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When Nyen became St. Petersburg: Patterns of specialization in Dutch shipping in the eastern Gulf of Finland in the first half of the eighteenth century

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INTRODUCTION

Dutch shipping and trade in the Baltic Sea are well-documented. A number of quantitative sources concerning Dutch shipping and trade in early-modern times has been preserved. This makes it possible to study Dutch trade relations with various areas in the Baltic Sea in great detail, especially in those cases where complementary data from different sources can be gathered. Despite the obvious richness of the sources, two approaches remain dominant in the study of Dutch shipping in the Baltic Sea. The first kind of studies looks for large-scale developments in Dutch Baltic trade on the basis of quantified, numeric data. In such an approach, names of shipmasters are processed in the form of numeric data of various kinds¹. On the opposite, a second type of studies does pay attention to alphanumeric data such as the name of the shipmaster or of the ship. In most cases these are smaller ‘sample’-studies in which information gathered for one or a few years is studied in detail². In some cases, such ‘sample’-studies are part of the large-scale numeric studies mentioned earlier; they are then used to prove the reliability of the sources on the basis of an *in extenso* comparison with one or more quantitative sources of a similar nature. Repeating patterns and changes in the habits of shipmasters remain underexposed in both approaches.

The necessity of including the names of shipmasters and of ships in research has been recognized though: “Further research must also include alphanumeric data (...). This is essential for the analysis of the shipping community and the related study of employment”, De Buck and Lindblad most correctly pointed out in their 1990 research article on the galjootsgeldregisters³. As the first thorough analysis of the Dutch shipping community in the Baltic Sea still has to be carried out, De Buck and Lindblad’s statement remains to be turned into action. In a similar way, Paul van Royen’s statement that “[the assumption] that shipmasters ‘specialized’ in the navigation to a certain area, as it is usually taken for granted, still has to be proved”⁴ is still very true indeed.

This situation is contradictory to the enormous developments in the application of computers in historical research has undergone since. Extensive studies on – for instance – methodological problems such as nominal record linkage, name standardization and matchscoring, have created a more than useful framework for the execution of alphanumeric research in which longer periods are studied and the dynamic developments in shipping can be analyzed.

¹ e.g.: Jake Th. Knoppers, *Dutch trade with Russia from the time of Peter I to Alexander I*, Montréal, 1976; J. Thomas Lindblad, *Sweden’s trade with the Dutch Republic, 1738-1795: a quantitative analysis of the relationship between economic growth and international trade in the eighteenth century*, Assen, Van Gorcum, [1982].

² e.g.: Knoppers, *op.cit.*; Pieter Dekker, ‘Friese schippers op de Amsterdamse Oostzeevaart in 1731’ // *It beaken: meidielingen fan de Fryske Akademy*, 1977, 39; George Welling, ‘Price-supply relations on the Amsterdam staple-market 1778’ // W.G. Heeres e.a. *From Dunkirk to Danzig: Shipping and Trade in the North Sea and the Baltic, 1350-1850*. Hilversum, 1988; P. Boon, ‘West Friesland and the Sound (1681-1720). Sound Toll Registers, Sound Toll Tables and the Facts in West Friesland’ // *ibidem*.

³ P. De Buck & J.Th. Lindblad, ‘Navigatie en negotie. De Galjootsgeldregisters als bron bij het onderzoek naar de geschiedenis van de Oostzeehandel in de achttiende eeuw’ // *Tijdschrift voor Zeegeschiedenis*, 1990, 1, 27-48.

⁴ P.C. van Royen, *Zeevarenden op de koopvaardijvloot omstreeks 1700*, Amsterdam, De Bataafsche Leeuw, 1987, 16.

The title of this paper – when Nyen became St. Petersburg – refers to the Ph.D. research that I am carrying out at this very moment. One of the major questions that is tackled in this research is that of the influence of the foundation of St. Petersburg in 1703 on the existing Dutch trade relations with Russia (and primarily in the eastern Gulf of Finland). In other words, this topic could be understood as the continuation in the 18th century of the well-known Archangel-Baltic question⁵. The focus of this research is on the ports of Narva, Vyborg, Kronstadt and St. Petersburg, which are all located in the eastern Gulf of Finland. Data on shipping to Archangel is added as the developments in the position of the Dutch in Russia's history of the 18th century appeared to be closely related to the fate of Archangel. Until the beginning of the 18th century Dutch trade relations were almost fully concentrated in Archangel, the only Russian port where foreigners could trade directly with Russians⁶. To a lesser degree, Narva, Vyborg and Nyen – three Swedish towns in the eastern Gulf of Finland – were of some importance for Dutch trade at the end of the seventeenth century⁷. In the first two decades of the eighteenth century various parallel processes took place in the area around the Gulf of Finland and beyond. Not only had tsar Peter the Great started the Great Northern War with Sweden in 1700, he had also demolished Swedish Nyen and founded Russian St. Petersburg on the very same place in 1703. He had conquered Narva in 1704, Vyborg in 1710 as well as other Baltic ports such as Reval and Riga. As it was Peter the Great's wish to turn St. Petersburg into the capital of “new and modern Russia” extreme efforts were made to execute this plan. Keen as he was on making St. Petersburg a “New Amsterdam”, tsar Peter also focused on the development of foreign trade. In 1713, still an early stage of St. Petersburg's development as a city, the tsar issued an order to redirect Archangel's export trade to St. Petersburg⁸. In 1714 some additions were made to this order and in 1715 the tsar commanded the complete redirection of exports from Archangel to St. Petersburg. In 1718, however, the ban was at least partly lifted: a maximum of one third of foreign trade could be carried out in Archangel, the rest had to be redirected to St. Petersburg. As long as the Great Northern War continued, these decrees hardly had any effect⁹, not in the last place because of the disturbance the war caused in the Baltic Sea¹⁰. However, when the Peace of Nystadt (August 30, 1721) marked the end of war in the Baltic area, tsar Peter had not only obtained his long-awaited “window on Europe”, he had also gained control over several other Baltic ports, such as Riga, Narva, Reval and Vyborg. Obviously, beside the tsar's continuing preoccupation with St. Petersburg, this also provoked major changes in Russia's economic policy.

⁵ See: J.T. Kotilaine, ‘Competing Claims: Russian Foreign Trade via Arkhangel'sk and the Eastern Baltic Ports in the 17th Century’ // *Kritika: Explorations in Russian and Eurasian History*, 2003, 4 (2), 281 ff.

⁶ See: J.W. Veluwenkamp, *Archangel: Nederlandse Ondernemers in Rusland 1550-1785*, Amsterdam, Balans, 2000, 294 pp.; J.T. Kotilaine, *Russia's Foreign Trade and Economic Expansion in the seventeenth Century: Windows on the World*, Leiden, Brill, XVII, 611, [31] pp.

⁷ See: Kotilaine, *Russia's Foreign Trade*, 95 ff.

⁸ Veluwenkamp, *Archangel*, 153; A. Semenov, *Izuchenie istoricheskikh svedenii o rossiiskoy vnesheyn torgovle i promyshlennosti s poloviny XVII-go stoletiya po 1858 god 9* (reprint, 3 parts bound in 2 vols), Newtonville, Oriental Research Partners, 1977, vol. 1, part 1, 54-59.

⁹ Veluwenkamp, *Archangel*, 153.

¹⁰ Veluwenkamp, *Archangel*, 154; Hans van Koningsbrugge, ‘Die Niedergang des niederländischen Handels mit Rußland und dem Baltikum in den Jahren 1710-1721’ // Carel Horstmeier a.o. (eds.), *Around Peter the Great: Three Centuries of Russian-Dutch Relations*, Groningen, INOS, 1997, 86-91.

From 1721 onwards, the hinterland on which Archangel could rely for its export was restricted to the basin of the Northern Dvina. Grain exports were entirely forbidden¹¹. This restriction was cancelled in 1727, but a new customs regulation replaced it, thus effectively redirecting good streams to St. Petersburg¹². Narva's hinterland was restricted to the Pskov District in 1721¹³, and the District of Velikolutsk was added to this area in 1728¹⁴. Other restrictions and regulations followed, especially concerning the maximal amount of trees which merchants active in Narva were allowed to have logged¹⁵. As the maximums were clearly exceeded most of the time, consecutive restrictions in 1736¹⁶ and 1745¹⁷ were issued, eventually leading to a complete ban on exports from Narva in 1755¹⁸. Vyborg also had its share in the restrictive economic policy that had to turn St. Petersburg into the major Russian port. In 1723, the Kommerts-Kollegija issued an order in which a maximum of 8 to 10 loaded ships were allowed to exit the port of Vyborg carrying a load of timber¹⁹. After having received a number of complaints about timber exports being much higher than the allowed 10 ships, a new restrictive order was issued in 1738²⁰. In the same year, Vyborg suffered from a large fire, and therefore yet another decree almost entirely prohibited the export of timber for the consecutive years²¹.

At the same time, construction works, both in St. Petersburg itself as in its surrounding areas were continuously executed since the second decade of the eighteenth century. In "Getting the goods to St. Petersburg" Robert E. Jones describes how water transport from Russia's interior developed in the course of the 18th century, thus making both the exports of valuable goods from St. Petersburg and the import of goods destined for Central Russia through St. Petersburg possible²². As time evolved infrastructure and economic policy made St. Petersburg a central point where a large variety of goods could be exchanged.

The question remains though whether this policy really was effective. Numeric data provided by Nina Ellinger Bang/Knud Korst²³ and Jake Th. Knoppers²⁴ give an insight in fluctuations in the amount of ships calling at certain ports, but it hardly contains any proof nor denial of the success of Peter's derivation policy from the point of view of the Dutch shipping community active in Russia. An answer to this question can only be found when the composition and the characteristics of the Dutch shipping community that was active in the eastern Gulf of Finland is studied parallel with the social, economic, political and

¹¹ Veluwenkamp, *Archangel*, 179.

¹² Veluwenkamp, *Archangel*, 179.

¹³ M.D. Čulkov, *Istoričeskoe opisanie rossijskoj komercii pri vsech portach i granicach: Ot drevnich vremjan do nyne nastojaščago i vsech preimuščestvennyh uzakonenij po onoj gosudarja imp. Petra Velikago i nyne blagopolučno carstvujuščej gosudaryni imp. Ekateriny Velikaja*, Sankt-Peterburg, Pri Imp. Akad. nauk, 1781-1788, 7 tomov. Tom V, kniga 2, 118.

¹⁴ Čulkov, *Istoričeskoe opisanie*, Tom V, kniga 2, 132-136.

¹⁵ For detailed information about these and other Russian trade regulations, see: Čulkov, *op. cit.*; Semenov, *op. cit.*

¹⁶ Čulkov, *Istoričeskoe opisanie*, Tom V, kniga 2, 199.

¹⁷ *Ibidem*, 212-221.

¹⁸ *Ibidem*, 294-301.

¹⁹ *Ibidem*, 368-369.

²⁰ *Ibidem*, 375-376.

²¹ *Ibidem*, 376-395.

²² Robert E. Jones, 'Getting the goods to St. Petersburg: Water Transport from the Interior, 1703-1811' // *Slavic Review*, vol. 43 (3), 413-433. For more information, see also: Semenov, *Izučenie istoričeskikh svedenii*, 76 ff.

²³ Bang STT

²⁴ Knoppers, *op. cit.*

geographical developments that took place at the same time. Such is the background for this paper.

The core material used as a basis for the study of Dutch shipping in the eastern Gulf of Finland consists primarily of unpublished sources. In the first chapter, a number of sources will be presented briefly, insofar as they are of importance for the study of patterns of specialization in Dutch Baltic shipping. Of them, the Danish Sound Toll Registers are the better known (see 1.1). Geographically related to the Danish Sound Toll Registers, but of a different nature are the Dutch Sound Toll Accounts²⁵ (see 1.2). Next, some specifically Dutch sources can be mentioned. First of all, the Galjootsgeldregisters²⁶ (see 1.3), but also the Paalgeld portbooks (see 1.4). Finally, a lesser known source for the study of shipping to and from Archangel in the first half of the eighteenth century – the Register of Abraham de Kramer - is presented, mainly because it is a valuable source to trace developments in the routes of Dutch shipping (see 1.5). Concluding remarks will close the first introductory chapter (see 1.6).

As this article is in the first place an attempt to provide evidence of specialization on the basis of the sources described in the first chapter, related topics such as employment, the question of demand and supply, the characteristics of good streams or the everlasting “homeport of the ship or of the shipmaster”-discussion will not be focused on here, although they can be studied using the same source material. The analysis of the data, which will be carried out in the second chapter, will be limited to transportation as such and the way in which it is registered in the sources (i.e. in the form of shipmovements). In the first part of the analysis a short explanation of the data - extracted from the sources and added in appendices in order to make it possible for others to see and verify my findings - is provided, then followed by a descriptive analysis based on the appendices.

Finally, some preliminary conclusions will be offered, first of all concerning patterns of specialization, in second place concerning the effects of tsar Peter’s attempt to divert foreign trade to St. Petersburg. Throughout the analysis, it is important to keep in mind that the results presented in this are only preliminary and based on the part of the source material that has already been processed.

CHAPTER 1: THE SOURCES

1.1. Danish Sound Toll Registers (DSR)

First of all, the well-known Danish Sound Toll Registers (DSR) must be mentioned. The DSR are a unique source that is the result of the activities of Danish custom-house officers

²⁵ George M. Welling, ‘Price-supply relations on the Amsterdam staple-market 1778’ // W.G. Heeres, e.a. (red.). *From Dunkirk to Danzig: Shipping and trade in the North Sea and the Baltic, 1350-1850*. Hilversum, 1988, pp. 457-469. Jacques Ph.S. Lemmink, ‘Dutch convoys in the Baltic during the Russo-Swedish War 1741-1743’ // J.Ph.S. Lemmink, J.S.A.M. van Koningsbrugge (red.). *Baltic affairs. Relations between the Netherlands and North-Eastern Europe 1500-1800: essays*. Nijmegen, INOS, 1990. pp. 161-204. Werner Scheltjens, Hans van Koningsbrugge (red.). *Van onze reporter ter plaatse: neerlandica in de Sint-Petersburgse Tijdingen 1728-1775*. Groningen, NRAC, 2003. 404 pp.

²⁶ Jake Th. Knoppers. *Dutch trade with Russia from the time of Peter I to Alexander I : a quantitative study in eighteenth century shipping*. Montréal, ICES, 1976. 3 vol. J. Thomas Lindblad. *Sweden's trade with the Dutch Republic, 1738-1795 : a quantitative analysis of the relationship between economic growth and international trade in the eighteenth century*. Assen, Van Gorcum, [1982]. xiii, 201 pp.

in Helsingör, who had the task of collecting tolls the seafarers were supposed to pay on ship and cargo by passing the Sound.²⁷ This levy of customs was introduced in 1426. Synchronically with a long battle for power and privileges in the Sound, the Danish Toll Registers only gradually obtained a fixed, administrative structure. As soon as a ship approached the harbor of Helsingör, the Danish government wanted the captain, the supercargo or at least the first mate to go ashore to carry out the Sound toll declaration.²⁸ The captain (or his substitute) had to go to the tollhouse, where he had to present his shipping papers, fill out the necessary forms and indicate with trade-house would carry out the actual declaration of the ship.²⁹ Subsequently, the documents were filed in order of the arrival of the ships, after which the tolls could be calculated and the clearance completed.³⁰ The stress in the Danish Sound Toll Registers is on the description of the cargo and the amount of customs to be paid. Therefore, the cargo is described in detail for each ship. Within this description, the name of the shipmaster and his homeport are the only two identifiers to be found throughout the registers. All the other information gathered, varies from entry to entry. To begin with, there is the date of arrival in Helsingör. Subsequently, the port of departure and the port of destination are given (at least since 1669).³¹ After the formula “Shipmaster X from A, coming from B en going to C” the central part of the customs-declaration follows: a detailed description of the cargo, including the quantity, the name and the toll of each of the goods carried.

The value of the Danish Sound Toll Registers lies in its individual character. The amount of information per shipmaster (or per shipmovement) is – especially in comparison with the Galjootsgeldregisters and the Dutch Sound Toll Tables – generous. The fact that the statistical edition by Nina Bang and Knud Korst has cut back precisely this individuality has been decisive for the usefulness of the *Tabeller*. Nevertheless, the detailed registration of ships in the Toll Registers also has its restrictions.

First of all, there is an important geographical restriction: only shipping through the Sound was registered, but the Sound is only one of the three straits joining the Northern Sea together with the Baltic Sea. It is known that the Little Belt (Lillebælt) was hardly used for shipping in early-modern times.³² The Great Belt (Storebælt), on the contrary, was significant primary for Norwegian and Lübeckian shipping. Accounts of toll registration in this strait are only preserved for a small period of time (1701-1748).³³

Secondly, the Danish Sound Toll Registers do not contain information of the volume of the ships, which makes it impossible to compare the amounts of ships passing the Sound in a certain direction in a legitimate way. 25 ships from Vyborg could carry far more goods than 25 ships from St. Petersburg, which was harder to reach for larger ships.

Thirdly, the problem of fraud is of interest for the study of trade. Jeannin argues that fraud is hard to measure, unless through comparison with other sources, such as cargo letters.³⁴ At

²⁷ Christensen, *Dutch trade*, 54-55.

²⁸ Hermann Scherer, *Der Sundzoll. Seine geschichte, sein jetziger Bestand und seine staatsrechtlich-politische Lösung. Nebst einem Anhang über die Sundzollfreiheit der Pommerschen und Preussischen Städte*, Berlin, 1845, 63-64.

²⁹ Scherer, *Der Sundzoll*, 64. Apparently, Scherer is the only historian who provides a detailed description of the practice of declaring goods in Helsingör.

³⁰ Ships *in ballast* were dispatched immediately as there were no tolls to calculate.

³¹ This is true within the framework of changes in the bookkeeping. The port of destination for westbound ships was added to the entries from 1669 onwards.

³² *Ibidem*, 68-70.

³³ *Ibidem*, 68-70.

³⁴ *Ibidem*, 80-102.

the same time he however points out that the problem of fraud was less of a problem in the period 1710-1783 and the 1650s than it was in the period 1660-1710 in the years before 1618. This has to do with the execution of stricter administrative rules in the periods concerned.³⁵ Yet the views on the importance of the share of fraud in the Baltic trade remain divided. Aulis Alanen, for instance, entirely refrains from the use of the Danish Sound Toll Registers for the study of goods in Finnish foreign trade.³⁶ Scherer on the other hand points out, that fraud by the levy of tolls occurred only rarely. He bases his position on the fact that the calculation of tolls in the Sound was carried out on the basis of the cargo letters the shipmaster received for each of the goods carried in the port of departure.³⁷ In other words, the customs-declarations are reliable insofar as the cargo letters they are based on are.³⁸ More than the other quantitative sources mentioned, the interpretation of data in the Danish Sound Toll Registers is complicated by the strategic and political importance of the sound dues. From the very beginning, the *øresundstold* was disputed by the big seafaring nations and in the course of history the struggle for power in the Baltic came down to the struggle for predominance in the Sound³⁹. Especially from the 1650s, when Sweden obtained freedom of tolls in the Sound for its subjects, the reliability (and most of all the completeness) of the declarations in the registers is restricted.⁴⁰ Only in 1710 Sweden is forced to renounce its claims. Summarizing it can be stated that the Danish Sound Toll Registers are in the first place useful as a source for the study of Dutch good traffic from and to the Gulf of Finland, however, this should not be done without losing touch with the origin of the registers (*Sound Toll*) and their political role. Furthermore, the registers offer an insight in the trade routes to and from the Gulf of Finland. Finally, they contain data that are identical for the Galjootsgeldregisters and the Dutch Sound Toll Tables as well, which makes the identification of shipmasters and the reconstruction of their routes possible.

1.2. Dutch Sound Toll Tables (NST)

The Dutch Sound Toll Tables differ from the other sources in the sense that part of it has been published on-line. This makes this source already the more popular of all the sources described, as it is a lot easier to search it. The first historians using the Dutch Sound Toll Tables for scientific research were Heeres, Lindblad, Scheltjens and Van Koningsbrugge, Labahn and Kroll⁴¹.

Though the tables are kept in a good way only from 1714 onwards, their origin must be situated in the final years of the 17th century. October 20, 1698, the States General decided 'in order to combat the expensiveness of grain in to encourage the import of it, to order Jan

³⁵ *Ibidem*, 316.

³⁶ Alanen, *Der Außerhandel*, 15-16.

³⁷ Scherer, *Der Sundzoll*, 65-66.

³⁸ Christensen, *Dutch trade*, 81-83.

³⁹ Charles E. Hill's 1926 work, titled *The Danish Sound Dues and the Command of the Baltic*, leaves not much to the imagination.

⁴⁰ Jeannin, 'Les comptes', 310-311.

⁴¹ Jacques Lemmink, 'Dutch convoys in the Baltic during the Russo-Swedish war 1741-1743' // J.Ph.S. Lemmink, J.S.A.M. van Koningsbrugge (Eds.), *Baltic affairs: relations between the Netherlands and North-Eastern Europe 1500-1800: essays*, Nijmegen, 1990, 172 ff. Lindblad, 'Dutch trade', 103-114. Scheltjens, Van Koningsbrugge, *Van onze reporter*. Karsten Labahn, Stefan Kroll, 'Die "niederländischen Sundregister" als Quelle für den Fernhandel der Hafenstädte des Ostseeraums während des 18. Jahrhunderts' // F. Braun, S. Kroll (Eds.), *Städtesystem und Urbanisierung im Ostseeraum in der Frühen Neuzeit: Wirtschaft, Baukultur und Historische Informationssysteme*, [Münster], 2004, 299-301.

van Deurs to send lists of the grain ships passing in Helsingør and to forbid the shipmasters to call at other than Dutch ports (...). Since then, Van Deurs, who was entitled 'commissary', started his correspondence with the States General. In 1699 and 1700 Jean van Deurs, the commissary of the States General in Helsingør at that time, mentioned shipmasters carrying grain through the Sound in his correspondence⁴². In his letters written in the years 1702, 1709, 1710 and 1711 scattered listings of ships can be found.⁴³ In most cases, the listings are detailed descriptions of convoys, but in the beginning of 1711 the first fragment of a list having the formal characteristics of what became the Dutch Sound Toll Tables was sent to the States General. This fragment was sent by Arent van Deurs, who had succeeded his father in 1710, and continued providing the States General with lists concerning shipping through the Sound. The original distinction between grain- and other ships, as it was made in the first decade of the eighteenth century, must have disappeared soon after Arent van Deurs took over his father's role. In 1747 Arent van Deurs was succeeded by his son, Jean Christoffel van Deurs, who was the last one to submit the Dutch Sound Toll Tables. Jean Christoffel died in 1781.⁴⁴

The structure of the Dutch Sound Toll Tables is as ingenious as it is simple. For each registered shipmovement one line was reserved, containing the date of passage of the Sound, the name, patronymic and/or surname of the shipmaster, his homeport, the port of departure, the port of destination and an indication of the cargo carried. Often only one product of the cargo was indicated, and in some cases shipmasters with the same port of destination were gathered together in clusters.⁴⁵

The absence of any geographical restriction in the registration of the passages through the Sound, the fact that east- and westbound passages were noted down and its status that is probably independent of the Danish Sound Toll Registers give the historian the unique opportunity to control the reliability of the Danish registers.

The Dutch Sound Toll Tables don't give any indication of the size of the ships passing through the Sound,⁴⁶ which makes any statements on the volume of the transported cargo to a certain port impossible. The cargo itself is only roughly indicated and it's often even unclear whether the ships at all carried cargo or were *in ballast* (i.e. empty) while passing through the Sound.⁴⁷ Based on the online adaptation of the tables, Karsten Labahn and Stefan Kroll assume that only the main good was specified in the The Dutch Sound Toll Tables. This assumption is not entirely correct though: the online version gives a somewhat distorted image of the way the cargo is described in the original tables. In the original tables "groups" of shipmasters with "groups" of goods behind their name are brought together using braces.⁴⁸

1.3. Galjootsgeldregisters (GGR)

⁴² Dutch National Archives (NA), 1.01.04 Archive of the States General, 7267, Liassen Denmark, Letters from the Dutch envoy Jean van Deurs to the States General, 13. Januar 1700 en 13. Februar 1700.

⁴³ NA, Archive of the States General, 1.01.04, 7268. Furthermore see: Lemmink, 'Dutch Convoys', 171.

⁴⁴ C.R. van den Berg, *De Commissarissen in de Sont en het geslacht Van Deurs*, Koudekerk, 1997 (unpublished research memorandum).

⁴⁵ Lindblad, 'Dutch trade', 107.

⁴⁶ Labahn, Kroll, 'Die "Niederländischen Sundregister"', 303.

⁴⁷ *Ibidem*, 303.

⁴⁸ cf. Lindblad, 'Dutch trade', 107: "(...) a rough indication of cargo (often only one type of product, sometimes clusters of product types for more ships at the time) [is given]."

The “Reekeningen aengaende de Heeren Gecommitteerden tot den Oosterschen Handel en Reederij Weegens den Ontfang (...) van een Stuijver van de Koopmanschappen en een halve stuijver van de schepen (...)”, or Galjootsgeldregisters, are part of the Archive of the Board of Baltic Trade and Shipping (Archief der Directie van Oostersche Handel en Reederijen)⁴⁹. Developed from what originally was a group of merchants and traders that split the costs for convoys of ships in the Baltic Sea in the end of the 17th century,⁵⁰ the Board was officially acknowledged in 1717. By that time registers of the received *galjootsgeld* (literally: galliot money) were already kept by the Board. At the same time, another closely related Board was active in Amsterdam: the Board of Muscovite Trade (Directie der Moskovische Handel)⁵¹, which was probably also acknowledged in 1717. They too levied ‘galjootsgeld’ and registered the levy. From 1753 on, the levy of ships coming from St. Petersburg was no longer a duty of the Board of Baltic Trade, being passed on to the Board of Muscovite Trade.

The Galjootsgeldregisters consist of a series of constant and varying data. Data that doesn’t differ for various shipmovements made by one shipmaster is understood as being “constant” data. These data are: the name of the shipmaster, his homeport, the name of the ship and the *ship lasts*. The varying data differs per shipmovement and can be specified as follows: the date of the registry of the ship at one of the two boards, the port of departure and the *cargo lasts*. The name of the shipmaster as registered in the Galjootsgeldregisters is – in most cases – the name followed by the surname of the captain of the ship. It happened that instead of the surname, the patronymic was registered and the surname was left out. The name of one shipmaster can thus vary and within one source and between sources. Additional information about the shipmaster’s homeport and the name of the ship might therefore be essential for the identification of shipmasters.⁵²

The so-called homeport is in fact the domicile of the captain of the ship.⁵³ Of all the “repeating” data the domicile is the most problematic: not only does the registered homeport of the shipmaster often differ from source to source, one shipmaster being registered with various homeports in the Galjootsgeldregisters is also quite common.

The name of the ship causes fewer problems than the captain’s homeport. In combination with the name of the shipmaster and the indication of the ship lasts the name of the ship is in most cases a sufficient means for the identification of a particular ship.⁵⁴ It happened however that a ship on a particular moment got a new captain, either on the way by illness, by death or even sale of the ship, either on Amsterdam, during the preparation of a new trip.⁵⁵

Finally, the *ship lasts* give an indication of the size of the ship as well as that of the cargo. The difficulty lies in the conversion of the dimensions of the ship to its carrying capacity. The problem was that the carrying capacity of a ship was not only determined by the way the ship was built, the nature of the cargo also played its role. The *galjootsgeld* was based on this duality, levying on the basis of the *lastage* of the cargo as well as on the basis of the *lastage* of the ship.

⁴⁹ Amsterdam Municipal Archives (GAA), 78: Archive of the Board of Baltic Trade and Shipping (Archief der Directie van Oostersche Handel en Reederijen).

⁵⁰ Knoppers, *Dutch trade*, 1-2.

⁵¹ GAA, 6: Archive of the Board of Muscovite Trade (Archief der Directie van Moscovische Handel).

⁵² Knoppers, *Dutch Trade*, 65-66.

⁵³ *Ibidem*, 66.

⁵⁴ *Ibidem*, 67.

⁵⁵ *Ibidem*, 65.

The variables in the Galjootsgeldregisters are the date of registry of the ship in Amsterdam, the port of departure and the lastage of the cargo, the latter two being the core of Knoppers' quantitative study on Dutch trade with Russia mentioned earlier.

The port of departure in the present study is either Narva, Vyborg or St. Petersburg. Although Knoppers concludes that the data concerning the port of departure in the Galjootsgeldregisters are generally accurate,⁵⁶ the following comment must be made: not all the shipmovements registered in the Galjootsgeldregisters have a specified port of departure. In some cases the vague description 'coming from the Baltic Sea' (*gekomen van Oostzee*) was used. Supposedly, this description was used when the ship called on several ports before leaving the Baltic on its way to Amsterdam.⁵⁷ Only comparison with the Dutch Sound Toll Tables and the Danish Sound Toll Registers will make an attempt to reconstruct the last port of calling before leaving the Baltic possible. To obtain certainty on the question whether or not the ship left from Narva, Vyborg or St. Petersburg only local sources – in the form of ship lists or correspondence between merchants - can be appealed to.

The *cargo lasts* are, as Knoppers assumes, the sum of the total lastage of the various products being part of the cargo.⁵⁸ In the Galjootsgeldregisters no difference whatsoever is made between the various *lastage* measures. The *lastage* of cargo and of ship is simply indicated as such.⁵⁹

Finally, the date of arrival in Amsterdam is, as Knoppers points out, the "registered" date of arrival and not the actual date of arrival of the ship. Between those two dates, a substantial amount of time could go by, sometimes up to six months.

The Galjootsgeldregisters of the Board of Baltic Trade and Shipping and of the Board of Muscovite Trade is one of the best kept sources on Dutch trade. The registers give the historian an insight in the evolutions in Dutch trade in the Baltic and the White Sea in the eighteenth century. The registers contain detailed information on the micro level on Dutch shipmasters in the Baltic and White Sea.

The main restrictions of the registers are that only *Dutch* ships had to pay the levy and were thus registered, that only westbound trips were registered and that only ships arriving in Amsterdam were under the auspices of one of the Boards. Though the sources were primarily presented as a Dutch source this is - be it in a strict sense – not entirely correct. The source is *de facto* about Amsterdam and there is no information to be found about the so-called *deurgangsvaerten* (ships passing Amsterdam without mooring) to France, Spain, Italy or Portugal or other Dutch ports in the Galjootsgeldregisters.⁶⁰

1.4. Rekeningen van den ontfang van het Paalgeld te Amsterdam

⁵⁶ *Ibidem*, 95.

⁵⁷ I. Schöffer, 'De Vonnissen in Averij Grosse van de Kamer van Assurantie en Averij te Amsterdam in de 18^e eeuw: Onderzoek naar hun economisch-historische waarde voor de geschiedenis van de handel en scheepvaart van Amsterdam op de Oostzee 1700-1770' // *Economisch-Historisch Jaarboek*, 1956, 26, 73-132. Knoppers, *Dutch Trade*, 62.

⁵⁸ The *lastage* of ships carrying timber is an exception. In this case the *lastage* of the cargo is usually the same as the *lastage* of the ship).

⁵⁹ Knoppers, *Dutch Trade*, 79-85.

⁶⁰ Dekker, 'Friese schippers', 240-241. Exactly during the eighteenth century these destinations gained in importance and in this respect, Knoppers' study, which is entirely based on the Galjootsgeldregisters, has a somewhat misleading title.

George Welling describes the Paalgeld Portbooks as follows: “The *Rekeningen van den ontfang van het Paalgeld te Amsterdam*, which from now on will be called the *Paalgeld* portbooks, the records of an eighteenth century tax-register on incoming shipping to Amsterdam”⁶¹. “The *Paalgeld* was a beaconage or docking fee levied on incoming ships in the harbors along the coast of the Zuider Zee. The name of this levy, *Paalgeld*, gives an indication of its purpose. From the revenues of this tax the maintenance of beacons, buoys and the coast-fires, that had the same function as modern light-houses, was financed. But it would also be used to meet the costs of placing poles (*palen*) in the water to mark the numerous shoals of the Zuider Zee”⁶².

“Only for a limited period these books have survived. For Amsterdam, by far the most important harbor for which we have data on the levy of the *Paalgeld*, these portbooks cover the periods 1742, a single year, 1771 to 1810, 1814 to 1828, and 1830 to 1836”⁶³. “For every year these books have two parts, of which the first is usually called *Rekening van den ontfang van het Paalgeld te Amsterdam over het jaar X* and the second part “*Ontvang van het Paalgeld wegens de Schepen gekomen uit de West Indien gedurende het Jaar X*” These portbooks normally cover one year, except for the case of 1816-1817: for this year the first page reads: “*Rekening van de Ontvang van het Paalgeld te Amsterdam over het Jaar 1816 & de Maanden Januarij & Februarij van 't Jaar 1817*”. The reason for this is the change from a system of the guilder of 20 stuivers to the guilder of 100 cents. However, this change is not consistent. The sums paid for each part of the cargo are still expressed in stuivers, just like the sub-totals: only the grand-totals for each ship are in guilders and cents. The first part of these books is the most interesting in our case. It contains the names of all shipmasters, the cargoes of their ships, the dates of payment, the amounts paid per cargo, and the ports of departure”⁶⁴.

These portbooks form the source of Welling’s study “The Prize of Neutrality”⁶⁵. In order to prepare the information in this source for further analysis, Welling entered the data for the years 1742 and 1771-1787 entirely into a database. This source-oriented approach provided him with a huge amount of data ready for processing and analysis as well as with a frame of reference necessary to study Amsterdam’s trade relations with one specific area. Thanks to Welling’s efforts, the Paalgeld Portbooks are now also available for other historians⁶⁶.

1.5. Register of Abraham de Kramer (RAK)

The register of Abraham de Kramer is a book that this Amsterdam broker kept of the levy of the so-called *schippgeld*. Kramer kept his book from 1697, when he was appointed by the Board of Muscovite Trade to collect the *schippgeld*, and he continued using it as a register of ships sailing to and coming from Archangel after the levy of *schippgeld* was abolished in 1709. After Kramer’s death in 1720, his successor - Abraham Muller - continued to keep track of Archangel shipping until 1738. The register is part of the archive of the Board of Muscovite Trade and is kept at the Amsterdam Municipal Archives⁶⁷.

⁶¹ Welling, *The Prize*, 40.

⁶² About the history of the levy of the Paalgeld, see: Welling, *The Prize*, 41 ff.

⁶³ Welling, *The Prize*, 41.

⁶⁴ Welling, *The Prize*, 41-42.

⁶⁵ Welling, *The Prize*, 40.

⁶⁶ The database of the Paalgeld Portbooks can be found on line at:
<http://www.let.rug.nl/~welling/paalgeld/appendix.html>.

⁶⁷ GAA, 6, 123.

The register of Abraham de Kramer contains detailed lists of ships going to Archangel. The date of registry is mentioned first, then followed by the name of the ship, the name of the shipmaster and the name(s) of the Archangel merchants they are sailing to. The lists were divided into so-called *vroegschepen* (the early fleet) and *naschepen* (the late fleet). From 1705 the value of the cargo is added. From 1709 until 1720 a very brief hardly readable description of the cargo is given. After 1720, when Abraham Muller was appointed to continue Kramer's register, the lists take a somewhat different shape: the date of departure is no longer made explicit and the distinction between *vroegschepen* and *naschepen* disappears. On the other hand, lists returning ships were added.

One of the difficulties of this register is the large amount of detailed notes, e.g. concerning convoys, concerning the type of ships (fregats are sometimes listed seperately) and concerning the destination of the ships (in some cases ships leaving for Livorno are added for unknown reasons). As will become clear in the next chapter, the register of Abraham de Kramer is a very valuable source both for comparison with the patterns of Dutch Baltic shipping and for expanding our knowledge of Dutch shipping to Archangel.

CHAPTER 2: ANALYSIS

2.1. Introductory remarks

The following analysis of data about shipmasters active in the eastern Gulf of Finland and Archangel in the first half of the 18th century is based primarily on three examples, data of which is added in the appendices to this paper.

First of all, a few words on the structure of the relational database model used to process data from the sources is necessary. Our model provides the historian with all the tools needed for an in depth study of shipping and trade, as well as for a detailed and reliable view on the peculiarities of the sources used. The relational database is constructed in accordance to the rules of nominal record linkage and normalization⁶⁸. The model is topic-oriented inasmuch as only the pieces of information that are needed for the pre-defined research purposes are captured⁶⁹; those purposes being the study of *Dutch 18th-century shipping and trade in the eastern Gulf of Finland*, where the ports of Narva, Vyborg, Kronstadt and St. Petersburg (previously Nyen) were located. At the same time, the approach is source-oriented: throughout the whole generative process of gathering and entering the data from the sources, the structure of the original documents on which the database is based, is preserved as closely as possible. It should, however, be noted that in our case, the term "source-oriented" must be understood somewhat differently than in its first and most common meaning (see: Paalgeld Portbooks).

Furthermore, it must be said that the data gathering from the sources described in the previous chapter is not complete yet, nor have I had the chance to see and process all the archival material available on this matter. For instance, the Dutch Sound Toll Tables for the years 1724-1729 could not be processed yet as they are in too bad a state to be consulted. The Danish Sound Toll Registers have currently been processed for the years 1703-1730 only, which effectively fills the gap left by the Dutch Sound Toll Tables for the years 1724-1729, but leaves another gap for the years 1733-1736 for which the Dutch Sound Toll Tables

⁶⁸ About nominal record linkage and normalization, see: Charles Harvey, Jon Press. *Databases in Historical Research: Theory, Methods and Applications*. London, 1996, pp. 22-24.

⁶⁹ Welling, *The Prize*, 87.

have not survived⁷⁰. The Galjootsgeldregisters of the Board of Baltic Trade and Shipping could not be processed yet for the years prior to 1722 and for the year 1727.

Finally, the sources themselves all have their restrictions as well, as was described in the previous chapter. Without going into detail, it must be kept in mind that not all data have survived. The large gap in the Sound Toll Tables has already been mentioned, but one must be aware of minor discontinuities as well, such as data missing for part of the year. At the same time, minor discontinuities of another kind must also be mentioned: sometimes some of the data items are missing for separate records in the source⁷¹. The last restriction is that of the representation of inner Baltic trade contacts. The amount of eastbound passages having an undefined port of destination (“the Baltic Sea”) is at times up to 30% of the total. Though a direct trip westbound was the rule, this vague description also appears in the Galjootsgeldregisters, leaving the historian with unanswered questions. Where did these ships go? To one or more ports? And if so, how and why?

The restrictions and possible discontinuities mentioned in the previous paragraphs can for the major part be overcome by combining complementary sources. The data gathered in the appendices proves this: they provide us with a sufficient tool for the analysis of shipmovements to and from the eastern part of the Gulf of Finland.

2.2. Structure

The structure of the tables in the appendices is as follows: the first column (“direction”) is added to make the shipmovements more visible. The sign “→” stands for “eastbound passage through the Sound”, “←” stands for “westbound passage through the Sound”, “⇒” stands for “journey to Archangel”, “⇐” stands for “journey from Archangel” and “↓” stands for “registered arrival in Amsterdam”. The second column contains day and month of passage, departure or arrival. As a rule, for passages through the Sound in Helsingør, the place of registration is coded as HEL, for arrivals in Amsterdam the place of registration is coded as AMS. In brackets, the data source is added to the places of registration:

(n) = Dutch Sound Toll Tables
(d) = Danish Sound Toll Registers
(ggr) = Galjootsgeldregisters
(pg) = Paalgeld Portbooks
(rak) = Register of Abraham de Kramer

As the tables are drawn up for shipmasters all having the same surname, the fourth column only contains the first name and the patronymic of the shipmaster. The names of the shipmasters have been previously standardized with the aid of the thesaurus available on the website of the Frisian Historical and Literary Centre Tresoar⁷². In the fifth and the sixth column the ports of departure and destination are specified. Cautious not to make the tables even more complex, the homeport of the captain - as it is stated in the aggregated sources - has been omitted. Thus, the first six columns contain data that – ideally – is equivalent in all

⁷⁰ See: J. Thomas Lindblad, ‘Dutch Trade on Narva in the Eighteenth Century’ // C. Horstmeier a.o. (eds.), *Around Peter the Great: Three Centuries of Russian-Dutch Relations*, Groningen, INOS, 1997, 103-114.

⁷¹ Such is the case, for instance, for shipmaster Abe Janse Kat (appendix 1, 1723-29-07) for whom the name of the ship is missing in the Galjootsgeldregisters.

⁷² See: www.tresoar.nl.

the sources used. These are the data items on which the reconstruction of shipmovements is based.

The final four columns contain source-specific data. The name of the ship, the lastage of the cargo and lastage of the ship are extracted from the Galjootsgeldregisters. The indication of the cargo is extracted from the Dutch Sound Toll Tables. The detailed cargo descriptions of the Danish Sound Toll Registers have been left out in order to avoid unnecessary complications.

2.3. Content analysis: fixed routes and flexible specialization

Throughout the tables, the repetitive character of the shipmovements is obvious. In the following table, the total amount of shipmovements is calculated, one shipmovement consisting – ideally – of 1) the registration of the eastbound voyage, 2) the registration of the westbound voyage and 3) the registration of the arrival of the ship in Amsterdam. In the case of inconsistencies between the sources, e.g. when a port of departure different from the port of destination is registered, both port are given as one destination. In those cases where only part of the voyage is registered, the “destination” of the shipmovement is set as “Baltic Sea + the registered destination(s)”, this to avoid underestimating the existence of what was already defined as inner Baltic shipmovements. In the case of shipmovements to Archangel, this was unnecessary. Where only a limited number of sources is available the “destination” of the shipmovement is based on the existing data, e.g. the beginning of 1737. The following examples will make things clear.

In the year 1725 in the table of the Kat shipmasters (appendix 1) an example of a shipmovement without “confirming” registration in Amsterdam is found. It remains unclear whether or not the shipmaster called at another port than the one registered in the Danish Sound Toll Registers, this port being other than Vyborg, Narva, Kronstadt or St. Petersburg. Therefore, “Baltic Sea” is added to the “destination” in the table of shipmovements (a fragment of such table is added in appendix 4). The year 1729 in the same aggregated table of Kat shipmasters sheds light on some other peculiarities of the reconstruction of shipmovements. First of all, we see that two different persons have the same name: Abe Broers (1723-03-08) and Abe Broers (1723-03-08) arrived back in Amsterdam on the same day. Evidence for the fact that there is no mistake in bookkeeping involved, is provided by the name of the ship and the fact that the two namesakes appear elsewhere in the table as well. What is interesting, is that one of them does not appear in the Danish Sound Toll Registers nor in the Dutch Sound Toll Tables with Narva as port of destination. Therefore, the shipmovement of one of the shipmasters Abe Broers has “Baltic Sea/Narva” as port of destination in the table of reconstructed shipmovements. A third, somewhat different example of reconstruction can be found in the year 1737. The year starts with two unmatched registrations in Amsterdam (1737-01-07 and 1737-01-08), which at first sight may seem strange. However, this occurrence can easily be explained by the fact that the Dutch Sound Toll Tables are only available from July 27th onwards. Therefore, the reconstruction of these shipmovements is based on the existing data.

name	total shipmovements	destinations	shipmovements per destination	% of total
Kat	103	narva	61	59,2 %

		baltic sea/narva	26	25,2 %
		baltic sea/vyborg	4	3,9 %
		narva/vyborg	4	3,9 %
		vyborg	2	1,9 %
		baltic sea/kronstadt/narva	2	1,9 %
		archangel	1	0,9 %
		kronstadt/narva	1	0,9 %
		baltic sea/kronstadt	1	0,9 %
		norway	1	0,9 %
Wijnberg	47	archangel	14	29,8 %
		danzig	8	17 %
		baltic sea/narva	7	14,9 %
		baltic sea/vyborg	5	10,6 %
		narva	4	8,5 %
		vyborg	2	4,3 %
		narva/vyborg	2	4,3 %
		danzig/narva	1	2,1 %
		baltic sea	1	2,1 %
		baltic sea/narva/vyborg	1	2,1 %
		narva/vyborg/st. petersburg	1	2,1 %
		narva/st. petersburg	1	2,1 %
Montes	27	archangel	19	70,4 %
		baltic sea/narva	5	18,5 %
		narva	3	11,1 %

Looking at the routes frequented by the Kat shipmasters, it is clear that they were specialized in Narva. Almost 60 % of all shipmovements follows the pattern “Amsterdam – Narva – Amsterdam” and if the shipmovements where Narva is possibly not the only port of destination are taken into account as well, the dominance becomes almost complete, with more than 90 % of the shipmovements having Narva as port of destination. The few cases in which other ports are registered as destination can be related to the type of goods exported from them. Just like Narva, the ports of Vyborg, Kronstadt and to a lesser degree Archangel were timber exporting ports. Thus the fixed routes are effectively confirmed by flexible specialization: only when there was the need to do so, the pattern was changed.

The same can be said about the case of Thomas Montes, although here the pattern shift might have had more dramatic consequences for the shipmaster. From 1702 until 1720 Thomas Montes travelled to Archangel on a yearly basis, every time with a loaded ship, called “Vrede”. From 1721 onwards, however, Thomas Montes started to sail to Narva instead, on the outgoing journey with a ship “in ballast”, on the return journey loaded with a cargo of timber.

It would have been too easy to say that this was the result of Peter the Great's redirection policy. Hence, Thomas Montes did not sail to St. Petersburg, he sailed to Narva instead, thus also having to face a change in the kind of goods that he carried from "valuable" goods to timber. Instead of seeking the reason for this shift in the questions of supply and demand or in political issues, I am inclined to believe that the lastage of the ship plays a decisive role in the explanation of this Archangel/Narva-shift.

A calculation of the average lastage of the ships calling at St. Petersburg, Archangel, Kronstadt, Vyborg and Narva provides the following result⁷³:

port of departure	average lastage of ships	standard deviation
St. Petersburg	63,93	27,67
Kronstadt	140,38	27,31
Narva	158,25	31,39
Vyborg	125,66	41,38
Archangel	140,12	40,90

Apparently, the ships of the Archangel fleet were just too large to sail to St. Petersburg. Therefore, they had to find another port of destination. The sudden rise in the popularity of Narva can partly be explained by this situation. But there is no doubt that other factors such as an increasing demand for timber in Western Europe and technological evolutions in timber processing in the areas around the Gulf of Finland⁷⁴ also influenced the decision to shift from Archangel to Narva.

The fact that both the Kat shipmasters and the Thomas Montes case show such obvious specialization in one route, makes it interesting to investigate exactly when and why they distance themselves from their fixed routes to sail to other ports instead. Partly, the answer can be found in political developments, which is most obvious in the case of Thomas Montes (see above). Another reason is of a more practical nature: in case of a timber deficiency (mostly due to governmental restrictions, see above), the shipmasters swiftly moved on to the nearest timber exporting port. Such patterns can be clearly derived from the table of shipmovements of the Kat shipmasters, especially for the years 1726-1738 (shift to Vyborg) and 1739-1741 (shift to Kronstadt).

At first sight, the table containing data about the Wijnberg shipmasters seems quite contrary to the regularity of shipmovements in the other tables. Indeed, the Wijnberg shipmasters did not have a prevailing route. Apparently, their shipmovements followed a more diverse pattern in which in the 1720s Danzig was the main port of destination. In the 1730s Archangel took over Danzig's place, then followed by a period in which Narva and Vyborg were the main ports of call. In neither of the periods however did one of these destinations completely prevail. An in-depth study of the cargo carried by the Wijnberg shipmasters will probably give a better insight in their complex pattern of routes. Maybe their case is not so

⁷³ Currently, George Welling (University of Groningen) is studying the correlation between distance to ports and the lastage of the ship and the correlation between the port of destination and the lastage of the ship. The first results of his study are very similar to those presented here.

⁷⁴ See: Sven-Erik Åström, *From Tar to Timber: Studies in Northeast European Forest Exploitation and Foreign Trade 1660-1860*, Helsinki, Societas Scientiarum Fennica, 1988 (Commentationes Huimanarum Litterarum 85). And also: S.-E. Åström, 'Technology and Timber Exports from the Gulf of Finland 1661-1740' // *The Scandinavian Economic History Review*, 1975, 23, 1-14.

much one of fixed routes and flexible specialization as it is one of fixed specialization and flexible routes...

PRELIMINARY CONCLUSIONS

Patterns of specialization can be clearly distinguished in the shipmovements of Dutch shipmasters sailing to and returning from the eastern Gulf of Finland. Most of the time, the Dutch shipmasters called at one and the same port for several years, only interrupted by external circumstances. For Archangel, one journey per year was normal, for the ports in the eastern Gulf of Finland the number of trips was two. Although we have not gone into the details of seasonal patterns, it is quite obvious that they can be derived from the aggregated tables as well.

Two types of remarkable either/or-patterns have received most of our attention in the analysis. The first type – the Archangel/Narva-pattern - is maybe the most revealing result of the aggregation of various data sources. The second type – the Narva/Vyborg or Narva/Kronstadt-pattern – is no less interesting though. A relation between the specialization of the shipmaster, the cargo and political or economic circumstances could clearly be discerned.

Both patterns show a remarkable resemblance to the trade patterns distinguished by Järno Kotilaine for Russia's foreign trade in the seventeenth century. In his article "Competing Claims: Russian Foreign Trade via Arkhangel'sk [i.e. Archangel – W.S.] and the Eastern Baltic Ports in the 17th Century", Kotilaine demonstrates that as a rule, Archangel and the Baltic ports traded almost exclusively with their respective hinterlands, although the upper Volga region, as well as the Iaroslavl' area, clearly maintained links in both directions, even if Archangel was their primary focus. The limited transferability of trade between the White Sea and the Baltic is revealed by the fact that on neither route did trade in Russian goods ever collapse completely⁷⁵. "However", Kotilaine adds, "there were important exceptions to the general pattern of distinct hinterlands. First, transit trade in valuable goods of non-Russian origin, such as raw silk, rhubarb, and various other medicines and dyes, which almost invariably passed through Moscow, tended to be channeled via Arkhangel'sk. Secondly, there were periods when actual diversion from one route to the other took place"⁷⁶.

As we have seen in the introduction, in the first decades of the 18th century, such transfer took place in favor of St. Petersburg. Remarkably enough, the apparent shift in the trade streams is not accompanied by a shift in the transportation streams, i.e. the trading of goods and the location of merchants shifts from Archangel to St. Petersburg (though not entirely of course), but the routes of Dutch shipmasters involved do not follow this pattern.

Partly, we have sought to explain this ambiguity referring to the lastage of the ships that were part of the Archangel fleet. Consequently, we could now say that the Dutch shipmasters frequenting the new port of St. Petersburg must have been either new or previously involved in trade outside the eastern Gulf of Finland. As St. Petersburg effectively became Russia's major port, we must conclude that in the 18th century Dutch shipping to Russia seems to have followed an evolutionary pattern different than that of trade.

We hope that further processing and analysis of source material will confirm and precise the preliminary results presented in this paper.

⁷⁵ Kotilaine, 'Competing Claims', 301-302

⁷⁶ Kotilaine, 'Competing Claims', 302-303.

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

direction	dd-mm	place of registration	name	port of departure	port of destination	name of the ship	lastage of the cargo	lastage of the ship	indication of the cargo
1719									
←	14-09	HEL (d)(n)	abe broers	vyborg	amsterdam				hennep
1720									
→	20-05	HEL (d)	abe jans	amsterdam	narva				
←	16-07	HEL (d)	abe jans	narva	amsterdam				
1721									
→	29-05	HEL (n)	abe jans	amsterdam	baltic sea				ballast
→	29-05	HEL (d)	sibbele jans	amsterdam	narva				
→	31-05	HEL (d)	iepe wietses	amsterdam	narva				
←	18-07	HEL (d)(n)	abe jans	narva	amsterdam				timber
←	08-09	HEL (d)	iepe wietses	narva	amsterdam				
1722									
→	11-05	HEL (d)(n)	abe jans	amsterdam	narva				ballast
→	12-07	HEL (d)(n)	iepe wietses	amsterdam	narva				ballast
←	15-07	HEL (d)(n)	abe jans	narva	amsterdam				timber
↓	02-09	AMS (ggr)	abe jans	narva	amsterdam	gulde kat	180	205	
←	09-09	HEL (d)(n)	iepe wietses	narva	amsterdam				timber
↓	19-10	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	222	204	
1723									
→	30-04	HEL (n)	abe jans	amsterdam	narva				ballast
→	08-05	HEL (n)	iepe wietses	amsterdam	narva				ballast
←	19-06	HEL (d)	abe jans	narva	amsterdam				
←	20-06	HEL (n)	abe jans	narva	amsterdam				timber
←	04-07	HEL (n)	iepe wietses	vyborg	amsterdam				timber
↓	29-07	AMS (ggr)	abe jans	narva	amsterdam	geen info	260	205	
↓	08-08	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	220	204	
1724									
→	01-05	HEL (d)	abe jans	amsterdam	narva				
←	24-06	HEL (d)	iepe wietses	narva	amsterdam				

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

←	25-06	HEL (d)	abe jans	narva	amsterdam				
↓	31-07	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	221	204	
↓	21-08	AMS (ggr)	abe jans	narva	amsterdam	gulde kat	205	205	
1725									
→	28-04	HEL (d)	iepe wietses	amsterdam	narva				
←	04-07	HEL (d)	iepe wietses	narva	amsterdam				
1726									
←	27-06	HEL (d)	iepe wietses	narva	amsterdam				
↓	12-08	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	221	204	
→	30-08	HEL (d)	iepe wietses	amsterdam	narva				
1727									
→	26-04	HEL (d)	abe broers	amsterdam	narva				
→	29-04	HEL (d)	iepe wietses	amsterdam	narva				
←	19-06	HEL (d)	abe broers	narva	amsterdam				
←	19-06	HEL (d)	iepe wietses	narva	amsterdam				
→	20-07	HEL (d)	abe broers	amsterdam	narva				
→	26-07	HEL (d)	abe broers	amsterdam	narva				
→	11-08	HEL (d)	iepe wietses	amsterdam	narva				
←	15-09	HEL (d)	abe mons (?)	narva	amsterdam				
←	21-09	HEL (d)	abe broers	narva	amsterdam				
←	27-09	HEL (d)	iepe wietses	narva	amsterdam				
1728									
→	28-04	HEL (d)	abe broers	amsterdam	narva				
←	08-06	HEL (d)	abe broers	narva	amsterdam				
←	11-06	HEL (d)	abe broers	narva	amsterdam				
←	23-06	HEL (d)	iepe wietses	narva	amsterdam				
↓	08-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	171	171	
↓	09-07	AMS (ggr)	abe broers	narva	amsterdam	kalkoen	174	168	
↓	14-07	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	170	169	
→	27-07	HEL (d)	abe broers	amsterdam	narva				
→	02-08	HEL (d)	iepe wietses	amsterdam	vyborg				
←	24-09	HEL (d)	iepe wietses	narva	amsterdam				
←	24-09	HEL (d)	abe broers	narva	amsterdam				

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

↓	21-10	AMS (ggr)	abe broers	narva	amsterdam	kalkoen	174	168	
↓	21-10	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	171	171	
↓	26-10	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	
1729									
→	19-05	HEL (d)(n)	iepe wieteses	amsterdam	narva				ballast
→	19-05	HEL (d)(n)	abe broers	amsterdam	narva				ballast
←	14-07	HEL (d)	abe broers	narva	amsterdam				
←	16-07	HEL (d)	iepe wieteses	narva	amsterdam				
↓	03-08	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	171	171	
↓	03-08	AMS (ggr)	abe broers	narva	amsterdam	kalkoen	174	168	
→	21-08	HEL (d)	abe broers	amsterdam	narva				
↓	22-08	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge kat	170	169	
←	21-09	HEL (d)	abe broers	vyborg	amsterdam				
←	24-09	HEL (d)	abe broers	narva	amsterdam				
↓	01-11	AMS (ggr)	abe broers	vyborg	amsterdam	vergulde kievit	171	171	
↓	16-11	AMS (ggr)	abe broers	narva	amsterdam	kalkoen	174	168	
1730									
→	13-04	HEL (d)	abe broers	amsterdam	narva				
→	13-04	HEL (d)	abe broers	amsterdam	narva				
→	19-04	HEL (d)	iepe wieteses	amsterdam	narva				
←	05-06	HEL (d)	abe broers	narva	amsterdam				
←	09-06	HEL (d)	abe broers	narva	amsterdam				
↓	11-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	171	171	
↓	11-07	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
↓	14-07	AMS (ggr)	abe broers	narva	amsterdam	kalkoen	176	168	
→	21-07	HEL (d)	abe broers	amsterdam	narva				
←	02-09	HEL (d)	abe broers	narva	amsterdam				
←	03-11	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
1731									
→	01-05	HEL (n)	iepe wieteses	amsterdam	narva				ballast
→	14-05	HEL (n)	abe broers	amsterdam	narva				ballast
→	18-05	HEL (n)	abe broers	hindelopen	narva				ballast
↓	25-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	171	171	
↓	25-07	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

↓	26-07	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
→	07-08	HEL (n)	abe broers	amsterdam	narva				ballast
→	07-08	HEL (n)	iepe wieteses	amsterdam	narva				ballast
↓	01-11	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	171	171	
↓	01-11	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
1732									
↓	03-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	17-07	AMS (ggr)	abe broers	narva	amsterdam	toeval	170	166	
↓	21-07	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
↓	11-11	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	173	
↓	01-12	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
1733									
→	27-04	HEL (n)	abe broers	amsterdam	narva				ballast
→	27-04	HEL (n)	abe broers	amsterdam	narva				ballast
←	06-06	HEL (n)	abe broers	narva	amsterdam				timber
←	08-06	HEL (n)	iepe wieteses	narva	amsterdam				timber
←	08-06	HEL (n)	abe broers	narva	amsterdam				timber
↓	16-07	AMS (ggr)	abe broers	narva	amsterdam	toeval	170	166	
↓	18-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	21-07	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
→	31-07	HEL (n)	abe broers	amsterdam	narva				ballast
→	31-07	HEL (n)	iepe wieteses	amsterdam	narva				ballast
→	05-09	HEL (n)	abe broers	hindelopen	narva				ballast
↓	19-10	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	05-11	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
↓	25-11	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	
1734									
↓	30-06	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	14-07	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	
↓	22-09	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	18-10	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	
↓	27-10	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
1735									

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

↓	21-06	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	28-06	AMS (ggr)	iepe wietses	narva	amsterdam	zwarte kat	170	169	
↓	29-08	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
1736									
↓	16-04	AMS (ggr)	abe broers	archangel	amsterdam	toeval	256	166	
↓	01-08	AMS (ggr)	abe broers	vyborg	amsterdam	toeval	166	166	
↓	08-11	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	169	169	
↓	12-11	AMS (ggr)	abe broers	vyborg	amsterdam	toeval	166	166	
1737									
↓	01-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	01-08	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	170	169	
←	04-08	HEL (n)	abe broers	vyborg	amsterdam				various
→	24-08	HEL (n)	iepe wietses	amsterdam	narva				ballast
→	17-09	HEL (n)	sierd sierds	amsterdam	vyborg				ballast
←	09-10	HEL (n)	iepe wietses	vyborg	amsterdam				various
↓	21-10	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	104	104	
↓	01-11	AMS (ggr)	iepe wietses	vyborg	amsterdam	zwarte kat	170	169	
←	08-11	HEL (n)	sierd sierds	narva	amsterdam				various
1738									
↓	15-04	AMS (ggr)	sierd	narva	amsterdam	twee gebroeders	156	152	
→	26-04	HEL (n)	abe broers	amsterdam	narva				ballast
→	26-04	HEL (n)	iepe wietses	amsterdam	narva				ballast
→	28-05	HEL (n)	sierd	amsterdam	vyborg				ballast
←	03-06	HEL (n)	abe broers	narva	amsterdam				timber
←	05-06	HEL (n)	abe broers	narva	amsterdam				timber
←	05-06	HEL (n)	iepe wietses	narva	amsterdam				timber
↓	09-07	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
↓	09-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	10-07	AMS (ggr)	iepe wietses	narva	amsterdam	jonge zwarte kat	169	169	
←	21-07	HEL (n)	sierd sierds	vyborg	amsterdam				various
→	25-07	HEL (n)	iepe wietses	amsterdam	narva				ballast
→	25-07	HEL (n)	abe broers	amsterdam	narva				ballast
←	07-09	HEL (n)	abe broers	narva	amsterdam				timber
←	07-09	HEL (n)	iepe wietses	narva	amsterdam				timber

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

→	10-09	HEL (n)	sierd	amsterdam	narva				ballast
←	15-10	HEL (n)	sierd sierds	narva	amsterdam				various
↓	21-10	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	
↓	03-11	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	07-11	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
↓	01-12	AMS (ggr)	sierd	narva	amsterdam	jonge twee gebroeders	126	152	
1739									
→	19-05	HEL (n)	sierd sierds	amsterdam	narva				ballast
→	24-05	HEL (n)	iepe wieteses	amsterdam	narva				ballast
←	12-07	HEL (n)	sierd	narva	amsterdam				various
←	12-07	HEL (n)	iepe wieteses	narva	amsterdam				various
↓	27-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	11-08	AMS (ggr)	sierd	narva	amsterdam	jonge twee gebroeders	156	152	
↓	11-08	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
↓	13-08	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	
→	28-08	HEL (n)	sierd	amsterdam	narva				ballast
→	28-08	HEL (n)	iepe wieteses	amsterdam	narva				ballast
→	28-08	HEL (n)	abe broers	amsterdam	narva				ballast
←	30-09	HEL (n)	iepe wieteses	kronstadt	amsterdam				various
←	30-09	HEL (n)	sierd	narva	amsterdam				timber
↓	09-11	AMS (ggr)	sierd	narva	amsterdam	twee gebroeders	156	152	
↓	10-11	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	10-11	AMS (ggr)	abe broers	narva	amsterdam	toeval	166	166	
↓	24-11	AMS (ggr)	iepe wieteses	kronstadt	amsterdam	zwarte kat	170	169	
1740									
→	21-05	HEL (n)	sierd	amsterdam	narva				ballast
→	22-05	HEL (n)	abe broers	amsterdam	narva				ballast
→	07-06	HEL (n)	iepe wieteses	amsterdam	narva				ballast
↓	02-08	AMS (ggr)	sierd sierds	narva	amsterdam	jonge twee gebroeders	156	152	
↓	05-08	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	16-08	AMS (ggr)	iepe wieteses	narva	amsterdam	jonge zwarte kat	170	169	

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

←	07-10	HEL (n)	abe broers	narva	amsterdam				various
←	17-10	HEL (n)	iepe wieteses	kronstadt	amsterdam				various
↓	08-11	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	01-12	AMS (ggr)	iepe wieteses	narva	amsterdam	zwarte kat	170	169	
↓	29-12	AMS (ggr)	sierd sierds	narva	amsterdam	jonge twee gebroeders	156	152	
1741									
→	24-04	HEL (n)	sierd sierds	amsterdam	narva				ballast
←	29-06	HEL (n)	abe broers	narva	amsterdam				timber
←	06-07	HEL (n)	sierd sierds	narva	amsterdam				timber
↓	17-07	AMs (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	01-08	AMS (ggr)	sierd sierds	narva	amsterdam	twee gebroeders	156	152	
→	19-08	HEL (n)	sierd sierds	amsterdam	baltic sea				ballast
←	05-09	HEL (n)	abe broers	kronstadt	amsterdam				timber
←	29-09	HEL (n)	sierd	kronstadt	amsterdam				timber
↓	09-10	AMS (ggr)	abe broers	kronstadt	amsterdam	vergulde kievit	176	171	
↓	24-11	AMS (ggr)	sierd sierds	narva	amsterdam	twee gebroeders	156	152	
1742									
→	15-06	HEL (n)	sierd	amsterdam	narva				ballast
↓	18-06	AMS (pg)	abe broers	norway	amsterdam				
→	12-07	HEL (n)	abe broers	amsterdam	narva				ballast
←	23-08	HEL (n)	sierd sierds	narva	amsterdam				timber
←	23-08	HEL (n)	abe broers	narva	amsterdam				timber
↓	25-09	AMS (ggr)(pg)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	03-10	AMS (ggr)(pg)	sierd sierds	narva	amsterdam	jonge twee gebroeders	152	152	
1743									
→	09-05	HEL (n)	sierd	amsterdam	narva				ballast
→	11-05	HEL (n)	abe broers	amsterdam	narva				ballast
←	22-06	HEL (n)	abe broers	narva	amsterdam				timber
←	26-06	HEL (n)	sierd sierds	narva	amsterdam				timber
↓	11-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
↓	19-07	AMS (ggr)	sierd sierds	narva	amsterdam	jonge twee gebroeders	156	152	

appendix 1: Kat (Cat, Katt, Catt, Cat Oude, Cat d'Oude) shipmasters
selection 1719-1745

→	22-07	HEL (n)	abe broers	amsterdam	narva				ballast
→	10-08	HEL (n)	sierd sierds	amsterdam	narva				ballast
→	10-09	HEL (n)	abe broers	narva	amsterdam				timber
→	19-10	HEL (n)	sierd	narva	amsterdam				rye
↓	21-10	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
1744									
→	29-04	HEL (n)	abe broers	amsterdam	narva				ballast
←	15-06	HEL (n)	abe broers	narva	amsterdam				timber
↓	16-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
1745									
→	09-05	HEL (n)	abe broers	amsterdam	narva				ballast
←	20-06	HEL (n)	abe broers	narva	amsterdam				timber
↓	23-07	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
→	10-08	HEL (n)	abe broers	amsterdam	narva				ballast
↓	16-11	AMS (ggr)	abe broers	narva	amsterdam	vergulde kievit	176	171	
(...)									

appendix 2: Wijnberg (Wijnbergh, Wynberg, Wynbergh, Wijnburg) shipmasters
selection 1721-1745

direction	dd-mm	place of registration	name	port of departure	port of destination	name of the ship	lastage of the cargo	lastage of the ship	indication of the cargo
1721									
→	10-05	HEL (n)	pieter wigles	Amsterdam	Danzig				salt
←	15-06	HEL (n)	pieter wigles	Danzig	Amsterdam				rye
→	08-09	HEL (n)	pieter wigles	Amsterdam	Danzig				stukgoed
←	19-10	HEL (n)	pieter wigles	Danzig	Amsterdam				rye
1722									
→	12-04	HEL (n)	pieter wigles	Amsterdam	Danzig				stukgoed
←	26-05	HEL (n)	pieter wigles	Danzig	Amsterdam				rye
→	04-09	HEL (n)	pieter wigles	Amsterdam	Danzig				ballast
←	20-10	HEL (n)	pieter wigles	Danzig	Amsterdam				rye
1723									
→	05-05	HEL (n)	pieter wigles	Amsterdam	Danzig				ballast
→	07-05	HEL (n)	doede pieters	Amsterdam	Danzig				stukgoed
←	14-06	HEL (n)	doede pieters	Danzig	Amsterdam				rye
←	14-06	HEL (n)	pieter wigles	Danzig	Amsterdam				rye
→	23-08	HEL (n)	doede pieters	Amsterdam	Danzig				ballast
→	23-08	HEL (n)	pieter wigles	Amsterdam	Danzig				ballast
←	22-10	HEL (n)	pieter wigles	Danzig	Amsterdam				rye
←	23-10	HEL (n)	doede pieters	Danzig	Amsterdam				rye
1727									
←	24-07	HEL (d)	doede pieters	Narva	Amsterdam				
1728									

appendix 2: Wijnberg (Wijnbergh, Wynberg, Wynbergh, Wijnburg) shipmasters
selection 1721-1745

⇒	n/a	AMS (rak)	wigle pieters	amsterdam	archangel	de jonge abraham apostel			
1729									
↓	22-02	AMS (ggr)	wigle pieters	Archangel	Amsterdam	(geen info)	200	123	
1730									
⇒	n/a	AMS (rak)	doede pieters	amsterdam	archangel	wijnberg			
⇒	n/a	AMS (rak)	klaas pieters	amsterdam	archangel	jonge gerrit & magdalena			
←	n/a	AMS (rak)	doede pieters	archangel	amsterdam	jonge wijnberg			
←	n/a	AMS (rak)	klaas pieters	archangel	amsterdam	jonge gerrit & magdalena			
←	14-06	HEL (d)	klaas pieters	Narva	Amsterdam				
→	18-07	HEL (d)	wigle pieters	Amsterdam	Narva				
↓	31-07	AMS (ggr)	klaas pieters	Narva	Amsterdam	jonge gerrit	123	123	
←	08-09	HEL (d)	wigle pieters	Narva	Amsterdam				
1731									
↓	02-03	AMS (ggr)	doede pieters	Archangel	Amsterdam	jonge wijnberg	128	128	
↓	22-03	AMS (ggr)	wigle pieters	Narva	Amsterdam	jonge abraham apostel	123	123	
↓	04-04	AMS (ggr)	klaas pieters	Archangel	Amsterdam	geertrui & magdalena	123	123	
→	18-05	HEL (n)	wigle pieters	Amsterdam	Danzig				stukgoed
→	19-05	HEL (n)	doede pieters	Amsterdam	Oostzee				ballast
←	24-07	HEL (n)	wigle pieters	Narva	Amsterdam				timber
↓	04-08	AMS (ggr)	klaas pieters	Narva	Amsterdam	jonge gerrit & magdalena	123	123	
↓	14-09	AMS (ggr)	wigle pieters	Narva	Amsterdam	jonge abraham apostel	123	123	
⇒	n/a	AMS (rak)	klaas pieters	amsterdam	archangel	jonge gerrit & magdalena			
←	n/a	AMS (rak)	klaas pieters	archangel	amsterdam	jonge gerrit &			

appendix 2: Wijnberg (Wijnbergh, Wynberg, Wynbergh, Wijnburg) shipmasters
selection 1721-1745

						magdalena			
1732									
↓	28-03	AMS (ggr)	klaas pieters	Archangel	Amsterdam	jonge gerrit & magdalena	180	123	
↓	17-12	AMS (ggr)	doede pieters	Vyborg	Amsterdam	jonge wijnberg	128	128	
1733									
⇒	n/a	AMS (rak)	doede pieters	amsterdam	archangel	wijnberg			
←	06-06	HEL (n)	klaes pieters	Narva	Amsterdam				timber
↓	07-07	AMS (ggr)	klaas pieters	Narva	amsterdam	jonge gerrit & magdalena	123	123	
←	04-09	HEL (n)	klaas pieters	narva	amsterdam				timber, iron
⇐	n/a	AMS (rak)	doede pieters	archangel	amsterdam	wijnberg			
↓	28-10	AMS (ggr)	doede pieters	archangel	amsterdam	jonge wijnberg	275	128	
↓	31-10	AMS (ggr)	klaas pieters	narva	amsterdam	jonge gerrit	123	123	
1734									
↓	05-07	AMS (ggr)	klaas pieters	narva	amsterdam	jonge gerrit	123	123	
↓	15-07	AMS (ggr)	wigle pieters	vyborg	amsterdam	jonge abraham apostel	123	123	
↓	17-07	AMS (ggr)	doede pieters	narva	amsterdam	jonge wijnberg	128	128	
⇒	n/a	AMS (rak)	klaas pieters	amsterdam	archangel	jonge gerrit & magdalena			
⇒	n/a	AMS (rak)	wigle pieters	amsterdam	archangel	jonge abraham apostel			
⇒	n/a	AMS (rak)	doede pieters	amsterdam	archangel	wijnberg			
⇐	n/a	AMS (rak)	klaas pieters	archangel	amsterdam	jonge gerrit & magdalena			
⇐	n/a	AMS (rak)	wigle pieters	archangel	amsterdam	jonge abraham apostel			
⇐	n/a	AMS (rak)	doede pieters	archangel	amsterdam	wijnberg			
↓	29-12	AMS (ggr)	doede pieters	archangel	amsterdam	jonge wijnberg	186	128	

appendix 2: Wijnberg (Wijnbergh, Wynberg, Wynbergh, Wijnburg) shipmasters
selection 1721-1745

1735									
↓	21-02	AMS (ggr)	klaas pieters	archangel	amsterdam	jonge gerrit & magdalena	240	123	
↓	21-02	AMS (ggr)	wigle pieters	archangel	amsterdam	jonge abraham apostel	185	123	
⇒	n/a	AMS (rak)	klaas pieters	amsterdam	archangel	jonge gerrit & magdalena			
⇒	n/a	AMS (rak)	doede pieters	amsterdam	archangel	wijnberg			
←	n/a	AMS (rak)	doede pieters	archangel	amsterdam	wijnberg			
←	n/a	AMS (rak)	klaas pieters	archangel	amsterdam	jonge gerrit & magdalena			
↓	23-12	AMS (ggr)	klaas pieters	archangel	amsterdam	jonge gerrit & magdalena	260	123	
1736									
↓	10-02	AMS (ggr)	doede pieters	archangel	amsterdam	jonge wijnberg	128	128	
1737									
↓	06-07	AMS (ggr)	klaas pieters	narva	amsterdam	jonge gerrit & magdalena	123	123	
←	31-07	HEL (n)	wigle	vyborg	amsterdam				timber
←	11-09	HEL (n)	klaas	narva	amsterdam				various
1738									
↓	28-03	AMS (ggr)	klaas pieters	vyborg	amsterdam	jonge gerrit & magdalena	123	123	
↓	22-04	AMS (ggr)	doede	narva	amsterdam	wijnberg	128	128	
→	26-04	HEL (n)	klaas pieters	amsterdam	narva & vyborg				ballast
→	26-04	HEL (n)	wigle pieters	amsterdam	narva & vyborg				ballast
⇒	n/a	AMS (rak)	doede pieters	amsterdam	archangel	jonge wijnberg			
←	03-06	HEL (n)	klaas	narva	amsterdam				timber, rye
↓	08-07	AMS (ggr)	klaas pieters	narva	amsterdam	jonge gerrit & magdalena	123	123	
←	19-07	HEL (n)	wiebe	st. petersburg	amsterdam				blanco

appendix 2: Wijnberg (Wijnbergh, Wynberg, Wynbergh, Wijnburg) shipmasters
selection 1721-1745

→	25-07	HEL (n)	klaas pieters	amsterdam	narva				ballast
←	05-09	HEL (n)	klaas pieters	narva	amsterdam				various
↓	17-09	AMS (ggr)	wigle pieters	st. petersburg	amsterdam	jonge abraham apostel	175	123	
←	09-10	AMS (rak)	doede pieters	archangel	amsterdam	jonge wijnberg			
↓	05-12	AMS (ggr)	doede pieters	archangel	amsterdam	jonge wijnberg	150	128	
1742									
↓	30-04	AMS (pg)	wigle pieters	archangel	amsterdam				
↓	15-05	AMS (pg)	klaas pieters	archangel	amsterdam				
↓	18-05	AMS (pg)	doede pieters	archangel	amsterdam				
→	13-06	NST (n)	doede	amsterdam	oostzee				ballast
→	15-06	NST (n)	wigle	amsterdam	narva				ballast
←	25-08	NST (n)	doede	vyborg	amsterdam				timber
←	12-09	NST (n)	wigle	st. petersburg	amsterdam				hemp
↓	18-10	AMS (ggr)(pg)	doede pieters	vyborg	amsterdam	jonge wijnberg	128	128	
1743									
↓	09-05	AMS (ggr)	wigle pieters	st. petersburg	amsterdam	jonge abraham apostel	225	123	
1744									
→	08-08	NST (n)	doede	amsterdam	vyborg				ballast
←	08-10	NST (n)	klaas pieters	vyborg	amsterdam				various
←	21-10	NST (n)	doede	vyborg	amsterdam				various
↓	22-12	AMS (ggr)	klaas pieters	vyborg	amsterdam	jonge gerrit & magdalena	123	123	
1745									
↓	10-05	AMS (ggr)	doede pieters	vyborg	amsterdam	jonge wijnberg	128	128	
→	13-05	NST (n)	klaas pieters	amsterdam	narva				ballast

appendix 2: Wijnberg (Wijnbergh, Wynberg, Wynbergh, Wijnburg) shipmasters
selection 1721-1745

→	31-05	HEL (n)	wigle pieters	amsterdam	vyborg				ballast
←	27-06	HEL (n)	klaas pieters	vyborg	amsterdam				various
←	03-08	HEL (n)	wigle pieters	vyborg	amsterdam				various
↓	05-08	AMS (ggr)	klaas pieters	vyborg	amsterdam	jonge gerrit & magdalena	123	123	

appendix 3: shipmaster Thomas Montes
1702-1726

direction	dd-mm	place of registration	name	port of departure	port of destination	name of the ship	lastage of the cargo	lastage of the ship	indication of the cargo
1702									
⇒	03-07	AMS (rak)	thomas montes	amsterdam	archangel	vrede			to thesingh
1703									
⇒	25-07	AMS (rak)	thomas montes	amsterdam	archangel	vrede			to thesingh
1704									
⇒	20-07	AMS (rak)	thomas montes	amsterdam	archangel	vrede			to egbert thesingh
1705									
⇒	01-08	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f. 8350, to jan d'orville
1706									
⇒	23-07	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f. 8350, to jan d'orville
1707									
⇒	04-04	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f. 8600, to thesingh
1708									
⇒	naschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.9900, to brants
1709									
⇒	naschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.10000, to solofjoff
1710									
⇒	naschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.9050, to solofjoff
1711									
⇒	20-04	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.8700, to jan de man
1712									

appendix 3: shipmaster Thomas Montes
1702-1726

⇒	20-04	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.7550, to sobbe
1713									
⇒	22-04	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.6400, yo otto sobbe
1714									
⇒	vroegschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.6000, to blanckenhays
1715									
⇒	01-06	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.6600, to blanckenhays
1716									
⇒	vroegschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.6000, to ?
1717									
⇒	01-07	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.5200, to oortman & comp.
1718									
⇒	vroegschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.5500, to van hooven
1719									
↓	24-01	AMS (ggr)	thomas montes	archangel	amsterdam	vrede	200	172	
⇒	vroegschepen	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.5025, to timmerman
1720									
↓	03-01	AMS (ggr)	thomas montes	archangel	amsterdam	vrede	200	170	
⇒	15-05	AMS (rak)	thomas montes	amsterdam	archangel	vrede			f.5200, to brants
↓	05-11	AMS (ggr)	thomas montes	archangel	amsterdam	vrede	180	170	
1721									
←	09-08	HEL. (n)	thomas montes	narva	amsterdam				timber

appendix 3: shipmaster Thomas Montes
1702-1726

←	21-08	HEL (d)	thomas montes	narva	amsterdam				
1722									
→	26-05	HEL (d)(n)	thomas montes	amsterdam	narva				ballast
←	29-07	HEL (d)(n)	thomas montes	narva	amsterdam				timber
↓	10-09	AMS (ggr)	thomas montes	narva	amsterdam	liefde	150	150	
1723									
→	19-06	HEL (d)(n)	thomas montes	amsterdam	narva				ballast
←	26-08	HEL (d)(n)	thomas montes	narva	amsterdam				timber
↓	18-10	AMS (ggr)	thomas montes	narva	amsterdam	(geen info)	150	150	
1724									
→	01-05	HEL (d)	thomas montes	amsterdam	narva				
←	23-06	HEL (d)	thomas montes	narva	amsterdam				
↓	04-08	AMS (ggr)	thomas montes	narva	amsterdam	vrede	150	150	
←	02-10	HEL (d)	thomas montes	narva	amsterdam				
↓	27-11	AMS (ggr)	thomas montes	narva	amsterdam	vrede	150	150	
1725									
←	17-06	HEL (d)	thomas montes	narva	amsterdam				
↓	14-07	AMS (ggr)	thomas montes	narva	amsterdam	vrede	150	150	
←	24-09	HEL (d)	thomas montes	narva	amsterdam				
↓	18-10	AMS (ggr)	thomas montes	narva	amsterdam	vrede	154	150	
1726									
←	12-06	HEL (d)	thomas montes	narva	amsterdam				
↓	12-07	AMS (ggr)	thomas montes	narva	amsterdam	vrede	158	150	

appendix 4: table of reconstructed shipmovements (fragment based on data about Kat shipmasters)

ship movement	name of the shipmaster	route	dates (yyyy-dd-mm)
1	abe broers	amsterdam – vyborg – amsterdam	← 1721-14-09
2	abe jans	amsterdam – narva – amsterdam	→ 1720-20-05 ← 1720-16-07
3	abe jans	amsterdam – baltic sea/narva – amsterdam	→ 1721-29-05 ← 1721-18-07
4	sibbele jans	amsterdam – baltic sea/narva – amsterdam	→ 1721-29-05
5	iepe wieteses	amsterdam – narva – amsterdam	→ 1721-31-05 ← 1721-08-09
6	abe jans	amsterdam – narva – amsterdam	→ 1722-11-05 ← 1722-15-07 ↓ 1722-02-09
7	iepe wieteses	amsterdam – narva – amsterdam	→ 1722-12-07 ← 1722-09-09 ↓ 1722-19-10
8	abe jans	amsterdam – narva – amsterdam	→ 1723-30-04 ← 1723-19 (20)-06 ↓ 1723-19-07
9	iepe wieteses	amsterdam – narva/vyborg – amsterdam	→ 1723-08-05 ← 1723-04-07 ↓ 1723-08-08
10	abe jans	amsterdam – narva – amsterdam	→ 1724-01-05 ← 1724-25-06 ↓ 1724-21-08
11	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	← 1724-24-06 ↓ 1724-31-07
12	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	→ 1725-28-04 ← 1725-04-07
13	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	← 1726-27-06 ↓ 1726-12-08
14	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	→ 1726-30-08
15	abe broers	amsterdam – narva – amsterdam	→ 1727-26-04

appendix 4: table of reconstructed shipmovements (fragment based on data about Kat shipmasters)

			← 1727-19-06
16	iepe wieteses	amsterdam – narva – amsterdam	→ 1727-29-04 ← 1727-19-06
17	abe broers	amsterdam – narva – amsterdam	→ 1727-20-07 ← 1727-15-09
18	abe broers	amsterdam – narva – amsterdam	→ 1727-26-07 ← 1727-21-09
19	iepe wieteses	amsterdam – narva – amsterdam	→ 1727-11-08 ← 1727-27-09
20	abe broers	amsterdam – narva – amsterdam	→ 1728-28-04 ← 1728-08-06 ↓ 1728-08-07
21	abe broers	amsterdam – baltic sea/narva – amsterdam	← 1728-11-06 ↓ 1728-09-07
22	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	← 1728-23-06 ↓ 1728-14-07
23	abe broers	amsterdam – narva – amsterdam	→ 1728-27-07 ← 1728-24-09 ↓ 1728-21-10
24	iepe wieteses	amsterdam – narva/vyborg – amsterdam	→ 1728-02-08 ← 1728-04-09 ↓ 1728-26-10
25	abe broers	amsterdam – baltic sea/narva – amsterdam	↓ 1728-21-10
26	iepe wieteses	amsterdam – narva – amsterdam	→ 1729-19-05 ← 1729-16-07 ↓ 1729-22-08
27	abe broers	amsterdam – narva – amsterdam	→ 1729-19-05 ← 1729-14-07 ↓ 1729-03-08
28	abe broers	amsterdam – baltic sea/narva – amsterdam	↓ 1729-03-08
29	abe broers	amsterdam – narva – amsterdam	→ 1729-21-08 ← 1729-24-09 ↓ 1729-16-11

appendix 4: table of reconstructed shipmovements (fragment based on data about Kat shipmasters)

30	abe broers	amsterdam – baltic sea/vyborg – amsterdam	→ 1729-21-09 ↓ 1729-01-11
31	abe broers	amsterdam – narva – amsterdam	→ 1730-13-04 ← 1730-05-06 ↓ 1730-11-07
32	abe broers	amsterdam – narva – amsterdam	→ 1730-13-04 ← 1730-09-06 ↓ 1730-14-07
33	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	→ 1730-19-04 ↓ 1730-11-07
34	abe broers	amsterdam – baltic sea/narva – amsterdam	→ 1730-21-07 ← 1730-02-09
35	iepe wieteses	amsterdam – baltic sea/narva – amsterdam	1730-03-11
		(...)	