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This article is still under writing. My apologies for lacunae, clumsy language and missing notes, and my thanks for any and all suggestions on how to improve this article.

Danzig Palgeld Registers and the Organization of Northern Baltic Sea Shipping

ABSTRACT

This article traces the activity of skippers sailing from Stockholm, Åbo and Reval to Danzig as a part of the networks connecting the northern periphery to the European core. Entries for North Baltic ships and skippers in the Danzig harbour toll registers (*Palgeld*) from the later 15th century show a dynamic participation in the Baltic Sea business, and specialization in the shipping between Stockholm, Åbo and Reval.

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Danzig Palgeld Registers and the Organization of Northern Baltic Sea Shipping

In the late medieval Baltic Sea, merchants had largely become sedentary. Specialized skippers catered for the maritime transportation of goods, and the responsibilities of the ship owner, skipper, crew and the merchant owning the goods were legally defined.¹ This is the established picture of the practices of the late medieval Hanse. But in the northern Baltic Sea region – which is often simplified as the backyard of the Hanse, dominated by the Low German language and the culture of North German trading cities – we find societies less or differently organized from the Hanseatic cities: a frontier which is still expanding a hundred years after the Black Death. (Section 2)

Three burgher communities dominate the urban map of medieval North Baltic: Stockholm, the capital of the Swedish realm with a population of 5000–7000; Reval (Est. Tallinn), the nexus of the Hanse trade in Russia, with a population similar to Stockholm; and Åbo (Fin. Turku), the provincial capital of the Diocese of Åbo (encompassing most of Finland), and the second largest town in the Swedish realm with a population of perhaps c. 2000.²

Burghers of these towns traded with the major Hanseatic hubs, notably Danzig and Lübeck; within the North Baltic, Stockholm and Åbo also traded with Reval. Stockholm's and Reval's trade and shipping are prominent in the Lübeck Pound toll registers (*Pfundzoll*) from 1492–1496, but direct shipping between Lübeck and Åbo seems to have been minimal, and there are no Åbo entries in the registers of 1495–1496.³ On the other hand, the number of ship arrivals from Åbo in the later 15th century Danzig harbour toll registers (*Palgeld*) almost equals those of Stockholm and Reval. Regarding the small size of Åbo, this suggests that the Danzig trade and shipping had a major impact in the small provincial town.⁴ (Regarding the Hanseatic customs registers, see section 3)

How was the intensive shipping between Åbo and Danzig organized, and how does the organization compare to that of Stockholm and Reval? This article traces the answer to this question through three surveys into the Palgeld registers of 1460, 1468–1472, and 1474–1476. First, fluctuations of shipping between each North Baltic port and Danzig are presented as the sum of yearly *Palgeld* values and yearly ship arrivals. (Section 4) Second, the activity of individual skippers is discussed. (Section 5) Thirdly, the shipping to Danzig from other Finnish ports and regions near to Åbo is analysed. (Section 6) Fourthly, the activity of individual skippers is translated into factors for each town, and these factors are compared to highlight the nature of each town's organization of

¹ Dollinger 1998, pp. 195–196, 200–203, 215–218. I am using the term "skipper" to avoid confusion between the frequent words "shipper" and "ship" in this article.

² There were smaller towns with a population in hundreds in the Estonian and Finnish coasts, for example Raumo (Fin. Rauma) in western Finland, Pernau (Est. Pärnu) in south-western Estonia and the somewhat larger Vyborg (Fin. Viipuri) on the Karelian Isthmus. The shipping from Raumo and Vyborg to Danzig is discussed in this article. None of the Swedish towns in the Swedish realm were members or factories the Hanseatic League, although the medieval Swedish Law ensured the German burghers a minimum representation in the town councils (until 1474) and some privileges regarding the legal use of Low German in the town council.

³ *Die Lübecker Pfundzollbücher*, 1: Introduction by Vogtherr, pp. ####, especially tables ###. Trade between Lübeck and Åbo could have passed through Stockholm or Reval. Cf. Kallioinen 2000, p. 168.

⁴ Kallioinen 2000, pp. 169–170. Lauffer 1894, p. 10, notes that since roughly a third of the Danzig imports came from Lübeck, the Åbo trade with Danzig may actually involve Lübeck.

shipping to Danzig. (Section 7) The results are discussed along with the conclusion (Section 8), and further topics of inquiry are suggested.

A late medieval frontier: Local specialities and common denominators

In the North Baltic Sea (here: north-central Sweden, the Bothnic Gulf, Finland and the Gulf of Finland; the hinterlands of Stockholm, Åbo and Reval), production was not very specialized. Most of the people subsisted on agriculture, fishing and even hunting; the economy was highly autarchic, and the little surplus that was produced universally mirrored the ecological adaptation to the northern clime, flora and fauna. Especially in Finland, peasants, burghers and the thin layer of nobility all traded with an almost identical selection of goods. Before the emergence of tar as a Finnish special product in the late 16th century, Finns exported fish, butter, skins, seal fat, furs and horses, i.e. products of animal husbandry, fishing, sealing and hunting. Imports consisted of salt, rye, hops, cloth, and finished or semi-finished goods like quality pottery and metalwares.⁵

However, there is some important specialisation in the North Baltic structure of trade. The metal industry in the Swedish Lake Mälaren region, made medieval Sweden one of the largest suppliers of iron and copper.⁶ Reval, on the other hand, was the nexus of the Hanseatic–Russian trade, and had a productive hinterland with surpluses of grains, flax and hemp.⁷ There was also a clear division in the nature of urban and rural trade. Burghers of the smaller towns (e.g. Raumo and Vyborg in Finland, Pernau in Estonia) exported and imported on the average more valuable cargoes than peasants, their trade contacts regularly reached the Hanseatic ports of the southern Baltic, and trade through the towns was concentrated in fewer hands than the trade of the peasants.⁸

It should be noted that the North Baltic Sea international trade was not organized according to the idealized division of lÅbour, where professional merchants and burghers of the trading towns and cities controlled trade. It has been estimated that the number of peasant ships in Finland in the mid-16th century was 350–400, a large number when compared to the somewhat over 100 vessels owned by the burghers of Åbo, Viipuri and the other fledgling towns. The patterns of 16th century peasant trade probably go back to at least the 13th century, and while the burghers and the crown tried to prohibit it or at least diminish its importance, peasant trade continued strong until the 19th century.⁹

Lacking specialisation in trade, the activity of the peasant traders, the small number of towns and burghers, and limits of the governments' power to control domestic and international trade through edicts and laws betray the undeveloped nature of medieval and early modern North Baltic when compared to German-dominated Baltic Sea coasts and the European core regions. Jason Lavery has proposed the use of the concept frontier when studying Reformation period Finland. Frontier here denotes a region which receives new immigrants, where new settlements are creat-

⁵ Dollinger 1998, p. 310; Kaukiainen 1980, pp. 112–115; Kaukiainen 1993, 7.

⁶ Dollinger 1998, pp. 310–313.

⁷ Dollinger 1998, pp. 306–310.

⁸ Kaukiainen 1980, pp. 108, 112.

⁹ Kaukiainen 1993, p. 8–16.

ed, where there is less social stratification, and where the central government is weak. Typically, frontiers are also politically and culturally contested spaces, where different power structures compete for hegemony.¹⁰

In essence, frontier is an expanding periphery in process of being increasingly tied to the central government, and becoming like the core regions where it receives its immigrants and sociocultural models. This is strikingly fitting for late medieval and early modern Finland (the Diocese of Åbo, the eastern part of the Swedish realm): here, new parishes were created from ca. 1300 to the 17th century, and we see a wave of construction of stone parish churches in the early 15th to early 16th century.¹¹ New towns were founded first piecemeal through the 14th to 16th centuries, and then in a large wave in the first half of the 17th century. Over 90 percent of the population were free taxpaying peasant farmers, compared to a little over 50 percent in western part of the realm (modern Sweden), and a considerably lower figure for the Teutonic Orders' Livonian state. Conflict between the Swedish and the Russian realms and the Western and Eastern Churches was brood-ing, and a brief war erupted in the late 1490s, involving a Russian siege of Vyborg.¹²

During the 13th to 17th centuries, the southern and coastal parts of modern Finland were tied and merged into the urbanized Baltic Sea world. They became participants in the western European culture, the Lutheran Reformation, and the transformation of the Swedish realm into a centrally led expansive monarchy.

The Hanseatic customs registers and the Danzig Palgeld register: problems and possibilities

The customs registers of Hanseatic towns have been recognized as the most valuable source material for studies on the volume and regional variances of the late medieval Baltic and North Sea trade. The preserved registers are of twofold origin. Pound toll registers, or *Pfundzolliste*, have been preserved from Lübeck and Hamburg, and they are a result of an extra toll periodically levied from arriving and leaving ships to finance military spending in times of crisis. Hence, they have been preserved only from crisis years. On the other hand, the Danzig *Palgeld*, modern High German *Pfahlgeld* or "pole money", was a standing harbour toll levied from arriving and leaving ships to finance the upkeep of the Danzig harbour with its fortifications and dredged channels.¹³

Despite the centrality of the customs registers as source corpuses and their division in units of single or short series of years, only few of them have been edited and published. The publications have centred in the Lübeck–Hamburg area: the Lübeck *Pfundzolls* of 1368 and 1492–1496, and the Hamburg *Pfundzoll* of 1369. A majority of the Lübeck *Pfundzoll* and all of the Danzig *Palgeld* registers remain unpublished, raising the threshold to use them to produce research data. Thus, each

¹⁰ Lavery 2012, 62–64. The concept of frontier is based on Frederick J. Turner's essay *The Frontier in American History*, originally published in 1893.

¹¹ Hiekkanen 2007, pp. 11–26.

¹² Enemark 1979, pp. 100–108.

¹³ Stieda 1884; Lauffer 1894; Stark 1967; Schildhauer 1968; Jahnke 1998; Burkhardt 2013. Also see the introductions in the source editions *Die Hansischen Pfundzollisten des Jahres 1368* (by Lechner 1935), *Das hamburgische Pfundzollbuch von 1369* (by Nirrnheim 1910) and *Die Lübecker Pfundzollbücher 1492–1496* (by Vogtherr 1996).

researcher has distilled them to answer their specific research questions. This has produced data sets which are not fully compatible, and forces a new researcher to refer to the original sources.

Mike Burkhardt has recently challenged the way the Pound toll registers of Lübeck and Hamburg have been traditionally approached. He stresses the special and partial nature of the periodical tolls levied for war effort: wartime likely distorted the patterns of trade, and it is indeed a complicated question of what should bee see as normal – especially when wars and privateering were endemic in the late medieval and early modern north European seas. Burkhardt rightly concludes that the preserved registers only show the minimum amount of the trade, and it is dangerous or outright erroneous to draw simple conclusions based on seemingly clean mathematical equations.¹⁴

This is true also of the Danzig material. Although the Danzig *Palgeld* was continually levied, customs registers have been preserved only fragmentally. Part of them are form years when trade was probably influenced by political conflicts and outright warfare, and the preserved books typically only include either the arriving or the leaving ships.¹⁵ Thus, to start with, the Danzig *Palgeld* registers are partial, and do not give us an easily generalized complete picture of the maritime commodity exchange between Danzig and its trading partners.

A key problem of the research on the Danzig *Palgeld* registers are the variously preserved registers of arrivals and departs. Victor Lauffer's seminal work on the commodity exchange of Danzig based Danzig's imports on the 1474–1476 arrivals, and the exports on the 1490–1492 departs. However, while the 1474–1476 registers record the origin of the arriving ship in 99.2 percent of the cases, in the 1490–1492 registers the destination of the departing ship is given only in 13.4 percent of the cases.¹⁶ A comparison of such data is indeed ill afforded to give us a credible picture of the commodity exchange. But for the lack of better comparison, Lauffer's survey is still referred to in the literature.¹⁷

Another problem is the representativeness of the data for individual years. For example, Johannes Schildhauer has traced the long-term change in Danzig's trade directions and the rise of the Dutch shipping based on surveys of ship arrivals in Danzig in the years 1460, 1476, 1530 and 1583. While the general picture of the rise of the Dutch shipping is credible – not the least because we have other sources to compare with for the later years, notably the Dutch Sound toll registers – the data for the year 1460 is complicated because the smallish number of ships listed as arriving in Danzig in 1460. The number, 282 ships, is About 25 per cent lower than the 403 ships Lauffer has counted for the year 1474, and About 50 per cent lower than the 666 ships Schildhauer has counted for the year 1476 (Lauffer has 641 ships for 1476).¹⁸

¹⁴ Burkhardt 2013, *passim*. Already Walter Stark noted the partial nature of the Lübeck *Pfundzoll* registers of 1492–1496, which lack the documentation of the toll free grain trade and the trade that went through the Danish Sound. In addition the clergy and the nobility did not pay toll. Stark 1973, 20.

¹⁵ Stark 1973, 19.

¹⁶ Lauffer 1894, pp. 8 and 29.

¹⁷ See e.g. Kallioinen 2000, p. 119.

¹⁸ Schildhauer 1968, p. 205; Lauffer 1894, p. 8.

There will be natural fluctuations in the numbers of ships over the years, but a closer look on the 1460 *Palgeld* register shows an anomaly: the last pages of the register are filled with ships arriving from Scania with herring, whereas the ships and convoys from Scania in the other years (1468–1472, 1474–1476) usually were not the last ships arriving each year.¹⁹ It is possible that the time of herring catching differed from the normal in the year 1460, but it is also possible that the Scania ships were either delayed, or that the shipping period for the year 1460 was cut short, or that the 1460 register simply stops before the end of the shipping period, and an unknown number of ships was recorded on a register that has not survived to us.

An example of a central problem that long troubled the research is the sums per ship recorded in the 1460, 1468–1472 and 1474–1476 *Palgeld* registers. While they obviously refer to the *Palgeld* paid by each ship, for a long time it remained unclear how the recorded sums – in tens and hundreds of marks – referred to the actual *Palgeld* paid by the ships. Furthermore, it was unclear if the recorded sums included the customs paid for the cargo, or if they were relevant for the ship only. This lengthy discussion was finally served an acceptable solution by Walter Stark in 1973, when he could show that the recorded sums actually refer to the customs values of the ships only, but also that each arrival or departing entry records only the half value, as the ship will pay the other half when it again passes through the customs. The actual customs for the ship was then paid referring to the recorded customs value, whereas the customs for the cargo were paid referring to the listed cargo lots.²⁰

It is notable that this breakthrough was achieved by close reading of some non-standard recordings in the Danzig entries, comparison with the language used in the 1369 Hamburg Pound toll register, and references to other sources than customs registers only: economic history still leans heavily on the basic tools of historians.

There have been obvious and persistent anachronisms. For example, the earlier research regularly grouped Finland as a separate entity from Sweden, and Victor Lauffer even listed mid 1470s Scania, Halland, and Blekinge under the Swedish realm, although at the time they were an integral part of the kingdom of Denmark. In this period, even the alignment of Gotland, Oland and Bornholm was within the Danish realm rather than the Swedish.²¹ An example of deeper confusion is Schildhauer's interpretation in the 1530 *Palgeld* register of "Holm" as the Danish small town Holm, whereas in the 1460, 1476 and 1583 registers he consistently reads Stockholm.²² Typically, no two researchers arrive precisely at the same numbers of ships arriving from certain ports, and the number of ships in the registers in general is a subject of minor controversy.²³

 ¹⁹ Archivum Państwowe Gdańsk, Kamera palowa – Pfahlkammer (henceforward APG), 300/19, 1, pp. 57–59v, 66v–72v.
 ²⁰ Stark 1973, pp. 21–27 also refers the whole discussion. The larger ship values derived from doubling the Palgeld sums settle neatly within the range of real ships values, e.g. in Dollinger 1998, pp. 559, 567.

²¹ Lauffer 1894, p. ##. Even Dollinger discusses Finland separately from the Swedish realm: Dollinger 1998, p. 310.

²² Schildhauer 1968, p. 197; ebenda 1970, pp. 170–173.

²³ Cf. Lauffer's and Schildhauer's numbers for the year 1474, Åbove. The numbers of Åbo ships presented throughout this article differ slightly from those recently presented by Mika Kallioinen. Cf. Kallioinen 2000, p. 170. This is partly because I have included such ships of missing origin where the skipper had previously or later arrived from Åbo, where the ship arrival is listed among other skippers from Åbo, and where the selection of goods is of obvious northern Baltic

Faced with this kind of problems and challenges, one could ask what more can be done with the late 15th century Danzig *Palgeld* registers, and can the questions stated in the first section of this article be answered with any credibility. Interestingly, there has been to my knowledge no analysis that would attempt to trace the activity of individual skippers and to contextualize the *Palgeld* ship values with the regional framework of cities. It seems to me that a combination of the *Palgeld* values and skipper data can indeed shed new light to the topic of Danzig customs registers, and demonstrate a novel way of combining the micro and macro levels of personal and communal economic effort.

Fluctuations of shipping

In the following diagrams, ships arriving to Danzig form Stockholm, Åbo and Reval, and their *Palgeld* values (recorded in marks), are presented as yearly totals. As the *Palgeld* values are connected to actual ship size, the yearly sums show how much cargo space was deployed to the Danzig trade.



DIAGRAM 1

Sea and likely Finnish origin. On the other hand, based on the original APG sources, I have at times been unable to find as many ships from Åbo (or Stockholm) as suggested by Kallioinen and others. The differences from Kallioinen 2000, are as follows: 1460 +2 ships; 1469 +2 ships; 1471 +2 ships; 1472 -1 ship; 1474 +1 ship; 1476 -1 ship.

Diagram 1 shows the sums of the yearly Palgeld values of ships arriving from each North Baltic town.²⁴ Some general trends are visible. Not counting the year 1469, the sum of Stockholm *Palgelds* stays roughly between 500 and 1000 marks. The Åbo *Palgelds* fluctuate more, but usually stays close to the Stockholm number. The Åbo *Palgeld* markedly exceed the Stockholm number in 1471. The Reval *Palgelds* are generally the highest and stabile over years when the Stockholm and Åbo numbers fluctuate. In general, the sums of Reval Palgeld levied from the arriving ships is growing smaller, with two clear drops in 1469 and 1473/4, and recuperation after a drop in 1473/4. The fluctuations of the Reval *Palgelds* would seem independent from the Stockholm and Åbo Palgeld changes until the early 1470s, suggesting that the shipping between Reval and Danzig was not dependent on developments similar to the Stockholm and Åbo shipping. However after the settlement of the English–Hanseatic war (in 1470–1474) the Palgeld values of all North Baltic ports seem to follow a similar, rising trend.

Considering the nature and the short periods of the data, it would be daring to draw very advanced conclusions. Nevertheless, the opposite directions of development of the Stockholm and Åbo total Palgelds in 1469–1471 may hint of a shift in Swedish shipping to Danzig, which can be at least partially explained by political developments. The high Stockholm value for the year 1469 coincides with the Swedish–Hanseatic negotiations held in Danzig in September. We are probably witnessing the arrival of a large Swedish delegation to Danzig. The next year may mirror the trade agreements and possible payback of debts originating the previous year. In 1471, the Danish– Swedish war entered central Sweden, Stockholm was beleaguered and the battle of Brunkeberg fought in its vicinity. This may have caused some Stockholm trade and shipping shift to Åbo. Perhaps more likely, some Åbo shipping that was normally directed to Stockholm (and perhaps from there to Lübeck) may have shifted towards Danzig because of the Danish presence in the waterways to Stockholm.²⁵

The lack of comparative data from Lübeck and from other arrivals in Danzig makes it impossible to gauge the general impact of the Hanseatic–English war waged on the North Sea. Such political impacts on trade would require in-depth studies, which we are forced to skip at this time. It should be noted, however, that troubled times forced the merchants and skippers to carefully ponder where and when they should sail. Opportunities arose and closed, information was dear, and previous long-term trade connections might get unintentionally or intentionally cut while new ones – perhaps of short duration – were agreed on. As can be seen in the APPENDIX 1, the turnover of Åbo skippers in the harbour of Danzig was very high: more than a half of the skippers visited Danzig only once or twice in the research period. Yet wars in general didn't stop commercial shipping.²⁶

²⁴ All of the diagrams are based on the *Palgeld* registers APG 300/19,1, 3, and 5.

²⁵ Enemark 1979, pp. 76–82.

²⁶ Se e.g. Kallioinen 2000, 232–233; Leskelä 2007, pp. 71–76.

Diagrams 2, 3 and 4 show the Palgeld values of individual North Baltic towns combined with the numbers of ship arrivals. This comparison establishes the proportion of cargo space per ship, clearly indicating general ship size for each individual year.



DIAGRAM 2

The Stockholm comparison (Diagram 2) shows a general connection of the *Palgeld* values and numbers of ships for the years around 1470. However, around the year 1475 the number of ships is high, whereas the sum of Palgeld values stays low: a clear shift to numerous smaller vessels.

DIAGRAM 3



Comparison of Åbo data (Diagram 3) shows that the Åbo ships were almost equally numerous but generally somewhat smaller than the Stockholm ships. The gap between the *Palgeld* sums and the number of ships around the year 1475 is not as pronounced as in the case of Stockholm: no shift in ship size can be perceived before the year 1476. In general the Palgeld sums and the number of ships vary in concert.



DIAGRAM 4

The Reval comparison (Diagram 4) differs markedly from the Swedish cases: the ships are in general larger, and the changes in their number around the year 1469 do not match the Swedish development.

(Considering the space of the diagrams and the meagre material they produce for discussion, it might be justifiable to drop the whole section.)

Individual skippers and voyages to Danzig

The Danzig *Palgeld* registers do not record the names of ships, but instead the names of skippers. This is natural, as the skipper was required to pay the customs indicated by the recorded *Palgeld* value, and in a harbour with hundreds of ships arrivals per year, people may have been easier to tell apart than ships. The later practice of ordering the skippers in alphabetical lists would have made referring to individual skippers still easier, although it is possible that similar books were produced already earlier but they have not survived. Alphabetical ordering suggests a practical use for the Palgeld registers: they may have served as references in case of payment delays and legal procedures, and an easy reference may have made it easier to remain consistent in determining the customs of an individual skipper.²⁷

The immediate benefit of listing the ships according to their skippers is an increased accuracy of the data. An approach on the level of individual skippers shows that many skippers lacking recorded port of origin in the Danzig *Palgeld* registers actually were skippers from Åbo or other North Baltic ports. Combining the data of names, ship sizes and, in some occasions, cargoes, increases the number of identifiable Åbo arrivals in 1460, 1468–1472, and 1474–1476 from 150 to 163.²⁸ In the case of Stockholm, the number of identifiable arrivals in the year 1476 rose quite sharply, from 16 to 26.

The APPENDIX 1 presents the known arrivals of the Åbo skippers²⁹ in table format which makes it possible to cross-reference the yearly arrivals of individual skippers'. It becomes apparent that the 163 recorded arrivals from Åbo actually list less than 80 individual skippers. Thus, in the fragment-ed timespan of the 1460s and 1470s *Palgeld* registers, each Åbo skipper visited Danzig approximately twice. However, there are huge differences in the number of times the skippers sailed from Åbo to Danzig. Whereas the skippers Laurens Schalm, Olaf Magnusson, Lasse Moll(er), Jacob Andersson, Claus Swarte, Hinrik Karl, Benedicte Crade and Olaf Andrisson each visited Danzig at least five times, 50 out of nearly 80 skippers from Åbo only make one appearance in the registers.³⁰

It is not apparent if the proportion of multi-time arrivals from Åbo would increase if the data was more complete: there are proportionally no more single arrivals towards the beginning (1460) or the end (1474–1476) of the period. It seems that many Åbo skippers only made a single trip from Åbo to Danzig. We should keep in mind the possibility that some ships – especially those owned by several people with experience in sailing, possibly belonging to the same family – may have been captained by two or more skippers who took turns in seasonal sailing.³¹ Nevertheless, the eight skippers named above show that some skippers sailed to Danzig in many consecutive years, even twice or thrice within a single year. We don't know how widely these skippers sailed when not heading to Danzig, but it is likely that a skipper making three trips between Åbo and Danzig within a single year lacked the time to make other similarly long trips. The eight skippers alone stand for 59 arrivals out of 163, or more than a third of the arrivals. They were specializing in the Åbo–Danzig trade, and likely had an established network of merchants in both towns. Some may have been burghers of Danzig instead of Åbo.

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²⁷ See the Palgeld registers for the years 1490–1492, and the early 16th century. APG 300/19, ##, 8a, 11.

²⁸ Compare with Kallioinen 2000, p. 170.

²⁹ The term "Åbo skipper" here simply refers to skippers who have at least one arrival entry from Åbo. As will become evident, many "Åbo skippers" have also arrival entries from other North Baltic ports or regions, and some were mainly sailing from other ports than Åbo.

³⁰ Because of the at times unclear names, it is likely that there are some duplicates among the 78 listed skippers. For example, Olaff Anderssons or Andrissons are listed three times. While the names Olaf and Anders were both popular in Åbo and Sweden at the time, it is still more likely that we are dealing with two namesakes instead of three.

³¹ #Example? Later? Finland?

The data of the Åbo skippers' frequency of sailing to Danzig in relation to the Stockholm and Reval skippers is discussed in Section 7.³² In the following, the Åbo skippers are cross-referenced to the Stockholm and Reval skippers in order to study the connections within the North Baltic sphere. Here, even smaller North Baltic ports and regions with arrival entries in the Danzig registers are included: Söderköping, Gotland, "Finland", the "Finnish archipelago" (*Vynneschen scheren* or just *Scheren*), Raumo (*Ramel*), and Viborg (*Wyburch*). The single ships arriving from Ulfsby (*Olzbue*) and Norrbotten (*norderbodd*) had skippers whose names are not duplicated in any other group, and thus these locations do figure in the APPENDIX 1 at all.³³

Of the 78 skippers who at least once had Åbo as their port of origin, 21 may have sailed from other ports or locations. The example of Olof Andersson (footnote 29) and the discussion in the APPEN-DIX 1 highlight the problems in interpreting medieval name data. In this comparison, we will drop out the three most obvious border cases with few arrivals, and names so general that differentia-tion of namesakes is impossible (Claus Swarte in Reval and Stockholm, Niclas Larsson in Gotland, Jons Andersson in Stockholm). We end with 18 Åbo skippers (23 % of 78) who at least once started their voyage to Danzig outside of Åbo. The non-Åbo ports and regions can be divided as follows:

Skipper	Åbo	"Finland"	"Archipelago"	Raumo	Stockholm	Gotland	Vyborg	Reval
Laurens Schalm	6		1					
Claus Prechil	1				3			
Jacob Bremer	1				1	1		
Olaf Bagge	1					1		
Claus Wylant	2							1
Martin Happe	1				4			
Jacob Andersson	7	2			1			
Paul Nyeman	1				1			
Bend Krade	10		2		1			
Clas Smit	2				1			
Cristoffer(Peterson)	4				1			1
Peter Nigels	3	1					2	
Herman Marquart	2				2			
Oluf Lange	1				1			1
Olaf Andersson	3				1			
Olaf Peterson	1							1
Jons Eriksson	2		1	1				
Bent Jonsson	1				2			
Total	18	2	3	1	12	2	1	4

TABLE 1³⁴

³³ #Source references to this data is failing from the article at the moment.

³² #Eventually, the Appendix will include tables for the Stockholm and Reval skippers, and they will be discussed similarly to the Åbo skippers. At his point, the article presents a work in progress.

³⁴ The total given in the table is the <u>number of skippers</u>, not a sum of the individual entries.

Stockholm is the pre-eminent secondary port of origin for the Åbo skippers: 12 out of the 78 Åbo skippers (15 %) had sailed to Danzig from Stockholm in addition to Åbo. For three of them, namely Claus Prechil, Martin Happe and Bent Jonsson, Stockholm actually seems to have been the primary port. For another four (Jacob Bremer, Paul Nyeman, Herman Marquart, Oluf Lange), Stockholm and Åbo are present in equal numbers, although apart from Herman Marquart, each only has one voyage. This suggests that the whole shipping business or the North Baltic harbours could have been secondary for these skippers, and perhaps apart from Oluf Lange they might have been German skippers who did not usually sail to the North Baltic ports. Thus the number of Stockholm skippers who clearly had Åbo as their main port of origin is in the end actually only five (6 %).

Another secondary origin is "Finland" and the "Finnish Archipelago", where altogether 5 (6 %) skippers had started their voyage in addition to Åbo. For all of these skippers, the Finnish and archipelago starting points were clearly secondary, often appearing only singly, compared to a more steady Åbo connection. It is noteworthy that skippers sailing from Finland and the archipelago only ever sailed from one of them. This suggests that the division into "Finland" and the "Finnish archipelago" was important.

In the third place comes Reval, where four skippers (5 %) had started their voyage in addition to Åbo. For two of them, Oluf Lange and Olaf Peterson, neither Reval of Åbo were pre-eminent, as both only sailed from these ports once. Other ports of origin are mentioned only passingly, and no patterns are visible. This suggests that skippers who sailed from Åbo mainly had their networks in the large urban centres – Stockholm and Reval in addition to Åbo – and in the immediate region around Åbo and the shipping lines south: Finland Proper and the archipelago.

Because of small numbers and fragmentary sources, the error margins for this analysis are large. I would still suggest that a further observation regarding the special position of Åbo for Stockholm can be made: The data of Stockholm (not included in this paper), the 12 skippers who sailed both from Stockholm and Åbo make up 10 % of the total number of skippers (116). Based on comparison between Stockholm skippers and those from Finland, Söderköping and Gotland (data incomplete), i.e. places and regions close to Stockholm, it seems that almost no skippers from other Swedish ports or regions than Åbo sailed from Stockholm to Danzig, and almost no Stockholm skippers started their voyages outside of Stockholm. Presumably ships from the Bothnic Sea stopped in Stockholm, or then sailed past it without collÅboration (cf. Rauma, below). This stresses the importance of Åbo and the Stockholm-Åbo-Danzig triangle for Stockholm.

A logical question would be if any North Baltic skippers sailed from Danzig to other Hanseatic ports, or if they sailed to these ports directly from the North Baltic towns. As a part of the publication of the Pound toll books of Lübeck from 1492–1496, Hans–Jürgen Vogtherr could show that the same skippers could frequently transport goods from different ports. Especially in the southern Baltic, around Denmark, southern Sweden, the Wendic coast, Pomerania, and Poland, the sea voyages were short and the connections multifaceted. Trading trips back and forth between two

towns likely did not provide the best opportunities for trade and cargoes. Triangular or even more complicated trading routes might have been a commonplace reality.³⁵

Mika Kallioinen has collected anecdotal data of Åbo skippers' and merchants' trips to smaller or more distant Hanseatic ports, and the list of anecdotes suggests that both direct and indirect sailing e.g. via Stockholm, Tallinn, Riga or Danzig were possible, if not perhaps common.³⁶ This article set to trace the North Baltic and Danzig connections, and thus no data to explicitly test the case was collected. However, chance glimpses showed that some of the Åbo skippers listed arriving in Danzig are also listed as either arriving from or departing to another south Baltic Sea town.³⁷

Skippers from other parts of Finland

The Danzig Palgeld registers from 1460, 1468–1472 and 1474–1476 contain arrivals from "Finland" and the (Finnish) archipelago (15 visits by 12 skippers); from Raumo (11 visits by 9 skippers); from Vyborg (2 visits by the same skipper); and from Ulfsby (1 visit). While the numbers of entries is small in the Baltic Sea comparison, it is remarkable that the late medieval coasts and small towns of distant Finland sent goods all the way to Danzig, seemingly without stops in-between. Such entrepreneurship may indeed echo economic upswing, and is no more to be found in the 16th century *Palgeld* registers.³⁸

The exact boundaries of "Finland" and the archipelago are vague. While we might be tempted to interpret them simply as Finland Proper and the Åbo archipelago, they may actually denote wider regions. Especially the complete lack in Danzig of ships from Åland Isles (Fin. Ahvenanmaa) is striking, when we think of the old maritime alignment of the isles, and the frequent visits in Danzig by skippers from other islands like Gotland, Oland and Bornholm. Was Åland so tied to Stockholm that it lacked long-distance shipping of its own? Or was it so close to the Swedish kings and state holders that they could effectively supervise the prohibition to non-urban communities to trade with foreign ports? Or did the Ålanders concentrate on trade with e.g. Lubeck and the Wendic cities? The lack of Åland in the Danzig *Palgeld* registers would find an easy explanation if the term (Finnish) archipelago also included the Åland isles and archipelago.

In the previous correlation between skippers from Åbo and skippers from other north Baltic ports and regions, we saw that five Åbo skippers sailed seven times from "Finland" and the (Finnish) archipelago, one skipper once from Rauma, and one skipper twice from Viborg. About half of the skippers who sailed from "Finland" and the archipelago also sailed from Åbo, showing how intensively Åbo and its surroundings were connected. On the other hand, there were individual skippers in the countryside who sailed directly to Danzig, always past Åbo.

³⁵ Vogtherr 1996, pp. ###.

³⁶ Kallioinen 2000, Appendix 4, pp. 323–327, 336.

³⁷ E.g. Laurens Schalm in 1475. Again, it should be noted that the term "Åbo skipper" is used because of the North Baltic viewpoint. It is very likely that some among the "Åbo skippers" who also sailed to other southern Baltic Sea ports were actually burghers of Danzig or other Hanseatic towns who had sometimes sailed to Åbo. ³⁸ Cf. Hickkapen 2007, p. ###: Kallipinen 2000, p. ###: Schildbauer 1070, p. ###

³⁸ Cf. Hiekkanen 2007, p. ###; Kallioinen 2000, p. ##; Schildhauer 1970, p. ###.

It is possible that the skippers from Finland actually started from the bishop's castle at Kustö (Fin. Kuusisto), or from the cloister town of Nådendal (Fin. Naantali), and the skippers from the archipelago at the royal castle of Kastelholm. But it is likely that the skippers would have given such place names as their port of origin instead of the vague terms "Finland" and "the archipelago". Thus we may assume that over the time of nine years, and concentrating mostly on the years 1474–1476, seven skippers from the Finnish rural coasts and islands sailed eight times to Danzig. In addition the town of Rauma also had direct links to Danzig that almost completely passed both Åbo and Stockholm: 8 skippers from Rauma alone visited Danzig 10 times over the years 1468–1476.

It is important to note that apart from the islands off the Swedish coast, Saaremaa (Arensburg) and Kurland, no other rural places are mentioned as origin ports of shipping to Danzig. We don't have e.g. skippers from the Mälaren region or Götaland, or from mainland Estonia or rural Livland. In this respect Finland and the archipelago are an anomaly in the north Baltic, as seen through the Danzig sources. Even though small of scale, the direct shipping connections to Danzig from Finnish rural districts and the small town of Rauma may have been of enormous importance to the self-identification and cultural contacts of these locales.

What we cannot determine based on the Danzig *Palgeld* registers is how many other Åbo skippers actually originated from rural coastal districts. The byname of two Åbo skippers, Philip and Hen(rik) Kaland, active in 1470–71, suggests a rural origin from Kaland (Nykyrko) north of Åbo. The byname of Claus Wylant, active in 1469–71 and mentioned in Reval in 1468, probably reads "Vynlant", denoting origin from Finland (Proper). Åbo may have relied on people of the coasts and islands for shipping services on a larger scale than can be discerned from the sources.³⁹

Frequencies of shipping

The number of Åbo skippers with intensive contacts to Danzig has been noted. The number of arrivals from Åbo in the late 15th century Danzig *Palgeld* registers is 163, so that each of the nearly 80 Åbo skippers made roughly two trips to Danzig. How does the case of Åbo compare to the larger North Baltic towns of Stockholm and Reval – are the Åbo skippers typical representatives of North Baltic skippers?

The following table (Table 2) presents a relative comparison of the North Baltic shipping frequencies to Danzig. The entry "visits per skipper" is determined by dividing the total number of arrivals from the port/region by the number of known individual skippers. The result is an average of visits per skipper over the 9 years. The second column, "duration 3 yrs" shows how many skippers in each port/region sailed to Danzig in three out of the nine years; a more severe criteria of five out of the nine years is given in the third column. Lastly, the fourth column gives the "intensity" of shipping as a percentage of skippers in each port/region who sailed to Danzig two times within a year, at least in two out of the nine years.

³⁹ Cf. Westerdahl ####; here especially p. 17.

Origin	visits per skipper	duration (3 yrs)	duration (5 yrs)	intensity (2 x 2)
Åbo	2,1	13 (17 %)	4 (5 %)	10 %
Stockholm	1,6	9 (8 %)	0 (0 %)	5 %
Reval	1,4	7 (8 %)	1 (1 %)	1 %
"Finland" & "archipelago"	1,3	0 (0 %)	0 (0 %)	0 %
Rauma	1,2	0 (0 %)	0 (0 %)	0 %

The table shows the higher frequency and longer duration of the Åbo skippers' contacts to Danzig. Even though the total number of skippers visiting Danzig both from Stockholm and Reval was higher than the total number of Åbo skippers, the Åbo skippers visited Danzig more often. Even Stockholm had skippers who visited Danzig often, when compared to Reval and the more rural places of Finland. As we have learned, there are even hints that some Åbo skippers at least used Danzig as a stop-between for shipping in the southern Baltic Sea. The Swedish skippers with their crews must have spent time in Danzig, waiting for loading and unloading and hawking for new cargoes. The large number of such short-time Swedish visitors to Danzig probably had led to the establishment of the Guild of St. Eric in Danzig earlier in the 15th century.⁴⁰

Danzig had good and growing contacts within the Hanseatic sphere, with the North Sea ports (Dutch, English, Scottish), the Atlantic ports (Bay of Biscay), the Polish inland and even the Black Sea coasts. Increasingly, the shipping of Danzig was in the hands of foreign (both Hanseatic and non-Hanseatic) skippers. This means that the Åbo skippers and crews spending (passing?) time in Danzig had good opportunities to meet people outside of German and Nordic cultural space. It is possible that in addition to the mercantile contacts in Danzig, also the cosmopolitan nature of the city made it tempting for Åbo skippers and their crews. On the other hand, because the maritime laws and practices allowed the seamen to carry small amounts of goods in their own belongings and trade them without paying taxes.⁴¹ The more often a skipper and his crew visited Danzig, the more often they had the opportunity to use this privilege for trading.

Conclusions

The North Baltic Sea region, including central Sweden with most of modern Finland and the coasts around the Gulf of Finland, was connected to Danzig primarily through the port towns of Stockholm, Åbo and Reval. Of these, Stockholm was the largest town in the Swedish realm, whereas Åbo was the second largest. Reval was a nexus in the Hanseatic trade with Russia, and as a member of the Hanse, the town is perhaps better comparable to Danzig than the other two North Baltic urban centres. In addition to the three towns, the Finnish coasts had smaller towns like Raumo and Vyborg, and even the rural freemen on the coasts and the Åbo archipelago participated in long-distance overseas trade.

⁴⁰ The Guild served the visiting skippers and traders from Sweden. #### DISCUSS!

⁴¹ Groth 2002, *passim*.

The organization of the North Baltic shipping to Danzig was discussed from four standpoints utilizing the Danzig Palgeld registers from the years 1460, 1468–1472, and 1474–1476.

First, the actual cargo space and the number of ships were determined. As might be expected from the position of the cities and previous research, Reval seems to have employed the largest ships, and the ship capacities in the Reval–Danzig trade remained the least volatile over the research period. The Swedish shipping from Stockholm and Åbo utilized a large number of smaller vessels. There seems to have been a shift towards smaller vessels in Stockholm around the mid-1470s. At least Stockholm's shipping in the year 1469 mirrors political developments during a tumultuous time. This period also saw the English–Hanseatic war in 1470–1474, but the possible influence of this conflict to the North Baltic–Danzig shipping and trade could not be established.

An analysis of the individual skippers brought to the front a minority of skippers who travelled very intensively between the North Baltic and Danzig. For example, eight skippers out of nearly 80 (10 per cent) catered for more than a third of the Åbo–Danzig voyages. On the other hand a clear majority of the Åbo skippers are recorded arriving in Danzig only once. One can ask if planning, opportunity, or sketchy survival of sources resulted in such a pattern. Further, roughly a fifth of the Åbo skippers, both intensive and less intensive, are listed as arriving from at least one other North Baltic town or region – predominantly from Stockholm, but also from Finland (incl. the archipelago) and Reval.

The small number of voyages of small town burghers and rural freemen from Finland to Danzig tell of a spirit of entrepreneurship, and suggests that the North Baltic frontier ecology supplied locals with surpluses that could be traded. This long-distance trade of small town burghers and rural freemen seems to wane in the 16th century.

Finally, the frequency of the towns and regions active in the North Baltic–Danzig shipping was tested with simple equations. They showed that Åbo skippers were the most frequent visitors to Danzig, and Stockholm skippers were somewhat more frequent than Reval skippers. Compared to the population base of Åbo, the near equality of Åbo to Stockholm and Reval in the Danzig trade, and the Åbo skippers high frequency of visits to Danzig, show a tremendous effort put to the trade with Danzig. The most important result of this article is the reinforcing of the notion that Åbo – and the rural region around it – had a very special connection to Danzig. Once such a strong connection was established in the medieval period, it is no wonder that it lasted well into the early modern era.⁴²

Such intensive and long-standing contacts likely fostered cultural influxes. The skippers, the ship crews, and any accompanying travellers and delegates were people who actually crossed over the distances, visited other cities and spent time there, in the local surroundings and with the local people. Through these people, knowledge of the comings and goings "in the wider world" was present in local communities geographically far away from the European centres. Contacts of long duration and high frequency suggest that possible cultural or mental gaps between the skippers and the people of foreign ports were not a major problem.

⁴² Cf. Kallioinen 2000, p. 170.

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Jons Eriks								1													F	Rame	15		50		S40	1	2	90
bentjonss		_	1					1	1													5t24				St20		1	1	20
Jons petzon/peters	_		+			-		1	1												ľ	1			20		25	1	3	70
jons oloffs			-			-		1	-													-	-		40			1	1	40
Jons olons Jons anderss	St40		+-			-		1	-			_					_					+	-				-	1	1	40
	J140		-					1	-			_										-	_		15	~~	\square	1		
Rotger jonss			_			_	_	-	-													_	_		20	20	\vdash	1	2	40
petermans			_						-													_	_		20			1	1	20
olaff claus																									40			1	1	40
Niliss manss																									30			1	1	30
jons matts						T																			60			1	1	60
Bend powels			1			T		1																	60			1	1	60
78	-	0					1	1	0			5			1			4		2	-		2		_	Tota	ls:	124	163	
10		U	-			-	·	1	0			5			1			4		2 ×		-	2			10ta 3		1,59	1,31	2,09
		~	-			-		1	620			982					_	c				-	630		_	3 1135		1,59	1,31	
		26	U			- 14	77		n 20			MK2			1445			630		682										42,09
Palgeld total		_				_	_	-									-							_	_					,
Palgeld total Visits (palgeld recorded Palgeld Average)	28	9				12 40		15			23 43	1		28 52			13 48		15			17 37	2		28	5	163		,

Appendix 1: discussion

General reference

Each number recorded indicates a single entry in the *Palgeld* register. The number gives the value "ingepalt" by the skipper, which according to generally agreed interpretation means the ship's monetary value.

Some ship entries in the *Palgeld* registers lack the value of the ship, and this is indicated as an "#" in place of a number.

The number of yearly visits and total visits addresses only the cases where the skipper is recorded sailing from Åbo.

The cross-references are shown in red, and give the first letter of the location name followed by the value of the ship. Where two locations start with the same letter, the other has been recorded with two or more letters; thus "St" for Stockholm and "S" for "Scheren" (the Finnish archipelago); and "R" for Reval and "Ramel" for Rauma.

Ship value entries with a question mark

Three cases are marked with a question mark:

An Olaf Bagge from Åbo had a ship valued at 50 mk in 1468, whereas a skipper with the same name from Gotland had a ship valued at 20 mk in 1474. Bagge (or Bage) is not a very typical name, yet we have three Bagge skippers from Åbo: in addition to Olaf, an Anders in 1460 and a Jacob in 1476. This suggests that the family Bagge, with three seafaring men in 1460–1476, lived in Åbo, and even the Niclis sailing from Gotland with a small ship was a member of the family. He may have been a son to one of the Bagges, named after another family member, perhaps his uncle.

One Niclas Larsson sailed from Gotland in 1474 with a ship valued at 20 mk. The difference of the ship values of the Niclas Larssons from Åbo and Gotland is such that we probably have two different Niclases. Both Niclas (with all its variances, like Claus and Nigel) and Lars (Laurentius) are common names at this time, so that it is thoroughly possible that two skippers of the same name sailed between Danzig and the north Baltic locations.

Cristoffer (Peterson) sailed from Reval in 1475 with a ship valued at 60 mk. Even the Cristoffer of Åbo is problematic because there might have been two Cristoffers, the one known with the first name only, the other with the patronymic Peterson. Further, the two ship values given for Cristoffer (petzon) in the year 1475, 40 and 60 mk, differ quite much. But so do the ship values of the pre-1473 and post-1473 Cristoffers. Perhaps in this case the Åbo Cristoffer had invested in a larger vessels and later also sailed from Reval – or we might be seeing three Cristoffers.