk, 2012: 520; Davidan, 1970: 80). No scientific dates preceding the current foundation date of 753 CE are in evidence, and so whether the Vendel period and Eastern Baltic artefacts were souvenirs brought by 8th century settlers, or were in fact in use in the pre-Medieval period, is uncertain. A single Omajjad dirham with a production date of 699/700 CE found in the very earliest excavated layer (Davidan, 1970: 81) suggests the former. The impetus behind the high profile of Staraya Ladoga is a subject of some debate. The coin evidence led numismatist Thomas Noonan to state that the upwelling and appearance on the world stage was somewhat instantaneous, externally galvanised by trade originating directly from the Abbasid Caliphate, attractive to the west Baltic travellers who used the Russian waterways (Noonan, 1986: 340). Søren Sindbæk, however, sees the development of the settlement’s profile as a coming-together of individuals seeking common economic opportunity; local Slavs, settling Scandinavians and roving fur-hunters engaged in

⁷⁴ Note here that this language specifically avoids attributing the establishment of the settlement to Scandinavians, this is likely in reference to the so-called ‘Normanist controversy’, which will be discussed further in subsequent/earlier chapters

⁷⁵ In fact the earliest evidence of Western Baltic contact with Russia in the form of bronze objects.

reciprocal exchange long before the introduction of coins, which in its turn kick-started a new, more intense phase (Sindbæk, 2017a: 85)



Figure 6.10 - Ongoing excavation at Staraya Ladoga (Thoeming, 2014)

Knowledge about the layout of the settlement is fairly basic and pertains only to the most obvious constructions at the site. These are described as a stone fortress (likely only built in the tenth century), surrounded by an earthen wall, in turn surrounded by a ‘posad’, a settlement area for traders and craftsmen (Noonan, 1986: 330). While the settlement seems to have been largely concerned with agriculture for the first 30 or so years after the first structures were built around 753 CE, the last two decades of the 8th century saw its character as a trade settlement develop before significant expansion in the first half of the ninth century (Androschuk, 2012: 520, 2013: 16–17). This second phase saw its heyday in the ninth century; the ‘posad’ with plot divisions was then built on the western bank of the river (Kirpichnikov and Gubchevskaya, 2012: 21). The extent of Early Medieval Staraya Ladoga is discussed as around 10 to 12 hectares, but an exhaustive plan has not yet been established, other than to say that the layout of the

'*posad*' was quite similar to that found in the early phases of Ribe (Jansson, 1997: 27). At some point before the end of the tenth century a stone fortress was constructed in the centre of the settlement, destroyed in 997 CE by western Baltic invaders and re-built of timber and earth around 1000 CE (Kirpichnikov and Gubchevskaya, 2012: 21). Excavations from the 1980s uncovered burning which has been theoretically linked to this event (Джаксон, 2001: 108). While cemeteries seem to lie all around the settlement area, very little excavation has been conducted upon them.

Social

Historically there is support for the concept of Scandinavian rule at Staraya Ladoga – Rurik's establishment of the town is detailed in the Russian Primary Chronicle, and further chronicles detail Swedish rule into the 11th century (Carlsson and Selin, 2012: 39). Archaeologically no evidence can be presented to support this, as is generally the case with settlements of this size, but there was certainly a Scandinavian population at the site; both Scandinavian and Slavic house-building traditions are in evidence there (Androshchuk, 2012: 520; Jansson, 1997: 30). In keeping with this, there is good evidence in the forge of a syncretism of Slavic and Scandinavian technology – two steels of either character for striking against flint (Rjabinin and Korotenko, 2003: 23–25). Despite the number of cemeteries, a population estimate with any more specificity than 'around 1000 individuals' during the settlement's Early Medieval heyday (Kirpichnikov and Gubchevskaya, 2012: 19) remains elusive. A population of 1000 individuals at the settlement's largest theorised Early Medieval extent of 12 hectares leaves a density of around 84 individuals per hectare.

There is a significant amount of evidence suggesting craft production at Staraya Ladoga, but perhaps the most interesting evidence is that of shipbuilding at the site. This supports descriptions of Staryya Ladoga in the Old Norse sagas, and is proposed in the form of finds related to ironworking as well as iron rivets and wooden fragments of ships (Jackson, 2009: 439). While this is perhaps not enough to conclusively recognise Old Ladoga as an ancient shipyard, ship typologies based on well-preserved boat graves acknowledge a difference between open and closed sea-going vessels (i.e. those suitable for the North Sea vs. the Baltic and the Danish straits) as well as those built specifically

for transporting large cargo (Bill, 2012). The chance that another boat type optimised for river travel existed is thus not outside the realm of possibility. Additionally, traders sailing south on the Volkhov and towards the Dniپر River and on to the Black Sea were faced with the need to portage their vessels between rivers (Shepard, 2014: 59) and the huge, sail-driven *knarr* cargo ships with loading capacities of up to 60 tonnes would likely have been difficult to move with a small crew (Bill, 2012: 176). The *De Administrando Imperio* (On the Governance of the Empire), a text written by the tenth-century emperor Constantine VII for his son, describes a process whereby tribes in the Kiev area cut boats known as *monoxyla* (which from Greek translates to ‘single tree’) which are then bought by the Russians (a term which in this context refers to the *Rus*), outfitted to their specifications, and then used for transit on the Dnieپر river (Constantine Porphyrogenitus, *De Administrato Imperio* 9).

In addition, an ‘artisan’s complex’ dating to the early years of the settlement has been unearthed, with a large forge and an adjoining workshop suggesting metalwork (439 Jackson, 2009). Later there is evidence of large-scale glasswork production, mostly that of glass beads which are speculated to have brought in a significant amount of the Arabic silver then circulating around the Baltic (Rjabinin and Korotenko, 2003: 25–26). There is a surprising lack of published evidence supporting this long-distance trade with which Ladoga was theoretically involved⁷⁶ but its acknowledgement as a settlement of importance is widespread and accepted. Artefacts showing a strong western Baltic connection have been discussed (Davidan, 1970), to the conclusion that those individuals were not only trading, but in residence, shown through the existence of non-prestige household goods and clothing. Davidan has suggested that a full discussion of the ethnic character of the settlement can only be done with more evidence from the large number of graves (Davidan, 1970: 91), but as of yet sources cited discussing this evidence in particular have been published only in Russian (Androshchuk, 2012: 521). There are exceptions to this in the form of works studying a particular type of good or material. The focus on weights in one of the volumes concerned with the previously-discussed settlement of Truso, notes that inside the oldest graves at the Staraya Ladoga

⁷⁶ Though this may be due to the use of only English-language publications in this work.

32 weights have been found, as well as a few weights dating to the second half of the 9th or the 10th century (Brather et al., 2012: 221). In summary, the overall story of Staraya Ladoga is that of a settlement which grew up somewhat organically in the second half of the 8th century with significant evidence of long-distance contact. More structure and organisation can be seen in the settlement in the 9th century with the establishment of a workers' area and burial mounds from the 10th century speak to a multi-ethnic population, with grave goods and burial traditions suggesting individuals of Finnic, Scandinavian, and Slavic descent (Rjabinin and Korotenko, 2003: 27)

Outcome

Staraya Ladoga quite clearly continues through to today (as does Wolin), though the Early Medieval phase can be seen to end in 1125 CE, when the settlement was annexed to the Novgorod Principality due to its strategically important location (Kirpichnikov and Gubchevskaya, 2012: 25). After the almost complete destruction of the nearby town of Novgorod in 1478 the principality fell under the control of Moscow, though Staraya Ladoga continued unaffected almost to today, seeing only a short decline phase in the early 17th century (Rjabinin and Korotenko, 2003: 28).

OTHER SETTLEMENTS



Figure 6.11 – Map of other settlements of interest in the Eastern Baltic

In addition to the settlements discussed here, there are a few other settlements which are of similar character, but less well-documented in the English-language corpus. Bogucki discusses six ports of trade⁷⁷ in the Baltic in the Early Medieval Period; Truso, Wiskiauten, Grobiņa, Daugmale, the Kaliningrad complex and Palanga (Bogucki, 2006: 95). While Daugmale would and should generally be included in a model of urbanising settlements in the eastern Baltic during the early medieval period, its main period of

⁷⁷ Note that this description includes seasonal markets, and thus these numbers should not be considered reflective of the pattern discussed in this thesis.

operation was in the 11th century, meaning it belongs to the stage after the one being investigated here (Mägi, 2015: 50).

Mentioned in the same breath as Seeburg in Rimbert's *Vita Anskarii* is the site of 'Apulia' (Apuole) in Lithuania (Rimbert, Chapter XXX, LX). The settlement is mentioned as the site of a battle between the Swedes and Curonians in the mid-9th century with 15,000 men assembled at a hillfort to fight (Gimbutas, 1963: 143). The site was excavated in the early 1930s by Birger Nerman, who excavated at Grobiņa, and he noted both a hillfort and a cemetery containing Gotlandic materials (Megaw, 1961). Very little has been published on the site in English but it is thought that, despite the population described by Rimbert, the settlement was likely internally-focused with few foreign contacts (Valk, 2012: 489). The settlement of Palanga must also be mentioned as likely very similar to the settlement complex of Žardė-Bandužiai, both centres of commercial trade and craftsmanship close to the Lithuanian Baltic coast (Genys, 1997: 142; Valk, 2012: 489)

Rjurikovo Gorodischche sits just north of Lake Ilmen on the Volkhov River in modern Russia, and is often discussed as a Russian example of the settlements under investigation here (Jagodziński, 2010: 111–112). It is the predecessor of the modern town of Veliky (Great) Novgorod, and shows very similar characteristics to the settlements being investigated here though excavation has been limited. The name of the site identifies it as 'Rurik's Hillfort', Rurik being the legendary founder of the Kievan Rus'. Dendrochronology from the site indicates occupation around the end of the ninth century, with the scales and weights found inside the rampart at the settlement seeing most of their use in the Baltic during the late ninth and tenth centuries (Brather et al., 2012: 221). The settlement was fortified and between roughly 4 and 7 hectares in size, and the inhabitants were likely both locals and western Baltic immigrants, though cultural syncretism occurred quickly (Androshchuk, 2013: 20–21).

Žardė

One settlement which has received minimal attention in the Scandinavian corpus, though a fair amount in the Baltic, is the Lithuanian site known as Žardė-Bandužiai. The settlement is only mentioned very briefly in Brink and Price's *The Viking World*, though as one of two "multicultural proto-urban trade and handicraft centres" in Lithuania, the

other being Palanga (Valk, 2012: 489). It is though that a significant amount of detail is lost in this description by lack of access to the Lithuanian scholarly corpus, but the information found and here presented certainly validates its future inclusion in this discussion. Žardė is found roughly 2.5 kilometres from the Curonian Lagoon, on what was then the Žardė and is now the Smiltelė River. Though the river is now silted up, linguistic analysis suggests that during the medieval period it was navigable by vessels large enough to service a trade-focussed settlement (Genys, 1997: 142). The hillfort, lying roughly a kilometre away, was long obvious in the landscape, in the early 1990s the settlement was unearthed (Genys, 2012: 44). During following excavation seasons what is now called the Žardė-Bandužiai settlement complex was discovered, with up to seven separate settlements and two hillforts and various levels of preservation (Masiulienė, 2012: 50). The entire settlement is thought to date to between the first millennium BC and the early second millennium AD, though only a few of the seven unenclosed settlements and two hillforts of the Žardė-Bandužiai Archaeological Complex are considered to make up the medieval centre (Genys, 2012: 44–45; Masiulienė, 2012: 56). The better-excavated four Žardė settlements seem to cover approximately 12.6 hectares and the hillfort 3.2 hectares, preservation conditions at the Bandužiai sites prevent the clear identification of a settlement area, though carbon dates have been gathered from artefacts discovered at the other three settlements and one hillfort (Genys, 2012: 44; Masiulienė, 2012: 51). The geography of the region seems to have influenced the multi-settlement phenomenon seen here, with many lakes, bogs, small hills and depressions across the landscape (Genys, 2012: 45). The location of the settlements was clearly chosen carefully; natural water barriers surround the settlement complex on every side and what is now a waterlogged depression on the western side of the largest settlement was likely a port (Genys, 2012: 48–49).

The settlement at the foot of the hillfort and ‘Unenclosed Settlement I’ were likely inhabited at the start of the Early Medieval period, though ‘Unenclosed Settlement III’, over 8 hectares in size, seems to have grown in importance significantly at the end of the first millennium CE (Genys, 2012: 45–46). This seems to have been the best-excavated of each of the settlements, and through the course of various field seasons artefacts were found that confirmed dense settlement, a clear orientation for structures,

and buildings which mirror those seen in Wolin and Haithabu towards the end of their existence (Genys, 2012: 46–48). Objects found at the sites speak to a significant amount of craft production as well as trade with Germany, and glass beads show analogy with those found on the island of Bornholm in Sweden (Genys, 1997: 151, 2012: 48–49). While there is surely much information left to gather about the complex, especially in light of the extensive excavation which has taken place in the Western Baltic, it is quite clear that the Žardė-Bandužiai should in future be added to models of urbanising settlements across the Baltic in the Early Medieval period.

CONCLUSIONS

The eastern Baltic in the Early Medieval period was not a uniform region by any means. Each settlement under investigation here shares characteristics with other settlements investigated here, i.e. Grobiņa could be seen as similar to Wolin and Truso to Hedeby, but some are complete outliers, such as the Žardė-Bandužiai complex. Each settlement has a relatively clear Early Medieval phase, while some pre-date the period, and all curiously seem to continue operating into the High Medieval and potentially beyond. These settlements remain important, but urban growth in the eastern Baltic seems to have then taken on an internally generative form, emerging from the thousands of hillforts and hillfort complexes which dot the landscape. Interpretations do vary for the outcome of each settlement, and Truso and Grobiņa seem to have declined in importance in the 10th and 11th centuries, but this is certainly an interesting point to note. The reasons for this will be explored further later on, but it is thought that the ‘flexibility’ seen in each of these settlements, their adaptability in the face of political, social, and economic change, served them well in this endeavour. As has been shown the recent history of the region has clearly greatly affected archaeological research, and thus it is not at all surprising that the western Baltic has typically been underrepresented in investigations of urbanising settlements in the Early Medieval Baltic. The recent integration of development of international partnerships in the investigation of these sites will hopefully close the academic gap variously experienced across the Baltic.

DISCUSSION

Long acknowledged both as important and related, the settlements of the eastern and southern Baltic should now be understood as integral to discussions of development and change in the wider region in the Early Medieval Period, despite their more varied form when compared to those of the western Baltic. The synthesis presented of the Early Medieval settlements in the eastern, southern, and western Baltic has uncovered issues with some of the current notions of the urbanising process which took place around the Baltic in this period. Three major points which require further discussion have become particularly clear, along with broad and general trends identified across the region.

The first point is related to the specific physical attributes of the settlements. They indeed differ within and between regions, but ultimately similar functions can clearly be identified in different material forms. For example, one element which differs significantly is that of defensive constructions. Despite the fact that most of the settlements under discussion do not have the clear and impressive rampart, wall and palisade systems of Hedeby and Birka, they were indeed defensible, just in a way informed by their differing social and cultural milieu in which they found themselves. The second issue is that of royal control. Many sources mentioned in the previous three chapters propose that royal control of the sites can be seen through either plot divisions or the construction of fortifications. While this surely indeed implies some form of spatial organisation, behavioural consistency, and construction competency, should royal control specifically be seen as necessary for the facilitation of the division of settlement space and boundaries of this sort? The third issue which needs discussion is the sense of 'Scandinavian supremacy' which has rather permeated discussions of the wider Viking Age. The reach of the western Baltic during the medieval period was indeed extensive, likely overshadowing on the global stage those of the southern and eastern Baltic, but it was not a situation of total regional dominance, nor did the Western Baltic simply 'set the agenda' for the circum-Baltic region. Settlements as artefacts of everyday life, and these settlements, in particular, as a unique cross-regional phenomena are well-placed to facilitate discussion, and challenge this assumption.

Despite this, there has been a general sense that the differences between the settlements, namely their differing sizes and populations, sets them apart from each other. But though there are significant differences between the settlements, when considered in a globally comparative framework, they are remarkably similar in their basic spatial arrangement of the relationship between settlement area and community size. They also form a coherent group with a distinct trend of increasing density, up to 100 individuals per hectare, with increasing community size, a known indicator of sedentary behaviour (Fletcher, 2007: 185), and lie in a zone of size ranges from a few hectares up to no more than 30 hectares. Emphasizing density as an important factor for investigation in this area of study is not unprecedented - there have been tentative comments about its role as an important operational factor within the circum-Baltic Early Medieval Settlements (Croix, 2018: 4). Plot divisions, clearly evident in several of the settlements, served to regulate space. There could be several effects of doing this; to create predictably patterned and very visible spaces, to restrict or regulate access to the plots, to create a sense of privacy, to signal status, or to show ownership of the space. In the western Baltic long-term ownership of land in the Iron Age has been considered to have carried a lot of symbolic weight, related to a sense of familial identity and connection with ancestors, and it has been suggested that this may have carried through into these settlements, in an effort by the communities involved to connect with a new and unfamiliar context (Zachrisson, 1994).

Finally, the conceptual framework around which the information presented in this thesis has been gathered will be presented. The degree to which the material and social elements of life within the settlements were operating successfully has emerged as a key factor in their outcome, with the understanding presented earlier in this thesis that these two factors tend to operate at very different replicative rates socially for larger elements of settlement space compared to sociality. This has assisted in developing a systematic focus on outcome, whereby the overall pattern of the individual outcomes of the settlements under investigation here will be presented and discussed. The contexts in which the material configuration of a site and its sociality may have been operating with varying degrees of adequacy will be presented, along with a discussion on the issue

of royal power and/or centralised control over these settlements, which has arisen as a particular theme of interest.

SETTLEMENT FORM

Upon immediate observation, there are both clear similarities and clear differences at different scales of comparison between the settlements under investigation here. All fit the minimum criteria for inclusion in the model⁷⁸; a permanent population, evidence of craft production, a connection to long-distance trade networks, and a density of greater than ten individuals per hectare. There are, however, a few quite clear differences between the materiality of the settlements, most obviously the presence or absence of fortifications directly surrounding the settlements. It was very necessary to be able to defend the inhabitants and/or the settlements, of the Baltic during the Early Medieval period. 'Piratical raids' across the Baltic (Gimbutas, 1963: 156) were commonplace, and the first line of defence for many of the settlements was their carefully-chosen locations, tucked into rivers, inlets, and lagoons away from the Baltic coast. Clear fortifications and/or defensive constructions have been found at five of the thirteen settlements under investigation here, mostly those of the Western Baltic and of heavily Scandinavian-influenced sites on the southern and eastern Baltic coast (Table 7.1)⁷⁹. Kaupang is an exception and an anomaly as an unfortified western Baltic town, though the settlement was tightly bound on the land-side by a rocky outcrop which likely provided the necessary defensive element. It is also possible that the lack of excavation conducted on some of the settlements in the unfortified category for various reasons, most notably Menzlin, Wiskiauten and Grobiņa, may mean that fortifications have just not yet have been found. That being said, there have been no suggestions of fortification at these sites in their respective available literature.

⁷⁸ Or all signs point to a fit for the less well-excavated.

⁷⁹ Though note that, as mentioned in Chapter Six, the rampart at Truso is assumed rather than being clearly in evidence.

Table 7.1 - Fortified and unfortified settlements

Fortified Settlements	Unfortified Settlements
Birka	Kaupang
Ribe	Groß Strömkendorf
Hedeby	Åhus
Wolin	Ralswiek
Truso?	Menzlin/Görke
	Grobiņa
	Wiskiauten
	Staraya Ladoga

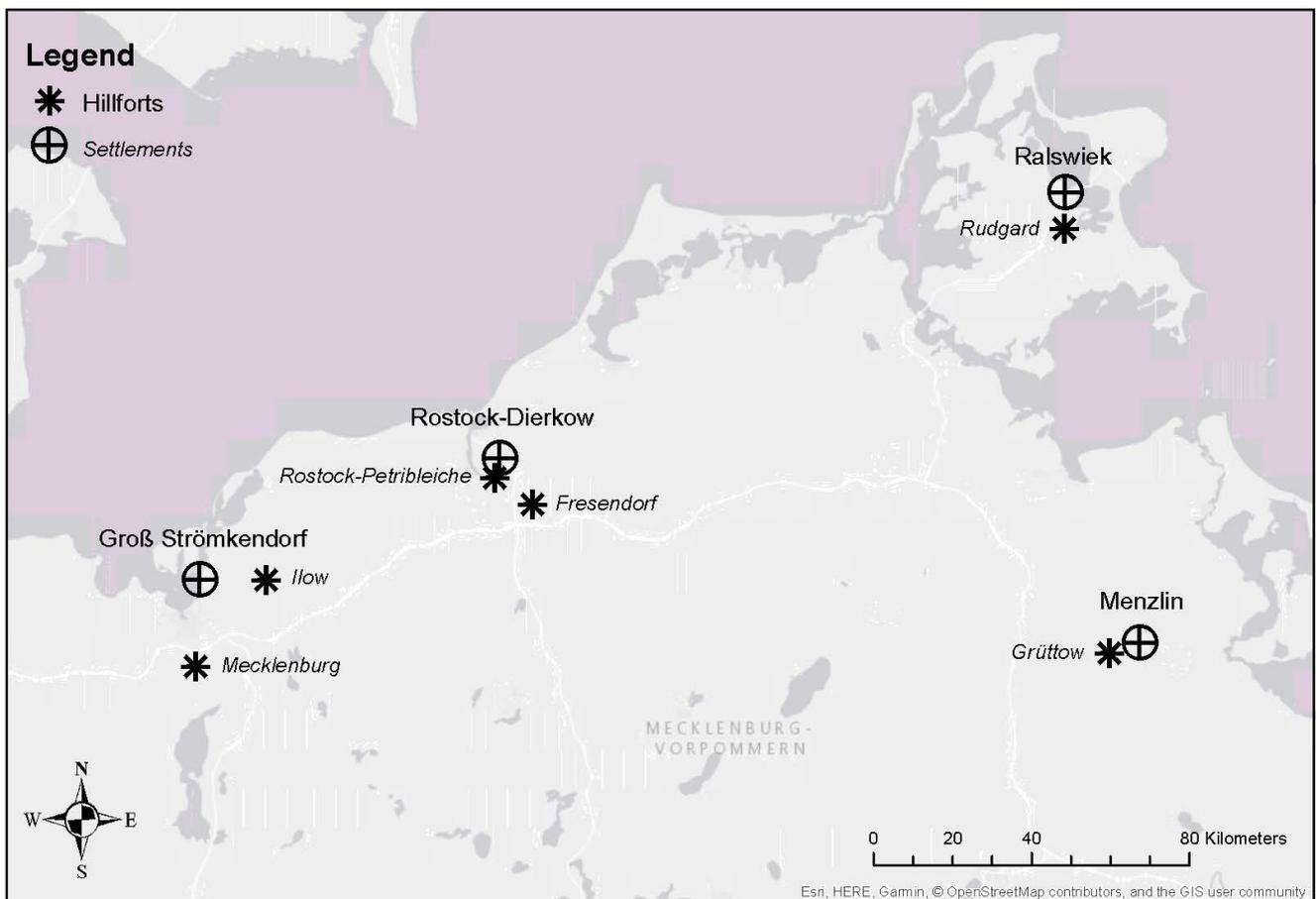


Figure 7.1 – Map of the settlements and Hillforts of the southern Baltic (data reproduced from Kleingärtner, 2014:144)

This fortification of the settlements has been viewed under the lens of the tenth-century urban phenomenon (Urbańczyk, 2008: 184), and indeed the settlements which display fortifications almost all lasted into the tenth century. Those which were not fortified but lasted into and beyond the tenth century could be interpreted differently; Staraya Ladoga was not fortified until much later, perhaps due to the much richer Ryuriko Gordischche and later Veliky Novgorod existing a short distance downstream, and not enough is known about the settlement at Wiskiauten to even venture a guess as to whether it was fortified. Recent work, however, has pushed back the dates of the fortification of both the settlement at Birka and the adjoining garrison to the earliest days of the site in the 8th century (Hedenstierna-Jonson et al., 2013). The long-accepted fortification of Ribe in the mid-9th century (Feveile, 2013: 11), in contrast, has recently been pushed forward to the 10th century, previously thought of as a period of decline and/or abandonment at the site (Sindbæk, 2017b). The dates at Birka certainly force questioning of the idea that fortification of the sites was a tenth-century necessity, though of course there are countless possible reasons for why Birka was fortified much earlier. Curiously the fortifications in most settlements were generally only erected to protect against land attacks, and left open to the water. Birka is an exception with its underwater palisade, though the generally difficult preservation conditions found at sites located on waterways, due to constantly changing sea levels, may explain why more palisades have not been found at other sites.

It is primarily the settlements of the Eastern and Southern Baltic without significant Scandinavian influence which are not fortified, but it is important to note that this should not be considered a significant factor in their recognition as important sites of the Early Medieval period. The cultural landscapes of the three regions may have been quite different, as indeed were their settlement histories in the periods preceding the Early Medieval period (see Appendix A), and recognition of this fact, of some degree of difference, should not lessen their importance. Where the settlements of the western Baltic were mostly fortified for their protection, the settlements of the southern and eastern Baltic were placed in close proximity to pre-existing hillforts, to which the population could retreat in times of crisis. Extensive analysis of this has been conducted and published by Sunhild Kleingärtner as part of her habilitation thesis (Kleingärtner,

2014) . Kleingärtner's work has shown that the unfortified southern Baltic settlements, Groß Strömkendorf, Menzlin, Ralswiek, and Rostock-Dierkow all lie not further than eight kilometres away from a large rampart (Figure 7.1), a distance easily traversed on foot in less than 90 minutes (Kleingärtner, 2014: 144). The tribal territory of strongholds in Poland is thought to stretch over a region extending across 80 kilometres (Kobyliński, 1990: 153), so the cultural landscape would have stretched much further than just these settlements. This also brings into consideration the element of control over the settlements, though this will not be discussed extensively here. Hillforts being seen as central places for tribal territories (Kobyliński, 1990: 153–154) and settlements lying close to particular hillforts does therefore imply that these settlements lie within a zone of influence, though the extent to which control can be seen, or just assumed is a discussion for another time. While hillforts (or hilltop sites) did exist extensively in the western Baltic (particularly in Sweden) between the 4th and 6th centuries, they may have been conceived as places of economic, social and religious significance rather than primarily as defensive constructions (Hedenstierna-Jonson et al., 2013: 285–287).

Despite a clear focus on defense and defensive constructions in the southern Baltic throughout the Early Medieval Period⁸⁰, Hedenstierna-Jonson views the hillforts as having fallen into disuse during the Early Medieval/Viking Period (Hedenstierna-Jonson et al., 2013: 288). Internal conflict was certainly still a factor, evident through the burning of *hallir* in the Western Baltic (Carstens, 2015), and Denmark in particular, where the larger defensive constructions are found, was under direct threat from the Frankish Empire to the south (Roesdahl, 2012: 655). Regardless, the construction of walls and ramparts was not a small task, and the individual fortification of the settlements under investigation here means quite clearly either that hillforts were no longer in use as defensive constructions, or that they were not close enough to the settlements to be of use, implying the social landscapes or zones of influence were somewhat geographically separated. The idea that in-situ fortifications are necessary for a settlement to be seen as important must thus be abandoned, along with an acceptance

⁸⁰ To name a few, the re-fortification of the Danevirke defensive wall across the Jutland peninsula through the Early Medieval Period (Graham-Campbell, 1980: 208–209), the construction of the Danish ringforts in the 10th century (Roesdahl, 2012: 660), and the fortification of Birka, Ribe, and Hedeby.

that similar social elements (refuge in a time of crisis) can be represented in different material forms. Defensibility was not an optional feature for the successful operation of the settlements of the early medieval Baltic, but the way in which it was accomplished says much about how the social milieu in which these urbanising settlements were placed directly influenced their development. Despite the fact that the settlements themselves are quite clearly a novel and foreign element in the landscape, in some places they were well integrated into the pre-existing cultural and geographical landscape.

ROYAL CONTROL

A point to be debated that is consistently reinforced in sources discussing these Early Medieval settlements is that of the necessity of royal control for their inception, development, and continued existence⁸¹. In general this is better-attributed for the western Baltic, not only because of its more extensive research history, but also because of its political prominence in Europe during the early medieval period. A significant amount of attention was paid to primarily the western Baltic by travelling writers from the continent, with accounts from the southern and eastern Baltic less common and comprehensive, when they do occur. The proximity of settlements to royal manors or estates is commonly used as an argument for royal control of the sites; Birka lies less than three kilometres away from the royal estate of Hovgården, Hedeby less than eight away from the site speculated to be that of a royal encampment, Füsing, and Kaupang lies only 1600 metres away from the large farm of Huseby. The settlements of the southern Baltic as discussed above are also all placed very close to hillforts, not more than eight kilometres away. Less is known about the settlements of the eastern Baltic, following on from the general trend identified in previous chapters.

Arguments supporting the idea of royal control generally centre on the supply, planning, and protection of the settlements. Calculations on food supply for the population at Birka have speculated that an area equivalent to all of the islands and entire coast of the Lake Mälaren region would have been needed to produce goods to

⁸¹ Note that this argument has been addressed extensively in Charlotta Hillerdahl's 2009 PhD thesis (Hillerdal, 2009: 205–288), yet debates proposing evidence she has rejected as that of clear royal control continue to be made.

support its population (MacLeod, 1999: 158). The organisation required to source and disperse this not inconsiderable amount of food is thus thought to have required royal intervention (Gräslund, 1980: 86). While settlements indeed are known to have been importing certain items of daily life from overseas (Croix, 2018), it is impossible that all foodstuffs were coming into the settlement as items of long-distance trade and exchange. A market economy supplying the settlements from the hinterland must have been in place (Skre, 2016: 174). Coin finds at the settlements have been used to propose the existence of either a king or local ruler, as of course the use of coinage, on a grand scheme, does imply some sort of centralised authority in both the gathering of silver and minting of consistently stamped coins, as well as the need to set rates of exchange for goods (Feveile, 2013: 49). Logically, however, the people resident at the settlements had significant experience with trade and exchange. It is sure not too much of a stretch to suggest that these individuals could have applied the same skills utilised for international trade to their hinterlands, including coins which were being dispersed across the country, eventually generating 'bottom-up' enterprise for food supply.

The establishment of plot divisions, the 'regulation' of the site in the second phase of occupation at Ribe, is said to be evidence of the regulation of the site by decree of a ruler (Feveile, 2013: 61). The organisation of Groß Strömkendorf into its distinctive checkerboard patterning is also said to have been upon on the decree of an authority (Müller-Wille, 2009). At Birka, a curious situation of the redistribution of one well-excavated plot in the mid-9th century has been discovered, and has been proposed as evidence of an authority of some description. MacLeod argues that one could hardly expect an established landowner to willingly cede their property to a neighbour without at the very least some sort of formal authoritarian request (MacLeod, 1999: 70). There are surely other situations in which the redistribution of land becomes necessary and potentially even voluntary – the marriage of a child and subsequent gifting of said land, for example. At Ralswiek there is clear evidence of planning in the construction of jetties and of the division of land into small areas, despite there being no discussion or suggestion of control or rule of the settlement. While planning to the organisational standards of a settlement like Ribe cannot be identified, groupings of buildings around central 'house' constructions located very close to the jetties can be quite clearly seen

(Herrmann, 1997: 41). Clarke and Ambrosiani suggest that the existence of plot divisions (in the western Baltic in particular) may be evidence of the settlements having been founded on land previously, or concurrently, used for royal estates or manors (Clarke and Ambrosiani, 1995: 137). Whether or not this is the case is uncertain, but division of space and evidence of settlement planning is in many cases not historically correlated with royal control. The residential units of the Ashanti villages of Ghana, for example, are habitually laid out by community-driven social practice in very particular grid patterns related to matriarchal family units (Fletcher, 2007: 22). Further investigation of Early Iron Age settlement practices in the Western Baltic could reveal that these units or plots are quite clearly scaled-down versions of the rural settlement form in existence for much longer than the settlements under investigation here, and thus the plots were a fairly ‘organic translation’ of rural farmsteads.

Control of some description would certainly have been a visible part of the landscape around at least two of the western Baltic sites. The topography of Kaupang makes the magnate farm at Huseby very visible in the landscape if leaving by land rather than sea (Skre, 2007a: 225), and at Birka recent excavations have discovered a magnate’s residence at the Björkö’s northernmost harbour, less than 300 metres away from the town walls (Kalmring et al., 2017). At Hedeby the connection of the fortifying rampart of the settlement to the Danevirke system of fortifications which stretched across the Jutland Peninsula to block invaders in the mid-10th century has been ascribed to the building projects of Harald Bluetooth (Clarke and Ambrosiani, 1995: 60–61; Hvass, 2015: 47). The garrison at Birka, constructed during the period of operation of the settlement, almost certainly suggests the presence of high-level authority (Hedenstierna-Jonson et al., 2013), as armies very rarely exist without kings. The functionality of the garrison as purely martial, however, has been questioned, with the material finds at the walled enclosure suggesting its character was similarly as ‘ordinary’ as the rest of Birka’s settled area (Hillerdal, 2009: 261). Certainly the protection of a ruler would guarantee peace and safety at the site for both locals and foreigners, making it a more attractive place for international traders to sell their wares (Feveile, 2013: 62). This, however, is potentially connected to the transference of the functions of these settlements to their later, High Medieval forms. The formalisation of power and control in those later settlements may

have indeed been the reason for their quick acceptance as alternative sites, their operational efficacy, and the reason for the relatively quick decline of the Early Medieval settlements. The linking of Hedeby to the Danevirke also does not demonstrate royal control of the settlement, merely a lack of significant opposition between the (potentially) community-driven settlement and royal decree.

Power in the Viking Age is linked to religion, so much so that the king of the Swedes is said to have been driven out of the northern part of the country and into the south when he tried to impose Christianity on the still overwhelmingly pagan population (Blomkvist et al., 2007: 161). In comparison with the High Medieval settlements of the western Baltic which had visible and clearly planned religious elements in their landscape, the new faith seems to have been less visible in the earlier urbanising settlements – no churches and very few identifiably Christian burials have been found, though it is thought that the faith was indeed present in the earlier settlements (Hillerdal, 2010: 518–519). Anomalies in the landscape, these Special Economic Zones⁸² (Kalmring, 2016) were undoubtedly subject to some sort of oversight, along with tribute given the influx of high-status foreign goods, but it seems more likely that their operation, planning, and daily function was largely left to locals. Royal control is much more obvious in the clearly planned High Medieval settlements of the west, and this may also be the case in the southern and eastern Baltic. A lot less is known archaeologically about the control of the south and the east, as historical records tend to be the primary point of reference (Tacitus' *Germania* and the Bavarian Geographer's *Description of cities and lands north of the Danube* to name just a few), but it is possible that their different phasing, operational duration, and patterns of abandonment and resumption may indicate a different landscape of control. At Ralswiek in particular the decline of the settlement as a multi-ethnic trading hub and resumption as a clearly Slavic settlement after a century is an interesting phenomena that should be investigated further under the lens of political control. A common argument for the existence of western Baltic dominance over the settlements of the south and the east, as outlined in previous chapters, is that

⁸² It has also been suggested that microtopographical analysis of sites may further this theory, as demarcation of areas, whether natural or artificial, may indicate a legal separation (Mogren, 2018, personal communication).

the egalitarian social structure of the settlements would likely have been unfamiliar to the highly structured social strata of the Slavs and thus must be a remnant of a foreign power (Bogucki, 2012: 108). The theorised existence of the settlements on *scharnierpunkte* (political hinge points - Müller-Wille, 2009), however, suggests that they may have existed somewhat on the fringes of political control, and thus that their social strata, generally imposed by the existence of a central authority, may have differed from that around them.

In the particular case of the western Baltic it seems not unprecedented that the settlements could have been regulated by community-driven social practice. Realistically, would it have been necessary that the decree of a king be given in order to divide a settlement into plots or build defensive ramparts? A community of well-travelled individuals who had seen how the towns of continental Europe were organised would certainly have been capable of returning that information to their homes to diffuse information on managing trade communities by utilising and modifying local social practices. The necessity of fortifications (in the absence of access to pre-existing forts) would have been blindingly obvious in a landscape characterised by both internal and external conflict (Carstens, 2015), and indeed the Western Baltic hillforts were constructed not on royal decree, but by local elites (Hedenstierna-Jonson et al., 2013: 287). Scandinavian society in the early medieval period was largely community-driven, though with local chieftains and kings at a high level, and MacLeod proposes that Birka in particular could have been a *þing*-controlled community effort (MacLeod, 1999: 159). The political organisation of Scandinavian society through the *þing* assembly was largely community-based, under the aegis of a local chieftain but with the president an official elected from the community for a three-year term (Magnusson, 1980: 199–201). The king gained power with the assent of his subjects, “ascending government” seems to have been the norm (Mogren, 2013: 77). An historical account of the southern Baltic settle of Wolin affirms this style of governance, stating that the inhabitants of the settlement “have no king and trade with no one. Their judges are their old men” (Lunde and Stone, 2012: 166). We have descriptions in the Icelandic sagas of laws and decisions being made by community assent (Brink, 2012a); the judicial system was the “mastic” of western Baltic society (Mogren, 2013: 77). Overall, MacLeod’s proposed model of ‘limited

kingship' seems to be the most likely scenario and the most accurate description of the overall landscape of control (MacLeod, 1999: 159). No extensive, systematic discussion on how control can be evidenced or viewed archaeologically in a landscape has yet been attempted, but there are other examples of the regulation of spatial forms (such as the Ashanti example given above), and construction of large monuments without royal oversight. Stonehenge and numerous large Neolithic enclosures were built on a substantial scale without state organisation or royal oversight (Smith, 2007). The advantages of a period such as the Early Medieval, documented externally but largely non-literate internally, may prove an interesting case study for the investigation and systematisation of this phenomena for global comparison. The development of frameworks for discussions on how and why landscapes of power and control are viewed archaeologically would be very valuable.

SCANDINAVIAN SUPREMACY

The most significant debate which has affected the equal representation of southern and eastern Baltic settlement in discussions about the urbanising process during the Viking Age is that of Scandinavian supremacy. The reasons for this dominant premise, when considered through an objective view of both ancient historical writings and recent historical developments, is clearly rater dated. A case for the equal treatment of the settlements of the southern and eastern Baltic, rather than a west Baltic-dominant model, needs to be clearly articulated. For a number of reasons the earliest documentarians, the travellers of the medieval period, pay significant attention to the settlements of the Western Baltic and largely ignore those of the south and east. This is for a number of reasons. The *Vita Ansgarii* (Robinson, 1921) and *Gesta Hammaburgensis ecclesiae pontificum* (Tschan, 1959) were of the Catholic Church, written to chronicle the work of missionaries and bishops in attempting to convert northern Europe to Christianity. Poland was Christianised at roughly the same time as the three Scandinavian countries but very little evidence remains of the efforts of missionaries towards this end (Buko, 2008: 174)⁸³. The settlements of the northern coast of Poland

⁸³ The Christianisation was largely a consequence of the political marriage of Mieszko I to the Czech princess Dobrava, who as a consequence of her country's long affiliation with the Ottonian Empire, was a Christian.

were also largely peripheral to the political machinations of the country⁸⁴, and so played a relatively much smaller role geopolitically than the settlements in the western Baltic. The eastern Baltic was not the subject of conversion attempts until the very end of the 12th century, with the start of the Baltic Crusades. The other two major accounts of the Baltic region come from the English traveller Wulfstan and the Spanish-Jewish merchant Ibrāhīm Ibn Ya'qūb (Levey, 2008). Wulfstan's account is of the geography of a sailing journey from Hedeby to Truso, taking seven days and seven nights, but does not mention any settlements or sites other than the two main nodal points of his voyage (Bogucki, 2012: 88). Ibn Ya'qūb's accounts of trading throughout northern Europe mention Schleswig (Hedeby), Wolin, the courageous Prussians, and the aggressive Saqāliba (Slavs). The study of antiquities, in the days before archaeology, was very much concerned with the 'matching' of places and things to the historical record. As a consequence, sites, settlements, and cultures without significant representation in the historical record have tended to remain, globally, somewhat of a mystery. The site of Groß Strömkendorf is a good example of this conundrum; its attestation as Reric in the *Annales regni Francorum* led to almost a hundred years of searching, resulting in the re-naming of the town of Alt-Gaarz to Rerik in 1938, and the statement in 1985 that Mecklenburg is obviously the site of Reric (Herrmann, 1985a: 251). The writings of the medieval period have greatly affected the archaeology of today.

The different historical conditions experienced by each separate region represented in this study, outlined in the third chapter of this volume, have previously led to the de-prioritisation of the settlements of the eastern and southern Baltic in the literature. While Scandinavia remained largely unaffected by World War II and the subsequent takeover by the Soviet Union of Poland and the Eastern Baltic States left them struggling to recover from the war. The latter group only regained independence and autonomy in the early 1990s. In some cases archaeological enquiry was specifically restricted, and in Poland in particular the nationalist agenda of the post-Communist government greatly affected the priorities of archaeological research. While undoubtedly the inhabitants of the western Baltic countries were the most prolific and numerous colonisers in the Early

⁸⁴ And were not subjugated to Mieszko until after his conversion

Medieval period, with evidence of this clearly shown in a predominance of Scandinavian artefacts in burial contexts, the fact that many assumptions about the settlements of the Early Medieval Baltic are the product of a very different and quite clearly subjective or biased context must be taken into consideration in a large-scale study such as this. The site of Grobiņa in Latvia is a particularly clear example. Recent re-analysis of extant burial mounds at the site has uncovered a significant number of artefacts of a local Curonian population (Virse and Ritums, 2012: 37), a fact that was neither noted or acknowledged in the Swedish excavation reports of the early 20th century. The fact that Nerman was accompanied by a cohort of Latvian archaeologists clearly did not have an impact on this; the field was very much in its infancy in Latvia, whereas Sweden had already appointed its first Professor of Archaeology, Oscar Almgren, 15 years beforehand.

Even in the Viking homelands, the “myth of a homogenous Scandinavian culture, as well as... an homogenous Swedish national identity” (Callmer et al., 2017: 1) has been shown to be somewhat of a simplification. Archaeologically, there are clear differences in how people displayed their associations in the three Scandinavian countries in the Early Medieval Period; the rune-stone tradition with over 2700 instances in Sweden only has 250 examples in Denmark and 50 in Norway (Thoeming, 2013: 37). Even historically the Anglo-Saxon text *Beowulf*, recreating the world of the North around 500CE, acknowledges the existence of two distinct cultures internal to Sweden (Thoeming, 2013: 32; Tolkien, 2006: 27). In this light, it is necessary that comparative archaeology, particularly in regions variously beset by war or disruption, take into account the impact that recent history may have had on the data selected by local researchers for analysis and on the way in which what was found has been perceived. An approach which acknowledges disturbance and accounts for it as much as possible in making conclusions about networks and people of the past seems a logical way forward. The biggest problem in this particular situation is the predominance of funding, attention, and publication of the settlements of the western Baltic over those of the south and east. It is certainly important that the settlements of the western Baltic continue to receive significant time and attention. This is not in any way a criticism of the work of scholars who have dedicated themselves to these places. It is more a call for the direction of new

attention towards clearly structured comparative archaeology⁸⁵ in adjacent regions, along with an increased understanding of the impact of recent political history on local regional archaeological priorities and thinking.

THE LIFE OF THE SETTLEMENTS

As outlined at the beginning of this thesis, the main aim of this work was to build a comparative picture of settlements which appear as part of the urbanising process in the Early Medieval period around the Baltic in the context of an operational perspective provided by the I-C model. Given the extensive variation in the data available for each settlement due to their different excavation and publication histories, a decision was made to build a quantitative framework for analysis based on data around site size and population, and hence an estimate of the occupation density at each of the sites (Table 7.2). As is usual with methodologies, some caveats must be noted.

Table 7.2 - Size, population, and density at the settlements

Settlement	Site Size (hectares)	Population	Density (people/ha)
Birka	15	850	56
Åhus	17.5	1000	57
Ribe	11.4	500	44
Hedeby	26	2500	96
Kaupang	5.7	420	74
Groß Strömkendorf	6.5	600	65
Menzlin	26	282	11
Ralswiek	2.6	150	57
Wolin	22.6	420	19
Truso	26	750	29
Wiskiauten	6	150	25
Grobiņa	20	500	25
Staraya Ladoga	12.5	1000	80

⁸⁵ And indeed research institutes like the ZBSA in Schleswig, Germany are making attempts to rectify this situation.

The figures for Birka, Åhus, Ribe, Hedeby, Groß Strömkendorf, Ralswiek, Truso, and Staraya Ladoga are considered to be as accurate as possible, given the general limitations of archaeological data.

The population and thus the density estimate for Kaupang is a minimum. Based on figures provided by Frans-Arne Stylegar (Stylegar, 2007: 65), the settlement may have played host to up to 800 individuals in peak market season, which would have led to a potentially problematic density of up to 140 individuals per hectare. The calculation made here is based on the number of individuals buried at the cemetery, which is considered to allow the calculation as close to accurate as possible, representative of the permanent population of the site.

Menzlin is problematic as the site size estimate is based only on artefact find scatter due to incredible poor preservation conditions at the site. That number then should be considered an absolute maximum, and thus the density estimate an absolute minimum estimate.

The figures provided for Wolin should be considered accurate, but it is important to note that these figures represent the last phase of the Early Medieval settlement, before it was taken over by Mieszko I. Three settlement areas are present at Wolin at the start of the tenth century, covering an area of roughly 23 hectares, and these areas are thought to have been consistently populated through to the 12th century (Bogucki, 2004: 106). While a population estimate for an earlier phase of the settlement would be desirable, the only information available to conduct calculation is that of burial data from the 10th – 12th centuries, though the occupation of certain areas at the site was likely quite consistent. This information leads to a density estimate of around 19 individuals per hectare, comparatively very low and not befitting the historical profile or number of artefacts excavated at the site. Wolin's consistent occupation through to today likely means that further burials from the 10th-12th centuries are yet to be found, and the lack of burials from the preceding centuries, as indeed occupation at Wolin is in evidence from the early 9th century, further strengthens this assertion. The density estimate for

Wolin thus must be considered a minimum, and likely only somewhat accurate. It is suspected that the occupation density at Wolin would be further in line with that of Hedeby. Further investigation of methods of population calculation⁸⁶ will hopefully provide further clarification.

Wiskiauten and Grobiņa see the same fate in this model; a lack of accuracy around the size of the settled area of the sites. Excavations at both sites have been primarily focussed on their very visible burial mounds, and almost all information about the settlements, other than that which can be clearly stated with the excavated evidence, is 'best guess'. Similarly to at Menzlin, artefact scatter has been used to identify a potential 20 hectare area of occupation at Grobiņa. At Wiskiauten, analysis of aerial photography conducted during excavations between the 1950s and early 2000s by V.I. Kulakov said to have revealed a semi-circular rampart enclosing an area of around 6ha (Ibsen, 2013: 243), though this assertion seems to have been treated sceptically. A 2009 PhD thesis which aimed to find the settlement was resolved with little more certainty than 'it is approximately here' (Ibsen, 2009).

As has already been noted, the settlements chosen for investigation in this thesis has been strongly related to the availability of data for study. Generally within regions, settlements of this type tend to be much better-represented at small sizes rather than large, confirming to a power law specifying that in general settlement size distributions in regions skew small, i.e. many low density cases, some medium density, and very few high density cases (Fletcher, 2007: 107). Here, however, the distribution is relatively egalitarian (Figure 7.2). The fact that there are some smaller settlements which are clearly relevant to this dataset but not well-published enough in English for their inclusion, has already been raised⁸⁷, along with the fact that there are areas in which settlements should exist⁸⁸ but have not as of yet been found or at least reported. These data support this assertion, and it is very likely that more of the settlements, as they are discovered and studied, will fall in the 'under 10 hectares' category. Larger settlements,

⁸⁶ Perhaps based on the excavation of individual plots and subsequent extrapolation of occupation patterns throughout the site.

⁸⁷ In particular Rostock-Dierkow and Mecklenburg in the Southern Baltic, discussed in Chapter 5.

⁸⁸ Such as Gotland in the Western Baltic and Estonia in the Eastern Baltic, discussed in Chapters 4 and 6.

after all, are particularly visible on the landscape and are less likely to fall by the wayside. Thus this thesis has inadvertently sampled settlements of different size ranges, and should not be considered as stringently representative of the site size distribution likely to have been in existence in the Baltic during the Early Medieval Period.

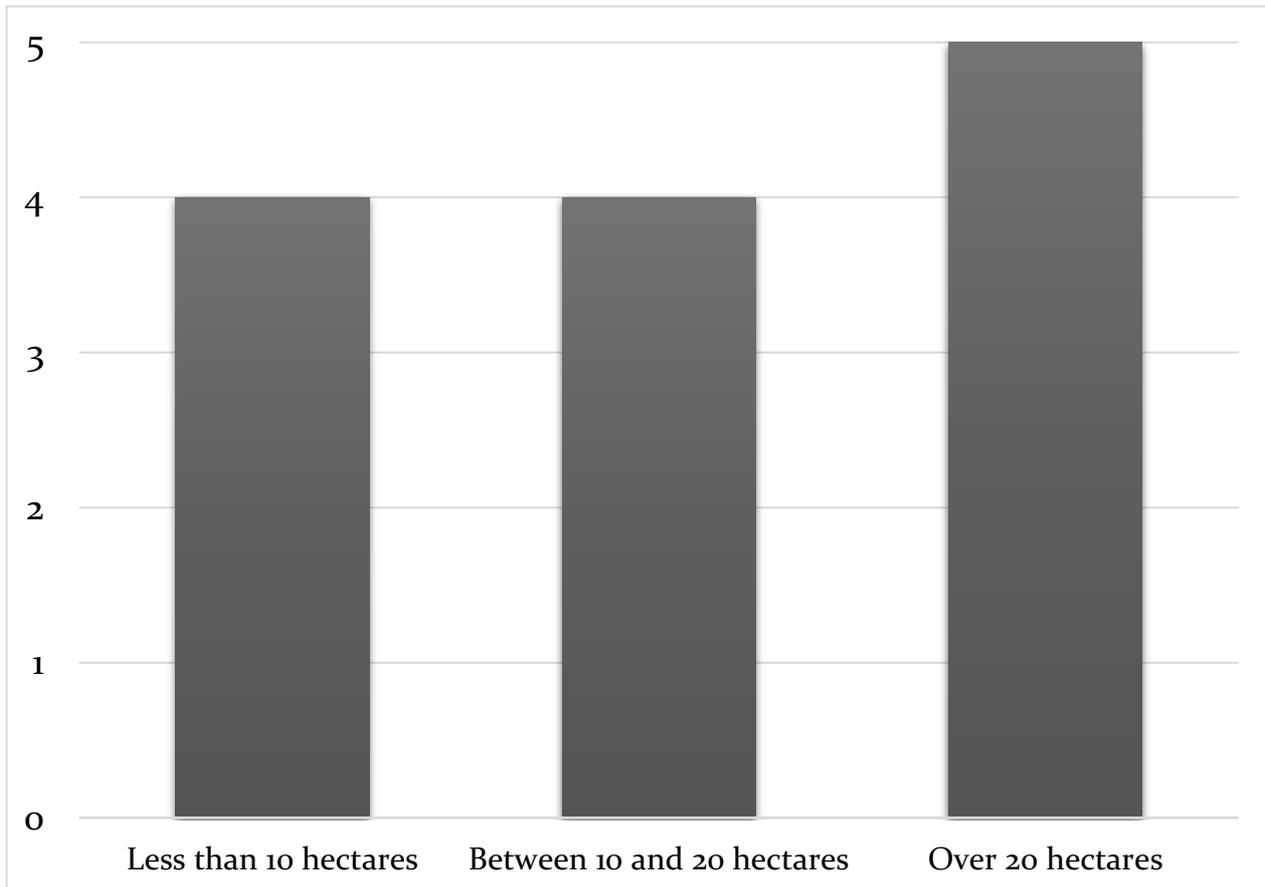


Figure 7.2 Range of Settlement Sizes

The Interaction-Communication Matrix

Intra-regionally, there seems a clear difference between the sites under investigation (Figure 7.3). Settlement size varies significantly (from Ralswiek's 2.6 hectares to Hedeby's 26 hectares) as does population (again, Ralswiek's 150 individuals to Hedeby's 2500). Hedeby is clearly an outlier, with the other settlements seeming to cluster closer together. Staraya Ladoga and Åhus are the next most prominent sites on the graph due to their theorised high populations. When viewed within the lens of the Early Medieval

Baltic sphere Hedeby is a behemoth, clearly the biggest and most influential settlement in the Baltic landscape. Settlements like Ralswiek and Groß Strömkendorf do *look* very different to Hedeby; smaller and less populous, without impressive ramparts and lacking huge numbers of beautiful artefacts. Regardless of their internal differences, however, the settlements are clearly all part of a single phenomenon, and statistical analysis such as Sindbæk’s cooking-pot network investigation (Sindbæk, 2013) have clearly shown the centrality of even the smaller southern Baltic settlements.

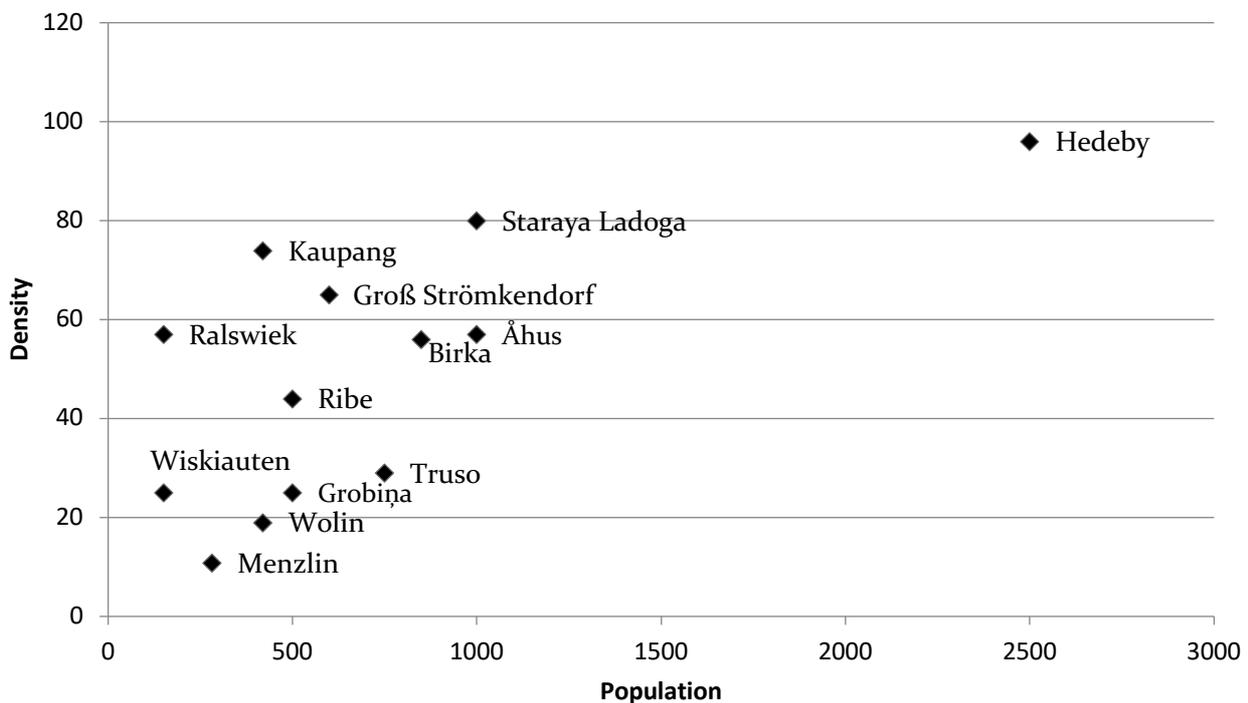


Figure 7.3 Settlements plotted on a linear scale

But while the settlements do differ clearly even within their own sub-Baltic region, when compared within a global framework, their similarity is striking (Figure 7.4). The Interaction-Communication Matrix, discussed in Chapter 1 and referred to throughout this thesis, provides a globally comparative framework for analysis of settlement dynamics, and for the operational parameters of community life (Fletcher, 2007: 97).

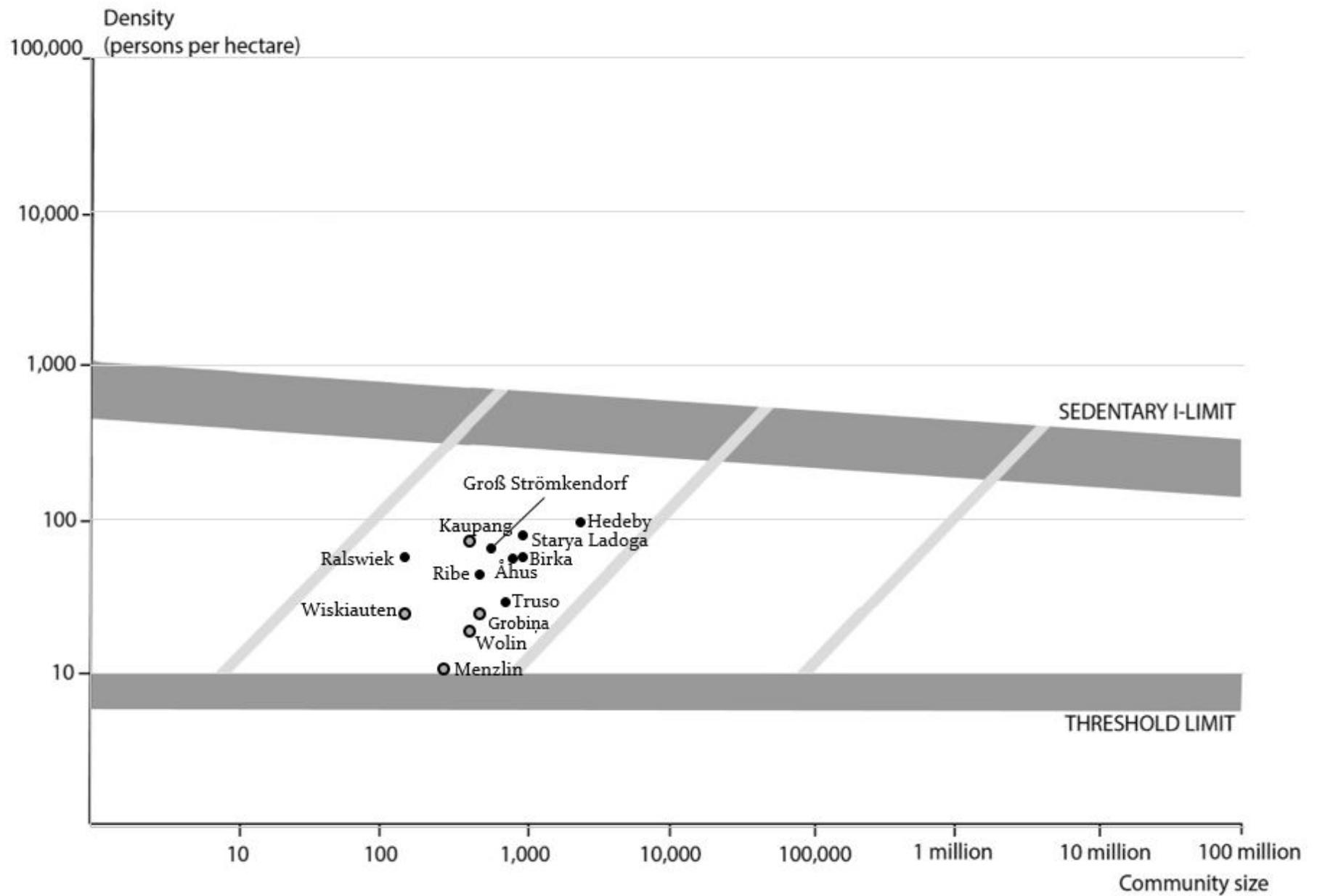


Figure 7.4- The I-C Matrix with settlements of the Early Medieval Baltic. Full dots represent data thought to be correct, empty dots are those of data stated with less confidence.

Note that log-log scaling is required for both the practical purpose of plotting settlements of disparate size worldwide (Figure 7.5), and also because the parameters of behaviour are more readily comprehended in terms of the “power law” of proportionate magnitudes. Settlements viewed logarithmically placed are *not* equidistant from one another as they would be on a linear scale

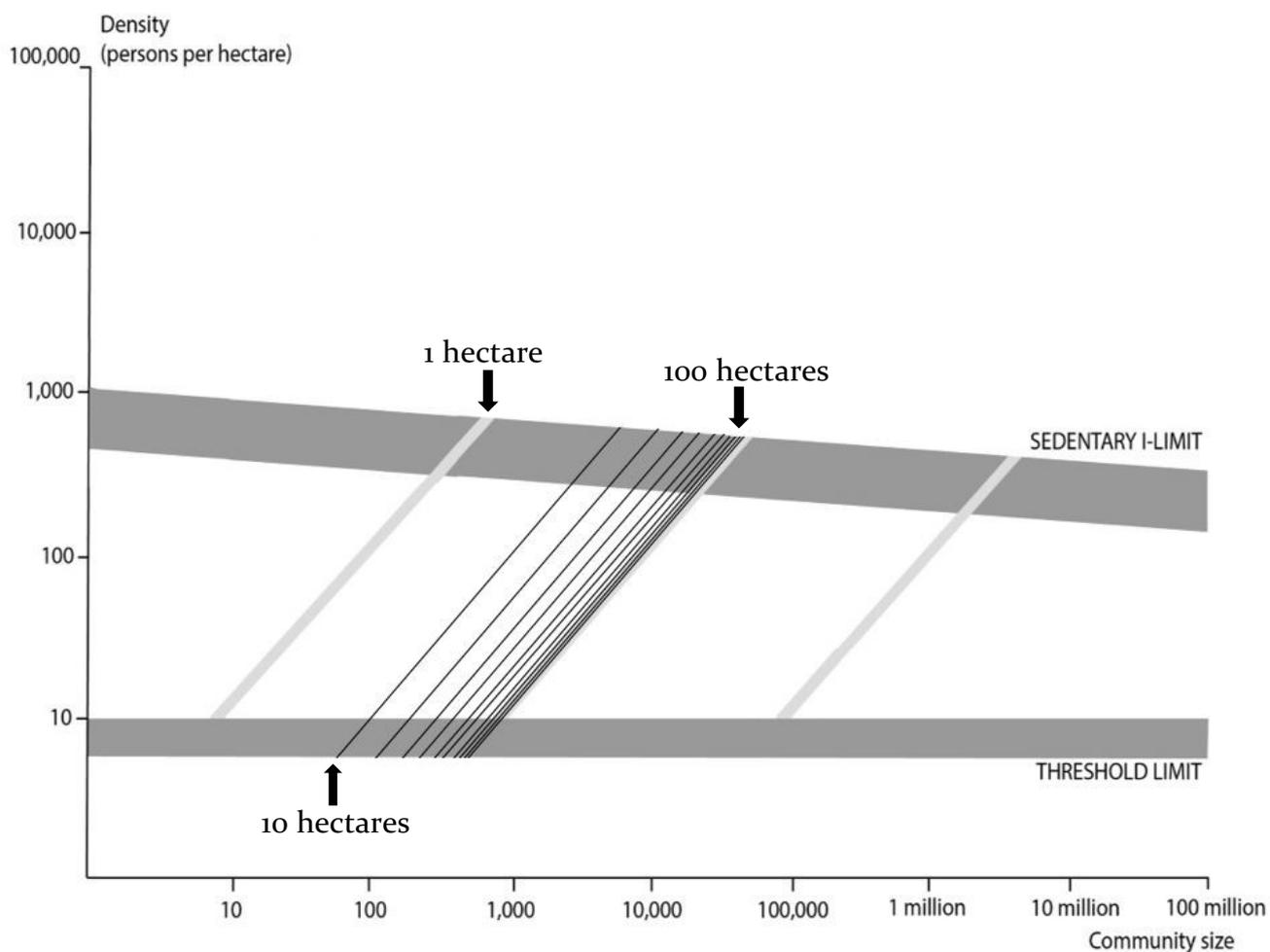


Figure 7.5 - I-C Matrix showing log/log scaling relative to areal extent of settlements

A key tenet of the I-C Matrix is an understanding that density is a major factor in the sustainability of settlements. Constrained settlements with growing populations that result in high density will require some form of stress management materiality to deal with increasingly prohibitive stress if they are to continue to grow (Fletcher, 2007: 78). The absolute limit for operational density has been found to correspond to around 700-

500 individuals per hectare for settlements which lie in the 'band' recognised as permanent sedentary, with populations of between 10 and 10,000 individuals (Figure 7.4), though this declines as populations grow. Most settlements tend to lie at or below about 100-200 individuals per hectare (see figures 1.4a and 7.4) ; this density range is only infrequently exceeded, as would be expected, because interaction stress increases exponentially (Fletcher, 2007: 102–107). Hedeby was towards the upper edge of the usual densities for settlements in the size ranges of the Early Medieval period around the Baltic *and* was large.

The other key sustaining factor is the efficacy of communication. While the absolute operational communication limit for settlements characterised by Fletcher as agrarian-based permanent sedentary using word of mouth and art as the main modes of communication is 100 hectares (Fletcher, 2007: 88), most agriculturally-based smaller communities live in settlements of less than 15 to 30 hectares in extent. This is the characteristic "village" size range. The settlements of the Early Medieval Baltic show a clear tendency to cluster below 30 hectares. Generally, global trends show that at around 30% of a communication limit (seen here at 100 hectares or one square kilometre, 100 square kilometres, and 1000 square kilometres), a 'sub-limit' or usual limit exists (Fletcher, 2007: 102). Again, this is because communication efficacy decreases exponentially as area increases. Beyond these settlement sizes, changes to the way communication is managed would be required.

For example, it seems that an obvious difference between the Early Medieval settlements and the ones that succeed them is direct royal control and/or hierarchical organisation. The formalisation of some form of supra-regional control within settlements may allow for much greater utilisation of 'outside' resources, such as agriculture, leading to the ability to grow larger and denser. The data collected on the settlements of the Early Medieval Baltic show that they all occupy a similar position when considered in a globally comparative framework, despite their internal differences. Within their similarity, settlements had differing and unique histories, and yet even then their various outcomes form a pattern - varied communities in settlements of varying areal extent and residential densities dealing with unique internal issues, but similar internal operating boundary conditions of interaction and communication and

similar external circumstances. The paradox for the circum-Baltic settlements is that they are anomalies in their landscape, functioning differently from the rural settlements, landscape and lifestyle which was usual across Northern Europe. This, perhaps, is intricately connected to their relatively short operational *durée*.

OUTCOME ANALYSIS

One aim of the investigation conducted here has been to look at the outcome of the existence of the anomalous settlements of the Early Medieval Baltic. Comparative discussion of these settlements has previously taken place to a limited extent, though generally within a framework of definitions, e.g. as 'urban' or 'pre-urban', or specifying the characteristics of the sites, such as their operational role or the conditions of the settlements (Callmer, 1994). Information presented throughout this work has shown that these settlements are related to each other in general as a relatively short-lived phenomenon of the Early Medieval Baltic, and can be considered as part of an urbanising trajectory throughout the region. For all the small differences between the settlements, in size, density, and form, they really are quite similar. One area in which they differ greatly, however, is that of outcome, a factor much less commonly discussed. To be quite clear here we are not talking about the end of the settlements, *per se*, more the various outcomes of the early medieval phases of the settlements. These outcomes differ greatly but in most cases there is quite a clear transition of some sort which takes place between the mid-9th and mid-11th century. Various the settlements moved, were replaced, destroyed, or continue to today, and in a few cases the specific outcome remains unclear or unknown. The specific factors behind the outcome of each individual site cannot be stated concisely, as they resulted from many, many different causes and conditions operational on the communities in the settlements. The particulars of each outcome stems from a microcosm of myriad circumstances, and without a completely accurate picture of every single one of these specific factors of internal daily life and external socio-political circumstances remains impossible to untangle. However, the value of the triadic approach to settlement dynamics as a frame of reference is that it specifically places value on the overall outcome of the settlements in relation to the overall extent to which the material and social elements of a site were

operating coherently and the interaction and communication behaviour of the community was able to operate adequately (Fletcher, 2004).

The thirteen settlements under discussion in their thesis as part of this phenomena each experienced different fates, but in a way the importance of comparative analysis is reaffirmed in this extreme diversity of outcome because when looked at in an overall behavioural context some pattern is observable. The pattern does not infringe the particular unique conditions within each settlement, i.e. the way in which a general situation, such as social breakdown, would have been specifically expressed in different communities. Exploration of this topic will raise questions for the future and points for discussion. The relevance of comparative analysis within archaeology and the emphasis on the “complementary difference” between large-scale patterns and the knowledge of internal, community-specific uniqueness of each settlement is that further questions arise about how, in particular, a given community ceased to function. Some settlements become significant anomalies, or resolving their specifics becomes particularly intriguing. The necessary information for further understanding – and for further assessment of the overall IC model – can only come from the expertise and work of local specialists.

Settlement Outcome

Broadly, several categories of outcome can be noted (Figures 7.6, 7.7 and Table 7.3). Five of the settlements under investigation here were clearly abandoned (Birka, Hedeby, Kaupang, Groß Strömkendorf and Menzlin), three declined notably (Ralswiek, Truso and Grobiņa), two continued without interruption and changed form (Wolin and Staraya Ladoga), two moved to adjacent location and have continuity (Åhus and Wiskiauten), and of one we are quite uncertain, though it too involves a move to a different location (Ribe).

Of the abandoned settlements, three cases of succession can be seen. Birka is followed by Sigtuna, Hedeby by Schleswig, and potentially Kaupang by Tønsberg (though this last link is more tenuous). Hedeby and Schleswig's is the closest example to a clear relocation, as the new settlement is located less than two kilometres away, across the Schlei Fjord. Material continuity is seen in the house construction at the newer site, just

as a continuity in population and layout is seen between Birka and Sigtuna. Sigtuna lies further away from Birka, roughly 30 kilometres north, and establishing a clear end date for the use of Birka in the form in which it existed for at least 200 years has proven difficult, but the trade and craft production responsibilities of the earlier site look to have been transferred. The less-than-clear relationship between Kaupang and Tønsberg has already been detailed, but the similar functions of the two sites and their resemblance to Hedeby/Schleswig and Birka/Sigtuna has meant that this relationship has been proposed widely. In no case can clear relocation of the population and function of the settlement be seen, but there is an ideological, if not practical, relationship between the earlier and later sites.

The other two abandoned settlements are much less clear. Historically, Groß Strömkendorf is said to have been destroyed by the Danish king Godfred, with the population of the site moved to Hedeby. While the decline of the earlier site and flourishing of the latter do match temporally, there is little evidence to suggest violent destruction at Groß Strömkendorf. In deference to this theory, however, the settlement does decline quite rapidly and no successor has yet become apparent, though the incredible amount of energy necessary to move over 500 people, and a permanently settled population at that, must be mentioned. The second uncertain settlement is that of Menzlin. Poor preservation conditions have limited the possibilities for excavation at the site, but the possibility that it was succeeded by the settlement of Usedom has been proposed, as there seems a certain amount of continuity between the two sites.

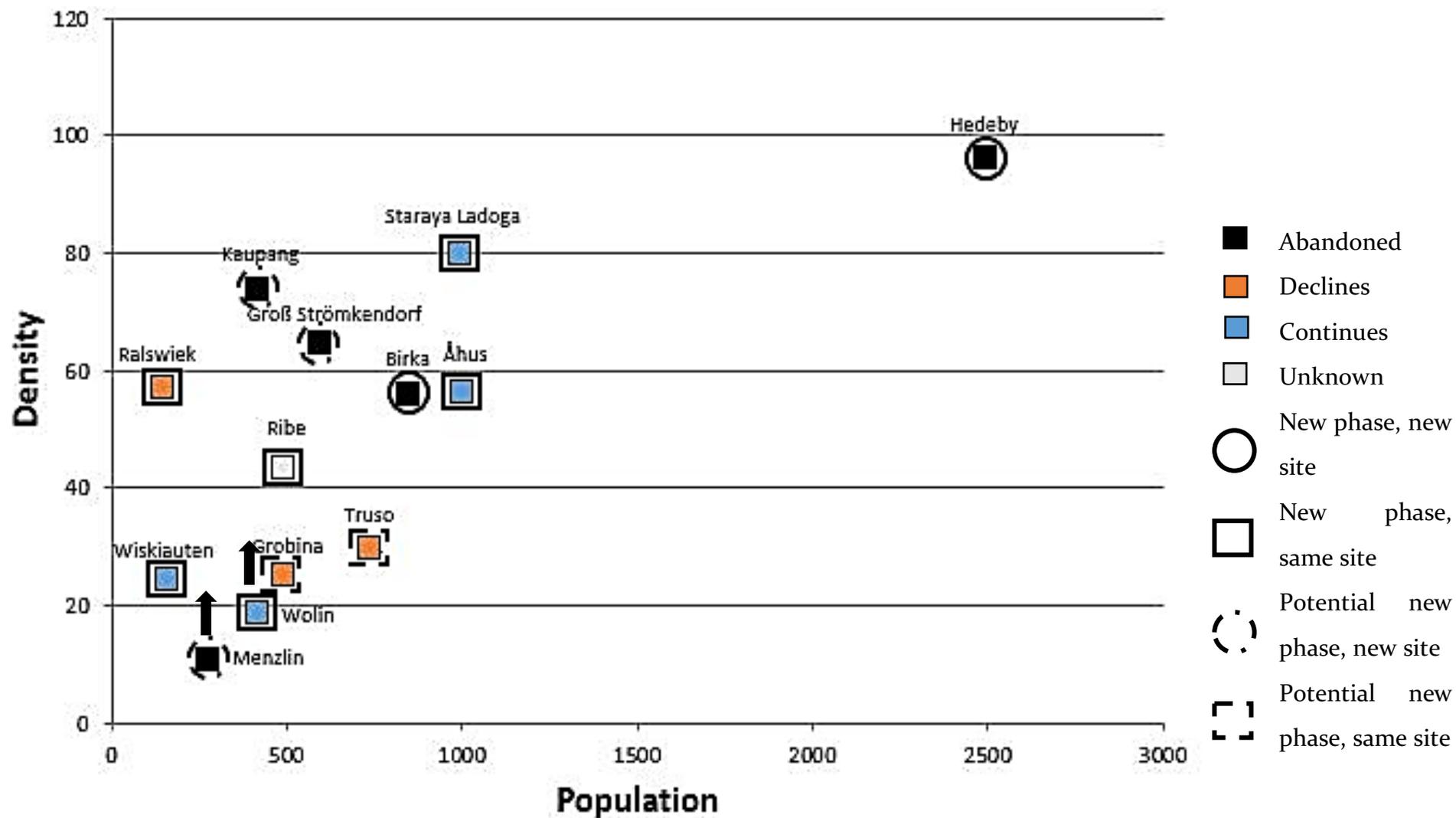


Figure 7.6 - Graph visualisation of settlement outcome against population and density

Ralswiek, Truso, and Grobiņa are the three settlements for which decline seems to have taken place, though all are settled towns today. In all three cases archaeological evidence continues to be found at the sites past their 'end' date, but with less frequency or density than in the operational period. At Ralswiek there is clear evidence of a second phase at the site, though the evidence for this appears almost one hundred years after the settlement appears to fall out of use. Cemeteries at the site continue to see use in the intervening century, and then a period coined the 'Slavic Period' begins, with all evidence pointing to a culturally homogenous population. Similarly in the case of Truso and Grobiņa (the former is now known as Janów) archaeological evidence continues to be found past the Early Medieval period, and may link these sites directly to the towns which lie at their locations today. At Truso a Teutonic estate was built on top of what may have been the burial ground for the site in the 14th century, and at Grobiņa a Teutonic castle from the 13th century was built across the river from the traces of Early Medieval settlement.

Wolin and Staraya Ladoga are the two settlements which change form but quite clearly continue. Both take a slightly different form. Wolin is known to have been taken over by the Piast dynasty in the mid-10th century, with very few large changes made to the site. When compared to the sites in the Western Baltic, where royal power seems at play in the movement from site A to site B, Mieszko I perhaps did not view the settlement as any kind of threat (political, economic, or otherwise), and instead was content with just taking over control. Wolin did decline in the mid-11th century, after being attacked by a Norwegian king, but by all accounts continues to today. Staraya Ladoga is the longest-lasting settlement of the bunch in its Early Medieval form, continuing uninterrupted until the early 12th century. The settlement was annexed by the Novgorod Principality in 1125, and then again to the Muscovites in 1478 when it experienced a marked decline, but can happily be said to have lasted from the mid-8th century until the present day.

The two sites which effectively moved slightly differ in their documentation. The Early Medieval settlement of Åhus lies only hundreds of metres upstream from High Medieval Åhus, which has been built upon to create the modern town of Åhus. A direct and clear continuity between the settlements seems evident. Wiskiauten is a more difficult story, with very little known about the site's settlement, but artefact finds suggest a High

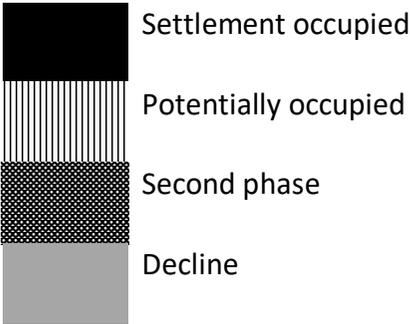
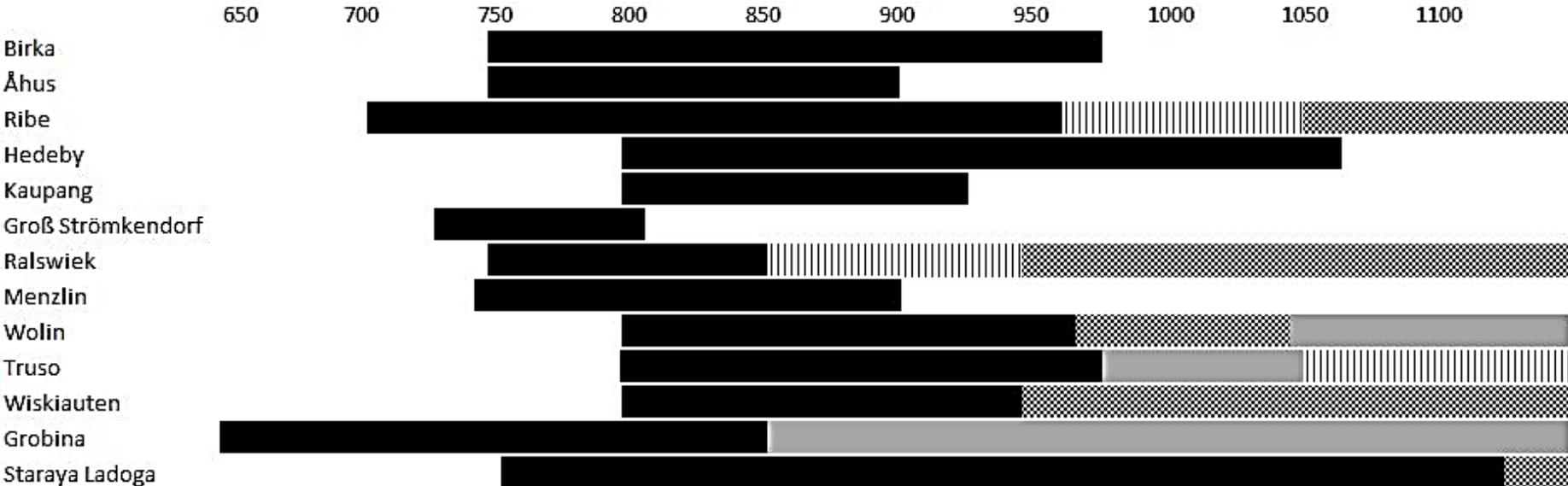
Medieval phase evident in much the same place as the theorised Early Medieval site. Very little is known about the settlement after this time, but the modern town of Mokhovoye lies close by.

Ribe, however, seems quite a different story to all the others. Over a period of around 150 years very little activity is seen at the site. Single artefact finds have been uncovered, and it has recently been resolved that the settlement's fortifications were constructed during this time, but almost all traces of activities related to daily life seem to drop sharply off. Several explanatory theories have been proposed, variously that the settlement declined markedly, that it was abandoned entirely, and that life continued either at the same location very close-by and the traces of settlement have not yet been found. While on the surface the latter seems the most probable, and the modern town of Ribe lies on top, limiting the possibilities for excavation, a distinct sense of "we would have found it by now" surrounds this debate. There is also a sense that the Christianisation of Denmark at the time may have been a contributing factor in this mystery.

Table 7.3 - Early Medieval settlement outcomes

<i>Settlement</i>	<i>Start Date</i>	<i>End Date</i>	<i>Operational period</i>	<i>Reason for outcome</i>	<i>Next stage</i>
<i>Birka</i>	750	975	225 years	Abandoned	Population moves to Sigtuna.
<i>Åhus</i>	750	900	150 years	Continues, adjacent move	High Medieval Åhus.
<i>Ribe</i>	705	900?	195 years	Unknown and adjacent move	Resumed in 11 th century to High Medieval Ribe.
<i>Hedeby</i>	800	1065	265 years	Abandoned	Population moves to Schleswig.
<i>Kaupang</i>	800	930	130 years	Abandoned	Unknown.
<i>Groß Strömkendorf</i>	730	811	81 years	Abandoned/destroyed	Population moved to Hedeby?
<i>Ralswiek</i>	750	850	100 years	Decline	Slavic period begins c. 950.
<i>Menzlin</i>	745	900	155 years	Abandoned	Population moved to Usedom?
<i>Wolin</i>	800	967	167 years	Continues	Taken over by Piast dynasty, declines after attack of 1043.
<i>Truso</i>	800	975	175 years	Decline	Decline through 11 th century, Teutonic phase 13 th century.
<i>Wiskiauten</i>	800	1025	225 years	Continues, adjacent move.	High Medieval phase begins.
<i>Grobiņa</i>	650	850	200 years	Decline	Decline until present-day Grobina founded 1253CE.
<i>Staraya Ladoga</i>	753	1125	372 years	Continues, annexed to Novgorod Principality	Continues until annexed to Moscow around 1478CE.

Figure 7.7 – Early Medieval Settlement Outcomes



Harmony, Complementary Difference, or Dissonance?

The theoretical approach here employed proposes that the outcome of a settlement's existence can be seen as resonant of the degree to which the material and social elements of the site were operating together adequately. This is not presented as a deterministic model, rather as an interpretative framework which aims to illuminate conditions or factors that are worthy of further discussion, in light of how they may have contributed to the outcome of individual settlement histories. The central tenet of this framework is that the social character of a settlement can change much more quickly than the material character – social character is much more ephemeral and changeable, whereas the substantial material character is much less easily adaptable. As hypothetical examples – a larger settlement area generated by wealth, which then remains in being, may therefore create a burden of increasingly problematic communication stress. More people can pack into a settlement more rapidly than the settlement area can be expanded, leading to overcrowding and increased interaction stress. The information outlined throughout the previous three chapters has presented the material and social elements at play in each of the settlements, with the thought that the degree to which they complement or are incompatible with each other may be illuminated through knowledge of their outcome.

Small material items can, of course, be replicated and changed far more readily and are remarkably adaptable. The hacksilver tradition is a good example of this. Seen across the Baltic, the North Sea, and the Viking-occupied British Isles, items of silver – bars, ingots, coins, jewellery, and even scales and weights – were 'hacked' into pieces of a standardised weight (Thurberg, 1988: 315–317). The incredible attention to detail in this exchange system is seen in finds of particularly small weights (the smallest being 0.2 grams (Jagodziński, 2010: 141)) and extensive fragmentation in coin hoards (Sindbæk, 2012: 152). Coins were produced in some parts of Northern Europe in the Early Medieval Period, but it seems not to a degree whereby they could satisfy demand for a standardised currency, and thus hacksilver activity began. The 10th-century 'silver crisis' in the Islamic world, from whence many *dirham* entered into regular circulation earlier in Northern Europe, likely also contributed to this (Noonan, 1989), with the practice very visible archaeologically from the 10th century. The emergence of a hacksilver

economy is interpreted as a sign of a successfully-functioning economy rather than a coping mechanism of a failing one (Thurborg, 1988: 317), and speaks to high levels of flexibility and adaptability in the trade networks of the Medieval world. In due course, the difference between patterns of change in small items compared to inertia in larger features, such as walls, may further illuminate how societies were changing relatively faster than the settlement space.

As outlined earlier in this thesis, the social character of a situation or settlement can change much more quickly than the material framework of the settlement, which retains old and large features as well as redundant structures and features such as blocked drainage and filled channels. At the within-settlement scale, bounded settlements, of which there are many examples in the urbanising Baltic settlements, can be problematic. Hedeby and Birka's walls, Kaupang and Ralswiek's environmental restrictions, and Groß Strömkendorf's delicately hidden position all restrict the expansion of the settlements. The trade networks of the Baltic were only fully-developed in the High Medieval Period (Näsman, 1991: 37), and thus the increase in the number of goods and people flowing through nodal points of the trade networks would have stretched their support capabilities. The assertion that Kaupang stretched its capacity to almost double normal operational levels both in the summer months and towards the end of its life in the 10th century (Stylegar, 2007) surely suggests that the facilities and structures of the settlement would have been under great pressure without the addition of extra space or some form of coping mechanism to mitigate the problems. Analysis of the spatial arrangement of settlements has not shown evidence for clear planning of the division of space for particular social operations – spaces were multifunctional. At Hedeby the waterfront area, where ships were loaded and unloaded, was also the marketplace for the settlement (Kalmring, 2011: 255). At Ribe, the clearly delineated plots upon which both workshops and private dwellings were located were used for market transactions, with some seen to have taken place inside houses (Croix, 2018: 5). Residential buildings, ostensibly constructed for the performance of private activities and affairs, became public spaces, and thus material surroundings may have become restrictive rather than protective (Fletcher, 2007: 20–21).

At the 'whole settlement' scale, a visualisation of the various outcomes of the settlements in conjunction with their 'succeeding' phases becomes quite interesting (Figure 7.7). It must be noted that, in conjunction with the information presented earlier, Wolin and Menzlin's 'true' positions on the graph should likely be somewhat 'higher' in terms of the interpretation offered below. Menzlin's settlement areal extent estimate is likely too large, and Wolin's population estimate likely too low. They will be discussed further in this analysis. Both require much more time and attention in the field to allow the characteristics for these sites to be assessed with more accuracy, though for practical reasons given in their relevant chapters this will be quite difficult. Recognising these issues, an interesting pattern occurs (Figure 7.8). There is a trajectory of continuing settlements from small and low density, to larger and higher density, as if there were a band of optimal, sustainable, stable growth. With the higher density suspected for Wolin, the settlement would 'fit' this trajectory more closely.

Across this trend of continuing occupation two distinct 'groupings' of settlements occur. The 'lower' group, characterised by smaller populations and lower densities, seem to largely persist through the Early Medieval period. They could decline or continue, but (with the exception of the difficult Menzlin) are not abandoned entirely. Grobina and Truso, while there is clear evidence of a decline, may actually show continual occupation until today. Options and varied behaviours seem easier at smaller settlement sizes at lower densities. There is also a 'higher' group, characterised by a higher population and higher density, which was abandoned completely. Menzlin's density may have been much higher, to fit this group, or its history may have been unusual. The calculation of population density for Wolin, as outlined in Chapter 5, is only possible with the use of High Medieval burials. From the mid-10th century Wolin became politically unstable, which certainly would have affected the population and the significance of the settlement as a nodal point for trade. The population density produced may be an accurate representation of the High Medieval population, but it is strongly suspected that the Early Medieval population would have been much larger. Hedeby is highly significant and may in fact have, earlier, grouped closed to the 'higher' group rather than being an outlier. As it is the largest and longest-lasting of the settlements, it may represent what happened when rapid growth occurred. Despite the change in rule of

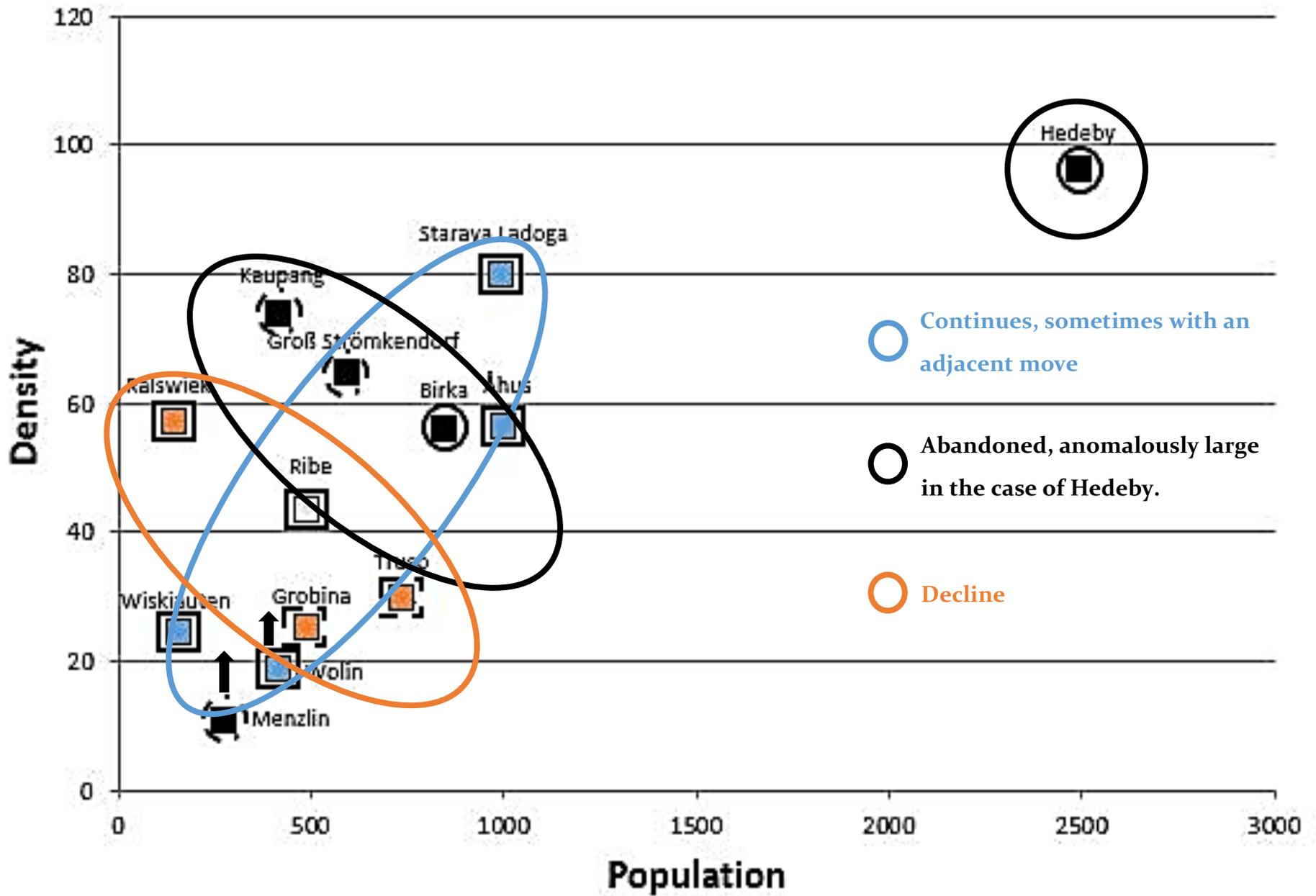


Figure 7.8 - Patterns of settlement outcome

Hedeby in 974 CE with its fall to the Roman Empire, there was no apparent change on sociality in the later phases of the settlement, to indicate that any ‘new ways of doing things’ had been introduced to cope with the stresses of an enduring, expanded settlement space, and a place with comparatively high-density living.

At the regional landscape scale it seems quite clear that as regards the settlements of the western Baltic, state formation and the emergence of consolidated power is at play in the abandonment of Birka, Hedeby and Kaupang, and potentially also Ribe. A strong suggestion has been made that environmental conditions hampered continued occupation at Birka and Hedeby (in both cases primarily the silting of access routes to the site), but it is here proposed that this was likely a contributing factor, rather than primary cause. Sigtuna and Schleswig show clear signs of social and power structures in their planning, as well as hallmarks of Christianity and the Christianisation of the regions, the emergence of which is intricately tied to royal power towards the end of the Early Medieval period in Scandinavia (Sanmark, 2004: 75–82). At Ribe it is hard to escape framing the uncertain period of the 10th century as some sort of decline, but regardless the expansion of the settlement on the western bank of the Ribe Å where Ansgar’s church was founded in the mid-9th century and the appearance of six parish churches by the mid-12th century (Feveile, 2013: 77) speaks to a significant change in character. The distinctly Frisian character and connections at Ribe could have informed the decision to have the High Medieval town develop adjacent to the location of the former trade settlement. If indeed, as has been outlined in Chapter 4, Ribe could have continued throughout the period of time traditionally spoken of as a ‘decline phase’, its small size could have been the reason. Ribe’s crucial location in this diagram makes the settlement a key test case for understanding the dynamics of the period.

If Christianity does indeed play an important role in the formation of state or royal power in the western Baltic then connections to the Christian Frisian⁸⁹ territories would surely be considered favourable, whereas connections to the still-pagan Baltic lands, the Islamic Caliphate, and with the early Russian state - which only became nominally Christian in the last years of the 10th century - would be de-emphasized⁹⁰. The role of religion in the formation and formalisation of the new social order of the High Medieval western Baltic is clear (Hillerdal, 2010: 519–520). At Åhus the trade goods point to a western European-facing focus, quite similar to Ribe, which would explain the only slight movement of the settlement upstream. At Birka, while the first phase of trade and exchange is western-oriented, the terminal phase is primarily one of eastern connections; Russia, the Caliphate, and the Black Sea region (Gräslund, 2001: 131). Trade networks were indeed reorganised eastwards upon the decline of the Carolingian Empire at the end of the 9th century, when many of these settlements were at their peak (Sindbæk, 2015), but Christian rulers would surely not have been so blind as to completely cut off themselves of from the wealth available there for religious reasons. They would merely want to re-organise and re-structure these connections on their own terms. As Hillerdal explains it, “the medieval town had the task of representing something different, namely the king, the state and stability”(Hillerdal, 2010: 520). At Kaupang, its placement in a liminal power zone may explain the decline of the settlement at around the time that the consolidation of royal power occurred – it was no longer a location of particular interest. The foundation of High Medieval towns in the western Baltic *not* linked to any of the Early Medieval settlements display very clearly a royal character, and their form and function has been suggested as entirely separate, modelled on the towns of western Europe (Callmer, 1994: 73).

Moving to the southern and eastern Baltic, as much less is known about the internal political structures of the regions, conclusions are much less solid than for the west. As discussed previously in Poland historical enquiry after the end of World War II was used

⁸⁹ Frisia is considered to have mostly been Christian by the mid-8th century, significantly earlier than any of the Western Baltic countries.

⁹⁰ Christianity is kind of all-or-nothing

as a political tool, first to emphasize historical and societal connections to communism, building a sense of connection with the Soviet Union, before taking on a highly nationalistic character, in an attempt to push as far away from the U.S.S.R. as possible. From the evidence presented thus far, it seems possible to state that the political structure of the Slavic and Baltic countries was tribal in nature, with groups claiming land for themselves and cooperating to various degrees with each other. In this light, however, Wolin is a particularly interesting case given it is widely accepted that Mieszko I of Poland took over the settlement in 967 CE. Ostensibly this was done to take advantage of the trade connections established by the settlement, and curiously very few changes are made to the settlement. Socially, connections were established with the hinterland around Wolin and materially, a new rampart (connected through the building technique utilised to Mieszko) was constructed (Filipowiak, 2004: 68), overall extremely minor changes. It seems that Mieszko was more content to let Wolin be, perhaps because it was extremely valuable as a place of trade and exchange, and because the settlement lay very much on the periphery (in fact in the far north-eastern corner of the region) of the area he controlled. The eventual decline of Wolin and transfer of responsibilities to Szczecin (and speculated potential former decline of Menzlin and transfer to Usedom or Wolin) is discussed more concretely by Bogucki as either a short-term (planned political action) or long-term (caused by economic, social, or environmental/ecological changes) process, concluding that the process was likely deeply involved and related to many different factors (Bogucki, 2013: 356).

At Staraya Ladoga a very similar situation is seen – the settlement was annexed twice, first to Novgorod and then to Moscow, speaking to the strategic importance of the settlement. A key point of difference with the other settlements, however, may go some way to explaining this. All of the other settlements discussed in this work were situated for their access to the Baltic, the international trade facilitator, but also with internal connections to their hinterlands in the form of rivers and roadways. Staraya Ladoga is the only of these settlements to sit on a major international trade route. It is a clear nodal point between the Baltic, the southern Kievan and Byzantine Empires which connected by the Dnieper River,

and the eastern Bulgar and Khazar Empires, which were connected to the Abbasid Caliphate via the Volga River. Staraya Ladoga passively saw goods from all of those empires and trade routes pass through its markets, without the need to go out and source them.

In this way, the comparative study of settlement traditions in the Early Medieval Baltic, clearly shows potential for further enquiry. While the settlements have been discussed as a 'cul-de-sac' (Bogucki, 2010b), the continuing importance of settlements such as Åhus, Ribe and Wolin shows that in some cases they were capable of integration into the newly-formed High Medieval states of the Baltic. Some of the settlements, such as Hedeby and Birka, perhaps did not fit into the emerging power structures and were threatening to their consolidation. They were also potentially vulnerable due to being at or near the limits of their capacity to manage themselves. The result was their removal, and the appearance of their operational ideological successors, Schleswig and Sigtuna. Without the agenda of a political power controlling the Early Medieval settlements, restricting trade and exchange for political and economic reasons, there was a lot more freedom in the actions and decisions made by individuals about with whom and for what they would barter. Ultimately, however, this form of free trade was not compatible with the emergence of the early Baltic states, which required strong connections with specific states for political reasons. Despite likely being more restricted in how and with whom they could trade, the later forms of these settlements were injected with the energy and the management controls on interaction and communication that large institutions such as the church and royal power structures could provide. Thus they were more likely to have longer-term success. What analysis of the limiting conditions of interaction and communication indicates is that this additional factor does add an interesting dynamic for further discussion, especially when considering the less well-studied settlements of the Eastern and Southern Baltic. Abandonment and decline appear as two differing paths depending on a combination of size and density. In conjunction with the increased emphasis on the study and excavation of these settlements, which will hopefully continue, this framework may help to shed some light on questions to be asked about their particular outcome.

CONCLUSIONS

Despite their differences, it seems now quite clear that the settlements which appeared across the Baltic in the Early Medieval Period were part of one phenomenon and also had their own distinct individual histories. Overall trends and local uniqueness are not incompatible perspectives, despite the prevalent disputes in archaeology from the 1960s and onwards. Their position on the periphery of the European world united them in a curious arrangement, thrown together by happenstance into a mutually beneficial relationship whereby trade and exchange flourished. While many of the settlements looked quite different, in particular in their defensive constructions, they all carried similar functions and were mutually cooperative. Despite this, a clear sense of 'Scandinavian supremacy' has permeated the ethos of the discussion, informed by old writings and new, and affected greatly by the chequered recent years experienced in particular by Poland and the former Soviet Baltic countries. This should be systematically addressed, not only in the context of the Baltic region, but also in the context of the implications for archaeological research in zones of conflict and political domination worldwide. Raw, comparative analysis, however, indicates that in a global perspective, these settlements were all part of a network, developing in similar ways but affected by varying degrees of internal behavioural stress. Just as they seem to have appeared due to ostensibly similar circumstances, their outcomes also seem to be due to ostensibly similar circumstances, their differing outcomes defined by their internal difference.

CONCLUSIONS

Regardless of just *what* they were, the brand new and peculiar settlements which appeared across the Baltic in the Early Medieval period clearly *were* something. This thesis set out to build a model of these settlements across the entire Baltic region, moving away from the old model of ‘four towns of the Viking Age’. Throughout the course of the study it became important to investigate just why the southern and eastern Baltic regions have had their importance downplayed, as well as building a model of the trajectory of Early Medieval urbanising settlements in the Baltic, including the pattern of the outcome for each of these settlements. Despite the fact that these settlements all appeared at roughly the same time, in response to similar circumstances, and operated similarly, there is an incredible diversity in their outcomes, yet also a basic overall pattern of outcomes in relation to the extent of the settlements and the density of their occupation. The I-C Matrix provides a perspective on the degree to which the communities in these settlements could behaviourally sustain themselves. That factor interacted in complex ways with the changing regional authorities, especially the emerging royal powers and the rise of the state, and with the location of the settlements in their trade network.

Four significant points have emerged. To begin, small settlements within networks are important, and we should expect that more are operational within the urbanising network of the Early Medieval Baltic. Secondly, the trends represented in the I-C Matrix have shown that settlement areal extent is a significant factor in its own right. Thirdly, settlement extent cannot be regarded as a proxy for community size. Much more rigorous population estimates are needed, particularly for some of the studied sites, and are an important factor in measuring and discussing their viability in relation to settlement area. Finally, settlement outcomes display patterns at different magnitudes. In the context of the interaction between royal power and settlement outcome one pattern is noted on a larger, regional scale, and another appears in the outcomes for specific settlements in relation to their residential densities and settlement areas.

APPRAISING THE EARLY MEDIEVAL BALTIC – REGIONS, UNIQUENESS, AND OUTCOMES

Globally, these settlements can be understood as part of a trend here referred to as ‘second-wave urbanisation’. The foundations of second-wave urbanism, in direct contrast to what is here in counterpoint termed ‘first-wave urbanism’, were externally more than internally generative. Individuals in the Baltic already had knowledge of and exposure to the urban communities which covered continental Europe. It must be noted here, however, that being part of a ‘wave’ of urbanism does not in itself make these settlements themselves definitively ‘urban’. Instead of entering the discussion into whether or not they are or are not ‘urban’, a deliberate choice was made in this work to acknowledge their status as part of a process of urbanising, on a trajectory towards a settlement form that can be clearly identified in the High Medieval period, without debate, as urban. The assignment of the title of “urban”, given the complexities of identifying such a developmental stage in terms of a global category, must be a responsibility given to regional specialists.

A common approach in studies of the settlements of the Early Medieval Baltic has been to name the towns relative to some degree of an ‘urban’ status; as pre-urban, proto-urban, or definitively as ‘urban’. Various other titles have been assigned to the settlements, taken from medieval terms (*vicus*, *oppida*, *urbs*) and foreign or historically-defined settlement types (*wic*, *emporia*, and town) among others. As Sindbæk describes, in exploring sites of long-distance trade, an unambiguous assertion of ‘contact or no contact’ may be unhelpful and misunderstand the dynamic, complex and interconnected nature of trade in the ancient world (Sindbæk, 2013: 72). This then should also be applied to the concept of urbanism. The description of individual sites as ‘urban’ has taken place relative to their prominence in the landscape. Instead, the understanding of the development of the region as of a network of settlements, with clearly similar connections and trajectories and yet differing outcomes, has been the focus of this study. By referring to the sites only as

‘settlements’, with a quantitative qualification of the common characteristics which can be observed between them, we move towards a description of what they were and what they become, rather than labelling them. The settlements under investigation in this work were all permanently occupied year-round, produced crafts to export-volume, engaged in long-distance trade and exchange, and emerge between the 7th and 9th centuries CE. Thirteen settlements thus became relevant for analysis. The excavation history, historical attribution, environment, material characteristics, social characteristics, and outcome of each of the settlements were reviewed in the context of three regions representing the eastern, southern, and western Baltic. Throughout this analysis, it became apparent that, when compared with global regional settlement patterns, the settlements discussed are predominantly, but not exclusively, the large settlements which were operational across the Baltic at this time. We should expect that there were a greater number of smaller settlements, below 10 hectares in area, which would have been active in this regional network. Several settlements matching this description have been identified throughout this thesis, most notably Rostock-Dierkow and Mecklenburg in the Southern Baltic. This discovery will hopefully direct future research towards efforts to investigate this disparity.

A regional comparative approach has been used to present the interconnectedness and interrelatedness of the Baltic region as a whole, rather than utilising the Viking-leaning framework that has often been used for analysis. The Viking world has overshadowed the rest of the Baltic and for obvious and logical reasons; the long-held view of the Vikings as barbarous savages “cast in the role of Antichrist” (Magnusson, 1980: 7), raping and pillaging their way through the sophisticated European continent, required clarification. It is now well-known that this particular representation of the men and women from Scandinavia can be attributed to one-sided chronicling, detailed in accounts written by the terrified and affronted clergy of England (Magnusson, 1980: 7). Viking Studies and Viking Age archaeology has long had a clear mission; to illustrate the complexity, sophistication, and interconnectedness of the Viking world in an effort to change this perception and to show the value, qualities, and beauty of the Viking cultural world. The rest of the Baltic region, however, has emerged as an unintended casualty of this agenda – not that this was

deliberate in any way. It seems the same perceptual misfortune which once befell the Vikings has, in a way, due to a lack of global attention, now befallen the rest of the Baltic region. Through investigation the reasons for this became apparent; a confluence of circumstances strongly related to the turbulent years following World War II. Despite the clear similarities that the settlements of the eastern and southern Baltic bear to those of the west, this situation has long left them underrepresented in the archaeology of the Early Medieval Period.

While differences do appear - the primary example emphasised in this thesis being settlement fortification - they can be resolved with an understanding of the context in which the settlements are found. In this case, the hillfort tradition of the southern and eastern Baltic which had persisted into and was still utilised in the Early Medieval period, appears to have made the cost of fortifying a newer settlement somewhat unnecessary if it was placed in good proximity to defensive ramparts⁹¹. The power structures within which the settlements emerged and existed are also of prime importance, as the extent to which they existed harmoniously within their wider landscape greatly affected the specifics of their outcomes. The settlements of the Western Baltic emerged at a time in which state formation was becoming visibly manifest, and in a landscape in which other settlement forms fulfilling similar functions either already existed or were beginning to emerge⁹². The settlements of the Southern Baltic were strongly influenced by both the local, Slavic populations and Scandinavian arrivals, as well as later by the emerging Polish state. The settlements of the Eastern Baltic are the least well-studied of the group, making conclusions quite difficult, but seem the most stable of the sampled group, all continuing into the High Medieval Period whether declining or not. In all cases, these settlements were anomalous and distinctive in local landscapes largely consisting of rural agrarian settlements, and thus an understanding of the context in which they emerged is of prime importance when investigating their outcome. When placed in a global context, the I-C

⁹¹ In fact, in the course of preparing this thesis I put the plans of the settlements of Hedeby and Truso to a second-year theoretical archaeology class and asked them what they saw. The answer was, without exception, 'two different plans of one site'.

⁹² Circular fortresses in the former case and magnate farms and central places in the latter, to name a few.

Matrix, these settlements fall in a similar zone; less than about 30 hectares and, with the interesting exception of Staraya Ladoga⁹³, below 30 individuals per hectare in density. They remained within the lower ranges of occupation density for agrarian-based, compact, small-scale settlements. The internal dynamics of the settlements, their material milieu and social operating conditions, appear to have restricted them from further growth and minimised internal behavioural stress. Within the overall population / population density analysis conducted here, it seems that settlements within a mid-range size band are able to display more resilience (Figure 8.1).

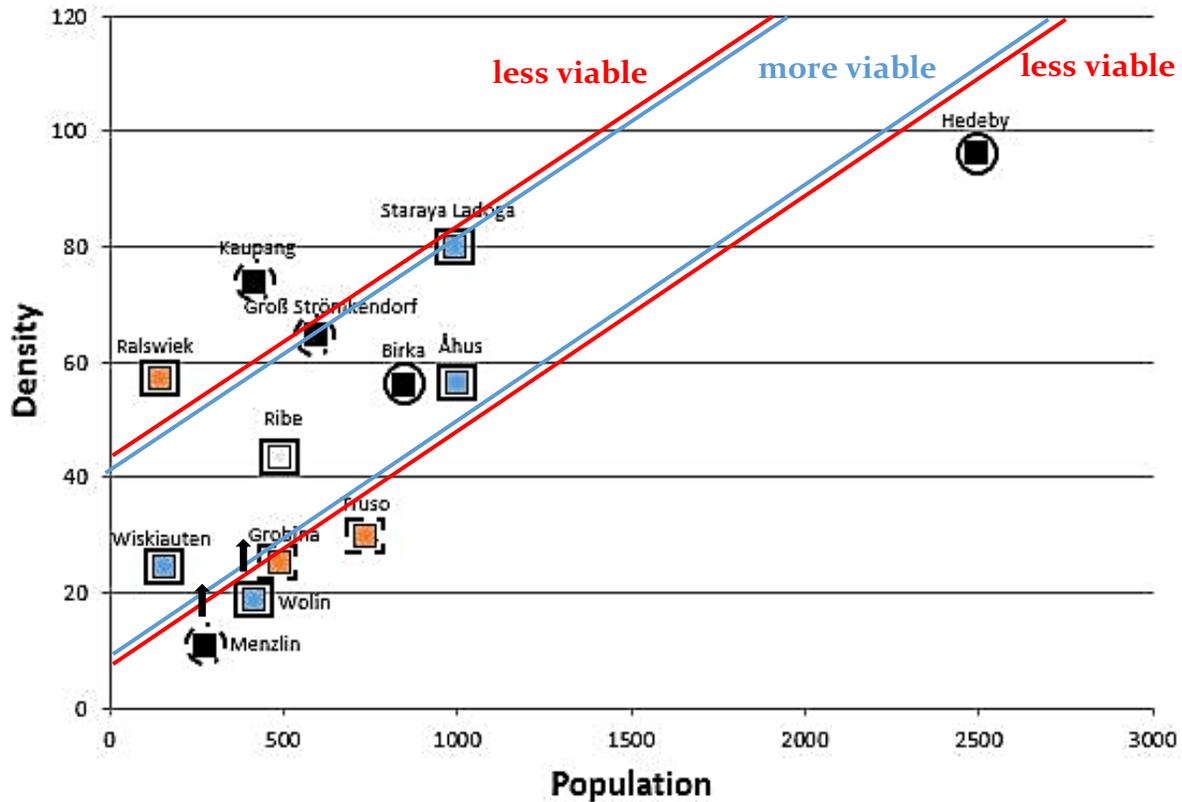


Figure 8.1 - The 'Resilience Band'

⁹³ And Menzlin, for reasons explained in the previous chapter.

SUMMARISING THE EARLY MEDIEVAL BALTIC – OUTCOMES, POWER AND THE FUTURE

The second primary aim of this thesis was to collect and analyse information around the outcome of the histories of the settlements in question. Discussions around the reasons for their emergence abound, but outcome is less well-represented in the literature for a variety of reasons, including a focus on developments and the issues of characterising outcomes. The central tenet of the theoretical framework used for this analysis is that of a triadic approach to settlement analysis, holding that an outcome factor be introduced to discuss material/social non-correspondence. This non-deterministic framework asserts that the outcome of a settlement may speak to the degree to which the social actions and material milieu of a settlement are operating harmoniously. This situation, in which settlements appear for similar reasons but then leave the Early Medieval period in different ways, is particularly interesting for the investigation of this analytical framework. Curiously, rather than clear trends emerging relative to the regions in which the settlements are found, a trend related to power and control is more apparent. It is here theorised that some settlements directly challenged the emergence of state formation and new power structures across the Baltic. In some cases it was necessary for the replacement of settlements, as the culture within them was both challenging and supportive of these emergent structures, and in some places they were integrated into emerging states (the outcome). Sweden, Denmark⁹⁴, Norway and Poland in particular underwent this process during the Early Medieval period.

In Sweden Birka seems to have been succeeded by Sigtuna but Åhus continues, in Denmark Ribe seems to experience an interruption of sorts in the tenth century and Hedeby is succeeded by Schleswig, and in Norway Kaupang has no immediate successor. This thesis proposes that in these countries in particular the external trade connections of the sites may have had an impact on their outcome. In Poland, Wolin continues until the first Polish

⁹⁴ As per its medieval borders

state begins to look towards the Baltic⁹⁵, and is successfully (at least initially) incorporated into the Piast state. The settlements which seem to have been replaced by others nearby were not destroyed or completely abandoned – it does not seem necessary that one settlement be extirpated for a successor to be operational. While Schleswig was operational the harbour at Hedeby saw continued use as a shipyard, and at Birka the garrison remained in use into the 11th century. It is proposed that the theorised continued occupation of the sites of the Eastern Baltic into the High Medieval period, specifically Truso, Wiskiauten and Grobiņa, was related to their being placed largely external to any similar process. Ralswiek, additionally, continues into the 12th century as a place of Slavic authority. Staraya Ladoga's importance as a nodal point for long-established trade routes was acknowledged in its stability through several annexations. Ribe is a particularly interesting case, its outcome unknown but position (along with the varying theories about its 10th century form) suggesting that decline, abandonment, and continuation are all possible. A conclusive answer to just what happened at Ribe in the 10th century would thus allow for much greater specificity in the outcome model.

One aspect which has seen discussion, albeit generally in the context of the settlements of the Western Baltic, is the relationship between these short-lived settlements of the Early Medieval period and the more stable and long-lived settlements of the High Medieval period. The settlements of the Early Medieval period were limited physically within their landscapes, anomalous, unprecedented and externally focussed, generally lying in liminal zones. Without the restrictions of royal control, however, they were internally versatile, with very few limits as to what they could do within their area of expertise. The settlements of the High Medieval period, because they had the support of (or were even founded by) the state or royal powers, had much more capacity to grow. In their immediate landscape they could take in a greater or lesser number of resources from their hinterlands, but their functions were clearly defined and they were internally focussed, serving the people of an internal landscape. In this way, the Early Medieval settlements were incredibly versatile

⁹⁵ For the purposes of this work, Truso is considered due to existing in the Prussian area of influence as eastern Baltic.

and adaptable internally; the High Medieval settlements had a more clearly defined role and thus less internal flexibility, but with the support of and connections to their hinterland, had a much 'larger' and more enduring presence.

Whether the Early Medieval settlements should be seen as a cul-de-sac of development (Bogucki, 2010b), as a settlement form which appears and then disappears without significant impact, or as an irreplaceable link in the chain (Mogren, 2013) which led to the urban development of the Baltic region as we know it now, is also hotly debated. In general the idea that the two phases of settlements are deterministically related as an 'evolution' (Jørgensen, 2003: 175–176) has been rejected in favour of acceptance a more nuanced view, which sees them as caught up in state formation processes and developments across Europe which forced changes to the Baltic trade network (Carstens, 2015: 12–15). Following on from the work of Hillerdal, who identified these settlements from a western Baltic standpoint as a 'middle child', lying between old and new power structures (Hillerdal, 2010), this thesis explored the archaeological evidence proposed in relation to the assertion of royal or significant power within them. Ultimately it seems that there is very little clear archaeological evidence for the presence of royal power in these Early Medieval settlements. This line of thought should be extended to counter their reduction to mere cul-de-sacs, and here it is instead proposed that the place of these settlements as external to the emerging states and power structures of the Baltic in the Early Medieval period in fact led to their place as ideological predecessors of the towns of the High Medieval Period. In most cases both the earlier and later settlements had many of the same functions, only with power much more clearly expressed in the latter. Indeed the earlier settlements may have been seen as a threat of some sort to these emerging powers. The interaction of internal stresses with external dynamics creates a complex pattern of outcomes, which still possesses structure and can be seen when plotted on the I-C Matrix.

CONCLUSIONS

The entire debate around the Baltic must thus be re-framed. The 'Viking Age' has long been understood as an artefact of history, defined in terms relevant to England and continental

Europe, but the terminology remains in use as a convenient and audience-grabbing force for wider engagement. Despite the fact that Viking Age archaeologists now almost universally reject the long-held definition of the era as lasting from 793-1066 CE, as well as its characterisation as a period of savagery, the material phenomena by which the Viking Age is characterised remain in place. In some situations this, of course, is exactly how things should remain, but the settlement tradition which appears across the Baltic, both pre-dating the Viking Age and extending well past the Viking World, should be viewed as an ‘extra-Viking’ phenomenon. This thesis argues that discussions of the trade-focussed permanent settlements which appear both in the Viking homelands and across the Baltic should be analysed under a separate lens, that of Early Medieval settlement archaeology. The settlements of England, Frisia, Frankia, and the western coasts of Scandinavia have long been acknowledged as part of the North Sea Network (Melleno, 2014), why therefore should we not acknowledge the settlements of the Baltic Coasts of Scandinavia, Germany, Poland, the Kaliningrad Oblast, Lithuania, Latvia, and Estonia as the Baltic Sea Network? Perhaps the comparative framework here applied to the Baltic Sea Network could in the future be expanded to the North Sea Network, to build a model of Early Medieval Northern European settlement trajectories.

With thanks to Helen Clarke and Björn Ambrosiani, I will end by modifying the final line of the preface of “Towns in the Viking Age”. Those who are investigating the settlements of the Early Medieval Baltic still have a lot to do!

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