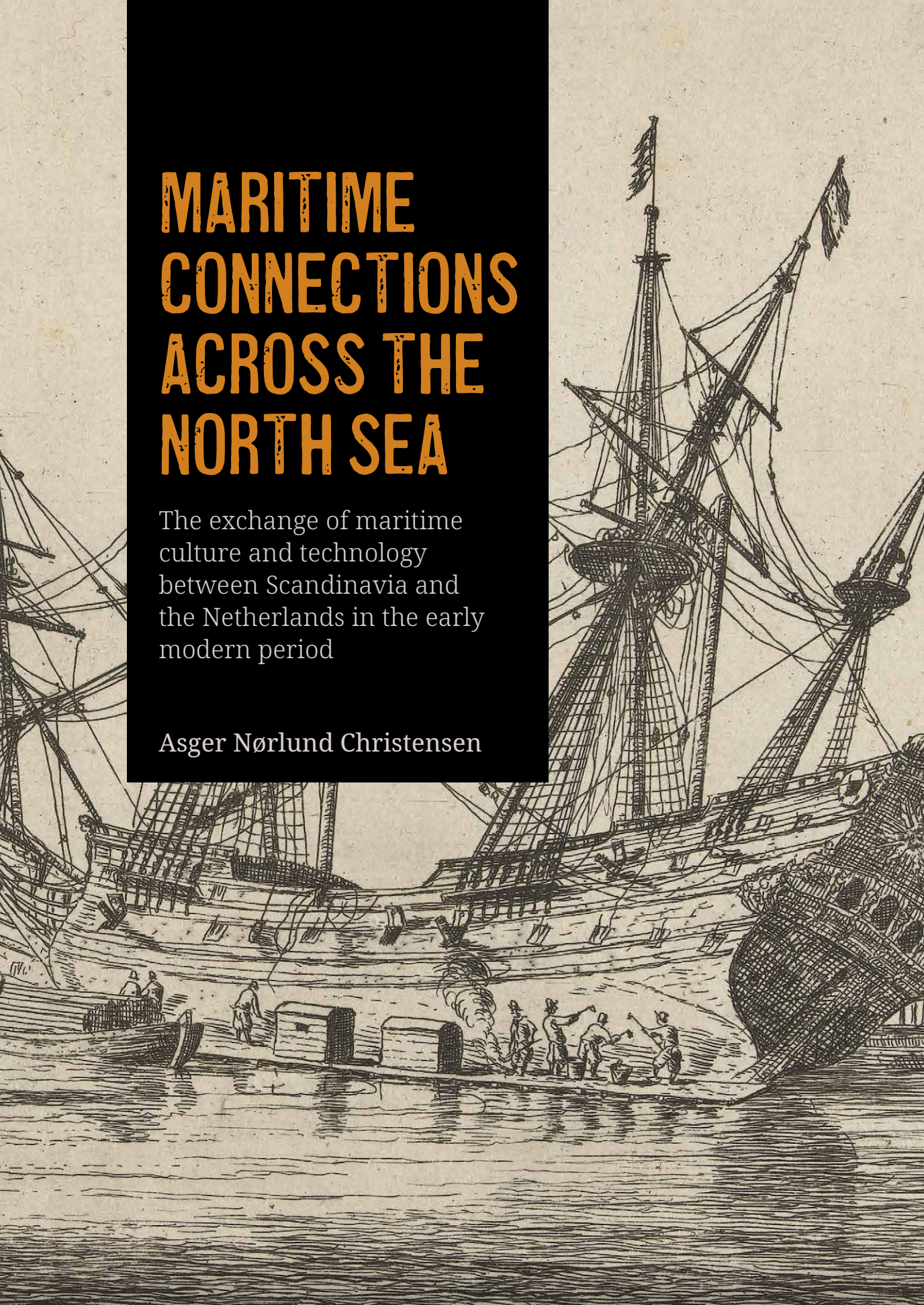
MARITIME CONNECTIONS ACROSS THE NORTH SEA

The exchange of maritime culture and technology between Scandinavia and the Netherlands in the early modern period

Asger Nørlund Christensen



MARITIME CONNECTIONS ACROSS THE NORTH SEA

sidestonepress

MARITIME CONNECTIONS ACROSS THE NORTH SEA

The exchange of maritime culture and technology
between Scandinavia and the Netherlands
in the early modern period

Asger Nørlund Christensen

Published by Sidestone Press, Leiden
www.sidestone.com

Imprint: Sidestone Press Dissertations

Lay-out & cover design: Sidestone Press
Photograph cover: Waterdichtmaken van de romp van een schip,
Reinier Nooms, 1650 - 1664. Het Rijksmuseum: RP-P-1881-A-4741

ISBN 978-90-8890-986-3 (softcover)
ISBN 978-90-8890-987-0 (hardcover)
ISBN 978-90-8890-988-7 (PDF e-book)

Contents

Preface

This Ph.D. dissertation took much longer than expected. In September 2016 I broke several bones in my neck and suffered a serious concussion, which led to long periods of illness during which the research and writing process came to a standstill. Therefore, it is with some relief and great satisfaction that the dissertation has now been completed.

In 2012 I was introduced by Mette Guldberg, PhD and senior researcher at the Fisheries and Maritime Museum, to a number of Danish scholars who were working on the contact between the Netherlands and Denmark-Norway in the 17th and 18th centuries. We formed the research group 'Trade and social life in the 17th and 18th centuries', of which Mette became the project manager and wrote our application to the VELUX Foundation's Museum Initiative Fund, which finances the project. Professor, Dr Phil, Dr Habil Martin Rheinheimer was also part of the group and it was he and Mette Guldberg who helped me apply for the position as PhD fellow at the University of Southern Denmark. Since then Mette has been an invaluable support and sparring partner for my endeavour and has guided me during my internship at the Fisheries and Maritime Museum in Esbjerg, just as well as she put a roof over my head during my many happy visits to Esbjerg. The project group's other members, Mag. scient. Max Petersen, PhD. and museum curator at the National Museum Christina Folke Ax, Cand.mag. and Chief Inspector at the Southjutland Museum Elsemarie Dam Jensen, teacher and museum mediator Asbjørn Holm and last but not least Martin Rheinheimer, have all been valuable participants and patient listeners in many discussions about the subject of this dissertation. To all of them, I offer my heartfelt thanks. Throughout the process the Trade and Social Life research group has been supported by a backup group consisting of international scholars who have guided and offered advice on our work, for which we are all very grateful.

Martin Rheinheimer became my Ph.D. supervisor at the Department of History at the University of Southern Denmark and has been the rock upon which I, like the waves of the sea, could throw all my ideas and suggestions and who, with his warm and calm nature, was able to support and guide me when I was in doubt. For this I am deeply grateful! I would also like to extend a warm thanks to my dear colleagues on the PhD course at the institute, to the staff of the secretariat and to the institute's other researchers and teachers, all of whom have contributed towards a wonderful workplace and an exciting research environment. The Center for Maritime and Business History also belongs to the History Department, and at several meetings and seminars I had the opportunity to present and discuss my findings with good and knowledgeable colleagues. Thank you.

In the spring of 2015, I had a four-month research stay in Amsterdam, where I mapped the presence of Scandinavian sailors in the shipping industry of Amsterdam and in that context collaborated with Vrije Universiteit Amsterdam, where Professor of Maritime History Joost Schokkenbroek was my contact and supervisor. Joost introduced me to a number of internationally recognised scholars in maritime history and was both a good source of support and a good friend in Amsterdam. I should also mention Diederick Wildeman, curator at Het Scheepvaartmuseum in Amsterdam, who very kindly helped with searches of the museum's collections and offered good advice. In Amsterdam's city archives, I met Maarten Hell, who works on the city's inns and pubs in the early modern period, and with him I discussed my own interest in seamen's residences in the metropolis.

A big thank you goes to Anette Christensen, who spent a long holiday proofreading this dissertation and finally a huge hug to my partner Kirsten Jantzens for her support and backing during this long process. I would never have achieved the goal of completing this thesis if Kirsten had not created the physical and mental framework that made this work possible.

Smørum, May 20th 2019.

After handing in this dissertation, the dean of the faculty of the Humanities, University of Southern Denmarm appointed an evaluation committee consisting of Jelle van Lottum, Senior Researcher at the Huygens Institute for the History of the Netherlands, Professor Bo Poulsen, Aalborg University and Lecturer Louise Nyholm Kallestrup, Institute of History, University of Southern Denmark with my mentor, Dr. Phil, Dr. Habil, Martin Rheinheimer as assistant for the comitte. In August 2019 the committee accepted my dissertation for defense with the following:

> 'The authors analysis of the existence of Scandinavian sailors in Amsterdam is impressive, as is his extensive research in the Waterschout and archival records. The detailed analysis of the whole year of 1780 gives us an unprecedented insight into the international part of the maritime sector of the Netherlands. Especially the Scandinavian part. On top of this the authors reseach in the notarial archives of Amsterdam supplies academia with interesting insights into foreign participation in the maritime labourmarked in a periode in History, which brings our knowledge further, than the commonly used marriages protocols.'

> 'There is reason to applaud the author for having contributed significally to the existing literature about especially the social sphere of the sailors in Amsterdam and their geographical backgrounds. This established knowledge can be used in the future to obtain deeper insights into the extent of the push-pull factors in the labourmarkets in differenct regions of the Northsea-Baltic area.'

On September 13th 2019 I successfully defended my dissertation and was apointed Ph.D.

Several people incouraged me to have the dissertation published and with the help of Mette Guldberg and the rest of our VELUX funding, I had the chance to translate the text from Danish to English and have a professional proofread the manuscript. In January 2020 I contacted Sidestone Press, who accepted to publish the dissertation and with the

help and support of Diederick Wildeman I applied to the Directie der Oostersche Handel en Reederijen for funding to have the manuscript published. Luckily on March 30th, Els van Eijck van Heslinga, the director of the Directie, informed me, the board had desided to award a sum for the publication and as a result, this book is now a reality.
For all the support and well-doings mentioned above, I am deeply greatfull.

Asger Nørlund Christensen
Smørum, May 4th 2020.

1

Introduction

When I was younger, I sailed as a mate on a charter schooner, on which we took guests out sailing. One day we had a group of Dutch tourists, and after clearing the port we set sail as usual, helped by our guests. I gave the different orders, and within 10 minutes we had set the six lower sails and could start sorting out all the ropes that now floated the deck. One of the Dutch guests who had been involved in setting sail turned to me with a smile and told me that he had understood everything I had said to the crew. Astonished, I listened to his explanation that a bowsprit (the horizontal piece of wood protruding from the front of the sailing ship) had the same name in Dutch, which also applied to: 'skøde, pikfald, klofald, stagfok, stængestagsejl, klyver, hundsvot and many other maritime words. After this encounter, I studied the subject some more and found that there are about 1000 words in the Danish maritime vocabulary of Dutch origin, and of course I became curious as to how this phenomenon could be explained. When I later wrote my master's thesis, I had the opportunity to pursue this subject further and at the same time discovered that very little had been written about Danish-Dutch maritime contact.

In the summer of 2011, I participated in a maritime history cruise aboard the Hardanger Jagt Mathilde in Bergen's archipelago and met Mette Guldberg from the Fisheries and Maritime Museum in Esbjerg, who shared my interest in the Danish-Dutch connection. Mette told me about Max Pedersen, who, for a number of years, had been studying the Danish immigrant community in Amsterdam in the 17th century, and we agreed to contact him and other Danish scholars who were also interested in Danish contact with the Netherlands. After a number of meetings and Mette's untiring work, we established the research group 'Trade and social life in the 17th and 18th centuries. Danish-Dutch contacts in the 1600-1700s', supported by the VELUX Foundation and based at the Fisheries and Maritime Museum and at the University of Southern Denmark. The project was launched in September 2015 and contained two major and three smaller research projects, of which my PhD project was the largest. Thus I was given the opportunity to go into depth with my research, seeking to uncover the extent of Dutch maritime influence in the Nordic countries, which mechanisms drove this phenomenon and what consequences it had.

My master's thesis was based on data from muster rolls from the Royal Danish Navy's engagement in the Scanian War (1675-1679) and here I found a large group of Scandinavian sailors who were recruited not in their local area, but in the metropolis Amsterdam, and it was clear that the Danish naval authorities did not distinguish between Danish, Norwegian, or Swedish or sailors when recruiting, and thus did not distinguish

between them in the way we do today.[1] Therefore, it was clear from the start that in this project it would not be enough to analyse the maritime connections from a purely Danish angle; I would have to include sailors from the 17th century Danish-Norwegian conglomerate state (nowadays Norway, Denmark and Sleswick- Holstein) and 17th century Sweden (nowadays Sweden and Finland). In addition, it was not enough to only focus on the Scanian War and the latter part of the 17th century, because Scandinavian maritime contacts to the Netherlands had their roots in the late Middle Ages and reached their peak in the 17th and 18th centuries, which meant that the time period studied should span several centuries. Dutch shipping traffic in Sweden was closely related to that in Denmark and Norway, so it made sense to involve Sweden in this study, just as the Swedish example could act as a reflection of the conditions in the Danish conglomerate state. Thus, this dissertation takes a transnational approach, where current and past state boundaries do not define the research area and viewpoint; instead I take a broader approach based on sea-based contacts limited by shipping lanes, weather phenomena and climate conditions in the North and Baltic Seas.

This is a new approach compared to previous research on this subject. In 'Ung i Europa', the Norwegian scholar Sølvi Sogner focuses on migration from the Stavanger area only,[2] while in 'And skuta lay in Amsterdam …' she studies migration from across Norway.[3] In Germany there has also been some interest in historical contact with the Netherlands, among others; 'On the Spurs Nordfriesischer Seeleute in the European Trade Fair of 1740 to 1830' by Harald Voigt,[4] just as Martin Rheinheimer has dealt with shipping from the Wadden Sea area to the Netherlands in several works.

A study of Scandinavian sailors' participation in shipping from primarily Amsterdam has not been seen before on this scale. The main source of data for this study was the muster rolls in the Waterschout Archive of the Amsterdam City Archives, where for three years – 1772, 1780 and 1787 – all Scandinavian seamen were registered and collected in a database of approximately 5500 persons. In order to get a comprehensive picture of the presence of Scandinavian sailors in Amsterdam in both the 17th and 18th centuries, my study of the Waterschout Archive was supplemented with a number of case studies of employment contracts written by mid-17th-century notaries in Amsterdam who took care of maritime cases. Other relevant sources were also consulted. Thanks to this large quantity of source material, it has been possible to answer a number of questions about the maritime contact between the Netherlands and the Danish realms in the early modern period:

How many sailors were involved, and where did they come from in Denmark, Norway and Sweden? What parts of the shipping from Amsterdam did they take part in, and was this participation constant during the period? Did the Scandinavian sailors only sail as ordinary seamen, or was it possible for them to advance in the Dutch maritime hierarchy? How much did they earn on their voyages and how did they find work on the Dutch ships in the first place? Who were their co-workers aboard and what did they do between voyages? Where did they live in Amsterdam and with whom? And last but not least; what did they bring home after a shorter or longer stay in the Netherlands? Furthermore, was

1 Christensen 2014.
2 Sogner 1994, 23.
3 Sogner 2012, 32.
4 Voigt 1999.

their contact with the Netherlands based solely on labour migration from Scandinavia? Did Dutch experts, seamen, shipbuilders or merchants not travel the opposite way and influence maritime conditions in the Nordic countries? Based on Danish sources and existing literature, which for the first time have been analysed and brought together, these questions were put forward. It is also with such sources that I have tried to determine whether Dutch maritime technology, ship and rigging types, shipbuilding methods and seamanship were imported to Scandinavia and were widely used in the shipping industry in the Nordic countries.

What was the significance of this wave of Dutch maritime knowledge, technology, and practices that washed in over the three Nordic countries, and how should it be viewed together with the migration of seafarers that took place during the same period? Were the domestic maritime environments in the Scandinavian countries able to absorb the currents from the Netherlands, or did they retain no traces?

I am certainly not the first to have dealt with the maritime contacts between the Netherlands and the individual Scandinavian countries, but I am the first to try to get an overall view of the Dutch maritime influence throughout Scandinavia and in the Danish conglomerate state in particular.

1.1 Research Overview

1.1.1 Denmark

In Denmark it was the author H. D. Lind who in the late 19th century published meticulous and well-documented chronological accounts of the Danish-Norwegian navy from Frederik II to Frederik III. This older military history recounts extensive recruitments of naval officers and shipbuilders/carpenters in the Netherlands for Denmark and can be used to illuminate the early part of the period.[5] Aksel E. Christensen's dissertation 'Dutch trade to the Baltic in about 1600. Studies of the Sound Toll Registers and Dutch shipping records' from 1941 describe the importance of the Dutch maritime shipping in the Baltic Sea area, but do not address the subject of my interest in great detail.[6] In 1945 Knud Fabricius published the two-volume 'Holland Denmark', and this work is still an important contribution to the research on relations between the Netherlands and Denmark and the Duchies; however, the focus is on historically important persons and events: the lives of ordinary people and their possible mobility is not a subject of interest.[7]

It was not until the 1990s that renewed interest in the area arose, but this time the focus shifted to studies of the contacts between Southwest Jutland and the Netherlands. In 1992 the anthology 'Facing the North Sea'[8] was published with contributions from a large number of Danish and foreign scholars, including Ole Degns' 'West Jutland, 1550-1900. Town, County and the Surrounding World', Poul Holms' 'The Decline in Fishery and Fish Trade from West Jutland, c. 1550-1860', and Wilma Gisbers' 'Danish Oxen in Dutch Meadows. Beef Cattle Trading and Graciery in the Netherlands between 1580 and 1750'. Two years later the anthology 'A North Sea Region; West Jutland and

5 Lind 1889, 1896, 1902.
6 Christensen 1941.
7 Fabricius 1945.
8 Guldberg 1993.

the World, II'[9] was published on the same subject. The following are three interesting articles: In 'The Dutch Connection' Esben Graugaard unveils the economic and human ties between Holstebro and Amsterdam spanning two centuries. In 'Trading Peasants', Mette Guldberg describes the trade of black pots from West Jutland to Hamburg and Amsterdam, and in 'Shipping to and from Ringkøbing 1679-1798' Per Hauge Mortensen describes in detail the sea-borne trade between Ringkøbing and among others the Netherlands. Providing a novel cultural-historical angle, these works are good sources of inspiration and form the backdrop for this dissertation.

In 1997 the first volume of the extensive *Danish Maritime History* was published and was later followed with a total of 7 volumes covering Danish maritime history from its beginnings up to the year 2000. Volume 2 (1588-1720) and volume 3 (1720-1814) are relevant to this dissertation, but unfortunately the *Danish Maritime History* is a strictly national project with very few references to the outside world. The important import of Dutch shipbuilding technology is mentioned in a side note saying that: 'Occasionally one was also forced to pick up shipwrights from Pomerania, Mecklenburg and the Netherlands.' And on the next page we are briefly told about Johan Trellund, who in 1663 was allowed to bring Dutch shipwrights into the country for his yard in Copenhagen.[10] As regards shipping between Southwest Jutland to the Netherlands, only the export of oxen is mentioned.[11] The labour migration from Denmark to the Netherlands is dealt with in the chapter 'The sailors. Skippers and ordinary seamen' where it is mentioned that: 'From the entire 17th century, we have scattered examples of people from the west coast of Jutland and the North Frisian islands going to the Netherlands to look for a berth.'[12] After this the authors used crew data from VOC to work out that during this period between 3000 and 4000 Danish and Norwegian sailors sailed with the VOC to the East Indies. Finally, it is concluded that: 'In most cases the labour migrants were ordinary sailors, and although the figures themselves are surprisingly high, Danish shipping was hardly threatened by a crew shortage due to the emigration to Amsterdam.' The authors take the view that maritime contacts with the Netherlands could be nothing but emigration and they go on to say: 'However, it must be borne in mind that the labour migration also included sailors who sailed on Dutch fishing boats, whalers and merchant ships on the Baltic, Mediterranean, and Caribbean trades.'[13] Volume 3 of the *Danish Maritime History* is to a large extent focused on 'the Florissant period' (1750-1807), when Danish shipping saw tremendous growth. Emphasis is placed on trade, politics, shipowners and ships, and only ten pages are spared to deal with the crews. The significant labour migration to the Netherlands is only mentioned in a caption about a buried sailor from the Vitus Bering Kamtchatka expedition in 1741-42.[14] There is no mention of the busy small-scale shipping between Southwest Jutland and the Netherlands, and the author just mentions that: 'The local merchant fleet consisted of rather small vessels and a considerable number of boats, measuring about 1 last. These constituted the local shipping along the west coast of Denmark and the Duchies; but there

9 Damgaard 1998.
10 Degn 1997, 33, 34.
11 Degn 1997, 67.
12 Degn 1997, 156.
13 Degn 1997, 156.
14 Feldbæk 1997, 163.

was also an exchange of goods with Norway – predominantly on Danish vessels.'[15] The two volumes of the *Danish Maritime History* are thus not adequate if you want to uncover the many maritime connections between the Netherlands and Denmark during the period, but do offer statistical shipping information and navigational conditions.

In 1999 Hedvig Beck contributed a relevant work on the North Frisian Island of Mandø in the 18th century.[16] Here are many references to the close connection between the Wadden Sea area and the Netherlands. Another local study is 'Rømø; A Northsea Community', published by Bert Kelm in 1999. Kelm was able to document the involvement of mariners from Rømø in Dutch shipping right back to 1594 and at the same time he proved that the Rømø shipowners had their vessels built in the Netherlands.[17] In recent years interest in the Dutch connection has again been awakened. Phillip Kelsall's PhD dissertation from 2007 deals with the sea-based trade between Denmark and the Netherlands during the period 1639-1755 and highlights how Dutch ships were almost sole masters of the trade between the Danish province and the Netherlands in the first part of the 17th century and thus may have served as a transport solution for migrating sailors.[18] In addition to the previously mentioned article, Mette Guldberg has on several occasions dealt with the contact between the Netherlands and Southwest Jutland. In 'Sjæklen 1996' she wrote about the Risbøls, a skipper family from Hjerting (North of Esbjerg) and their voyages to the Netherlands[19] and in 'Sjæklen 2013' she wrote about the different types of vessels from the Wadden Sea area[20]. In 2014 she published the article 'Købmanden, Skipperne og Hollandsfarten' (Merchants, skippers and the trade on Holland, Red)[21], which deals with the import of goods from Amsterdam to Hjerting on the basis of the customs accounts from that place. Interesting here are the mentions in the accounts of 'Some Seafaring People, who intend to seek a berth' who shipped out on board the first smack (small spritsail-rigged vessel), which departed to Amsterdam in the spring. The works by Mette Guldberg are important to this dissertation and exemplify the contacts between the Wadden Sea area and the Netherlands.

Based on population statistics, Hans Chr. Johansen in 'Danish Population History: 1600-1939' found that from the 15th to the 20th century, several thousand young men left for the Netherlands and worked aboard Dutch ships. [22] Johansen is thus one of the few scholars to have dealt more extensively with labour migration between Denmark and the Netherlands, but his contributions still have a national starting point and do not involve other parts of the Danish conglomerate state. In 2012 came 'Nederlandsk I Norden: Den nederlandske teknologis indflydelse på renæssancens maritime Skandinavien' (The Dutch in the North: The influence of Dutch technology on Renaissance maritime Scandinavia), which summarises and emphasises how important Dutch maritime technology was to the development of shipping in the Danish kingdoms. Claus Rohden Olesen dealt with Dutch shipbuilding in Denmark, and Thorbjørn Thaarup contributed with the parts concerning the import of Dutch navigational methods in the form of

15 Feldbæk 1997, 23.
16 Beck 1999.
17 Kelm 1999.
18 Kelsall 2007.
19 Guldberg 1997.
20 Guldberg 2014a.
21 Guldberg 2014b.
22 Johansen 2002, 77.

sailing instructions, maps and instruments. This work is particularly relevant to this dissertation's section on the import of Dutch technology and culture. In 2014, this author published the article *'Flådens udlandsmobilisering: Rekruttering af skandinaviske søfolk i Amsterdam under Skånske Krig'*[23] (Naval foreign recruitment: Scandinavian seamen recruited in Amsterdam during the Scanian War), which is an adaptation of my master thesis and part of the starting point for this dissertation.

1.1.2 Norway

In Norway, interest in the Dutch connection has been greater and has had a longer duration than in Denmark. Already in 1880, Louis Daae published *'Nordmænds Udvandring til Holland og England i nyere tid'*[24] (The Expatriation of the Norwegians to the Netherlands and England in recent times). In 1923, *'Den Norske Sjøfarts Historie* bind 1' (The Norwegian Maritime History volume 1) was published, to which Roar Tank contributed the chapter 'Fra Hollændervældet til Handelsempiren' (From Dutch dominance to the Trade Empire). Here, the extensive trade of the Dutch in Norway was documented by means of customs accounts; in addition, the chapters on the timber trade and Norwegian shipping under Christian IV testify to the close contact between Norway and the Netherlands in the 16th and 17th centuries.[25] This work has formed the basis for parts of this dissertation's section on Norway, but an updated Norwegian maritime history, which incorporates the latest research results, is greatly needed.

In 1976, Oddleif Hodne wrote the thesis *Fra Agder til Amsterdam. En studie av norsk emigrasjon til Nederland i tiden 1625-1800*[26] (From Agder to Amsterdam. A study of Norwegian emigration to the Netherlands in the period 1625-1800), in which he combined the Dutch historian, Simon Hart's results from his studies of marriage registers of Amsterdam[27] with demographic material from Norwegian archives. This enabled him to determine from where in Norway the emigrants came and in which years they came to Amsterdam.[28] Based on demographic studies of parishes in Kristiansand, Ståle Dyrvik argues that the population of the diocese, due to massive emigration to primarily the Netherlands, grew by only 2 percent in the period from 1665 to 1740, whereas in the rest of Norway population growth was 45 percent.[29] The works of Hodne and Dyrvik are important here, because they for the first time documented the Norwegian labour migration to the Netherlands based on careful source studies.

In 1994, Sølvi Sogner published *'Ung i Europa; Norsk ungdom over Nordsjøen til Nederland i tidlig nytid'*[30] (Young in Europe: Early Norwegian youth across the North Sea to the Netherlands in the early modern period). She used figures from the Stavanger area as a case study and could deduce from these that it was not poor people who departed for the Netherlands, but instead the eldest sons of well-to-do peasants from the Norwegian coastal districts, and that they did not leave because of distress, but

23 Christensen 2014.
24 Daae 1880.
25 Bugge 1923.
26 Hodne 1976.
27 Hart 1976.
28 Sogner 1994, 14.
29 Dyrvik 1979. Sogner 1994, 15.
30 Sogner 1994.

due to 'Muligheter som folk så og som folk ønskede at gøre brug af, som et positivt alternativ til de foreliggende hjemlige muligheter'[31] (Opportunities that people saw and wanted to use as a positive alternative to the domestic opportunities available to them). Finally, she concluded that Norwegian emigration to the Netherlands was significant and of great importance for the development of the home country. In 2012, she picked up the trail again with a continuation of 'Young in Europe'. In *'Og skuta lå i Amsterdam. Et glemt norsk innvandrersamfunn i Amsterdam 1621-1720'* (And the boat lay in Amsterdam. A forgotten Norwegian immigrant community in Amsterdam 1621-1720) she focused on the whole of Norway instead of just the area around Stavanger and extended the period of study from the time around 1700 to the period 1621-1720, which covers the largest wave of Norwegian emigration.[32] Here Sogner reiterates her conclusion that Norwegian immigration to the Netherlands was a temporary labour migration, which, however, often led to permanent settlement. Nine out of ten Norwegian grooms were employed at sea during the period, and she points out that actual settlement in the foreign country usually took place only after one or more periods in the home country.[33] Sogner's excellent work is indispensable in this context and serves as a basis for my treatment of Norwegian seamen's participation in Dutch shipping.

'Med Mars og Merkur' (With Mars and Mercury)[34] is a master's thesis from 2003 by the Norwegian historian Sindre Aarsbog. He analysed Norwegian participation in the Dutch East India Company (abbreviated to VOC in Dutch) and his work indicates that there were many Norwegian sailors who worked in the Netherlands. However, as this dissertation does not deal with Scandinavian sailors who sailed with the VOC (only a few returned from such voyages and therefore could not contribute to Dutch influences in Scandinavia), his work is not used here. *'Hollendertida i Norge 1550-1750'*[35] (The Dutch era in Norway 1550-1750) by Margit Løyland is an attempt to see the contact between Norway and the Netherlands not only from a migration point of view, but with a desire to look at the entire contact surface. Not much new knowledge is presented here, so only a small amount of information from this work has been used in this dissertation.

1.1.3 Sweden

In Sweden, there has been very little research on maritime relations with the Netherlands. In '*Swedish Naval Administration 1521-721*', however, Jan Glete deals with the subject, and demonstrates that Dutch shipbuilding technology became dominant in Sweden between the years 1610 and 1680 through the continuous employment of Dutch shipbuilders.[36] However, there is a lack of research on the labour migration of Swedish seamen, which is why it is hoped that this dissertation can help to remedy this knowledge gap.

---

31 Sogner 1994, 136.
32 Sogner 2012, 72.
33 Sogner 2012, 79.
34 Aarsbog 2003.
35 Løyland 2012.
36 Glete 2010.

1.1.4 Germany

German research has been closely linked to the northern Wadden Sea and especially to the maritime communities on the islands Föhr, Amrum and Sylt. The anthology '*Nordfriesische Seefahrer in der frühen Neuzeit'*[37] (North Frisian seamen in the early modern period) is the result of a seminar held at Föhr in May 1997 with contributions from both Dutch and German researchers. '*Auf den Spuren Nordfriesischer Seeleute in der Europäischen Handelsfahrt von 1740 bis 1830'*, and '*Westerlandföhr und Amrum im 18. Jahrhundert og Föhrer Grönlandfahrer* [38] are significant contributions here. The anthology is focused on the contact between the Wadden Sea area and the Netherlands, but must be supplemented with research on contact from other Scandinavian areas in order to contribute to the overall picture of the maritime contact between the Netherlands and Scandinavia.

Over the years Martin Rheinheimer has published numerous articles on various aspects of the shipping from and on the maritime population of the North Frisian Islands.[39] In relation to this dissertation, the article 'Fra Emmerlev til Holmen: Orlogsflådens faste styrmænd i 1700-tallet' (From Emmerlev to Holmen: The permanent mates of the Royal Danish Navy in the 1700s) from 2009, co-authored with the naval historian Jacob Seerup, is relevant here[40], as is 'Nordfriesische Seeleute in der Amsterdamer Handelsfahrt' (North Frisian sailors in Amsterdam shipping). Here, using material from the deceased Harald Voigt's study of North Frisian sailors, Rheinheimer was able to process this material and determine the extent and special regional characteristics of the sailors. [41]

As part of the project 'Trade and social life in the 17th and 18th centuries', in 2016 Rheinheimer published *'Ipke und Angens. Die Welt eines nordfriesischen Schiffers und seiner Frau (1787-1801)'* (Ipke and Angens. The world of a north Frisian skipper and his wife (1781-1801)), an exciting source study based on 30 letters written by Oland Captain Ipke Petersen and his wife Angens Ipkens.[42] Among other things, Rheinheimer describes Ipke's life as the captain of a small ship sailing out of Amsterdam and the network of Oland sailors he used. Rheinheimer's work culminated in 2016 with *'Die Insel und das Meer. Seefahrt und Gesellschaft auf Amrum 1700-1860'*[43] (The island and the sea. Shipping and society on Amrum 1700-1860), a comprehensive case study. Based on a personal database compiled from many sources, Rheinheimer was able to uncover living conditions and various networks and circumstances that were hitherto unknown, revealing the long-standing connections to Dutch shipping not only of Amrum but also Föhr. By using qualitative sources, Rheinheimer's impressive research on the life of seafarers at sea and on land is important in uncovering the many contacts that existed between the communities of the Wadden Sea and the Netherlands, and is used here as a starting point for this dissertation.

---

37 Bohn 1999.
38 Bohn, Voigt og Riewerts 1999.
39 Rheinheimer 2011, 2014a og b.
40 Rheinheimer 2010.
41 Rheinheimer 2012.
42 Rheinheimer 2016b.
43 Rheinheimer 2016a.

1.1.5 The Netherlands

Of course, Dutch researchers have dealt extensively with the part of Dutch maritime history that concerns Scandinavia, and there is a rich selection of publications from around 1900 onwards. In 1968 P. Dekker wrote about the last heyday of Dutch whaling, and mentions the large number of Föhr sailors who participated in it.[44] Dekker's work is still the main source on Dutch whaling. The great work *Maritieme Geschiedenis der Nederlanden*[45] provides a detailed description of Dutch maritime history from ancient times to the present and has so far been the major standard work. It also mentions the Dutch contact with Scandinavia; one sentence mentions that Scandinavian sailors also sailed on Dutch ships. However, the information on Scandinavian sailors is very sporadic and not detailed enough to be of much use. The anthology *From Dunkirk to Danzig. Shipping and Trade in the North Sea and the Baltic, 1350-1850'* offers the missing detailed information, but has today been replaced by more recent works. However, P.C. van Royens, R. Th. However, H. Willemsens and C. A. David's contributions still provide parts of the background for this dissertation.[46]

'Zeevarenden op de koopvaardijvloot omstreeks 1700' by P.C. van Royens is a central work which, drawing on interrogations of mariners between 1700 and 1710 found in the notarial archives of the towns Amsterdam, Hoorn, Enkhuizen and Medenblik, provides an overview of parts of Dutch shipping at that time and the conditions that prevailed on board Dutch ships. Van Royen gives specific figures on the number of ships, seamen, cargo and destinations and notes that around 1700 foreign seamen constituted 24 percent of the crews in the Dutch merchant marine, and that Danish, Norwegian and Schleswig-Holstein seamen together numbered about 1230 men.[47]

'Those Emblems of Hell? European Sailors and the Maritime Labour Market, 1570-1870' is an important contribution to research on the international maritime labour market based in the Netherlands, and Danish and Norwegian contributions to it. The chapters by Paul C. Van Royen, Jan Lucassen, and Jaap R. Bruijn are interesting in this context, dealing with the special characteristics that characterise Dutch shipping, various forms of labour migration to the Netherlands and career opportunities aboard Dutch ships. Karel Davids' contribution 'Maritime Labour in the Netherlands, 1570-1870' is also significant, presenting figures for crew sizes in Dutch shipping over time, the number of seamen in the various vessels, the proportion of foreign seamen in these and the segmentation that existed in the Dutch labour market; namely, between an internal, local segment of Dutch sailors attached to local shipowners or captains, who sailed from their hometown, and the large external segment consisting of a flexible mass of day labourers and migrant workers, who manned most of the Dutch merchant ships.[48] The international perspective of the anthology is important and contributes points of view and data to this dissertation.

The Dutch works on the Scandinavian contacts kept on coming. In 1999, Wilma Gijsbers published her Ph.D dissertation, *'Kapitale Ossen. De internationale handel in Slachtvee in Noordwest-Europa (1300-1750)* (Capital Oxen. The international trade in beef cattle in Northwest Europe (1300-1750), which deals with the trade in oxen from the Ribe area in Southwest Jutland and where this trade enabled passengers to travel to Enkhuizen and

44 Dekker 1968.
45 Akveld 1977.
46 Heeres 1988.
47 Van Royen 1987, 116.
48 Van Royen 1997, 8, 14, 31, 62.

Hoorn in particular.[49] In the same year, Roelof van Gelder published a work on Germans in the VOC service, which contains an overview of the participation of German sailors (and thus also sailors from Schleswig-Holstein) who sailed to Asia.[50] Both works highlight aspects of the contact between the Netherlands and the Wadden Sea area in particular, but again they are local studies and do not offer a larger perspective. The anthology *Dutch Light in the 'Norwegian Night': Maritime Relations and Migration across the North Sea in Early Modern Times* was not essential for this dissertation, because it contains already presented knowledge, but Erika Kuiper's contribution 'Poor, Illiterate and Superstitious? Social and Cultural Characteristics of the "Noordse Natie" in the Amsterdam Lutheran Church in the Seventeenth Century' is of interest in the sense that it sheds light on the Dutch authorities' assessment of the importance of foreign seafarers.[51]

Jelle van Lottum's PhD dissertation '*Across the North Sea. The impact of the Dutch Republic on International labour Migration c. 1550-1850*'[52] came in 2007. Here he uncovers, among other things, the Danish-Norwegian participation in Dutch shipping and also shows that there was another international labour market – the English – but that there was no connection between the two; only a few Danish-Norwegians sailed on English ships in the early modern period. Furthermore, he shows that while the foreign contribution on board Dutch ships in the 17th century consisted mainly of immigrants who had settled in the Netherlands, this changed during the 18th century, so that migrant workers now resided and worked for a few years in the Netherlands before returning home. Van Lottum's dissertation is ground-breaking in that he presents hitherto unpublished data on the participation of Scandinavian seafarers in the Dutch shipping industry and that he compares this with the share of other foreign sailors. Parts of his findings have been used in this dissertation.

Karel Davids' two-volume '*The Rise and Decline of Dutch Technological Leadership. Technology, Economy and Culture in the Netherlands, 1350-1800*' is interesting, as his subject is Dutch technological knowledge and leadership, which are important topics for this dissertation. Davids states that the main way in which technology was transmitted in the early modern period was through the migration of people. Other European countries that wanted to get hold of the coveted Dutch knowledge recruited Dutch craftsmen, who travelled in small groups, while large waves of foreign workers immigrated to the Netherlands for a shorter or longer period and brought Dutch knowledge back home with them.[53] He has thus paved the way for this dissertation's section on the import of Dutch technology and culture.

The latest contribution to the topic of this dissertation is Jaap Bruijn's book, *Zeegang*, on Dutch shipping in the 18th century. Based on his own long research career and the latest findings, Bruijn deals with all aspects of shipping from the Netherlands and also mentions the Scandinavian contribution to this.[54] His detailed knowledge is used in this dissertation.

---

49 Gijsbeers 1999.
50 Van Gelder 199.
51 Sicking 2004.
52 Guldberg 2014, 80.
53 Davids 2008, 204, 270, 273, 276.
54 Bruijn 2016.

1.2 Conclusion

As far as Norwegian conditions are concerned, the works of Hodne, Dyrvik and Sogner are particularly important for this subject, showing that a Norwegian labour migration of seamen who went to the Netherlands for a shorter or longer period took place; however, we do not hear much about what happened when they returned home. Regarding Sweden's maritime contacts to the Netherlands during the period, astonishingly little has been published, and knowledge of the subject is lacking. In a Danish context, the *Danish Maritime History* does not adequately account for contacts with the Netherlands, and although Guldberg, Degn, and several others have made significant contributions to the overall knowledge on the subject, they focus on conditions in West Jutland and along the west coast of Southwest Jutland and Schleswig. The same goes for Voigt, Bruijn, van Royen and Rheinheimer. As far as Dutch work is concerned, '*Those Emblems of Hell*' has been especially important in uncovering the participation of Scandinavian seamen in the international Dutch maritime labour market, and Jelle van Lottum's PhD dissertation and Bruijns' '*Zeegang*' in particular have been significant for this dissertation.

However, a research project has not yet been presented that, based on a unified Scandinavian perspective, attempts to provide an overview of the maritime contacts that existed between the Scandinavian realms and the Netherlands; how they were established and what it meant for the development of the maritime community in the North. A project that incorporates the existing literature, but more importantly, uses new sources, both from Danish and Dutch archives, and with this background, for the first time, gives an overall picture of the Dutch maritime influence within the kingdoms of the Danish king, and that comes very close to the seamen who left for the Netherlands and came back as changed individuals. The driving question of this study is therefore:

> 'Did a transfer of maritime technology, knowledge and practice take place from the Netherlands to the kingdoms of the Danish king in the early modern period? How did this transfer take place and what consequences did it have for maritime development in the Danish conglomerate state?'

1.3 The composition of the dissertation

In order to arrive at an answer to these questions, the dissertation starts with a theory chapter based on the theories of Jean Lave and Etienne Wegner about learning through participation in practice communities, which form the theoretical framework for how maritime technology, knowledge and practice were transferred from the Netherlands to Scandinavia. Then follows a section about the written sources which form the basis for the quantitative analyses, especially in connection with Scandinavian seafarers' participation in Dutch shipping, and then comes the method section, which describes how the content of these sources was processed and analysed to produce useful information. The Background chapter contains a description of the shipping industry in the Danish conglomerate state compared with the same in the Netherlands during the period covered and will provide a background picture of the maritime activities of the respective areas, whereas the section on push/pull factors describes the economic, social and political conditions in the realms of the Danish king and in the Netherlands, which formed the background for the migration of maritime actors.

Once this theoretical and historical foundation has been established, the study focuses on one side of the Scandinavian-Dutch contact: Dutch experts in Denmark-Norway. Karel Davids has shown how Scandinavian states recruited experts in the Netherlands in order to access the latest technology. As qualitative sources on the Danish-Norwegian merchant fleet are few, and since this dissertation is about the official acquisition of knowledge and technology, the focus here is primarily on the Danish-Norwegian navy and the shipbuilders, navigators and naval officers recruited in the Netherlands, who worked for shorter or longer periods for the Royal Danish Navy. It will be shown that Dutch experts were also recruited for the merchant fleets in the double monarchy. In chapter 4 the transfer of maritime material culture; Dutch maritime technology and maritime intangible culture; Dutch seamanship and the maritime conceptual world will be examined. In the late Renaissance and through the 16th and 17th centuries, Dutch maritime technology was so advanced in comparison with what was found elsewhere in Northern Europe that it diffused very rapidly to even the farthest corners of the continent. In addition to some primary sources, the aforementioned chapters are based on existing secondary literature, which for the first time is gathered and reinterpreted in this context and put into a new perspective that can shed light on the maritime contacts between the Danish kingdoms and the Netherlands.

The central part of this dissertation, however, is chapters 5 and 6, which, based on new findings in the Waterschout Archive in Amsterdam's city archives, uncover the labour migration of thousands of Scandinavian sailors in the 18th century. Through analysis of this material it is possible to say something about the number of sailors, where they came from, what positions they had on board, their wages and in what parts of the Dutch shipping industry they took part. To determine whether this labour migration also took place in the 17th century, findings from Amsterdam's notarial archives have been used to prove this and to put the information from the Waterschout Archive into perspective. Chapter 6 describes the networks that the Scandinavian sailors formed on board Dutch ships but also ashore in Amsterdam, networks that helped them to get a berth and a place to stay in between the voyages.

Chapter 7 concludes this dissertation. Here I will gather the threads from the different chapters and in broad strokes paint the picture that has formed of the contact between the Netherlands and the Danish conglomerate state. Did a transfer of maritime knowledge, technology and practice flow from the Netherlands to the realms of the Danish king, and what consequences did this phenomenon have for the Danish conglomerate state and the maritime resources of this state in its political and economic development over two centuries?

1.4 Theory

This dissertation concerns itself with the maritime practices that flowed from the Netherlands to the Danish conglomerate state from about 1480 onwards, but with an emphasis on the 17th and 18th centuries, and not least how this happened. By maritime practice I mean: the knowledge, experience, technology and social organisation that primarily male members of a maritime community establish in order to maintain an existence from marine activities. That is: maritime language, actions, functions on board, technical knowledge, experience and maritime technology; ships, hand tools, navigation instruments, clothing and more. The underlying premise is that these practices are 'hand-held skills'; competences that arise and are exchanged when people work, live and die

together. In other words, this dissertation is not about the transfer of formal knowledge through school teaching or through reading manuals or technical descriptions, but about 'action-based knowledge'; human experience and wisdom, the source of which is the interaction with objects and other people.[55] Part of such knowledge may be of a technical nature, and Dutch technology historian Karel Davids has defined two forms of technical learning: 1) Learning by doing and 2) Formal learning that concerns itself with knowledge and experience transmitted through drawings and printed text. [56]

The two educational theorists, Wegner and Lave, have introduced their ideas of learning through practice communities and legitimate, peripheral participation, which can be seen as identical to 'learning by doing'. They point to the fact that it is possible to acquire recognition and knowledge by observing and using objects and thereby recognising how the objects in question work and are manufactured. Futhermore Karel Davids has emphasised that this particular way of learning is about human interaction (and in this dissertation interaction between people from the Danish conglomerate state and the Dutch) with his ideas about knowledge migration: 'As with the import of technology, the principal way of transmitting technical knowledge from the Northern Netherlands to other countries was the movement of people.'[57]

This focus on human movements and encounters can also be found in the works of Paul van Royen on the characteristics of the Dutch maritime labour market in the 17th and 18th centuries: 'Because economy and social setting are intertwined, and because seafaring is essentially a social event (single-handed sailing excluded), part of a better understanding of the maritime labour market must be found in the social setting of the sailor.'[58] Jean Lave and Etienne Wenger have developed theories of learning, specifically occurring through social interaction, which are applied here to maritime practice in the early modern period.

1.4.1 Situated learning

Jean Laves and Etienne Wenger's theory of situated learning is rooted in the social sciences. According to them, it is wrong to talk about 'transferring' knowledge or technology, since such a view of learning is far too simple and unproblematic. Rather a separation between the inner and outer selves exists, where the world (a mental inner and a bodily outer world) and knowledge are considered to be predominantly intellectual, and can be internalised without taking into account the person's character, the world in which this person is living and the relationships that exist in this world. Instead, learning and thinking should be seen as the origin of relationships between people who actively participate in the social and culturally structured world. The authors believe that our perception of the world is rooted in a social practice where we participate in various action- and relationship systems and our subjective understanding of them. Therefore, knowledge is always carried by social relations and is open to all, and the meaning it gives to the individual is constantly changing due to participation in social relationships.

---

55 Godal 2007, 13.
56 Davids 2008, Vol II 435.
57 Davids 2008, 270.
58 van Royen 1997, 8.

1.4.2 Practice communities

Jean Lave and Etienne Wenger use the concept of 'practice communities' to describe how social relationships form the basis of learning. For them, practice communities are made up of 'the social configurations where our actions are defined as worth doing and our participation can be recognized as competence. We participate in many different communities of practice every day; at home, at work, in the sports club or, in our case, aboard a Dutch ship. These communities of practice are not static, but are constantly changing as the human relationships within them change. The competences discussed here are practices: activities one participates in, tasks one can perform, functions which are performed and which can be understood as parts of a larger system of relationships where these make sense. Thus, meaning is in the author's perspective, the things we perceive either as an individual or as a participant in a community that make our lives and the world meaningful: for the sailors this was the ability to steer with a compass, to bend a sail or to embark on a sea voyage.

As one acquires more and more skills through the practice community, through this system of relationships, one becomes a different person. Learning is thus also part of the person's identity formation, which explains how during life we change our views of who we are. The authors point out that one can participate on many levels in a practice community and contribute in different ways. Such a community of practice is not necessarily temporary, but can extend over many generations. However, what is also important is that it is a system of actions, 'where participants have a common understanding of what they are doing and what it means in their lives and for their communities'.[59] This definition suggests that people in a maritime community participate in a practice community about 'earning our livelihood through activities at sea' and that this community may be many centuries old. The many sailors from Denmark-Norway, who over two or three centuries travelled to the Netherlands to find work on Dutch ships, participated in just such a community of practice.

1.4.3 Peripheral, legitimate participation

According to Lave and Wegner, learning happens in the practice community through 'peripheral, legitimate participation'. The idea is that in order to learn through practice, one must first start on the outskirts (periphery) of a community of practice, and secondly, one must be allowed by the other community members to participate in the practice (legitimacy). As a young boy, the Föhr seaman, Jens Jacob Eschel obviously could not apply for a berth as a full-fledged seaman, but he could still get a berth on a ship as a ship's boy on the periphery of the experienced seamen's world. Although he could not contribute significantly to the work on the whaling ship, he was nevertheless accepted as part of the crew even though he was only a cabin boy. On his first journey to the whaling area off Greenland, the chief shipwright on the ship thus gave him legitimacy by saying: 'Mit Jens geht alles gut, nur das Gelbeerbsenbackschrappen will nicht recht gehen, da weint er manchmal bei.'[60] The young Eschels did not like eating yellow peas, but he was nevertheless accepted aboard – he was a legitimate participant in the practice community. Being on the periphery of a practice community (which the carpenter apprentice does

59 Lave & Wenger 2003, 44, 47, 49, 83, 130, 132.

60 Eschels 1966, 21.

when he starts, and as the ship's boy does when he first signs on) means that there are simpler demands regarding the time he takes to complete a task, the responsibilities he is expected to take and the effort he can make. The tasks are short-lived and simple and if the new participant makes mistakes, it doesn't matter much. In their field studies, Lave and Wegner observed that the apprentice's work typically occurs at the beginning and end of a work process. *E.g.* a tailor apprentice had to set the sewing machine up for his master and eventually cut lose threads from the fabric etc. In addition, he spent a great deal of time just watching the master work. On Dutch ships there existed a similar apprentice-master relationship, where the new ship's boy was teamed up with a 'zeevader', an older sailor who made sure that he learned the ropes by helping out. [61]

The new participant in the practice community gradually discovers what it means to be part of this community. He gets a picture of what members do, how they live everyday life, how they walk, how they talk, how they regard people outside the practice community, what they like and dislike, what they respect, and what other new participants do. For the new participant, the full-fledged members of the practice community are role models, who serve as motivation to become a full-fledged member themselves. As the newcomer in the practice community learns to master the various activities and forms of actions, he moves from the periphery toward the centre and towards full community participation – he becomes a veteran in the practice community.[62] Jens Jacob Eschels started as a cabin boy and worked his way up the social ladder of shipborne life to become a ship's master and later a respected ship's correspondent.

1.4.4 Change of identity and community of practice

As previously mentioned, Lave and Wegner also understand learning as identity formation, which means that the new participant, through mastery of practice, changes and gains a sense of identity as a veteran. The meeting between the new participants and the veterans in a community of practice is not smooth, as there is a contradiction between the continuity represented by the veterans and the replacement and change represented by the new participants. The power relationship between the new participant and the other full members of the practice community changes over time as the new participant masters more and more of the community's competence, which means that the practice community itself changes. All participants' knowledge, perspectives and actions help to define the practice community, and as new inputs come with the novice, 'Change is a fundamental characteristic of practice communities and their activities'. There will be a negotiation between the generations in a practice community, where new practices are developed that incorporate both the previous generations' perspectives and knowledge and the newcomers. This is how new methods and technologies are constantly developed and improved. In practice, there is therefore always a negotiation in relation to the recognised actions and activities and the so-called 'objectification of the practice community', which is 'a historical trace of artefacts – physical, linguistic, and symbolic and of social structures, which over time constitute and reconstitute the practice community'.[63] These objects of a practice community can be of physical nature in the form of special objects (physical artefacts), linguistic character in the form of words

61 Lave & Wenger 2003, 94.
62 Lave & Wenger 2003, 31, 80.
63 Lave & Wenger 2003, 53. 95, 99, 177.

and concepts (linguistic artefacts), symbolic character (symbolic artefacts) and of social character (social artefacts). By recognising, beginning to use, or internalising these artefacts, the new practitioner thereby takes over the history of the practice community and its view of the world.

1.4.5 Objectification of the community of practice

Physical artefacts

In maritime culture, there are many special objects that are specific to this profession and which are full of symbolic meaning: the ship, as a representation of the profession, the compass that shows the way over the sea and the anchor that symbolises safety. But also, of course, all the myriad tools that have been developed for nautical purposes over the centuries: sailmaker's needles, caulking hammers, marlinspikes, special clothing, etc.

Linguistic artefacts

The entire maritime vocabulary represents such linguistic artefacts. It contains concepts and expressions by which seamen could precisely refer to an object or action, and which are special to this profession: names of objects on board, everyday actions on board, the various commands for manoeuvres, the different positions in the hierarchically constructed ship's company, myths, words and phrases related to navigation, loading and unloading etc.

Symbolic artefacts

In the maritime world one can point to the familiar equatorial baptism as a symbolic artefact. Jens Jacob Eschels underwent such a baptism at approx. 23 degrees north: The Tropic of Cancer: 'Nach Seemannsgebrauch hänseln lassen, (dass heisst: man wird dreimal von der grossen Rahe ins Wasser untergetaucht; man heisst es auch wohl nach Schiffsgebrauch: die Leute sollen getauft werden).'[64]

Social artefacts

'Social artefacts' clearly refers to the particular social order that ruled aboard a ship; the strictly hierarchical structure built on experience and knowledge that stretched from ship's boy to captain.

Lave and Wegner state about the four kinds of artefacts that: 'The importance of artefacts in their complex relationships to practice can be more or less transparent to the learners. Transparency, in its simplest form, may mean that the learner can observe the inner workings of the artefact: the black box can be opened, it can be transformed into a 'glass box'. But the understanding of the use and meaning of an artefact is more than this: knowledge within a community of practice and the ways of perceiving and manipulating objects characteristic of community practice are encoded in the artefact in more or less revealing ways. The system of activities and the social world of which the artefact is a part are reflected in its design and application in many different ways and can become even more transparent or can remain opaque. Of course, the transparency of a technology

64 Eschels 1966, 114.

always exists for one purpose or another and is inextricably linked to the cultural practice and social organisation in which the technology is intended to function. Lave and Wegner's view of the meaning of objects is central to this dissertation, because it can explain how culture and practices can migrate from one area to another: 'the artefacts used within a cultural practice are bearers of an essential part of that practice's heritage'.

The authors use an example of this view of the objects in a description of the training of quartermasters in the US Navy, where students must learn how to use an old navigational instrument: the Alhiad, which is used for taking bearings and has been developed as a navigational tool over several hundred years and thus expresses calculations that were invented long ago. Understanding the practice of technology is not just a matter of learning how to use tools; it is a way of connecting with the practice's history and participating more directly in the cultural life of a practice community. By using these artefacts, the participants are thus linked to the history of the community, and their identity is shaped in light of this.

As we have seen, language is also an artefact that is shaped and influenced by participation in the practice community. Lave and Wegner do not see language as a means of acquiring knowledge, but rather as a means of acquiring legitimacy within the community of practice. By mastering the particular language used here, the newcomer gains access to the periphery of the practice community. As the authors describe it: 'For newcomers, the purpose is therefore not to learn from speech as a substitute for legitimate peripheral participation (traditional school education), it is to learn to speak, which is the key to legitimate peripheral participation.'[65]

1.5 Conclusion

Jean Lave and Etienne Wenger's theory of practice communities and legitimate, peripheral learning can explain how Dutch experts who came to the realms of the Danish king acted as veterans of practice communities in these lands and through their activities and actions helped to bring Dutch maritime practice to Denmark-Norway. It was also within these Dutch maritime practice communities that maritime objects; artefacts such as ships and navigational tools etc., became expressions of these communities and where the use of these artefacts was part of the participants' acquisition of the history and worldview of the Dutch maritime practice community. But not least, these theories explain how the Scandinavian sailors who went to the Netherlands and stayed here for a while in a hostel and then sailed out into the world, absorbed the Dutch maritime culture and brought it back home.

1.6 Sources and Methods

1.6.1 Time- and Area delimitations

The period in which to search for evidence of maritime contacts between the Netherlands and realms of the Danish king is called the 'Early Modern Period'. This period is usually defined as extending from the end of the Middle Ages to the Industrial Revolution and is therefore a somewhat debated timeframe. Nevertheless, this study will operate in this space of time, as it is exceedingly difficult to set an exact start date to a major Dutch maritime presence in the North. Still, it seems sensible to set the lower limit of the enquiry around the reign of King John (1481-1513), as the first evidence of direct Dutch contact

65 Lave & Wenger 2003, 86, 89, 93, 160.

can be found here. The upper limit for the period is set to 1795, which is the first year of the French occupation of the Netherlands, although Dutch world trade had already declined after the Fourth Anglo-Dutch War (1780-1784). However, the boundary is set as 1795, since it is thus possible to include in the study of the Amsterdam Waterschout Archive the year 1787, which is the year of the first Danish census. Under French rule, Dutch ships and colonies became targets of British warfare, and Dutch shipping was dramatically reduced during the Napoleonic Wars. [66]

The scope of this thesis is the North Sea-Baltic area, which like Fernand Braudel's Mediterranean can be seen as a particular socio-economic unit connected by the sea. As with the Mediterranean, here contacts across the water were stronger than over land and cities were connected with each other by waterways and thus worked as nodes in an international network.[67] Following this view I have used a geographical division that reflects the Dutch sea trade in Scandinavia and divides the Scandinavian seamen into subgroups that reflect the shipping lanes of Dutch trade in Scandinavia. The seamen found in the Dutch archives stated that they originated from port cities or local areas in Scandinavia that were part of the Dutch trade routes and did not claim to come from localities that were normally used by the local magistrates; be it parishes, counties, or shires. This is a functional concept of origin, reflecting that these seamen came from areas oriented towards the sea and Dutch shipping and at the same time that this homeland orientation was temporal: today there are probably not many people from Hjerting or Esbjerg in Southwest Jutland who would say that they come from 'Graudiep', which is the Dutch word for Grådyb, the waters between Fanø and Skallingen, or from Lagelant List, today's Lista in southwest Norway. Sweden is included because Swedish sailors mingled with Danish-Norwegians in the Dutch shipping industry, and because the Swedish example can serve as a reflection of the conditions for sailors from the realms of the Danish king. By applying this functional concept of origin, I also achieve a shift from the contemporary conception of provenance – national, linguistic, and religious – to the more transnational, linguistic and fluid conception of provenance offered by the analysed material. [68]

1.6.2 The Dutch in the Danish conglomerate state

In order to uncover how a possible Dutch maritime practice came to Denmark-Norway, one must identify the agents who were the bearers of such a practice. In some cases, there were Dutch experts entering the realms. The 'Kancelliets brevbøger' (The Chancellor's Letterbooks) is a collection of sources published by the Royal Danish National Archives from 1885 to 2005, and consists of 39 volumes covering the period from 1551-1660. The collection contains all or part of 117,000 documents from the Danske Kancelli (The Danish Chancellery) and consists of copies of various royal letters concerning internal affairs in Denmark, arranged in chronological order.[69] The Chancellor's letterbooks have proven to be an important source, in particular, for uncovering the work of Dutch maritime experts in Denmark during the early part of the examined period.

---

66 Israel 1989, 404.
67 van Bochove 21.
68 Guldberg 2003, 112-113.
69 Degn 2005, forordet.

1.6.3 The acquisition of Dutch and Scandinavian sailors by the Royal Danish Navy during the Scanian War

During the Scanian War, the Royal Danish Navy needed to recruit sailors in addition to those that could be mustered within the Realms. Because the Danish king was an ally to the Netherlands, the General States allowed recruitment in Amsterdam, which took place from the autumn of 1675 to the end of 1678. The muster rolls for this recruitment are kept in the Danish National Archives, of which three are particularly interesting:

'Afreignings bog Offuer Hans Kongl. May. Udi Holland Anno 1675, 1676, 1677, 1678 antagne Söefolck'('Discharge book for mariners recruited to the service of his Royal Majesty in Holland anno 1676, 1677, 1678' (henceforth called AF)).[70]

'Maaneds Thienere antagne udi Holland Anno 1675, 1676, 1677 ' ('Temporal servicemen recruited in Holland anno 1675, 1676, 1677' (henceforth called MA)), [71] and 'Bog ofver de udi Holstein Anno 1678 antagne Söefolk under hr. Admiral Jens Rodstehns Esquadre,' with the chapter 'Udi Holland Anna 1678 Antagne' ('Book about the seamen recruited in Holstein anno 1678 in the squadron of the honourable admiral Jens Rodstehn' with the chapter, 'Recruited in Holland anno 1678' (Henceforth called UD))[72]. In these muster rolls, the first seamen were recruited on 9 June 1675, and the latest settlement date was 1 December 1680. In these muster rolls, the personal data of a total of 2103 sailors was found, of which 41.4% were from the Netherlands, while 869 men or 39.3% of the 2103 sailors were from Scandinavia. The rest came from various European countries. Not only ordinary sailors and sub-officers were found here, but also senior Dutch naval officers.

In AF, data from 1258 sailors is recorded alphabetically under the year in which they were recruited. Listed are their names, positions, places of residence, the dates on which they were recruited in the Netherlands, how much they were paid in advance, how much in monthly salary, when they were paid on the individual ship, when winter allowances were paid, and when and where clothes were handed out (if any). When a sailor received his final settlement, a calculation of the total amount was required, which included how many months he had served in total, as well as a set-off of advances etc. In MA, personal data for 734 sailors is recorded for the years 1675, 1676, and 1677, with the first record dated 30 May 1675 and the last recruitment dated 10 December 1677. In MA, 208 seamen are registered, but here the information does not flow so easily, since only the seafarer's name, place of residence and date of recruitment are recorded. Moreover; how much was paid in advance, how much in monthly salary, possible advancement, and in most cases the first ship they sailed in, so thus no discharge date. This muster roll was created late in the war, as the first entry is from 2 May 1678, and likewise it is also a result of the merge of several temporary sources. In all three cases the currency is 'Gylden', Dutch golden florins.

AF, MA and UD all have the character of summaries and are presumably the result of a later compilation of the original Amsterdam recruitment protocols and subsequent ship protocols, as Amsterdam and the ships are mentioned in several places by name. The purpose must have been to try to create a comprehensive overview of this Dutch recruitment and to be able to trace each individual seaman through his entire involvement in the Navy. There are careful corrections of *e.g.* spellings of names and places of residence as well as cases

70 RA. Generalkommissariatet (søetaten), Eskadreskriverne, AF.

71 RA. Generalkommissariatet (søetaten), Eskadreskriverne, MA.

72 RA. Generalkommissariatet (søetaten), Eskadreskriverne, UD.

where the registrar had to distinguish between two seamen of the same name. This fact and the fact that both the navy and the individuals recruited had an interest in the information being correct so that the right salary could be paid, greatly strengthens the credibility of the sources. Personal data from these sources has been loaded into an Excel file which was then titled AFMAUD. It is important to emphasise that these sources only hold information about the seamen chosen by the recruitment officer and, therefore, not necessarily on all the seamen who were present in Amsterdam. He may have turned away men who did not have the necessary qualifications and it is also possible that there were many sailors who did not want to be enrolled in the Danish navy. The material therefore does not provide a comprehensive picture of all the Scandinavian sailors who were looking for a berth in the Netherlands during the Scanian War, but represents a segment of them.

Personal data from AF, MA and UD has been transferred to an Excel spreadsheet containing information about the 2103 sailors. They are registered with position/rank, first name, last name, place of residence, paid salary advance, monthly salary, and then recruitment data is divided into columns for 1675, 1676, 1677, 1678 and 1679. In each column, the actual recruitment date is stated. Then follows a column where it is indicated whether the sailor has advanced. After advancement comes a column for the date of discharge or death, followed by a column listing the seaman's total salary paid throughout the service. Since some of these sailors were recruited more than once in Amsterdam and therefore returned to this city, a column with a possible re-employment is indicated by the date, followed by a column containing any advance payments. With this spreadsheet it is possible to get an overview of Scandinavian and Dutch seamen who joined the Royal Danish Navy and of special conditions such as size of salary, time of recruitment, return trips to Amsterdam and more. In the dissertation this spreadsheet is referred to as AFMAUD.

1.6.4 Scandinavian seamen in the Netherlands

The quantitative material in this part of the dissertation was extracted from a number of serial sources, which concern the recruitment of seamen in the Netherlands in various years ranging from 1639 to 1787. Although the main emphasis is on the findings from the Amsterdam Waterschout Archive in the years 1772, 1780 and 1787, I have tried to find older sources to document the presence of Scandinavian sailors in Dutch shipping as far back as possible. As shown in the research review, there is broad consensus that at least from the second half of the 17th century, sailors from the Danish realms went to the Netherlands to seek a berth, and that some of them returned home with new skills. The most important city and port in the Netherlands was Amsterdam, so it must be here that one has to search if one is to find traces of these men.

1.6.5 The Notarial archives in GAS (Gemeente Amsterdam Stadsarchief (the city archives of Amsterdam))

In an age when not everyone could read and write, public notaries were needed to take care of the preparation of all kinds of public documents and papers; be it wills, property documents, protests and complaints, trade contracts, certificates, etc. P. C van Royen has shown that in Amsterdam between 1700 and 1710 there were 99 public notaries and that 12 of these notaries specialised in maritime affairs.[73] The Amsterdam City Archives (GAS)

73 Van Royen 1987, 44, 46.

holds a huge archive containing documents from public notaries in the city from 1578 to 1915. Through the project 'VeleHanden', archives from 731 Amsterdam notaries are being digitised and posted on the archive's website.[74]

During my stay in Amsterdam I found the so-called 'Minuutacten van transporten van soldaten en bootsgezellen', documents relating to the employment of soldiers and sailors and a few notaries specialising in maritime affairs. One such notary is Hendrik Schaef, who was active between 1636 and 1665. His office was located directly opposite the 'Het West-Indisch Huis' at the Heerenmarkt, which was the headquarters of the WIC (West Indische Compagnie (the Dutch West India Company)). Schaef drew up contracts between the WIC and the sailors and soldiers recruited for service.[75] 161 Scandinavian seamen have been identified for the years 1639, 1646, 1647, 1648, 1649 and 1652. As far as it has been possible to determine, the vast majority of these sailors and soldiers were recruited to the WIC, but some were recruited to the VOC or the Dutch whaling company: Groenlandse Compagnie.

The archive of Hendrik Schaef had been scanned and was located on the archive's website, which I, as with the Waterschout Archive, could initially only use in the city archives itself. Therefore, I took photographs of each document displayed on the computer screen in the reading room and thus brought home 292 photographs. When the Amsterdam City Archives website became available in 2017, I was subsequently able to continue the search for Scandinavian sailors in the Hendrick Schaef archive and completed the search for the years 1639, 1646, 1647, 1648, 1649 and 1652. For each man the following were registered: name, place of residence, his position on board, which ship he was to sail on (sometimes under which skipper), the employer (one of the companies), who could guarantee for him, his address in Amsterdam and the agreed salary. Finally, it was noted whether the person could sign with his name or whether he used initials or a sign. Sometimes a person's identity had to be verified by others, and here it is obviously his comrades who had to step in. This applies, for example, to Poulus Sybrantsz from Mos in Norway, who was hired on *Patentia von Courlant* on 10 July 1649 for a trip to Asia. Casper Erasmus from Verkerstradt (Fredrikstad?) guaranteed his identity and as witnesses are mentioned Bildert Pietersz from Stavanger and a Hans… from Langesund. The scribe has written their names at the bottom of the document and next to their names are their marks.[76]

Hendrick Rosa's archive had not yet been scanned, which is why I had to look through and photograph two protocols at the City Archives Reading Room, respectively: Archief van de Notarissen ter Standplaats Amsterdam. 3140A 1664 May 26 -1668 April 10. Notar Hendriek Rosa and Archive of the Notaries at the Amsterdam Location. 3140B 1660 February 10 – 1677 May 26, Notar Hendriek Rosa. For these, 1059 photographs were taken, which, like the photographs from Hendrick Schaef's archive, were transferred to and the contents gathered in Word documents. Here, 164 Scandinavian sailors were found, who were recruited by Rosa for the Admiralty of Amsterdam to serve on the city's warships during the Second Anglo-Dutch War (1665-1667). Scandinavian sailors have been found for the years 1664-1667, and besides the person's name and origin, the contract specifies the size of his salary, under

74 http://www.alleamsterdamseakten.nl/notarissen/. 2/4 2018.

75 http://www.alleamsterdamseakten.nl/notaris/743/hendrik-schaef/. 2/4 2018.

76 GAS. 1310-1330 Minuutacten van transporten van soldaten en bootsgezellen. Hendrick Shaef. 1639-1653.

which naval officer he was to serve, who could guarantee for him, and that person's address. It is also noted whether the sailor was able to sign by name or mark. [77]

1.6.6 Muster rolls for the flagship of Admiral Cornelis Tromp

In the archives of the Het Scheepvaartmuseum in Amsterdam, the payroll of Admiral Cornelis Tromp's flagship *Gouden Leeuw* for the year 1673 is kept.[78] During my stay in Amsterdam I was allowed to photograph it, as with the documents from Hendrick Schaef's and Hendrick Rosa's archives. These photographs were then transferred to a Word document. The payroll is dated 23 March 1673 and consists of 24 pages. The first two pages contain a general overview of the size of the salaries of the various groups on board, ranging from Captain Tomas Tobiasz to the nineteen ship's boys. There is a total of 37 different pay classes on the large ship, whose crew makes up a total of 500 men. Following the payroll, there is an alphabetical record of all the occupants with mentions of the person's number, full name and place of residence. With the exception of the captain, unfortunately the rank or function of the individuals is not stated, so it is not possible to determine whether any of the 84 Scandinavian seamen on board had a higher rank than ordinary sailor or petty officer. This payroll is important in this dissertation as it documents the presence of Scandinavian sailors in Amsterdam in 1673.

1.6.7 The Waterschout Archive in GAS

Before a sea voyage could begin, sailors who had secured a berth on a ship in the Netherlands always had to be officially signed up so that later there could be no disagreement about the size of the salary or the length of the voyage. In Amsterdam, from 1643, a so-called waterschout (directly translated, a port constable) was employed, and was situated in the house of the maritime court, which lay a stone's throw from Kamper Steiger (the old defence tower at the harbour). One of the tasks of the waterschout was to keep a muster roll for each ship's crew. On a pre-printed document, a monster roll (muster roll), was written: the date, the name of the ship, the master's name, the destination of the voyage, the size of the 'handmoney' (advancement of pay) and the rules of service. Under this text, in handwriting, followed a list of the crew with officers and petty officers first, then the ordinary seamen and at the end, the cabin boys. For each person the following was noted: position on board, full name, place of residence, who could guarantee they would show up, when the ship sailed and that person's address, as well as the agreed monthly salary. A copy of this muster roll was kept at the waterschout office, and the other followed the ship so that the skipper could always refer to the text if a disagreement about the terms of the voyage occurred.[79]

The Amsterdam City Archives (Gemeente Archief Amsterdam, GAS) has preserved such muster rolls from 1747 to 1852, but for the first 25 years there are large gaps in the inventory. This is partly due to the fact that the muster rolls were not collected and bound in books, but lay as loose sheets gathered in bundles. Because of poor storage conditions, sheets at the bottom and top of such a bundle degraded over time, causing the information from especially the off-seasons in a given year to disappear. The first full year which is

77 GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrik Rosa. 1660-1677.

78 Scheepvaartmuseum HS-0821 (a Gouden Leiuw).

79 Bruijn 2016, 32.

completely preserved is the year 1772. Access to the Waterschout Archive is now available on the Internet, but until 2016 it could only be accessed in the Amsterdam City Archives itself, which is why I spent four months in the spring of 2016 collecting information from here. In 2017, the archive was opened for access on the Internet, but it is not as such digitised. All preserved muster rolls have been scanned and can be accessed via the Internet, where the individual scrolls can be found.[80]

Amsterdam was by far the largest of the Dutch ports to which most of the Scandinavian sailors travelled, but this does not mean that all the sailors from the Nordic countries who sailed from the Netherlands are to be found in the Amsterdam Waterschout Archive. Cities such as Hoorn, Enkhuizen, and Harlingen, etc. had significant shipping industries in the 16th and 17th centuries, while Rotterdam and Middelburg etc. became important maritime hubs during the 18th century. This subject will be addressed in the section on Scandinavian seamen on Dutch ships. Another problem regarding data from the serial sources from the 17th Century and for the Waterschout Archive is the question of the origin of the seamen.

First, it must be remembered that the scribe who wrote the muster rolls was Dutch, for whom many of the Scandinavian place names were unknown, and that he therefore spelled them as he heard them. In some cases, therefore, it has been impossible to recognise a given locality. Secondly, there is the question of whether the sailor named his actual place of residence or whether he referred to the locality from which he sailed to the Netherlands. In the case of the Waterschout Archive, it seems to be both. On the one hand, small villages inland are mentioned, which must indicate that the seaman actually came from here and did not ship out from these places. This applies, for example, to Ballum, Emmerlev, Sønder Sejerslev, and Balsted in southwest Jutland, and Feggesund on Mors and Løjt at Aabenraa. Some very small Norwegian localities are also listed, which may well have been small trade points where lumber was exported, but which are not known as major traffic hubs (*e.g.* Christiansand and Copenhagen). Examples of these small places could be: Farsund, Kleven (right next to Mandal), or Ny Hellesund in Norway and Højer and Hjerting in southwest Jutland. It is possible that the sailors did not live here but came from the surrounding area, but in this study, this has no consequence for the geographical distribution of the Scandinavian seamen. Most Scandinavian sailors in the Waterschout Archive named major shipping ports and traffic hubs as their home: for example, Christiansand, Copenhagen, Kalmar, Åbenrå and Arendal. Or they also mentioned larger geographical areas such as; Holstein, Ditmarsken, Zealand and Funen, or in Norway; Legelantlist and Terneus, which were the Dutch terms for Lister parish and Lindenes respectively. Here it is also not possible to determine whether we are talking about the place of residence (and if so, exactly where) or point of departure but again this is of little import.

Another problem concerning the Scandinavian seamen is that some of them claimed to come from locations which can cover two different geographical places. One such location is 'Fredrikstad', which could be either Fredrikstad in Norway or Friederichstadt in Schleswig, Ribe in Denmark which was spelled 'Riep, Riepe, Riepen, Rype etc.' and thus could also mean places in the Netherlands, Denmark and Germany, or Wyk, which could be a location in the Netherlands (Wyk op Zee) or Wyk on Föhr. In all cases, a distinction has been made by looking at the sailor's name and the origin of the rest of the

80 https://archief.amsterdam/inventarissen/inventaris/38.nl.html. 2/4 2018.

crew: if a sailor mentions his place of residence as 'Rippen' and is called Terje Jans Pram, he is assumed to be Dutch and is not registered in this study, but with a Danish name like Christan Hansen, he is. Another example is Carel Corneles, who designated Fredrikstadt as his home and in 1787 sailed with the *Amsterdamse Packet* to Philadelphia. On board were no Norwegians, but four men from the Wadden Sea area, one Scotsman and two Dutchmen, so he is considered to come from Friederichstadt in Schleswig. Conversely, Sybrandt Pietersz (Dutch for Søren Petersen), who designated Fredriksstad as his place of residence, has been registered as a Norwegian (many Scandinavian sailors 'Dutchized' their names).[81] He sailed to Surinam in 1772 aboard the *De Leyde Star* with four other Norwegians, six men from the Wadden Sea area, one Swede and three others from Denmark, but none from the German area.

When I started working with the Waterschout Archive in the spring of 2016, it quickly became clear to me that even for a single year there was a great deal of information (for the year 1772, about 800 ships with about 23,000 sailors on board), which meant that I had to limit myself to a few significant years, namely 1772, 1780 and 1787. The first fully preserved year is 1772 and to get as far back in time as possible, this year was chosen. 1780 is the most active year in Dutch shipping, before the Fourth Anglo-Dutch War led to the downturn of the shipping industry of the Netherlands and was therefore selected. 1787 was chosen because the first Danish census was carried out in this year and therefore it might be possible to find sailors from the Waterschout Archive in the census.

The retrieved information about the Scandinavian seamen was entered into an Excel spreadsheet, because this program is well known and spreadsheets can easily be converted for use in *e.g.* Microsoft Access. Since the primary goal of the research in the Amsterdam Waterschout Archive was to ascertain how many Scandinavian sailors actually sailed on Dutch ships and where they came from and, secondarily, to uncover any networks among them, the capabilities of Excel were sufficient. For each of the three years in question, an Excel spreadsheet was created in which I recorded: a serial number for each person, the particular page of the scanned muster roll from the Waterschout Archive, the date of the muster roll, the seaman's position on board, his first name, last name (both written as accurately as possible to catch past spellings), and his full name in standardised form, to make it easier to cross-check with the other years. His place of residence was also spelled as it appears in the muster roll, any handmoney paid beforehand (the norm was a month's advance, as shown in the printed text on the muster roll), the salary in guilders, the name of the ship, the name of the captain, the number of private sailors on board (captain and mates not counted) which, together with the destination, can give a clue as to the type of ship. The destination to which the ship should sail, the person who could guarantee that the seaman would show up on the ship and not disappear with the advance paid. This guarantor was usually the owner of the inn where the sailor was living. Then the address of the inn was registered, the name of the inn and finally a box for any comments.

2223 sailors were thus registered for 1772, 2876 sailors for 1780 and 1847 for 1787. Subsequently, the figures were cleared for localities outside the designated study area, leaving 1870 seamen in 1772, 2404 seamen in 1780 and 1305 in 1787. As previously mentioned, data for all these seamen was inserted into three Excel spreadsheets, one for each year, and these three were then combined in another Excel spreadsheet, which

81 Rheinheimer 2016a, 80.

allowed searches and comparisons to be carried out for the three years, revealing important features regarding the origin of the sailors, distinctive travel patterns, special living areas in Amsterdam, etc.

With the desire to better understand the social relations that may have existed between the Scandinavian seamen, I contacted Associate Professor Kristoffer Laigaard Nielbo of the SDU eScience Center and asked him to help conduct a so-called Social Network Analysis (SNA) of registration data from the Waterschout Archive, more specifically using the data entered in Excel about Scandinavian sailors for the years 1772, 1780 and 1787. Using this material, he was asked to answer the questions: who lived with whom and who sailed with whom? By 'whom' is meant sailors from a location found in the Waterschout Archive, *e.g.* Ballum, Bergen or Karlskrona. Nielbo used Graf theory, which is a mathematical method that studies pair-relationships between objects or entities, and which uses two rows of such objects as variables (the pairs) and then counts the number of times one variable shares a relationship with another variable. This work is facilitated by having a computer program do the calculations, and in this case Nielbo used Python and the visualization program NetworkX and found for each variable the number of relationships it had with the other variables. This can best be illustrated by a graph where the individual variables are represented by a point (a node) and their relationships with lines (edges). For the question 'Who lived with whom?' Nielbo used the variables 'innkeeper' (the innkeeper with whom the sailors lodged in Amsterdam) and 'place of origin' (the registered place of origin of the seamen), while for the question 'Who sailed with whom?' he used the variables 'place of origin' as the first variable and 'ships' (the registered ships where the seamen had a berth) as the other. The two graphs that could be drawn from these calculations give a clear answer to the questions that could not be answered by visually reviewing the large amounts of data, thus helping to gain a better insight into the social relations of the Scandinavian sailors.

1.6.8 The Waterschout Archive in GAS. All nations in the spring of 1780

In order to create a complete picture of the national composition of the crews of the ships departing from Amsterdam and thus knowledge of who the Scandinavian seamen were sailing with, I registered all seamen who sailed from Amsterdam in the first half of 1780. 1780 was the great year of Dutch shipping and can therefore be used to uncover a maximum number of sailors from Amsterdam, thereby showing the greatest possible differentiation of hometown entries. For reasons of limitation, only six months were registered. With this information, it is possible to uncover any networks that the seamen entered into, both at sea and on land. The aforementioned record of Scandinavian seamen in the Waterschout Archive for 1772, 1780 and 1787, combined with this detailed study of all nations in the spring of 1780, made it possible to compare the participation of the Scandinavian seamen in various voyages, their salaries and positions on board, with German and in particular Dutch seamen.

On the Amsterdam City Archives website the Waterschout Archive for the year 1780 is divided into three subgroups: January-April with 1025 pages, May-June with 1029 pages and August-December with 1264 pages. As can already be seen from these figures, it is clear that the recruitment of sailors did not take place in a steady stream, but was concentrated in the spring months, which is why it is not enough to simply divide the year into equal parts with the division at midsummer. The procedure therefore involved taking all the pages for 1780 (3318) and dividing by two, so that my limitation of investigation

ranges from the first muster roll in 1780 to number 1659, which corresponds to page 637 of the May-June subgroup; 19 June 1780. The premise was also that, on average, there are as many seamen on each pattern roll in spring as in autumn, which can be confirmed in the aforementioned survey of Scandinavian sailors hired in 1780. Thus, 6234 seamen were found in the first half of 1780.

Again, the registration was done in Excel, where each entry was given a unique serial number, which was followed by the name of the ship, the captain's name, and the date, which allows these three entries to be traced back to the original muster roll in the large, combined Waterschout database. Then follow the destination of the voyage and a serial number for the ship in question, the guarantor of the sailor (the innkeeper) and a serial number associated with him. In order to save space in the main registration and thus create an overview, I created another database where the number associated with the innkeeper is presented, followed by his name, his address and the name of the inn. Back in the main registration follows the number of the innkeeper, a column showing the total number of sailors on board (again not the captain and mates) and then a number of columns with the locations of the sailors, spanning from the Netherlands Antilles in the west to St. Petersburg in the east and from Vardø in the north to Africa in the south. In order to be able to find any slave ships, a column was added in which it was registered each time a ship had a 'Master' on board; namely, a ship's surgeon, of whom a few were always to be found aboard slave ships. Finally, there is a column where any comments about the ship were noted. The registration of all the seamen who sailed with a ship from Amsterdam in the first half of 1780 (All nations in the spring of 1780) offers an overview of who the Scandinavian seamen sailed with and who they lived with in the seamen's inns in the Amsterdam Harbour Quarter. This makes it possible to look for any networks that the seamen were part of, or specific patterns of shipping lanes for a given nationality.

1.6.9 Autobiographies

To exemplify statements based on the quantitative sources used in this dissertation, I have chosen to use excerpts from a number of biographies and depictions of life at sea that can shed a more nuanced light on various matters.

Jens Jacob Eschels:

Das abenteuerliche Leben des Jens Jacob Eschels aus Nieblum auf Föhr als Walfänger, Matrose, Kapitän und zuletzt als Reeder und Tabaksfabrikant in Altona vom ihm selbst erzählt.

This autobiography was published by Eschels in 1834 and describes his seafaring life from his birth on Föhr in 1757 through his whaling experiences at Spitsbergen on Dutch ships to his many years spent aboard Dutch merchantmen. On ordinary merchant ships he sailed in European and overseas shipping as a mate and later as a captain, until settling in Altona in 1798, where he became a tobacco manufacturer and ship surveyor.[82] The life story of Jens Jacob Eschels gives rare insight into daily life aboard a Dutch merchant ship and thus helps to qualify our knowledge of the conditions that the Scandinavian seamen experienced in Dutch shipping. The style is sober and descriptive, but also at times moralising and laden with moral or ethical values. However, there is no doubt that the

82 Eschels 1966.

factual descriptions are true, as any untruths would soon have been revealed by former shipmates and the whole maritime community of which Eschels was a part.

Paul Frercksen:

The same can be said of *Aus den Lebenserinnerungen des Grönlandfahrers und Schiffers Paul Frercksen* published in 1905 by Frercksen's great grandson Friedrich Paulsen.[83] Paul Frercksen, like Jens Jacob Eschels, was a sailor from the North Frisian Islands who participated in Dutch shipping, but even earlier, as he got his first berth as a ship's boy in 1740, and his account is thus the oldest known autobiography written by a North Frisian sailor. Like Eschels, he advanced to captain.

1.6.10 Ships lists

In connection with the preparations for an invasion of Scania, in the autumn of 1677, the Royal Danish admiralty sent a request to the merchant towns of Denmark and the duchies enquiring about the number and size of vessels registered there and about how many horses or soldiers each vessel could carry. In the resulting ships lists there are inventories from 25 Danish cities and 6 cities and a port (Rømø) from the duchies. Wismar in Swedish Pomerania also appears, as this city was controlled by Danish forces at this time. Not all provincial towns in Denmark and the duchies answered the query, presumably because the citizens were tired of providing free shipping in connection with the war effort[84]. Thus, Køge, Vordingborg and Nykøbing Zealand in Denmark and Eckernförde, Tønder and Haderslev in the duchies are missing, and the ship lists cannot therefore be said to give a true and fair view of the total tonnage in Denmark and the duchies. However, for proving the presence of Dutch ship types in Denmark and the duchies, they are useful. The archives were photographed in the Royal National Archive and then transferred to a Word document.

83 Paulsen 1905.

84 Rheinheimer 2014b, 34.

2

Historical Background

2.1 The shipping industries in the realms of the Danish king and in the Netherlands

2.1.1 Shipping in the Danish conglomerate state

By the end of the 16th century, the merchant fleet of the Danish conglomerate state was very small and consisted almost entirely of smaller inshore vessels. Thus, in 1593, the Englishman Fynes Moryson wrote of this situation: 'Their marchant use not to Export or foster Comodityes by any long Navigation into forrayne parts, because the Shipps of all nations passing the Sound supply their wants, and export their dryed fish and like Commodityes they can spare. So the marchants haue no strength of well-armed shipping'.[85] By 1634, the Danish merchant fleet had grown to about 30,000 tonnes and the Norwegian to 29,000 tonnes, and in the Danish parts of the duchies the total was about 11,000 tonnes. The Swedish wars in 1644 and 1658-1660 meant a steep decline in especially the Danish and Sleswig-Holsteinian merchant fleets, but from the 1660s a slow growth began. In Norway, the total tonnage grew to just over 30,000 tonnes in 1680, while Danish tonnage fell to 18,000 tonnes in the same period because of the Scanian War. A short while later, however, Denmark saw a rapid growth to 30,000 tonnes again, while in the 1680s the Norwegian merchant fleet saw a decline to 27,000 tonnes. In 1688, the Nine Years' War started and with the neutrality of Denmark-Norway, it was possible for the ships of the monarchy to take over much of the shipping operations previously carried out by the combatants' merchant fleets. This led to almost an explosion in the size of the merchant fleets of the Danish conglomerate state, which reached a zenith in 1696 with a total tonnage for the Danish merchant fleet of almost 60,000 tonnes and a Norwegian tonnage of 72,000 tonnes! In the latter half of the 17th century, the seaborne trade of the double monarchy had broken lose from Dutch domination, and for Norway this meant an increase in its trade with England, just as a number of vessels went to France and Spain after salt.[86]

The Great Nordic War (1709-1721) marked a serious setback for the shipping industry in the realms of the Danish king, because Swedish and French privateers carved great chunks out of the merchant fleets. As registered in the Sound Toll Registers, approximately 550 Danish vessels passed through the Sound every year between 1690 and 1709, while for

85 Lemée 2006, 46.
86 Dyrvik 1979, 267, 335.

the period 1709 to 1720 the numbers were less than 100 a year.[87] With the regulation of 1 June 1726, which gave Copenhagen exclusive rights to import and sell the four specialties – salt, tobacco, wine and foreign spirits – the authorities tried to favour the capital's shipping industry and trade. These rights were likewise granted to the cities Flensburg and Åbenrå, which gained a similar monopoly. But it didn't help. It was only after 1750, when the international economy bettered, that Danish-Norwegian shipping again started to grow. In 1746, Copenhagen's merchant fleet consisted of 120 vessels together with 11 large company ships, but in 1797 the number had reached 342 vessels of over 18 tons![88] During the period, a growing international market for the transport of general cargo also arose, which caused Danish-Norwegian ships to enter this business and when the Danish king managed to stay neutral in the wars of the Great Powers in 1740-48 and 1756-63, it was possible to penetrate into the trades of other nations.

In 1767, a Danish government official, Ove Malling, estimated that 2053 vessels with a total tonnage of 112,500 tonnes had a homeport in the realms of the Danish king. It was possible to retain the benefits gained, and at the same time the government began to liberalise various sectors (the West Indian trade in 1755 and the trade to Asia in 1772). Norwegian ships benefitted from the opening of the Mediterranean in around 1750, and especially ships from Bergen took part in this trade, but it was not until around the start of the Fourth Anglo-Dutch War that things really took off. The Norwegian merchant navy was initially engaged in the export of the country's timber and as such did not take part in the general cargo carrying in European waters, but after 1780 freight rates skyrocketed, and the Norwegians followed. In 1781 the total Norwegian tonnage was approximately 62,000 tonnes, while in 1785 it had risen to almost 84,000 tonnes. In the same year, Bergen had 123 registered vessels, Arendal 98, Øster Risør and Stavanger each had 70 and Larvik 61 vessels; thus a very large merchant fleet.[89] The American War of Independence, which began in 1778, was also an opening for Danish-Norwegian shipping, as Danish-Norwegian ships were able to fill the gap in the English freight market to America, and after the end of 1783 various international crises continued to create favourable conditions for Danish-Norwegian shipping. When the French Revolution broke out in 1789, international tensions grew and freight rates rose further, and when France declared war with England in 1793, Danish-Norwegian shipowners increased their profits dramatically. The adventure stopped abruptly when England, in response to the French blockade of England in 1806, imposed a blockade on the continent.[90] In order to seize the Danish navy, which the Danish crown prince refused to hand over, the British attacked Copenhagen in 1807, which resulted in a state of war between the two countries. This war lasted until 1814 and resulted in a catastrophic decline in the merchant fleets of the Danish conglomerate state.

2.1.2 The shipping industry of the Netherlands

By the end of the 15th century, the tonnage of the merchant fleet of the northern Netherlands was ca. 60,000 tonnes, but 100 years later, in 1570, that figure had risen to 250,000 tonnes. The province of Holland had more than 1800 ships, of which Amsterdam

87 Degn & Gøbel 1997, 197.
88 Feldbæk 1997, 76, 149, 156.
89 Bugge 1923, 518, 559, XXVII, XXXVIII.
90 Feldbæk 1997, 63-64.

alone was the homeport of 500 large ships. During the first half of the 17th century, Dutch merchant ships grew in size. In the Sound Toll Registers one can see that the number of Dutch ships passing Kronborg in 1640 was about the same as in 1570, but on the whole the total tonnage more than doubled over 70 years to a vessel average of about 280 tonnes. In 1636, the General States estimated that there were 1050 Dutch vessels in the grain trade from the Baltic with an average tonnage of 200 tonnes. Add to these numbers the whaling vessels, ships engaged in overseas trade, 1000 vessels in coastal trade routes and 500 herring boats, and you end up with a total Dutch tonnage of 450,000 tonnes.[91]

In comparison, the total English merchant fleet in 1560 was about 45,000 tons, in 1583 90,000 tons, and by 1629 it had grown to 115,000 tons. At the end of the 15th century, the fleets of the Hanseatic League measured about 60,000 tons and 100 years later around 110,000 tons. At the same time, the tonnage of Scottish merchants was about 10,000 tonnes and the French merchant fleet 80,000 tonnes.[92] In the mid- and late 1600s, the maritime zone of North Holland controlled about half of the known world's seagoing ships.[93] By 1636, the total tonnage of Dutch ships had grown to 500,000 tonnes, by 1670 it had reached 600,000 tonnes, and by 1676 it was peaking at around 900,000 tonnes, compared to England's 500,000 and France's 100,000 tonnes.[94]

The war of the Spanish Succession had serious consequences for the Dutch shipping industry. The grain trade from the Baltic was severely restricted, the flow of Spanish silver, which was crucial to VOC's trade in Asia, dried out, and the large Dutch herring fleets were decimated by privateers. From 1710, Dutch ships, because of French political pressure on Spain, were cut off from the Mediterranean trade, and when peace came in 1713, the lucrative slave trade to Spanish possessions in South America moved from Dutch hands to the English. After the war, Dutch shipping was able to regain some of its former glory, but at the same time the English, Danish-Norwegian and Swedish share of the Baltic grain trade grew. Mercantilist measures in most European countries cut Dutch products from their markets, which meant that the Dutch processing industry lost its sales base and that Amsterdam lost its role as a staple place to which raw materials were transported and from which processed goods were shipped out. In contrast, Dutch trade in the Caribbean and South America grew in the middle of the 18th century, partly because of the explosive European demand for sugar, tobacco and other products, and partly because of the century-long wars that prevented in particular the English, French and Spanish merchant fleets from carrying goods to Europe, but where the neutral Netherlands had both the capital and the ships to take over. The decline in Amsterdam shipping in particular is evident: from an annual average of around 2,700 ships that docked in the city in the period from 1665 to 1735, the figure dropped to about 1600 vessels per year in the period from 1740 to 1790.

Until 1780, England recognised the Dutch policy of 'Free cargo, free ship', which had the effect that Dutch shipping grew by shipping raw sugar, unrefined salt, grain and other raw materials to warring countries. Eventually, however, British maritime interests came to feel this competition at the same time as the Republic's ships broke the English blockade of the rebellious North American provinces. Especially from the Dutch island of St. Eustacius

91 Unger 1978, 11.
92 Unger 1997, XIV, 206.
93 Israel 1989, 12.
94 Unger 1997, XVI 261.

an extensive trade of contraband to the rebels was carried out, and it had become a thorn in the side of the English. By attacking Dutch overseas interests, England was able at once to hamper the French economy, which was relying on Dutch ships to carry its Caribbean products, stop supplies to North America and take over the Dutch colonies in South America and the Caribbean. In 1781, during the Fourth Anglo-Dutch War, England conquered the islands of St. Eustacius, Saba, and St. Martin in the Caribbean and the colonies of Essequebo, Demerary and Berbice in South America. Although this meant a severe blow to the Dutch, they were still able to ship considerable quantities of French, Spanish and North American products from Curacao to Europe, and at the same time the grain trade in the Baltic was not seriously reduced. It was only with the French occupation of the Netherlands and the creation of the Batavian Republic in 1795 that things took a seriously downturn. One by one, Britain conquered the Dutch colonies around the world, and with the introduction of the Continental Barrage from 1805 to 1807, Dutch shipping was blown off the seas by the British and never again became a decisive player in world trade.[95]

2.2 Conclusion

Compared with shipping in the realms of the Danish king, it is evident that the Dutch shipping industry was far, far greater, far more specialised, and involved far greater parts of the country's economy. The Netherlands' leading position in the maritime field was an economic and military power tool that enabled the Republic to dominate world trade for much of the 17th century and later, in the 18th, to remain a major economic player in the European context, thus affecting economic and maritime development in several countries. The Dutch shipping industry must have served as a role model for the maritime communities in Scandinavia and 'the Dutch miracle' must have had an impact on countless ordinary people who chose to leave their homes to take part in this success. By comparison, shipping in the Danish conglomerate state was much smaller and was particularly subject to Dutch domination in the 17th century. The 'suction' from the Netherlands resulted in a migration wave from parts of Scandinavia to especially the northern areas of the United Provinces, but how can this phenomenon be explained in more detail?

2.3 Migration to the Netherlands

2.3.1 Push/pull factors as a background for migration

Based on political, economic and social conditions in the Danish conglomerate state and the Netherlands, respectively, certain underlying factors can be uncovered, which were the drivers of the migration that took place in the early modern period and in which sailors from the realms of the Danish king took part. Migration research has long operated with the so-called 'push/pull' factors, which are the conditions in the recipient and sender countries, respectively, that can create migration flows. Dutch historian Jan Lucassen stated that labour migration would be found: A) If there is a free labour market; B) If there are two regions within reach of each other where wage and price levels differ sufficiently; C) If in one of these regions – a potential pull area – capitalistic projects or single crop cultivation involves seasonal peaks in the demand for labour; D) while in the other region – the potential push area – there is a large class of small farmers who are

95 Israel 1989, 375, 381, 384, 388, 396, 403, 404.

unable to guarantee their annual income by participating in the domestic industry.[96] This model of analysis can be applied to the connection between Denmark-Norway and the Netherlands in the 17th and 18th centuries.

A. During the 17th century, the Western parts of the Netherlands experienced a tremendous growth in the manufacturing and manufacturing sectors, which consequently had a constant need for additional manpower.[97] This was particularly true of the Dutch shipping industry, which in the 17th century grew several hundredfold and was constantly in search of more sailors.[98] This demand for labour could only be met if there were no restrictions on the workers, and thus a free labour market existed in the Netherlands.[99] The relative freedom of the Netherlands was noted in Norway; in 1743 the royal bailiff for Lister and Mandal counties wrote to the authorities: 'Bønder ved sjøkanten er meget tilbøjelige til sjøfart med skibe, og særdelis til den hollandske nations levemaader der medfører et meget fritt levned og magelighed'[100] (The peasants along the coast are inclined to seafaring and in particular the customs of the Dutch nation, which results in a very free way of living and in indolence). In contrast, in Denmark, the vast majority of the population, namely the peasants, gradually experienced disempowerment as a result of the Swedish wars of the mid-17th century. An ever increasing tax burden required the farmer to stay on his land and make a profit from it, just as he had to do villeinage at the local manor for an increasing number of days a year.[101] At the same time in Norway, through the increased focus on forestry, the peasants saw a restriction on their relative freedom due to economic dependency on the local sawmill owner and merchant.[102] After 1701, measures were introduced in Denmark that further tied the rural population to the land, and the increased taxes of the Great Nordic War (1709-1721) only made matters worse.[103] In Norway, the demand for military service also meant increased control of the coastal populations in particular, which could be used as crew in the navy; in the maritime communities an honest hatred of this military service existed.[104] The rural population of the two kingdoms did not have freedom of movement. Already in Norwegian law of 1604, in the recess of Christian IV of 1643, the Danish law of 1683 and the Norwegian law of 1687 it was stipulated that the local priest should require people who were free from service and would like to travel, to prove that they were 'fri og ledige fra herretjeneste til lands og vanns, så vel som fra bondens tjeneste, og for ekteskab. Løsgængere, som ikke har sådant fuldkomment bevis og nøjagtigt skudsmål fra præsten, kan pågribes og dømmes'[105] (free and vacant from service to a lord both at sea and on land as well from peasant service and from marriage. Idlers, who do not have such perfect proof and exact credentials from the priest, can be apprehended and sentenced).

96 Lucassen 1987, 131.
97 Israel 1989, 115.
98 Unger 1997, XVI 261.
99 Davids, Lucassen 1995, 369.
100 Løyland 2012, 101.
101 Rian 1997, 344. Dyrvik 1979, 249.
102 Rian 1997, 339, 341.
103 Feldbæk 1998, 83.
104 Hodne 1976, 108.
105 Sogner 1994. 28.

As for the sailors in the Danish conglomerate state, the authorities likewise tried to limit their freedom of movement. Thus, in 1664, a declaration was issued that 'forbud anlagende skibsfolk og soldater ej at udføres'(forbade the export of seamen and soldiers). It was forbidden for skippers to take seamen on board unless they had the necessary permission. The following year, the ban was extended to all the king's subjects, and it was emphasised that it was forbidden to go into the service of other countries, just as those who had already departed should return home under threat of the death penalty. In the years immediately following, the ban was repeated, and here sailors from the Wadden Sea islands of Rømø, Sylt and Föhr were explicitly mentioned. In 1675, the ban was repeated, because the king needed 'Til Vores skibsflådes udrustning en stor andel dygtige og søfarende bådsfolk behøver at lade hverve' (a great part of skilled and seafaring sailors for the equipment of our navy). At the same time young men and sailors who resided outside the realms were pardoned if they came home. In 1704 the regime introduced a maritime enrolment system, in which men between the ages of 16 and 50 who were engaged in shipping and fishing were registered for service in the navy. They were restricted in their movements, as they were not allowed to leave the country without the permission of the local enrolment officer. In return, they gained exclusive rights to the seaman's trade and were spared a number of taxes.[106] Based on experiences with mercenary troops during the Great Nordic War and in connection with the economic crisis in the 1730s, the regime sought to secure ample and cheap labour for the large estates through the introduction of the 'stavnsbånd' (the Danish version of serfdom) in 1733. It was left to the landlords to provide soldiers for the army and in order to get sufficient numbers, boys and men aged 14-36 and later 4-40 were forbidden from leaving the estate.[107]

B. The distance between the cities of the Netherlands and the southern Norwegian coastline and the west coast of South Jutland and the duchies is not very great, especially not at a time when traffic over the sea was often the usual mode of transport over long distances. Vessels from the Netherlands were already massively present in the southern Norwegian fjords early in the period, and in 1635 about 350 ships were employed in the timber trade in Norway, which often made several trips a year.[108] In relation to the duchies and southwest Jutland, we know that there was contact over the sea to the Netherlands from Hjerting, Ribe and Tønder and from many other ports and trading posts along the coast.[109] Philip Kersall has shown that Dutch vessels were also present in the inner Danish waters during the early period. When this pattern changed, due to the fact that the Dutch grain ships mainly visited Copenhagen, there was ample opportunity to find passage from here to the Netherlands. [110] In the 18th century, we even hear that so-called smacks departed from the Wadden Islands to the Republic at regular intervals, and under normal circumstances such a voyage took about four days. [111] The distance between Föhr and Amsterdam is approx.

106 Degn & Gøbel 1997, 154, 155.
107 Feldbæk 1998, 83.
108 van Royen 1997, 45.
109 Guldberg og Dam Jensen 2017, 96 -103. Guldberg 2014a, 3. Akveld mfl. 1977, 227.
110 Kelsall 2007, 92-94, 110.
111 Eschels 1966, 16, 32, 33, 45, 55, 79. Paulsen 1973, 98, 101, 124.

250 nautical miles, so the smacks sailed at an average of 2.6 knots. Applied to the 382 nautical miles between Kristiansand in Norway and Amsterdam, this average speed would deliver a ship on this route to Amsterdam in six days. As the sea voyage was direct and thus did not have expensive stops and embarkations at other ports en route, it was very easy to get to the Netherlands from both southern Norway and the Wadden Sea, and it was not possible for the authorities to monitor all the numerous small ports, fjords and coves used by traffic to and from the Netherlands.[112] The cost of living in the Dutch cities was considerably higher than in the rural communities in Denmark-Norway, but even when taking this factor into account, life was easier in the Netherlands, because the wages were much higher.[113] This was because the countries around the Baltic simply had lower economic capacity than the Netherlands and therefore also lower wages. Thus, Jelle van Lottum found that in the 17th century, wages in southern Norway were just over half the average wages in the western part of the Netherlands, and that the wages on Danish ships were 20 to 25 percent lower than on corresponding Dutch ships.[114] During the period between 1630 and 1650, the salary of unskilled workers in Amsterdam increased to about 75% of a skilled worker, making the city attractive to the large flow of untrained people from the northern European rural areas. In western Schleswig during this period, a farmhand could earn between 13 and 15 guilders for a summer's work, as well as receiving free food and lodging, but a young sailor in the Dutch merchant fleet could earn 14-15 guilders a month (with food and lodging). In 1633 a carpenter in Amsterdam earned 30 stuivers a day, while his colleague in Flensburg earned less than half of this.[115]

C. The rapid growth in the manufacturing sector in the Northwestern part of the Netherlands (especially in Amsterdam and the Zaan area) created a need not only for skilled workers, but also for unskilled labour. The cities and the densely populated areas attracted people because the local population was not sufficient to meet the growing demand for manpower and also because the mortality rate in these areas was very high.[116] In all European cities, child mortality was especially high, and infectious diseases affected the entire population from time to time due to poor hygienic conditions, creating large gaps in the population that could be filled by migrants. In the heavily urbanised province of Holland, the population increased from 275,000 in 1514 to 883,000 in 1680 and two thirds of this increase occurred in the cities. Only 5% of the new inhabitants came from the province's agricultural areas; the rest were immigrants from other parts of the Netherlands and from the areas around the North Sea and the Baltic Sea.[117] The winter months in Northern Europe are extremely stormy, dark and cold and in the early modern period large parts of the Baltic Sea, the Kattegat and the Belt Sea froze over. Consequently, it was dangerous or at best very difficult to go to sea, which is why Dutch shipowners laid up their vessels in November, December and

112 Hodne 1976, 108.
113 Davids, Lucassen 1995, 372.
114 van Lottum 2007, 60, 61, 185.
115 Kuijpers 2005, 50.
116 Davids, Lucassen 1995, 425.
117 Kuijpers 2005, 92.

January and only started sailing again in February or March. The whaling ships left the Netherlands in February and March and in April or May the ordinary merchant ships departed for the Baltic. [118] For the many foreign sailors who sailed annually on board a Dutch vessel, this meant that they left home in the early spring months, as did for example the seamen from the Wadden Sea area, as testified by both Jens Jacob Eschels and Paul Frercksen.[119] Seafaring was therefore largely a seasonal occupation.

D. In Danish feudal agricultural society there was continuous pressure on the peasantry from the nobility and the crown, which led to poverty. Already in the late 16th century, a non-resident proletariat emerged in Zealand[120], and at the same time, the prioritisation of forestry in Norway had the consequence that in bad years there was famine in parts of the country.[121] In Denmark, however, it is in connection with the Swedish wars in the mid-17th century that the rural population, especially in Jutland and Funen, was seriously affected. Between 1610 and 1650, warfare and extra taxes caused the number of free farmers to fall, and in many places a large number of peasants could not pay their taxes to the king.[122] After the wars, in 1660, the duchies and Denmark were impoverished, and in the current Danish area the population decreased by about 20 percent, which led to deserted farms being found all over the country. [123] Large parts of the duchies were hit hard during the various wars and disasters. After the defeat of Christian IV at Lutter am Barenberg, the Danish army fled north into Schleswig-Holstein, drawing the opponent's forces after them. Five imperial regiments occupied the Ejdersted Peninsula and looted the area, just as the island of Strand was occupied and looted. After the peace in Lübeck was concluded in 1629 and the troops dispersed, the formerly wealthy area was devastated. Then the 'Grausame Wasserfluth' struck on 11 October 1634, when stormy weather and rising water levels destroyed large parts of the Wadden Sea coast from Ho Bay in the North to Bremen in the West. In the duchies the formerly prosperous Wadden Sea Island of Strand was almost washed away; about 6000 people died, 1300 houses were destroyed and 30 mills and 21 churches disappeared. The chronicler Peter Sax reported that over 2000 people perished on the Ejdersted Peninsula, along with 12,000 cattle, and that 664 houses were destroyed. In Husum many houses were destroyed and seagoing ships stood in the streets of the city. The storm surge in 1634 was by far the worst natural disaster of the 17th century along the Wadden Sea coast, but certainly not the only one. In 1616, 1625, 1651, 1663 and 1685-86, other storm surges hit the area and for a time made life difficult for the population. In 1643, Duke Frederik III of Gottorp declared himself in favour of the Swedish cause, which meant that Swedish troops entered the duchies and moved further into Jutland. To obstruct the Swedish troops, Danish forces were ordered to destroy everything in Ditmarsken, which triggered a massive influx of refugees. Finally, the population suffered from wars in the years 1657-58, when first the Swedish occupation and later

118 Dekker 1968, 132. Unger 1997, VIII, 6.
119 Eschels 1966, 16, 32, 33, 45, 55, 79. Paulsen 1973, 98, 101, 124.
120 Rian 1997, 200, 342.
121 Feldbæk 1998, 91. Rian 1997, 346.
122 Rian 1997, 343.
123 Degn & Gøbel 1997, 8.

the Brandenburg and Polish relief troops burned and looted the area. The result of all these wars and natural disasters was a great exodus of people from western Schleswig-Holstein, primarily to the Netherlands. The American historian Leslie Page Moch has characterised the hundred years between 1650 and 1750 in the area as a period of economic stagnation and decline, in which a demographic crisis in the population occurred due to wars, misery and epidemics. Facing a hopeless future, many chose to travel to where they believed they would find better life opportunities, and so the migration flows of the 17th century can largely be characterised as an expression of 'Subsistence migration'.[124] Massive foreign debts amassed during the Great Nordic War, and again the bill was passed on to the rural population, which, due to the low grain prices all the way up to the 1750s, was under serious pressure.[125] After 1721, the Danish conglomerate state did not engage in armed conflict until 1807. Throughout Western Europe the population grew between 1680 and 1820 by 62 percent, with the highest growth after 1740. Plague outbreaks became rare and the food deficit that had prevailed in the past century disappeared. Especially during the period between 1740 and 1786, crop yields throughout Europe were high, and with the declining mortality rate the fertility curve grew as extended life spans allowed for more children. The largest increase in population was in the lower strata of communities among common wage earners, where families did not have the resources to feed their extra children. The solution to this problem was that young people had to leave their childhood homes and find livelihoods elsewhere.[126] As international economic conditions changed for the better during the 1750s, lords of the great estates in Denmark and the duchies reacted with increased productivity demands in order to benefit from rising prices, but by 1770 the government became aware that the rural population could be squeezed no further without social unrest, which led to major agricultural reforms. Thus, the farmer class was freed from villeinage and could look forward to a long period of increasing prosperity, but at the same time the losers of these reforms were the land proletariat of tenants and rural workers, with a population one and a half times larger than that of the farmers, *i.e.* about 120,000 people.[127] In Norway, the economic conditions as mentioned earlier were very different from those in Denmark and the duchies. Here, too, the splitting up of property by heritance and a general population growth resulted in a surplus of people who were unable to feed themselves and therefore migrated to the coasts in search of better conditions.[128] The government's focus on forestry led to periods where Norway was not able to feed its population, and after the introduction of the grain monopoly in 1735, where Denmark and the duchies were to supply all Norway's grain, a number of years followed in which famine occurred in parts of the country.[129] In Norway, too, the tax requirements of the regime constituted an increasing burden on the population. In a study of Danish-Dutch relations, Hans Christian Johansen compared the economic conditions of the 18th century with the conditions that currently exist between the developed countries and the developing countries of the world: 'Economic relations

124 Kuijpers 2005, 22, 52, 53, 55, 56, 66.
125 Dyrvik 1979, 369.
126 Moch 1992, 61, 68.
127 Feldbæk 1998, 86, 234.
128 Løyland, Margit 2012, 102.
129 Feldbæk 1998, 91.

between Denmark and the Netherlands in the late eighteenth century have many of the characteristics of the modern relations between developed and underdeveloped countries with regard to flows of manpower, goods and capital.' He characterises today's poor countries as agricultural and rural, whereas the rich world is industrial and urban. The poor countries specialise in the export of a few commodities or agricultural products, whereas rich countries export processed products. Poor countries often have balance of payments problems and borrow money from rich countries, and the migration of people is characterised by the fact that experts and contractors from rich countries try to exploit the opportunities provided by poor countries, while unskilled labourers from poor countries try to access the labour markets of rich countries to take over some of the lowest paid jobs.[130] Johansen's description thus resembles the conditions that prevailed in the early modern period between the Danish conglomerate state and the Netherlands.

2.3.2 Other motives for migration

As described above, a large number of political and economic conditions existed that made ordinary people from the Danish conglomerate state choose to emigrate either permanently or for a shorter or longer period and then return home. But to understand how these migration flows came about, it is not enough just to look at political and economic factors. It is necessary to see migration as a socially constructed, self-reinforcing system including sender area and recipient destination; a system that expands, contracts and changes in response to conditions. Leslie Page Moch points out that a potential migrant is in possession of a 'personal information field': a comprehensive knowledge of travel options and transport routes and possible interesting destinations. This knowledge is shared with family, friends and acquaintances who often choose the same destination and help each other find employment and housing. Migration is therefore also very much about human relations and can be said to exist in a space of regional culture. As the migrant travels from the countryside to the regional urban centre and perhaps from there to the central metropolis, she or he makes contact with people who speak the same language/dialect and share the same cultural habits such as food, clothing, religion and more. Thus, the rural sender area is connected to the metropolis in the same system of knowledge and wide-ranging networks of human contacts. Moch concludes on migration: 'It was a manifestation of family systems, social connections and regional solidarities.'[131] Lave and Wegner would say that the mentioned characteristics make these systems systems of practice communities.

2.3.3 Mobility in the early modern period

Early modern mobility was far more common than is usually recognised. The phenomenon is linked to seasonal changes, the human life cycle, family life and not least property. Homeowners with small plots not big enough to make a decent return had to leave their homes on seasonal work trips to make ends meet, but wealthy land-owning farmers also sent their sons and daughters out to serve.[132] Among the landless rural proletariat,

130 Johansen 1996, 206, 197.
131 Moch 1992, 16.
132 Moch 1992, 35.

mobility was a necessity. When the children were big enough to earn their own keep, they were sent off to another household to work as a farmhand or maid. Thereby the family had a mouth less to feed, and the young man or woman was given the opportunity to learn farming or housekeeping. This traditional transition from childhood to adulthood was common throughout Western Europe and formed a routine part of rural living for all social groups. Thus, with an average marital age for men in their late 20s and for women in their mid-20s, young unmarried people had a period of 10-15 years, working in foreign households and regularly changing places. Usually they did not move that far; to the next parish or nearest village and rarely further than the borders of the local shire, but this 'micro-migration' nevertheless was of great importance, for it introduced the young to a larger world, to strangers and other ways of living, and the next step, into the great world, was thus not so great.[133]

2.3.4 Circular migration

In the individual 'personal information field' there were various migration opportunities, of which local migration in connection with transition from childhood to adulthood was one. Leslie Page Moch also operates with 'circular migration', 'chain migration' and 'career migration'. 'Circular migration' is defined as a system in which the migrant returns home after a specific period of time, most often in connection with seasonal activities, such as the annual participation of Föhr seafarers in the Dutch whaling industry.[134]Away on a working spree it was all about making as much money as possible in as short a time as possible and then returning home. Norwegian historian Sølvi Sogner doubts that direct seasonal migration (circular migration) occurred for the Norwegian migrants. Instead, she points out that the non-resident migrants, whom she called 'migratory birds', stayed abroad for a few years before returning home, and that there was a smooth transition between them and the permanent immigrants. Jan Lucassen divides 'circular migration' into two types: 'migrant laborers' who were away from home for only one season, and 'labour migrants' who stayed in the receiving country for longer than a year. In practice, there was probably a sliding transition between the two based on the opportunities of the situation. [135]

Sogner concludes that in the case of Norwegian migration there was 'a comprehensive, permanent labour immigration' and that the vast majority of Norwegian migrants settled in the Netherlands.[136] However, Sogner contradicted herself when she found that most brides and grooms from the Stavanger area returned to the area,[137] and in his studies of the Prize Paper Archive it was possible for Jelle van Lottum to partly contradict Sogner's argument. In a 2015 study, he showed that the share of 'non-sedentary' (non-resident) migrants in the international Dutch maritime labour market in the years around 1800 was more than 40 percent, whereas in around 1700 it was 20 percent. In the second half of the 18th century, therefore, there was a change in the type of migration workers, so that many only stayed in the Netherlands for a shorter period. The figures also point to a different

133 Moch 1992, 31-35.
134 Moch 1992, 17.
135 Kuijpers 2005, 96.
136 Sogner 2012, 142.
137 Kuijpers 2005, 96.

conclusion; namely that in the period before, 20% or one fifth of the foreign workers in the international Dutch labour market actually returned home.[138]

Kuijpers even estimates that only one fifth of all foreign seamen are registered in the Amsterdam marriage register, because far more Lutheran seamen can be found in the Registers of the Lutheran Church in a given year than in the marriage register.[139] These sailors were on their own and presumably 'migratory birds' who, after a shorter or longer period, returned home. Another very common 'migrant' was the young man who went to the city to learn a craft and after his apprenticeship returned to his homeland.[140] One explanation for why so few people chose to stay in Amsterdam is probably that the unskilled wage in relation to the high cost of living in the city was so low that it was actually not possible for most migrants to reproduce themselves, but only to put a little aside. Young unmarried people went to the metropolis and worked hard for a number of years until a reasonable sum was put aside, after which they returned home to get married and settle down.[141]

2.3.5 Chain migration

A system of 'chain migration' involved people at the migration destination who could help new arrivals with shelter and employment, and Leslie Page Moch's term for this migration phenomenon is highly accurate, as it was a network of family and acquaintances who together with the migrant were 'embedded in regional identity'.[142] In a chain migration system that may have existed for many years, the migrant could make use of information and contacts circulating in the system, and the connection between the home area and the new destination was strengthened by every newcomer. It is a cumulative causality, because the costs and risks of the individual migrant continue to decrease as the group of family members, acquaintances and people from the home area grows at the receiving end. As a result, the number of migrants grew and the migration network steadily expanded and at the same time other cumulative mechanisms came into force. A section of the labour market where migrants were able to gain a foothold, usually due to poor pay conditions, could change its reputation during such a process and come to be regarded as 'immigrant work', where locals would no longer work, thus creating space for even more migrants.[143] This process is particularly recognisable in the case of the VOC, where the share of foreign seamen was around 29 percent in the late 1630s and increased to 42 percent in the 1660s. As the Dutch shipping industry ran into difficulties in the late 17th and early 18th centuries, the share of foreign seamen declined as the republic's own sailors were forced to work here as well due to heightened competition, but as the international economy began to improve during the 1740s, the number of foreign sailors increased again. In 1730 the share of foreign sailors in the VOC was 38 percent, and by 1750 it had reached almost 50 percent.[144]

The cumulative consequences of chain migration were also that migrants from a given area settled in the same neighbourhoods in Amsterdam. Erika Kuijpers has shown that

138 van Lottum 2015, 659.
139 Kuijpers 2005, 98.
140 Moch 1992, 49.
141 Kuijpers 2005, 26.
142 Moch 1992, 17.
143 Kuijpers 2005, 29
144 van Royen 1997, 50

the city's expansion to the east in 1658, which created the artificial islands of Rapenburg, Kattenburg and Oostenburg, coincided with the first major wave of migration from Scandinavia, which resulted in this group being particularly strongly represented here. The main characteristic of Rapenburg was that it was cheap to live there, which was also the case in other neighbourhoods close to the harbour; such as the inner city around Oude and Nieuwe Zijde, the Lastage area and at Uilenburg. Immigrants were usually poor and marginalised and were drawn to these quarters. Jelle van Lottum and Alexander Klein have shown in a recent study of labour migration in the maritime sector from 1700 to 1800 that it was not until the late 18th century that wage differentials in the international maritime labour market became relevant for migrants. The explanation for this is that wage conditions in the international maritime labour market only became attractive in relation to other sectors during this period, and that migrants in the 17th and early 18th centuries were more concerned with getting a subsistence basis at all, and here port cities offered a variety of options.[145]

As previously shown, place of work, origin and wealth level determined where the migrant came to live in the metropolis.[146] In chapter 6 it will be shown that sailors' inns played a crucial role as centres for the seamen's stay in Amsterdam. Such inns were in all likelihood owned by former seamen who, through circular or chain migration, had ended up in the city.[147] In this context, it is interesting that Jelle van Lottum and Alexander Klein found that the presence of large port cities was particularly important for migration, because of a differentiated labour market. Also, there were many meeting places (inns and taverns) where workers and employers could meet, there were many jobs in other sectors, and here there was the exchange of not only goods, but also information about work situations in other parts of the country and in the city itself, which could reach all the way back to the sending country of the migrant. Finally, major port cities were a stepping stone for transit migration to other parts of the world.[148] Many artisans also settled in the metropolis, because of the market for their products. In the Ondertrouw Register (marriage register of Amsterdam) Erika Kuijpers found 80 different crafts and trades represented among the grooms from the Ejdersted area in Schleswig, among them carpenters, blacksmiths, painters, masons, bronze founders, bundlers, weavers, brewers and bakers, needle makers and even gold thread pullers. Some stayed, and others returned, and some, when married, might still be in an apprenticeship and would later have to make the decision to stay or to return.[149]

2.3.6 Career migration

Leslie Page Moch's last category of migration is 'career migration', which refers to persons who were recruited on the basis of the needs and geography of the employer. In the early modern period such migrants were typically church officials.[150] We will return to this category in the next chapter.

145 van Lottum & Klein 2017, 23.
146 Kuijpers 2005, 173.
147 Moch 1992, 50.
148 van Lottum & Klein 2017, 20.
149 Kuijpers 2005, 73.
150 Moch 1992, 17.

2.4 Conclusion

In this chapter it has been shown that during the 17th and 18th centuries, there was ample motivation, through push/pull factors, for ordinary people from the Danish conglomerate state to leave home and seek happiness abroad – in the Amsterdam metropolis and in the other Dutch cities. During the 17th century, with its many wars and epidemics, migrants from the Danish kingdom and from the duchies, in particular, could be labelled 'subsistence migrants', as they simply looked for means of survival. Over the last decades of the 17th century and the 18th century, as the Danish state tightened the tax screw and worsened other conditions for the Danish peasantry, and the Norwegian forest industry made life harder and harder for the lower and middle classes in Norway, the possibility of different and freer lives in the Netherlands became attractive, and as population numbers began to rise in the mid-18th century, there was a surplus of people who had to look for work elsewhere. The fact that people knew that better life opportunities existed elsewhere is due to the social nature of the migration phenomenon, since long-distance contact between family or local acquaintances existed and was enhanced through their participation in the networks/practice communities, paving the way for new migrants, both when travelling and at the receiving end.

Thus, there was good reason why the Netherlands appeared to be a tempting alternative to the life conditions in the Danish conglomerate state and it has been shown how different forms of migration patterns developed and helped ordinary people on their way. However, a movement also existed the other way; from the Netherlands to the realms of the Danish king and this, unlike the migration to the Netherlands, was career migration, where different types of experts were recruited by the king or other employers to do a specific job. This phenomenon was particularly pronounced in the 17th century, whereas labour migration to the Netherlands really took off in the 18th.

3

Dutch experts in Denmark-Norway and the Duchies

In various ways Dutch maritime experts found their way to the realms of the Danish king in the early modern period. As technological progress in the Netherlands accelerated in the 15th and 16th centuries, other European states or individuals wanted to gain access to this knowledge, which is why Dutch experts in many fields were targeted for recruitment by foreign powers. Karel Davids writes that: 'Skilled artisans or merchants could also be recruited, directly or indirectly, by foreign governments',[151] as happened to a greater or lesser extent. For hundreds of years, Danish kings and businessmen had brought Dutch experts to the kingdom, just as Dutch skippers and merchants of their own settled in the realms. In the following, such 'career migration' from the Netherlands to the realms of the Danish king will be examined in the following professions: ship's carpenters and shipbuilders, naval officers and sailors, as well as other maritime-related professional groups.

3.1 Shipbuilders and shipwrights

Royal shipbuilding at Bremerholmen in Copenhagen and at various places around the realms of the Danish king is important to understanding how Dutch shipbuilding technology spread to the provinces. The king recruited foreign shipbuilders who came to work for the Danish Royal Navy, and from these masters the new knowledge was carried out into the realms by conscripted local shipwrights. It was customary for the king to conscript shipwrights from the larger cities of Denmark and the duchies and each spring a decree was issued as to which and how many shipwrights would be needed. For example, from 27 February 1574: 'Befaling til nedennævnte Købstæder straks at sende nogle Skibsbyggere til Kiøpnehafn, da Kongen har Brug for nogle saadanne til at istandsætte de Orlogsskibe, der skulle udrustes til Foraaret. Kongen vil betale Skibsbyggerne for det Arbejde, de udføre, for at de ikke skulle have noget at klage over' (Orders for the following cities to immediately send some shipwrights to Copenhagen, as the king needs such men to repair the warships to be equipped for the Spring. The king will pay the shipwrights for the work they do, so that they have nothing to complain about'. After this, twenty towns in Skåne, Jutland and Funen are listed, along with the number of shipwrights each city should provide. Another example is from 10 January 1632: 'Opfordring til Lensmændene rundt omkring om at sende skibstømrere til

151 Davids Voll II 2008, 273, 297.

Fig. 3.1. View of Copenhagen, 1659, Unknown, 1659. Notice the Royal yard in the right side of the picture. Rijksmuseum. RP-P-OB-81.868.

Bremerholmen'[152] (Calls for the lords of the land to send shipwrights to Bremerholmen). The selected shipwrights were to report to Bremerholmen at Candlemass (2 March) and were to serve for two months. They were given free transport by horse and carriage and free crossing at the ferries to and from Copenhagen and, moreover, enjoyed the privilege of free living in their hometown without any other public service than the king's tax.[153] This annual conscription of additional shipwrights to the Royal Navy was common until about the 1700, and it can be argued that at the royal yards a practice community existed, with the Dutch shipbuilders as veterans, and with the provincial shipwrights as peripheral legitimate participants who, through participation in the practice community's activities, acquired parts of the community's collective knowledge.[154]

In the 1470s it is likely that the Danish king John brought Dutch shipwrights to Copenhagen to help build a fleet of large carvel-built ships; his letter to Lübeck of June 1488 mentions at least one of these: *'unde sine gnade was sere but to vreden unde boklagede man, dat he sine scepe nicht verdich hadde, wente he heft hir mesters ut Holland, de am de karvele vardich maken'* (and his grace was not satisfied and regretted that his ships were not finished, because he had here (Copenhagen) Masters from Holland, who were finishing the Carvels (ships)).[155]

After this, there are no written sources that directly refer to Dutch shipbuilders in the service of the king, but it is reasonable to assume that there was a strong Dutch influence during the reign of Christian II (King of Denmark and Norway 1513-1523 and of Sweden 1521-1523) as well. The king relied on his female adviser, Sigbrit Villoms, who came from the Netherlands, and in 1514 he married Elizabeth of Habsburg, the later Emperor Charles V's sister, who was born and raised in Brussels. To break the Hansa's influence in his kingdoms, the king pursued a very burgher-friendly policy and actively invited trade with

152 Marquard 1932, 647.
153 Marquard 1936, 30, 150.
154 Lave & Wenger 2003, 53.
155 Schäfer 1883, 289.

Fig. 3.2 The Danish king Frederik II. Hendrik Goltzius, 1587 -1591. Rijksmuseum. RP-P-OB-10.140.

the Dutch cities.[156] After the Civil War (1523-1536) ended and Christian III became king, Dutch shipbuilders again appeared in the kingdom. In the king's letter to the commandants of Copenhagen, Eske Bilde, Jørgen Klingenthberg and Iver Krabbe, he wrote: 'Da vi har bemærket, at skibsbyggerne fra Holland er ankommet, da er det vor befalling…' (As we have noticed, that the shipbuilders from Holland have arrived, then it is our order…). In 1548 we find mention of a shipbuilder, Henrik Kolterman, who was responsible for

156 Wittendorff 2003, 76 -83.

the building of the great warship *Fortuna*.[157] He was in all probability Dutch, because a Johan Kolterman is mentioned in Amsterdam in connection with the rebellion against the Spanish king in 1572,[158] and another Johan Kolterman is mentioned in 1611 in connection with the purchase of some land in the Zanddyk area in the Netherlands.[159] Finally, in the marriage register of Amsterdam, we find on 30 March 1628 the groom Johan Koltermand.[160] It is thus highly likely that the Koltermans came from the province of Holland.

Frederik II was crowned in 1559 and was interested in acquiring Dutch technology and knowledge. In November 1560 he wrote to the nobleman Magnus Gyldenstierne: 'Han skal sørge for, at den Skibsbygger, som Johan Falckner har skrevet om, kommer ind i Riget og bliver antagen; man kan saa et Aars Tid prøve, om han er dygtig til sit Embede og kan gjøre Fyldest for den Løn, han fordrer' (He must make sure that the Shipbuilder, about whom Johan Falckner has written, enters the Kingdom and is taken on: After a year one can determine, whether he is good at his office and is worth the salary he demands). Johan Falckner was a citizen of Amsterdam and probably the king's factor or trade connection there. The shipbuilder in question must have originated in Amsterdam, and perhaps he is the one we hear about in 1565, here referred to as 'shipbuilder Frederik Banck', who was supposed to build a ship for the king in Norway. In Mogens Gyldenstierne's exchange of letters this Frederik is referred to as 'Banck' or 'Brinck', and as a carpenter and citizen of Amsterdam.[161] In October 1565 Brinck was sent to Amsterdam and another royal factor, Johan Jellesen, was asked by the king to help him 'antage de nødvendige Skibsbygningsfolk' (recruit the necessary shipwrights).[162]

Frederik II had a personal and confidential relationship with William I of Orange, whom he had met as a young prince in Augsburg,[163] and as an answer to a letter from the king, William wrote on 10 December 1565, that his trusted man would obtain 'dreizig oder vierzig Schifftimmerleute' in the Netherlands and bring them to Denmark.[164] The need for skilled shipwrights and shipbuilders must have been great during and after the Nordic Seven Years' War (1563-1570), for on 24 March 1572, the king sent the following: 'Befaling til Johan Jellissen, Borger i Amsterdam, at hjælpe Kongens Skipper Lauritz Bagge med at faa 20 gode Skibsbyggere i Amsterdam og forstrække ham med Penge, hvis han behøver nogle' (Order to Johan Jellissen, Citizen of Amsterdam, to help the King's Skipper Lauritz Bagge recruit 20 good Shipbuilders in Amsterdam and provide him with Money if he needs it). After the end of the war, it seems that Frederik Brinck ended his engagement with the crown, because in August 1573, a local man 'Carpenter Peder Schooning' is referred to as the king's master builder.[165]

The relationship with William I of Oranje must have had an impact on Frederik II's choice of foreign shipbuilders, and it is plausible to think that most of the shipbuilders recruited during his reign had to do with this relationship. Perhaps he also considered the

157 Barfod 1995, 64, 128.
158 Hoofts 1843, 395.
159 Tirion 1750, 373.
160 https://archief.amsterdam/indexen/ondertrouwregisters_1565-1811/zoek/query.nl.pl?i1=1&a1=Kolterman&x=20&z=b. 12/9 2018.
161 Barfod 1995, 208.
162 Laursen 1893. 676.
163 Jensen 1993, 239.
164 RA. Tyske kancelli, Udenrigske afdeling. Breve… Breve fra Vilhelm af Oranien til kong Frederik II.
165 Laursen 1898, 116, 311.

Fig. 3.3. Portrait of Willem I, prins of Oranje. By Adrian Thomatz Key, ca. 1579. Rijksmuseum. SK-A-3148.

Dutch method of shipbuilding to be the most suitable for his needs, because he had his son, later King Christian IV, trained in the 'Dutch method'. Still, it seems that Christian IV preferred shipbuilders from the British Isles,[166] because in 1604 he employed two Scottish shipbuilders, Robert Pietersen and David Balfour.[167] The king's shift to Scottish shipbuilders

166 Rohden & Thaarup 2012, 222.
167 Laursen 1915, 215, 238.

Fig. 3.4. Portrait of king Christiaan IV of Denmark and Norway. By Jan Harmensz. Muller. After Pieter Isaacsz., 1625. Rijksmuseum. RP-P-OB-32.172.

may be related to the fact that the British islands had a long tradition of building heavily armed ships, unlike the Dutch who, in their specialisation process, preferred merchant ships that did not carry artillery.[168]

At the same time, conditions were friendly between Scotland and Denmark-Norway, as in 1589 the king's sister, Princess Anne, married the Scottish James VI, after which strong diplomatic ties existed between the two kingdoms.[169] In 1614 Daniel Sinclair was employed as a royal shipbuilder, which he remained until 1626.[170] Robert Petersen, David Balfour and Daniel Sinclair built 20 ships for the Royal Danish Navy between 1596 and 1631, which is why their influence on the Danish shipbuilding tradition is considerable. However, the king was not blind to the potential that was to be found in the Netherlands, and in 1607 he sent the learned Dr Jonas Charisius to the Netherlands with his envoy, Jacob Ulfeldt, to 'formaa fremmede Kiobmænd og Haandwerksmestre at nedslaa sig i Danmark' (induce foreign merchants and master craftsmen to settle in Denmark). The doctor's instructions specified that he should take special interest in 'Schiffshandwerke, Mollgebaaÿde und Kauffhandlung' (Shipsbuildingcrafts, mill building and tradesman's craft). The possibility of success in recruiting Dutch ship's carpenters is certainly present.[171]

We know of a Dutch shipbuilder who, during the reign of Christian IV, had a significant influence on the Royal Danish Navy: Peter Michelsen. Due to the king's dissatisfaction with David Balfour's work on the warship *Recompens*, Michelsen took his place and signed a contract with the king in 1613, specifying the construction of a small warship at the shipyard in Itzehoe, previously used by the Scots. *Fides*, as the ship was named, became an excellent sailor, and Michelsen secured a number of royal contracts for the Royal Navy in the next decades. [172] In the period from 1613 to 1631 he built 11 vessels for the crown, of which the merchant ship *Perlen,* at 1200 tons, was the largest. [173] Although the Scottish shipbuilders dominated the ship construction at the Holmen during the first three decades of the 17th century, this does not mean that Dutch shipbuilders were not present there. On 7 November 1625 the king wrote to the noblemen Sten Villomsen and Mons. Kaas: 'Da der er Trætte mellem Mester David Skibsbygger og nogle hollandske tømmermænd, skulle de forhøre de stridende Parter og hjælpe hver af dem til Ret, saa vidt Lov og Ret er' (As there is a feud between Master David Shipbuilder and some Dutch shipwrights, they should interrogate the two parties and help each of them to justice as far as law and justice are concerned).[174] And Dutch influence was also brought to the Holmen by other means.

In February 1624, the Norwegian naval officer Jens Munk was sent by the king to Northern Germany to find suitable shipwrights: 'Han skal snarest begive sig til Pommern, Meklenborg og andre steder deromkring, hvor han kan opspørge, at der er gode Skibstømmermænd, og gøre sig Flid for at faa 60 gode Skibstømmermænd, som han skal antage og akkordere med om en rimelig Dagløn, saa snart de komme her.' (He is ordered to Pomerania, Mecklenburg and other places there about, where he can inquire about good shipwrights and do his utmost to get hold of 60 good shipwrights, which he

168 Bruijn 2011, 59-63.
169 Bellamy 1997, 357.
170 Lemèe 2006, 61.
171 RA. Tyske Kancelli, Dr. Jonas Charisius Sendelse til Nederlandene.
172 Bellamy 1997, 378.
173 Lemèe 2006, 56.
174 Laursen 1925, 529.

must recruit and agree with on a reasonable daily salary, as soon as they are here).[175] This is important because shipbuilding technology in the northern German cities was also strongly influenced by the Dutch building tradition.

In 1544, when ships from the Netherlands were exempted from paying the Sound Toll, Dutch influence grew rapidly in the Baltic Sea, and Dutch merchants settled in most old Hanseatic towns on the southern Baltic Sea coast. These merchants commissioned Dutch vessels at the local shipyards, and when the ship type the fluyt was introduced at the beginning of the 17th century in large parts of the freight market in the Baltic, this ship type and Dutch shipbuilding technology as a whole were copied throughout the major ports of the Baltic.[176]

Initially, the shipbuilding guilds in the Hanseatic cities had rejected all foreign shipbuilders in order to protect their own interests, but in the latter half of the 16th century the guild and city government in Danzig changed this policy. According to the guild roll of 1589, foreign shipwrights were allowed to work in the city for a year, after having payed 30 groschen, and in the years thereafter this provision also fell away. In Lübeck, skippers and shipowners were allowed to use skilled foreign shipwrights. These were to register with the city magistrate and the shipbuilding guild's elder and be approved by him as skilled craftsmen, after which they could work there as long as they wanted. Because of religious riots and the ensuing struggle for independence in the Spanish Netherlands, the number of migrating Dutch shipwrights increased dramatically. In 1576, both Danzig and Lübeck were flooded with Dutch shipwrights, and the local guild complained to the authorities: 'dass die niederlandischen Meister, Knechte und Jungen in grosser Menge in die stadt eingedrungen seinen und sich hier niedergelassen hätten, weil dort Krieg und Emp'rung sei. Man habe gewisse Kundschaft, dass in Daenemark und anderen Orten Noch mehr vorhanen Seien'(that the Dutch shipbuilders, skilled shipwrights and boys have forced their way into the city and settled here, because there is war and disturbance there. There is certain knowledge, that in Denmark and other places there are even more). Thus, according to the register of shipwrights in Danzig for the year 1579, there were 12 Dutch shipwrights out of a possible 21, most of them from Edam and Hoorn.[177]

That the Dutch shipbuilding tradition lasted a long time in Lübeck is evident from the marine archaeological studies in 2015 in Karlskrona's archipelago of the Swedish warship *Solen*, built in Lübeck in 1667. This wreck shows clear traces of Dutch shipbuilding technology and is at the same time indirect evidence of the contact between Denmark and Lübeck in the field of ship technology. In 1665, Swedish Lieutenant admiral Claus Uggla was sent to Lübeck to oversee the building of a contracted warship (*Solen*). Here he discovered that the Danes had an even larger warship built a few kilometres from Lübeck, in Neustadt (*Tre Kroner*), and that the hull shape of this ship seemed better than the Swedish types. Therefore, Uggla had parts of the design of the *Solen* changed, and at the same time he witnessed the building of another ship for the Danish navy (*Prinds Christian*). In the collections in the Maritime Museum in Stockholm there is a period ship model of the *Solen*, a former church ship, which is considered to be an authentic model of the warship built by an experienced professional in the latter half of the 17th century. The interesting thing about the model is that both Dutch

175 Laursen 1925, 27, 529.
176 Bes, Frankot & Brand 2007, 5.
177 Olechnowitz 1960, 29, 72, 188.

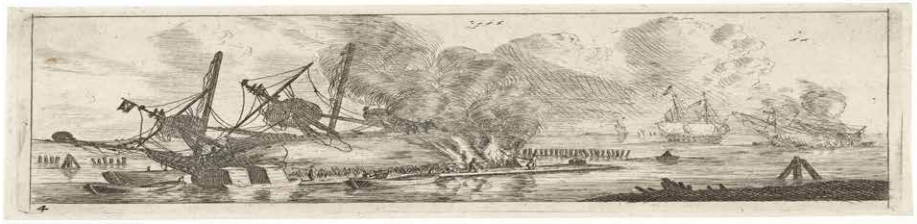


Fig. 3.5. Making a ship's hull watertight by Reinier Nooms, 1651 – 1652. Rijksmuseum. RP-P-1980-132.

and English shipbuilding features appear.[178] Thus, the *Solen* and the ship model of the same testify to a strong Dutch shipbuilding tradition in Lübeck, but also to the fact that in some cases the different national building traditions went hand in hand. It is therefore likely that, despite the presence of English and Scottish master shipbuilders at Holmen, shipbuilding methods with roots in the Dutch tradition were practiced and that the shipwrights recruited by Jens Munk in Northern Germany had the same background.

While mainly shipbuilders from England and Scotland were used at the Holmen during this period, it is likely, considering the significant Dutch shipping activity in the provinces, that Dutch shipbuilders were used for larger shipbuilding in the private sector. Evidence of this can be found for example in an open letter from April 1631, where the king allowed the citizens of Copenhagen to enrol 'en Skibstømmermester og 19 Skibsbyggere og Skibsbyggersvende fra Udlandet' (a master shipbuilder and 19 shipbuilders and shipwrights from abroad) and in June 1632 it was approved that 'Hans Søfrensen, Tolder i Aalborg, der sammen med sin Svoger Rasmus Bendtsen, Indvaaner i Randers, vil bygge et eller flere Skibe og der til maa forskrive nogle Skibstømmermænd fra andre Lande til Danmark, faar bevilget, at disse Tømmermænd maa forskaanes for Udskrivning i Kongens Tjeneste, indtil Skibene er færdige' (The customs official Hans Søfrensen from Aalborg, who with his cousin, Rasmus Bendtsen, will build one or several ships, and has to recruit some shipwrights from other countries, is granted, that these shipwrights are spared conscription to royal service, until the ships are completed). In connection with the whaling adventures of the Dutch Braem brothers there are mentions of foreign shipwrights. In their privileges from 1634, the king allowed: 'De fremmede Tømmermænd, som de forskriver her ind i Riget til deres Skibsbygning, samt deres Folk og Svende skal være fritaget for Kongens Arbejde, saa længde de arbejder paa Johan og Goddert Brams Skibe, med mindre Kongen og Riget kommer i en saadan Trang, at slige Folk endelig kan behøves til Kongens Tjeneste' (The foreign shipwrights, whom they bring into the realm for their ship construction and their men and servants, shall be exempt from the King's service, as long as they work and the ships of Johan and Goddert Bram, unless the King and the Realm meets conditions, that such people be needed for the King's service).[179] At this time 'foreign shipwrights', must have meant Dutch shipwrights, considering the Dutch hegemony of merchant shipbuilding and the Braems most certainly must have used Dutch shipwrights. These examples correspond with Danish marine archaeologist, Christian Lemèe's, conclusion on shipbuilding in the province during the reign of Christian IV:

178 Hansson 2016, 22, 24.

179 Marquard 1932, 447, 608, 835.

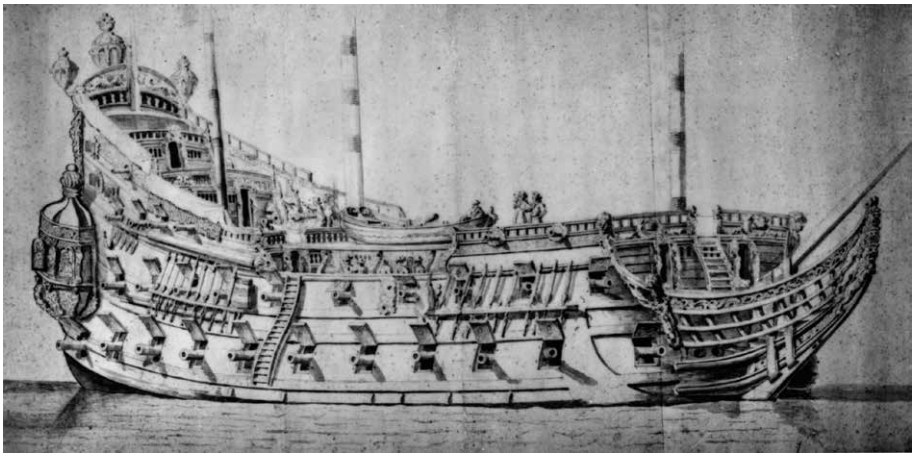


Fig. 3.6. The capital ship *Trefoldigheden* (Trinity), built 1642 in Neustadt. Villiam van de Velde (II). The Danish Maritime Museum.

'Danish textual sources point to the existence of an innovative skeleton-based shipbuilding method used within State-controlled shipbuilding, influenced by English and Scottish shipbuilders who were working for the Crown in the late 16th and early 17th centuries. On the other hand, it seems that private shipbuilding was conservative and stayed with the traditional shell-based methods, which were influenced by Dutch techniques.'[180]

In the latter half of the reign of Christian IV, at least four large or medium-sized warships were built at a newly constructed shipyard in Neustadt. It was probably the king himself who in 1637 urged his factors in Hamburg, the great merchant A. B. Berns and his father-in-law, the rich Dutch financier and merchant Gabriel Marselis, to build a shipyard intended to supply warships to the Danish navy. The first ship was the size of the well-known *Store Sophia* and was delivered in 1638, and in 1642 the shipyard supplied the *Trefoldigheden*, aboard which the king lost his one eye during the Battle of Kolberger Heide. In the same year the frigates *Den Graa Ulv* and *Pelicanen* were delivered. The shipyard was looted and burned down during the Swedish occupation in 1644, and the Swedes even managed to capture an almost finished warship, *Ørnen*. Berns and Marselis rebuilt the shipyard after the war and in 1647 they delivered the warships *Hannibal* and *Victoria*. The name of the master shipbuilder at the shipyard in Neustadt is not clarified, but the Danish maritime historian, Probst, states that he built using 'continental methods', *i.e.* the 'Dutch method',[181] which is not so strange, since A. B. Berns was the son of Baltzer Berns, a merchant from Friesland, and Gabriel Marselis came from the province of Holland. Neustadt's location directly opposite Lübeck also indicates that there was one or more Dutch shipbuilders or North German shipbuilders trained in 'the Dutch method'. During the Swedish wars (1657-1660), it became necessary to recruit more shipwrights to repair the worn-out Danish warships, and '25 dygtige Skibstømrere i Lübeck, og Markvard Rodtsten, der jo var sendt til Holland, 30 andre foruden en Mestersvend' (25 good shipwrights in Lübeck and Admiral Markward Rodtsten, who was sent to Holland,

180 Lemèe 2006, 312.
181 Probst 1996, 48.

30 in addition to one master shipwright) were recruited.[182] After the defeats in the Swedish wars and the ensuing economic collapse, no new warships were built for a period of time and naval activities stopped.

In 1662, the then-16-year-old Danish Crown Prince Christian, later Christian V, went on an educational trip abroad, visiting the Netherlands, the Habsburg Netherlands, England and for a long time France at the court of Louis XIV. He spent two months in the Netherlands, where he must have been struck by the Dutch enterprise and military force. At the beginning of June the crown prince landed in northern Friesland with an entourage of 20 people and stayed for a few days in Leeuwarden, where he met Prince William of Orange, later William III of England, for the first time.[183] After arriving in Amsterdam, the Crown Prince visited the Zaandam area 'hvor den store mangfoldighed af schibe byggis och (kronprinsen) saa adskillige slags wærmöller, som Oliemöller, amdammöller, sagmöller og andre' (where the great diversity of ships are build and (the crown prince) saw several kinds of windmills, such as Oilmills, amdammills(?), sawmills and others). Later the party did a 'Tour udi Nordholland og besaa Noerden, Meyden, Möinickendam, Edam, Hoorn, hvor mange skionne Orlogsschibe byggis, Enchuysen, Medemblich og Alckmaer' (trip to North Holland and saw Norden, Meyden, Möinickendam, Edam, Hoorn, where many beautiful men-of-war are built, Enchuysen, Medemblich and Alckmaer). In early July, the crown prince stayed for a few days in The Hague, where Prince William invited him to lunch and this kindness was answered with a dinner invitation, just as the Dowager Queen invited the Crown prince. Later, the de facto leader of the Republic, grandpensionaire Cornelis de Witte, approached the crown prince and assured him of the United Provinces' friendship with the Danish royal house. Afterwards, the trip continued to Brussels, and on 29 July they were in Hellevoitsluis, where 'Hans Kongelige Hoyhed besaa de 7 stöerste Orlogschibe aff den Hollandske Flaaede, Iblandt hvilke war det schib "Endracht" som war Admiral udi det slagh udi Öresund' (his Royal Highness saw the seven largest in the Dutch Navy, among which was the ship "Endracht", that was the flagship in the Battle of the Sound (8 November 1658)).[184] After this they spent a few days in Brussels before crossing the Channel and visiting England. The kindness and hospitality that Crown Prince Christian experienced during his visit to the Netherlands and his close contact with Prince William of Orange may well have made the later king friendly to the United Provinces, and it is interesting to see how much attention was paid to Dutch shipbuilding and the Dutch naval services.

The popular Norwegian naval hero, Cort Sivertsen Adelaer, who had learned his seamanship from the Dutch and had commanded Venetian ships against the Ottoman Empire, returned in the spring of 1662 to Amsterdam, where he married for a second time. Although he had married into a rich Dutch family and had his career among the Dutch, he chose to move to Copenhagen in the same year, where he received the privileges to build a shipyard with a ropework and a sawmill. He must have met either the crown prince or another high-ranking person in the royal entourage, who made him come to Denmark. The following year he was asked to go into royal service, and although the Danish admiral Niels Juel had been prepared to take over the post for some time, on 15 September 1663 Adeler was appointed Admiral and Commander-in-Chief of the Danish-

182 Lind 1896, 132.

183 Bender 2014, 63, 70, 82, 90.

184 RA. Kongehuset. Breve og beretninger om kronprinsens udenlandsrejse.

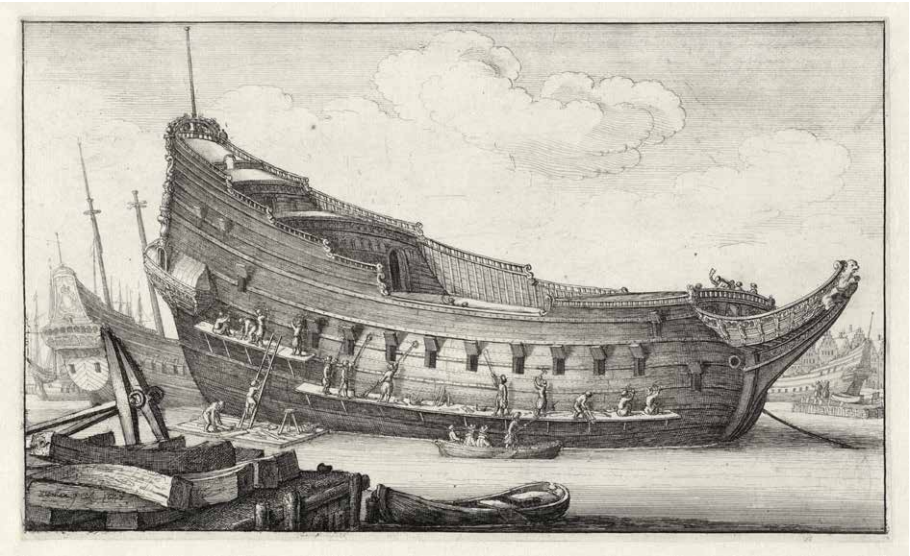


Fig. 3.7. The building of a ship, by Wencelaus Hollar, 1647. Rijksmuseum. RP-P-OB-11.346.

Norwegian Navy.[185] Soon afterwards, he brought the shipbuilder Thies Hermansen van der Burg from the Netherlands, who in February 1664 began the construction of a large warship and in April of the following year another two.[186] With him Hermansen brought about a dozen shipwrights, but also a rigging master (Equipagemester) who was to supervise the renewal of the rigging of the ships.[187]

In 1663, the dane Jonas Trellund, who had built up a considerable trading business in Amsterdam, received royal approval to set up a shipyard in Strandgade in Copenhagen, where a sawmill and a ropewalk were also to be built. Trellund was allowed to recruit two master shipbuilders and some master- and ordinary shipwrights, and these were granted royal permission:

> 'at komme hid og atter begive sig bort igen og saasom det i Holland brugeligt er, at benytte sig af den Præst, de ønskede' (to come here and leave again and use the desired priest, as is the custom in Holland).[188]

Whether the plan succeeded is unknown, but the incident shows that the authorities were prepared to accept Reformed Church practice in an otherwise orthodox Lutheran country, in order to attract Dutch craftsmen. In 1665, however, Captain Jens Rodsten was sent to the Netherlands for shipwrights and various equipment for the fleet[189] and in the same year the list of shipwrights at Holmen counted 109 Dutch, Lübeck and Hamburg shipwrights.[190] According to the Danish historian Garde, Adelaer also facilitated a number of Danish

185 Topsøe-Jensen & Marquard 1935, Vol I, 8.
186 Barfod 1997, 17.
187 Garde 1861, 243.
188 Fabricius, Vol II, 360.
189 Topsøe-Jensen & Marquard 1935, Vol I, 392.
190 Lind 1896, 238.

shipwrights being sent to the Netherlands to learn the newest construction methods.[191] In the next few years Thies Hermansen v.d. Burg constructed a large number of smaller warships and frigates and the Danish maritime archaeologist, Jens Auer, concludes, 'that at least in the first part of the period of Dutch influence between 1660 and 1685, most of the small cruiser in the Danish navy were built along the lines of Dutch warships, using Dutch ship design methods'. One of these, the frigate *Mynden*, was excavated off the coast of Rügen in 1993 and again in 2000 and, compared with similar international finds, can be categorised as a small Dutch cruiser. [192] Considering the above-presented presence of Dutch shipbuilders at Holmen, Auer's conclusion about the smaller warships must also apply to the larger warships from this period.

The shipyard in Neustadt also played a role during the reign of Frederik III (1648-1670). In 1652 a new warship was delivered to the navy, but it was not Berns and Marcelis who were the contractors. It might be possible that the contractor was the shipbuilder Claus Reimers, who had already taken over the yard. In the1660s he constructed a number of large warships for the Royal Danish Navy. [193] In 1665 he delivered *Tre Croner* and two years later the warship *Prinds Christian*. Taking into account the earlier mention of the Neustadt shipyard in the 1660s, it is likely that Claus Reimers also used 'the Dutch method'. At the royal shipyard in Copenhagen, the Holmen, Thies Hermansen continued to work and in 1673 he delivered the warships *Christianus Quartus* and *Fridericus Tertius* and two frigates. In 1680, however, a new master shipbuilder, Cornelis Thomsen, was to build a new large warship, but using the templates of the old master shipbuilder, Thies Hermansen. Thomsen's sense of honour was hurt, and he was allowed to build according to his own plan, which resulted in the warship *Christianus Quintus*. Four years later, Cornelis Thomsen was so ridden by illness that he was dismissed and replaced by the Englishman Shelton,[194] which is why the Dutch influence on the Danish fleet must have declined from this point on. Yet Thies Hermansen's son, Herman Thiesen, was still active. In 1983, at Stolen in Norway (Vesterøy), the wreck of the *Lossen* was surveyed. She was a Danish warship that sank in 1717. According to historical sources, *Lossen* was built in Fredrikstad in Norway in 1684 by the Dutch shipbuilder Herman Thiesen, and the wreck has a characteristic box-shaped hull, which is common to Dutch shipbuilding traditions.[195]

In 1672, another Dutchman, Jan Schudt, became active as a shipbuilder at Bremerholmen. Thies Hermansen v.d. Burg was clearly the master builder and constructed the large ships, and it seems that it was left to Jan Schudt to build the smaller frigates and snows. The marine archaeologist Jens Auer is of the opinion that Schudt was heavily influenced by v.d. Burg in his early works, but that he subsequently developed vessels that deviated from a typical Dutch design and presumably were adapted to Danish conditions. However, Auer also points to the fact that Thies Hermansen v. Burg and Cornelis Thomsen both made use of traditional Dutch ship design and methods.[196] During the 1680s and -90s, Dutch craftsmen were continuously recruited to Copenhagen. For example, the Danish consul in Amsterdam, J. N. Abo, recruited shipwrights and

191 Garde 1832, 162.
192 Auer 2008, 146, 148.
193 Lauridsen 1982, 75.
194 Barfod 1997, 19, 22, 38, 95, 103.
195 Grue 2010, 60.
196 Auer 2008, 133, 143.

sailmakers to Bremerholm.[197] In 1690, Admiral Henrik Span became the head of Holmen and chief inspector of the Port of Copenhagen. Span, born in the county of Schaumburg in Oldenburg, served throughout his youth in Dutch ships and learned shipbuilding according to the 'Dutch method' in the Netherlands. Span made construction drawings for 90-, 72- and 54-cannon ships, which were approved by the king, and he also designed the first floating dock in the kingdom.[198] After Span, it was Olaus Judichær who designed and supervised the building of Danish warships, and he seems to have been influenced by Henrik Span's design and construction methods at the beginning of his career. However, it was Judichær who, with the introduction of various mathematical ship design principles and with inspiration from English shipbuilding methods, finally ended the Dutch influence on the design and construction of Danish warships.[199]

It seems that Dutch shipbuilders had a strong influence on the building of Danish warships all the way back from King John up to the beginning of the 18th century. Both Frederik II and later Christian V were interested in Dutch maritime know-how and brought Dutch experts to the realms, and during Christian IV's reign there was a Dutch influence on the Royal Danish Navy from Peter Michelsen and the Neustadt shipyard. With the activities at the Holmen of the Dutch shipbuilders in the latter part of the 16th century, a foundation of Dutch shipbuilding methods and terminology was established in the navy shipyard in Copenhagen. However, the peak of the influence of the Dutch shipbuilders on Danish shipbuilding and design must be said to have occurred in the period after Cort Sivertsen Adelaer was recruited into Danish service and before the employment of Olaus Judichær in 1692.[200] As mentioned earlier, it is most likely that Dutch shipbuilding technology and terminology was transferred from the Holmen and out into the realms by the annual conscription of shipwrights from the provinces,[201] who, by participating in the practice communities at Holmen, acquired this kind of knowledge and experience. In the article *Renæssance i småskibsbyggeriet – arkæologisk set* (Renaissance in small ship construction – archaeologically), Morten Gøthche and Jan Bill deny that Dutch construction methods found their way into the provinces of Denmark in this way, emphasising that at Holmen shipbuilding was done according to English methods.[202] However, as shown by the example of the Swedish warship *Solen*, English design principles and Dutch construction methods could easily go hand in hand; furthermore it has been shown that there were Dutch shipwrights on Holmen under the Scotsman Balfour in 1625 and that Dutch master shipbuilders were present in the realm for a much longer time period than the first half of the 17th century, when Sinclair, Piettersen and Balfour were active.

197 Fabricius 1945, Vol I, 214.
198 Topsøe-Jensen & Marquard 1935, Vol II, 535.
199 Topsøe-Jensen & Marquard 1935, Vol I, 675.
200 Topsøe-Jensen & Marquard 1935, Vol I, 675.
201 Rohden & Thaarup 2012, 224.
202 Bill & Gøthche 2006, 56.

3.2 Dutch sailors in the Royal Danish Navy

3.2.1 Dutch naval officers and navigators in the Royal Danish Navy

Through the aforementioned conscription of shipwrights from the provinces, the shipbuilders and shipwrights at Holmen came into contact with the local shipwrights, and through practice communities where the Dutch were veterans, shipwrights from the realms of the Danish king acquired the new methods and terminologies, but it was the navigators and naval officers who had daily contact with the enlisted personnel in the navy, and who communicated with and commanded these. On such ships, it was the veterans, the Dutch naval officers, who formed the centre of the on-board practice communities and the enlisted crew who were peripheral legitimate participants and who through the activities and routines initiated by the Dutch officers learned the standards, modes of action and values of the practice community. In the following the extent to which Dutch naval officers and navigators were present in the Royal Danish Navy will be examined and an assessment will be made as to what impact this may have had on the maritime culture of the Danish conglomerate state.

As Dutch shipping activities in the Baltic expanded after 1580, it seems obvious that the Royal Danish Navy recruited competent commanders and navigators from the Netherlands. The written sources, however, do not leave many traces, but in 1619 Christian IV employed the internationally renowned cartographer and explorer Joris Carolus from Enkhuizen as 'Læremester og Underviser for vore Styrmænd, Sø- og Skibsfolk' (tutor and teacher of our navigators, mariners and sailors).

Initially, the teaching took place in the attic of the church of the Holmen, but later the school moved to Vandkunsten (area around the fountains), where the 'Star gazer', as Carolus was called, taught until he left the position in 1624. In 1626, Joris Carolus published an at-the-time very respected collection of maps 'Het Nieuw Vermerte Lich des Zeevaerts', in which maps of the west coast of Greenland with Dutch names appear.[203]

The king thus found one of the most accomplished seafarers in the Netherlands at the time and instructed him to teach his navigators, which must have left traces in the naval practice of the navy. However, there were many other Dutchmen who joined the service of Christian IV. But it is difficult to determine the place of birth for many of them. In the Chancellor's letterbooks, some skippers and commanders with Dutch-sounding names appear, but we cannot be sure of their background.[204] The 19th century Danish historian, H. D. Lind, estimated that out of 440 naval officers serving in the navy at this time, around 20% were of Dutch background. Some can be identified as Dutch:

In March 1629 skipper Johan Cornellissen commanded the warship *Havhesten* with the later Frederik III aboard to the Netherlands. Already in 1617, Cornellissen skippered a merchant ship from Copenhagen to Northern Norway, and in 1618 he joined Ove Geddes' expedition to the East Indies as the mate on the *Christian*, a voyage where all navigators were from the Netherlands.[205] In 1630 we also find a Dutch skipper in the king's service: '4. Juni1630 (Kbhv). Søpas for Kaptejn Bastian Ehling af Flissing i Seeland til med sit Skib *Lammet* straks at begives sig herfra til Vestersøen under Island og andet steds paa Kongens Strømme og holde

203 Fabricius 1945, Vol II, 390.

204 Laursen 1915. 209, 344. Laursen 1925, 96, 127, 626. Marquard 1932, 68.

205 Lind 1889, 131, 269, 292.

Fig. 3.8. Portrait of a naval commander, probably vice-admiraal Aert van Nes (1626 – 1693) by Ferdinand Bol, 1667. Rijksmuseum SK-C-107.

Strømmene rene, for at Kongens Undersaatter og andre Søfarende' (4 June 1630. License to Captain Bastian Ehling from Vlissingen in Zeeland, who is ordered to board his ship, the *Lam*, immediately to sail from here to the western sea under Iceland and other waters of the king, and to keep these waters free for the king's subjects and other mariners).[206] In 1645, Gilles/Jelles Lennertsen/Lennertz was commissioned captain in the navy, and as he reportedly had knowledge of fishing, he was sent by the king to Norway 'til Fiskeriets Fremmede' (for the advancement of the fisheries). He must have returned to the Netherlands shortly afterwards,

206 Marquard 1932, 142.

because in 1648 he was recruited by the Danish factor in Amsterdam, Gabriel Marselis, for Danish service with a payment of 400 rigsdalers. At the same time Lennertsen arranged for his son to come to Denmark. He remained in Danish service, for in 1658 he was captain of the man-of-war *Norske Løve*.[207] Jelles Lendertsen was probably not the only Dutch naval officer recruited by Gabriel Marselis, for in 1645 he received the sum of 10,000 rigsdalers to secretly recruit 10 captains and 6,700 sailors in the Netherlands.[208]

In connection with the Swedish wars (1657-1660), the sources run a little quicker. In preparation for the upcoming war, Selius Marselis (the son of Gabriel Marselis) was entrusted with recruiting seamen and skilled naval officers in the Netherlands to the Royal Danish Navy. In the spring of 1657, the Dutchman Harman Valman, along with Frederik de Køningk and Captain Reinike Tiebert Bishop, was recruited. Tentative contact was made with 'young' Tromp (Cornelius Tromp) to hear if he would take on the job as commander of the navy, but it did not succeed. After the wars of 1657-1659, the navy was inactive, with little going on, and it was not until 1663, when Cort Sivertsen Adelaer was commissioned as Admiral General of the navy that the level of activity increased. Again, Dutch sailors were needed.

The frigate *St. Mikael* was bought for the Royal Danish Navy by the Dutchman Arnt Tengnagel, who arrived in Copenhagen on board the vessel in May 1664. Tengnagel had been appointed master in charge of naval equipment at the Holmen. It was a post with great responsibility, as this position demanded a deep insight into the rigs and materials of the ships, and the procurement and repair of the same. However, in February 1665 Tengnagel died, and Reiger Pieters of Schiedam in the Netherlands replaced him. He had served as a commander in the Royal Danish Navy during the Swedish wars and came from Venetian service to Denmark. However, it was not until May 1666 that he, along with several other Dutch officers, was appointed into the service. They came to Copenhagen aboard the eight warships leased from the General States and, in addition to the ordinary Dutch crews, the company was made up of 16 captains and 17 lieutenants.[209]

In the period 1663-1669, 31 Dutch naval officers were found serving in the Danish-Norwegian navy. Most of them were captains or lieutenants and thus had direct contact with the crews. [210] An example is the Dutch naval officer Carsten Krintzen de Rechter, born in 1622 and recruited by Cort Adelaer in 1669 as chief mate on the *Havhesten* for a trip to the East Indies. From there he returned in 1672 on the East Indiaman *Mageløs*, and on his return to Copenhagen he was promoted to captain. Immediately afterwards he was again sent to the East Indies, this time as commander of *Håbet*. After returning home and a short spell skippering another navy vessel, he was ordered ashore in 1677 and took up the position of master in charge of naval equipment at Bremerholmen. He held this important post until Christmas 1684, after which he was put on half pay until his retirement in 1697.[211]

The Norwegian naval officer Cort Sivertsen Adelaer played a very important role in the massive influence of Dutch experts on the Royal Danish Navy in the 1660s and 1670s. The maritime historian Garde wrote about him, that because of his many years in Dutch and Venetian service, 'in his older years he did'n become quite familiar with the conditions at

207 Lind 1889, 320.
208 Fabricius 1945, Vol II, 402.
209 Lind 1896, 103, 120, 230, 239.
210 Topsøe-Jensen & Marquard 1935, Vol I, 238.
211 Topsøe-Jensen & Marquard 1935, Vol II, 365.

home. In his opinion, everything with us should be arranged in the Dutch way, and in the end not only the material, but also at least a large part of the personnel was found there'. According to Garde, Dutch officers in the naval officer corps made up half the force in the period around the Scanian War (1675-1679), and this naturally created an animosity towards them among the king's own subjects. [212]

According to the manning plan of the Danish admiralty of 1673, it was necessary to recruit – in addition to the conscripted crews from the realms – another 3,000 ordinary sailors, 16 captains, 25 lieutenants and 40 navigators abroad to have the navy fully manned,[213] and by the outbreak of the Scanian War in 1675, it was in the Netherlands that sailors and officers were to be recruited for the navy. Already in June of the same year, the first recruitments took place and naval authorities were very eager to get hold of the best, which is why very large sums were given in down payments. Thus, on 16 August 1675, Captain Franz Brouwer was paid 1500 guilders, the equivalent of 600 rigsdaler and it was agreed that he should have a monthly salary of 100 rigsdaler. In contrast to this an ordinary sailor was paid 14 guilders immediately when recruited and then the same 14 guilders as monthly pay! The following year, Captain Willum Kniff was recruited with an advance of 1700 guilders.[214] During the Scanian War, the number of Dutch naval officers peaked in the Royal Danish Navy, and 121 such officers have been found in the navy muster rolls for the period 1675-1679.[215]

Their significance for the spread of Dutch maritime language, culture and technology in the navy cannot be underestimated, since they commanded Danish warships with Danish-Norwegian crews and probably did not speak Danish. The Battle of Koge Bight on 1 July 1677, where the Danish admiral, Niels Juel, defeated a superior Swedish force, has been seen internally in the Danish Navy as a solely national effort: 'Desuden var sejren af den største nationale betydning. Niels Juel havde sejret uden fremmed hjælp, og det kom for den danske flåde i tiden fremover til at spille en afgørende rolle' (Besides, the victory was of the greatest national significance. Niels Juel had been victorious with outside help and this played a decisive role for the Royal Danish Navy in the future).[216] This can of course be said to apply to Niels Juel himself, although he also learned his robes aboard Dutch warships,[217] but if you look at the composition of the officers who were in charge of the ships in the three squadrons of Juel, then it turns out that 15 out of 27 commanders were Dutch. And that is just the commanders. Below them, they each had several officers; two years before, in 1675, many of these were from the Netherlands. On the *Charlotte Amalia,* the flagship of Niels Juel, he had with him the Dutch captains Adrian Ackersloot and Hex Happe and the Danish Zoufren Axlaug. His ship's priest was named Henrich Cornelis, and besides him there were on board three naval lieutenants; Jan Foixen van Embden, Robbert Monrot and Jørgen Carstens. On the flagship of the pro-Dutch Cort Adelaer, the *Prins Jørgen*, the Dutch were, not surprisingly, the majority: three Dutch captains, four Dutch lieutenants and one Dane. A Danish army captain with two Dutch lieutenants and then the priest, who was called 'Johan Ambsterdam'. At the aft decks of the

212 Garde 1861, 251-252.
213 Barfoed 1997, 37.
214 RA. AFMAUD.
215 Topsøe-Jensen & Marquard 1935, Vol I, II. RA: Mønsterskriveren ved søfolket (søetaten). Registerbøger over kaptajners og løjtnanters kostpenge. AFMAUD.
216 Barfod 1997, 74.
217 Garde 1832, 210.

Fig. 3.9. Portrait of Cornelis Tromp by Lambert Visscher after Ferdinand Bol, 1665 – 1702. Rijksmuseum. RP-P-OB-70.332.

other two admirals, the brothers Jens and Marquard Rodsten, around half of the officers were Dutch.[218] It is therefore very likely that at least half of the Danish-Norwegian naval officer corps during the Scanian War were Dutch, so Barfod's claim that the victory at Koge Bight was a Danish national triumph is quite misleading.

218 RA. Mønsterskriveren ved søfolket. Registerbøger over kaptajners og løjtnanters kostpenge.

On 5 November 1675, Cort Sivertsen Adelaer died, but instead of making Niels Juel the new head of the navy, the king instead chose the Dutchman Cornelis Maartenzoon Tromp, who on 21 March 1676 agreed to lead the Royal Danish Navy as General Admiral.[219] Tromp was known throughout Europe as a skilled and charismatic fleet commander. In 1658, he had fought under Admiral Opdam as a Schoutbynacht against the Swedes in the Sound, and during the Second Anglo-Dutch War in March 1665, he was appointed Vice Admiral of the Admiralty of Amsterdam. Later that year he was appointed commander-in-chief of the combined Dutch navy, a position which he later had to leave. In 1672, in the face of a renewed French threat to the United Provinces, he was again appointed lieutenant admiral and commander of Amsterdam's naval division with Michiel de Ruyter as commander-in-chief of the overall Dutch navy. In the two subsequent battles at Schooenvelt off the coast of the province of Zeeland, he displayed great tactical understanding and courage, and in the Battle of Texel, his flagships were battered so much that he had to move his command to a new ship three times.[220]

It was thus a very competent and experienced man who was put in charge of the Danish navy, and his appointment upset the Swedish opponent so much that the Swedish ambassador in The Hague, Johan Philip Silbercrone, became furious and declared that his most important task was to prevent Tromp from coming to Denmark, just as he tried to persuade the admiral not to leave. However, the attempt was unsuccessful, and Cornelis Tromp arrived in Copenhagen in May 1676,[221] and subsequently led a combined Danish-Dutch fleet which triumphed at the Battle of Öland on 1 June. The following year, Tromp came to Denmark with a Dutch auxiliary fleet and commanded the fleet that carried out the landing of the Danish troops on Rügen, but in the spring of 1678 he was dismissed by the Danish king.[222] Putting a foreigner in charge of the entire Danish-Norwegian navy in wartime and even disavowing his own qualified officers illustrates that Christian V was very Dutch-oriented, but of course due to Tromp's reputation he tried to play a safe card. It seems very likely that the Danish naval officers commanded by Tromp must have understood Dutch in order to execute the admiral's orders, as it seems unlikely that the Dutch naval hero would have spoken Danish.

3.2.2 Ordinary Dutch seamen and petty officers

It was not only officers and navigators who were recruited into Danish naval service in the Netherlands, but also ordinary sailors. During the Nordic Seven Years' War (1563-1570), of course, seamen were needed to man the many ships in the navy of Frederik II, but it was not always easy to recruit them. The royal recruiters were threatened by the seamen in the Danish cities when they attempted to enrol sailors, and mayors and councils did not obey the king's demands and supply sailors for the navy. This was perhaps why the nobleman Peder Huitfeldt was sent to the Netherlands in 1567 to recruit seamen.[223] When Ove Giedde's expedition returned from the East Indies in 1621, the success had to be followed up, which is why Jens Munk was sent to Amsterdam to recruit sailors to man new ships for the next expedition. In 1641, Christian IV sent a navy captain to the Netherlands to recruit seamen for

219 Barfod 1997, 44.
220 Hallema 1941, 82, 134, 168, 188.
221 Christensen 2014, 199.
222 Barfod 1997, 53, 83.
223 Lind 1902, 217.

the navy and for the Danish East India Company,[224] and in the same period Gabriel Marselis, the royal factor in Amsterdam, recruited hundreds of sailors to the king's service.[225]

In the 1660s, the navy acquired manpower via conscription in the port towns, but also through recruitment, in particular from the Netherlands.[226] Thus, in 1666, Cort Sivertsen Adelaer was in the Netherlands to recruit both officers and sailors.[227] In the naval muster rolls from the Scanian War are listed 2017 men and petty officers who were recruited in the Netherlands. Of these, 942 were Scandinavians and 1075 were Dutch, Germans, Englishmen, Frenchmen and others. 751, or 37 percent, of all recruits came from the United Provinces and from the Spanish Netherlands, present-day Belgium. 12 percent or 240 sailors came from present-day Germany as well as from the then-German-speaking areas of the Eastern Baltic, *e.g.* Königsberg and Danzig. 66 sailors were British, 13 were Frenchmen, two Spanish and two Italian, and finally there were also five sailors from various locations in the Caribbean.[228] The Dutch and German seamen constituted the two largest groups, making up a total of over 49 percent of all recruited seamen, and it is striking that in these two groups, and especially among the Dutch seamen, there were proportionally more petty officers than among the Scandinavian seamen, constituting as many as 73 percent of all recruited petty officers. In the spring and summer of 1675, the Danish authorities were very eager to attract skilled sailors, which can be seen by the fact that the advances for even ordinary seamen were very high. Thus, on 23 July 1675, the sailor Bertel Jacobsz of Franeker in Frisia was paid 198 guilders up front, which corresponds to more than a year's wages, and on the same day Arnou Pietersz from Amsterdam was paid 168 guilders when signing on. In 1675 the average advance money was about 100 guilders for the 50 Dutch sailors who were recruited that year. In March 1676, when recruitments recommenced, there must have been very few sailors to get hold of, for the advances were now even higher than the year before. On 10 March of that year, the ordinary sailor, Jacob Sturharde of The Hague, was paid no less than 400 guilders up front, which is far more than even officers received in advance later in the war. Another point is, however, that the stated origin of the Dutch sailors also indicated that they were experienced people. 68 percent came from major maritime centres such as Amsterdam (218 or 30 percent), Enkhuizen (60 men), the Gouw area (43), Hoorn (20) and Medenblich (20).[229]

Because king Christian V had changed his alliance there was a prospect of war in the winter of 1682-83, and once again the Royal Danish Navy turned to the Netherlands to provide sailors. Cornelis Justsen, who had served as a captain in the Royal Danish navy and now lived in Amsterdam, was asked to recruit sailors and was subsequently again commissioned with this rank. In connection with the attack on Hamburg in 1687,[230] Cornelis Justsen again had to go to the Netherlands to recruit sailors.[231] During the unfortunate conflict in 1700 (where the Swedish king Charles XII suddenly landed on Zealand and marched on Copenhagen) about 6500 men were needed to man the fleet, and here 30 percent of these were acquired in Hamburg, Bremen and the Netherlands, while the rest were enrolled in

224 Degn & Gøbel 1997, 142, 154.
225 Fabricius 1945, Vol II, 398.
226 Barfod 1997, 111.
227 Topsøe-Jensen & Marquard 1935, Vol I, 8.
228 RA. AFMAUD.
229 RA. AFMAUD.
230 Barfod 1997, 99.
231 Topsøe-Jensen & Marquard 1935, Vol I, 693.

Norway and Denmark. In 1705, in order to overcome the problem of acquiring sufficiently qualified sailors for the navy, a maritime enrolment system was introduced in Denmark, Norway and Schleswig in which 13,000 men were listed: 29 percent from Denmark, 7 percent from Schleswig and 64 percent from Norway, but despite this, during the Great Nordic War (1709-1721), additional sailors had to be recruited repeatedly in the duchies, Hamburg and the Netherlands.[232] Thus, in 1710, Captain Ulrich Kaas was in the Netherlands and was recruiting both in Amsterdam and later in Embden.[233] After the end of the long war, the Danish conglomerate state stayed out of European conflicts, and the enrolment system of 1705, which had not worked very effectively, was abolished in 1726. However, in 1739 it was reintroduced as an improved version, and with this system the navy could now finally secure enough and sufficiently qualified manpower from the realms of the Danish king.[234] It has, however, been shown that in the 17th century, and especially in the last part, a large number of Dutch sailors and petty officers were recruited for the Royal Danish Navy, and that they participated in the joint practice community on board with their Danish colleagues. As we have seen before, in such practice communities, there were a constitution of what this practice community consisted of through negotiation between the participants, where input from newcomers was incorporated,[235] which is why both the recruited Dutch sailors and the enrolled men from the realms of the Danish king were affected.

3.3 Dutch sailors and navigators on Danish and Norwegian merchant ships

Early in the reign of king Christian IV (1588-1648), there is evidence of the presence of Dutch skippers and sailors in the navy as well as in the merchant fleet. Thus, in 1600, the King had to issue a warning to the merchants of his realms against the use of Dutch skippers, captains and merchants: 'Da Kongen af Spanien agter dem for sine rebelliske Undersaatter at være og endog at slige Personer ere bosiddende her udi Riget, og men dermed fri at ville være, saa bliver de dog af Kongen af Hispaniens Bestellere og Udliggere antastet og siden med vore Undersaatters store Skade og med deres Skib og Gods Eventyr maa randzonneres' (Since the king of Spain regards them as his rebellious subjects, even though these persons live in the Realms and as such are free men, they are nevertheless attacked by the supporters and privateers of the King of Hispania and later to the great damage of our subjects and their ships and goods have to be ransomed). As this warning was issued to the 14 largest cities in the kingdom, including Copenhagen, Bergen and Aalborg, it must be assumed that in at least some of these cities, the practice of using experienced Dutch mariners was common.[236]

Presumably in 1615 the Dutchman Roland Crappe came to Copenhagen. He had previously sailed for VOC and worked his way up the ship's hierarchy from ship's boy to navigator and merchant.[237] In August 1618, Crappe departed on board the *Øresund* as commander en route to the East Indies, and in November of the same year the main squadron, led by the young nobleman Ove Giedde, left Copenhagen. The squadron consisted of the two warships

232 Degn & Gøbel 1997, 155, 156.
233 Topsøe-Jensen & Marquard 1935, Vol I, 714.
234 Bjerg 2010, 86.
235 Lave & Wenger 2003, 99.
236 Fabricius 1945, Vol I, 174.
237 Lauring 1988, 86.

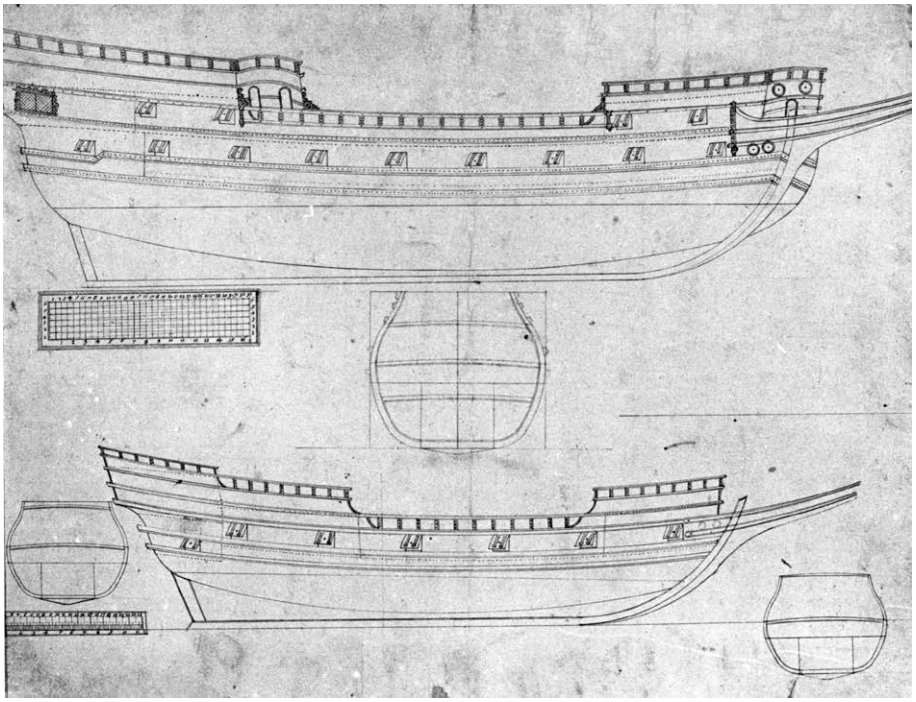


Fig. 3.10. The constructiondrawing for two Danish warships, presumalble by David Balfour around 1600. The *David* should be one of them. The Danish Maritime Museum.

Elefanten and *David* as well as the company ships *Christian* and *København*,[238] and since no ships from the realms of the Danish king had ever been sent to Asia, all the navigators and most of the ordinary seamen had to be recruited in the Netherlands.[239]

The result of the first Danish-Norwegian East Indies expedition was the founding of the colony of Trankebar on the Malabar coast. Ove Giedde returned to Copenhagen in 1621, but Roland Crappe remained in Trankebar as governor for another year before returning home as well. The following year he was again sent to Trankebar as governor of the colony, which he remained until 1637.[240] In 1635, when the converted man-of-war *Sankt Anna* was to be dispatched to the East Indies, three Dutch navigators were already taken on in September 1634, and thus had to wait almost a year for departure. In total, the three Dutchmen were paid about 1000 rigsdaler, which of course proves how valuable their services were considered to be. The VOC and the General States were jealously guarding the knowledge of the sailing routes to the East Indies, and taking such information out of the republic and sharing it with other nations was punished with the death penalty. Therefore, the three navigators were smuggled out of the country from Vlieland instead of simply departing from Amsterdam.[241] In the first years after the founding of the colony,

238 Klem 1943, 77.
239 Mortensøn 1995, 51.
240 Klem 1943, 78.
241 Degn & Gøbel 1997, 155.

frequent voyages were made, but during the 1640s and 1650s the traffic to and from the East Indies deteriorated, eventually to cease altogether.

In connection with the establishment of *Kompagni til Grønlands besejling* (The Greenland Company) in 1636 we find the navigator and cartographer Joris Carolus, who was now captain of the *Røde Løve* and conducted an expedition to Greenland. Later, we find another Dutchman, David Urbanus Dannel, who in 1644 was commissioned as ship's captain by Christian IV. In the period 1652-655, Dannel made three trading voyages to Greenland and later on he was given a seat in the Admiralty Court, dying in 1661.[242]

In order to resume contacts with the Far East, in 1688 Admiral Cort Sivertsen Adelaer sent the warship *Fœrøe* to Trankebar, where contacts were re-established, returning home with a rich cargo. The *Fœrøe* was commanded by Adelaer's son, the Dutch-born Sivert Adeler, who, in addition to calling at the Danish fort in Tranqebar, Dansborg, also reached Bantam (on the western end of Java), where he founded a Danish trading station.[243] Subsequently, a new East India Company was established in 1670 with Cort Adelaer as director, and in the following years a number of former warships were sent to the colony. One of the Dutch navigators who took part in these expeditions was Carsten Krintzen de Recter, who in 1669 was first mate (and thus chief navigator) on the warship *Havhesten* on a voyage to the East Indies and who returned the following year on the ship *Mageløs* also as first mate. From 1672 to 1676 he was in command of the warship *Haabet* on an expedition to the Far East, and a few years later became master of equipment at Holmen.[244] In 1670 the navy handed over the warship *Voogel Phoenix* to the East India Company, and the same year she was sent to Tranquebar. In 1671, several former warships were sent to the East Indies*: Oldenborg, Mageløs, Havhesten* and *Fortuna*, the latter commanded by the Dutchman Bernt Berentsen.[245]

In 1677 the *Voogel Phoenix* was to sail to the Far East again, and this time the commander was Anthonie van Dooren from Rotterdam. He was recruited in Bantam in 1674, when the Danish East Indiaman *Oldenborg* needed an experienced navigator. On the return voyage, the captain of the *Oldenborg* died, and the ship's council chose van Dooren as his replacement. Jan Leendersen Lindeman from Monikendam in North Holland was also aboard the *Oldenborg* and sailed as second mate. Lindeman had made a voyage to the Far East in 1670 with the VOC ship *Saxemborg* and thus also had experience of long-distance sailing. Besides him, the third mate, Heyndrich Thijsen, was also from the Netherlands, which also applied to a large part of the crew. On the return voyage Anthonie van Dooren died and Jan Lindeman was elected new captain by the ship's council. [246]

Jan Jansen Bloem, who was recruited in the Netherlands for the Royal Danish Navy in 1678, was granted leave in 1680 in order to take *Grisen* to the West Indies for the Danish West India Company and returned the following year. In 1682 he was granted another leave from the service to take the frigate *Havmanden* on a voyage to Guinea and later on to the Danish colony in the Caribbean. During the voyage, the crew and the convicts aboard the ship rebelled and killed the ship's officers and passengers. Jan Dons of Antwerp, who had served as a navy lieutenant, was sailing aboard as first mate and was also killed. Another example is Captain Jan Emmerich, who had previously sailed as a mate in the Far East, and

242 Fabricius 1945, Vol II, 392.
243 Topsøe-Jensen & Marquard 1935, Vol I, 9.
244 Topsøe-Jensen & Marquard 1935, Vol II, 365.
245 Barfod 1997, 33.
246 Parmentier 1985, 116-135.

Fig. 3.11. Portrait of a captain or a shipowner by Michiel van Musscher, 1678. Rijksmuseum. SK-A-2331.

who commanded the warship *Flyvende Ulv*, which in 1681was lent to the East India Company. In 1683 he returned from Tranquebar and resigned in 1684 from the navy in order to make another voyage by ship to the Far East. In 1685 he sailed again with *Flyvende Ulv* and this time he had Jan van Houen, from Alst in Flanders, as skipper (chief navigator). In 1689, it was Marten van Beckum of Alkmaer who was captain of the *Flyvende Ulv*, but he lost her in 1691 at Plymouth on the return voyage. Another Dutch former naval officer was Anthoni Frantzen from Rotterdam. After fighting in the Scanian War, he was decommissioned in 1680 and later joined the East India Company, where in 1684 he commanded the *Voogel Phoenix* to Tranquebar and Malacca.[247]

247 Topsøe-Jensen & Marquard 1935, Vol I, 83, 151, 305, 335, 636.

Fig. 3.12. Clay figure of supercargo Pieter van Hurk, by unknown Chinese artist in Canton, 1731. The Danish Maritime Museum.

During the Nine Years' War (1688-1697) some Dutch skippers sought protection under Danish colours, because of the risk of French privateers. In this period, 274 skippers were granted citizenship in Copenhagen, and over half of these were Dutch. The fact that these were clearly economic refugees can be seen at the end of and after the war, when 117 skippers again left the city, out of which 33 returned to the Netherlands. Because many of the larger Copenhagen merchant ships were commanded by Dutchmen during the war, replacing them after the war caused problems.[248]

During the 17th and the first parts of the 18th century the Danish East India Company sent out numerous successful expeditions to Trankebar, employing a great many Dutch sailors and merchants.[249] However, the Great Nordic War (1709-1721) and subsequent poor economic conditions led to a decline in revenue, and in 1729 the company renounced its monopoly and the East India trade and closed. That same year, however, initiatives were taken to open up trade at Canton, where other nations had been established for a long time. [250] An interim company was formed, which was to continue trading at Trankebar, but also to try to establish itself in the China trade. However, no one in Copenhagen had the necessary experience to take a ship to China or knowledge of the conditions in Canton, but at the same time in 1730 the East India Company in Ostend went bankrupt, providing a chance to obtain the necessary expertise. Thus, Guillielmo de Brouwer was recruited in Ostend as chief mate under the command of the Danish naval officer Michael Tønder, but since Tønder had only sailed in northern European waters, Brouwer was in fact the captain of the ship. Brouwer had previously sailed as 2nd and 1st captain of company ships from Ostend and together with the supercargo Pieter van Hurk, who was also recruited in Oostend, he made the navigational plans for the ship *Cron Printz Christian*, which left Copenhagen in the autumn of 1730. After returning home in 1733, Guillielmo de Brouwer was employed by the newly formed Danish Asiatic Company and commanded the former warship *Schleswig* to Canton that same year. With him on board he had the second mate, Pieter Brunet, who had previously sailed for the Ostend Company as a mate and since then as captain. In 1737 *Schleswig* departed again to China, and this time the second mate was Phillipus de Vos, who had made four voyages to Canton with ships from the East India Company in Ostend. De Vos made three voyages with *Schleswig* and was appointed captain in 1741. In the period from 1730 to 1747, a total of seven navigators and three supercargoers were recruited from Ostend to the East India companies of Copenhagen. [251] In addition to taking the company's ships safely to China and back to conduct trade out there, it was also the task of the Ostend navigators and merchants to teach Danish navigators and merchants about the China trade, which is why, after 10 years, the company no longer needed foreign expertise.[252]

Like the Nine Years' War, the Fourth Anglo-Dutch War (1781-1784) caused some sailors to leave the Netherlands and settle in the neutral Danish kingdom. In the skipper's examination protocols of Copenhagen there are 22 Dutch navigators who were to be examined in order to command a ship under Dannebrog. How 'Danish' these sailors became

248 Fabricius 1945, Vol I, 212.
249 Degn & Gøbel 1997, 146.
250 Klem 1943, 81.
251 Parmentier 1989, 142-153.
252 Feldbæk 1997, 55.

is not easy to judge, but 17 of the 22 men actually took citizenship in Copenhagen.[253] In the years 1781-1790 nine of the 22 navigators sailed for the shipping company De Coninck and Reiersen, and eight of these indicated Rotterdam as their birthplace. [254] In the Sound Toll Registers we find another of these Dutch skippers, namely Jacobus van der Plaats, who was examined by the Copenhagen Skippers' Guild on 24 January 1782 and four days later took citizenship in the city. [255] On 15 May of that year, he was registered as a Copenhagen skipper at the Sound Toll in Helsingør, sailing from Rotterdam to Copenhagen with a cargo of nails, zinc white colours, cheese, linseed oil, paper and 'groceries.[256]

Another of these 'war refugees' was the 39-year-old skipper Jan Swan from Den Helder, who on 25 October 1782 was examined by the skippers guild, and three days later, on 28 October, became a citizen of Copenhagen.[257] Two years earlier, however, in 1780, we find him in the Waterschout Archive in Amsterdam, as skipper of the vessel *De Juffvrouw Magdalena*, who on 26 February recruited men for a trip to St. Eustacius, indicating that the *Juffvrouw* was a large ocean-going ship. With him he had the mate Cornelis Dirkzs from Föhr, a sailor from Norway, in addition to 6 other men. After this voyage, Jan Swan recruited a new crew on 14 November, this time sailing from Amsterdam to the Mediterranean over Falmouth in England. Now he had two Norwegian sailors on board as well as the mate Christian Evertsen from Ribe (in southwest Jutland) and six other sailors. [258] The two mates from the Wadden Sea may have been the acquaintances who made Jan Swan choose the realms of the Danish king as a refuge when the war made sailing under the Dutch colours too dangerous. Jan Swan is a good example of the fact that many of the immigrant Dutch skippers were very experienced people. When the Netherlands was occupied by French forces in 1795, another group of Dutch sailors found their way to Copenhagen, this time only seven men, and only two of these took Copenhagen citizenship. [259]

It has been shown that the Danish-Norwegian merchant fleet made extensive use of Dutch experts, especially in the 17th century, and particularly on voyages where Danish skippers had no experience; *e.g.* the East India trade and whaling in Spitsbergen and Greenland. On such ocean voyages the Dutch were masters, because insight into astronomical navigation and other advanced forms of navigation was required; skills developed by Dutch navigators during the expansion of the Dutch trading empire. It was only after 1747 that navigators from the Danish conglomerate state completely took over the voyages to Asia, using methods taught to them by their Dutch predecessors. In the latter part of the century, a small number of Dutch skippers and officers came to Copenhagen because of war and unrest in their home country.

---

253 RA. Københavns Skipperlav, eksaminationsprotokol, 1774-1793. Københavns kommune, borgerskabsprotokol 1749-1784.

254 Ra. Københavns Skipperlav, Eksaminationsprotokol, 1774-1793.

255 RA. Københavns Skipperlav, eksaminationsprotokol, 1774-1793. Københavns kommune, borgerskabsprotokol 1749-1784.

256 http://dietrich.soundtoll.nl/public/dates.php?id=148620. 18/9 2018.

257 RA. Københavns Skipperlav, eksaminationsprotokol, 1774-1793. Københavns kommune, borgerskabsprotokol 1749-1784.

258 GAS, waterschout 1780.

259 RA. Københavns Skipperlav, eksaminationsprotokol, 1794-1823. Københavns kommune, borgerskabsprotokol 1795-1804.

3.4 Other Dutch experts in the maritime sector

Due to religious riots in the Netherlands in the 1560s and 70s, a number of Dutch merchants and craftsmen came to the realms of the Danish king. One of them was Claes Joostens, who was a sailmaker, and who settled in Copenhagen. Immigrants to the realms had to submit to religious scrutiny and had to be examined in the 25 articles of faith from the Augsburg confession before they were allowed to settle in the realms. In return they were granted extensive privileges, with their skills and trade connections being welcomed in the country. 'Kommer der flere, som vilde føre Penge, Handel og Vandel ind i Riget, have I derom vor Vilje vel at ergate' (Do others come here, who will bring money, trade and commerce into the realms, you will act accordingly to Our Will). This is what Frederik II wrote to his commander in Copenhagen, Christoffer Valkendorf, about two citizens of Antwerp applying for citizenship. In many market towns in the realms of the Danish king, Dutch merchants and shipowners settled *e.g.* the Worm family of Gelderland, who traded in oxen, chose to settle in Aarhus.[260]

In Elsingore, which was strongly influenced by the Dutch, there were special Dutch residents who took care of the interests of the United Provinces; thus in 1560 Isaac Pietersz and in 1631 Willem Adriaensz. In fact, the presence of the Dutch in Helsingør was so massive that in 1576 the citizens complained to the king that 'disse Hollændere og andre af deres Folk, som her bosidde havde tiltaget sig al Næring og Brug, som Handelen med de søfarende medførte, ved at sælge *Øl*, Brød, Smør, Flæsk og Kød og andre Fornødenheder' (The Dutch and others of their people who reside here have taken over all commerce and use, that the trade with the mariners brings by selling beer, bread, butter, pork, beef and other necessities).

One is led to believe that the local citizens of the town must have looked with disdain on the inn *Amsterdam* in Strandgade, where 'Svir, Dobbel og løse Kvindfolk' (drink, gambling and loose women) were common.[261] The well-known family of Van Deurs came to influence Helsingør for hundreds of years. In 1640, the patriarch, Arent Simonsz van Deurs, came to the city from Harlem, and his son, Jan van Deurs, became Dutch commissioner and secretary at the Sound Customs Chamber, a position inherited by his son, Arent van Deurs. Another Dutch migrant family was the family Holten; Jacob Ysbrandtsen Holten came to Helsingør in 1635. His son, Isbrand Holten, became a customs clerk at the Customs Chamber, and the family thereafter produced several well-known Danish naval officers.[262]

Many Dutch also settled in Aalborg in Northern Jutland. In 1571, Johan van Rhyn became a guild brother in the local guild of The Body of God and in 1573 he took citizenship in the city. In 1591 he became city councillor together with his compatriot Hendrik Kampmann from Konder. Herman van Cinchel became a citizen of Aalborg in 1585 and in 1598 even a councillor in the city, and in 1586 Hendrik de Hemmer was a citizen and merchant in the city. Copenhagen, however, was the principal destination for most Dutch refugees. Already in 1517 Albert van Goch (Goch in Cleve) was mayor of Copenhagen, and his compatriot Johan van Gelder was mayor of the city in the period 1570-82.[263] In 1580 Johan van Delden (Delden east of Deventer) was admitted to Danske Kompagni (a shooting guild).[264] Van Delden was

260 Fabricius 1945, Vol I, 153, 162.
261 Fabricius 1945, Vol II, 361, 362.
262 Fabricius 1945, Vol II, 363.
263 Fabricius 1945, Vol II, 153, 162, 361, 359, 362, 363, 364.
264 Nielsen 1885, 289.

Fig. 3.13. Sailmaker by Jan Luyken, 1694. Rijksmuseum. RP-P-OB-44.495.

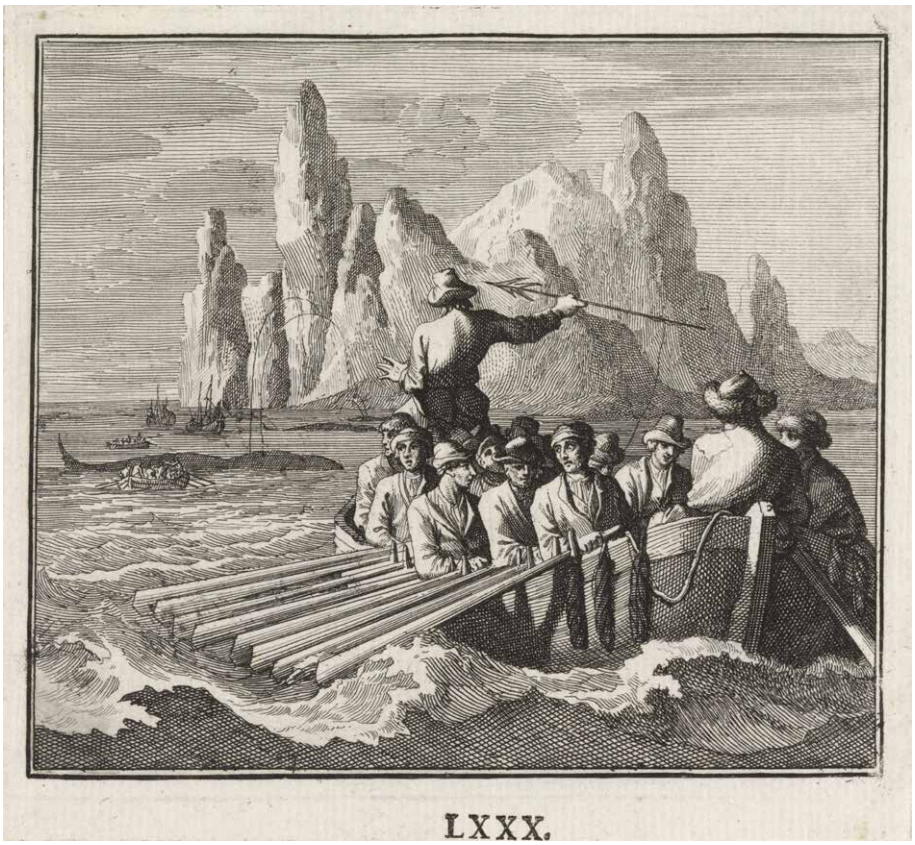


Fig. 3.14. Whaling by Casper Luyken, 1675 – 1705. Rijksmuseum. RP-P-1896-A-19368-1870.

an important Copenhagen merchant with several ships and a supplier of large quantities of Rhinish white wine to the Danish king.[265]

At the end of 1615, the aforementioned Roland Crappe together with two recently immigrated Dutch merchants, Jan de Willem from Amsterdam and Herman Rosenkrantz from Rotterdam, proposed the founding of a Danish East India Company to King Christian IV, receiving a patent on 17 March 1616.[266] It is probably de Willem and Rosenkrantz who brought an example of VOC's patent from 1602 to Copenhagen, for the patent of the Danish company was strongly inspired by this, and even has passages copied directly from it. However, yet another Dutch merchant influenced the new company, because in 1617 Marcelis de Boshauwer arrived in Copenhagen. This man had previously worked for VOC in India, but had left because of disagreements and had now come to Copenhagen to seek his fortune. Boshauwer claimed to be an envoy of a local Indian ruler and negotiated an agreement with Christian IV, where Boshauwer was to conduct negotiations in India about the establishing of a Danish colony. However, Boshauwer died while en route to India, and when Crappe and Giedde reached the Coromandel coast, it turned out that Boshauwer had

265 Fabricius 1945, Vol II, 373.
266 Klem 1943, 74.

no direct relations with the local prince. Despite this, a Danish bridgehead was established at the town of Trankebar on the Indian southwest coast, and Roland Crappe became the first governor. His next two successors were also of Dutch origin, as were some of the shareholders in the company, which is why the early Danish East India Company must be characterised as being strongly influenced by the Dutch.[267] In 1625, the entrepreneurial Jan/Johan de Villum was also behind another project: a West Indies trading company that was supposed to trade in 'West Indies, Brazil, Virginia and Guinea', but this initiative did not last long. However, it was two other Dutch immigrants, the brothers Johan and Godert Braem, who in 1636 obtained royal privileges to set up an African trading company and probably succeeded in attracting some investors from the Netherlands. The company succeeded in establishing itself on the Guinea coast with factories and a permanent residence, but after a few years the historical sources go silent.[268]

The Dutch were also behind the advent of Danish whaling. In 1614, the same Johan de Villum was granted a four-year royal privilege on whaling in the waters 'under Norway', *i.e.* the Arctic. In 1608-1609 the Danish nobleman, Jens Munk, had made a journey north of Norway and eastwards, and it was therefore common sense for the two to join ventures; in 1619 they founded a whaling company with some Dieppe investors. In 1617, however, another whaling company was formed, with the aforementioned Herman Rosenkrantz among the leading members, and in the same year the two companies both sent a vessel to Spitsbergen. It was Rosenkrantz and his consort who won the game, and in 1620 one of them, Johan Bram, became director of the Greenlandic Company and at the same time responsible for the 'Biscay' whalers that the company had hired in the Basque country. During the 1620s the company ran into difficulties, but the Braem brothers succeeded in reorganising the company in 1630 and 1633 and having the privileges extended. In 1634, they were allowed to involve '*østerske* og hollandske' (Easterners and Dutch) investors and to use foreign ships; read: Dutch ships. This was an advantage as the company was able to draw on foreign capital, but also to get access to Dutch ships and whaling equipment, not to mention sailors with the necessary skills in whaling, thereby avoiding the need to hire expensive and difficult-to-access Basque harpooners. The Dutch investors had an interest in being part of the Danish company, which allowed them to circumvent the Dutch 'Noordse Compagnie's' monopoly on whaling.[269] However, the Danish company never became a real success, and the catches stagnated and declined in the 1640s, which is why the company was liquidated in 1652.[270] Despite this setback, Johan Braem was considered one of the most successful shipowners in Scandinavia at the time and was also one of the leaders of the Reformed St. Petri Church congregation. On his death in 1646, brother Godert Braem took over the business, and besides this, he was also for a time manager of customs in Helsingør.

The Marselis family had a great influence on the maritime development of the realms of the Danish king. For several generations, the family members were royal factors in Amsterdam, and through their international network, gave large loans to the Danish king and provided the kingdom with all kinds of military supplies, just as they were involved

267 Asmussen 2018, 48.
268 Fabricius 1945, Vol I, 193.
269 Davids 2008, Vol II 293.
270 Fabricius 1945, Vol I, 194, 195.

in shipyard operations and delivered ships to the Royal Danish Navy. Selio Marselis, who was born in Rotterdam in the year 1600, moved to Christiania (Oslo) in 1645, from where he sent war supplies and ships to Christian IV, but in 1657 he settled in Copenhagen and even commanded the Dutch sailors during the Swedish attack on Copenhagen (11 February 1658). Gabriel Marselis, born in Hamburg in 1609, was a royal resident and factor in Amsterdam from 1638 to 1642 and after this royal Danish resident commissioner in the city. He repeatedly recruited sailors for the Danish crown and in 1647 had a number of warships equipped for the Danish king. It was this Marselis who arranged most of the foreign loans to Christian IV, which were paid for with large areas of land, making Gabriel Marselis one of the largest landowners in Denmark. Thus, in 1665, in recognition of his merits for the Danish king, he was admitted to the Danish nobility. The Berns and Marselis families were closely linked and intermarried. In Copenhagen Baltzer Berns built up a substantial business during the 1580s and 90s and owned several ocean-going vessels. In 1596 he was admitted to the previously mentioned Danske Kompagny and from 1600 to 1604 had a royal monopoly on trade on 'Vespenø', today's Shetland. His son, Albert Baltzer Berns, continued his father's business with ships in the grain trade from Arkhangelsk, and was the main supplier of guns and ammunition to the army between 1625 and 1627. In 1631 he moved to Hamburg, because in that year, he was appointed royal Danish factor in the city, and with his brother-in-law, Gabriel Marselis, established a company which traded in the Netherlands and the Baltic. It was also at this time that Berns and Marselis founded the yard in Neustadt. [271]

During the latter half of the 17th century, Dutch merchants and shipowners were very active in Copenhagen. Thus, in the 1670s, Cort Adelaer's widow, the Dutchwoman Anna Pelt, was the most important shipowner in Copenhagen, with among other things 50 percent shares in the *Pelican* of 250 tons, and ownership of all shares in *Islandske Fisker* of 70 tonnes. After her came Albrecht Itzen, merchant in Copenhagen from 1637 onwards, with shares in six vessels. Former naval officer and ship captain Jan Siever specialised in small ships and owned at least 13 of this kind in the 1690s and had shares in 22 other vessels. [272]

In 1667, when the later Christian V married Princess Charlotte Amalie of Hessen-Kassel, it meant a strong push for the Dutch influence in the Danish conglomerate state. The princess was a Calvinist and retained her faith, just as she was allowed to hold Reformed services in some of the royal castle churches. With her background, Queen Charlotte Amalie arranged that many with her faith were granted different privileges, and the Reformed Church in Gothersgade in Copenhagen became a rallying point for the Copenhagen business elite. The management of the Danish Asiatic Company was heavily influenced by the Reformed Church, with 22 of the total 53 directors in the Company's hundred-year history being members of the Church. One of the priests of the church was Laurids Thura. Born in Nakskov on Lolland in 1657, Thura took the theological master's degree in 1682 and served as principal of the Køge school until 1690, after which he travelled to the Netherlands and England as teacher for some wealthy benefactors. For two years he resided in Leiden and learned to speak Dutch so well that on his return in 1695 he was appointed priest of the Reformed Church, which at that time was allowed to use the church at Holmen.[273] In an overview of naval personnel from the year 1700,

271 Fabricius 1945, Vol II, 388, 398, 400, 402, 403, 404.

272 Barfod 1997, 189, 190.

273 Bricka 1887a, Vol 17, 365.

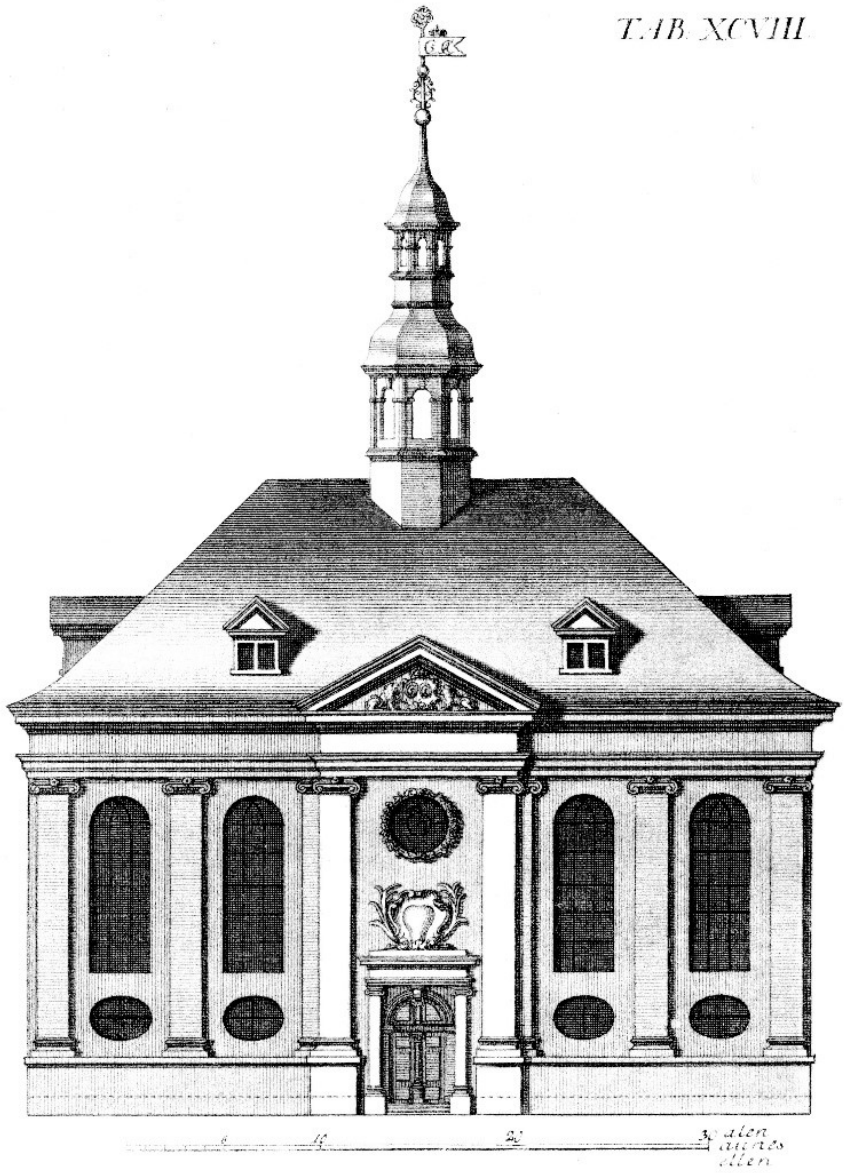


Fig. 3.15. The reformt church in Copenhagen. Hafnia Hodierna Tab XCVIII.

Laurits Thura is listed as the 'Dutch priest', with the same annual salary (500 rdl) as the Lutheran parish priest,[274] which tells us that Thura was not just a shepherd for Copenhagen's better citizenship, but also for the sailors and craftsmen with a Calvinist conviction who worked at Holmen. As mentioned earlier, in 1675 Cort Sivertsen Adelaer had a priest on board *Prinds Jørgen* named Johan Amsterdam, and on the flagship of Niels

274 Garde 1833, 24.

Juel, *Charlotta Amalie,* the priest was Henrich Cornelis; his name indicates that he was also a Dutchman. In the muster rolls from the recruitment carried out by the Royal Danish Navy during the Scanian War in the Netherlands, one also finds a priest, Simen, who came from Serdam. He was recruited in Amsterdam on 20 March 1676, with an advance of 400 guilders, which corresponds to approx. 160 rigsdaler and thus far less, than Thura's salary of 500 rigsdaler. [275] The recruited priest must have been taken on in order to perform divine services according to the ordinances of the Reformed Church for the sailors with this conviction recruited in the Netherlands, which must have happened at least on board *Prinds Jørgen* and *Charlotta Amalie*.[276]

Just as during the Nine Years' War (1688-1697), when Dutch skippers temporarily moved to the realms of the Danish king to escape enemy privateers, there is no doubt that Dutch merchants and shipowners also moved some of their activities to Copenhagen. Therefore Danish-Norwegian private economic activities and shipping must have been strongly influenced by the Dutch just before the year 1700. During the Great Nordic War (1709-1721), there was not much for Dutch entrepreneurs and merchants to do in the realms of the Danish king, and during the post-war economic downturn, trade and shipping continued to be in difficulties. With the establishment of the new Danish Asiatic Company in 1730, however, something new happened in Copenhagen. The company turned out to be a good investment, which also attracted attention from abroad, so in 1773 citizens of the Danish conglomerate state owned about 56% of the shares, investors from the Netherlands about 33%, while the rest was owned by the Danish king, besides anonymous investors from the rest of Europe.

Foreign investors usually had a direct interest in the company, like for example the Dutch trading house of C. van Orsay, who was the DAC's important bank liaison in the Netherlands.[277] The Danish maritime historian, Benjamin Asmussen, has shown in his Ph. D dissertation that in the upper strata of the Danish Asiatic Company there was a close network of merchants and financiers, many with a Dutch background. In connection with the big scandal that struck the company in 1783, two of four directors had Dutch origin: Joost van Hemert, whose father, Peter van Hemert, emigrated from the Netherlands during the 17th century and settled in Copenhagen as a wine merchant and landowner and co-founder of the German Reformed Church in Copenhagen. His son, Joost van Hemert, followed in his father's footsteps and built up a large banking business and later founded the acclaimed trading house Joost van Hemert and Sons. During his time he was head of various large trading companies: from 1743 to 1752 he was director of the Danish Asiatic Company; from 1747 to 1754 director of the West India-Guinea Company; from 1755 to 1767 director of the African Company; and from 1757 to 1769 director of the General Trade Company.[278] In the 1730s and 1740s, Joost van Hemert was one of Copenhagen's three major shipowners and had shares in seven ships, primarily in the trade to French and Portuguese ports. [279] His son, Peter van Hemert, continued his father's business and in 1767 married Agathe Hooglant,[280] daughter of Simon Hooglant. His father, Diederich Hooglant, was a

275 RA. AFMAUD

276 RA. Mønsterskriveren. Registerbøger over kaptajners og løjtnanters kostpenge.

277 Asmussen 2018, 54.

278 Bricka 1887a, Vol 7, 321.

279 Feldbæk 1997, 38.

280 http://oldenburgbusiness.net/index.php?title=Hemert,_Peter_van_2. 18/9 2018.

Fig. 3.16. Merchant and shipowner Frederic de Coninck by Daniel Orme, London 1799. The Danish Maritime Museum.

merchant who emigrated from the Netherlands, and who for example was mentioned in a case before the Copenhagen Police Court on 16 March 1708 about import of tin ware to the country.[281] His son, Simon Hooglant, became a cadet in the Royal Danish Navy in 1730 and was allowed to serve on Dutch warships from 1737 to 1742. In 1751 he was commander of the frigate *Falster* on a secret diplomatic expedition to Morocco, and from 1776 to 1785 he was director of the DAC. In 1782 he was appointed admiral in the navy.[282]

One of the best-known Dutch merchants in Copenhagen was Frederic de Coninck. He came as a 23-year-old from the Netherlands to Copenhagen and in 1765 obtained citizenship as a merchant. De Coninck was a skilled trader, who was able to capitalise on the positive economic trends of the 1750s onwards and built a fleet of five great East Indiamen, from which he gained a large fortune. In 1775 he founded the trading house De Coninck and Reisen, together with the Dane, Niels Lunde Reiersen, a company, that until 1790 controlled 64 vessels. From 1790 De Coninck continued for himself with the trading house De Coninck and Co. In addition to this, Frederic de Coninck was director of the DAC from 1773 to 1776, after which he occupied the respected post of accounting director of the company.[283] After 1807 he lost his ships and large parts of his fortune due to the war

281 Nielsen 1872-1887, Vol 8, 24-25.

282 http://oldenburgbusiness.net/index.php?title=Hooglant,_Simon. 18/9 2018.

283 http://oldenburgbusiness.net/index.php?title=Coninck,_Fr%C3%A9d%C3%A9ric_de. 18/9 2018.

with Britain.[284] Before this, however, he was also active in the Danish slave trade, with the Copenhagen trade consortium Pingel, Meyer and Prætorius, controlled by Frederick de Coninck. This company took over the administration and monopoly of the Danish slave trade from the Eastern-Guinea Trade Company in 1787. Prime Minister of the Danish king, Ernst Schimmelmann, was the sleeping partner of the company, which shows just how important de Coninck had become.[285]

3.5 Conclusion

Because of their knowledge of and experience in the construction of large ships, as early as the late 15th century the Danish king recruited Dutch shipbuilders to help expand the Royal Danish Navy, and during the reign of Frederik II (1559-1588), Dutch shipbuilders were dominant in the naval yard in Copenhagen, the Holmen. Christian IV (1588-1648) preferred Scottish and English shipbuilders, but in the provinces, it was still Dutch shipbuilders who constructed merchant ships and warships for the navy. Christian V (1670-1699) also recruited experts in the Netherlands, and after the appointment of the admiral Cort Sivertsen Adelaer as head of the fleet in 1663, a massive acquisition of Dutch ship's carpenters and master builders took place, which characterised the construction methods of the Navy for the next 30 years. Each spring shipwrights from the provinces of Denmark, Scanian and the counties of Bohuslen were conscripted to assist with the construction and repair of ships at Holmen, and Dutch construction methods, skills and professional terms were thus picked up and introduced to the provincial shipbuilding industries.

The Royal Danish Navy and various commercial trading companies recruited navigators and naval officers from the Netherlands in large numbers. During the first decades of the 17th century, it was especially for the East India trade and for Artic whaling that Dutch experts were recruited, as the necessary knowledge of navigation and whaling technics was not present in the kingdom. The navy of Christian IV apparently only employed a limited number of Dutch naval officers, but under his grandson Christian V, probably half of the naval officers in the Royal Danish Navy were of Dutch origin, which is why Dutch must have been understood by most Danish-Norwegian seamen. Through participation in the on-board practice communities (Lave and Wegner), the Danish, Norwegian and Sleswig-Holsteinian seamen who served under the Dutch officers had to learn to understand this language, if they did not already know it. The Dutch influence on the navy's officer corps dwindled in the early years of the 18th century, but when the Danish Asiatic Company in 1730 was looking for navigators with experience in the China trade, it was again Dutch experts who were recruited.

Until the introduction of the naval enrolment system in 1730, the Royal Danish Navy again and again had difficulty acquiring sufficiently experienced sailors to man its many warships, and often had to turn to the large maritime labour market in the United Provinces. Especially during the Scanian War, many sailors and petty officers were recruited in the Netherlands, and these came to work, sleep and fight shoulder to shoulder with enlisted seamen from the realms of the Danish king, which is why the two parties who were participants in the same practice community on board (Lave and Wegner) must have exchanged knowledge, language and experience. In particular, given that the warships were Dutch constructions

284 Bricka 1887a, Vol 4, 78.
285 Feldbæk 1997, 92.

and that half of the commanding officers were from the Netherlands, the opportunities for transferring Dutch maritime culture and language to the domestic maritime environment must have been great. In the same way, the Copenhagen merchant- and maritime circles must have been influenced by the entrepreneurial Dutch merchants, who made their mark on the early Danish trade to the East Indies and on Artic whaling in the late 16th and early 17th centuries. During the reign of Christian IV, it was Dutch merchants who supplied the army and navy with equipment and ships, and by the end of the 17th century the largest shipowners in Copenhagen were still Dutch. The Reformed Church became a gathering point for German and Dutch businessmen in particular, and these served on the Executive Board of the Danish Asiatic Company for many periods. As late as 1801 the Dutchman Frederic de Coninck was the greatest businessman in the realms of the Danish king, with a huge fortune and a fleet of large East Indiamen.

However, it was not only various Dutch experts and other maritime actors who characterised the shipping industry of the Danish conglomerate state in the 16th and 17th centuries, but also Dutch maritime technology; ship types, rigging types and navigational methods and instruments, and various new maritime practices that were picked up in the Netherlands. What types of technology and practices were involved, why these in particular and what consequences did it have? This is the subject of the next chapter.

4

Import of Dutch maritime technology and practice

During the 17th century, foreign observers began to regard the northern provinces of the Dutch Republic as the home of Europe's *officina machinarum*, as Dutch goods and inventions were of a particularly high quality, and various attempts were made to uncover the Dutch secrets and to adapt the improved products, production methods and manufacturing methods. Karel Davids wrote: 'It is significant in this respect that during much of the early modern period foreigners did not only perceive the Northern Netherlands as a technological leader, but also eagerly tried to recruit individual specialists in order to get hold of Dutch know-how'.[286]

As shown in the theory chapter, one of the ways in which technology, knowledge and experience can be transferred from person to person is via participation in so-called practice communities, as described by Lave and Wegner. In this case, one must imagine that from the end of the 16th century, there was, in what might be called a Dutch international maritime practice community, a common recognition that Dutch maritime technology was 'state of the art', not only because of its quality, but also because of its price. For several generations, in this community of practice, new methods and technology emerged through negotiation between the participants, resulting in an objectification that can be said to be a manifestation of this international Dutch maritime community of practice. The Dutch ship types were such manifestations, such objectifications that were imported because they made sense to the participants.[287]

4.1 The particular Dutch art of shipbuilding and the types of vessels of the Netherlands

In the 17th and part of the 18th century, Dutch shipbuilders were considered by others to be particularly skilled because they were more economical with the use of timber than their European counterparts, and they were referred to as careful, regular, clean and hard-working. By using cheaper types of wood, they could lower the cost of construction of the ships, just as these types of wood were easier to process. Dutch shipbuilders were able to produce vessels at prices far below those of their counterparts in other European countries. Therefore, besides production to the domestic market, an export-oriented Dutch

286 Davids & Lucassen 1995, 436.
287 Lave & Wenger 2003, 53, 177.

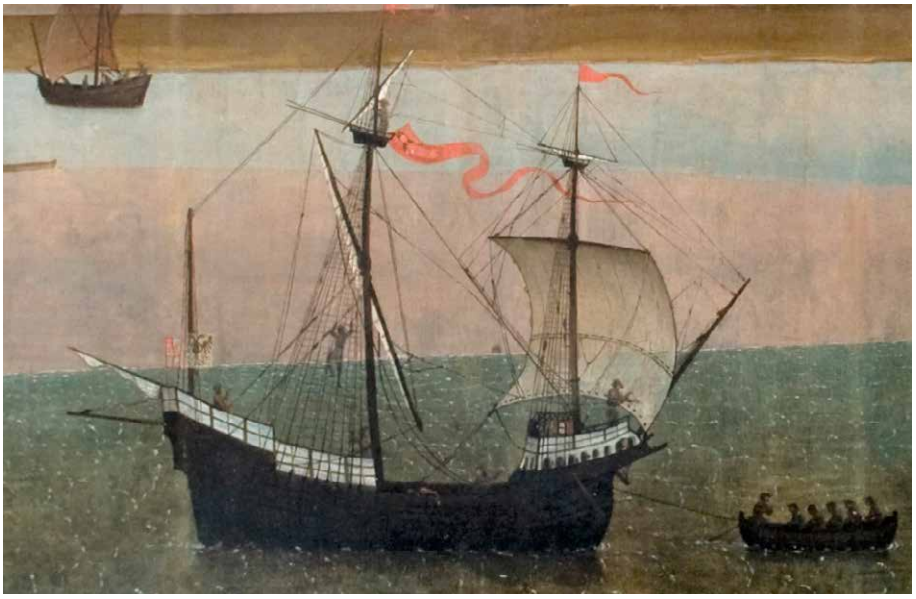


Fig. 4.1. One of the earliest renderings of a North European carvelship. Detail *from Schilderij met schepen op de rede van Zierikzee.* 1500 – 1540. Stadhuismuseum Zierikzee.

shipbuilding industry, particular in the Zaanstrekk area north of Amsterdam, occurred quite early. In around 1650 there were more than 25 shipyards in this area, but by the year 1700 the number had risen to over 60, and in 1708 306 vessels were under construction in the area. Maritime historian Richard W. Unger calculated that, in order to keep up with domestic demand, the Dutch shipbuilding industry would have had to build between 300 and 400 vessels over 100 tonnes annually, and that the export markets would have demanded at least 50% more on top of that. [288]

The use of labour-saving tools such as jacks, sawmills, cranes and pullies also gave Dutch shipbuilders an advantage, but it was probably the very early specialisation of types of vessels for special uses that was the great advantage in contrast to other countries' ship construction. As early as the late 16th century, shipbuilders in the Netherlands, unlike English shipbuilders, developed unarmed cargo ships. English shipbuilders were slow to adopt this concept, giving Dutch shipowners a huge advantage in the international freight market, with more space for the cargo.[289] A certain degree of standardisation and assembly line production can also be observed, especially in the Zaandam area, where there was so much ship timber that dry wood was always available for frames and hullplanks.

The relatively simple ship types; the galjoot, the fluyt, the bojer were built in such large numbers that individual parts of the ship could be made in advance. This more economical method of construction meant that the construction price of a Dutch ship was between one third and half that of a similar ship built in England.[290] This Dutch specialisation coincided with the rapid expansion of Dutch seaborne trade, where Dutch shipowners during the 16th

288 Unger 1978, 11.
289 Unger 1997, VI 153, 154.
290 Barbour 1930, 275, 277.

and 17th centuries were able to constantly lower their prices because of cheap tonnage, among other things. The English master mariner, Sir Walter Raleigh, said that the reason for the Dutch ships' success was: 'to hold great bulk of merchandise, and to sail with few men for profit'. Sir Walter's words are supported by the fact that the ratio of register tonnage and crew size for Dutch ships in the early 17th century was 20:1, while for English ships it was 7:1.[291]

Ever since the Viking Age, when the clinker built tradition was taken over by the people of the Netherlands, different types of vessels were developed in the area, adapted to different purposes, such as the bysse and the Flemish holk, which was rigged with three masts, carried square sails and was flat-bottomed with a plank keel. Both the bysse and the holk were clinker-built and, because of this construction method, they were of a limited size because hullplanks can only have a certain thickness, before they are too stiff to bend, which is essential in clinking: the larger the vessel, the thicker the planks. New impulses had to come from outside to break this constraint, and this happened when full-rigged carvel-built ships began to visit the ports of the Netherlands. These so-called 'carracks' were presumably developed in Spain or in the Bay of Biscay sometime in the second half of the 15th century, and as early as 1457 two Flemish cities leased such a full-rigged, carvel-built ship for convoy duty. As this new type of ship were faster and more manoeuvrable than the known types, its potential for faster voyages and for warfare was quickly realised, and in 1460 we find the first testimonies of the building of a carvel ship in the Netherlands – in Zierikzee in the Meuse Delta. It was a Breton shipbuilder who was in charge of the building, but soon the technique spread, and shipbuilders in West Friesland took over the method and began to produce larger and larger three-masted carvel-built ships. [292] It was these ships that enabled Dutch shipowners to take over large parts of the European freight market, as they could now, during a sailing season, make a trip to Spain for wine and salt and then return and continue into the Baltic for a cargo of grain and be back home before storms and ice made sea voyages dangerous. Already in 1462, the carvel-built ship *Peter von La Rochelle* came to Danzig, and the local shipbuilders quickly succeeded in copying the construction method, so that in the 1470s carvel ships were being built in the city and one must presume that shipbuilders in Denmark also came into contact with the new technique at this time. In any case, a royal Danish carvelship is mentioned in 1474.[293]

The carvel shipbuilding method was quickly differentiated in the Netherlands, and the Rotterdam shipbuilder Cornelis van Yk described in 1697 that in his area, around the Meuse River delta, the ship's hull was made by erecting three or four already-formed frames and then connecting these with thin strips, after which templates for the rest of the frames could be made. This method required that a simple calculation was made to create the shape of these first frames and that the shipbuilder had a notion of the final shape of the hull, before building. In contrast to this method, van Yk pointed to the shipbuilding technique used in 'Noorderquartier', *i.e.* in the provinces of Holland and West Friesland, where the lower hull was created during the ongoing process of planking, where a certain twist of the individual plank shaped the hull and where frames were first inserted after this. [294] The hull planks were held together with temporarily placed clamps nailed

291 Unger 1978, 44.
292 Unger 1997, 33.
293 Probst 1994, 145.
294 Probst 1994, 143.

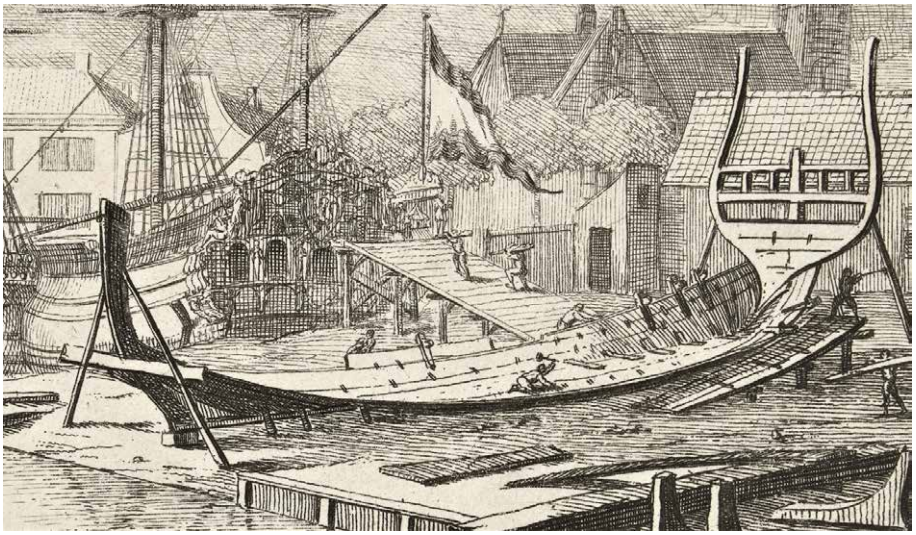


Fig. 4.2. Dutch shell-first construction, the holding clamps are clearly visible inside the hull. Detail from *De opbouw van het schip, plaat nr. 2,* ca.1700. Siewert van der Meulen, 1690 – 1710. Rijksmuseum, RP-P-OB-6658.

to the inside of the hull and removed only when the frames were inserted. As the hull grew upwards, single frames were attached to the planks, and so the shipbuilder could progressively adjust the shape of the hull. In shipwrecks, the presence of single frames not attached to others and nail holes in the inner hull from the temporary clamps testify to this method. This construction method requires no prior calculations and is based on the shipbuilder's experience and craftsmanship, and it seems that it was this 'shell-first' construction method that first came to the Nordic countries.[295]

From the mid-15th century, Dutch shipping saw a number of improvements and new designs that helped to reduce shipping costs considerably. Through an evolutionary process, going from the bysse, over the buyscarvel, to the bojert and the flyboat, Dutch shipbuilders developed a hull shape that was particularly suitable for carrying a large bulk cargo and at the same time seaworthy enough to handle the high seas.[296] The final step in the evolutionary chain was the fluyt, which, according to tradition, was developed in Hoorn in 1595, and which within a few years was refined and adapted to the various trades.

The fluyt was a relatively shallow-draughted vessel with an almost box-shaped hull, but far slimmer than previous types with a length-to-width ratio of 1:4 and up to 1:6, making it an excellent sailor. At the same time, the hull had a low centre of gravity, making it a good sailing vessel and seaworthy in bad weather conditions. The type had at least one deck and on larger fluyts additional fore- and poop decks. Both the fore- and aftship had a full and rounded shape, and over the sternpost and rudder there was a small tapered transom, which extended along the already inclined sides. Initially, the fluyt was equipped with a relatively low rig consisting of a square-rigged foremast, a mainmast with two square sails; and a mesan mast with a lateen sail and sometimes also a square sail above this.

295 Maarleveld 1994, 155.
296 Unger 1997, 35, 36.

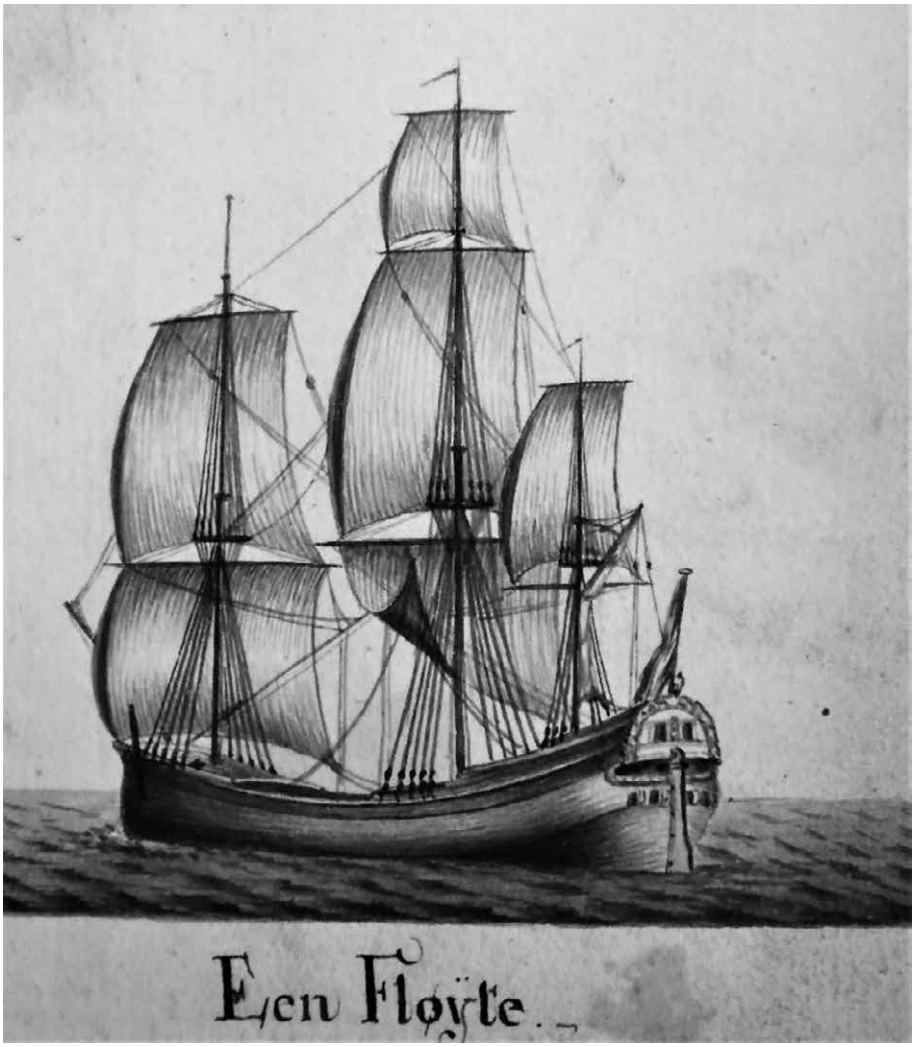


Fig. 4.3. An 18th century fluyt. The Stibolt Brothers 1763. The Danish National Maritime Museum.

Small fluyts did not have square topsails on the mainmast, but were rigged with a single square sail on the fore- and mainmast and only a lateen sail on the mesan. The sail area was relatively small in relation to the size of the ship, and with the low rig this meant slow speed, but in turn great seaworthiness. As a result, and because pullies and other types of purcase were used aboard, the number of crew members was small compared to the size of the vessel, which also made the fluyts competitive in the bulk freight industry. Another benefit was that pine and fir timber was used wherever possible. The hull itself was built of oak, but decks, sides and superstructures were made of these woods, which resulted in a lighter ship, making room for even more cargo. In the late 17th century, fluyts typically had a tonnage of about 200 to 600 tonnes, but never more, in order not to increase the crew, thus keeping operating costs down.[297]

297 Unger 1978, 36.

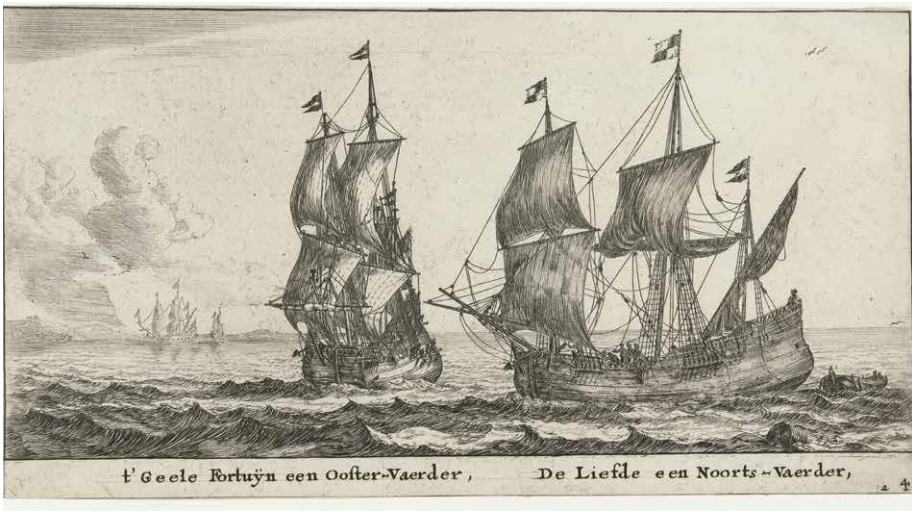


Fig. 4.4. Dutch specialization; two fluits with different purpose. Reinier Nooms, 1652-1654. Rijksmuseum RP-P-OB-20.520.

During the 18th century, the fluyt evolved from being a multipurpose ship to a class of ships with common features, but specialised for particular trades. The big 'Straatvarders' that sailed on the Mediterranean were armed and had a low bow with a galleon under the bowsprit. Dutch whaling ships had an additional hull planking for ice protection and davits along the sides for the whaling boats. 'Noordvarders' in the timber trade to Norway were relatively small in order to enter the Norwegian fjords and small coves and had special loading hatches for long spars in the lower hull. 'Oostvarders', employed in the grain trade between the Baltic Sea and the Netherlands, were between 300 and 600 tonnes, but shallow-draughted and with 'Tumblehome'; very inward sloping sides, a feature developed in order to reduce payment at the Sound Toll, because this was calculated by multiplying length by width. Even when this payment calculation method was abandoned in 1669, the 'Oostvarders' retained their particular shape with strong tumblehome, because it turned out that this feature reduced wind resistance on the hull.

The 'hekboot' evolved out of the fluyt. Like the fluyt, it had a particular rounded hullshape, but instead of the rounded stern that ended in a small transom, the hekboot had a wide transom above the sternpost and thus wider decks without the tumblehome feature. When the Dutch whaling industry had to give up the so-called 'bai fishing' close to shore in the late 17th century, it was the hekboot that became the preferred whaling ship, where the wide decks could accommodate the cutting up and cooking of whale blubber. The 'cat' also belonged to the fluyt family, but unlike the fluyt, the cat only had one deck. Initially, the cat's advantage was that its three-masted rig was incredibly simple. All square sails were set from the deck, and for this, winches were placed by each mast so that the number of crew members could be kept down.[298] Finally, the 'pinas' was also a part of the fluyt-family. This type was far more sharply built and therefore had a greater draft than most fluyts. Like the fluyt, it was a three-masted, full-rigged vessel, but with larger and more sails. In addition to

298 Unger 1978, 48, 49.

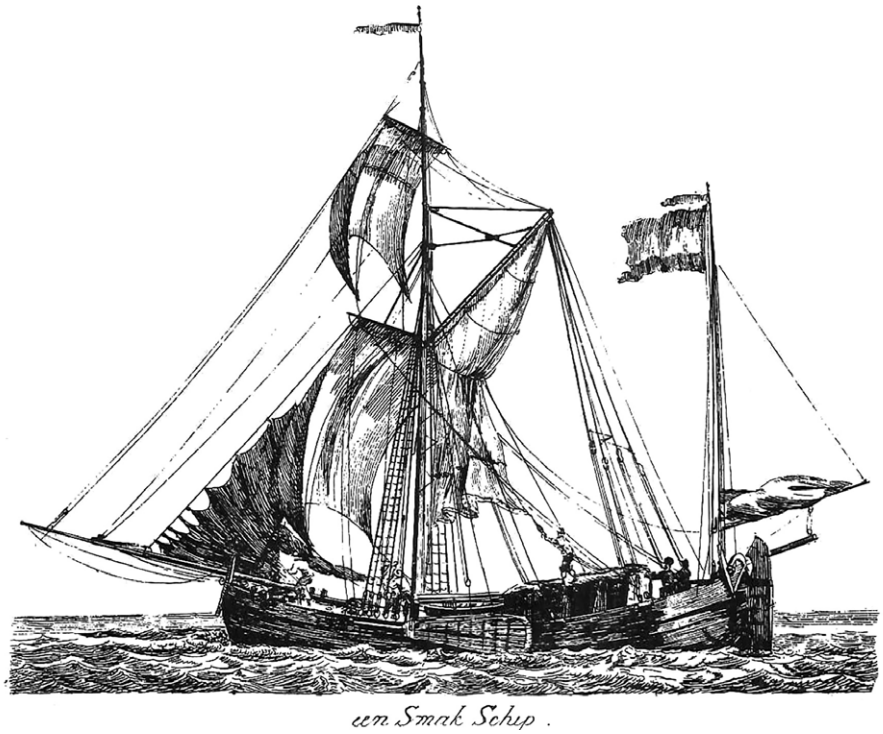


Fig. 4.5. 18th century smack. Groeneweger 1789.

lower square sails on the fore- and mainmasts, the pinas also carried topgallant and topsails and on the bowsprit one or two spritsails. The type had a wide transom like the hekboot and was also heavily armed and therefore was widely used by the VOC.[299]

The smack was yet another Dutch-developed vessel. It was carvel-built with a very full foreship and a rounded stern and very shallow-draughted, which made it particularly suitable for use in the Wadden Sea. To avoid too much sideways drift, the smack had leeboards that could be lowered into the lee side of the ship and stabilise the course. On most smacks a stern cabin was placed behind the main hatch, and the vessel was rigged with a mast carrying staysails and a mainsail either as a sprit sail or a gaffsail. During the 17th century, the smack became larger and a mesan mast was added, also rigged with a gaffsail, just as the main sail was now a gaffsail. Above the main, the smack carried one or two square topsails. The hoeker or Houchboot, in Danish called a 'Huggert' and in English a 'Hooker', was developed in the Netherlands for cod fishing in the North Sea. It was larger and more powerful than the bysse with wells for the live catch and two light masts, both of which carried square sails. Characteristic of the hooker is that the mainmast was placed almost in the middle of the ship, which left the foredeck as a working platform for the fishermen.[300]

The galjoot was also a Dutch type. Initially, the galjoot, or galiote in Danish, was a two-masted vessel, where the mesan mast was half as tall as the mainmast, which was

299 Mortensøn 1995, 58.
300 Unger 1978, 31.

Fig. 4.6. The related types, the galjoot and galeas. The Stibolt Brothers 1763. The Danish Maritime Museum.

rigged with gaffsails, and the mesan mast with a lateen sail on the mesan, besides a jib and staysail on the bowsprit. During the 18th century, a third gaffrigged mast was added. The vessel had a full hull with a rounded bow and stern, where the tiller extended inboard; finally she had a deeper hull than the smack and no leeboards.[301] In around 1700, the galiote was by far the most common cargo ship in Danish waters, but in the second half of the century it was replaced by the galeas, which had a flat transom with two small windows and was much more sharply built than the galiote.[302]

The very typical Danish 'jagt' was developed from a Dutch ancestor. As early as the beginning of the 17th century, jagts were known in the Netherlands, which by then meant a fast, small and armed patrol vessel, but rigged with one or two masts with either a sprit sail or a gaff sail. Later on the 'spejljagt' (transom yacht) was an open pleasure craft with a transom stern and rigged with one or two masts that could be struck to the deck. It was relatively flat-bottomed with straight sides, and there was a large cabin with windows in the stern. In 1622, the first of several 'marinas' was set up in the Amsterdam harbour

301 Mortensøn 1995, 59.
302 Feldbæk 1991, 135.

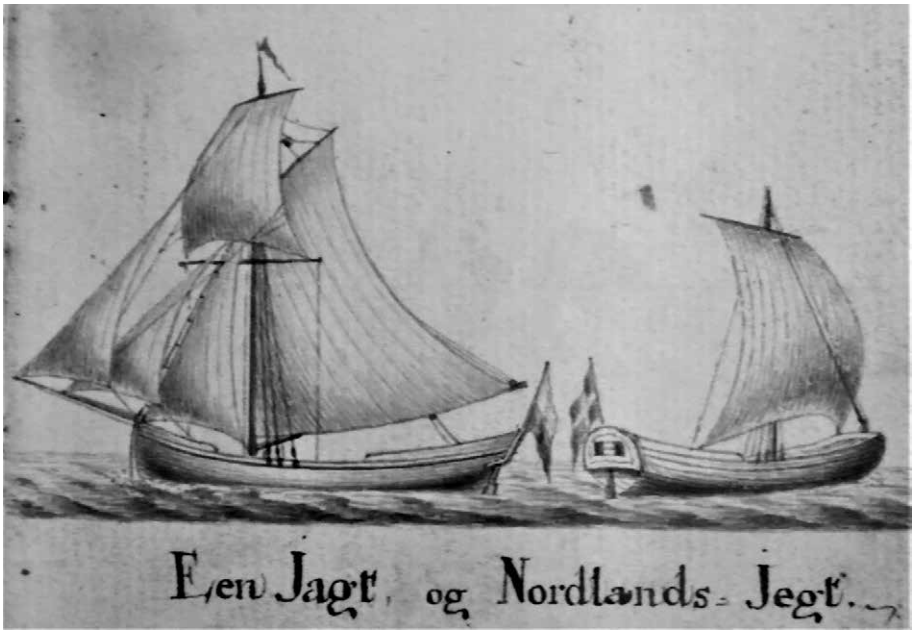


Fig. 4.7. Jagt and jegt. Contrary to the jagt, the Norwegian jegt was clinker built and did not originate in the Netherlands. The Stibolt Brothers 1763. The Danish Maritime Museum.

for these luxury vessels.[303] Slightly larger were the so-called 'Statenjachts', decked vessels with a large cabin aft, that were used to transport distinguished persons, and in the same size we find the 'Trekjachts', which were packet vessels used on routes where the vessel's ability to sail close to the wind was important.[304] In Denmark we know the jagt as a small cargo vessel of about 10 tonnes with chubby bow and heartshaped transom stern. It carried a pole mast with a gaffsail as a mainsail and a staysail on the bow. In the first half of the 18th century, one-third of all provincial vessels in Denmark were jagts, and together with the galjoots they took over the role of domestic cargocarrier from the older 'skuder' (small one or two-masted square-rigged coastal vessels).[305]

4.2 Rigging

New ways of rigging a vessel and new type of sails were developed in the Netherlands during the 16th and 17th centuries and spread to Scandinavia. In the 17th century, a vessel with longitudinal sails (gaffsails, sprit sails, lateen sails) could sail about 45 degrees to the wind, while a square sail-rigged ship could only come about 50-60 degrees to the wind. This advantage was used by Dutch shipbuilders to build vessels that could cross and negotiate the narrow lakes, river deltas and fjords in the Low Countries, where the prevailing westerly winds made east-west-going voyages difficult.[306] The sprit sail was well known in ancient times, but went out of use, to be rediscovered by shipbuilders in Holland

303 Unger 1978, 51.
304 Mortensøn 1978, 58.
305 Degn & Gøbel 1997, 17.
306 Unger 1978, 54.

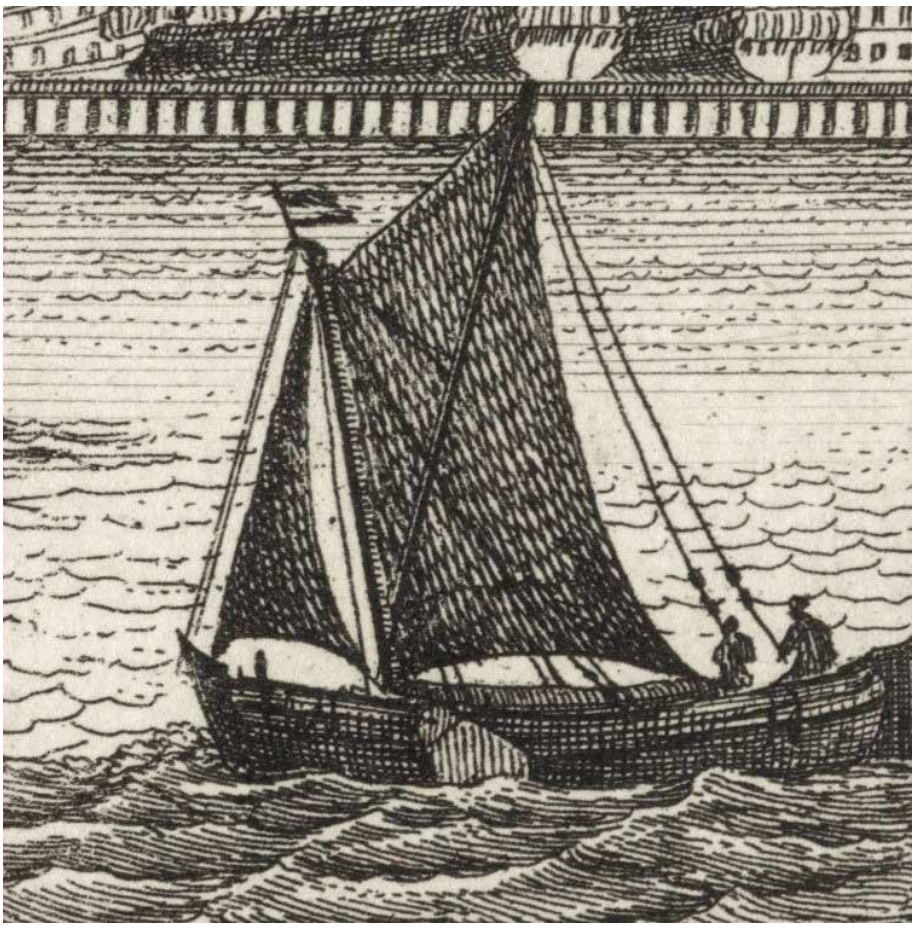


Fig. 4.8. Spritsailrigged smallcraft. Detail from *Gezicht op de Admiraliteitswerf op Kattenburg te Amsterdam, anoniem, 1757 – 1766.* Rijksmuseum RP-P-1911-3453.

and Zeeland in the late 15th century, where it was used on bojers and smacks. The sprit sail is square-shaped with a so-called 'sprit' (yard) for lifting the outermost, upper corner, and it has no boom at the bottom of the sail. At the same time as the sprit sail began to be used on Dutch vessels, triangular sails (staysails), that ran on the stays supporting the mast from the bow and bowsprit, became common. In around 1600, herringbysses had one or two staysails, but these new sails were first introduced on larger square-rigged vessels in the mid-17th century, and only later in the century did the first staysails between the masts emerge. All indications are that it was also Dutch shipbuilders who first introduced staysails on the bowsprits of squareriggers. As the name suggests, stay sails run on stays (the ropes/wire supporting the mast in the longitudinal direction), and staysails are particularly suitable for sailing close to the wind, since it is possible to get the foreleach of the sail (the edge of the sail upwards against the wind) to stand stretched and tight, allowing for enhanced windward progress. This is also achieved with the sprit sail and the gaffsail, where the foreleach is attached to the mast.

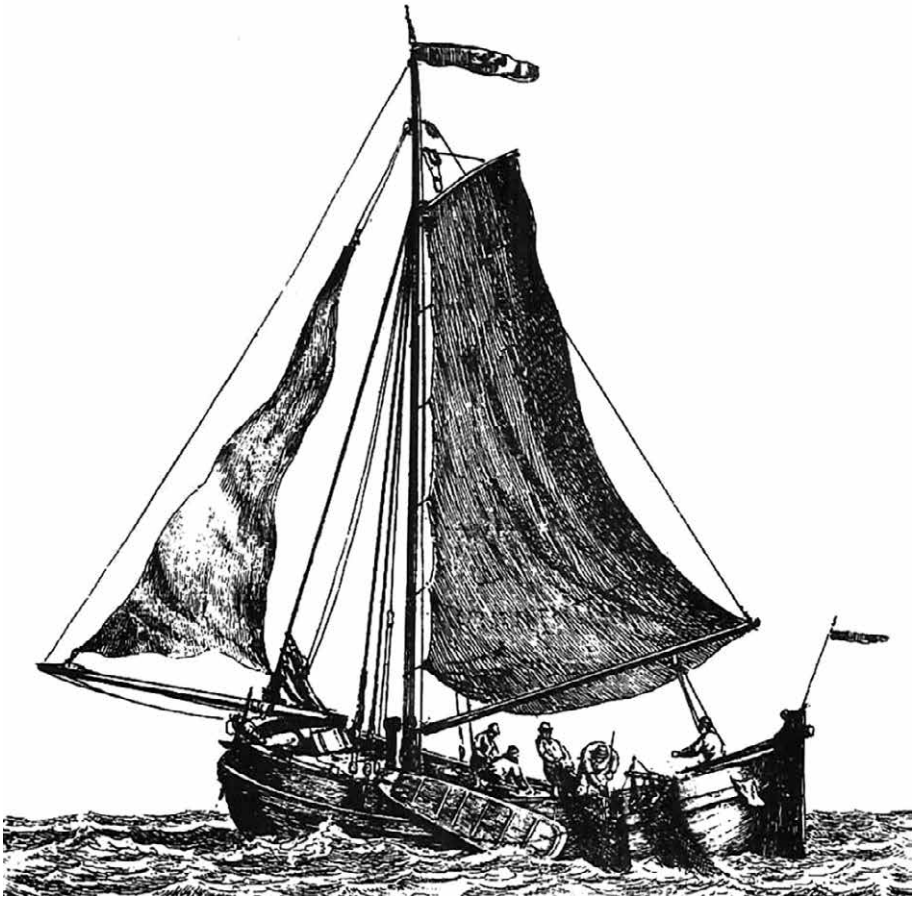


Fig. 4.9. Gafrigged Scholschuit taking in her nets. Groeneweger 1789.

The gaffsail, which appeared in the early 16th century, was originally called a 'half-sprit sail', which presumably indicates that the sail was developed from the sprit sail. When taking in the sprit sail, the end of the sprit (yard) swung forward, because the sprit was attached halfway up the mast by a pulley, and thus moved down and forward when the sail was lowered. When hanging horizontal, half of the sail hung from the sprit behind the mast, thereby making it look like a gaffsail. Like the sprit sail, the gaffsail is square-shaped, but instead of having a sprit to hold the sail out, an actual gaff boom is used here, to which the sail is attached throughout the top length. Initially this gaff boom was held to the mast with lashings or tackle, but in around 1700 someone had the idea of putting a fork shaped, two half-arched short pieces of wood at the end of the gaff boom so that these jaws could enclose the mast. It was also at this time that the gaff sail had a boom added at the bottom of the sails, which helped keep the sails tight and stretched.[307] Gaff sails with boom and gaff boom were first used on small Dutch jagts, but during the 17th and 18th centuries they became common on bojerts and large coastal vessels. Such a rig typically consisted of a large gaffsail,

307 Unger 1978, 55, 56.

one or two square topsails, two staysails and either a mesan mast rigged with a lateen sail or a smaller gaff sail. On large ocean-going squareriggers, the fore-aft sail of the mesan mast was initially a lateen sail, but when the lower part of this sail projected in front of the mast and had no function, this piece was removed and the fore leach of the sail was lashed to the mast, whereby a gaff sail was created. Around 1780, a gaff sail with jaws on the gaff boom had become standard and in order to reduce the sail area in heavy weather, a reefing system was invented, where the bottom part of the sail could be rolled up and the sail reduced. This was achieved with a number of small ropes sewn into the sail that could be tied around the now-loose lower part of the sail and thereby act as a new bottom leach of the sail.[308]

When sailing close to the wind with sails set in the longitudinal direction of the ship (sprit sails, staysails, lateen sails and gaffsails) the force and angle of the wind creates a relatively large drift to leeward. To avoid this, shipbuilders in countries with relatively deep coastal waters (Spain, France, England) could create vessels with a deep and sharp keel, but because of the shallow waters of the Netherlands this was not an opportunity for the local shipbuilders. The solution was to add a slab of wood that could be submerged into the water on the lee side of the ship, when sailing close to the wind, and hoisted up again close to shore, or when sailing with stern winds. Since the 8th century such leeboards had been in use on the flat-bottomed Chinese junks. At their top end, they were attached to the side of the vessel and could be lowered or raised from the water by means of a tackle connected to the other end. European travellers must have seen these devices and such leeboards appeared on Portuguese and Dutch vessels after 1570 and subsequently became a widely used feature on Dutch vessels.[309]

Already in the 1400s, three-masted square-rigged vessels were known; the holk is an example of this, and as the seaborne trade of the Netherlands grew significantly during the 16th century in particular, there was a tendency to increase the number of sails in relation to the total sail area. This more differentiated sailing plan gave the skipper greater opportunity to choose an appropriate combination of sails for the prevailing wind direction and strength and thus greater control of his ship. During the 16th century, top sails were used over the main sails, which meant that the masts had to be longer, and the necessary extra-long mast timbers were increasingly difficult and expensive to obtain. However, since the top sails were only used in light winds, this extra expense was not urgently needed, and shipowners and skippers shied away from top sails, although the benefits of a differentiated sail plan were known. In around 1570, a mariner from Enkhuizen decided to mount one or two wooden platforms at the top of the mainmast, which could support a small extra mast and thus carry a top sail. In bad weather, not only could the top sail be taken in, the topmast could be struck, thereby not damaging the mainmast. The top sail could also be made larger by increasing the length of the top mast, thereby encouraging the tendency for increased division of sail area. Sir Walter Raleigh noted this invention and called it 'a wonderfull ease to great ships.'[310]

As the top sail became a permanent component of the ship's sail plan, the problem of reducing sail in bad weather arose. In the past, so-called 'bonnets' had been attached to the bottom of the sail. A bonnet was an extra piece of rectangular sailcloth that was tied to

308 Unger 1978, 57.
309 Unger 1978, 54.
310 Unger 1978, 28.

Fig. 4.10. Sailors work on the yard without footroops. Detail from *Hollandse schepen op een kalme zee* by Willem van de Velde (II), ca. 1665. Rijksmuseum SK-C-1707.

the main sail, increasing the total area of the sail, and was therefore used under normal conditions. In bad weather, the yard of the main sail could be lowered, so that the bottom of the sail could be reached from the deck and the bonnet removed. However, this approach was not possible for the top sails mounted high above the deck, so the reefing system from the gaffsail was transferred to the square sails initially on warships, which in the latter half of the 17th century began to have two or three reef points at the top of their sails. Now the sailors could lift the sail up a notch, tie the rope straps to the yard, and thereby reduce the sail without lowering the sail to the deck. This meant that square-rigged ships now sailed with reefed down top sails in bad weather, which with their position higher up in the rigging, gave the ship steering speed, even when it was between to great waves.[311]

In theory, this sounds quite logical and straightforward, but if you ask how the seamen worked with the sails out on the yard, the answer is rather appalling. Until about 1680, square-rigged warships had no footropes on which the seamen could stand, and when it came to ordinary merchant vessels, such a feature became common only well into the new century. A footrope is a strong rope that is stretched out under the yard, along which the seaman can move. Often there is also a back rope, that sits a little further up by the sailor's back to prevent him from falling backwards, away from the yard. These ropes cannot be seen on period ship models and drawings from before the 1680s, which must mean that until then seamen ran out on top of the yard and worked with the sails while they hung on; standing, riding on top or lying on the yard – even in bad weather! When the sail was to be taken in, so-called 'bunt-lines' were hauled, which lifted the lower corners of the sail up to the yard on both sides of the mast,

311 Unger 1978, 57.

whereby the sail hung like a large bag from the yard down in front of the mast. In the early square rig, there were large round 'tops', platforms, in the transition between mast to topmast and from topmast to gallant mast. The function of these tops was to provide a foothold for the sailors who could seize most of the sail and wrap it to the mast, under the yard. The part of the sail that was fixed farther out on the yard was packed by sailors who moved out onto the yard, without footholds, and secured the sail under the yard with a long line.[312]

Vessels with such sail- and rig types became common in Scandinavia during the 15th, 16th and 17th centuries, by import from the Netherlands, but also because Dutch sailors worked on Scandinavian ships and because sailors from here took part in the maritime labour markets of the Netherlands.

4.3 Import of Dutch vessels into the realms of the Danish king

4.3.1 Import to Denmark and Schleswig-Holstein

In the early modern period, vessels of Scandinavian origin were initially the most widely used vessels in the realms of the Danish king. This applies to the 'Skude', which was an undecked vessel of between 3.5 and 48 tonnes, originally clinker built, but later also carvel-built. It was rigged with short masts in one piece (pole masts) and carried square sails that could be set from the deck. Furthermore, in the bow and on a short bowsprit a staysail or a small square sail could be set.[313] The 'krejert' was a sharply built and fast medium mid-ship of 35-55 tons with two, or less often three pole masts, and several square sails on each.[314] As we have seen, in the 15th and 16th centuries, especially in the provinces of Holland and Zeeland, a number of new types of ships were developed that were more competitive than the ones used to date and which during the same period began to be built and used in Scandinavia. Knowledge of such vessels was transferred to the Nordic countries through the previously mentioned international Dutch practice community, partly through skilled experts and partly through the import of Dutch vessels.

In a Danish context, the first written source mentioning the purchase of ships in the Netherlands is from 31 January 1477, in which Molly Michelson from Ribe, in a complaint to the authorities, describes how the skipper Bolde Boyensz of Nordstrand (a Wadden Sea Island) had swapped his evert (a flat-bottomed Wadden Sea vessel), in which vessel Michelson had shares, with a 'Fluyt' in the city Kampen in the Netherlands.[315] (As the invention of what is commonly known as a fluyt is traditionally set to 1595, this early mention must refer to another type of ship with the same name.) About a century later, in 1536, a 'flybojert' and a 'Raabojert from Hoorn' are mentioned during the siege of Copenhagen[316] (1535) and in connection with the naval mobilisation of King Christian III in 1555 it is clear that Dutch ship types were in use in Denmark and from most provincial towns one hears of carvel-ships, jagts and bojerts.[317] The rebellion against the Spanish king and the religious wars in the Spanish Netherlands caused many to flee, and it is likely that many shipowners also fled and brought their vessels with them. For example, the Dutchman Jacob Pietersen Dijk settled in Helsingør in

312 Harland 1984, 104.
313 Degn & Gøbel 1997, 16.
314 Feldbæk 1997, 134.
315 Christensen 1929, 590.
316 Mortensøn 1995, 42.
317 Barfod 1995, 103-106.

1569 and brought with him a bojert, and in 1572 another bojert-owner, Høyttke Gierttsen from Wokum in Friesland applied for permission to settle in the city, because of war in his home country.[318] From the 17th century, the historical sources flow more rapidly when it comes to the import of Dutch types of ships. In 1610, the Ribe merchant Niels Hansen Grisbeck bought a share in Christen Hjaresen's ship; 'som han købte udi Holland'(which he bought in Holland). Niels Grisbeck and later his son, Hans Friis, had shares in nine vessels, four of which were purchased in the Netherlands, one in Bremen, two in Flensburg, one in Aarhus (in Jutland) and the last of unknown origin. [319] In the period 1600-1622, skippers from Rømø (a Wadden Sea island) bought six large ships in Enkhuizen, almost all of which can be found in the Sound Toll registers. Boye Folckers, who originally came from Föhr in the Wadden Sea, settled in Enkhuizen and brokered the sales, and in some cases the Ribe merchant Bagge Pedersen was the biggest partner. [320]

The smack is first mentioned in written sources in 1625, when Christian IV gave a Dutchman privileges to set up ferry services between Nyborg and Korsør in the Great Belt with a smack: 'som brugelig er i Holland' (which is common in Holland), and in 1639 a prominent citizen was granted exclusive rights to provide ferry service to Copenhagen, Helsingør, Helsingborg, Landskrona and Malmö with a smack. In Aarhus there were three smacks in 1643 for the ferry service to Kalundborg (western end of Zealand). [321] Already in 1618 the first fluyt was built in Lübeck, so it is likely that fluyts were known in the Danish conglomerate state in the early modern period; certainly the nobleman Ove Gjedde brought *Den hollandske Fløyte* (the Dutch Fluyt) with him on his expedition to Asia in 1618.[322] In the List Customs Account from 1642-1645 (Lister Deep is the tidal channel between the Wadden Sea islands Sild and Rømø and leads to the harbour of Højer) we find 24 bojerts and 26 ships (which may have been fluyts) and 32 smacks from the local area[323] and in the same period, in 1643, the merchant Hans Friis from Ribe acquired a 1/16 share in a large ship built in the Netherlands. It was the Rømø skipper, Peder Christensen, who bought the ship in the Netherlands for 9600 guilders (about 3800 rigsdalers), which probably indicates that it was brand new. It was presumably this 200-ton ship from Ribe that was registered going through the Sound in July 1643, skippered by a Peder Christensen, loaded with timber and 'Dutch goods`.[324]

During the Scanian War, the authorities wanted to gain an overview of what private shipping capacity they could dispose of in connection with a landing on the Scania peninsula, and in 1677 a request was therefore sent to the local authorities in the Kingdom of Denmark and in the duchies. The result was a register of 611 vessels, which is probably not the total tonnage of the areas, as some cities did not respond to the enquiry. Of the 661, 393 were skudes, while 47 were jagts, 16 smacks, eight so-called 'ferry smacks', 32 galiots, 24 krejerter and 46 ships. In some cities ships and krejerter were put together in a group, as were in the duchies jagts, smacks, which shows a division based on the rig of these vessels: Squaresail rigged or

318 Mortensøn 1995, 117.
319 Degn & Gøbel 1997, 183.
320 Kelm 1999, 69.
321 Mortensøn 1995, 119.
322 Mortensøn 1995, 56, 119.
323 Mortensøn 1995, 74.
324 Kelm 1999, 75.

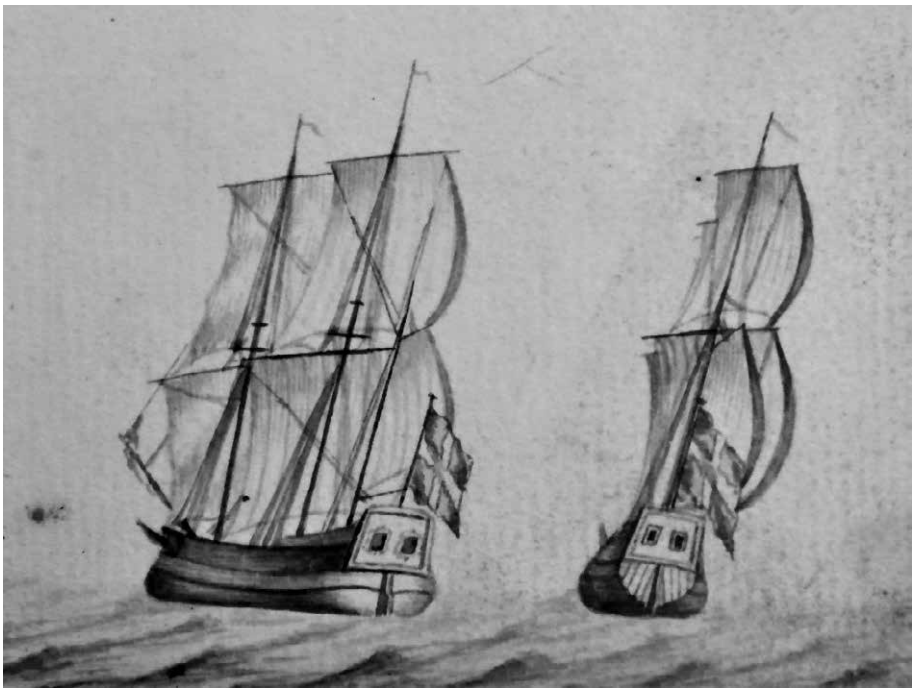


Fig. 4.11. 18th century krejerts. The Stibolt Brothers 1763. The Danish Maritime Museum.

sprit- or gaffsail. The 'local' vessels, skudes and krejerts accounted for 70 percent of the total tonnage, while the Dutch types – ships, smacks, galiots and jagts – accounted for 28 percent.[325]

The Dutch ship had at this time become part of the overall maritime landscape in Denmark and the duchies, but was not yet of any importance. It is interesting to see where the jagts and smacks, both of them able to sail close to the wind, were common: on the Wadden Sea coast, Fanø, Rømø, Varde, and Husum, where there were a total of nine skudes, but 11 smacks and a galjoot, and in Skagen there were 14 'smaa obne Jachter, som Bruges at fiske med…' (small open jagts, which are used for fishing…) as well as two more smacks and four small cargo jagts.[326, 327] The local magistrate in Nyborg also wrote that 'dend sidste smache, som jeg hafde ladet bygge og till Lars Wandel og jens Grubbe af sendt, bleff for nogle aarsiden Nendre anholt, den waar 22 læster stor og blef pressit herfra Holmen at gaa' (the last smack, that I have had built and sent to Lars Wandel and Jens Grubbe, was taken a couple of years ago, it was 22 last (46 tonnes) and was commandeered from here to the Holmen). Smacks was thus constructed in Nyborg. From Assens on Funen it was reported: 'Lass Clausens spiel jagt (transom jagt), drægtig fem læster, stikker tre alen, som her bruges paa færgeriet' (the 'spiel jagt' of Lass Clausen of five lasts (10.5 tonnes) which here is used in the ferry service') and 'Thomas Jensens spiel jagt, som her imellem gaar med Posten och paa færgeriet' (the spieljagt of Thomas Jensens, that occasionally sails with mail and as a ferry). Rudkøbing also had a spieljagt and in Nakskov there were six small jagts, two of which were

325 RA. Fortegnelse over skibe i Danmark og hertugdømmerne. 1676-1679.
326 RA. Fortegnelse over skibe i Danmark og hertugdømmerne. 1676-1679.
327 RA. Fortegnelse over skibe i Danmark og hertugdømmerne. 1676-1679.

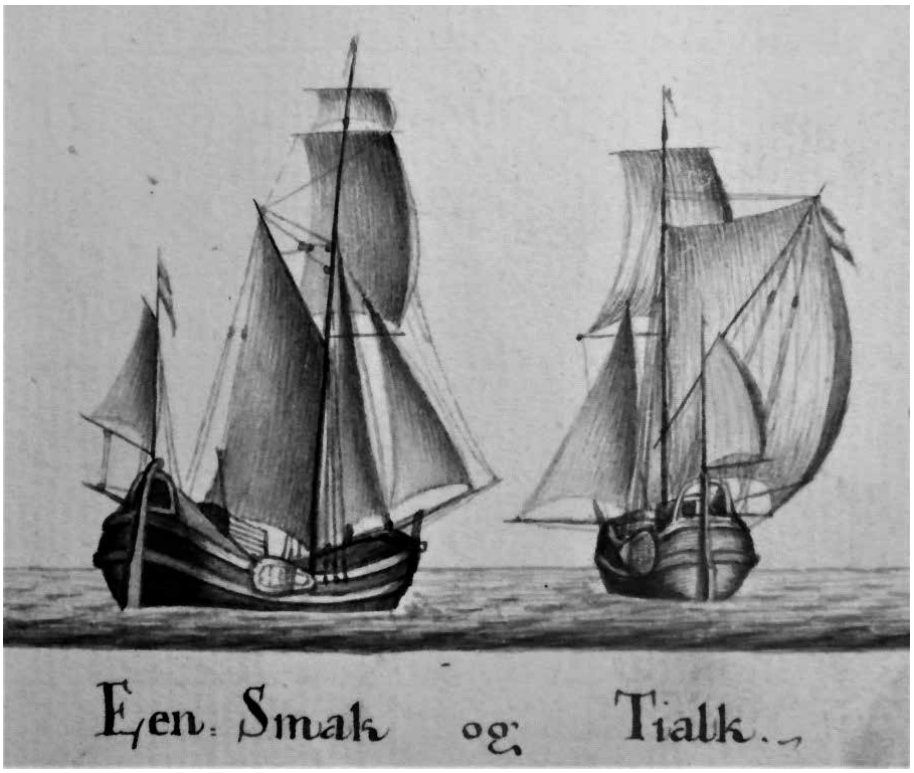


Fig. 4.12. 18th century smack and tjalk. The Stibolt Brothers 1763. The Danish Maritime Museum.

en route to Lübeck. It is apparent that smacks and jagts were used to provide ferry services at the west coasts of Jutland and Schleswig and at Skagen, where the vessel's ability to sail close to the prevailing westerly winds was indispensable. Interestingly, Copenhagen had no local smacks and only three jagts, which must mean that the ferry service to and from the city, which was considerable, is not included in the inventory. In Copenhagen, however, you find the largest number of ships, 36 of which were between 90 and 190 tonnes, which clearly indicates the capital's contact with the international ship traffic in the Sound.[328]

This international contact is verified by a custom register from Copenhagen, where in 1717 there were 17 skudes, unlike the 60 registered in 1678 and in 1727 there was only one skude left in the capital. Both in 1717 and 1727 there were 29 local jagts, and between these two years, the number of galjoots dropped from 64 to 34 (in 1678 there had been 16). There were only a few local smacks in the city, but in 1727 we now find a 75-ton hooker. Another novelty to the city was the 14 tjalks that were now registered there. The tjalk was a small, decked Dutch vessel with leeboards, one mast on which a sprit sail was carried and, on the bow, and bowsprit; staysail and jib.[329]

In 1717 in Copenhagen there were 27 ships with an average tonnage of 84 tonnes, while ten years later there were 25 ships, which now had an average tonnage of 105 tonnes; the average tonnage of cargo vessels went up. What the term 'ship' in this context

328 RA. Fortegnelse over skibe i Danmark og hertugdømmerne. 1676-1679.

329 Rheinheimer 2016a, 110.

actually means is not entirely clear, but since they are mentioned alongside krejerts in the customs registers and in the aforementioned register from the Scanian War, it must be assumed that the krejert was not considered a ship. The Danish maritime historian, Jørgen Barfod, describes the pinas as a ship and characterises it as being a three-masted vessel, with three square sails on both the fore- and mainmast and therefore with tops between the mast, the topmast and the gallant mast. The mesan mast carried a lateen sail with a square sail above it, and the pinas sometimes had, besides the tops of the three masts, an additional top on the bowsprit, indicating that the vessel was carrying square sails even here. Barfod also classified fluyts as ships, as they had the same rigging, but the fluyt differed from the pinas by being flat-bottomed, full-bodied and rounded with a small transom over the helm. Another Danish maritime historian, Anders Monrad Møller stated, based on customs accounts and ship surveys from the period 1712-1720, that 'ships were three-masted and in all cases carried square sails on at least two "floors"'. Monrad then questions Barfod's comparison between 'ship' and the pinas and fluyt, stating that 'all indications are therefore that skudes and – to a large extent – ships were common types of vessels in the domestic waters, and therefore precisely also of local origin or obtained from neighbours at the Kattegat, Skagerrak or the Baltic Sea 'and that they both probably were squareriggers with ancient origins in the nearby waters'.[330] It is true that in certain records fluyts/pinas and krejerts were put together under the common name 'ships' (and at other times were carefully distinguished from each other), but when Monrad Møller argues that the ship had to be a local, common ship type in 1721, he overlooks the fact that at that time, the dutch fluyt and pinas had been known and built in Denmark-Norway for about 100 years and were thus commonly seen on the waters of the Danish king.[331]

The vessels in the Danish merchant fleet were relatively small for most of the 17th century compared with abroad. In the years around 1640 the Sound Toll Registers show that only 11 percent of the Danish ships measured more than 180 tonnes, while for the Dutch ships the share was 90 percent. 43 percent of the Danish vessels were between 54 and 180 tonnes, which only 9 percent of Dutch ships were, and while 46 percent of Danish vessels were below 54 tonnes, this only applied to 1 percent of Dutch vessels. The same year, there were 118 vessels registered in Copenhagen, of which 65 or 55 percent were skudes of an average of 30 tons and 27 so-called ships (23 percent) of an average of 144 tons. Despite the many skudes, however, the ships accounted for 91 percent of the total tonnage.[332] After the Great Nordic War (1709-1721), the picture began to change as old types of ships disappeared and were replaced with new ones, and the average size of vessel grew bigger.

Thus, it can be seen that in 1733 the skudes constituted eight percent of the province's merchant fleet, in 1797 only constituted 1 percent of the vessels. The same trend can be seen with the full-bellied galjoot, which in 1733 made up 46 percent of the vessels, but in 1798 only constituted two percent. The krejert also declined in numbers from 13 percent to one percent in the period. On the other hand, the number of jagts grew. In 1733 this type made up 36 percent of the provincial merchant fleet, and in 1798 it accounted for almost 40 percent of the vessels, and the new type, the galeas, which was not registered at all in 1733, in 1798 made up 31 percent of the vessels. And finally the proportion of full-rigged vessels in

330 Monrad Møller 1996, 186.
331 Bugge, 452-455. Probst 1996, 106.
332 Degn & Gøbel 1997, 24.

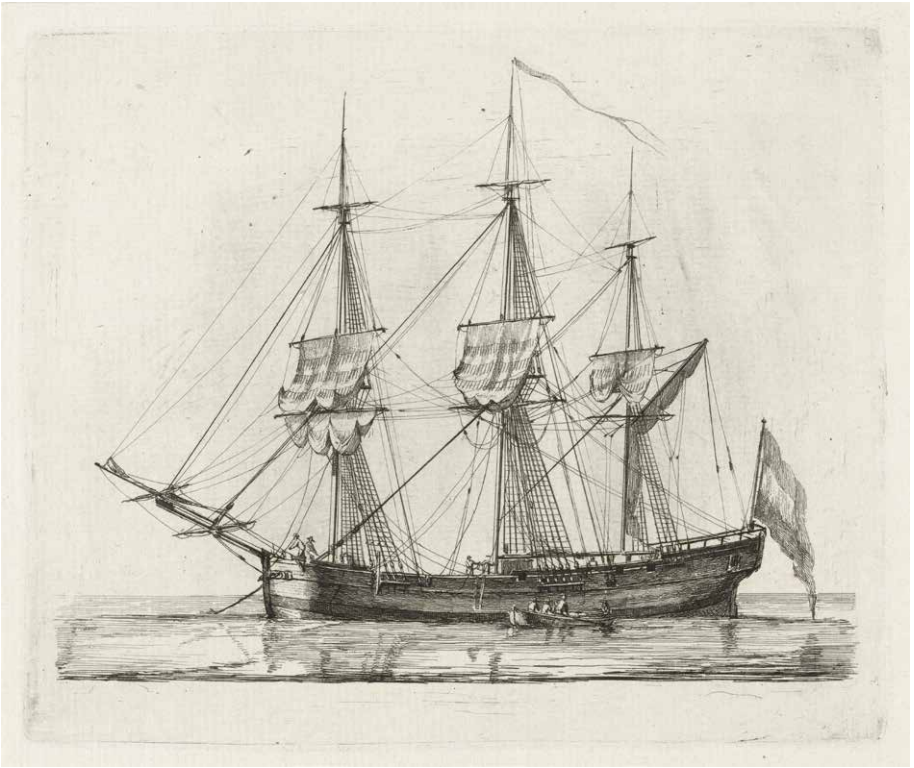


Fig. 4.13. Full-rigged ship (fregat). Groeneweger 1789.

the provincial towns of Denmark was now also declining, from seven percent in 1733 to one percent in 1798; it was now primarily the capital that had the disposal of these large ships.[333] In 1746, there were 120 vessels in Copenhagen, of which 45 were ships totalling 5900 tons, 36 were galjoots with a total tonnage of 1600 tons, and 18 were jagts of in total 324 tons. In 1787, on the other hand, there were now 450 vessels, 140 of which were full-rigged ships, 80 galeases and 54 brigs. There were 36 hookers, 30 jagts, 27 snows (brigs with a support mast behind the mainmast) and 20 brigantines (two-masted vessels with a square-sail rig on the foremast and gaffsails on the main and mesan mast). Now there were only six galjoots left. [334]

4.3.2 Import of Dutch vessels to Norway

By the middle of the 17th century, the import of Dutch ships to Norway must have been quite large, as seen in a request from the Danish king Frederik III to the English Parliament in 1661 in connection with the introduction of the new Navigation Acts. The king asked for an exemption from the new rules for ships from his kingdoms and the argument was that there was too little oak in the kingdoms for the subjects to build enough cargo ships themselves and that they had to import Dutch ships.[335] The statement that there was not

333 Feldbæk 1997, 134.
334 Feldbæk 1997, 137.
335 Barbour 1930, 286.

Fig. 4.14. View of Bergen (Norway), 1665, unknown. After Hieronymus Scholeus, 1665. Rijksmuseum RP-P-OB-81.971.

enough oak seems to be a somewhat thin explanation, but the request shows that there was probably a lot of Dutch imported tonnage at this time and that exclusion from the English market for Norwegian shipowners in particular could have serious consequences. In the accounts of many customs offices around Norway there is evidence of a strong Dutch influence through the construction of Dutch ship types or imports of Dutch ships. This applies to Drammen, Langesund, Risør and Arendal, where large fluyt and pinas vessels of 300-400 tonnes were registered. The large import of Dutch vessels can be seen in the customs accounts of Skien, as the origin of the local ships is stated. It turns out that six were built in Norway, three in Denmark and three in the Netherlands, but in terms of tonnage they are distributed with 1180 tonnes on Norwegian-built ships, just 76 tonnes on Danish ships and 1130 tonnes on Dutch ships, which shows that the ships imported from the Netherlands were very large. In the ship register of Bergen from 1696, one finds the bysse *Pelican* built in 1679 in the Netherlands, the bysse *Ste. Maria* built in 1684 in the Netherlands, the ship *St. Peder* built in 1680 in the Netherlands, the ship *Ste. Johannes* built in 1683 in the Netherlands and the ship *Ste. Maria* built in 1679 in the Netherlands.[336]

In around 1700, contact with the Netherlands was still strong, and the city hall in Christiania (Oslo) issued certificates 65 times for trips to England or the Netherlands. These were for large timberhaulers of between 300 and 400 tons loading their timber in Drøbak in the Oslofjord, mainly sailing to Amsterdam. Many of these ships were Dutch secondhand tonnage, but some were also built locally. In 1699 in Drammen there were three fluyts with three tops each and two fluyts with two tops, as well as a catship, and, in Stavanger, the fluyt *Jan* of 300 tons was purchased in 1683. As far as Bergen is concerned, in the 'Fortegnelse over de schippere og schibe som Bergen har eiet udi aaret 1701' (List of the skippers and ships owned by Bergen in the year 1701), one finds in addition to armed

336 Scheel & Worm-Müller 1935, 12-14.

merchantmen with average tonnage of 115 tonnes (probably of the pinas type), 58 fluyts, 17 galjoots and hookers, 13 krejerter and 15 skudes.

The Great Nordic War (1709-1721) hit Norwegian shipping hard, and an anonymous writer from the Akershus district reported on the conditions: 'De skibe i dette stift tilbage er, bestaar mesten af hollandske bygninger, undtagen nogle faa i dette stiftets vestre lands stæder. Med de hollandske bygninger kan ei befares andre steder med trælast end Holland, Flandern, Frankrike, Spanien og Portugal. Fra Holland kan undertiden føres litet støkgods, mens dog alt med sand eller mursten, ballast. I Flandern er ei heller andet til ballast end sand' (the ships left in this district mostly consist of Dutch constructions, except for a few in the district's western towns. With these Dutch vessels, it is not possible to go anywhere with timber cargos other than the Netherlands, Flanders, France, Spain and Portugal (because the English navigation laws prohibited Dutch imports, ed.). From Holland a little cargo can sometimes be had, mostly though, sand or brick, ballast. In Flanders, there is nothing else for ballast, but sand'. As shipping began to grow after 1740, the maritime cities of Arendal, Kristiansand, Bergen and Trondhjem initially bought secondhand tonnage in the Netherlands and England. In Trondhjem there were no locally built ships in 1746, only second-hand tonnage from abroad and in Bergen there were only 13 ships built in Norway; the rest was foreign tonnage, whereas the eastern cities of Skien, Larvik and Drammen built their timber ships themselves.[337]

4.3.3 The Royal Danish Navy

Given the better manoeuvrability and speed of the full-rigged carvel-built ship, it may be obvious that the Royal Danish Navy was very quick to adopt Dutch ship types. Thus, in 1487, the fleet of King John consisted of at least four carvel ships: *Michel Skottes Kravel*, *Holken, Den Gule Kravel*, *Axels Kravel*, *Dugeren*, *Snekken*, *Skytternes Kravel*, *Barken*, *Bardsen* and *Griffen.*[338] Only 20 years after the first carvel-built ship was constructed in Zierekzee, we find this type of new ship in Denmark. The fact that they were imported or perhaps even built by Dutch shipbuilders brought to the country by the King, is supported by the mention of the Dutch shipbuilder in the chapter 3 on Dutch experts in the kingdoms of the Danish king.[339] During the War of the Reformation, Christian II (1513-1523) led a fleet of Dutch vessels to Norway, and perhaps it is the remains of this fleet which we find in the siege of Copenhagen in 1533: *Enckhuysen Kravel* and outside Karlskrona: *Den Brygske Kravel*, *Grønningske Kravel* and the bojert of Jørgen van der Wisch. South in the Sound as guardships were the bojerts of Peter van Alkmaar and Karl Skotte and also Ålborger *Bøjert*. Clearly, there was an intensive import of Dutch ship types to Danish waters in the first part of the 16th century. However, dutch type ships were also being built in Denmark. Thus, in 1548, the aforementioned master shipbuilder Henrik Kolterman built the *Fortuna*, a new warship, at Holmen. In 1565 King Frederik II (1559-1588) bought two more ships in Norway and also agreed with 'tømmermand og borger i Amsterdam Frederik Brinck' (shipbuilder and citizen in Amsterdam) Frederik Brinck about the construction of a ship in Norway according to the size and template of 'our Fortuna'.

In 1559, Frederik II bought another ship built by his factor in Amsterdam, Johan Falckner, and this ship was to be used for war, because it was fitted with guns.[340] The following year,

337 Bugge, 452-455, 458, 466, 506, 525.
338 Dahlerup, Troels. S. 335.
339 Schäfer 1883, 289.
340 Barfod 1995, 9, 44, 152, 168.

his governor of Copenhagen, Mogens Gyldenstjerne, recommended that the king have another ship built in Amsterdam, because 'hvad de der bygger er to Gange saa langvarig' (what they build there has twice as long a duration, as elsewhere).[341] Perhaps Gyldenstjerne was inspired by the royal customs officer in Helsingør, Henrik Mogens Rosenvinge, who saw Dutch ships every day, and in a letter to the governor recommended that the king buy ships from Amsterdam and Enkhuizen, 'hvor De byggede Skønne Skibe til brug i det vesterske Farvand' (where they build beautiful ships for use in the western waters (the North Sea)). The king worked purposefully to build a strong navy, and in connection with the start of the Nordic Seven Years' War (1563-1570) he went shopping abroad. Two ships were purchased in Danzig and two others in Lübeck, while *David* and *Morianer* were purchased in Amsterdam. In 1576 a squadron was dispatched to *Øsel* in Estonia, consisting of *Enkhuyser Jomfru, Sorte Bojert*, the bojert *Flasken* and *Flyvende Hjort*.[342]

It seems that during the period from the reign of King John and until the end of the reign of Frederik II there was a considerable import of Dutch vessels and construction of the same types of ships in the realms, in order to supply the Royal Danish Navy, and this process continued to a lesser extent during the reign of Christian IV (1588-1648), although he apparently preferred Scottish and English shipbuilders. Yet we see that when Jens Munk embarked on the expedition to the White Sea in 1610, he commanded three ships, of which one was named *Hollandske Pinas* (Dutch Pinas), and when the king in 1620 needed a large merchant vessel, he had *Perlen* built in Neustadt by the Dutchman Peter Michelsen.[343] In 1621, the navy even bought two warships in the Netherlands for the net sum of 25,000 rigsdalers, which happened again in 1645, when another five warships were acquired in the Netherlands.[344]

The small budgets following the Swedish wars (1657-1660) put a damper on the maintenance and acquisitions of the Navy, so it was not until Christian V took the throne in 1670 and General Admiral Cort Sivertsen Adeler was put in charge of the navy, that interest in Dutch ships and shipbuilders resurged. Thus, in 1664, Adeler bought the frigate *St. Michael* in Amsterdam and at the same time the influential nobleman Christoffer Gabel acquired the galjoot *Unge Tobias*. During the second Anglo-Dutch war, in 1665, four warships were purchased in the Netherlands and stationed in Bergen.[345] In the following year, eight additional warships were hired in the Low Countries, and the galjoots *Det Unge Lam* and *Det Gamle Lam* were bought as well. In the build-up before the Scanian War, the warship *Mercurius* was bought in the Netherlands and later named *Anthonette*. By the end of the 17th century, the Royal Danish Navy consisted of 30 warships with more than 50 guns, 15 warships with between 20 and 50 guns, 12 frigates with less than 20 guns, and nine jagts, while in Norway there were six galleys. In addition, the navy owned 18 merchant vessels, including: one cat, three fluyts, six galjoots, one krejert, and five fire ships.[346] Many of these ships were either purchased in the Netherlands or built by Dutch shipbuilders.

341 Fabricius 1945, Vol I, 157.
342 Barfod 1995, 168, 208, 247.
343 Probst 1996, 106, 130.
344 Garde 1861, 128, 209.
345 Bugge, 411.
346 Barfod 1997, 23, 38, 107, 108.

Fig. 4.15. The figurehead of the *Gribshunden*. The Blekinge Museum.

4.4 Marine archaeological finds

In 2015, at the Eköen in the Rönneby archipelago, in Blekinge, Southern Sweden, a 15th century shipwreck was discovered, which has been identified as the wreck of the Danish warship *Griffen* or the *Gribshunden*. The Blekinge Museum's diving report from 2015 shows that the dendrochronological dating establishes the logging of the timber to 1482/1483 and that the provenance is the Ardennes area (southern Belgium, northern France) down to the river Meuse.[347] The timber for the *Gribshunden* was therefore most likely floated down the river into the Meuse Delta, where the town of Zierikzee immediately suggests itself as the logical construction site. This seems to be the earliest concrete evidence of the import of Dutch maritime technology to Scandinavia. In addition to the *Gribshunden* in Blekinge, archaeological evidence has been found in Denmark for the early import of Dutch vessels and for the use of the shell-first construction method, which, as mentioned earlier, originated in the northern provinces of the Netherlands.

The Hafnia wreck found in Vejle Fjord (Jutland) was dated to 1574 and the timber originated from western Germany, which was one of the main timber supplying areas for the Dutch shipbuilding industry. The vessel had a flat bottom and no connection between the frames, which means that the vessel was probably Dutch.[348] In 1990, at Helsingør ferry terminal, a large vessel was surveyed that could be identical to the warship the *Gideon*, built on Holmen in 1584, and lowered as part of port facility in 1617. The wreckage had

347 Blekinge Museum 2015, 33.

348 Grue 2010, 45.

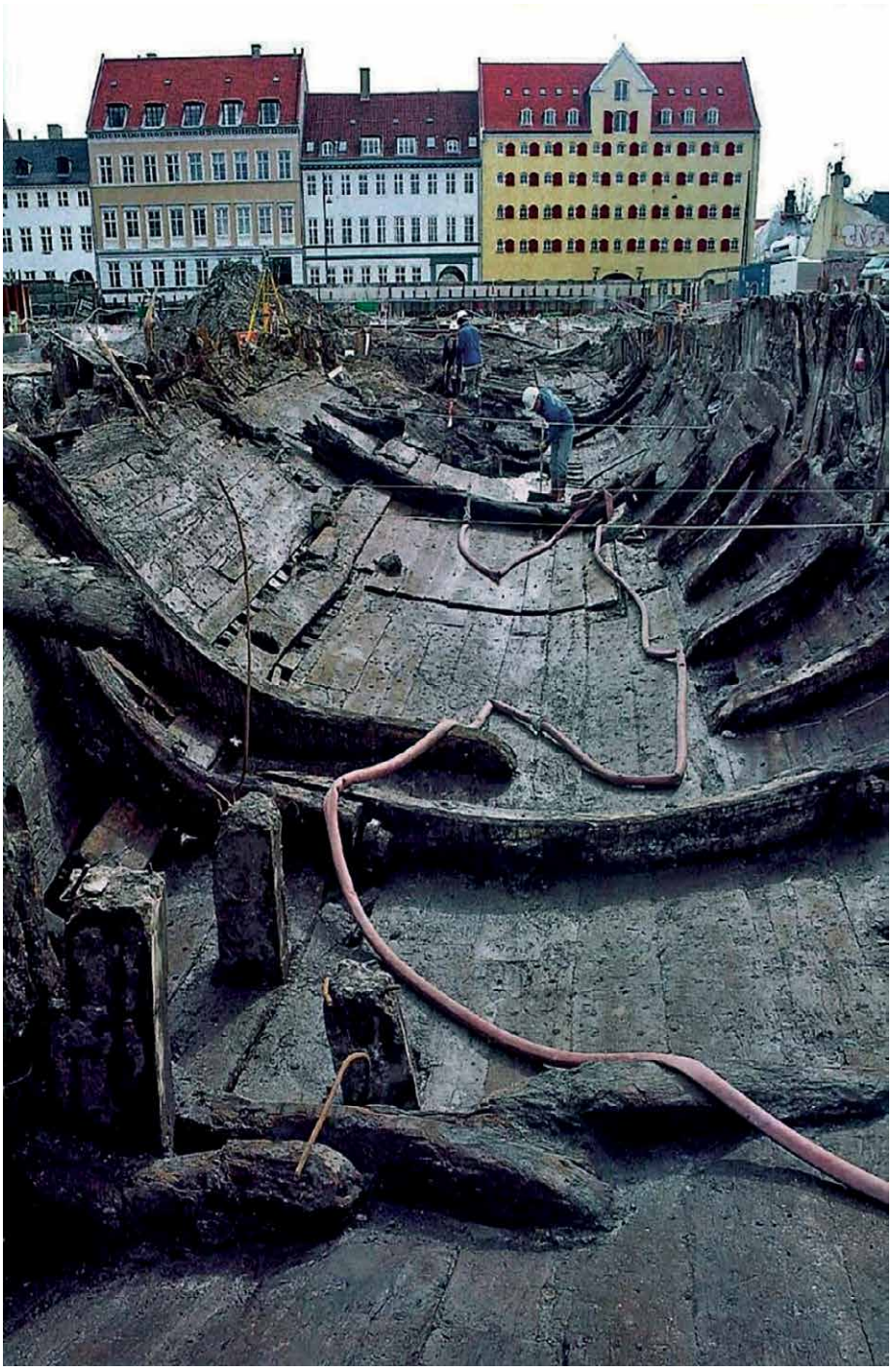


Fig. 4.16. The B&W excavations, 1997, the B&W 5 wreck. The Danish Maritime Museum. Photo: WK.

clear traces of the shell-first method.[349] In 1994, a flat-bottom Wadden Sea ship was excavated in Uelvesbüll at Husum in Schleswig, dating to 1584 and built shell-first.[350]

When developing a building site in 1996 at the former B&W site at Christianshavn in Copenhagen, eight shipwrecks were found, four of which were built using the previously described shell-first method. The B&W1 wreck is presumably a Dutch 'verlanger' (a ship enlarged after some years of service), in this case a bojert, and there is reason to believe that this is the *Hollands Jæger*, which according to written sources was active in Danish waters between 1620 and 1623. The B&W2 wreck was built in 1606 and reinforced with an extra layer of hull planks in 1622. It was a large ship, and since a coconut was found in the bilges, it is reasonable, with written sources as a clue, to assume that the ship is the *Elephanten*, which participated in the expedition of Ove Gjedde to Trankebar in 1618-1622. In 1609 the Royal Danish Navy captured the ship from the Swedes, when it was called the *Hollands Mjölkpigan* (Dutch Milk Maid). The B&W4 wreck, with its relatively small size and very flat bottom, was obviously a Wadden Sea vessel and could be one of the two smacks that were acquired in 1626 for the navy; the vessel is dated to 1589. The B&W5 wreck is most likely a fluyt or a pinas and was probably built in 1627.[351]

The Stinesminde wreck at Mariager in Jutland is yet another early carvel-built ship, which has certain Dutch building features: three powerful sheerstrakes (the uppermost planks in the hullsides), which were typical of fluyts, as well as the anchor winch foreward. However, the wreck also lacks some typical Dutch features, as it is built quite sharply at both ends and the draught marks on the stern were set in Lübeckerfeet. It may therefore be a ship built in Lübeck, whose shipbuilding tradition, as shown earlier, was strongly influenced by the Dutch after 1572. The Ebeltofthavn wreck can be attributed to a Dutch building tradition to a greater extent than the Stinesminde wreck. The wreck is dated to 1640 with a timber provenance to western Norway or northwest Germany and has clear traces of clamp spikes on the inside of the planks. The hull is not very flat-bottomed, but has a nice rise from the keel to stem and could have been built in Norway for sailing in the deep fjords. Finally, there is the Ebeltoft Camping 2 wreck, built in around 1663 with timber cut in Germany. This wreck had spike holes in the inner planks after temporary clamps, a fairly flat bottom and a non-connecting frames system, indicating that this vessel was also of Dutch origin.

With the massive Dutch timber trade in Norway, it would be reasonable to find wrecks of Dutch origin in Norway. The Tau vig wreck in Ryfylke does not have all the known characteristics of Dutch-built ships, although there is double-planking, where an extra layer of skin planks is stitched on top of the first layer. In addition to this 'Double-Dutch' technique, the wreck had a flat bottom, and around the wreck were found some loose objects of Dutch origin: bricks, pottery, etc., dating the wreck to the late 16th century and the beginning of the 17th. The Tau vig was a small timber shipping locality, known for visits by Scottish and Dutch timber ships and in light of the loose finds, it is likely that the Tau vig wreck is of Dutch origin. In 1982, a wreck was found at Strømsholmen, which was considered to be identical to *De Graue Adler*, a merchant ship whose last port of departure in 1696 was Copenhagen. The wreck had double planking, flat bottom and together with some loose finds, it is considered to be of Dutch origin. In 1983, parts of a shipwreck appeared on the beach at Kviljo, Lista. The

349 Probst 1994, 148.
350 Kühn 1999, 77.
351 Lemèe 2006, 117, 165, 232, 263.

timber was dated to 1680 plus or minus 50 years, and the wreck had Dutch characteristics: cavel built with unconnected frames, flat-bottomed and with a bow similar to wreckage found in the Zuiderzee. The Stopleleia wreck at Hustavika was found in 1985 with many loose finds of Dutch origin in the immediate area: yellow bricks, lead, chalk pipes, faience and other commodities, and it is assumed that this is a small Dutch fluyt. Based on the loose finds, the wreck is dated to the latter part of the 17th century. The Skernøysund 1 wreck was built between 1610 and 1620 and some of the timber originated from the Netherlands itself, which may indicate a source of error, as due to the large shipbuilding industry in the area, Dutch timber should supposedly have been very rare. However, the conclusion after the initial investigations was that this is a Dutch vessel.[352] Ships were probably also built in Norway using Dutch construction methods. A ship found in Oslo in 2014 indicates that at least in the middle of the 17th century, this occurred. The timber for the Palëhave 1 wreck is dendrochronolegily dated to between 1636 and 1643 with a provenance in southern Norway or southern Sweden, which, however, does not definitively determine the construction site, as timber from especially southern Norway was known to be exported to the Netherlands. However, the wreck indicates that it is a shell-first ship, as there are no connections between the frames. To sum up: the marine archaeological material from the realms of the Danish king shows a clear Dutch presence and also that Dutch ship types were constructed here.

4.5 Navigational aids

During the 14th century Dutch skippers increasingly began to use so-called 'reading charts' (pilot books), which gave detailed descriptions of waters and sailing directions. In 1532 *Der Kaert van der Zee* was the first printed edition of such a reading chart. In 1568, the dane Laurentz Benedicht published the *Søkartet offuer Øster oc Vester Søen (Seachart for the eastern and western seas)*, which was a collection of all ready know charts, but with the exception of the Danish and Norwegian waters, which seem to reveal local knowledge, this work must be based on a now-vanished Dutch collection of charts. The great breakthrough for an internationally useful chart collection was Lucas Janszoon Waghenaer's *Spiegel der Zeevaerdt*, which was published in 1584-1585, and which was translated into English as *The Mariner's Mirror* the following year.[353] This work was used throughout Europe and probably also in Denmark-Norway, as it was easily accessible with the help of the Dutch printing industry. In 1598 a German version came on the market, which became the main reference for hydrographic work in the North and Baltic Seas. In the first half of the 17th century Dutch cartographers such as Simon Stevin, Willebrord Snellius, Ezechiël de Decker and Adriaen Vlacq published a series of works on improvements to navigation techniques and calculation methods which were quickly translated into English, and it was not until 1693 that an English hydrographer published his own observations and directions.[354] Undoubtedly, in Denmark-Norway, these works were also used. It was also in the late 17th century that a new wave of Dutch navigation manuals hit the market. The most popular were Claes Hindrickz Gietermaker's *t Vergulde licht der zeevaert* from 1660, Jacob and Caspar Lootsmans *Nieuw en Groote Zee-Spiegel* from 1680[355] and Klaas de Vries'

352 Grue 2010, 43, 52, 56, 58, 59, 60, 61, 79.
353 Olesen & Thaarup 2012, 20, 23, 26.
354 Davisa 2008, 294.
355 Degn & Gøbel 1997, 76.

Fig. 4.17. Navigation instruments. Unknown, ca. 1590 – 1596. Rijksmuseum NG-NM-7696.

Schat-kamer of te kunst der Stuurleiden from 1702. The works of Gietermaker and de Vries were used everywhere in the realms of the Danish king, and according to Christian Carl Lous, who was the director of the Copenhagen Navigation School in the 1780s, 'the Schatkamer of Claes de Vries' was the typical sailing manual used in Denmark.

In 1781 and in 1786 navigation schools were established in Porsgrund and Christiania (Norway), respectively, where the authorities specifically emphasised that the lessons taught should be based on Dutch manuals. In Danzig, the *Schat-kamer* was still used for navigation tuitions in 1802, and from the Hamburg Navigation School there is evidence that from 1749 onwards classes were taught in Dutch. In Schleswig-Holstein, the manuals of Gietermaker and de Vries were used in the private navigation schools for over 130 years.[356] Thus, in 1743, Paul Frercksen used Gietermaker's work in the navigation school in Wyk[357] and Jens Jacob Eschels did the same in 1774.[358] It is thus clear that Dutch navigation methods and expressions were dominant in the realms of the Danish king throughout the period under study.

Not only charts and sailing manuals were sourced in the Netherlands, but also navigational aids. In 1634, when the Danish company ship *Sankt Anna* was to sail for the East Indies, all navigation instruments had to be purchased in Amsterdam. Compasses, binoculars, hourglass, maps, astrolabes, quadrants, etc. were bought and smuggled out of the country as the General States vigilantly guarded the knowledge needed for sailing to Asia. It was not until the late 17th century in connection with the great boom of Danish-

356 Davids 2008, 278, 326.
357 Frercksen 1973, 101.
358 Eschels 1966, 51.

Norwegian shipping that domestic compass- and instrument makers in a larger style were able to supply the domestic market with navigation instruments, putting a halt to imports from the Netherlands.[359]

4.6 The sailor's craft, seamanship

To be a part of the crew of a large ocean-going square-rigger required a high degree of specialised knowledge and experience, which could not be picked up randomly, but required years of work. The big sailing vessels of the time were among the most advanced technologies, and the seamen were recognised by some as highly competent. Thus Adam Smith wrote about them: 'Though their skill and dexterity are much superior to that of almost all artifiers and though their whole life is one continual scene of hardship and danger, yet for all this dexterity and skill (…) They receive scarce any other recompense but the pleasure of exercising the one and surmounting the other'.[360]

This was true in the 17th and 18th centuries and also in the 19th century before steam technology displaced sailing ships from the world's seas. The Danish sailing ship captian, Jens Kusk Jensen, has brilliantly described the craft of the sailor and his career, and this description might as well be the considerations made by a Dutchman of the 18th century. In 1901, Kusk Jensen published 'Haandbog i Praktisk Sømandsskab' (Manual in practical seamanship) to assist newcomers to the trade, and in 1924 the fourth revised edition of 400 pages was published with a supplement on sail making. In the chapter 'Various Positions and Customs on Board a Ship' he writes about the start of the sailor's career: **'Dreng** (boy) is the name given to the one who goes to sea and has not sailed before, no matter how old or big he is, and the same goes for anyone who is not strong enough for the work of an ordinary sailor, even if he has sailed for some time. He who ships out as a boy does not pretend to have any knowledge of the sea, and so cannot be expected to know the name of anything on board or know the difference between starboard and port, but it is assumed that he has good will and diligence to learn as fast and well as he can. The boys on board are expected to clear the rope ends on the deck, sweep the deck, carry water when swabbing, take the yarn around when an end is to be dressed, grease aloft, overhaul the buntlines, hold logline, hammer rust, polish brass, make keckling, make yarn and the like. When a rope has to be hauled, the boy is still in the afterhand and must stop and belay. With good weather, he may try to stir together with an able hand and get to know the compass, and when he knows the compass and can steer, he is allowed to do it alone, provided he has enough strength, is careful and is otherwise willing. In the same way, he gets to know the various duties of a watchman. The boys join the watch and work with the rest of the crew, but their work, as a rule, is of the nature that not much practice is required to do it'.[361] Wegner and Lave would say about the ship's boy, that he is a peripheral but legitimate participant in the on-board practice community, and there are lower demands made of him in terms of working time, responsibility and effort, and there is more room for him to make mistakes.[362]

359 Degn & Gøbel 1997, 76, 78.
360 Brock & van Lottum 2016, 12.
361 Jensen 1971, 361.
362 Lave & Wenger 2003, 94.

It was the on-board practice community that could decide whether a peripheral, legitimate participant could approach veteran status: 'Anyone who feels that he is in possession of the knowledge required to muster such as ordinary, able seaman or boatswain quite simple ably for job in the desired position. But woe to him who overestimates his skill and pretends to be more than he is. His are all kinds of dirty work, teasing and unpleasantness, for others feel that he has deceived them, and that they must do some of his work. He who thus sets out for more than he can, must be glad if he gets off with only having his pay reduced.' About the able seaman Kusk Jensen wrote: 'Quite a lot is needed in order to be called an able seaman. He should first and foremost be an experienced seaman, and besides everything previously mentioned for boy, and ordinary seaman, it is generally assumed that an able seaman should be able to manoeuvre a boat, be fully acquainted with all that belongs to setting, taking in, reefing and making fast sails, as well as manoeuvring for sails, port manoeuvres, warping and carrying and letting go anchors in boats. He must be a good helmsman, be able to set up all running and standing rigging, take down and bend sails, be fully familiar with the use of logs and lead, be able to do the ordinary seaman's work on hemp, gras and wire rope (splicings, knots, serving, kecklings, mats, straps, etc.) as well as some finer works (points, cock's comb, Turk's head, crosspoints, etc.); in short, he should be able to make the running rigging on a ship and repair the standing rig. Some of the more difficult jobs that can be demanded of an able seaman include the splicing of cables, footropes, grass, manila and wire hawsers, as well as setting up and taking up yards and masts and taking the jibboom in and out. It cannot be required that an able seaman on his own should be able to make the standing riggim for a ship, but it is considered a given thing, that a good seaman can make a shroud seizing and strap in a block, make a shroud-knot, put a pigtail and the leach rope of a sail and sew on a patch, when necessary'.[363]

Kusk Jensen's description of the various positions and the advancement ladder on board compares exactly to the working conditions that have existed aboard large, square-rigged ships ever since they were developed in the late 15th century.[364] Of course, one should disregard the mention of work with iron or steel wire, which only became common in the second half of the 19th century, just as mention of oil may be a modern time. However, the road to sea was the same. The boy, the landlubber, started aboard as a peripheral-legitimate participant, but through 'Stadig at tage del i forskellige Arbejder, lærer de efterhånden Søvæsnet at kende og hvad brug man gør af de forskellige ting' (constantly taking part in different jobs, they gradually learn the sailor's trade and what use the different things have).

Through participation in the maritime practice community, the novice slowly approached veteran status and advanced through the positions on board, not by using a traditional educational system, but by slowly understanding and taking over the practice community's activities and mind-set,[365] which also included social control that made sure that no one took on a higher position in the ship hierarchy than his knowledge allowed. The culmination of seamanship could be found with the veteran of the maritime practice community; the experienced able seaman who could muster as a boatswain. He was familiar with all shipboard work: towing and mooring, anchoring and warping. He could set, take in and reef all types of

363 Jensen 1971, 361, 362, 363.
364 Unger 1997, 12.
365 Lave & Wenger 2003, 31.

Fig. 4.18. *Standing young sailor* by Moses ter Boch, from about 1660 to ca. 1665. Rijksmuseum RP-T-1951-14.

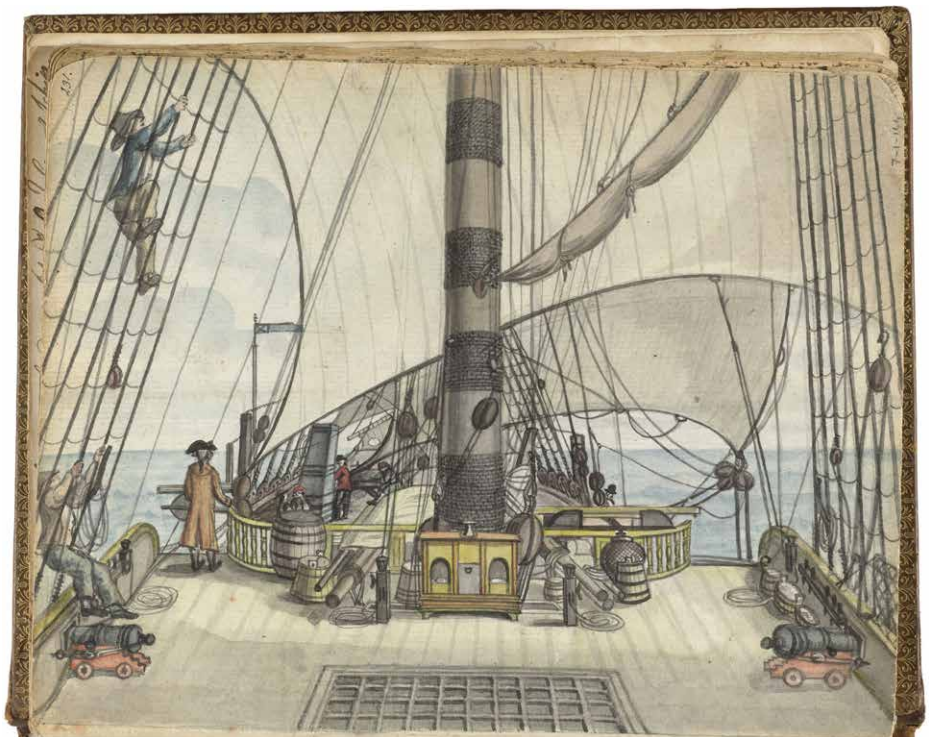


Fig. 4.19. Sailors enter the rigging onbord a Dutch Eastindiaman. *Deeksview from a VOC-ship behind the mainmast.* Jan Brandes, 1778- 1787. Rijksmuseum NG-1985-7-1-144.

sails and handle them during tacking, going about, anchoring and coming under way. He was an experienced helmsman and should be able to control the large ship under all conditions. He could set up all running rigging (the ropes that operated the sails) and take down all the sails and stow them in the sail room. The able seaman could repair the ship's standing rig, but the boatswain should be able to take it completely out of the ship and set it up again. An example of such a full-fledged seaman is the Föhr sailor Jens Jacob Eschels, who despite his young age was put in charge of the most difficult job in connection with the rigging of the newly built whaler *Grev Bernstorff*. He was happy with the work because: 'bei dem Aftakeln eines neuen Schiffes lernt man mehr als bein einem alten, weil de Takelage da schon steht, bei einem neuen Schiffe aber Müssen Masten, Bugsprit usw. Erst eingesetzt und alle Takelage an Tauwerk muss erst neu gemacht werden' (when rigging a new ship, one learns more than when working on an old one, because the rigging is already in. On a new ship masts, bowsprit and more must be put in for the first time and all standing and running rigging must be made from scratch).[366] Later we see how topgallant yards and mast as a pure routine, were struck to the deck in preparation for bad weather; a job that required a great deal of experience and knowledge, and that was done aloft, maybe 30 metres up in a swinging rig.

Seamanship in the large ocean-going squareriggers was obviously a complicated craft that took a long time to learn, and such an accomplished 'deepwatersailor' was a veteran of international maritime practice communities on such ships. Seamanship was easier

366 Eschels 1966, 63.

in the smaller, coastal trades on less complicated types of ships, which Kusk Jensen also implies; however, sailors were not just a homogeneous group of men who happened to work on a ship, but specialists whose knowledge was acquired through long experience.

The American scholar Jeremiah Dancy surveyed the crews of 81 English warships from the period 1793-1802 and registered the name, background, age and position of 27,174 sailors. About them he wrote:

> *'These ships required skilled men with experience in blue water square-rigged Atlantic sailing. Though much larger than Merchants, warships required the same skills. However, such ships with their vast size and increased complexity could not be manned primarily with inexperienced men from land-based trades'.*[367]

Kusk Jensen describes 4 classifications of common sailors from boy to able seaman, but previously only three categories were known; landsman, ordinary and able seaman, about whom Dancy wrote:

> *'Able seamen were the most skilled of seamen, and had mastered the ability to reef, knot, splice, man a ship's wheel, as well as work aloft in the ship's rigging, among other duties. Essentially, these men could work efficiently at any of the duties aboard ship that required "sea skills." It took several years of experience, generally five or more, to acquire enough skill to rise to this level in their profession. Ordinary seamen were semi-skilled men who knew, though had yet to master, the skills of able seamen. They proved useful on ship by working alongside able seamen in most aspects of daily life aboard a wooden warship, leaving the most difficult duties, such as working on the highest spars, to able seamen alone. Often ordinary seamen had many years of sea experience in the coasting trade under their belts. They served in small "fore and aft" rigged ships, rather than the large square-rigged ships, like those that made up the bulk of the Royal Navy, as well as in the deep-sea trading fleets. Landsmen, as their title implies, were men with little or no skills at all aboard ships at sea, and could not perform the basic tasks of a seaman. Generally, it took at least two years for a landsman to gain enough experience to become an ordinary seaman; however, this depended on the ability of the individual. Although they lacked sea-based skill, landsmen were not useless aboard warships. The majority of the heavy work in trimming and shifting sails and spars was performed via ropes that ran to deck, where strength rather than skill was needed. Unskilled men, who simply needed an experienced able seaman or petty officer to direct their work, performed these tasks from the relative safety of the deck.'*[368]

Although Dancy here describes the work on board the large English warships, which needed many more people than ordinary merchantmen did, he was aware that the experienced sailor on board a warship had the same qualifications as those on-board merchant ships. Interestingly, he also clearly distinguished between the seamen who had tried bluewater-square-rigged Atlantic sailing – able seamen – and 'ordinary seamen' who might well have sailed for many years, but in the 'coasting trade' or the 'lesser trades' as

367 Christensen 2014, 35.
368 Dancy 2012, 4.

Kusk Jensen called it,[369] on 'fore and aft' rigged ships, *i.e.* on vessels with gaff- or spritsail rig. The difference is considerable, since in the square rig you have to enter the rig and work aloft, while on the smaller coastal vessels you can operate the sails from the deck. This distinction is important because it emphasises the peculiarities and specialities of square-rigged vessels, and Dancy also explains the essential difference:

> *'The key to naval manpower was topmen, who formed the youngest, most agile, highly experienced able seamen.'*[370]

And:

> '*The key factor was acquiring able seamen, who by definition were capable of working aloft in a ship's rigging. Three skills were necessary for this. First, the men had to have the necessary skills to work aloft, which took years of experience. Secondly, they required the agility of youth to work in the rigging, and finally they needed the strength of a full-grown man to be able to handle the large and heavy sails involved in sailing warships.*'[371]

In addition to knowledge of the work required on board a square-rigger, it was also important that the seamen had the necessary agility and raw strength needed to carry out the work with the heavy sails. This ability to move quickly and efficiently in the rig high above sea could never be achieved in the coastal traffic, and as shown earlier, these requirements were even more pronounced in the 17th century, when the lack of foot-ropes in the large square-rigged vessels forced the seamen to move on top of the yards without any support. Such physical requirements also determined how long the seamen could keep sailing. Thus, Dancy found that 71% of the ordinary seamen were 29 years or younger and that only 12% of petty officers were over 40 years.[372] Thus, the well-trained able seaman was a little under 30 years old and, over the next few years, had to either advance to a petty officer's position or go ashore. The Danish-Norwegian navy depended heavily on skilled, able seamen, and the recruitment officers in Norway would sometimes find ways to force the seaman to ' Begi seg på farten' (go on the high seas) – to seek a berth in the Netherlands in order to gain the necessary experience in large ocean-going ships.[373] When the Norwegian seaman, Daniel Trosner, was conscripted to the Royal Danish Navy in 1709, he was rated as an able sailor, which means he must have been at sea for some years and learned his trade. He clearly distinguished between the experienced and able seaman and ordinary sailor, as in his diary entry for 23-24 June 1710, where he was annoyed that his ship, the frigate *Høyenhald*, had to transfer 7 able men to the *Prinsz Friderik* and received 7 inexperienced ordinary sailors in return. [374] The able seamen were, as mentioned earlier, veterans of the international deepwater maritime practice communities, while the ordinary sailors were peripheral-legitimate participants.

---

369 Jensen 1971, 365.
370 Dancy 2012, 12.
371 Dancy 2012, 200.
372 Christensen 2014, 36.
373 Sogner 2012, 73.
374 Bjerg og Melien 2017, 23, 112.

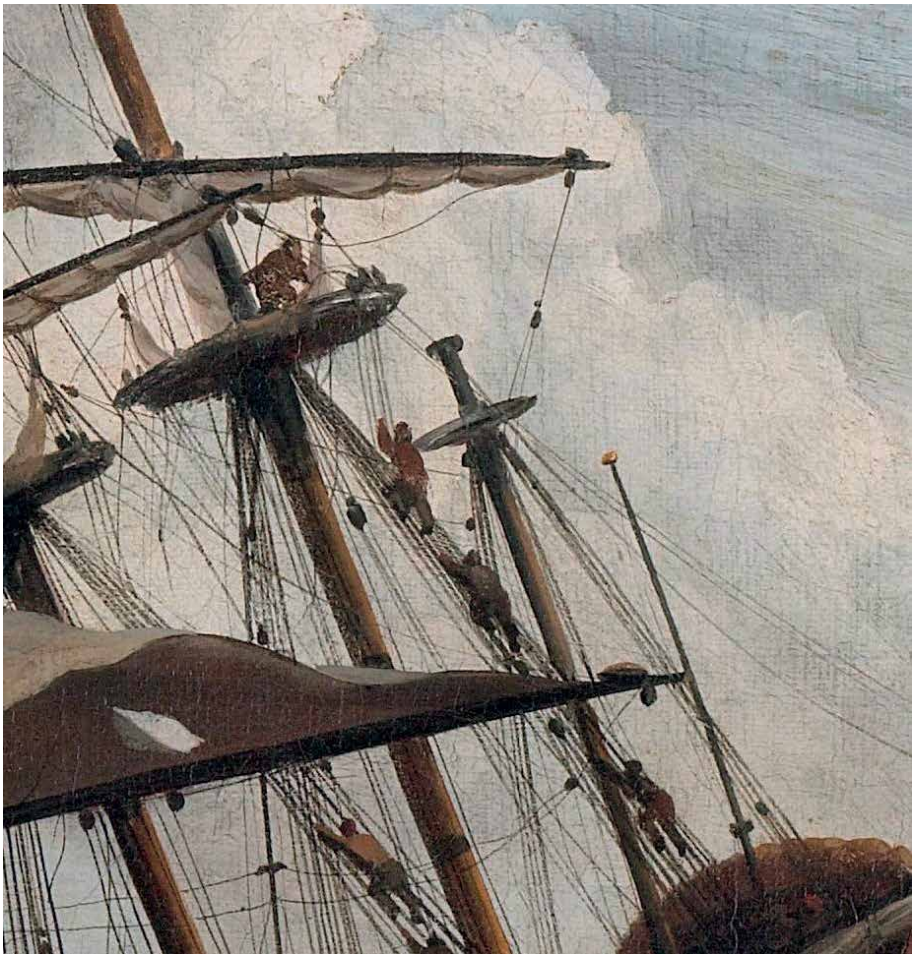


Fig. 4.20. Detail from *A ship in the open sea during a roaring storm*, also know as "the Gust", by Willem van de Velde (II), ca. 1680. Rijksmuseum SK-A-1848.

The Swedish maritime historian Jan Glete summarised the importance of skilled seafarers to an ambitious maritime nation as follows: 'Naval manning was not only a quantitative problem. Seaman skills were critical because ships could not sail without a number of highly qualified seamen. But the number of men also mattered as much of the work on deck and at the guns required unskilled muscle power as well as skills for a particular task in a team, rather than long experience at sea. Warships and fleets did not only require men. They required men with several types of skills and the ability to lead, instruct and coordinate men with different skills and tasks… Early modern states with naval ambitions required access to skilled seamen, to experienced masters and to manoeuvrable ships, to pilots who could navigate along the coast and into the open sea, and to men who could direct gun crews.'[375]

The skill of Dutch seamen was already recognised at the time. Thus in 1667, when Michiel de Ruyter succeeded in the Medway raid and captured the English flagship *Royal*

375 Glete 2010, 575, 576.

Charles and brought it across the Channel, the English Admiralty Secretary noted in his diary: 'I find it true that the Dutch did heele "the Charles" to get her down, and yet run aground twice or thrice, and yet got her safe away, and have her, with a great many good guns in her, which none of our pilots would ever have undertaken.' The Dutch seamen were considered by many to be the best in the world, not least among themselves. Nicolas Witsen described how Dutch sailors looked down on the English and claimed that these 'had more stomachs for the mess table than for hard work'. The English diarist and Member of Parliament Samuel Pepys described how in a pub he had met some Dutch sailors and discussed maritime affairs with them, and about their disdain for English sailors he wrote: 'But to see how despicably they speak of us for our using so many hands more to do anything than they do, they closing a cable with 20, that we use 60 men upon'.[376] In the maritime practice communities to which these Dutch seamen belonged, there was a professional pride in seamanship that they did not consider to be something the English seamen had. On board Dutch ships, sailors from the realms of the Danish king participated in practice communities, where such professional skill was acclaimed, and which they acquired and then brought back home.

4.6 The maritime vocabulary

The main characteristic of the maritime language is that it is developed out of necessity. In the battle against the elements, this language has been developed to accurately convey commands and instructions on action and connect the decision maker with the crew with almost machine-like efficiency. It is a laconic and technical language that can accurately describe an object or an action,[377] and was developed in the communities of practice that existed aboard the sailing ships of the time. The maritime language is a linguistic artefact; a manifestation of the practice community and thus contributes to this. The knowledge, methods, and social world of the practice community are reflected in the design and application of the language.[378] Earlier on, I showed that much of the maritime practice that existed in the Danish conglomerate state in the 17th and 18th centuries originated in the Netherlands, which must mean that the language used on board Danish and Norwegian ships, at least at the beginning of the period, must have been Dutch. Presumably this practice continued well into the 18th century. The Danish, Norwegian and Sleswig-Holsteinian sailors who went to the Netherlands to work had to learn to speak Dutch. There are many references to this,[379] and it was difficult for the new recruits to settle on board at first as they did not understand Dutch.

The seaman Paul Frercksen from Langeness in the Wadden Sea began sailing from Amsterdam in 1740 as a 15-year-old, and recounted his first time on board as follows: 'Wie ich unter so vielen fremden Leuten kam und dabei kaum die allerlei Sprache, keine einzigste davon, konnte verstehen: wurde ich hochinniglich betrübt' (As I met so many strangers and barely understood the language at all, I was very sad).[380] His publisher, Friedrich Paulsen showed that at home in the hallig Oland, Frercksen spoke Frisian, while he spoke German

376 Barbour 1930, 284, 285.
377 Rediker 1987, 165.
378 Lave & Wenger 2003, 53, 86.
379 Van Lottum 2011, 339. Dekker 1968, 33. van Royen 1987, 148. Bruijn 2016, 109.
380 Frercksen 1973, 98.

or Dutch outside his home. However, his logbook is exclusively in Dutch.[381] Also aboard the Dutch whalers on which Jens Jacob Eschels sailed, the language spoken was Dutch: 'Weil wir von Holland fuhren, wurde das Gebet in Holländischer Sprache gehalten, aber wir sangen deutche Gesänge' (Because we sailed from Holland, prayer was in the Dutch language, but we sang German hymns).[382] Without mastering the language, both Paul Frercksen and Jens Jacob Eschels would have been partially excluded from the ship's practice community, and learning Dutch was part of the path from status as a legitimate, peripheral participant to veteran status, where language as an artefact provided access to the history and worldview of the community, in this case the Dutch maritime practice community.[383]

Both Marcus Rediker and Jelle van Lottum mention that the maritime language was a kind of 'Lingua franca' in a maritime sector with many different nationalities and that it was necessary to master it in order to get a berth at all.[384] Dutch shipping increased explosively from the end of the 16th century to the end of the 17th century, and it was at that time that a large career migration of maritime professionals from the Netherlands to Scandinavia took place, which particularly affected the Royal Danish Navy. These experts also made their mark in the shipbuilding industry, and probably also in large parts of the merchant fleet, just as it was during this period that imports of Dutch ships and other Dutch maritime technology were most numerous. It is therefore most likely that it was here that the Dutch language and Dutch words really entered the maritime culture of the Danish conglomerate state. Before this time, the Lower German of the Hansa must have been dominant, and since Dutch and this language have many common features, it is necessary to be careful when words and phrases are assigned a Dutch origin, especially as we know that Lower German in the 17th and 18th centuries was also spoken in the eastern Dutch provinces and along the entire coastline from here and west to the Danish border by the Kongeåen and then again from Flensburg and all the way east to Königsberg (today's Kaliningrad).[385] Therefore, the following examples of Dutch words in Scandinavian maritime language are limited to those parts of Dutch maritime culture that can be linked to Dutch technological expansion in the 16th and 17th centuries.

A good example of this is the Danish word 'klyver', which is a staysail that is set in front of the mast, on the bowsprit. As shown earlier, the triangular staysail was developed in the Netherlands around the year 1600. The klyver is set a bit farther out than the staysail, and the word comes from the Dutch verb 'Kluiven', which denotes the act of scraping a bone completely free of/collecting all the meat. Usually on the early smacks, only the staysail was set as a foresail, but when there was almost no wind, it might be necessary to set yet another sail, the klyver, which could thus 'scrape' or catch the light wind.[386] In Dutch, the sail is called a 'kluiver', in Danish, as said, 'klyver', in German 'klüver' and in English 'jib'.[387] It is clear that the Danish and German words originate in Dutch, while the English

381 Frercksen 1973, 96.
382 Eschels 1966, 39.
383 Lave & Wenger 2003, 93.
384 van Lottum & Klein 2017, 22, 23, 24. Rediker 1987, 165.
385 Kuijpers 2005, 91.
386 Beelen, Biesheuvel & van der Sijs 2011, 147.
387 Jensen 1924, 115.

belongs to an English maritime culture. The same goes for 'stagfok', which, in German is called a 'Stagfock', in Dutch a 'Stagfok' and in English a 'forestay sail' or 'jib'.[388]

Another word is 'bramsejl' (topgallant), the term for the top square sail on a mast with three square sails, for example; mainsail, main topsail and main topgallant sail. As mentioned before, it was in the Netherlands that the idea of extending the mast with one or additional masts was developed. Most words for the various features of the full-rigged squarerig must therefore originally be Dutch. In Dutch, the topgallant sail is called a bramzeil'[389], in German 'Bramsegel' and in English 'top gallant sail'[390] and we see again that the English word belongs to another language group. In Danish 'Gårdinger' are lines that run from the yard down under the square sail and up on the front side of the sail and are used to take in the sail/haul it up to the yard.[391] In Dutch they are called 'Gordijn', and the word comes from the verb 'gorden', which means to make something fast.[392] In German the term is 'Gording' and in English 'Bunt-lines'.[393] Another example is the Danish word 'Givtov', which is a line that runs from a block at the centre of the yard to the clew corner (one lower corner of the square sail) and is used to haul the corner of the sail up to the yard when taken in.[394] In Dutch it is called a 'Gijntouw', in German 'Geitau' and in English 'the Clew-garnet.' [395] As mentioned earlier, after about 1700, the seamen could now stand on a footrope when they worked with the sail along the yard. Such a footrope is called a 'pert' in Danish and a 'pard' in Dutch and actually means 'horse'. How the connection between the animal and this rigpart emerged is unknown. In English it is called 'footrope'[396] and in German 'Pferde', also meaning 'horse'.[397]

Many Dutch words are also found in the shipwright profession. *E.g.* the Danish word 'barkholt', which refers to a particularly heavy plank in the outer shell of the ship. In *Dansk søe Ord-bog* (Danish Sea Dictionary) from the end of the 18th century it reads: 'Barkholter, eller Bergholter, giør endeel af den udenbords Klædning paa et Skib og ere tykkere Planker end de andre Klædnings Planker, som da de giøre en Væsentlig Deel af Skibets Forbinding ere de sammenføyede indbyrdes efter Længden med Lasger' (Barkholt or Berghots, which is a part of the outer planking on a ship, are heavier planks than the outer outboard planks, and because they are a significant part of the ship's integrity, they are joined together with lask).[398] Barkholt planks can only be found on carvel-built ships, which were first introduced in Northern Europe in the Netherlands in the late 15th century. In Dutch, the plank is called a 'Barghouten' or 'Berghouten' plank and according to the Dutch author Winschooten the word has its origin in the Dutch verb 'bergen', which means to preserve something and the word 'hout' which means wood. So, the barkholt planks 'preserve' the longditudinal stiffness of the ship. [399] In German, the plank is called a 'Schergänge' and in English a 'sheerstrake',[400] and it

388 Röding 1793, 607.
389 Beelen, Biesheuvel & van der Sijs 2011, 101.
390 Jensen 1924, 100.
391 Koefoed 1993, 51.
392 Beelen, Biesheuvel & van der Sijs 2011, 121.
393 Jensen 1924, 133.
394 Koefoed 1993, 48.
395 Jensen 1924, 129.
396 Harland 1984, 104.
397 Röding 1793, 262.
398 Koefoed 1993, 9.
399 Beelen, Biesheuvel & van der Sijs 2011, 91.
400 Jensen 1924, 71.

is therefore only in Scandinavia that the Dutch word has survived. In Danish the 'skandæk' are the outher planks in the deck and they cover the top end of the frames. In Dutch this plank is called a 'Schandek'[401], in German 'Schandeck' and in English 'gunvale'.[402] In Danish to 'kalfatre' means to hammer 'værk'(tarred lose hemp fibres) with a hammer (a mallet) and a caulking iron in between the planks of a carvel-built vessel to make it watertight. In Dutch this is called kalfaten/kalefateren',[403] in German 'kalfatern' and in English 'to caulk'. In Dutch 'werk' is tarred hemp and linen leftovers from rope- and sail production and is put between the planks. [404] In German it is called 'Werg', while in English it is called 'oakum'.[405]

There are also many other maritime expressions in the Scandinavian languages which originate in Dutch. As mentioned earlier, the rig types that made it possible to sail close to the wind originate from the Netherlands. Therefore, the terms associated with this kind of sailing must also originate from the Netherlands. *E.g.* the term sailing 'bide vind' in Danish, which means going as close to the wind as possible. In Dutch this is called 'by de wynt',[406] in German 'bei dem Wind,[407] and in English 'close hauled'.[408] When sailing close hauled, and wanting to turn up in the wind and continue on the other tack, it is normal to 'stagvende', namely to turn the vessel bow with the stays through the wind, so that the wind catches on the other side. In German this manoeuvre is called 'durch' or 'gegen den Wind wenden', in Dutch: 'Door de wind wenden, overstaag wenden' and in English 'to tack'.[409]

The Danish naval rank 'kontraadmiral' was not used in the 17th century. Back then, this rank was called 'Schoutbynacht', a position which is known to have been in use from at least 1657, where three such officers appear in the three squadrons of the Royal Danish Navy. [410] In Dutch, this officer is called a 'Schout-bij-natt' and was originally a public figure who served at night and therefore also a naval officer who had to take the night watch when the higher echelons were sleeping. [411] In English such an officer is a 'Rear Admiral' and in German he was called a 'Schout bey Nacht'. [412] On Dutch ships, various sub-officers, quarter masters, boatswains, constables, etc. were found, but it is not so well-known that there was also a 'schiemand', who was a second boatswain, not to be confused with the boatman's apprentice; the mate. On the full-rigged three-masted ship, the boatswain took care of the running and standing rigging on the mainmast, and his mate (helper/apprentice) was responsible for the mesan mast. The schiemanden took care of the fore mast and bowsprit. In Dutch, 'schim' is a shadow, and the schiemanden was thus in the shadow of the boatswain. [413] The word has been distorted, so in Danish this position is called a 'skibman', in German a 'Schiemann' and in English this position does not exist at all.[414]

---

401 Beelen, Biesheuvel & van der Sijs 2011, 227.
402 Jensen 1924, 70.
403 Beelen, Biesheuvel & van der Sijs 2011, 139.
404 Beelen, Biesheuvel & van der Sijs 2011, 289.
405 Jensen 1924, 1.
406 Kohlmans 1997, 178.
407 Röding 1793, 299.
408 Koefoed 1793, 138.
409 Röding 1793, 986.
410 Lind 1896, 97.
411 Beelen, Biesheuvel & van der Sijs 2011, 236.
412 Röding 1793, 510.
413 Beelen, Biesheuvel & van der Sijs 2011. 231.
414 Röding 1793, 439.

4.7 Identity

Lave and Wegner point out that by learning new things in the practice community, the legitimate-peripheral participant (*e.g.* the ship's boy) slowly changes his identity, as is the case with the seaman from Föhr, Jens Jacob Eschels.[415] After his first voyage on a Dutch whaler, both he and his family perceived him to have changed. When his father came home to Föhr the same winter after 3 years away from home, he was delighted to say: 'dass er nun schon einene seefahrenden Sohn hatte' (that he now had a seafaring son).[416] Jens Jacob Eschels also changed his name in connection with his Dutch seafaring life and called himself 'Jan Jacobs', a practice that was common among the foreign seamen who sailed on Dutch ships.[417] In doing so, he changed his identity and went from being a schoolboy to a seaman in Dutch shipping. Through participation in the on-board practice community, the peripheral-legitimate participant slowly acquired the values of the community; what you liked or disliked, what was considered worthy of respect and what was not.[418]

Great professionalism and skilled seamanship were highly valued in the maritime practice communities aboard the sailing vessels of the time. Already during the journey from Föhr to Amsterdam, Jens Jacob Eschels got to see how the older sailors behaved and what they liked and respected. When the smack on which Jens was aboard on his first voyage from Föhr to Amsterdam arrived in Amsterdam as the first of a number of such passenger vessels, the sailors on board bought a new flag for the skipper, which said with gold letters: 'Also zall de laetste de eerste wesen' (So the last shall be the first).[419] Such a performance was respected and was something the sailors liked. Appraisals of this kind can also be found in the diaries of the Norwegian sailor and diary writer Daniel Trosners, who gives several examples of warships competing with each other: '12. Juli 1710. Da var vi 3 fregatter tilsammen 'Høyenhald', 'Raae' og 'Andriken'. Det kulte hårdt som vi førte store mersejl med 3 reb og halede sejl ind, bare 'Raae' (var) lige med os. Siden tog vi stormersejlet ind, begge, da gik 'Raae' os både forud og til luvart med styrbordshalse til, men gik dog ikke meget i fra os, og at lænse med et skonnertsejl eller en fok var vi begge lige gode' (12th July 1710. We were three frigates together, *Høyenhald*, *Raae* and *Andriken*. It was blowing hard and we had three reefs in the topsail and took more sails in, only *Raae* was close by. Later on we took the main topsail in and *Raae* advanced to windward on a starboard tack, but didn't come much from us and to sail downwind with a gaffsail or the foresail we were equal). Here the frigate *Raae* beat his ship, the *Høyenhald,* and Trosner must have been displeased, because on 27 August he again wrote about a race: 'da kunne vi sejle langt forbi 'Raae' med alle sejl bi og temmelig stiv kuling forde vind – Siden tog vi begge to alle vore småsejl ind, og tog 2 reb i hvert merssejl og 1 reb i krydsejlet, og 'Raae' tog 1 reb i hvert mersejl og tillige reb i krydsejlet. Da gav vi op vore 3 andre sejl og gik mod ..ver 3 merssejl og 'Raae' gik med sine 3 undersejl, og merssejl storestagsejl og blinde og vi kunne endda holde det med ham….' (Then we could pass Raae by far with a stiff breeze sailing close-hauled with all sails set. – Later on we both took in all the small sails and we put two reefs on both topsails and one reef in the mesan topsail and *Raae* put one reef in her topsails and in the mesan topsail. Then we took in our three other sails and steered to… with three reefs in the topsails and *Raae* sailed with her three lower sails and topsails and main staysail and spritsail

415 Lave & Wenger 2003, 95.
416 Eschels 1966, 32.
417 Eschels 1996, 65.
418 Lave & Wenger 2003, 80.
419 Eschels 1966, 17.

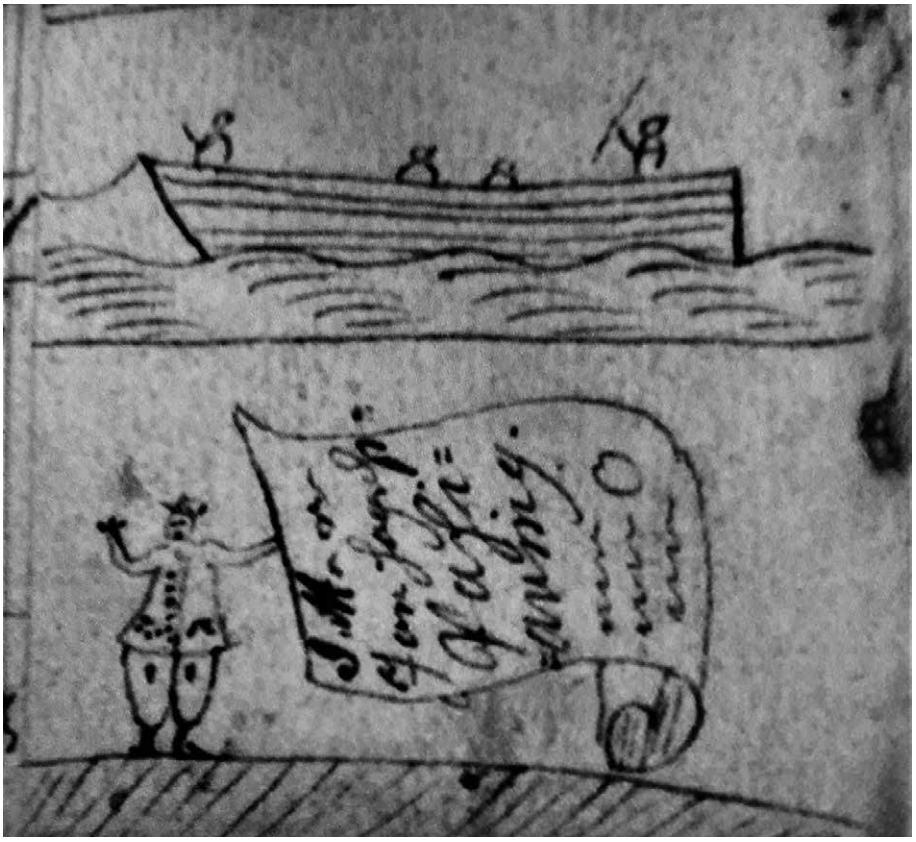


Fig. 4.21. The drawing of Jan Hagel by Niels Trosner. Bjerg, Melien 2017, Vol II, 240.

and we could even then keep up with him…).[420] Trosner consistently refers to the crew of the *Høyenhald* as 'we', which reveals that he did not consider the frigate's performance a result of the skipper and the superior officers' orders, but as a result of the actions of the entire crew, the practice community of the ship.

The Dutch shipping industry was so important for Scandinavian sailors that they often strongly identified with Dutch sailors. As mentioned above, it was common for Scandinavian seamen to take a Dutch name when sailing on Dutch ships, but also on ships from the realms of the Danish king, there was an identification with Dutch seafarers. In the Netherlands, at least in the 17th century, the Dutch sailor was known as 'Jan Hagel', a nickname often synonymous with 'mob' or 'scum'.[421] In connection with the recruitment of sailors to the Dutch fleets in May 1665, the Grand Pensionary Johan de Witt prevented the wage from rising to 18-20 guilders and stated that the sailors ' wages should be made fast, as if made of steel, for: 'Anders is matroos meester, ende den Staet gestelt ter discretie van Jan Haegel' (Otherwise the sailor is master and the state is at the discretion of Jan Haegel).[422] But Danish-Norwegian sailors also used this synonym for themselves. When Johan Petri Cortemünde sailed in 1672 with the East

420 Bjerg 2017, 148, 161.
421 https://ordnet.dk/ods/ordbog?query=jan%20hagel 25/2 2019.
422 Akveld, Hart & Hoboken 1977, 136.

Indiaman *Oldenborg*, the skipper Ib Lydersen called the sailors together with the shout: 'Jan Hagel hid' (Here, Jan Hagel),[423] and the aforementioned Niels Trosner identified himself and his comrades as 'Jan Hagel'. In his diary for 3 December 1711 there is a small sketch depicting a sailor holding a piece of paper which reads 'Jan Hagels passiasering' (Jan Hagel's conversation) and on 17 October 1712, a small sketch in the margin saying: 'Jan Hagels passiaring ei agtis maa: thi den taler ofte om det, som den ei monne forstaa' (Don't mind the conversation of Jan Hagel, because he often talks about things he doesn`t understand).[424]

Through participation in Dutch maritime practice communities, the Scandinavian sailors, through mastery of the activities and world of the community, also changed their identity and became veterans; or Jan Hagels. [425]

4.8 Conclusion

In the provinces of Zeeland and Holland in particular, the maritime technologies which were developed during the 15th and 16th centuries proved to be superior in terms of price and quality. Through an evolutionary process, a number of ship types were developed in this region that quickly proved superior: the bojert, the fluyt, the pinas, the smack, the galjoot, the hooker and the jagt, as well as the associated sailing and rigging types: the smack-sail/spritsail, the gaffsail, the staysails as well as the division of the squaresail rig into several parts originating in Zeeland and Holland. As early as 1477, we have the first written testimony of the import of Dutch vessels into the Wadden Sea, and around 1550 we begin to hear about bojerts in Danish waters. In 1625, we first hear about smacks in the inner Danish waters, and in 1618 the first mention of a fluyt in Danish service can be found. Over the next 200 years, the Dutch types displaced the older Scandinavian types, and the Dutch ship type, the galjoot, was even developed into the galease, after having been used here for over 100 years, which must be said to be an adaptation of a Dutch ship type to Nordic conditions. Norway became a major trading area for Dutch timber vessels very early on, which is probably why Dutch shipbuilding is mentioned here as early as 1535. During the 17th century, a lot of Dutch secondhand tonnage was purchased into Norway, and fluyts and pinas were built in both East and South Norway, and it seems that imports of Dutch vessel types culminated in the last decades of the 17th century.

The carvel-built three-masted square-rigged ship was first introduced in Northern Europe in Zeeland in around 1460, but already in about 1482-83 it seems that the first vessel of this type had been introduced to Scandinavia. The wreck of the *Gribshunden* found in Blekinge's archipelago can be dated to this time. King John quickly embraced the new technology, because in 1487 there were 5 such carvel-built ships in the Royal Danish Navy, and the following year it seems that Dutch shipbuilders had gone into the king's service. During the Reformation disputes, bojerts and carvels are also mentioned, but it seems that it is under Frederik II that the import of Dutch vessels and shipbuilders really took off. Christian IV was more restrained in his use of the Netherlands as an exporter of ships and shipbuilders, but in the reign of his grandson, Christian V, interest in Dutch ships and shipbuilders grew again, and this period was yet another highlight in the import of Dutch ship technology. There is physical evidence in the waters of the Scandinavian countries for these imports, as shipwrecks in Norway, Denmark and Sweden all testify to a Dutch provenance or show

423 Henningsen 1953, 51.
424 Bjerg, Melien 2017, Vol II, 44, 240. Tank, Roar 1923. Illustration forord.
425 Lave & Wenger 2003, 95.

Dutch construction methods. Dutch cartography and navigation methods were developed during the 16th century and, with the help of the rapidly growing printing industry, were spread throughout Europe, where these new maps, navigation instructions and navigation methods quickly became popular. In 1568, a similar map was published in Danish, parts of which were taken from an older Dutch work, and during the next century Dutch sailing manuals and maps became standard in the shipping industry of the Danish conglomerate state. Moreover, navigation instruments had to be imported from the Netherlands.

Lave and Wegner would say about ships, charts and navigational instruments that they are physical artefacts; historical traces of the practice community's negotiations and disputes in relation to what was recognised by the practice community, and that they were manifestations of the maritime practice communities over time.[426] The actual design of the objects is seen by them as the result of the knowledge of the practice community, which is encoded in the physical artefact. Therefore, Dutch maritime objects are especially typical of Dutch maritime practice, and to apply them is to take over this practice's heritage, knowledge and history. 'Understanding practice technology is not just a matter of learning how to use tools; it is a way of connecting with the practice community's history and participating more directly in its cultural life'.[427] Therefore, the Dutch ships, charts and navigation instruments must be seen as particularly identity-bearing for Dutch maritime practice in Scandinavia.

The sailor's craft, seamanship, is a subject that cannot be learned at a school desk, but must be acquired through participation in the activities on board a ship. Lave and Wegner's theory of learning through participation in practice communities, first as a peripheral legitimate participant and later as a veteran, is central to understanding this process, and also why the knowledge needed to handle a rig on an ocean-going full-rigged ship could not be acquired on smaller, inland vessels, where the sails were operated from the deck. You had to work a long time on the big ships to master this craft, and Scandinavian sailors who took a berth on Dutch ships (which the following chapter will discuss) had the opportunity to acquire this knowledge and experience, unlike their colleagues who were employed in the domestic trades between the parts of the Danish conglomerate state. Already in the latter part of the 15th century, Dutch maritime technology and knowledge began to gain entry into the realms of the Danish king, and during the 17th century these imports grew to include large parts of the shipping industry in the Danish conglomerate state. Not only was maritime technology taken over by the maritime communities in the realm, but also maritime practices such as actions, ways of doing things (seamanship), words and phrases. It is likely that Scandinavian seamen in part saw themselves as part of a Dutch maritime practice community and thus also identified with the ordinary Dutch seaman. It is therefore not an understatement to say that the Dutch shipping industry acted as a mentor for the maritime communities in Denmark, Norway and the duchies.

This happened through the recruitment of Dutch maritime experts and the import of Dutch maritime technology and practice, both through Dutch seamen and shipbuilders passing on their knowledge to maritime actors in the Danish kingdoms and by seamen from the Danish conglomerate state who had travelled to the Netherlands and learned their craft aboard ships from the United Provinces.

426 Lave & Wenger 2003, 53.
427 Lave & Wenger 2003, 86.

5

Scandinavian seamen on Dutch ships in the 17th and 18th centuries

Due to a number of factors that have been touched upon in the section about push/pull mechanisms and migration theory, Scandinavian sailors travelled to the Netherlands and found work on Dutch ships, from which they brought Dutch maritime culture back to their home country. In the following, the extent of this labour migration will be examined on the basis of the Waterschout Archive in Amsterdam for the years 1772, 1780 and 1787, as well as the Notarial Archives in Amsterdam and the National Archives in Copenhagen for the 17th century.

5.1 Scandinavian seamen in the international Amsterdam maritime labour market in the years 1772, 1780 and 1787

5.1.1 The background for the labour migration

Of the three years investigated, 1772 was a good year for shipping in Amsterdam, with an annual arrival of about 1800 ships, while 1780 was already a poor year with only 1500 ship calls to Amsterdam before the English declaration of war against the Netherlands in December. On the other hand, things were back to normal in 1787, when the annual call was up to about 1800 ships again.[428] Although some ships may have been laid up for a number of years, I will assume that the number of calls to the city must correspond roughly to the number of departures. However, another shift occurred that is not immediately visible from these figures: during the 18th century, Rotterdam developed into a major port from which products from the German hinterland were transhipped and shipped specifically to England. During the same period, the grain trade, which had always been an Amsterdam speciality, slipped more and more over to skippers from Friesland, who, with their small vessels (on average less than 80 tonnes) started to visit the Baltic Sea.[429]

In the Amsterdam Waterschout Archive I found 1870 Scandinavian seamen for the year 1772, 2404 seamen for the year 1780 and 1305 for the year 1787 out of a total number of crewmen of somewhere between 8000 and 12,500 men per year. These figures reflect the above-mentioned economic trends quite well. Since 1772 was a good year for Amsterdam shipping, we can assume that the 1870 men represent the previous year's

428 Broeze, Bruijn & Gaaestra 1977, 233.
429 Broeze, Bruijn & Gaaestra 1977, 238.

positive development in Dutch shipping and give a picture of how many Scandinavian sailors must have sailed from Amsterdam in the years leading up to 1780. The numbers in 1780 tell us that an extraordinary number of Scandinavian sailors were employed in Amsterdam shipping, which, with its great commitment to the West Indies trade, had golden days during the American War of Independence, but which also suffered from war threats that became more and more likely throughout the year, and which presumably meant that Dutch seamen stayed away from the most dangerous journeys. When war broke out in early 1781, the Danish government banned its subjects from serving overseas, which is why the seamen from this group were forced to seek a berth in other major ports.[430] 1787 represents the time 'after the storm', when the war had taken a number of Amsterdam ships and replaced them with foreign tonnage, which now carried some of the freight from Amsterdam and consequently did not recruit sailors in the city. But it was also a time when the Dutch seamen had returned and had pushed the Scandinavians out, who might therefore have left for Rotterdam.

The Dutch maritime labour market was extensive as early as the early 17th century, when it is estimated that around 45,000 men earned their livelihood from this market. In the course of the Dutch economic expansion over the century, the number grew to just under 60,000 men in around 1640 and then dropped to around 52,000 in the last decades of the 1600s. After the Spanish War of Succession, employment in Dutch shipping increased again, reaching the old peak of 60,000 men just before 1780.[431] From the outset, this maritime labour market was of an international nature, as the United Provinces did not have a population that could meet the demand for seamen. Already in 1615, the share of foreign seamen on Dutch ships was 15 percent, and as the century progressed, that proportion grew to around 30 percent by the end of the century. In the 18th century this development continued so that in 1785 there were an average of about 50 percent foreign seamen on Dutch-owned vessels, and it is in this international Dutch labour market that Scandinavian seamen worked.[432]

Amsterdam was not the only port city from which Dutch ships departed and on which Scandinavian sailors worked. By registering half of all sailors in the Waterschout Archive (and thus not just Scandinavians, but sailors from all nations) from 1780, I found that in the period from 10 January to 19 June, 6234 men were signed up, which means that in 1780 there must have been a total of about 12,500 sailors who shipped out of Amsterdam.[433] This figure is not impressive when according to Jelle van Lottum there should have been about 60,000 men in the total Dutch merchant navy at this time and considering that Amsterdam remained the largest and most important port in the republic. The explanation, however, is that this dissertation does not include figures from the VOC, which employed many thousands of men in the 18th century, and that Dutch shipping also had centres other than Amsterdam. VOC employed about 10,000 men in the years just before 1780,[434] but it has not been possible in this dissertation to find time to search for Scandinavian sailors in the VOC archives, which is why they are not included here. The Dutch admiralties employed about 10,000 men annually until the heavy casualties of the Fourth Anglo-Dutch War, and the

430 Rheinheimer 2016a, 217.
431 Van Lottum 2007, 132.
432 Van Lottum 2007, 136.
433 GAS Waterschoutarkiv, januar-juli 1780.
434 Van Lottum 2007, 134.

Dutch herring fleets employed about 3500 men.[435] These branches of the maritime industry are not registered in Amsterdam's Waterschout Archive. The Dutch whaling industry was quite extensive and employed about 3000 men annually[436], but this maritime industry also belonged in Zaandam, Lek, Rotterdam and de Ripp[437], so although some whaling ships have been found in the Waterschout Archive, these do not represent the total number of Dutch whalers. The Scandinavian sailors also went elsewhere; Thus, the Norwegian scholar, Oddleif Hodne, has shown in his study of church registers and domestic marriage lists that the Norwegian migration to the Netherlands was largely governed by the trade that took place between a given Norwegian locality and a Dutch city[438]. Thus, people from Rogaland, West and East Agder went to Hoorn, Edam, Monickendam, Serdam and Amsterdam, while the people from Bergen and the Westcountry mainly went for Rotterdam, Middelburg and Amsterdam, and we must assume that the' non-sedentary', labour migrants followed similar movements[439]. My findings in Amsterdam's Waterschout Archive do not therefore cover all Scandinavian sailors who must have sailed on Dutch ships, but probably a pretty good proportion of them.

5.1.2 A snapshot of the composition of crews on ships from Amsterdam

If you look at the survey in the Waterschout Archive of sailors from all nations who sailed from Amsterdam in the first half of 1780, which totalled 6234 men, 35 percent were from the Netherlands, leaving a share of foreigners on Amsterdam ships of 65 percent; thus well above the 50 percent that van Lottum estimates was the nationwide average. The fact that there were so many foreign sailors involved in the Amsterdam shipping industry shows that the city was, in fact, an international maritime centre that attracted people from all over Europe, but also that at this time the maritime industry was in a boom where everyone was needed; sometimes at the expense of the quality of the sailors. Van Lottum has shown that the proportion of sailors in the VOC who did not come from coastal areas and thus probably did not have a maritime background increased from about 5 percent in 1680 to 45 percent a hundred years later;[440] a trend that must also have been present in the rest of Dutch shipping. This does not mean that trained and skilled sailors disappeared from the Dutch maritime labour market, but that in the boom years up to 1781 new opportunities were opened in Dutch shipping, even for newcomers. This is especially evident when considering the proportion of seamen who came from present-day Germany. Their share of the 6234 seamen registered in the first half of 1780 was just over 34 percent, and although most of these came from the coastal areas of the North Sea and especially from the Bremen area, there was still a considerable number who hailed from places far inland.

The proportion of seamen from the German-speaking areas in the Baltic Sea and here mainly from the port cities of Danzig, Rostock and Königsberg was 3.7 percent. Not much, but it does testify to the presence of Dutch shipping at a time when the merchant navies of the Baltic countries were growing stronger and were thus competitors to the Dutch. This phenomenon is most clearly seen in the share of Swedish and Finnish seamen, which

435 Van Lottum 2007, 134.
436 Von Lottum 2007, 134.
437 Dekker 1968 177.
438 Hodne 1976, 42.
439 van Lottum 2015, 659.
440 van Lottum 2007, 150.

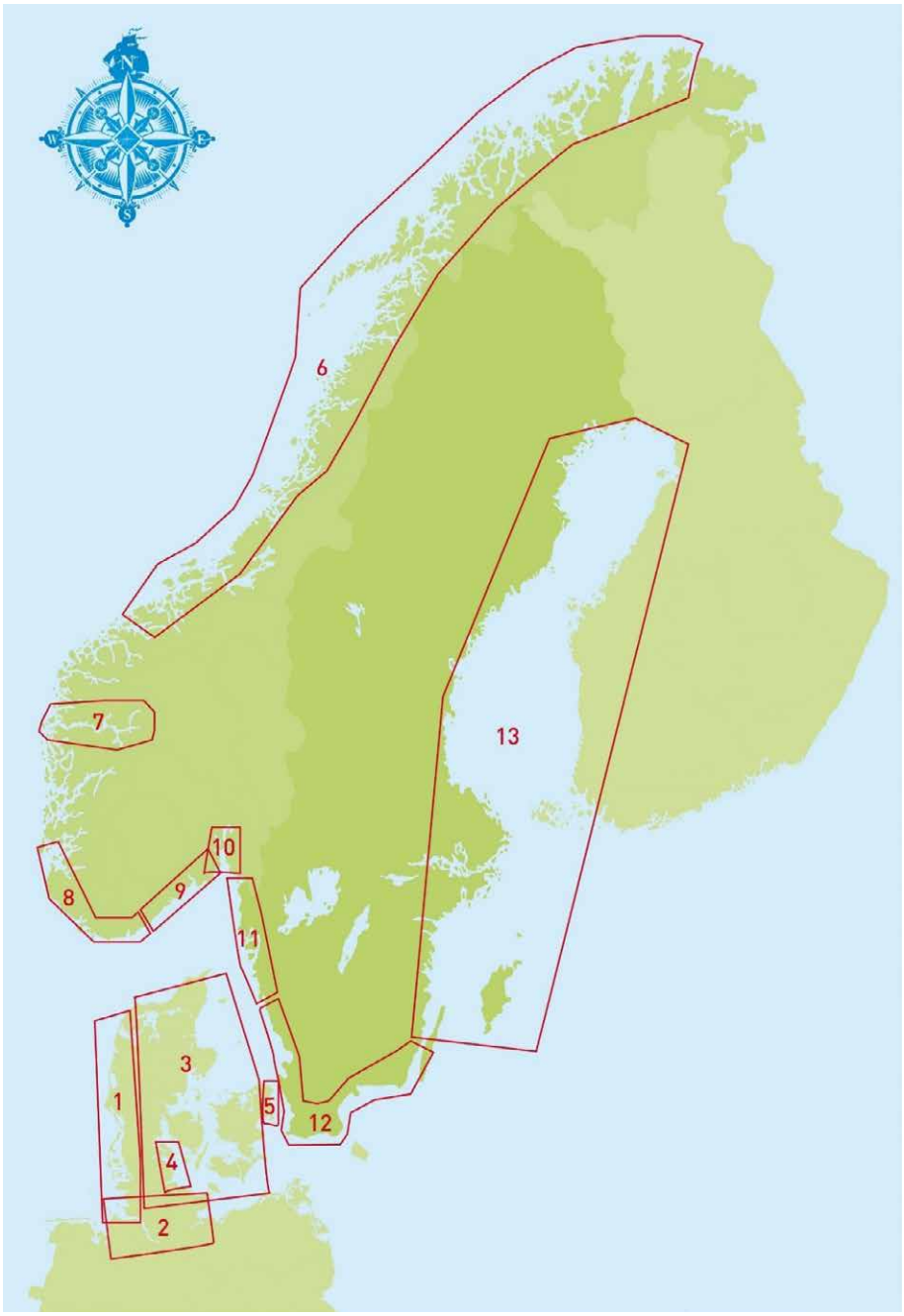


Fig. 5.1. The geographic location of the groups of origin of the Scandinavian seamen. Ole Vedel Rasmussen.

was 2.4 percent, just as the proportion of Danish seamen (Copenhagen and inland Danish waters) was only 1.1 percent. On the other hand, the share of Norwegian seamen was 6.3 percent of all seamen, just as the proportion of seamen from Southwest Jutland and the Wadden Sea coast of Schleswig-Holstein down to the Elbe was 14.7 percent. In light

of the total maritime traffic from Amsterdam, this figure is very high and shows that the Dutch maritime labour market was indeed very important for the people of this part of the Danish conglomerate state. The Norwegian share is fairly low, but this coincides well with the pattern of Norwegian marriages registered in the Ondertrouw Register in Amsterdam, where the annual number of marrying Norwegians was over 600 in the period 1650-1660, after which it fell to about 20 in 1780.[441] Since the majority of Norwegian immigrants were seamen, it can be assumed that their share in Dutch shipping followed the same pattern. Finally, a small residual group of just 1 percent is made up of seamen from Russia (St. Petersburg and Narva), the Dutch West Indies, England, France and the American colonies.

In a survey of the Waterschout Archive's muster rolls for 1772, 1780 and 1787, I selected seamen from present-day Denmark, Norway, the duchies of Schleswig and Holstein and Sweden, which in the survey of all seamen for the first half of 1780 constituted 24.5 percent or a quarter of all sailors sailing out of Amsterdam. The following sections concern themselves with the origin of these sailors, their wages, position on board, ship destinations and connections in Amsterdam.

5.1.3 The origins of the Scandinavian sailors

To analyse the backgrounds of the Scandinavian sailors, I have used a geographical division that reflects the Dutch trade routes of Scandinavia and divides the Scandinavian seamen into subgroups (see geographical demarcation in Sources and Methods). The advantage of this is that it became possible to penetrate further into the geographical origin of the seafarers and thereby be able to differentiate the view on their area of origin and thus reveal any differences or similarities between different areas. The geographical subgroups are: 1) The Wadden Sea coast: the west coast of Jutland and the Duchies to the Elbe. 2) Holstein, excluding the west coast, including Glückstadt and Altona. 3) Denmark, excluding the Sound: the kingdom of Denmark at the time, but not the Sound area. 4) Eastern Schleswig, including the port towns of Eckernførde, Flensborg, Sønderborg, Haderslev and Åbenrå. 5) The Sound: the east coast of Seeland including Elsingøre, Copenhagen and Koege. 6) Northwest Norway from north of Bergen to Vardø. 7) West Norway, including Sognedal and Bergen. 8) Southwest Norway: Rogaland and West-Agder counties from Karmøy in the west to Kristiansand in the south. 9) Southeast Norway: East-Agder, Telemark and Vestfold counties from Skottevik and Lillesand to Svelvik and Holmsbu. 10) East Norway: The fjord of Oslo with Drammen, Christiania and Frederikshald. 11) The Bohus coast: The former Danish province, Bohuslen, with the Swedish Gøteborg. 12) The Scanian peninsula: the former Danish provinces Skåne, Halland and Blekinge. 13) Sweden: Sweden herself and Finland (which until 1809 was a part of Sweden. 14) The rest.

The Wadden Sea coast (group 1). The west coast of Jutland and the Duchies to the Elbe

With the exception of Klitmøller, Ringkøbing and a few inland villages (*e.g.* Omme and Sølsted), this group includes the northern Wadden Sea, which extends from Ho Bay to the Elbe. This area was home to a rich maritime culture throughout the period and housed seafarers in many places. Through analysis of the Schleswig-Holstein census of 1769, Martin Rheinheimer found that the proportion of seafarers and fishermen in the area was far

441 van Lottum 2007, 74.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Klitmøller			1	0.08	1	0.14
Ringkøbing	8	1	8	0.7	3	0.4
Bork			1	0.08	2	0.28
Oksby, Ho			1	0.08	1	0.14
Varde	1	0.1	5	0.4	3	0.4
Janderup	1	0.1				
Omme			2	0.017		
Grådyb	42	5	50	4.4	32	4.5
Fanø	9	1.1	12	1.1	1	0.14
Ribe	20	2.5	18	1.6	15	2.1
Seem	4	0.5				
Hvidding	2	0.25	1	0.08		
Gram	2	0.25	2	0.017	2	0.28
Bredebro			1	0.017		
Sølsted			1	0.017		
Mandø	6	0.7	12	1.1	2	0.28
Rejsby	3	0.4	3	0.26		
Brøns	8	1	10	0.87	4	0.6
Skærbæk	25	3	21	1.8	27	3.8
Ballum	64	8	49	4.3	42	6
Randerup	1	0.1	4	0.35		
Abterp			1	0.08		
Lovrup			1	0.08		
Løgumkloster	1	0.1	2	0.017		
Rømø	15	1.8	26	2.3	31	4.4
Hjerpsted	14	1.7	11	1	8	1.14
N. S. Sejerslev	12	1.5	7	0.6	7	1
Emmerlev	49	6	58	5	33	4.6
Visby	4	0.5	2	0.017	1	0.14
Sild	77	9.5	91	8	26	3.7
List on Sild	8	1	7	0.6	8	1.14
Højer	35	4.3	45	4	27	3.8
Daler	9	1.1	9	0.8	2	0.28
Gallehus			3	0.26		
Møgeltønder	8	1	7	0.6	8	1.14
Schachenborg	11	1.3	2	0.017	1	0.14
Tønder	30	3.7	33	2.9	25	3.6
Kirkeby	1	0.1				
Niebüll	1	0.1			1	0.14
Galmesbüll	14	1.7	7	0.6	11	1.5
Dagebüll	11	1.3	8	0.7	19	2.7

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Risummoor	12	1.5	6	0.5	8	1.14
Föhr	176	2.6	390	34	184	26
Amrum	17	2	30	2.6	16	2.3
Oland	6	0.7	13	1.14	6	0.8
Langeness	7	0.9	31	2.7	41	5.8
Nordmarsch	2	0.25	20	1.7	25	3.6
Gröde	15	1.8	22	1.9	6	0.8
Hooge	43	5.3	73	6.4	66	9.4
Ockholm	1	0.1	1	0.08		
Bredstedt	1	0.1	2	0.017		
Nordstrand	1	0.1	3	0.26	1	0.14
Pelvorm	4	0.5	5	0.4	2	0.28
Husum	17	2	12	1.1	6	0.8
Uelvesbüll			1	0.08		
Eiderstedt	3	0.37	5	0.4		
Tönning	4	0.5	2	0.017		
Dithmarschen	5	0.6	4	0.35		
Heide			1	0.08		
Habel			1	0.08	2	0.28
Femern	4	0.5	3	0.26		
In total	**814**	**100**	**1146**	**100**	**704**	**100**

Table 5.1. Number of sailors from the Wadden Sea area (group 1), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

above average in many places. In Schleswig-Holstein, the average number of seafarers was 4.6 percent of the population, in Denmark 3.7 percent and in Norway 12.5 percent, but on the island of Fanø the proportion was well over 50 percent and on Sylt over 75 percent. Not only on the Wadden Sea Islands, but also on the mainland you see this relationship to some extent. Most clearly in Ho and Oksby parishes, where the proportion of seafarers and fishermen was around 60 percent, but also in Hjerpsted parish there were between 25 and 50 percent seamen or fishermen, just as the proportion around Dagebøll, on the mainland east of Föhr, was between 50 and 75 percent. Rheinheimer found that the reason for the concentration of seafarers and fishermen in some parts of the Wadden Sea area was the poor agricultural soil. Both Ho and Oksby parishes and the Wadden Sea islands of Fanø, Rømø, Sylt and Amrum had very sandy soils that were difficult to cultivate, and elsewhere it was the lean geestlands (meagre clay soil) that did not yield much. The people in these areas were forced to find a livelihood other than farming, which is why they turned to the sea.[442]

Grådyb (Graydeep), which is the name of the channel that stretches between Skallingen in the north of Ho Bight and Fanø in the south, was also called Hjerting at that time; this

442 Rheinheimer 2016a, 101, 102.

location was also known as 'Grådyb Havn' (Graydeep Harbour).[443] The old term 'Riesemoor' covers the present-day village of Risum-Lindholm, which together with Niebüll and Deezbüll is located on an old geest hill, which was called Risummoor,[444] meaning that Riesemoor is really a collective term for this area. A total of 14 sailors stated that they came from Schachenborg, or Schak/Schack, as it was written, which must be a collective term for the Schackenborg estate. In 1661, the general, later Count Hans Schack, bought what became Schackenborg estate, which consisted of Møgeltønder, Ballum and Lustrup birches, patronage to the churches in Møgeltønder, Daler, Ballum, Lustrup, Vesterland-Föhr and Amrum.[445] The same applies to the term 'Ditmarsch', which must also be a collective term for all settlements in what is today known as Kreis Dithmarschen. Conversely, however, you also find some very small localities: Abterp, Lovdrup, Uelvesbüll and Bredebro.

When you consider the figures you immediately see that Föhr stands out as a colossus compared to the other localities. In 1772 some 22 percent of the entire group of seamen came from this Wadden Sea island; in 1780 34 percent and in 1787 26 percent of all the Wadden Sea sailors. The closest competitor is the island of Sylt, which in 1772 mustered 9.5 percent of all seamen in the group, in 1780 8 percent and in 1787 3.7 percent, but these figures do not come close to the dominance of the Föhr sailors. Yet, these numbers point to the fact that it is the seamen from the Wadden Sea Islands who dominated the group, so that Föhr, Amrum, Rømø, and the halligs (small islands) of Hooge, Oland, Gröde, Langeness/Nordmarsch were home to just over 60 percent of all seamen in the group. The island of Fanø falls behind with an average share of just one percent, as does Mandø with an average score of just 0.7 percent of all sailors. The limited participation of Fanø sailors in Dutch shipping can partly be explained by the fact that some sailors from here presumably named 'Graudiep' (Grey deep) as their place of origin and not Fanø. Another reason must be that the population of the island lived off farming (in contrast to most other Wadden Sea islands, there is reasonable farmland on the island) and a fairly large fishery and near coastal shipping with small vessels sailing from the local harbours to Hamburg, Bremen and the Netherlands. Some sailors worked in the international maritime labour market in the Netherlands, but the majority of the maritime population from Fanø was employed in local waters. Another reason may be that the sailors from this island traditionally sailed out of Hamburg or Altona. The weak representation of Mandø in the figures from the Waterschout Archive is quite puzzling. There are numerous examples of Mandø seamen in Dutch shipping that show that they sailed on Dutch whalers and merchantmen to both the Baltic and the Caribbean. [446] However, sailors and skippers from Mandø became popular with Copenhagen shipowners on whose ships they sailed to Iceland or to the Mediterranean, so this phenomenon probably explains their absence from the Waterschout Archive.

When adding the mainland locations Grådyb, Skærbæk, Ballum, Emmerlev, Höjer and Tønder to the aforementioned Wadden Sea islands you find that 82 percent of all the seamen in the group came from these areas; therefore, these areas must be said to be the core maritime areas of the Wadden Sea. As previously mentioned, one of the explanations

443 Guldberg 2009, 12.
444 https://www.niebuell.de/Unsere-Stadt/Geschichte/Zeittafel. 25/10 2018.
445 Worsøe 1996, IX.
446 Beck 1999.

for why sailors from the Wadden Sea came from certain localities is that the farmlands here could only provide a poor yield, and so alternative livelihoods had to be found. This applies to most of the Wadden Sea islands, which are mostly sand, and it applies to the parishes of Ballum Emmerlev and Skærbæk, which lie on the sandy geestlands, the moraine hills formed by the Ice Age. Around Tønder the type of landscape is sandy moorlands, which is poor farmland.[447] As previously mentioned, the location Grådyb was used as place of origin by some sailors from Fanø, but probably also represents the maritime communities in the northernmost part of Ho Bay, Oksby and Ho parishes. The Port of Tønder, Højer, must also be regarded as a collective term for sailors from Tønder's hinterland, as they probably used the name to state the port from which they had sailed to Amsterdam.

It is clear that the years up to 1780 were golden years for Dutch shipping, and that more or less everybody went to the Netherlands to take part in the bonanza. This is illustrated by the many examples of seamen from small locations who sailed out of Amsterdam in only this year or maybe another, but not in all three. The number of seamen from most localities follows the previously mentioned increase in Dutch shipping, culminating in 1780 and then declining towards 1787. Thus, the sailors from Föhr went to Copenhagen for a few years after the outbreak of the fourth Anglo-Dutch war, and some returned to Amsterdam again, a trend that also applied to Amrum.[448] However, this did not apply to Skærbæk, Møgeltønder, Dagebüll, Langeness and Nordmarsch. Martin Rheinheimer has shown that the seamen from Halligs Hooge, Nordmarsch-Langeness and Oland, as a percentage of population size, were strongly overrepresented in Amsterdam's shipping industry, and that, unlike the other Wadden Sea sailors, they remained on board Amsterdam ships during the war of 1781-1784 and then only slowly switched to Altona during the 1790s.[449] This tendency is clear in the figures for the seamen from Langeness and Nordmarsch, but also for Skærbæk, Møgeltønder and Dagebüll, and it must be assumed that the seamen from these locations made use of the fact that, in the absence of the other Wadden Sea sailors in Amsterdam's shipping (Föhr, Grådyb, Ballum, Rømø) new opportunities were created which they seized and subsequently maintained. In the area of group 1 you also find the city of Friederichstadt, upstream of Tønning, which is not included here. This is because it is not possible to distinguish sailors from this town from those from the Norwegian city of Fredrikstad on the west side of the Oslo Fjord using the information from the Waterschout Archive. The island of Fehmarn on the east coast of Schleswig is only represented with four seamen in 1772, and three in 1780. The island, which is known for its maritime past, must have been home to many more sailors, but these probably shipped out of Lübeck, Kiel or Copenhagen.

Holstein (group 2), excluding the west coast, including Glückstadt and Altona

The term Holstein was used for Schleswig, Holstein and the Wadden Islands at the time, which is why it is unclear exactly where a sailor originated from when he claimed to come from here.[450] This is also the case in the Waterschout Archive, since in 1772 there were 15 men, in 1780 34 men and in 1787 17 men who claimed to come from 'Holstyn/Holstein'. Since the Duchy of Holstein to a greater extent was a farming area than at least the western

447 Trap 1966, 408, 440, 441.
448 Rheinheimer 2016a, 225.
449 Rheinheimer 2016a, 216, 228.
450 Rheinheimer 2016a, 210.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Holstein	15	34	34	45.3	17	36
Altona	16	36.4	22	29.3	23	48.9
Glückstadt	2	4.5	6	8	5	10.7
Westermoor			1	1.3	1	2.1
Rendsburg			1	1.3		
Kiel	7	16	6	8	1	2.1
Heiligenhafen			2	2.7		
Neustadt	4	6.6	3	4		
In total	**44**	**100**	**75**	**100**	**47**	**100**

Table 5.2. Number of sailors from Holstein (group 2), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

part of Schleswig, the maritime profession was not so pronounced here, which is why it is likely that most sailors who indicated 'Holstein' as a place of origin in fact came from somewhere in the western parts of Schleswig.[451] However, this is not determinable, and therefore these men are placed in group 2, although they could have been listed in group 1. The locality named 'Westermoor' can also apply to two different localities: Westermoor at Kleve in Ditmarschen or Westermoor near Itzehoe in the county Breitenburg; both places seem equally likely. The sailors from this locality are also included in group two.

Besides the sailors from 'Holstein', sailors from Altona appear to be best represented in this group, but even from here there are relatively small numbers. We must assume that most of the sailors from Altona, which was the second largest port in the realms of the Danish king, sailed on ships from their home town and therefore do not show up in Amsterdam's Waterschout Archive. Nevertheless, there is a slight increase in Altona's share, which may be due to the fact that maritime employment became more common as the city's shipping increased in the late 1780s and early 1790s,[452] and that some sailors from here also ended up on board Dutch ships. The figures for Glückstadt do not decline much between 1780 and 1787, which might indicate that sailors from here followed in the wake of their countrymen from Altona. Martin Rheinheimer mentions that in the population census from Heiligenhafen a proportion of seamen of 17 percent was found, which, however, does not appear in these figures. As for Altona, the answer must be that it was not practical for seamen from the city to go all the way to Amsterdam when you could get a berth in your own backyard. The seamen from Kiel constitute a not insignificant proportion, but here there is a clear decline after 1780, which may be related to the opening of the Eider Canal between the North Sea and the Baltic in 1785.

451 Rheimheimer 2016a, 104.
452 Rheinheimer 2016a, 220.

Place of origin	Numbers in 1772,	%	Numbers in 1780	%	Numbers in 1787	%
Danmark			1	1.31	1	3.3
Jylland	7	9	4	5.3	1	3.3
Lolland	3	3.8	5	6.57		
Falster	2	2.6				
Fyn	1	1.3	1	1.31		
Fåborg	1	1.3	1	1.31		
Lundeborg						
Fladstrand	1	1.3	1	1.31		
Frederikshavn	6	7.7	5	6.57	1	3.3
Læsø	3	5.1	5	6.57		
Aalborg	7	9	11	14.5	6	20
Randers	2	2.6	2	2.6	2	6.6
Hammerum	2	2.6				
Kellerup	3	3.8				
Kolding	3	3.8				
Århus						
Horsens	5	6.4	5	6.57	2	6.6
Jelling	2	2.6	2	2.6		
Bornholm	26	33.3	22	29	14	46.6
In total, including Locations with one man	**78**	**100**	**76**	**100**	**30**	**100**

Table 5.3. Number of sailors from Denmark (group 3), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

Denmark (group 3), excluding the Sound. The kingdom of Denmark at the time, excluding the Sound area

The geographical distribution of sailors from Denmark north of the Kongeå and Ho Bay shows a very sporadic picture, with locations represented only by single seamen in one of the three years studied. Thus, in 1772 we find one man from: Jerup (north of Frederikshavn), Strandby (north of Frederikshavn), Solbjerg (southwest of Aarhus), and Farre (east of Jelling). In 1780 there is a single sailor from: Møen, Salling, Århus, Borum (west of Aarhus), Samsø, Holstebro, Tustrup (south of Aalborg), Middelfart, Nyborg, and Nysted on Lolland, and in 1787 we find a single man from Jetsmark (east of Blokhus), Hobro and Rørbæk (there are four localities with that name in Denmark, but most likely the Rørbæk east of Løkken). However, this exact mentioning of a small location and often even an inland one (which therefore could not be the port of departure) shows that the sailor actually came from here, which strengthens the credibility of the Waterschout Archive in terms of the sailors' place of origin. In this group, there are examples of seamen who came from locations that were landlocked. These sailors were therefore not raised in a maritime environment and therefore had to start from scratch in the maritime hierarchy. Conversely, we also find locations that had a maritime connection,

such as Jerup and Strandby, close to the coast north of Frederikshavn, and Samsø, Middelfart, Nyborg, Nysted and Jetsmark at Jammerbugten. The rest of the group is distributed as follows:

Here we find collective terms of origin: Denmark, Jylland (Jutland), Lolland, Falster and Fyn (Funen). It is not clear why the seamen claimed such an unspecific origin, but it may be due to the laziness of the Waterschout scribe. Among locations with more than one seaman we also find inland places: thus, the two seamen from Hammerum between Ikast and Herning. Mathias Sibrandtsen (Mathias Sørensen in Danish) even gave 'Hammerum herret' (Hammerum shire) as his place of origin, so there can be little doubt that these men actually came from this area. Frederikshavn and Fladstrand (Frederikshavn was granted city privileges in 1818 under the same name, and it is unknown when the older name 'Fladstrand' was abandoned[453]) is represented in all three years, which is no wonder as there was some shipping from Amsterdam to this northern Jutland port. Aalborg is a little better represented, but this city also had the province's second largest merchant fleet, which also sailed to European ports,[454] so it must have been relatively easy for an Aalborg sailor to go to Amsterdam. Conversely, it is notable that Aarhus is represented by only one man, although in 1733 the city had about 10 percent of the province's tonnage and over the next decades the number of ships increased.[455] Sailors from Samsø, Læsø and Bornholm are strongly represented and testify to communities where farming was not enough to feed a growing population, which is why the only other option was to go to sea. On Læsø, where there had been a considerable 'skudehandel' (smallcraft trade) in the past, it became a necessity for many to go abroad when this activity died out in the late 17th century and the sand drift took over larger and larger areas. Later, however, conditions improved, and in 1776 an official noted: 'Hvad nu angår, hvorledes for eftertiden bedst kunne hermed forholdes, så i henseende landet er temmelig folkerig, og endskønt de som sø- enroullered farer såvel uden- som på indenrigs steder, hvor de kan komme i farten, er det dog rart (sjældent), nogen udebliver eller nedsætter sig andre steder, men søger her til landet igen' (The land is rather populous, and though the men on the muster rolls sail both abroad and in the domestic trades, it is rare that someone does not show up or settle elsewhere, but returns to the country again).[456] Noteworthy is Bornholm's leadership position in group 3 and it is evident that there was a strong tradition of participation in international shipping, as the island is also nicely represented in 1787, whereas most other locations went down. Overall, however, it must be said that the poor representation of seamen from this group is clear evidence that the vast majority of Danish maritime communities were engaged in domestic shipping of goods between the provinces and Copenhagen, on short trips to Norway or to the nearest German cities.[457] Brock and van Lottum have also shown that 70 percent of the crews on Copenhagen ships in the period 1776-1803 were immigrants to the city and originated mainly from Bornholm, Læse and Samsø, but also Aalborg, Haderslev, Åbenrå, the southern Funen cities, Lolland, Grenå , Ebeltoft, Møen, Vordingborg, and Nyborg,[458] which explains the small number of sailors from these cities in the Waterschout Archive.

---

453 http://denstoredanske.dk/Danmarks_geografi_og_historie/Danmarks_historie/%C3%98vrige_danske_byers_og_omr%C3%A5ders_historie/Fladstrand. 2/11 2018.

454 Feldbæk 1997, 82.

455 Feldbæk 1997, 16.

456 Stoklund 2018, 71, 75.

457 Feldbæk 1997, 18-19, 35-37.

458 Brock & van Lottum 2016, 6, 8.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Haderslev	47	31.5	35	23	16	25
Åbenrå	48	32	45	29.6	22	34
Løjt	1	0.7	1	0.65		
Als	4		4	2.6	4	6.2
Augustenborg	1	0.7				
Sønderborg	9	6	11	7.2	3	4.7
Flensborg	27	18	40	26	12	18.7
Ærø	2	1.34	1	0.65		
Ommel			1	0.65		
Gelting	2	1.34	3	2	3	4.7
Kappeln			1	0.65		
Slesvig			2	1.3		
Egernførde	4	2.6	4	2.6		
In total	**149**	**100**	**152**	**100**	**64**	**100**

Table 5.4. Number of sailors from Eastern Schleswig (group 4), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

Eastern Schleswig (group 4), including the port towns of Eckernførde, Flensborg, Sønderborg, Haderslev and Åbenrå

The old maritime cities in Eastern Schleswig delivered twice as many sailors to the shipping industry of Amsterdam as group 3, which is no wonder. Flensburg, Sønderborg, Åbenrå and Haderslev all have long traditions of maritime activity and were still very active in the second part of the 18th century.

Flensburg was undisputedly the largest port in Schleswig and developed extensive participation in European shipping with activities from Arkhangelsk to the Mediterranean as well as a lucrative trade in the Caribbean.[459] Next to Bergen and Altona, Flensburg was the largest maritime city in the provinces of Denmark, Norway and the duchies, with a tonnage that in 1800 reached 40,000 tonnes, in contrast to the rest of the Danish provincial cities, which together had only about 23,400 tonnes.[460] Therefore, it is all the more remarkable that seamen from this city constitute only the second or third largest group of seafarers from Eastern Sleswig. The explanation must be that there was enough work to be had on board the city's own ships without having to go elsewhere.

In 1772, there were almost the same number of sailors from Haderslev and Åbenrå, but in 1780 Haderslev fell behind in favour of Åbenrå. This is not unexpected, as the skippers and shipowners from Åbenrå were among the first in Denmark to start sailing on the Mediterranean after peace was made in 1746 with the Barbary states. On ships of over 100 tonnes, Åbenrå skippers sailed primarily in the western Mediterranean. The Åbenrå shipping was the second largest in the area after Flensborg, and the smaller vessels from the town eagerly participated in the exchange of goods in the Baltic Sea, while the slightly larger

459 Henningsen 2005, 87, 88.
460 Henningsen 2005, 89.

ships were active in the east-west trade with timber and hemp from Russia and the Baltic to Spain and from there with wine and salt back home.[461] Even after the decline of Dutch shipping during and after the Fourth Anglo-Dutch war, Åbenrå had a significant share of the group's seamen in the Waterschout Archive. In comparison with Flensburg and Åbenrå, Haderslev did not have much seafaring at all, which can probably be attributed to the long and narrow fjord into the city, making it difficult to reach.[462] This must be the reason why in 1772 47 sailors came from here and in 1780 35 when there was insufficient work in the domestic fleet. It is also noteworthy that Sønderborg, which, together with Flensburg and Åbenrå, dominated the shipping industry of East Schleswig, was not represented by many sailors. Like Åbenrå, Sønderborg had a good port that was easy to enter, but unlike Åbenrå, the city's ships were not represented in foreign trade, but instead handled the transport of goods between the various parts of the kingdom and the capital. Thus, in 1796 there were 41 vessels registered in Sonderborg between 2 and 52 tonnes out of a total number of 61 vessels.[463] The city must therefore have had a certain population of seamen, and some of these joined the international maritime labour market in the Netherlands. The last major location for sailors in Amsterdam's shipping is Egernförde, whose sailors make up the fourth largest group. Although Egernförde only had a population of 2091 people, registered in the census of 1769,[464] the city still had a relatively large merchant fleet, which, like Flensburg, took part in shipping on the Mediterranean quite early on.[465] In addition, part of the city's ships sailed on a regular basis between Copenhagen and Iceland.[466] A small proportion of group 4 is made up of seamen who claimed to come from the island of Als, which makes it impossible to determine their actual place of origin.

A number of locations are represented by only one or two men for one or more years: Løjt, Augustenborg, Ærø, Ommel, Gelting, Kappeln and Schleswig. Løjt or Løjtland, as one of the seamen referred to his home region, is a peninsula north of Åbenrå, from which many Åbenrå seafarers originated.[467] In addition to the ducal castle, Augustenborg also had a small harbour from which a single sailor had come to Amsterdam. The two sailors from 'Ærø' (again a collective term for an area) and Ommel (village north of Marstal) testify that in the latter half of the 18th century Ærø had conquered a significant part of the domestic freight market with the small characteristic jagts from the island, so it is no wonder that some of them can also be found in Amsterdam's Waterschout Archive. Gelting, located on Angel on the south side of Flensburg Fjord, was a small maritime community whose sailors must have sailed on Flensburg ships, and Kappeln in the mouth of Slien (the narrow fjord into the city of Schleswig) also had a considerable seafaring population.[468] The name Schleswig could be a collective term for the duchy, but also the town at the bottom of Slien. Like Haderslev, Schleswig did not have any considerable shipping activities, which must be due to its long fjord, which was difficult to navigate. Seen from an overall perspective, the vast majority of seamen in group 4 came from pre-existing maritime communities and the group does not include seamen from locations in the hinterland.

461 Feldbæk 1997, 37.
462 Rheinheimer 2017, 16.
463 Feldbæk 1997, 40, 70.
464 Grove-Stephensen 1980, 398.
465 Feldbæk 1997, 85.
466 Feldbæk 1997, 37.
467 Feldbæk 1997, 188.
468 Rheinheimer 2016a, 102.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Helsingør	1	2.8	4	7.4		
København	32	91	44	81.5	20	100
Christianshavn			1	1.8		
Dragør			4	7.4		
Køge	1	2.8	1	1.8		
Præstø	1	2.8				
In total	**35**	**100**	**54**	**100**	**20**	**100**

Table 5.5. Number of sailors from the Sound (group 5), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

The Sound (group 5). The east coast of Seeland including Elsingore, Copenhagen and Koege

The capital of the Danish conglomerate state had a considerable shipping industry, which is why it is no surprise that quite a number of sailors from here appear in Amsterdam's Waterschout Archive, but in relation to the maritime activity of Eastern Schleswig it is noteworthy that Copenhagen was not represented with a larger number of sailors. An analysis of the crews of Copenhagen ships taken by the English from 1776 to 1803 shows that around 35 percent lived in Copenhagen and the rest were labour migrants from other parts of the Danish conglomerate state. The study also shows that the proportion of permanent Copenhagen seamen in the period 1701 to 1714 was around 60 percent, and the differences between the two periods are thus an indication that the capital's seafaring population was not enough to man the ships, as the capital's merchant fleet grew after 1750.[469] All Copenhagen sailors were employed on the ships of the capital, so more sailors had to be obtained from the other parts of the kingdom.

The sailors from Køge and the single man from Præstø are examples of this. Dragør is represented with four men in the great year 1780, and there should have been more, because Dragør's shipping was quite considerable. However, Dragør ships were predominantly employed in the transport of goods from the province to the capital, and in particular the trade in firewood was a specialty. In 1769 vessels from this town constituted 45 percent of the provincial vessels that entered Copenhagen.[470] Finally, we have a single sailor, the carpenter Evert Rolufsen, who came not only from Copenhagen, but even from the Christianshavn district in the capital.

Northwest Norway (group 6) from north of Bergen to Vardø

North of Trondheim, not many sailors reached Amsterdam, so the geographical area of this group extends all the way to Finmarken in northern Norway. From here we find a man in 1780 who claimed to come from 'Vindmarkk' (Finnmark in northern Norway) and also the sailor Roluf Rolufsz, who in 1780 came from Oskestrand, located at Lenvik northeast of Lofoten.

469 Brock van Lottum 2016, 8.
470 Feldbæk 1997, 23.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Trondhiem	6	28.5	10	27.7	7	77.7
Hammersund	1	4.7				
Hitra	13	62	22	61	2	22.3
Linge			1	2.8		
Molde	1	4.7				
Oksestrand			1	2.8		
Finmarken			1	2.8		
In total	**21**	**100**	**36**	**100**	**9**	**100**

Table 5.6. Number of sailors from Northwest Norway (group 6), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

However, it is sailors from Trondheim and the surrounding islands that make up the largest contingency in this group. When Dutch skippers pushed the Hansa out of the trade in dried cod during the 16th century, Trondheim was also involved in this trade and was visited annually by many Dutch vessels. However, the city was central to the trade in copper from the mines at Røros, Kvikne, Selbu and Løkken, which were loaded in Trondheim and sailed directly to Amsterdam, the world centre of this trade. There were therefore plenty of opportunities for sailors from the Trondheim area to get to the metropolis.

Just south of the entrance to the Trondheim Fjord is the island of Hitra, which the Dutch called 'Hetteren' or 'Hitteren', and most of the seamen from this group claimed to come from here. In his *Zeespiegel inhoudend* én *korte onderwijsinghe in de konst der zeevart* Willem Jansz Blaeu described this nautical landmark thus: 'Van Ramsfioerde oostwaert leydt dat landt van Hitteren, twee groote lange Eylanden, Noorder Hitteren en Zuyder Hitteren, te samen ontrent vijf mijlden langh' (From Ramsfjord and eastwards lies the land of Hitteren, two large, long islands, North Hitteren and South Hitteren, together approximately five miles in length).[471] Perhaps sailors from Trondheim and the surrounding area gave their place of residence as this location, as it must have been widely known among seafarers in Amsterdam. Still further out in the Trondheim Fjord lies Hammersund on the island of Tustna, about 15 miles southwest of Hitra,[472] and from here we find a sailor in 1772. At the very bottom of the Storfjord at *Ålesund* in Møre and Romsdal county lies Linge, from which in 1780 we find the shipwright Barent Mulder, and in 1772 the seaman David Davidsen came from Molde on the Romsdal peninsula a little northwest of *Ålesund*.

West Norway (group 7), including Sognedal and Bergen

Bergen and the surrounding area had been in contact with the rest of Europe since the early Middle Ages, so it is no wonder that sailors came from here to Amsterdam as well. However, Hodne demonstrates that people from Bergen and Western Norway also went to

471 Damsteegt 2001, 91.
472 Damsteegt 2001, 25.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Bergen	40	93	43	75.4	12	75
Sognedal	3	7	12	21	4	25
Ondal			2	3.5		
In total	**43**	**100**	**57**	**100**	**16**	**100**

Table 5.7. Number of sailors from West Norway (group 7), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

other Dutch cities, which means we probably do not see the total Bergen participation in Dutch shipping in these figures.[473]

Bergen was the third largest city in the Danish conglomerate state after Copenhagen and Altona and Norway's most populous, so it is not strange that we find quite a number of seamen from this city.

It was primarily for dried cod that the many Dutch ships came to Bergen, but the city also had a large merchant fleet, which in 1784 consisted of 107 vessels, of which 20 were frigates and snow brigs. In order to man the many ships, it was estimated that 746 sailors would have been needed, so the city obviously had its own large maritime community, from which some sailors chose to go long distance.[474] We must assume that it was also via Bergen that the sailors from Sognedal came to Amsterdam, but it is unknown why it is only people from this area who show up in the Waterschout Archive, as the fjord systems on the Norwegian west coast are filled with small maritime communities. Maybee many of these sailors simply claimed to come from Bergen. Ondal is a site at Norheimsund in the Hardangerfjord, and from here we find Sybrand and Roluf Petersen in 1780, perhaps brothers. They mustered on board the *Schione Judith* for a journey first to the Canary Islands and then to St. Eustatius.

Southwest Norway (group 8): Rogaland and West-Agder counties from Karmøy in the west to Kristiansand in the south

The northernmost area in this group is the island of Karmøy, from which we find two sailors from Kopervik on the east side and Skudeneshamn in the south, but this is not otherwise normal for this group, because here we find some of the largest concentrations of sailors in a location, in a group that holds by far the largest number of Norwegian seamen. The largest is the group of sailors from the island of Lista, or 'T'Lage land Leest' as the Dutch called the place because of the low profile of the island.[475] The number of sailors from here fell from 1780 to approx. a third in 1787, and the group from Kristiansand saw a similar trend. On the other hand, we see that in 1787 Egersund had the largest contingency, which only experienced a decline of about half of the numbers in 1780, a tendency which also applies to Stavanger. We even see that the number of seamen from Farsund went up between 1780 and 1787. A picture emerges showing that the seamen

473 Hodne 1976, 49.
474 Huun 1930, 203.
475 Damsteegt 2001, 29.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Kopervik	1	0.4				
Skudeneshamn			1	0.3		
Stavanger	12	5	34	10.4	14	11.6
Egersund	22	9	48	14.7	24	20
Flekkefjord	33	13.6	48	14.7	10	8.3
Lista	61	25	62	19	19	15.8
Farsund	3	1.2	4	1.2	9	7.5
Lyngdal	5	2	8	2.4	1	0.8
Korshamn	4	1.6	10	3	3	2.5
Lindeness	26	10.7	28	8.6	12	10
Spangereid	2	0.8				
Svinør	12	5	2	0.6		
Mandal	13	5.3	26	8	11	9.1
Ny Hellesund	5	2	7	2.1	1	0.8
Kristiansand	44	18	49	15	16	13.3
In total	**243**	**100**	**327**	**100**	**120**	**100**

Table 5.8. Number of sailors from Southwest Norway (group 8), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

from the two largest maritime centres in the area, Lista and Kristiansand, during this period abandoned Amsterdam and presumably started working aboard local ships to a greater extent than the sailors from the rest of the group. As is shown in Chapter 3, it was precisely during these years that the Norwegian merchant fleet grew rapidly.

The fact that so many sailors from Rogaland and Vestagder went to Amsterdam and sailed from here is not new knowledge, as Sølvi Sogner found that among the 68 Norwegian sailors who appear in Paul van Royen's material from 1700 to 1711, 37 percent came from exactly these areas.[476] What is new is that we here find so many seamen from exact locations and that we can follow their movements over several years. Migration from Rogaland and West and East Agder to the Netherlands was high in the early modern period, largely due to a lack of opportunities. Thus, in 1739, Resen, the king's representative in Lister and Mandal county (present day Vest-Agder county), explained that people in his area were poor and that many emigrants sent money home to the family.[477] The emigration from southwestern Norway to the Netherlands was so great that it can be traced at a demographic level. Thus, the population increase in Lister and Mandal counties between 1660 and 1801 was 28 percent, while the population in the rest of Norway doubled in the same period. As people along the coast went abroad, migrants from the interior came down to the coast and settled, but even this relocation was not enough to fill the gaps.[478]

476 Sogner, 74.
477 Sætra 1997, 200.
478 Sætra 199, 192.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Grimstad			2	4.3		
Arendal	15	39.5	13	27.6	11	31.4
Risør			3	6.4		
Brevik	1	2.6	2	4.3		
Langesund	9	23.7	16	34	10	28.6
Stavern			1	2		
Larvik	3	7.9	2	4.3	1	2.9
Sandefjord	1	2.6	2	4.3	5	14.3
Tønsberg	6	15.8	4	8.5	5	14.3
Holmestrand	2	5.2	2	4.3	3	8.6
Svelvik	1	2.6				
In total	**38**	**100**	**47**	**100**	**35**	**100**

Table 5.9. Number of sailors from Southeast Norway (group 9), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

Another factor that explains the many seamen from this area of Norway is, of course, that the Dutch presence along the coast made it easy to find a berth on a ship bound for the Netherlands. Although many immigrated to the Netherlands from this area, many also returned home. Some were already married when they left and returned home to provide for their families, and the Netherlands was the place to go and save up a certain amount of money in order to settle down. Thus, there was a return migration of about 12 percent.[479]

Southeast Norway (group 9): East-Agder, Telemark and Vestfold counties from Skottevik and Lillesand to Svelvik and Holmsbu

Compared to group 8, there were far fewer seamen from this area, which emphasises how important contact with the Netherlands was to Southwest Norway, at least up to and including 1780. Also, here in the east, there is no large decline in the number of seamen from any location between 1780 and 1787, as we saw for Lista and Kristiansand. The number of sailors from Sandefjord, Holmestrand and Tønsberg even increases, and as these three places are located in the easternmost part of the area, farthest away from the active southern Norway, it seems that contacts with the Dutch timber ships were not severed and that the local sailors did not switch to the growing Norwegian merchant navy. It is certain that Dutch skippers continued to dominate the timber trade in especially East Norway, so that most of this trade in Drammen even after 1770 was in Dutch hands.[480] In 1786, Dutch ships thus visited Holmestrand 22 times and Langesund 100 times; figures for Tønsberg and Larvik do not exist.[481]

After 1740, Arendal was home to the largest number of merchant ships in Norway, which grew steadily until the outbreak of the Napoleonic Wars. In 1776 73 ships were registered in

479 Sætra 1997, 198.
480 Sætra 1997, 196.
481 Bugge 1923, XXXVIII.

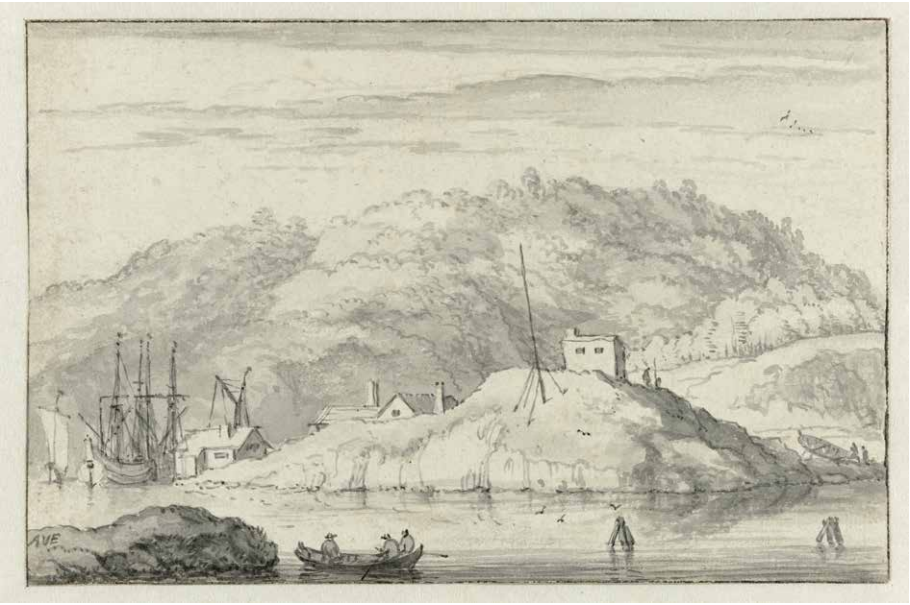


Fig. 5.2. View of the harbour of Risör in Norway. By Allaert van Everdingen, 1644. Rijksmuseum RP-T-1957-202.

the city with a total tonnage of 11,800 tonnes, and in 1787 there were 97 ships with a total tonnage of 18,500 tonnes,[482] so it is no wonder that most of the sailors in this group came from here. In 1787, 983 men were needed to man the 97 ships, which is why the vast majority of sailors from Arendal must have sailed on the city's own ships. The most important trade from here was the timber trade to England, so it is surprising that we find sailors from here at all.[483] A likely scenario may also be present in the case of Risør, where there are 3 men listed in the Waterschout muster rolls for 1780. In 1776 there were 56 vessels registered in Risør, with a total tonnage of 4173 tonnes, and in 1787 65 vessels with a tonnage of 7500 tonnes. The city thus had a considerable number of vessels, but these were relatively small (mostly between 13 and 130 tonnes) and were employed in the domestic traffic between the cities of the Danish conglomerate state,[484] so sailors from here were not likely to show up in Amsterdam.

Eastern Norway (group 10): the fjord of Oslo with Drammen, Christiania and Frederikshald

East Norway was the heart of the old timber shipping area to which Dutch ships were already flocking in the 16th century.[485] The largest group of sailors in this group came from Drammen, whose closest competitor, Christiania, could only muster half as many sailors in the Waterschout Archive. It is surprising that there are sailors from Kongsberg at all, as the town, with its silver mines, lies inland. However, there is access to the sea

482 Bugge 1923, XXXIX.
483 Bugge 1923, 538.
484 Bugge 1923, XXX.
485 Løyland 2012, 23.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Kongsberg	2	3.1	8	10.5		
Holmsbu			1	1.1		
Eknes	1	1.6	2	2.1		
Drammen	24	37.5	36	38	17	39.5
Christiania	12	18.7	14	14.7	6	14
Drøbak	3	4.7	1	1.1	1	2.3
Moss			1	1.1		
Lervik	1	1.6				
Hankø			1	1.1		
Sandesund			1	1.1		
Kråkerøy	1	1.6	1	1.1	1	2.3
Fredrikshald	14	21.9	13	13.7	4	9.3
Norge	6	9.4	16	16.8	14	32.5
In total	**64**	**100**	**95**	**100**	**43**	**100**

Table 5.10. Number of sailors from Southeast Norway (group 10), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

both by the Numedalslågen River, which opens at Larvik, and by the Vestfosselven over Hokksund into the Drammenselven down to Drammen itself. Perhaps in bad times mining people found their way to sea by these waterways. Eknes, from which three men came, is also located in this area. Drammen's own shipping industry was not small, with 22 ships totalling 6000 tonnes in 1776,[486] a number that increased to 35 ships in 1787 with a total tonnage of 12,000 tonnes. Merchants from Drammen also took part in the lucrative timber trade to England, but there was also a considerable number of Dutch vessels coming to Drammen; in 1776, 72 vessels with a total tonnage of almost 15,000 tonnes, so there was ample opportunity for sailors from the area to take a berth on a Dutch cargo ship back to Amsterdam.[487]

The presence of Dutch ships had a direct influence on the number of sailors in the Waterschout Archive from the given locations, as is clear when comparing Drammen and Christiania. We see that the number of seamen from Christiania was only half that from Drammen, and indeed only a single Dutch vessel of 65 tons visited Christiania in 1786.[488] Christiania's own merchant navy was not very large either: in 1776 12 vessels totalling 1700 tonnes and in 1787 16 vessels with a total tonnage of 3260 tonnes, so it seems that Christiania was not home to very many seamen in comparison with the other port cities along the Norwegian southeast coast.[489] From Drammen, Christiania and Frederikshald we see the significant decline between 1780 and 1787, which is due to both rising employment

486 Bugge 1923, XXX.
487 Bugge 1923, XXXVII, XXXVIII.
488 Bugge 1923, XXXVIII.
489 Bugge 1923, XXX, XXXIX.

in domestic shipping, but also to the fact that the Danish government banned its seamen from going abroad when the Fourth Anglo-Dutch War broke out.[490]

On the west side of the Oslo Fjord we find sailors from small timber shipping places such as Drøbak, Moss, Lervik, Hankø and Kråkerøy, which shows that the Dutch timber ships also came to very small locations and thus could take one or two young Norwegian men with them. Sailors from Frederikshald (today's Halden) form the third largest group. The town had a slightly larger domestic fleet than Christiania and in 1776 there were 19 vessels with a total tonnage of about 2000 tonnes registered and in 1787 35 vessels with a tonnage of 4100 tonnes, so like Drammen and Christiania, we see a significant growth in the local merchant fleet.[491] Like Christiania, in 1786 we do not see many Dutch ships here; only two small vessels of an average of 58 tonnes,[492] which must indicate that the sailors from Frederikshald mainly came to Amsterdam on their own ships. Sailors from Fredrikstad are not included in this survey, as these are indistinguishable from seamen from the Schleswig town of Friederichstadt. Similar to the other areas, some of the Norwegian seamen were also not very specific when giving their place of residence, but simply reported a larger geographical area, region or entire region. The place of residence 'Norway' is one such indication.

The Bohus coast (group 11): the former Danish province, Bohuslen, with the Swedish Göteborg

Just as on the Norwegian southeast coast and in the Oslo Fjord, Bohuslen had a considerable export of timber, and the deep fjords were ideal ports that cut far inland and thus came close to the forest areas while providing protected anchorages. The condition of the soil in Bohuslen is poor, which is why the population turned to seafaring and fishing very early on, and this made Uddevalla, Marstrand and Gothenburg important maritime areas.[493] Not many sailors from the actual Bohuslen can be found in the Waterschout Archive, and this might be explained by the fact that Sweden, like England, which introduced the Navigations Acts some 70 years before, introduced the so-called 'produktplakatet' in 1724. This was a law that prohibited all foreign imports if they were not brought to the country by Swedish ships or by ships from the country of production, which, as in the case of England in 1651, effectively prevented Dutch vessels from taking part in the traffic to Sweden. Thus, Dutch traffic to Sweden fell from about 100 ships annually in 1720 to three in 1726, and the ban remained in effect for the remainder of the 18th century.[494]

The lucrative trade with live lobsters from the coasts of Bohuslen to the Netherlands was an old tradition that the authorities with the 'produktplakatet' and following Sweden's rising mercantile ambitions, tried to put into Swedish hands. However, the Swedes did not master the Dutch ability to keep the lobsters alive until entering the Dutch market, which is why this business became unrestricted in 1757.[495] Perhaps some of the sailors from Bohuslen travelled to the Netherlands on such a Dutch lobster boat.

---

490 Rheinheimer 2016a, 217.
491 Bugge 1923, XXX, XXXIX.
492 Bugge 1923, XXXVIII.
493 Ekström, Müller & Nilson 2016, 70.
494 Ekström, Müller & Nilson 2016, 80.
495 Ekström, Müller & Nilson 2016, 289, 290.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Strømstad	2	5	2	4.9		
Uddevalla	7	17.5	1	2.4		
Marstrand	2	5	5	12.2	1	2.5
Gøteborg	29	72.5	32	78	39	97.5
Mariestad			1	2.4		
In total	**40**	**100**	**41**	**100**	**40**	**100**

Table 5.11. Number of sailors from the Bohus coast (group 11), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

Gothenburg had the same position in the Swedish maritime industry in the west as Stockholm had in the east.[496] The city had an important function as a connection between the West Swedish hinterland and the world market, which is why timber, tar and pitch were shipped from the harbour along the Göta River, but also salted Bohuslen herring, which after 1760 became a growing export commodity.[497] Gothenburg, like Stockholm, was also the export harbour for Swedish ironbar transported by large ocean-going vessels, and at the same time Gothenburg was home to the *Svenska Ost Indiska Kompaniet* (the Swedish East India Company), that from 1731-1811 sent 132 expeditions to China.[498] The number of sailors from Gothenburg in the Waterschout Archive increased over the three years investigated (as opposed to the seamen from groups 1, 3, 4, 5, 6, 7, 8, 10, 12 and 13), which must be related to the fact that Sweden did not issue a ban on going abroad and serving on other nations' ships and that the Swedish merchant navy grew rapidly in those years; from 456 vessels with a tonnage of 26,000 tonnes in 1760 to 900 vessels with a total tonnage of 57,500 tonnes in 1785.[499] As the number of Swedish ships in the international trade increased, more Swedish sailors took part in the international maritime labour market, and some of them also found a berth on a ship from Amsterdam. And then a curiosity: on 25 September 1780, the mate Marius Westerberg embarked on the *Vrouw Elisabeth* on a trip to Suriname, claiming to come from Mariestad. This town is located on the western bank of Lake Vänern in central Sweden and is the starting point for the locks and canal system leading down to Stockholm; so, in 1780 sailors went to Amsterdam even from inland locations like this.

The Scanian peninsula (group 12): the former Danish provinces, Skåne, Halland and Blekinge

In this group we can follow the sailors along the coast from Varberg and all the way around the southern tip of the Scanian peninsula to Karlskrona. Near Karlshamn and Karlskrona there are smaller provincial ports, and the many localities testify that along the coasts of Skåne, Halland and Blekinge there was a long tradition of maritime activities. The second

496 Ekström, Müller & Nilson 2016, 70.
497 Ekström, Müller & Nilson 2016, 94.
498 Ekström, Müller & Nilson 2016, 87, 88.
499 Ekström, Müller & Nilson 2016, 84.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Varberg	7	5.5	14	14	3	5
Falkenberg			1	1		
Halmstad	3	2.4	1	1		
Skåne					1	1.6
Båstad	1	0.8				
Ångelholm			1	1		
Helsingborg			3	3	2	3.3
Rå					1	1.6
Landskrone	1	0.8	1	1	1	1.6
Lund			1	1		
Malmø	2	1.6	2	1	8	13.3
Falsterbo	1	0.8				
Ystad	2	1.6	1	1		
Åhus			1	1	2	3.3
Kristianstad	2	1.6	8	8.1	5	8
Karlshamn	55	43.6	46	46.5	26	43.3
Karlskrona	52	41.3	19	19.2	11	18.3
In total	**126**	**100**	**99**	**100**	**60**	**100**

Table 5.12 Number of sailors from the Scanian peninsula (group 12), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

largest group of sailors from the former Danish regions came from Karlskrona, which is no coincidence, since in 1683 the city became the main base for the Swedish navy and only a few years later ranked as Sweden's third largest city.[500] It is unknown whether the Karlskrona sailors in the Waterschout Archive were seafarers who had been allowed to go to sea (as is the case with some of the Danish-Norwegian sailors who were in the muster rolls of the navy) or whether they had nothing to do with the Swedish navy. As mentioned earlier, the Swedish merchant navy experienced a dramatic increase during these years, and it is therefore highly conceivable that this could be the case.

One additional factor which makes this likely is that in 1634 the Swedish navy introduced the so-called 'indelningsverket', a recruitment system in which a number of farmers paid for the wages and lodgings for a sailor in the navy, who served in the summertime and in winter worked as a regular farmhand.[501] Such a sailor was not only bound by his oath to the king, but also by his dependence on his sponsors, and it is hard to imagine that he could just leave his home as he pleased. On the other hand, it is conceivable that the Swedish navy also wanted to qualify its seamen by letting them sail in international shipping.

500 Ekström, Müller & Nilson 2016, 36.
501 Hammar 2015, 698.

Regarding the number of sailors from Karlskrona and Karlshamn, it is striking that there is a steady decline from 1772 to 1787 and not, as for most other sites in the study, an increase from 1772 to 1780 and then a decrease. One can imagine that the numbers from 1772 reflect a peacetime level and that the naval authorities, thanks to the increased tension between the Netherlands and England up to the Fourth Anglo-Dutch War, increasingly kept their seamen at home. In the 1780s the Swedish navy saw a massive build-up, aimed at war with Denmark, but at the same time in 1780 Sweden joined Denmark-Norway and Russia in the Armed Neutrality Alliance with the aim of keeping out of the conflict between the great powers.[502] In 1787, the Swedish merchant fleet was at its highest before 1800, and it must be assumed that the seamen who had previously sailed from Amsterdam now did so on Swedish ships.[503] Karlshamn is home to the largest number of seamen in the group and, unlike Karlskrona, does not see the same decline over the three years. Instead of a nearly 80 percent decline from 1772 to 1787, we find only a 50% decline for the Karlshamn seamen, which might indicate that some of the Karlskrona sailors were actually navy personnel restricted by the Navy. In contrast, the Karlshamn sailors must have been more independent and could choose whom they would sail with. The location 'Skåne' is another example of a collective term for a larger geographical area.

Sweden (group 13): Sweden herself and Finland (which until 1809 was a part of Sweden)

The Stockholm sailors are by far the largest contingency in this group, which of course is no wonder. The city was not only the capital of Sweden-Finland, but also the centre of the Swedish Baltic Sea empire with Swedish Pomerania and had a population of 60,000-70,000 at the end of the 17th century.[504] With its large and rich hinterland, the city was also the export harbour for large quantities of iron and timber and other forest products.[505] The aforementioned Swedish mercantilistic law from 1724 excluded both English and Dutch ships, but already from 1689 the vast majority of iron and timber from Stockholm was transported on Swedish ships.[506] As mentioned earlier, the Swedish merchant navy grew dramatically in the 18th century, as can be seen in the figures from the Sound Toll Registers: in the 1720s the annual passage was approx. 400 Swedish ships and during the 1770s the numbers reached 800 passages. However, between 1775 and 1785 the number of Swedish ships passing through the Sound reached over 2,000 ships annually.[507] The second largest group of sailors came from Kalmar, which undoubtedly must have served as an export harbour for the large hinterland in Småland and thus must also have had a considerable local merchant fleet.

The third largest group came from Gotland, which, unlike Stockholm, retained roughly the same number of seafarers in Amsterdam shipping over the three years. Additionally, there is only a slight decline for the Kalmar group. The explanation must be that sailors from these smaller localities could not benefit to the same extent from the growing Swedish merchant fleet and therefore had to find employment elsewhere. Until 1765,

502 Bjerg 2010, 103, 105.
503 Ekström, Müller & Nilson 2016, 84.
504 Ekström, Müller & Nilson 2016, 79.
505 Ekström, Müller & Nilson 2016, 70.
506 Ekström, Müller & Nilson 2016, 75.
507 Ekström, Müller & Nilson 2016, 85.

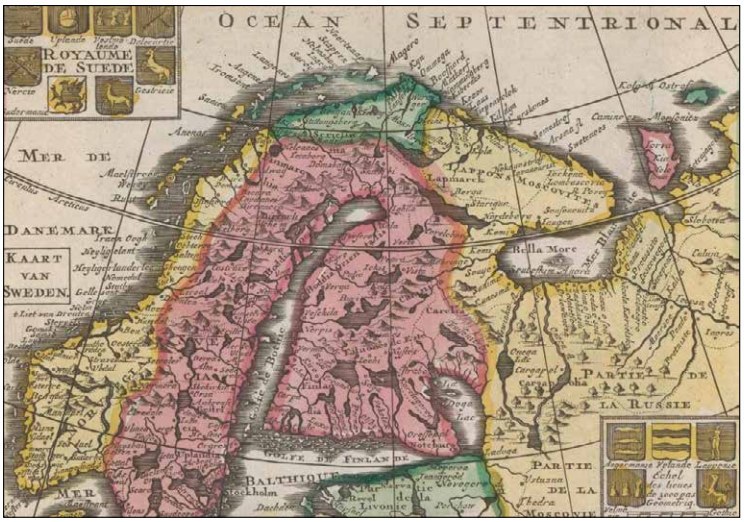


Fig. 5.3. Detail of map of Sweden by unknown, 1735. Rijksmuseum BI-B-FM-090-87.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
Kalmar	35	21.5	26	18	20	19
Ôland			2	1.4		
Gotland	10	6	13	9	12	11.4
Visby	3	1.8	2	1.4		
Västervik	4	2.5	6	4	7	6.6
Norrköping	10	6	4	2.7	6	5.7
Landsort	1	0.6			1	0.95
Stockholm	76	46.6	70	48.3	44	42
Riddersholm	2	1.2				
Söderhamn					1	0.95
Umeå					1	0.95
Luleå	1	0.6	1	0.7	1	0.95
Småland			1	0.7		
Sverige			1	0.7	3	2.9
Karleby	1	0.6				
Jacobstad	1	0.6	4	2.7	1	0.95
Karlsund	1	0.6			1	0.95
Vaasa			2	1.4	4	3.8
Hälgrund			1	0.7		
Nystad			2	1.4		
Åbo/Turku	9	5.5	7	4.8	3	2.9
Helsingfors	3	1.8	2	1.4		
Loviisa	4	2.5	1	0.7		
Viborg	1	0.6				
Finland	1	0.6				
In total	**163**	**100**	**145**	**100**	**105**	**100**

Table 5.13 (left). Number of sailors from Sweden (group 13), shown in numbers and percentages with their place of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

Table 5.14. Number of sailors from the restgroup (group 14), shown in numbers with their place of origin for 1780 and 1787. 'Residents' refers to Scandinavian sailors who claimed to live in Amsterdam. GAS, Waterschoutarchive 1772, 1780 og 1787.

Place of origin	Numbers in 1780	Numbers in 1787
Residents	30	
Island	1	
Lauenborg		1
Vestindien		1
In total	**31**	**2**

Stockholm shipping had a monopoly on all export goods from the eastern possessions of the realm, which applied to tar, pitch and sawn boards, but when this restriction was lifted Finnish maritime cities such as Old Karleby, Jacobstad and Vaasa saw a rapid development of shipping, from which we also find sailors in the Waterschout Archive.[508] Åbo or Turku in Finnish was then as now an important maritime city and ranks as the group's fourth largest location. Hälgrund is a peninsula approx. 50 km south of Vaasa, and Karlsund is a peninsula approx. 30 km south of Jacobstad. Loviisa is a small maritime town about 70 km east of Helsinki.

The rest (group 14)

In 1780, a peculiar phenomenon occurs in the muster rolls of the Waterschout Archive. Thirty seamen stated that they came from Amsterdam, but when looking at their names there is no doubt that they were Scandinavians, which is also confirmed by their stated addresses in Amsterdam, sailors' inns with Scandinavian connections, such as Teunis Dekke's *Wapen von Christianzand* in Ridderstraat or Engeltje Mansen's *Wapen van Flensburg* on the corner of Ridderstraat and Jonkerstraat. For 14 of the 30, their origin in Scandinavia was even noted down on the documents: eight were from locations in Norway, five from Schleswig-Holstein, and one from Bornholm. However, the common denominator for the 30 sailors is that they all sailed on the short run between Amsterdam and Hull in England. Ten men sailed on the *Holland* commanded by Jurian Mattysen, seven men sailed on *D'Waat Saemheyd* commanded by Pieter Berg, five men sailed on *Amsterdam* commanded by Hendrik Broerz and Andries Jansen Anker, and eight men sailed on *Mercurius* commanded by Hans Christian Pietersen and Henrik Broersz. The captains' suspiciously Nordic names suggest that these were Danish-Norwegian skippers on Dutch ships who recruited their landsmen. Perhaps what we witness here is an attempt to conceal the nationality of these seafarers, which may be related to the rules of the English 'Navigation Acts', where the number of foreign seamen on Dutch ships was limited when calling at English ports.[509] In 1780 we find Jan Olle Isseveld from Iceland, who embarked on the *De Maasstroom* on a trip to Suriname, and in 1787 we find two seamen who cannot immediately be placed in the other groups: the steward Jan Henriksen from Lauenborg, who on 23 March mustered on *De Goede Verwagting* for a trip to Batavia and the cabin boy Christian Petersen, who claimed to come from the 'West Indies'.

508 Ekström, Müller & Nilson 2016, 83.
509 Akveld mlf. 1977, 228.

Place of origin	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
1) The Wadden sea coast	810	43.3	1143	47.5	704	54
2) Holstein	60	3	101	4.2	57	4.4
3) Denmark exept the Sound	78	4.2	76	3.1	30	2.3
4) Eastern Schleswig	149	8	152	6.3	64	5
5) The Sound	35	1.9	54	2.2	20	1.5
6) Northwest Norway	21	1.1	36	1.5	9	0.7
7) Westnorway	43	2.3	57	2.4	16	1.2
8) Southwest Norway	243	13	327	13.6	120	9.2
9) Southeast Norway	38	2	47	1.9	35	2.7
10) Eastern Norway	64	3.4	95	4	43	3.3
11) The Bohus coast	40	2.1	41	1.7	40	3
12) The Scanian peninsula	126	6.7	99	4.1	60	4.6
13) Sweden	163	8.7	145	6	105	8
14) Rest			31	1.2	2	0.2
In total	1870	100	2404		1305	100

Table 5.15. Numbers and percentages of Scandinavian sailors, shown in their groups of origin for the three years examined. GAS, Waterschoutarchive 1772, 1780 and 1787.

Analysis of the 14 groups of origin

When you combine the results from the 14 groups, an overall picture appears. The Wadden Sea sailors (group 1) make up the largest group for each year, with 43.3, 47.5 and 54 percent of all Scandinavian seamen respectively. Second largest is the group of seamen from Southwest Norway (group 8) with proportions of 13, 13.6 and 9.2 percent of the Scandinavian seamen, thus making up only a quarter or a fifth of the number of Wadden Sea seafarers, thus emphasising the importance of Amsterdam for the Wadden Sea seafarers and presumably showing that, unlike the seafarers from Southwest Norway, they did not have a domestic merchant navy to join when conditions in the Netherlands deteriorated. Despite the aforementioned Danish ban on sailing on foreign ships, sailors from Föhr, Ballum or Grådyb kept on working on the international maritime labour market in Amsterdam, a fact that highlights how little control the authorities in Copenhagen had over the southwest coast of Jutland and the duchies, and thus also, how autonomous and self-reliant the people of these areas were. While the number of seamen from Denmark (excluding the Sound), East Schleswig, the Sound and northwest Norway (groups 3-7) declined between 1780 and 1787 by between one-half and three-quarters, the number of Wadden Sea seamen fell by less than half, which again shows the importance of Amsterdam for this region. The reason for the large decline in the aforementioned groups (groups 3-7) may be because the authorities in these areas had a much tighter grip on the maritime population, primarily through the maritime enrolment system, which only allowed seamen to leave the country legally if the local muster officer had given his permission.[510] As mentioned earlier, it is noteworthy that there were so few sailors from

510 Sogner 2012, 73.

Areas	Percent in 1772	Percent in 1780	Percent in 1787
Denmark	6.1	5.3	3.8
Schleswig-Holstein	54	58.3	63.4
SL-H without Föhr	48.4	47.9	55.8
Norway	21.8	23.4	17.1
Sweden	17.5	11.8	15.6
Sw. Without G and St.	5.6	3.8	5.1
In total	100	100	100

Table 5.16. Scandinavian sailors shown in percentages according to current national borders for the three years examined. Schleswig-Holstein has been shortened to SL-H, Sweden to Sw, Göteborg to G, and Stockholm to St. GAS, Waterschoutarchive 1772, 1780 and 1787.

the Sound, primarily Copenhagen, especially as 450 ships were registered in the capital in 1787, of which 140 were large ocean-going vessels.[511] On average over the three years surveyed, sailors from the Sound constitute only 1.8 percent of all Scandinavian seamen, and thus there is an obvious gap among the Scandinavian seamen in Amsterdam. This deficiency can only be explained by the fact that the sailors from the Sound region mainly sailed on Copenhagen ships and therefore did not have to go to the Netherlands to find employment. The same applies in part to the sailors from Bergen and Arendal, where there were large merchant navies which provided work for most of the seamen.

In the second largest group of Scandinavian sailors, the sailors from Southwest Norway (group 8), we see a decline between 1780 and 1787 of about half, which in comparison with, for example, Northwest Norway (group 7) is not significant, and if we look at the next group, Southeast Norway (group 9), the decline is even smaller. The explanation for this may be that, as for the Wadden Sea sailors, it was relatively easy for sailors from Southeast Norway to evade the authorities and go to Amsterdam, as Sølvi Sogner points out.[512] Similar to Sogner's surveys of Norwegians in the marriage registers in Amsterdam, we see that more than half of all Norwegian sailors in the Waterschout Archive came from Southwest Norway (group 8). [513] The number of sailors from Bohuslen (group 11) is more or less the same for all three years, testifying to Gothenburg's long and close connection with the international market, because of the iron export from the city.

If we step back and look at the distribution of seamen from the individual Scandinavian countries, it is quite striking that the proportion of seamen from modern Denmark (groups 3 and 5) constitutes only 6.1, 5.3 and 3.8 percent respectively of all seamen over the three years surveyed, which shows that seafarers from these areas participated only to a very small degree in the international maritime labour market in Amsterdam. This is probably due to the fact that shipping in domestic Danish waters was carried out largely on smaller vessels sailing between provincial ports and the capital or to Norway,[514] and

511 Feldbæk 1997, 137.
512 Sogner 2012, 38.
513 Sogner 2012, 37.
514 Feldbæk 1997, 66.

that most of the Copenhagen seamen sailed on the capital's own ships. In contrast, we see that the proportion of seafarers for the duchies of Schleswig and Holstein (groups 1, 2 and 4) is 54, 58.3 and 63.4 percent of all Scandinavian seamen, and even if we remove the Föhr seamen, the proportion is impressive. In this case, the share of the sailors from the duchies would still be 48.4, 47.9 and 55.8 percent respectively, *i.e.* still more or less half of all Scandinavian sailors. These figures emphasise that many seamen from the duchies were part of the international maritime labour market in the Netherlands and were an important component of the transfer of maritime culture.

The average number of seamen from present-day Norway (groups 6-10) represents an average of 20.7 percent for the three years surveyed, which is surprising, as we shall later see that Norwegian seamen in the 17th century had a much larger participation than this in the Amsterdam shipping industry. The answer for this relatively small proportion must be found in Norway's rapidly growing merchant navy in the second half of the 18th century. Sweden-Finland's share is a bit smaller than the Norwegian one, but if we take the sailors from Gothenburg and Stockholm out of the equation, something interesting happens. We then see how important the two port cities had for Swedish contact with the international market, and how small the contact really was in the rest of the kingdom.

When considering the distribution of Scandinavian sailors in the Waterschout Archive over the three years, it is clear that there was a central maritime core area, namely the Wadden Sea area and a somewhat smaller but still important maritime core area, namely Southwest Norway. From these two areas, a considerable number of seamen went to the Netherlands for shorter or longer periods and brought Dutch maritime knowledge and technology back to Denmark-Norway. By becoming part of the practice community on Dutch ships, the Scandinavian seamen appropriated the characteristics of these practice communities: their knowledge, competences, everyday life on board, language, perspective of life and more.[515]

5.2 Position on board and wages

5.2.1 The various positions on board

A hierarchy of crew members existed aboard sailing ships in the early modern period, reflecting their experience at sea and status on board. As mentioned earlier, the position in the hierarchy was connected to the individual's place in the on-board community: how far one was from being a peripheral legitimate participant to being a full member and veteran of this community.[516] Looking at the positions the sailors held according to the Waterschout Archive reveals how fine-grained this hierarchy was and how many different positions were actually present on board. At the bottom of the hierarchy we find the cabin boys, who were newcomers to the profession and typically went to sea at the age of 11-14 years, as was Jens Jacob Eschels, who shipped out at age 11 when he joined the whaler *De Stadt Zwolle* as 'Unterkajütswächter' (junior cabin boy).[517] Above the cabin boys came the actual ship's boys, who had made a trip or two as cabin boys and were now considered experienced enough to help on deck and in the rig. A side step from the direct route from cabin to the deck, was the

515 Lave & Wenger 2003, 80.
516 Lave & Wenger 2003, 95.
517 Eschels 1966, 18.

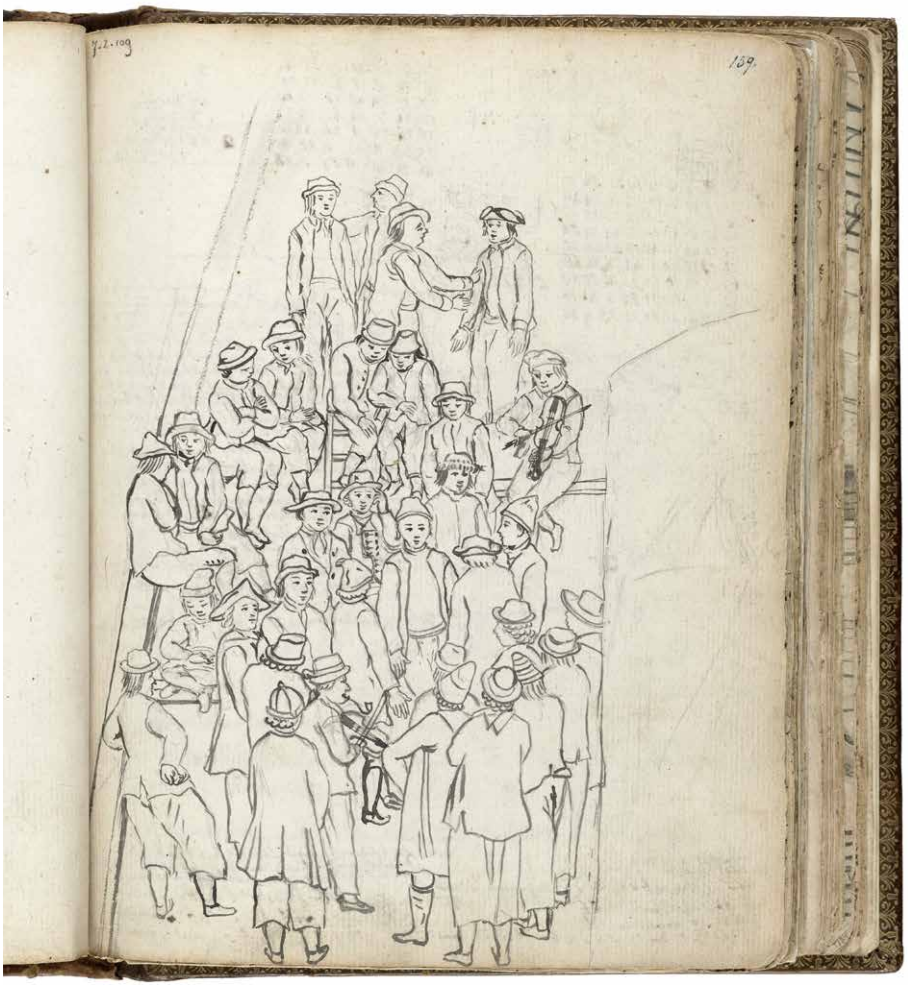


Fig. 5.4. Ordinary sailors on an Eastindiaman, by Jan Brandes, 1778 – 1787. Rijksmuseum. NG-1985-7-2-109.

position of 'Kok en jonge' (cook and boy), where the young seafarer worked both as a cook and as a ship's boy. Eschels sailed as one, when, after a whaling season, he chose to continue in smallcraft shipping on the Baltic.[518] Another option was to sail as a 'koksmat', the cook's assistant, which Eschels also tried on his third, fourth and fifth voyages.[519] The task of the constable was to operate and maintain the ship's guns, pistol, rifles and swords and he was therefore often a soldier who had found his way to sea.[520]

Once enough experience had been gained, it was possible to muster as either an ordinary or able seaman, but this division is not used in the Waterschout Archive, so a distinction can only be made by considering the size of the wage. As this is so individual from trade to trade, no distinction is made here. Ship's cooks were ordinary sailors who

518 Eschels 1966, 59.
519 Eschels 1966, 36, 45.
520 Beelen, Biesheuvel & van der Sijs 2011, 151.

chose this position because it usually paid more than the sailor's wage, and the cooper (Cuyper in Dutch) was one of the maritime craftsmen whose job it was to assemble barrels on board, when needed for the cargo taken and to maintain what barrels the ship carried herself.[521] The sailmaker was, as the name implies, responsible for sewing new sails and repairing the existing ones, as well as making hatch covers and more. Like the boatswain, a 'schieman' was a very experienced sailor who mastered all activities on board and led the seamen at work. A 'schim' in Dutch means 'shadow' and the 'schieman' thus stood in the shadow of the boatswain, subordinate to him.

On larger three-masted ships, the schieman was responsible for the mesanmast, the boatswain for the mainmast and the boatswain's mate (his apprentice) for the foremast.[522] The most treasured and therefore also highest paid position among the maritime craftsmen was the shipwright who was responsible for the ship's hull and thus everyone's safety. He made new spars (booms, yards, masts) if necessary and otherwise carried out all the woodwork on board. In the Waterschout Archive we find senior, junior and third-class shipwrights, in addition to the ordinary title of shipwright. As mentioned earlier, the boatswain was a very experienced sailor who knew everything about the ship's standing and running rig and who led the sailors in their daily work. On whaling vessels, special occupations were closely linked to this trade. The harpooner was a very experienced sailor who commanded his own whaling boat and threw the harpoon; a job that required years of experience. The 'Specksnuyderen' or the blubber butcher, which you would probably call him today, was also a harpooner, but at the same time responsible for the cutting up of the whale, and therefore, that the whale carcass was utilised optimally. It was a very dangerous job, standing on top of the slippery whale, which was placed along the ship's side and the chances of falling into and perishing in the icy water were considerable.[523]

Both the harpooner and the specksnuyderen were considered ship's officers, and, as well as their normal wage, they received a bonus per barrel of whale oil delivered by the ship to ports. The Specksnuyder received 16-17 stuivers per barrel and in addition, 5 guilders for each whale caught, while the harpooner received 14-15 stuivers per barrel in addition to his regular wage.[524] Actual navigators were the mates, and of these there are four categories in the Waterschout Archive: the third watch, that is, the fourth mate, the third mate, second mate and the first mate, and these categories obviously relate to the navigators' experience. The ship's captain or skipper was himself a navigator and had worked his way up through the maritime hierarchy, eventually being entrusted with a vessel by the shipowner. He made all the important decisions on board and was answerable to the shipping company. As the skippers' places of residence and wages are not noted in the Waterschout Archive, these are not included in this study.

The largest proportion of the registered seamen was made up of the sailors with just over 61 percent, 50 percent and 59 percent respectively for the three years surveyed. The apparent decline in 1780 must be a result of the fierce demand for labour in the golden years around 1780. The seafarers who had previously sailed as sailors, but who qualified for a higher position, could gain it and move up the hierarchy, while new, inexperienced sailors

521 Beelen, Biesheuvel & van der Sijs 2011, 159.
522 Beelen, Biesheuvel & van der Sijs 2011, 231.
523 Bruijn 2016, 59.
524 Dekker 1968, 36, 249.

Positions	Numbers in 1772	%	Numbers in 1780	%	Numbers in 1787	%
1. Mate	3	0.16	12	0.5	5	0.4
Mate	74	4	217	9	82	6.3
2. Mate	29	1.5	85	3.5	26	2
3. Mate	4	0.2	8	0.3	8	0.6
All mates	110	5.86	322	13.3	121	9.3
Specksnuyder	3	0.16	4	0.16	3	0.23
Harpooner	4	0.2	5	0.2	3	0.23
Shipwrights	118	6.3	212	8.8	95	7.3
Boatswains	110	5.9	173	7.2	81	6.2
Schiemand	2	0.1	2	0.08		
Sailmaker	34	1.8	43	1.8	10	0.7
Cooper	39	2	29	1.2	15	1.15
Constable	4	0.2	2	0.08		
Cook	97	5.2	145	6	62	4.7
Cook`s assistant	74	4	75	3.1	48	3.7
Cook and boy	20	1.1	31	1.3	23	1.7
All cooks	191	10.3	251	10.4	133	10.1
Sailors	1144	61.2	1213	50.5	770	59
Ships boys	111	5.91	148	6.2	74	5.7
In total	**1870**	**100**	**2404**	**100**	**1305**	**100**

Table 5.17. The proportions of different positions held by the Scandinavian sailors shown in numbers and percentages for the three examined years. GAS, waterschoutarchive 1772, 1780 and 1787.

from other areas entered the bottom. Thus, the proportion of boatswains reached its peak in 1780 at 7.2 percent, and in total, the group of mates sees an increase from 5.86 percent in 1772 to 13.3 percent in 1780 and then a decrease to 9.3 percent in 1787. In this group the most commonly named position is simply 'mate', presumably referring to the many smaller ships that only sailed with a skipper and a mate on board. As soon as a division takes place among the mates on the same ship, we are dealing with a large ocean-going vessel that needed more navigators to take the watches. *E.g.* all five first mates in 1787 sailed on large East Indiamen, and in 1780 all twelve first mates were employed in the Atlantic trade to the West Indies or South America, which also applied to the three men in 1772.

In total, the four categories of mates are 5.86, 13.3 and 9.3 percent respectively of all Scandinavian seamen. The two special whaling positions, harpooner and specksnuyder, were strongly linked to Föhr. In both 1772 and 1780 it is Föhr sailors, we find here, but in 1787 a Norwegian had come in; a fine example of the Föhr sailors leaving the whaling industry and switching to regular shipping after the Fourth Anglo-Dutch War.[525] There are quite a few shipwrights among the Scandinavian sailors, taking a fourth place in 1780 and in 1772 even a third place, which testifies to their importance on board.

525 Dekker 1968, 258.

There are not a lot of Schiemen: in 1780 they are completely absent, which presumably relates to the continuous development of the three-masted squarerig, which was constantly optimised and became easier to operate; two 'boatswains' were no longer needed to take care of this. The number of sailmakers is also relatively modest, and one must assume that many ships did not muster them, as the common sailors on smaller ships and on shorter journeys had to take care of the condition of the sails themselves. Only on the large ocean-going ships with many sails and spending a long time at sea was a sailmaker needed. We find almost all of the coopers in the Atlantic trade to the sugar plantations in South America and the West Indies, where the large sugar barrels required a special craftsman for building and maintaining these.

We only find constables in the Atlantic trade or the runs to Spain and the Mediterranean, which testifies to the fear of attacks by corsairs from the Barbary states. In 1787 we find none of these, but by this time the vast majority of European countries had also made agreements for free shipping with the Barbary states in North Africa, which is probably why it was no longer important so important to carry guns. Like the boatswains and the shipwrights, the cook was a central person on board, and of course there are a good number of these in the muster rolls of the Waterschout Archive. As mentioned earlier, this function could also be held by a 'cook and boy', just as the cook's assistant belongs to this group. It is interesting to note that in all three years these three positions accounted for just over 10 percent of the Scandinavian seamen, while the proportion of the other positions fluctuated from year to year. One should thing that the group of cooks also saw an increase in 1780, but since this is not the case, the reason must be that the Scandinavian seamen moved up the system and left the role of the cook to other lesser experienced sailors from other nationalities, a tendency that can also be observed with the sailors. The proportion of ship's boys among all Scandinavian seamen is about 6 percent, showing only a slight increase in 1780, presumably for the same reason as for cooks and sailors.

5.2.2 Where did they come from?

In order to get an overview of where the various professions on board came from and to see if special areas were home to special groups, a survey have been made of the boatswains and the mates.

The boatswains

Two areas in particular stand out: namely the Wadden Sea area (Group 1) and Southwest Norway (Group 8), which are also the two largest groups among all Scandinavian seamen. It is evident that the boatswains from the Wadden Sea are far in excess in a ratio of 3: 1 and in 1787 4: 1, which highlights the importance of the area. In relation to the Wadden Sea people's share of all Scandinavian seamen (in 1772 at 43.3 percent, in 1780 at 47.5 percent and in 1787 at 54 percent), the proportion of boatswain from this group did not coincide; The proportion of Wadden Sea boatswains is in all cases lower than the Wadden Sea group's share of all seamen. Regarding the sailors from Southwest Norway (Group 8), this phenomenon applies to the last two years, but not to 1772, when the proportion of boatswains is actually larger than the group's share of all Scandinavian seamen. A total of 50.8 percent of all Scandinavian boatswains came from these two areas in 1772, 50.9 percent in 1780 and 59.2 percent in 1787, which clearly shows that these two areas were home to some of the most talented seamen in the Danish conglomerate state.

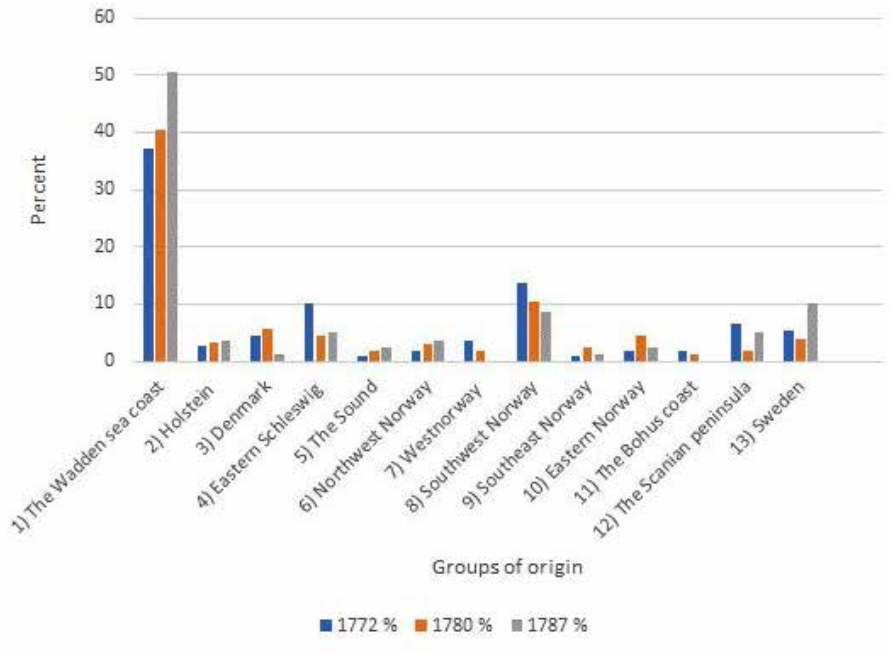


Fig. 5.5. The proportion of boatswains from the 13 groups of origin in percent of all Scandinavian sailors for each year examined GAS, waterschoutarchive 1772, 1780 and 1787.

It is interesting to see that the proportion of Wadden Sea boatswains (group 1) increases over the three years, while the reverse happened among the seamen from Southwest Norway (group 8). This phenomenon can be interpreted as the Norwegian boatswains increasingly staying away from the Dutch maritime labour market, while the boatswains from Southwest Jutland and the northern Wadden Sea coast took a greater part in it. The same is true on a more modest scale for the Holstein seamen (group 2), for the seamen from Sound (group 5) and for the sailors from Northwest Norway (group 6). The boatswains from East Schleswig (group 4) accounted for a significant proportion of all boatswains in 1772, but in 1780 their share had dropped by half, and one must assume that sailors from the East Schleswig maritime towns took part in the area's growing foreign trade and in the 1780s shifted to ships from their home towns.

In 1787 from both Northwest Norway (Group 7) and Bohuslen (Group 11) there were no boatswains sailing from Amsterdam at all; a plausible explanation is that these sailors sailed on board domestic vessels, as both Bergen and Gothenburg had a large merchant fleet. If you turn to the Swedish seamen in groups 12 and 13, it is characteristic that the proportion of boatswains in 1780 is considerably lower than in the other two years. Here one probably sees the effect of Sweden's caution in the run-up to the Fourth Anglo-Dutch War: the important boatswains were kept at home. For the year 1787, we see that the Swedish-Finnish sailors (group 13) actually have the second largest proportion of boatswains, surpassed only by the Wadden Sea sailors, which can be explained by the fact that sailors from most other areas (except groups 1 and 7-11) left the Dutch shipping industry at this time, leaving room for the Swedes. Finally, it should be noted that the proportion of boatswains from two areas as diverse as the Sound (group 5) and Northwest

Norway (group 6) increased over the three years. For the sailors from the Sound (group 5), this could be the effect of the growing Copenhagen share in international shipping, which took more of the sailors from the city out into the international maritime labour market, and for the northwestern seamen (group 6) this change could be due to sailors from here becoming boatswains in the Dutch shipping industry when their colleagues from Bergen (group 7) withdrew.

The Mates

For the mates, the picture looks a little different. Again, one sees the total dominance of the Wadden Sea sailors (group 1) among the Scandinavian seamen, but conversely the seamen of Northwest Norway (group 8) do not occupy a clear second place; only in 1787 is this the case. In all cases, the proportion of sailors from the Wadden Sea (group 1) far exceeds the group's share of all Scandinavian seamen (1772: 43.3 percent, 1780: 47.5 percent, 1787: 54 percent) and in 1780 it peaks with almost 70 percent of all mates, which must be related to the fact that there were local navigation schools in the area, where the sailors could be taught in the wintertime.[526] On the other hand, the proportion of mates from Northwest Norway (group 8) is in all three years below the group's share of all Scandinavian seamen (1772: 13 percent, 1780: 13.6 percent and 1787: 9.2 percent), which indicates that navigation schools were not common in this area, and that the seamen from here thus had a harder time achieving this status. Regarding the Holstein seamen (group 2), the proportion of mates in 1780 is higher than the group's total share of Scandinavian sailors, which must indicate that the mates from Altona also went to Amsterdam. However, while the number of sailors from Denmark (group 3) declined over the three years, their proportion of mates increased, which must indicate that it was possible for mates from this group to fill the gap that appeared after 1780, left by the mates of most other groups. In 1772 we see that there were actually more mates from East Schleswig (group 4) than the group's share of all Scandinavian seamen (8 percent), but after that year the proportion of mates fell below the share of all sailors, which is probably because they, as the boatswains from the East Schleswig maritime towns took part in the flourishing of local shipping. The proportion of mates from the Sound and Northwest Norway (groups 5 and 6) declined and completely disappeared in 1787, which is a diametrically reversed development compared to the one we saw with the boatswains from these same areas. When the economic conditions in the latter part of the 1780s became better, there was a greater demand for navigators among the local shipowners, and as there were far fewer sailors who reached the position of mates in relation to becoming a boatswain, this explains why this group left the Dutch maritime labour market for domestic shipping. This phenomenon is clearly seen for the West Norwegian sailors (group 7), since in 1787 there are neither boatmen nor mates.

Among sailors from Southeast Norway (group 9), the proportion of boatswains in 1780 is higher than the group's share of all Scandinavian seamen (1.9 percent), while for the other two years it is in line with this. In 1787 the proportion of mates from this group is either equal to or just above the group's share of all seamen (2.7 percent), while for the other two years it is in line with the group average. Is this the contours of a segment from this area which focused exclusively on Amsterdam and which in the years 1780-1787 advanced from boatswain to mate? In 1780 the proportion of

526 Rheinheimer 2016a, 246.

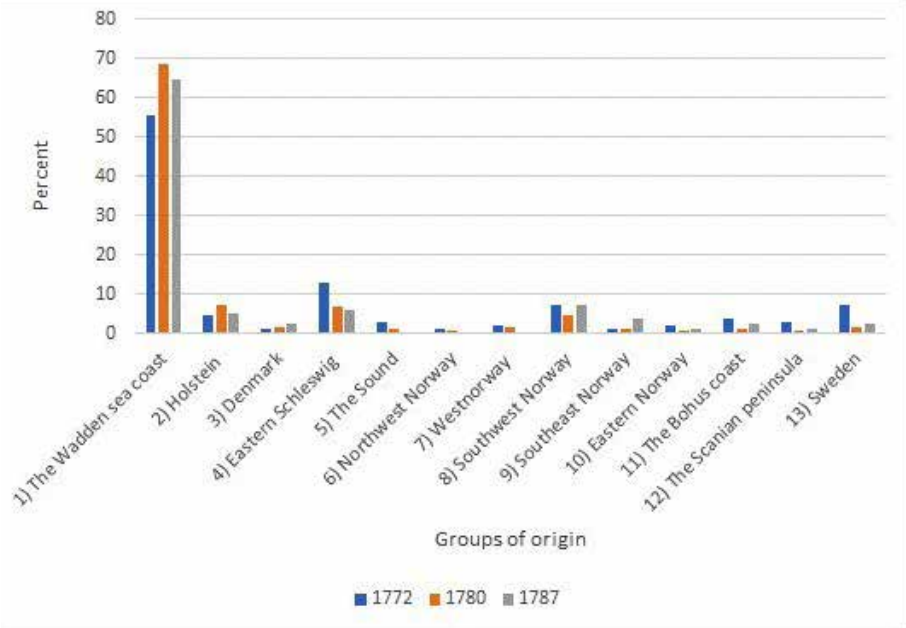


Fig. 5.6. The proportion of mates from the 13 groups of origin in percent of all Scandinavian sailors for each year examined. GAS, waterschoutarchive 1772, 1780 and 1787.

boatswains from Eastern Norway (group 10) was in line with the group's share of all Scandinavian seamen (1772: 3.4 percent, 1780: 4 percent, 1787: 3.3 percent), while for the other two years it was lower. For the mates, their share is well below the group's overall average; this must either mean that not many of them reached the level of navigator or that they sailed in domestic shipping. For the mates in the Swedish groups (11, 12 and 13) we also see that their share falls in 1780 just as for the boatswains, while the mates from Skåne and Sweden-Finland (groups 12 and 13) only see a modest increase in 1787. Like the seafarers from the Sound, Northwest Norway and Southwest Norway (groups 5, 6 and 8), these sailors probably found employment in the growing domestic merchant navy.

Again, a clear picture emerged of two maritime core areas (the Wadden Sea and Southwest Norway) that dominated certain professional groups and reacted somewhat similarly to the international economic cycle, along with some more peripheral areas, where the sailors were kept out of certain positions on board, but when the possibilities arose filled the gaps when 'the big ones' disappeared. Lave and Wegner would say that because of the strong practice community of sailors from the Wadden Sea coast and from Southwest Norway, based on a regional background, it was possible for members from here to gain full status as a veteran of the practice communities that ruled Dutch ships, while seamen from 'weaker' areas never managed to be 'legitimate' enough to acquire this status.

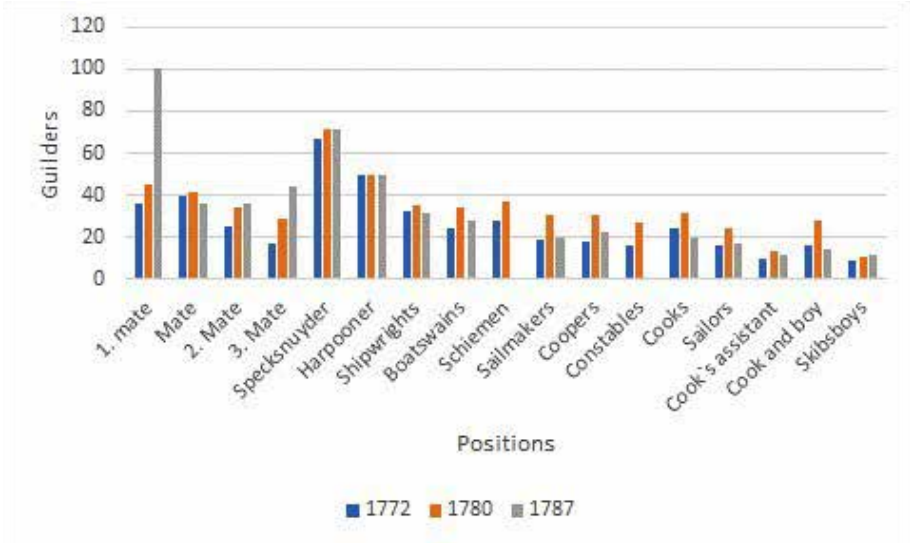


Fig. 5.7. The average size of wages in guilders for Scandinavian sailors shown according to positions on board for the three examined years. GAS, waterschoutarchive 1772, 1780 and 1787.

5.2.3 Size of wages

As the sailor rose through the maritime hierarchy, so did his salary and the size of the Scandinavian sailors' wages is shown for the three years examined.

The effects of international economic developments and the consequent demand for sailors in the Dutch shipping industry are immediately obvious, with most groups peaking in 1780. As Jens Jacob Eschels described it: 'Es war damals einge gute Zeit in Amsterdam, man konnte fast eine Heuer bekommen, wohin man nur wollte. Die Matrosen erhielten 20 Gylden pro Monat' (It was a good time in Amsterdam then, you could always get a berth to wherever you wanted. The sailors had 20 guilders a month).[527] In fact the average sailor's wage in 1780 was 24.6 guilders, so it was indeed a good time. From the mid-17th century to the beginning of the 19th century, sailors' wages were relatively stable, and it has been assumed that it averaged between 14 and 15 guilders a month and was only pushed up during periods of war and increased demand.[528] However, here we see that in 1772 it averaged 15.8, in 1780 24.6 and in 1787 16.9 guilders, so either Scandinavian sailors earned a bit more than their German or Dutch counterparts, or the assumption is wrong. As for the other professional groups, a few comments must be made: for the 1. mates there is a sharp increase in 1787, but this picture is deceptive. Only five first mates were recorded for this year, and they were all recruited to large East Indiamen with a wage of 100 guilders a month; well above the average for the 82 'ordinary mates' who received an average of 36.5 guilders a month that year. The same is true of the eight 3. mates, six of whom were recruited on ships to the East Indies and received an average wage of 54.8 guilders, whereas the two remaining men sailed to Suriname with a monthly wage of 17 and 18 guilders respectively. The West

527 Eschels 1966, 90.
528 Bruijn 2016, 58.

Fig. 5.8. An Eastindiaman at anchor by Jan Brandes, 1785. Rijksmuseum. NG-1985-7-2-38.

Indies and South America were also the destination of the 1. mates in 1772 and 1780, which matches the fact that in this trade fairly large ships were often used.

It is problematic to draw any conclusion on the wage size of the Schiemen, since for both 1772 and 1780 there are only two men. The same caution must be observed with the constables, of whom there were only four in 1772 and two in 1780. The groups of specksnuyders and harpooners are not very big either; for the specksnuyders three, four and three respectively in the three years and for the harpooners four, five and three, but the conditions of their wages are nevertheless interesting, because they did not change over the three years. The reason for the wage level for the specksnuyders in 1772 being slightly lower is that one of the three men was in fact an assistant to the specksnuyder and therefore only received 60 guilders a month as opposed to the other two, who got 70 guilders. It is clear that the whaling industry was different from the rest of the trades and not so dependent on supply and demand, since it was a very specialised profession with only a certain number of participants, which is why

the wage size did not change. What was crucial for the money gained, after all, was the number of whales caught, which was expressed in larger or smaller bonuses. It is interesting to see that the wages of the shipwrights in 1772 were higher than that of the 3. mates and at the same level in the other two years (when we subtract the East Indiamen from the equation) and that it is higher than the boatswains in all three years; this testifies to the significance of the shipwright profession. Conversely, the wages of the sailmakers were just slightly better than the common sailors' and less than the cooks. The only group that does not have cyclical fluctuations is the ship's boys, whose wages increased slowly over the three years. It is difficult to ascertain whether these are statistical coincidences or whether it was really the case that the skipper gradually increased their wages over time. A comparison with the general price trend in Amsterdam for these years could be interesting here.

5.3 Destinations

As previously shown, the Dutch shipping industry spanned the entire world, so the Scandinavian sailors who embarked on ships from the largest port in the United Provinces also visited different parts of the globe. For the three years in question, a total of 172 different destinations have been registered, from Archangelsk to Batavia and from St. Petersburg to New York. In order to get an overview, it has been necessary to divide the many destinations into some larger groups that reflect the different trades in which the Amsterdam ships sailed: the ships which sailed the Archangelsk run sometimes also visited the nearby port of Onega. In the Baltic trade you find vessels which had Frederikshavn, Copenhagen, Gothenburg or Stockholm as their destinations, although these were quite rare compared to the majority of ships in this trade, which sailed to Riga, Danzig, Königsberg, Stettin, St. Petersburg, and Narva. In the Norwegian trade, the primary destination was the old timber shipping area at Drammen with sites such as Svelvik, Holmsbu, Drammen or 'Soenwater' (the Dutch term for the Oslo Fjord[529]) but also to places such as Kristiansand, Bergen and Trondheim.

The voyages to Britain were primarily concentrated on London and Hull, but there were also trips to Falmouth, Portsmouth, Southampton, Cork and Belfast in Ireland. A small part of the ships leaving Amsterdam sailed to other ports in the Netherlands or to places just on the other side of the border, and therefore these voyages must have been either delivery jobs returning the vessel to its home, or the first leg of a longer voyage abroad. Such destinations include for example: Hoorn, Harlingen, Dordrecht, Middelburg but also Vlissingen, Rotterdam and Goeree in the Maas Delta, as well as the nearby Ostend. The ships that sailed to northern and western French ports participated in the old wine and salt trade. Here we find ports such as Rouen, Le Havre, Honfleur, St. Malo, Brest and further south Lorient, Nantes, La Rochelle, Bordeaux and at the Spanish border we find Bayonne. In the traditional Iberian trade, the ships typically carried timber from Norway and picked up wine, Merino wool and salt in ports such as San Sebastian, Bilbao, A Coruña, Porto, but most sailed to Lisbon and Cadiz. In the valuable Mediterranean trade, the Spanish ports of Malaga, Cartagena, Valencia, but most often Barcelona, were most frequently visited, and when the voyages went further into the Mediterranean, the traditional rendezvous point was the Italian port of Livorno, but also Genoa and further afield Naples and Venice. Farthest away, the ships went to Smyrna, present-day Izmir, to

529 Damsteegt 2001, 164.

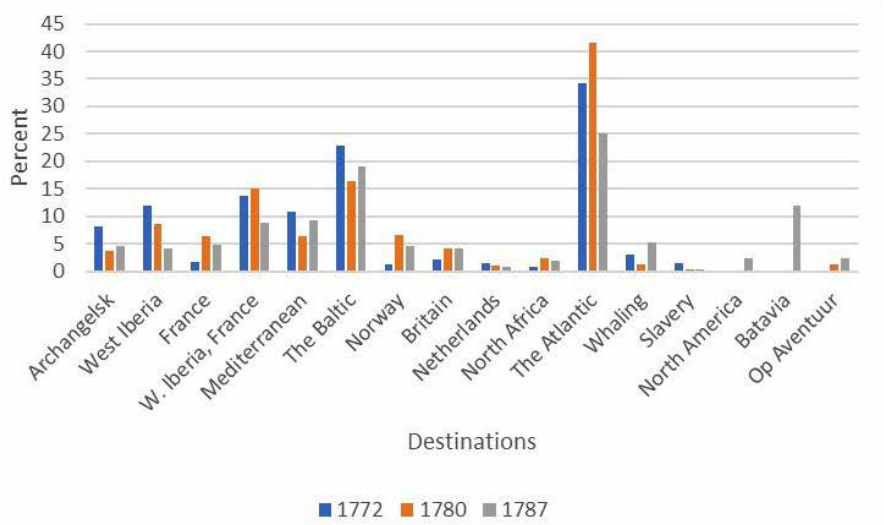


Fig. 5.9. The proportions of Scandinavian sailors, shown by destination as percentages for the three examined years. GAS, waterschoutarchive 1772, 1780 and 1787.

load Persian rugs and Oriental silk. A branch of the Mediterranean trade was the North African trade, where the ships went to Sallee in Morocco (a suburb of the capital Rabat), Mogador further down the coast and to the Spanish enclave of Ceuta opposite Gibraltar.

The Atlantic trade was quite substantial, going to the Dutch possessions in the New World. Here the cargo was sugar, coffee and cocoa,[530] and the destinations were plantations at the rivers Essequibo, Berbice and Demerara in present-day Guyana, as well as the colony of Suriname a little further south. Further north in the Caribbean, it was primarily the two Dutch islands of Curacao and St. Eustacius that were primary destinations, but some ships also called at St. Martens south of Anguilla and St. Kitts and Nevis in the Leeward islands, as well as St. Croix, St. Jan and St. Thomas, the Danish West Indies. In 1787 new destinations in North America became popular. These were Baltimore, New York, Charleston and Philadelphia. In the whaling industry, we find ships that in 1772 were designated as going only to 'Groenland', the hunting areas between Spitsbergen and Greenland, and in 1780 about a third of the whalers sailed to 'Straat Davis', *i.e.* the Davis Strait west of Greenland. In 1787, all Scandinavian sailors who worked on whalers went to the Davis Strait, and this shift reflects the situation whereby decades of overfishing of whales at Spitsbergen had resulted in the whales being far scarcer than before and their average size decreasing. Therefore, after 1780, the whalers sailed to the new hunting grounds west of Greenland.[531]

Some Scandinavian sailors participated in the Dutch slave trade: in 1772 28 men, in 1780 11 and in 1787 four men and the destination was typically stated as 'Na de Kust van Guinea ter inhandelig van Armesoens Slaven' (To the coast of Guneay to trade poor slaves) and sometimes it was specified as; 'Na Delmina op de Kust van Guinea' (To Delmina on the

530 Bruijn 2016, 216.
531 Bruijn 2016, 134.

coast of Guinea), which was the Dutch fort Elmina in present-day Ghana. In 1780 we find four men, two from Ballum, one from Møgeltønder and one from 'Grådyb', who shipped out with *De Naarslighyt te Huyshovend* for a trip to the East Indies, but in 1787 we now find 151 men who sailed to 'Cap de Goed Hoep' (Cape of Good Hope), 'Batavia' and 'East India'. Finally, in 1787, we also find 29 Scandinavian sailors who took a berth in ships that sailed 'Op Aventuur', *i.e.* on adventures without any fixed destination.

When considering the destinations to which the Scandinavian seamen sailed, there are thus three to four trades that stand out: the Atlantic, the Baltic, Spain and France, and partly the Mediterranean. It can be seen immediately that in all three years the Atlantic trade was by far the largest and in 1780 over 40 percent of all sailors from Scandinavia took part in this. In the same year, the Scandinavian seamen were less represented in the Spanish, Mediterranean and Baltic trades, and we can assume that some of these switched to the Atlantic trade. However, as can be seen later on, the wages were only lower in the Mediterranean trade in 1780, whereas for the other two destinations it was either equal or higher. The explanation for this contradiction may be that it was nevertheless advantageous for the individual seaman to embark on a journey across the Atlantic, as it was longer than to the other destinations and thus was paid for a longer period, just as he did not have to pay for food and lodgings ashore. The other major destination is the Baltic Sea, to which about a fifth of the Scandinavian seamen sailed, and if we look at the size of the wages in this trade, with the exception of 1780 and 1787 for the trade to France, the wages were higher than the four previously mentioned trades. As it is almost the same type of trade, the trades to North and West France can reasonably be combined with the trade to the west coast of Spain; however, there is no consensus on the wages. Wages were lower in the Spanish trade in 1772 and 1780 than on the ships sailing to ports in France, which may be due to the threat of Barbary corsairs. On the other hand, the not insignificant danger that prevailed in the whaling industry was the reason why these sailors had such good wages. In the 18th century, 172 whaling ships were lost in the areas east of Greenland and 54 west of Greenland,[532] but since whaling was at the same time a specialised profession that required long training, not every seaman could muster these ships. With a limited pool of experienced whaling sailors and a dangerous profession, shipowners had no other option than to pay wages that compensated for this.

Especially in 1780 this is evident when an elevated wage level in the Atlantic trade attracted some Föhr sailors.[533] Compared to the Baltic and Atlantic trades, the wages in the Archangelsk trade were quite modest, but still attractive, which must also be related to the fact that this work was not without risk. The 'Noordvarders' could also be trapped in the ice and sunk.

It seems that the sailors in the short-distance traffic to Britain, Western France and the Netherlands did very well, which can probably be explained by the fact that the demand for labour was low, which is why only the most experienced sailors were recruited and thereby also received a higher wage. The wages in the timber trade to Norway were slightly below average, and this is presumably a question of supply and demand. No special experience was required to get a berth here, and the supply of seamen was great in Amsterdam, so the wage was lower. In the slave trade no special experience was required

532 Bruijn 2016, 126.
533 Dekker 1968, 268.

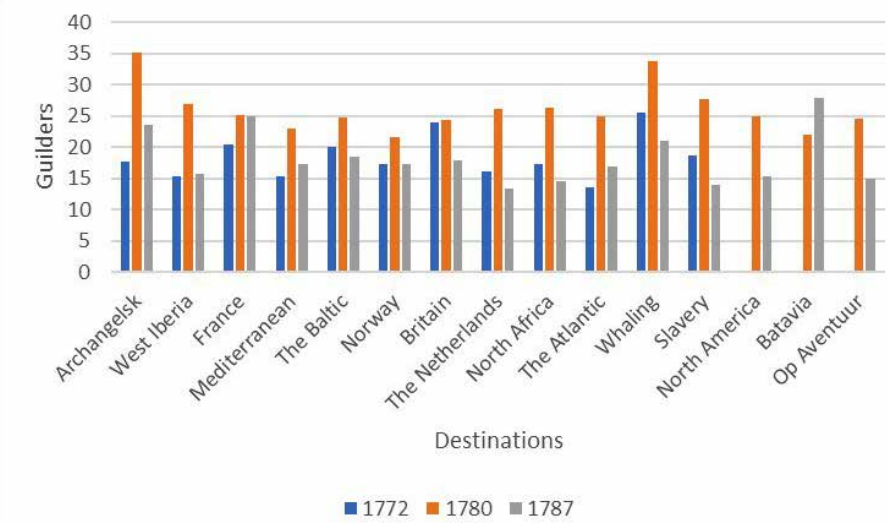


Fig. 5.10. The average wage in guilders for common Scandinavian sailors shown for the different trades for the three years examined. GAS, waterschoutarchive1772, 1780 and 1787.

either, and it has been claimed that only the poorest seamen were recruited, because the wage was so low and because the risk of disease was high.[534] However, this phenomenon is not particularly evident among the Scandinavian seamen, because in 1772 the wages on the slave ships were above the wages in the Atlantic and the Mediterranean trades, and in 1780 it was the third largest wage after the Archangel trade and whaling. Finally, it is interesting to see that in 1787 there were suddenly many sailors who were recruited to VOC ships and tramping with no fixed destination. The reason for this is probably that after the Fourth Anglo-Dutch War, in which the Dutch merchant navy saw a sharp decline, there was a surplus of sailors who had to find a living in less attractive branches of shipping.

5.3.1 German and Dutch sailors in Amsterdam shipping

To determine whether the sailing patterns that the Scandinavian seamen display is typical of Amsterdam shipping in around 1780, the survey of all seamen from the first half of 1780 was reviewed for German and Dutch seamen, yielding an interesting result. If we look at the Archangelsk trade, the Dutch seamen participated in 1780 with the same proportion as the Scandinavian ones, whereas the German seamen were represented with twice as many men. In the trade to Spain, however, there were almost twice as many Dutch sailors as Scandinavians, despite the fact that the wage was not very good, and there was the danger of Barbary corsairs. About 5 percent of the German and Dutch sailors participated in the voyages to Northern and Western France, only slightly lower than the 6 percent of the Scandinavian sailors, and in the Norwegian trade only minimal differences can be seen. In the trade with Britain, there were also no major differences, while in local traffic to Dutch ports it is no wonder that the proportion of Dutch sailors who participated in this was almost four times that of the German and Scandinavian seamen. In the tramping

534 Bruijn 2016, 113.

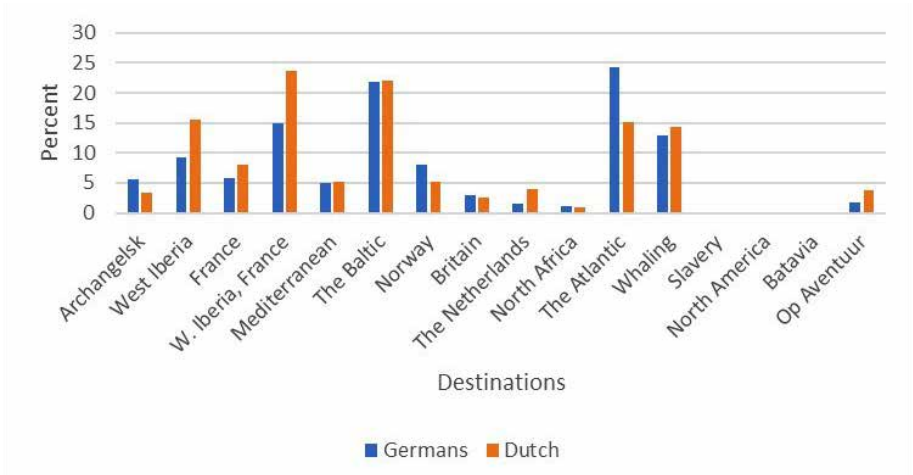


Fig. 5.11. German and Dutch sailors who sailed out of Amsterdam in the first half of 1780, shown in percentages for the different trades. GAS, waterschoutarchive January to July 1780.

business, or sailing 'Op Aveentuur', the proportion of Dutch seamen was also the largest, with 4 percent in contrast to the German 2 percent and the Scandinavian 1 percent.

There were major differences in the Baltic trade. Here, the share of Scandinavians was about 16 percent, while the share of German and Dutch seamen was a full 22 percent. The wages in this trade were average, but the voyages were fast and in relatively safe waters. On the whalers, the difference is even greater. Here, the proportion of Scandinavian sailors who participated in this was around 1.5 percent in 1780, while for the German seamen it was about 12 percent and for the Dutch about 14 percent! As we have seen, the sailors' wages in the whaling industry were the second largest, and with the promise of possible extra bonuses, the German and Dutch sailors favoured this trade. As the whalers departed in March or April, it is possible to compare numbers directly between the Scandinavian and the Dutch and German sailors. Thus, in 1780, 35 Scandinavian seamen, 279 German seamen and 289 Dutch seamen participated on board the whaling ships. Unlike the Baltic trade and in whaling, where the German and Dutch seamen were represented more strongly than the Scandinavian seamen, this does not apply to the Atlantic trade. Here, the proportion of German seamen sailing in this trade was 24 percent, while for the Dutch seamen it was as low as 15 percent. On the other hand, the proportion of Scandinavian seamen sailing here was as high as 41 percent in 1780.

Thus, it seems that German seamen from the North Sea coast and especially Dutch seamen were able to dominate larger parts of the lucrative trades than the Scandinavians could, and at the same time had the opportunity to stay away from the riskier trades across the Atlantic or into the Mediterranean. We must assume that there were networks, practice communities based on Dutch and German backgrounds, which played a significant role in Amsterdam shipping, to which Scandinavian sailors were perhaps not allowed access and thus be legitimate participants or where they were allowed only to be peripheral participants. These German and Dutch practice communities also consisted of shipowners and skippers who, to some extent, recruited their own veterans.

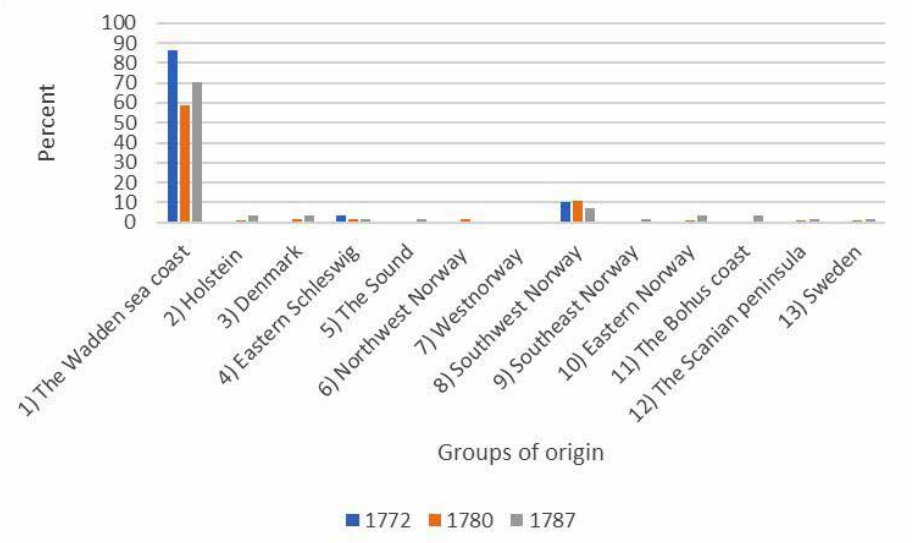


Fig. 5.12. Scandinavian sailors' participation in the Archangelsk trade shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

Were there any trades preferred by Scandinavian seafarers from particular locations? In order to get an overview of this, the composition of Scandinavian seamen in each trade has been examined.

5.4 Scandinavian sailors' participation in the different trades

5.4.1 The Archangelsk trade

In addition to rye, Dutch ships loaded leather, hemp, tar, potash, talc, and furs in Archangelsk and landed textiles, jewellery, utensils and weapons. Twice a year a fleet of ships sailed north: in March or April at the same time as the whaling fleet left and in mid-July until mid-August. The Archangel traders were large unarmed ships that from around 1640 averaged 300 tonnes or more and were therefore some of the largest ships in European shipping with a crew of between 10 and 20 men. In the 17th and 18th centuries, Amsterdam was the entrepot for international shipping to Northern Russia.[535]

In the Archangelsk trade, the Wadden Sea seamen (group 1) were completely dominant, making up 86 percent of all Scandinavian seafarers in 1772, 58.8 percent in 1780 and about 70 percent in 1787. Sailors from Southwest Norway (group 8) made up the second largest group, but are underrepresented, as the group's share of all seamen in 1772 was 13 percent, in 1780 13.6 percent and in 1780 9.2 percent. The wages in this trade were not particularly high in 1772, but in 1780 they were the highest of all the trades, and yet, there is a decline of Wadden Sea sailors, which does not immediately make sense. Could the cause have been rumours of war, or was it more profitable to switch to the Atlantic trade, where the wages were lower but lasted over a longer period?

535 Akveld mlf. 1977, 225.

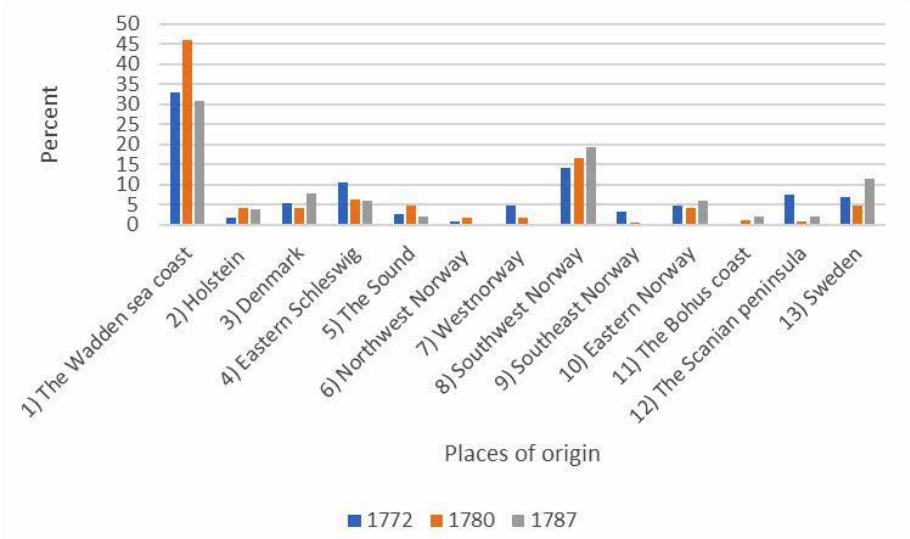


Fig. 5.13. Scandinavian sailors' participation in the trade to Western Spain shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

5.4.2 The Trade to Western Spain

In northern Spanish ports, Dutch ships picked up iron and wool, but the centres for this trade were the Andalusian ports of Cadiz, Puerto, Santa Maria and Seville. Here, Dutch ships delivered grain, textiles, spices, leather and dairy products and loaded oil, wine and citrus fruit.[536] In the 18th century, the trading pattern of the Dutch ships to Portugal and Spain was still an east-west exchange of goods: delivering grain from the Baltic to the Iberian Peninsula and returning with salt and wine. Annually between thirty and a hundred ships sailed in this trade.[537]

The picture is much more varied for the voyages to Western Spain. Admittedly, the Wadden Sea seamen (group 1) are still the largest group, but only in 1780 is the share of this group twice as big as the next, which is Southwest Norway (group 8). The proportion of all Scandinavian seamen found in the Waterschout Archive for the Wadden Sea seamen is 43.3 percent in 1772, 47.5 percent in 1780 and 54 percent in 1787, so with the exception of 1780 the group is thus underrepresented in the trade to Western Spain. The average wage for ordinary sailors in 1772 in this trade was 15 guilders and was thus the second lowest in all the trades, and in 1787 the wage was evenly small, but in 1780 the wage level was the fourth highest, which may explain the high proportion of Wadden Sea seafarers this year. On the other hand, we see that the seamen from Southwest Norway (group 8) were overrepresented in 1780 and 1787, as this group's share of all seamen was 13.6 percent in 1780 and 9.2 percent in 1787. Their participation in the trade to Spain in 1787 was thus double of the groups share of all Scandinavian sailors.

536 Akveld mfl. 1977, 235.
537 Boeze mfl. 1977, 259.

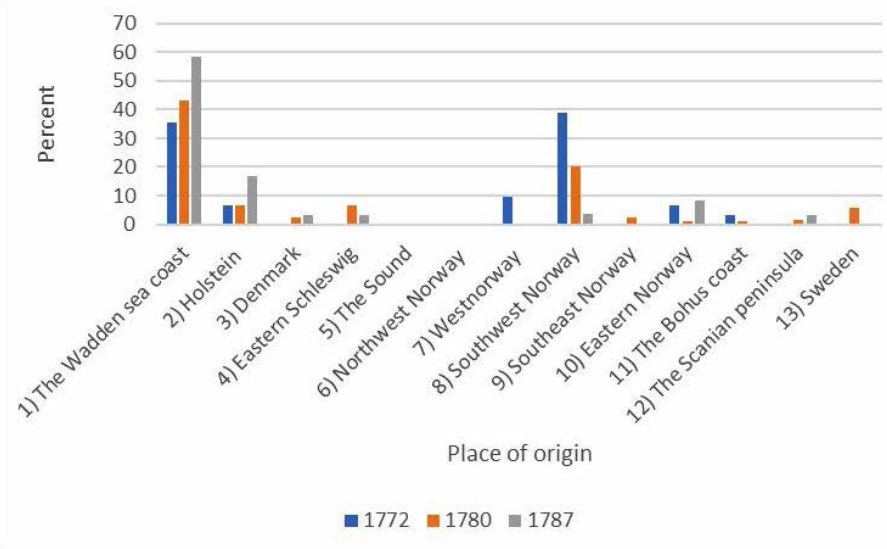


Fig. 5.14. Scandinavian sailors' participation in the trade to North- and Western France shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

It is interesting to see that sailors from Denmark (group 3) had a share of 5 percent sailing to Spain in 1772 as opposed to the group's share of just 3 percent of all Scandinavian seamen, which is also the case in 1787, when the group's share of all seamen was 2.3 percent, while the share in the Spanish trade was twice that. Finally, the seamen from Bohuslen (group 11) did not participate at all in the Spanish trade in 1772, while seamen from the Northwest Norway and southeastern Norway (groups 6, 7 and 9) were not represented in 1787.

5.4.3 The trade to North and West France.

Dutch ships loaded salt in the Brouage area south of La Rochelle, but also sailed to ports such as Nantes, La Rochelle, Bordeaux and Bayonne for wine and spirits and landed timber from Norway, cheese from home or spices from the east.[538] In 1710, somewhere between 400 and 750 Dutch ships sailed in these trades.[539] During the 18th century, the trade patterns changed between the Republic and France. Where in the 17th century Dutch ships loaded salt and wine in Nantes, Le Havre or Bourdeaux, in the 18th century the cargoes were different colonial products. In 1789, colonial goods accounted for 80 percent of cargo on Dutch ships from French ports, which meant that the ships in this trade were getting smaller, and no longer carried bulk cargo.[540]

In the trade to Northern and Western France, the picture looks different. In the first two years, the Wadden Sea seamen (group 1) are underrepresented in relation to the group's share of all seamen, while the seamen from Southwest Norway (group 8) are strongly overrepresented with as many as 40 percent of all Scandinavian sailors taking part in this

538 Boon 1996, 61.
539 Boon 1996, 97.
540 Boeze mfl. 1977, 258.

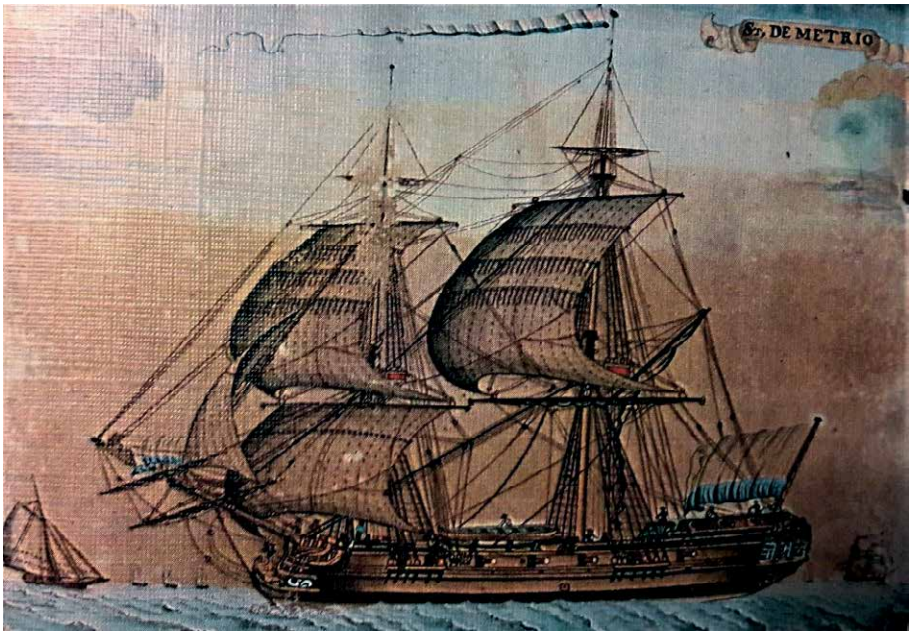


Fig. 5.15. The armed Mediterranean trader *St. De Metrio* of Amsterdam skippered by Jan Sybrantz aca Jens Sørensen Strellev, a Danish sailor, who had reached the top in the Dutch maritime hierarchy. The Fisheries- and Maritime Museum in Esbjerg.

trade. In 1772, the wage in this trade was the third highest, and it is possible that the sailors from Southwest Norway found a niche here, which is also the case for the Spanish trade.

In contrast, the average wage in 1787 was the second highest, surpassed only by the wage among East India sailors, and it is at the same time the year, when the Wadden Sea sailors (group 1) are over-represented in this trade, compared to the group's share of all seamen, which must show that they had displaced other groups. Sailors from the Sound and from Northwest Norway (groups 5 and 6) did not participate at all on the ships sailing to France and the seamen from West and Southeast Norway and Sweden (groups 7, 9 and 13) participated for only one year, while sailors from Denmark, East Schleswig and the Scanian peninsula (groups 3, 4 and 12) only joined in 1780 and 1787. The seamen from the Wadden Sea and Southwest Norway clearly dominated this trade.

5.4.4 The Mediterranean trade

In the port cities of Alexandrette (Aleppo's gateway to the world) and Smyrna one could buy Persian silk, cotton fabrics, Turkish rugs, Angora wool and camel hair for the textile industry in Leiden. In Italian ports, the Dutch ships unloaded grain, textiles, dairy products, dried cod and spices and loaded wine, citrus fruit, oil, silk, alum and many other products. Initially Livorno was the most favoured port, but in the 18th century Genoa took over, followed by Venice.[541] Often, it was not possible to get a full cargo at the same destination, so it was quite common for Dutch ships to participate in international tramping between

541 Akveld mfl. 1977, 241.

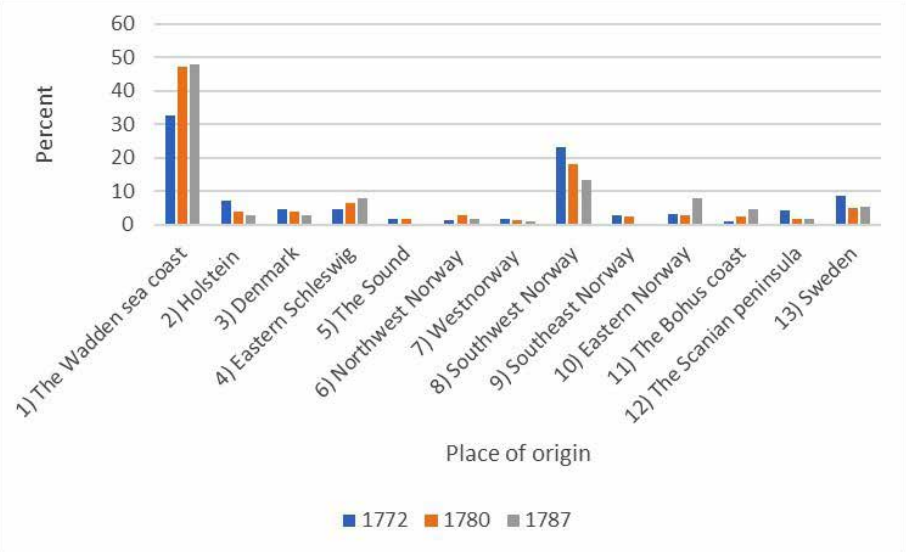


Fig. 5.16. Scandinavian sailors' participation in the trade to the Mediterranean shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

Spain, Italy, Greece and the Ottoman Empire.[542] As with ships in the trade to Spain, due to the danger of Muslim corsairs, the ships in the Mediterranean trade were usually large two or three-masted squareriggers, often armed.[543]

In the Mediterranean trade, seamen from the Wadden Sea and Southwest Norway were again dominant among the Scandinavian seamen, but it is also clear that during the three years surveyed, the Wadden Sea sailors took greater and greater part in this branch of Amsterdam shipping. Thus, the group's share of the maritime traffic to the Mediterranean in 1772 was 32 percent and was therefore underrepresented in relation to the group's share of all Scandinavian seamen (43.3 percent). The proportion of southwestern Norwegians in that year was 23 percent while their share of all seamen was 13 percent. In 1772, the average wage for a common sailor in the Mediterranean trade was just over 15 guilders, which was not much, and in 1780 it had risen only to being third from the bottom. In that year, the proportion of Wadden Seafarers in the Mediterranean trade was almost equal to the group's share of all Scandinavian seamen, while for the sailors from Southwest Norway there was still an overrepresentation, which was also the case in 1787. Although the proportion for this group among all Scandinavian sailors dropped to 9 percent, the group was still overrepresented in the Mediterranean trade in 1787.

5.4.5 The Baltic trade

Already in the 15th century, the growing population of the Dutch cities created a demand for bread grains, which the ships from the Netherlands mainly found in the countries along the southern coast of the Baltic Sea. Ships from the provinces of Holland and West

542 Akveld mfl. 1977, 238.
543 Akveld mfl. 1977, 237.

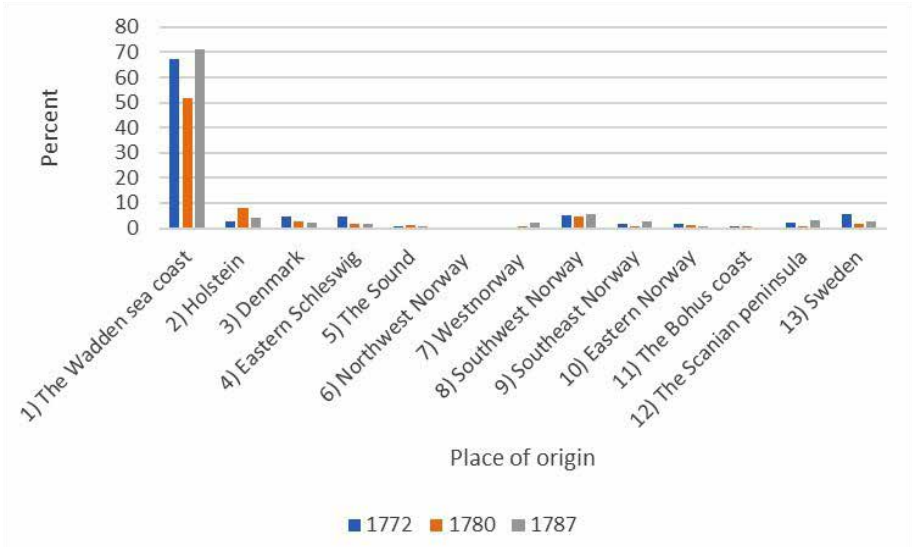


Fig. 5.17. Scandinavian sailors' participation in the trade to the Baltic shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

Frisia sailed to especially Danzig and Königsberg, where grain was loaded as well as various timber products, and to these ports they brought salt, wine, salted herring, textiles and tobacco. After acquiring grain and timber from the southern and Eastern Baltic ports, Swedish and Finnish ports were visited, where the Dutch loaded iron and copper and forest products such as timber, tar and pitch, which were also the main export goods from the Finnish ports.[544] The total Dutch participation in Baltic Sea shipping decreased during the 18th century. During the period 1681-1690, Dutch ships passing the Sound accounted for 47 percent of all passages, but after a brief boom in the 1730`s and -40`s it dropped to 28 percent between 1771 and 1780 and to 14 percent between 1791 and 1794. Amsterdam's grain ships grew larger over the course of the century, but Frisian skippers increasingly entered the trade, commanding small vessels of less than 80 tonnes, transporting local dairy products to the Baltic and bringing cargoes of grain back home.[545]

In the trade to the Baltic Sea, Wadden Sea sailors (group 1) were completely dominant, making up 67 percent of all Scandinavian seamen in 1772, 51 percent in 1780 and a full 72 percent in 1787, while the remaining groups were all strongly underrepresented. As mentioned earlier, during the 18th century, Frisian skippers took over much of the trade to the Baltic, but it is also likely that many skippers from Schleswig and Holstein entered this trade, and through their participation in locally based practice communities, took compatriots with them. In all the three years surveyed, the Baltic Sea trade was the second largest among the Scandinavian seamen, and since the Wadden Sea seafarers were dominant here, it emphasises the importance of the group among them. The wages in this trade were roughly the same as the average for all the Amsterdam trades, but the

544 Akveld mfl. 1977, 220.
545 Broeze mfl. 1977, 240-248.

Fig. 5.18. Dutch ships loading Timber in a Northern Port, by Andries van Eertvelt, 1610 – 1620. The National Maritime Museum – The Royal Museums Greenwich. BHCo750.

advantage was that the ships going to the Baltic often sailed several trips during one season, and if the sailor remained on board, he could thus make more money, and at the same time be relatively safe without the risk of Barbary corsairs, tropical diseases or severe storms.

5.4.6 The timber trade to Norway

Most Dutch timber ships made more than one voyage a year,[546] and even in the 18th century the timber trade between the Netherlands and Norway was considerable. In 1784 there were thus more than 500 vessels involved in this trade, and in 1791 the number had increased to 533.[547] It was not only ships from Amsterdam that specialised in the timber trade to Norway; Hindeloopen, Hoorn Medemblik and Enkhuizen also had timber ships.[548] These ships were mainly bojerts, smacks and galjoots with small crews.[549]

Also, in the Norwegian timber trade, the proportion of Wadden Sea seamen was big, but it would be natural to imagine that Norwegian seamen would dominate here, which however is not the case. The total number of Scandinavian seamen sailing to Norway was relatively small, with only 24 seamen in 1772, 181 in 1780 and 58 men in 1787, so the material is not large enough to draw decisive conclusions from. Admittedly, in 1772, the proportion of southwestern Norwegian (group 8) seamen is almost 40 percent, with the Wadden Sea (group 1) represented by only 38 percent, but in 1780 and 1787, when the proportion of Wadden Sea seafarers increases to over 70 percent, the proportion of southwest Norwegian seamen fell far below the group's share of all Scandinavian seamen.

The reason may be due to a thin material that distorts the figures, but it may also be the case that sailors and skippers from the Wadden Sea filled a gap when the Norwegians in this trade switched to Norwegian ships in the same period.

546 Sogner 1994, 29.
547 Boeze mfl. 1977, 248.
548 Heeres 1988, 476.
549 Bruijn 2016, 50.

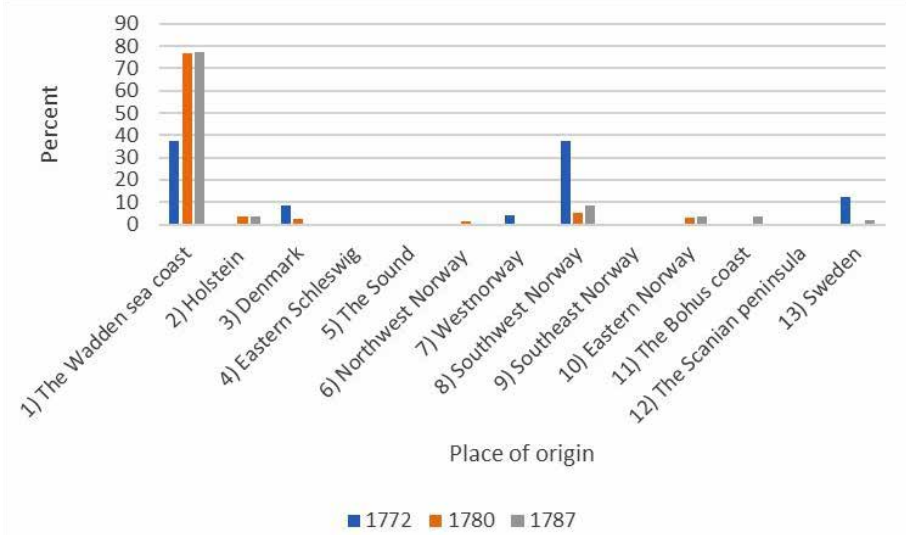


Fig. 5.19. Scandinavian sailors' participation in the timber trade to Norway shown in percentages for the different groups of origin for the three years examined. Source: GAS, waterschoutarchive 1772, 1780 and 1787.

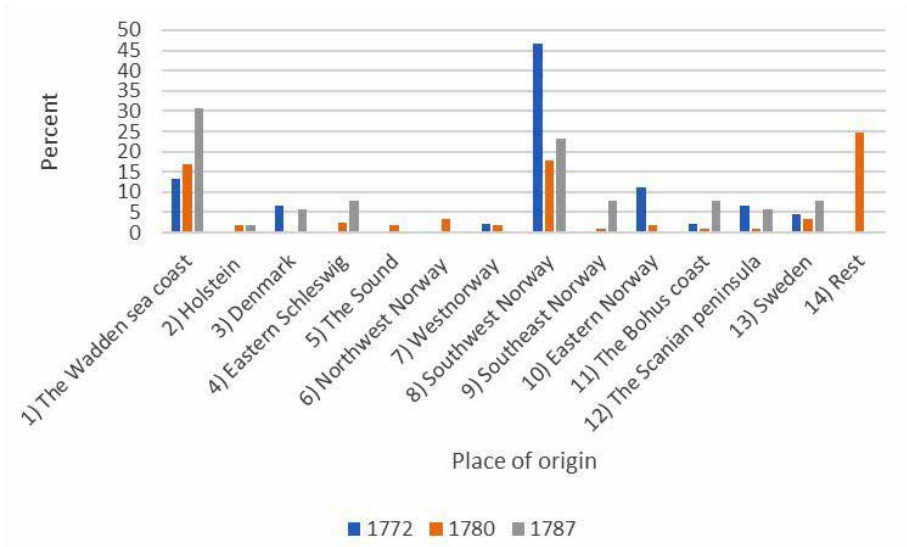


Fig. 5.20. Scandinavian sailors' participation in the trade to Britain shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

5.4.7 The trade to Britain

The ships sailing to Britain were small, between just 40 and 80 tons,[550] and in the 18th century it was especially the coal trade that dominated as the prices of domestic peat had risen steadily, making coal a cheaper source of heat in Dutch homes. Grain and malt, however, were also increasingly exported from England to the Netherlands. The Dutch skippers usually carried a load of bricks, roof tiles or peat over the Channel and then returned with a cargo of grain or coal.[551]

Nor is there solid statistical material available for the trade to Britain, as there were only 45 men in 1772 in this trade, 117 men in 1780 and 52 men in 1787, so again one must be careful when drawing conclusions. However, it seems that this time the roles were reversed, because in 1772 it was the sailors of Southwest Norway (group 8) who dominated, but had to retreat to a second place in 1787, making room for the Wadden Sea men (group 1). In that year, the participation of the Wadden Sea sailors was far below the group's total share of Scandinavian sailors, while the sailors from Southwest Norway are strongly overrepresented in all three years, with 1772 as the absolute top score. Group 14 represents the strange participation in the trade to Hull by Norwegian seamen who stated that they came from Amsterdam. In addition to the Wadden Sea sailors and seafarers from Southwest Norway, there is widespread participation in this trade for all groups and the worst year for all groups was (with the exception of group 14) 1780, coinciding with a period when the relationship between Britain and the United Provinces began to cool down in anticipation of war, limiting shipping.

5.4.8 Local shipping in the Netherlands

Not many Scandinavian sailors took part in the local traffic to Dutch ports. In 1772 you find 28 men, in 1780 29 men and in 1787 52 men. In fact, only Wadden Sea sailors (group 1) participated in all three years, and sailors from Bohuslen and Sweden and groups 11 and 13 are not represented here at all. Except in 1780 the wage was not very good in this branch of Amsterdam shipping, which probably explains why so few other groups are represented, but even among the Wadden Sea sailors there were those who took whatever job they could find in Amsterdam.

5.4.9 The trade to North Africa

The voyages to North Africa were certainly not very popular with the Scandinavian seamen, since in 1772 only 17 men, in 1780 65 men and in 1787 23 men participated, which is why the material may also be too limited to say anything accurate about this trade. Seamen from the Sound and the Scanian peninsula countries (groups 5 and 12) are completely missing from this trade and most other groups, with the exception of the sailors from the Wadden Sea, East Schleswig, Northwest and Southwest Norway (groups 1, 4, 6 and 8), are represented only in one or two years. This is probably because this trade was notorious for the risk of being taken by a Muslim corsair and ending up as a slave in North Africa. Despite this, sailors from the Wadden Sea were overrepresented in 1780 and 1787, and the same goes for sailors from Southwest Norway in the years 1772 and 1780. Again, we see that some sailors from these groups had to take what jobs were offered, even if it involved a risky journey. In 1780, the wages in this trade were the fourth highest, and this is also the year with the most participants.

---

550 Akveld mfl. 1977, 226.

551 Boeze mfl. 1977, 254.

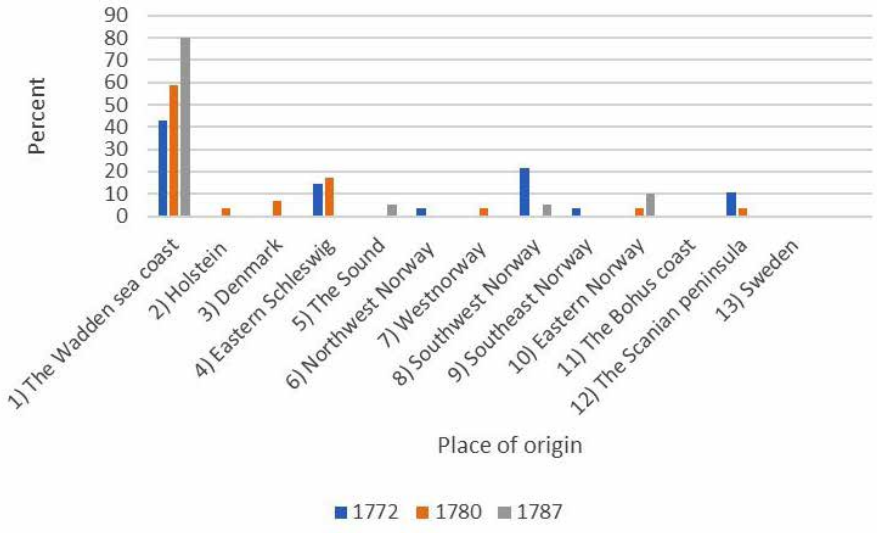


Fig. 5.21. Scandinavian sailors' participation in the local traffic to ports in the Netherlands shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

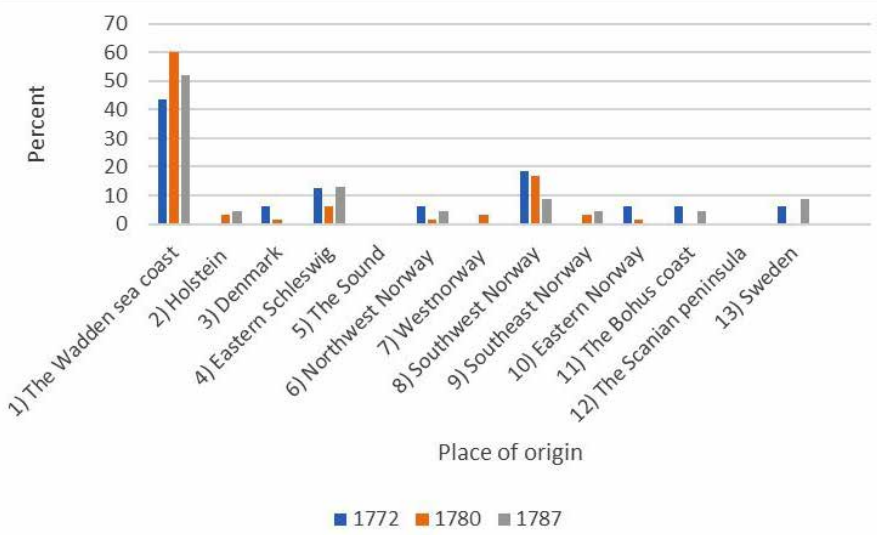


Fig. 5.22. Scandinavian sailors' participation in the trade to North Africa shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

5.Fig. 5.23. A Westindiaman under sail by Jan Brandes, 1779 – 1787. Rijksmuseum. NG-1985-7-2-39.

5.4.10 The Atlantic trade

During the 1630s, the Dutch West India Company (WIC) captured some of the Portuguese possessions in Brazil, but in 1653 lost most areas apart from the small colonies around the rivers Essequibo, Berbice and Suriname, where the production of sugar, cocoa and tobacco was established.[552] In the Caribbean, the WIC possessed the island of Curacao located close to the Venezuelan coast, where sugar plantations were also established.[553] In the second half of the 18th century, the sugar trade from Surinam was particularly important, and with the exception of the years around the Fourth Anglo-Dutch War, the annual average

552 Akveld mfl. 1977, 285.
553 Akveld mfl. 1977, 287.

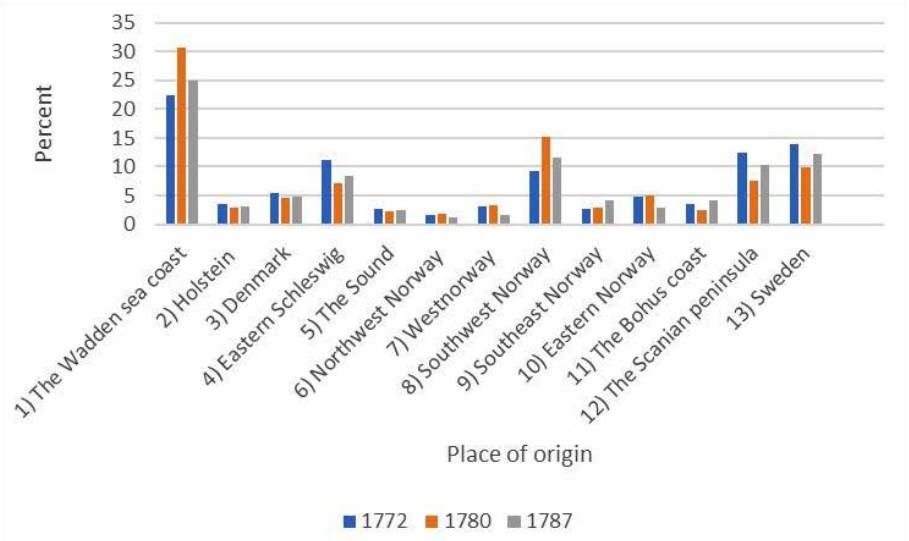


Fig. 5.24. Scandinavian sailors' participation in the Atlantic trade shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

of ships visiting was between 40 and 70, and these were almost exclusively registered in Amsterdam.[554] In the 18th century, smuggling slaves from Curacao to South America was big business, but the island also served as a trading place for European consumer goods paid for with cocoa and hides. In the middle of the century, St. Eustacius became an important port, supplying especially the French colony of St. Dominique (today's Haiti) with European goods and receiving sugar and coffee from here. St. Eustacius gained further importance during the American War of Independence as a supply station for the rebels, which annually sent 10 ships to Curacao and 40 to St. Eustatius. The golden days for Curacao and St. Eustacius ended during the Fourth Anglo-Dutch War, when England seized both islands and even destroyed all warehouses on St. Eustatius.[555] In the Atlantic trade, fluyts, small frigates or brigs with a crew of about 15 were the common ship types.[556]

In the Atlantic trade, things look different. In all three years, the proportion of Wadden Sea sailors (group 1) was well below the group's share of all Scandinavian seamen (43.3 percent in 1772, 47.5 percent in 1780 and 54 percent in 1787), which is especially pronounced in 1772, where it is half the size of the share of all Scandinavian sailors. For the seafarers from Southwest Norway (group 8), there was also an underrepresentation in 1772, while in 1780 and 1787 there was a small over-representation. Thus, the conclusion must be that the Atlantic trade was not especially popular amongst these two groups of Scandinavian sailors, but instead seamen from East Schleswig, the Scanian peninsula and Sweden-Finland were found here (groups 4, 12 and 13). These three groups were all strongly over-represented in the Atlantic trade, and this could be explained by the fact that seamen from Southwest Norway in 1772, but especially the

554 Broeze mfl. 1977, 303.
555 Broeze mfl. 1977, 305.
556 Bruijn 2016, 50.

Fig. 5.25. Whaling in the Polar-sea, by Abraham Storck, 1654 – 1708. SK-A-4102.

Wadden Sea seamen, stayed away from this trade. The reason may be that the wages here were not particularly good and even in the good year 1780 were only 6th best.

5.4.11 Whaling

Only a few years after Willem Barentz and Jan Cornelisz Rijp discovered Spitsbergen and the Barents Sea in 1596, both English and Dutch whalers were present in the area, and during the 17th century the Dutch whaling industry increased from 20 annual ships in the years around 1640 to 246 whaling vessels in the record year 1684.[557] Many of these ships brought the unprocessed blubber to their home country, a traffic that fuelled a significant whale oil-industry in the Zaan area and along the Rijp and Jisp rivers.[558] In 1719, the first Dutch whalers sailed around Cape Farewell and up the west coast of Greenland in the Davis Strait.[559] Already in February, the so-called 'Straat Davisvaarders' left the Netherlands, and a month later 'het Groenlandvaarders' departed, which sailed for the old hunting grounds around Spitsbergen. When the ice began to close in in August and September, the ships returned home heavily laden with the catch. In the record year 1684, there were about 9,000 men on 246 ships employed in the Dutch whaling industry,[560] but the figure fell to 86 ships in 1730 and to only 15 ships in 1790; the latter figure mainly due to English captures during the Fourth Anglo-Dutch War.[561] Whaling vessels were large three-masted squareriggers with a crew of between 40 and 47 men.[562]

557 Akveld 1977, 131, 132.
558 Dekker 1977, 19.
559 Dekker 1968, 20.
560 Dekker 1968, 132.
561 Bruijn 2016, 53.
562 Bruijn 2016, 52.

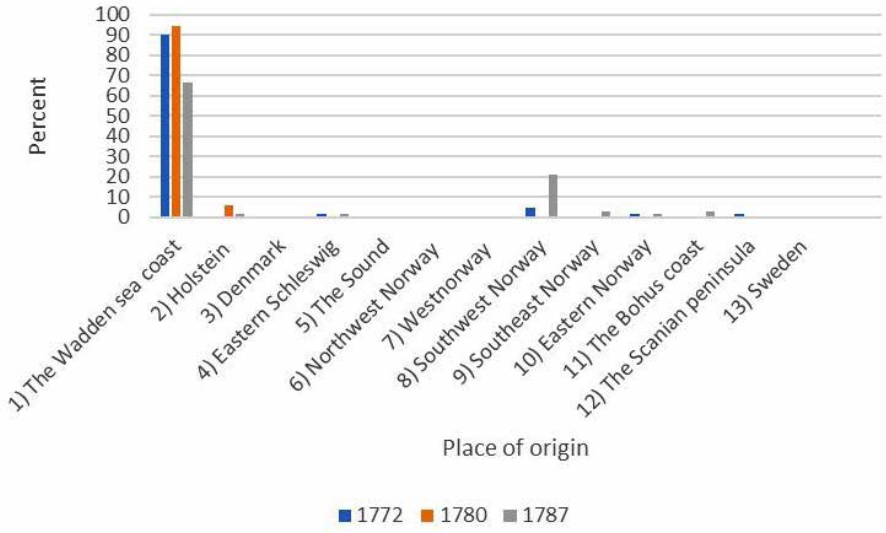


Fig. 5.26. Scandinavian sailors' participation in whaling from Amsterdam shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

As in the Archangelsk trade, the Wadden Sea sailors (group 1) were completely dominant among the Scandinavian sailors on the Amsterdam whalers. Admittedly, not many sailors have been recorded on these ships: in 1772 63 men, in 1780 35 men, and in 1787 66 men, but the trend is nevertheless clear; this was a Wadden Sea speciality, as was especially true for the Föhr sailors. Of these, there were 42 men in 1772, in 1780 25 men and in 1787 40 men who sailed on a whaler from Amsterdam, so their participation was significant. Most Föhr sailors left whaling after 1780 and started sailing in the conventional merchant navy, which is probably why seamen from Southwest Norway (Group 8) were able suddenly to get a berth on these whalers in 1787. The seamen from the remaining groups only occasionally participated in whaling from Amsterdam.

5.4.12 Slavery

In order to participate in the lucrative slave trade, the Dutch government established trading posts on the Gold Coast in 1612 and in 1617 conquered the island of Goeree off Dakar in Senegal, establishing a port of call on the way south.[563] In 1637 many Portuguese possessions on the Gold Coast were conquered: Sao Jorge de Mina and Elmina and in 1641 Sao Paulo de Luanda in Angola and the island of Sao Tomè at the bottom of the Gulf of Guinea.[564] From 1720 it was mainly ships from Het Middelburgse Commercie Compagnie (MCC) that transported slaves across the Atlantic.[565] Slave ships were relatively large two- or three-masted ships with a crew of about 25 men.[566]

563 Akveld mfl. 1977, 278.
564 Akveld mfl. 1977, 281.
565 Bruijn 2016, 50.
566 Bruijn 2016, 50.

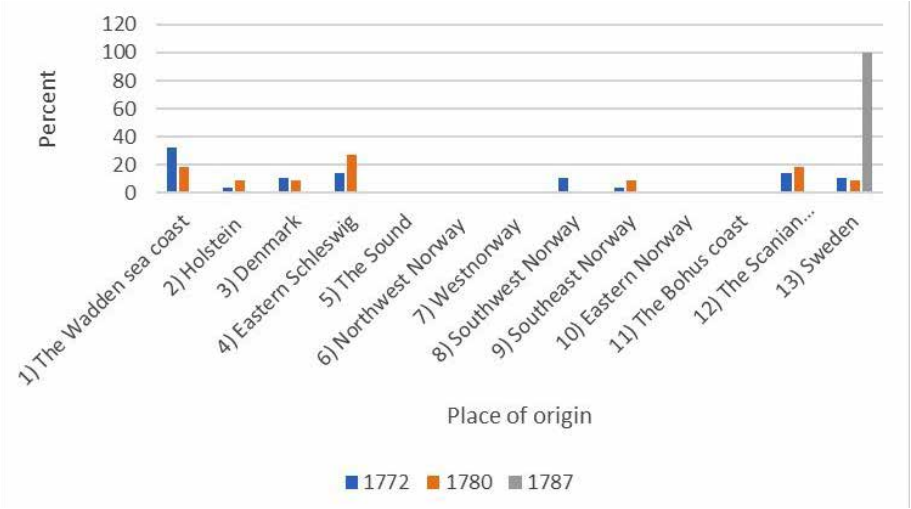


Fig. 5.27. Scandinavian sailors' participation on slave ships from Amsterdam shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

Not many Scandinavian sailors took part in the slave trade from Amsterdam: in 1772 28, in 1780 11 men and in 1787 just four Swedes, so the material is thin, but it seems obvious that this trade was never something that attracted Scandinavian seamen and that the vast majority had left it by 1787.

5.4.13 The North American trade

It was not until the last year investigated that ships from Amsterdam visited the newly independent United States, because until 1783 the Netherlands were at war with Britain, and in 1772 we must presume that British ships supplied the Colonies. There are only 30 men registered on ships to North America, so here too the material is not comprehensive enough to conclude much; it seems, however, that the Wadden Sea sailors (group 1) were not able to dominate this trade, as there were just as many seamen from Southwest Norway (group 8), just as Southeast and East Norway and Bohuslen (groups 9, 10 and 11) were also well represented.

5.4.14 The East India trade

The Dutch East India Company, VOC, was founded in 1602 and was given exclusive rights to all trade east of the Cape of Good Hope.[567] VOC's main base in Asia was the city of Batavia, Indonesia's present capital Jakarta, to which most East Indiamen sailed, but after 1665 Galle on Sri Lanka became the second most important destination. The voyage from the Netherlands took about eight or nine months due to contradictory winds, while the return voyage, traditionally begun in December or January, took an average of seven months; on both voyages the Dutch colony at Cape of Good Hope was used as a port of supply and repair.[568] From a modest start with 76 voyages to Asia in 1602-1610, the activities of the

567 Israel 1989, 71.
568 Gaastra 2003, 114.

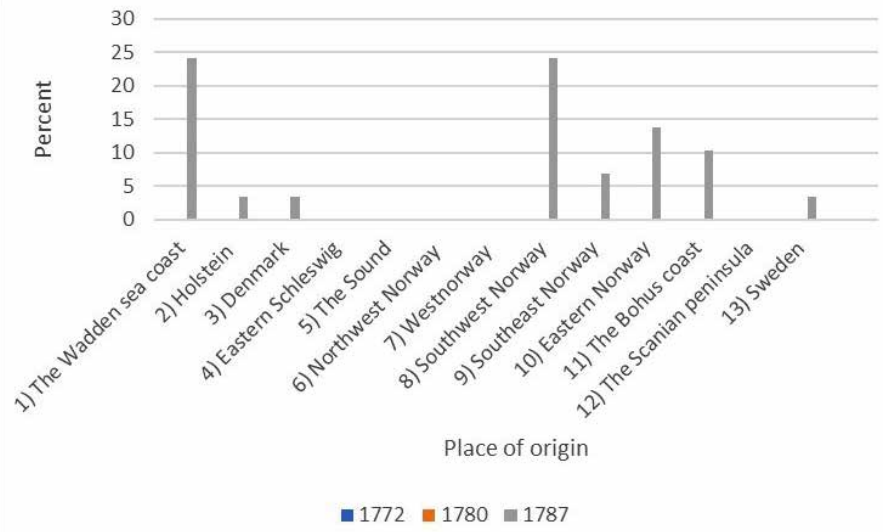


Fig. 5.28. Scandinavian sailors' participation in the North American trade shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

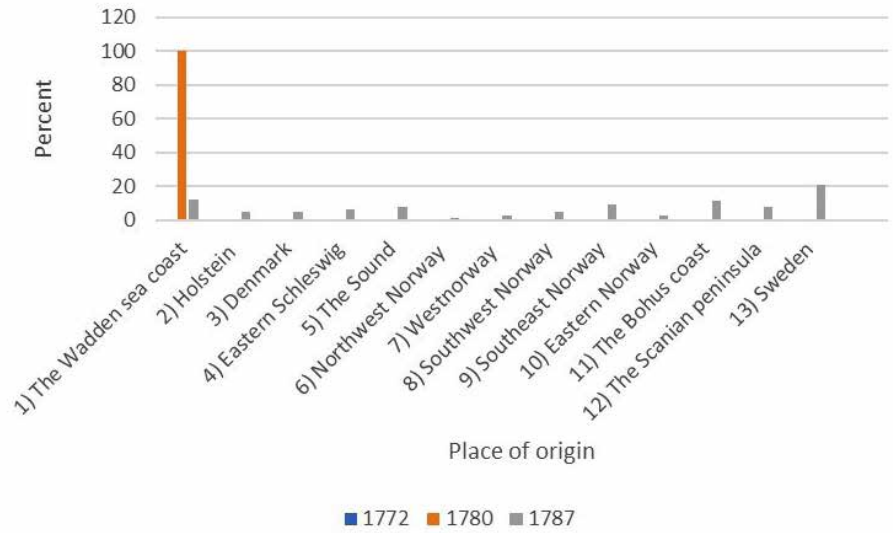


Fig. 5.29. Scandinavian sailors' participation in the East India trade shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

company grew tremendously, reaching its peak in the period from 1720 to 1730 with an average of 38 departures for Batavia per year. Up to 1790, the annual number was still high with an average of 30 vessels sailing for Batavia annually.[569] VOC's return ships were similar to large warships, with crews of between 250 and 300 men.[570]

In 1780 we find four men, all from the Wadden Sea, who secured a berth on an East Indiaman, which demonstrates the extreme situation that year, as they were the only Scandinavians to participate in this trade. In contrast, 151 men participated in voyages to East India in 1787, which is probably a consequence of the heavy losses that Amsterdam's shipping experienced during the Fourth Anglo-Dutch war, leaving quite a number of Scandinavian seamen with no other choice but to participate in the dangerous trade to Batavia, where mortality could reach as much as 30 percent.[571] We see an even distribution of seamen across all the groups, but particularly the Wadden Sea seamen (group 1) and the seamen from Southwest Norway (group 8) are strongly underrepresented in relation to their share of all Scandinavian seamen, while the seamen from Sweden-Finland (group 13) are clearly over-represented.

5.4.15 'Op Aventuuer'

Finally, we find the sailors who sailed on ships that went 'op adventuur' – on adventures, meaning tramping and thus did not have an already fixed destination to sail to, but had to fetch a cargo where it was to be had. In 1780 there were 38 Scandinavian men and in 1787 about 29 men on these ships, so again the material is thin. Nevertheless, it is probably fair to say that the seamen from the Wadden Sea (group 1) were dominant here. As the wage was about 25 guilders a month, just slightly below average, and as these were relatively small vessels with an average of 6.4 men on board, presumably sailing in the safe north European area, this was a reasonably good job. Again, we see that the seamen from southwestern Norway (group 8) were strongly represented, but while the share of Wadden Sea sailors even grew in 1787, sailors from southwestern Norway were absent that year. The reason must again be that some of these sailors had gone over to the local merchant navy, while this was not possible for the Wadden Sea sailors.

5.4.16 Scandinavian sailors on ships from the Admiralty of Amsterdam

The organisation of the seven provinces' naval forces was highly unusual. Due to the fierce rivalry between the individual provinces and the federal nature of the young republic, in 1597 this resulted in a naval organisation with five independent admiralties in the three maritime provinces, Zeeland, Friesland and Holland in the cities of Rotterdam, Amsterdam, Hoorn and Enkhuizen, which alternated, Middelburg and Dokkum later Harlingen in Friesland[572]. The Dutch warships were relatively small compared to the English and French warships and were armed with about 50 guns and with crews of approx. 500 men. The frigates were smaller three-masted ships with crews of about 300 men.[573]

A group of Scandinavian sailors were recruited to serve on warships from the Amsterdam Admiralty, and for comparison I have looked through the muster rolls for

569 Gaastra 2003, 115.
570 Bruijn 2016, 50.
571 Bruijn 2016, 94.
572 Bruijn 2011, 5.
573 Bruijn 2016, 49.

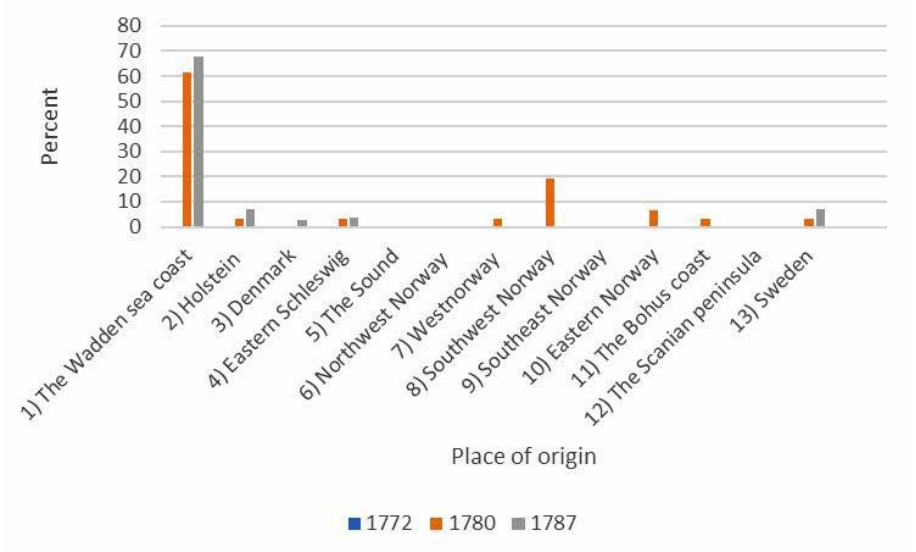


Fig. 5.30. Scandinavian sailors' participation in tramping from Amsterdam shown in percentages for the different groups of origin for the three years examined. GAS, waterschoutarchive 1772, 1780 and 1787.

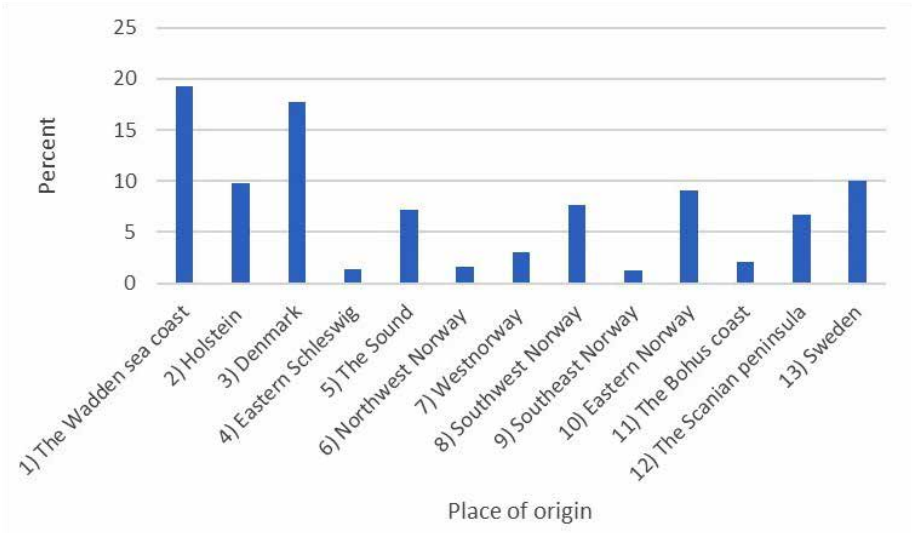


Fig. 5.31. Scandinavian sailors on warships from the Admiralty of Amsterdam in 1780 shown in percentages for the different groups of origin. Nationaal Archief, Den Haag. Archieven der Admiraliteitscollegees.

21 such warships and registered 430 Scandinavian seamen who were in the service of the Admiralty in 1780. Unlike the average wage for the Scandinavian common sailors, who served on the Amsterdam merchant ships, which was 24.6 guilders a month, the Amsterdam Admiralty paid only 15 guilders a month, which made this kind of seafaring not particularly attractive.

Although seamen from the Wadden Sea (group 1) constituted the largest proportion of Scandinavian seafarers, their share in naval service is 19.3 percent, which is well below the group average of all Scandinavian seamen in the Amsterdam merchant navy (47.5 percent in 1780). The Holstein seamen (group 2) made up 9.8 percent, whereas the group's share of all Scandinavian seamen is 4.2 percent. This does, however, cover the fact that in the muster rolls of the Amsterdam Admiralty some collective names for larger areas were used; in this case 'Holsten', which can mean both the Duchy of Schleswig and Holstein, which is why sailors from the Wadden Sea, Holstein and East Schleswig can also appear here. The same phenomenon applies to seamen from Denmark, excluding the Sound (group 3), who had a share of 17.7 percent, which far exceeds the group's share of all Scandinavian sailors in the Amsterdam merchant navy of 3.1 percent. Thus, in the navy muster rolls, many seamen were registered as coming from 'Jutland' or 'Denmark', but this does not change fundamentally by the fact that many sailors outside the traditional maritime areas were recruited for naval service.

There were 30 seamen from Copenhagen registered in the navy muster rolls, giving seamen from the Sound (group 5) a 7.2 percent share, which is 5 percent higher than the group's share of all Scandinavian seamen in the Amsterdam merchant navy. I have previously claimed that the absence of seamen from the Sound among the Scandinavian seamen in the Waterschout Archive is due to the fact that they sailed on vessels from Copenhagen, so how do these new figures relate to this? One explanation may be that, in addition to trained and experienced sailors, warships employed a large group of men who did not have to have maritime experience, because it was their raw muscle power that was needed in the heavy work with the guns and the setting of sails and lifting of yards. People from Copenhagen without maritime experience could thus still be recruited to a warship. For sailors from Northwest, West and Southeast Norway as well as Bohuslen (groups 6, 7, 9 and 11) there is almost a correspondence between their proportions of navy sailors and of all Scandinavian sailors found in the Waterschout Archive, while for the sailors from Southwest Norway (group 8) there is a difference. Their share of all Scandinavian sailors in the Amsterdam merchant navy was 13.6 percent in 1780, making it the second largest group of Scandinavian sailors in the Waterschout Archive, while among the navy sailors the share was 7.7 percent. As with the Wadden Sea sailors (group 1), we see that fewer seamen from this area took a berth on a man-of-war. Among the sailors from Eastern Norway (group 10) there is a significant difference. Here, the proportion of navy seamen is 9.1 percent, while that of the Waterschout Archive is 4 percent, and the same pattern applies to the sailors from the Scanian peninsula and Sweden-Finland (groups 12 and 13), where the proportion of navy sailors was 6.7 percent and 10 percent, respectively, whereas the groups' share among all Scandinavian sailors in the Amsterdam merchant navy were 4.1 and 6 percent.

It is probably the low admiralty wages that kept the seamen from the maritime core areas of the Wadden Sea and from Southwest Norway away from Dutch warships, making way for men from areas where the tradition of an international maritime labour market was not as

strong. As Jan Glete notes, men on warships needed little or no sailing experience. *'But the number of men also mattered as much of the work on deck and at the guns required unskilled muscle power as well as skills for a particular task in a team, rather than long experience at sea'.*[574] It is fair to assume that the higher percentages of navy sailors for Holstien, Denmark excluding the Sound, the Sound, Eastern Norway, the Scanian peninsula and Sweden-Finland (groups 2, 3, 5, 10, 12 and 13) cover such non-experienced sailors. Another factor made it unattractive to enrol for navy service: the risk. Among the 430 Scandinavian navy sailors found in the muster rolls from Amsterdam's admiralty,[575] there was a 16.5% mortality rate: of these 71 sailors, 9 men were killed in action, and two drowned. The rest are just registered as dead, some in connection with hospitalisation on board a hospital ship, and it is easy to imagine that the warships with their large crews who lived and worked in cramped conditions had poor hygiene conditions where typhoid, cholera and tuberculosis were the causes of death. Sailors with long experience at sea had the opportunity to find a berth on board a merchant ship with a much higher wage and a must lower risk.

In the muster rolls from Amsterdam's admiralty, 70 Scandinavian officers and petty officers are registered, and it is especially interesting that in the Admiralty of Amsterdam, Scandinavian seamen were used, even high up in the hierarchy. Thus, the group of mates is 5.4 percent, but still much lower than the corresponding group among the Scandinavian sailors in the Amsterdam merchant navy in 1780, which was 13.3 percent, and it is also interesting that the proportion of mates from the Wadden Sea area (group 1) and from Southwest Norway (group 8) is quite small, just three and five men out of the 26 mates, whereas there were 10 mates from Denmark excluding the Sound (group 3).

5.4.17 Scandinavian sailors, more than one year in the Waterschout Archive

By combining the lists of Scandinavian sailors in Amsterdam shipping from the three years surveyed, a number of men who sailed in more than a single year emerge, thus showing that their participation in Dutch shipping was not a mere incident, but probably the result of a labour migration over several years. An example of this is Jens Jacob Eschels, who was home on Föhr every winter while sailing on Dutch whalers, but when he later switched to merchant ships, he was only home once or twice in a period of several years.[576] 170 such men have been found, of which 134 are registered either in the years 1772 and 1780 or in the years 1780 and 1787, while 36 men are found in all three years

Again, a significant overrepresentation can be detected for the Wadden Sea seamen (group 1) and the seamen from southwest Norway (group 8). The Wadden Sea seafarers had an average share of all Scandinavian seamen over the three years surveyed at 48 percent, but in this population they had a share of 63 percent, and among all the Scandinavian sailors the sailors from Southwest Norway had an average share of 11.9 over the three years, but among the seamen with more than a year in Amsterdam, their share was 15.8 percent. Conversely, the remaining 12 other groups are underrepresented, with the sailors from East Norway (group 10) as a modest exception as this group's average share of all seamen over the three years was 3.5 percent and here around 3 percent.

574 Glete 2010, 575.
575 Archieven der Admiraliteitscollegees, Nationaal Archief, Den Haag.
576 Eschels 1966.

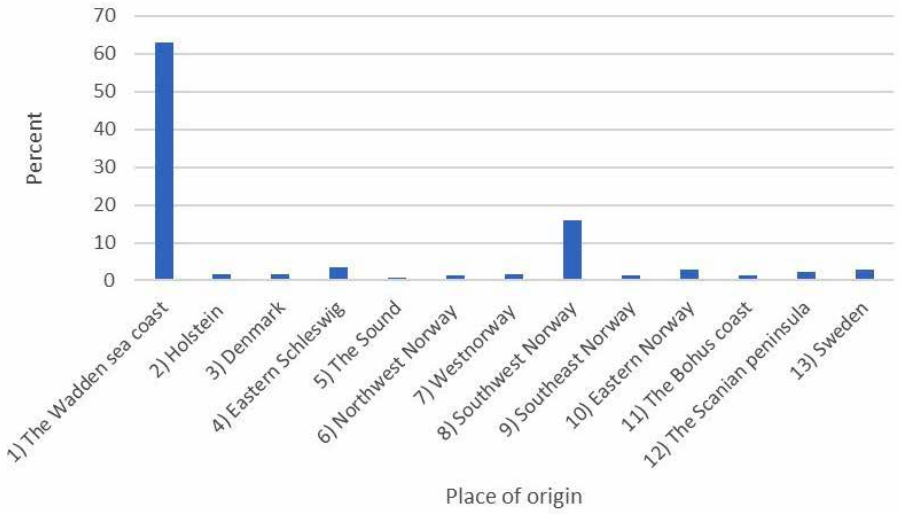


Fig. 5.32. Scandinavian sailors who were registered in the Waterschout Archive for either two or three of the examined years shown in percentages and in their groups of origin. GAS, waterschoutarchive 1772, 1780 and 1787.

This study of Scandinavian sailors' participation in the shipping from Amsterdam should be seen as a snapshot of the Scandinavian sailors' involvement. Firstly, because in years other than those surveyed there may have been a different composition of seamen, and secondly, because we have to assume that many of the seamen represented here in just one year may well have had a similar continuous presence over several years in Amsterdam, but just not in the other years investigated, where they may have been on a longer journey, gone home or been elsewhere. Therefore, it is reasonable to consider the above-mentioned figures as a minimum figure for a continuous presence on the international maritime labour market in Amsterdam, making the importance of the high proportions for the seamen from the Wadden Sea and from Southwest Norway even greater; the seamen from these two groups were unconditionally the best integrated into the shipping industry from Amsterdam and were veterans of the Amsterdam shipping community.

By tracking individual seamen's movements over several years, it is possible to uncover their career. *E.g.* Volkert Adolf de Jong from Hooge, who in 1772 sailed as a cook in the Baltic trade, in 1780 shipped out as a common sailor and in 1787 sailed as a boatswain; or Pieter Booysen, who in 1772 sailed as a boatswain on board a ship to Cadiz, in 1780 had made it to mate, but in 1787 sailed as a common sailor on a whaler to the Davis Strait. Many others advanced over the years through the maritime hierarchy, but there are also examples of sailors who did not experience this. For example, Pieter Andriesz (Peter Andersen) from Emmerlev, in all three years studied sailed as a common sailor first in the Baltic trade and then in the West Indies, and Andries Pietersz (Anders Petersen) from Højer, who sailed as a cook in 1772 and 1780 and then sailed in 1787 as a common sailor, which meant a setback as a sailor's wage was lower, than a cook's. With information from church books, the navy conscription list and probate records, together with information from the Amsterdam Waterschout Archive, one could presumably piece together a few life histories, bringing us closer to the lives of these migrating seamen.

5.5 Conclusion on the sailing patterns of the Scandinavian sailors in Amsterdam

When you step back and consider the distribution of Scandinavian seamen in the 16 different shipping areas or trades, several trends become evident: It was possible for the sailors from the Wadden Sea (group 1) to dominate some trades that were either well paid or were relatively safe because the voyages took place in northern European waters, where they were not so far away from home. The same is true, in part, for Southwest Norway (Group 8), whose sailors apparently also had the opportunity to participate in the more lucrative trades. As mentioned, the difference between the two groups becomes most apparent in 1787, when the sailors from Southwest Norway withdrew partly from the Amsterdam shipping industry, while the seamen from the Wadden Sea remained. In contrast to these two groups, there were other groups of sailors who did not have the experience and training or the connections to work in the lucrative trades, but had to make do with trades that were either less well paid or where the risk was far greater. If the Amsterdam shipping industry is considered to be a large practice community, these seamen were not recognised as veterans and therefore could not secure a berth in the lucrative trades. It is therefore reasonable to conclude that among Scandinavian sailors there was an A and a B team that sailed under very different conditions. However, what unites most seamen from the different Scandinavian groups of origin is that they participated in Amsterdam shipping on board large ocean-going two- and three-masted squareriggers and through integration into these vessels' practice communities acquired Dutch maritime knowledge, technology, language and everyday practice on board, which they brought home with them.

5.6 Scandinavian sailors in the Dutch international maritime labour market in the 17th century

The study of the Waterschout Archive for the years 1772, 1780 and 1787 has uncovered a considerable Scandinavian presence on ships sailing from Amsterdam, and it has been shown that there were two maritime core areas in particular from which these sailors came: the coast of Southwest Jutland and the duchies, and Southwest Norway, respectively. But was it only during these years that Scandinavian sailors were present in Dutch shipping, or is this a phenomenon of older date?

The Dutch maritime labour market was extensive as early as the 17th century, and it has been estimated that around 45,000 men made their livelihoods here. In the course of the Dutch economic expansion over the century, the figure grew to just under 60,000 men in around 1640 and then dropped to around 52,000 in the last decades of the 1600s. After the Spanish War of Succession, employment in Dutch shipping increased again, reaching the old peak of 60,000 men just before 1780.[577] From the outset, this maritime labour market was of an international nature, as the United Provinces did not have a population that could meet the demand for seamen. As early as 1615, the share of foreign seamen on Dutch ships was 15 percent, growing to around 30 percent by the end of the century. In the 18th century this development continued so that in 1785 there was an average of about 50 percent foreign seamen on Dutch-owned vessels.[578]

577 Van Lottum 2007, 132.
578 Van Lottum 2007, 136.

P. C. van Royen estimated that in the period 1651-1665 there were 15.5 percent Norwegians, 6.75 percent Swedes and 6 percent Danes aboard ships from Amsterdam. Seamen from the Wadden Sea coast do not appear in his survey as they were registered as German seamen, of which 18.5 percent were found.[579] Based on figures from Simon Hart's surveys of the marriage registers in Amsterdam, Sølvi Sogner points out that in the period 1600-1800 11,869 spouses were registered, of whom 6.5 percent were born in Norway, 3.9 percent were Danes and 3.3 percent Swedes. Most of these men were sailors.[580] There is thus evidence that there were Scandinavian seamen in the Dutch shipping industry in the 17th century as well, but the lack of evidence of Wadden Sea men is problematic, since these seamen constituted the largest Scandinavian group in the survey of the Waterschout Archive.

To solve this problem and to gain more concrete knowledge of the composition and number of Scandinavian sailors in Amsterdam's 17th-century shipping, I looked for them in the vast collections in the Amsterdam City Archives. Here I examined job contracts written by special public notaries who took care of maritime affairs in the city.[581] P. C. van Royen found that between 1700 and 1710 there were 12 such notaries specialising in maritime legal affairs,[582] which is why this survey of Scandinavian seamen in the papers of individual notaries must be considered a sample of a whole. The notary archive in Amsterdam's City Archives is huge and has by no means become accessible through digitalisation yet, but when it does, it will undoubtedly be proved that Scandinavian seamen were far more numerous, seen with the background of the above-mentioned general figures for the composition of Dutch shipping in the 17th century.

1639

In 1639, Hendrick Schaef was a public notary who produced contracts between the large Dutch trading companies and seamen and soldiers who wanted to enter into their service, and here 27 Scandinavian seamen have been found, two of whom were recruited to the VOC and 25 to WIC.[583] Among these 27 men, there were also seamen from the Wadden Sea coast, and although the number of seamen is very small, and therefore cannot be expected to be representative of all the Scandinavian seamen who might have been looking for a ship at this time in Amsterdam, it does show that there were representatives from the same areas that have been analysed in the Waterschout survey. The distribution between the previously presented areas is different here than in the years around 1780, with five men coming from Denmark, six men from Sweden, six men from the Wadden Sea coast, but 10 men from Norway. The proportion of seamen from the Wadden Sea area is thus around one fifth, which is not coherent with the findings in the Waterschout Archive. Among the Danish sailors, we see Aalborg represented here, which is also not particularly well-represented in the 1780s, and among the Swedish sailors it is worth noting that five men came from Marstrand or Masterlandt, which the Dutch called the place, and which was a part of Norway until 1658. For comparison, these sailors are here included as Swedish sailors. The vast majority of sailors, however, came from Norway, but not to a great extent

579 van Royen 1987, 29.
580 Sogner 2012, 20.
581 van Royen 1987, 10.
582 van Royen 1987, 46.
583 GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrick Schaef 1639.

1639	Numbers	1639	Numbers
Aalborg	2	Kobbervik	1
Elsingore	1	Lyngdal	1
Copenhagen	2	Oslo Fiord	1
Ditmarsken	2	Stavanger	1
Husum	2	Tønsberg	2
Tønder	1	Vesterrisør	1
Tønning	1	Østerrisør	1
Bergen	2	Kalmar	1
		Marstrand	5

Table 5.18. Scandinavian sailors registered by Hendrick Schaef in 1639, shown in numbers and by place of origin. GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrick Schaef 1639.

from Southwest Norway, but rather from areas that had the best contact with the Netherlands in the early in the period. Øster- and Vesterrisør refer to areas around the small harbour which from 1662 onwards came to be called Mandal.[584]

1646-1649

A little over ten years later, 88 Scandinavian seamen were recruited to the VOC and the WIC, but also to the service of the Admiralty in Amsterdam, just as one man was recruited to the Dutch-licensed whaling company Het Noordse Compagnie. Again, it was the notary Hendrick Schaef who, on behalf of the employers, took care of recruiting and writing up contracts with the Scandinavian seamen.[585] This time nine men were hired from Denmark, 19 men from Sweden, 30 men from Norway and also 29 men from the Wadden Sea area, as well as a man from Kappeln in Eastern Schleswig. Now the seamen from the Wadden Sea area were much better represented and made up about a third of all Scandinavian seamen, while the proportion of Norwegian seamen is more or less constant. Among the Danish sailors it is interesting to find a man from Slagelse in rural Sealand, just as we see two men from Langeland and Horsens respectively. Nine out of the 30 Norwegian sailors came from Southwest Norway, which later became very important in Amsterdam shipping, and at the same time we see that the old maritime city of Bergen was already an important place for Norwegian sailors. Finally, we also see again that the old timber exporting areas in eastern Norway are already important. This is also accentuated by the seamen from Marstrand among the Swedish seamen who made up the largest single group of seamen. Among the Wadden Sea sailors we see a clear differentiation of places of origin, with nine from this area, and now people from Föhr are represented for the first time. Husum, the old reloading centre on the trade route between Flensburg and Amsterdam, is the largest single location among the Wadden Sea people, while the collective term 'Ditmarsken' was also used by nine seamen. Among the Swedish seamen, it is interesting to note that Stockholm seamen were now present in Amsterdam, but also that the provincial port of Nyköbing is represented.

584 Sogner 2012, 35.

585 GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrick Schaef 1646-1649.

1646-1649	Numbers		Numbers
Denmark	1	Trondhjem	3
Fyen	2	Ditmarsken	9
Horsens	1	Holstein	3
Copenhagen	2	Husum	8
Langeland	1	Kappeln	1
Samsø	1	Föhr	2
Slagelse	1	Nordstrand	2
Arendal	1	Schulp	1
Bergen	9	Sild	2
Christiania	5	Tønning	2
Flekkerø	1	Gotland	1
Fredrikstad	1	Malmø	2
Kongsberg	1	Marstrand	11
Moss	5	Nyköbing	1
Stavanger	4	Stockholm	3
		Sweden	1

Table 5.19. Scandinavian sailors registered by Hendrick Schaef in the period 1646-1649, shown in numbers and by place of origin. GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrick Schaef 1646-1649.

1652	Numbers		Numbers
Copenhagen	6	Flensburg	1
Samsø	1	Ditmarsken	4
Arendal	1	Husum	9
Bergen	6	Tønder	1
Fredrikshald	1	Bohus	1
Langesund	1	Marstrand	4
Stavanger	1	Stockholm	4
Trondhjem	1	Sweden	1
Tønsberg	1	Wästerwik	1

Table 5.20. Scandinavian sailors registered by Hendrick Schaef in 1652, shown in numbers and by place of origin. GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrick Schaef 1652.

1652

In 1652, Hendrick Schaef recruited 47 Scandinavian sailors, four of whom were recruited to the Amsterdam Admiralty, one man was to serve with the WIC and the rest, 43 men, with the VOC. Among the 47 men, one claimed to come from 'Viborg' which could be either Viborg in Finland or Viborg in Jutland and another from 'Fridrichstadt' which could be the city by the same name in Schleswig or Fredrikstad in Norway, which is why these men are not included in the following list. The 47 sailors represent only about half the number from 1646 to 1649, which probably explains the smaller number of locations and their differentiation.

This time we find seven men from Denmark, 12 men from Norway, 11 men from Sweden and 14 men from the Wadden Sea coast, as well as a man from Flensburg, and again the representation of seamen from Norway and the Wadden Sea coast is about equal. It is interesting that we see six sailors from Copenhagen, which was also represented in the previous two surveys, but this time much better. Both here and in the survey from 1646-1649 we find a man from Samsø, but not from Bornholm, which may indicate that the sailors from Bornholm had not yet found their way to Amsterdam. Among the

Norwegian seamen we find only one sailor from Stavanger, representative of the later significant group of sailors from Southwest Norway, and as before we find sailors from Bergen strongly represented. Otherwise, many Norwegians came from the eastern part of the country.

1664-1668

In connection with the Second Anglo-Dutch War from 1665 to 1667, the notary Hendrick Rosa recruited sailors to the Admiralty of Amsterdam, and in his papers, I found 164 Scandinavian seamen for the period 1 March 1664 to 24 November 1668. Of these, six came from 'Fridrichstadt', which is why they are not included here. During these four years, the Norwegian seamen were strongly represented with 76 men, whereas seamen from the Wadden Sea constituted 20 men, as well as four men from Flensburg and three men from Sønderborg. From Denmark there were 23 men and from Sweden 29 men. In the group of Danish sailors, Copenhagen continues to be strongly represented, but now there are also four men from Lolland, from which there had not been sailors before, and we also find a sailor from Randers in Jutland.

The same differentiation of the place of origin is also seen among the rest of the Scandinavian seamen and is probably due to the larger number of registered persons. Again, we see among the Norwegian seamen that many came from Bergen, but now Southwest Norway appears to be an important maritime area, with 28 men or 17 percent of all registered Scandinavian seamen coming from here. However, seamen from Southeast Norway, *i.e.* from Aust-Agder, Telemark and Vestfold counties, as well as East Norway (the Oslo Fiord with the city of Frederikshald) still made up a disproportionate share, with 25 men or 15 percent, in comparison with the situation in the 1780s. It is interesting that the proportion of seamen from the Wadden Sea is still relatively modest and constitutes only about 12 percent of all registered seamen, and it is still Husum that is the largest single location from the area. Furthermore, we see that the Eastschleswig cities, Flensburg and Sønderborg, are now represented. In the Swedish group of seamen we find 10 men from Marstrand, which is why the city can be seen as a significant maritime centre, but at the same time Gothenburg has now appeared with just as many seamen, which is probably the result of the development of the Swedish west coast after the Karl Gustav Wars. Sailors from Stockholm continue to be significantly present.

1673

In 1672, the Third Anglo-Dutch War broke out, and a crew list from 1673 is preserved from the warship *Gouden Leeuw*, which was Admiral Cornelis Tromp's flagship.[586] Of the total 500 ordinary sailors on board, there were 73 Scandinavians; thus just over 14 percent.[587] It is immediately noticeable that there is only one person from Copenhagen and in addition no other sailors from the kingdom of Denmark. On the other hand, there are 33 or 45 percent Norwegian sailors, but also 30 or 41 percent sailors from the duchies. The Swedes had a slightly reduced presence with 9 men, *i.e.* approx. 12 percent of the Scandinavian sailors. Among the 33 Norwegian seamen, Bergen was still well represented with 6 men, but at the same time it seems that maritime Southwest Norway was now becoming very visible, with

586 Bruijn 2011, 76-78.

587 Scheepvaartmuseum HS-0821(a).

1664-1667	Numbers		Numbers
Bornholm	5	Trondhjem	4
Copenhagen	8	Tønsberg	3
Langeland	4	vesterrisør	12
Lolland	4	Ditmarsken	4
Randers	1	Flensborg	4
Samsø	1	Föhr	1
Bergen	23	Graudiep	1
Christiania	6	Holstein	2
Fredrikshald	1	Husum	8
Grimsøya	1	Højer	1
Kongsbakke	2	Sild	1
Kongsberg	1	Sønderborg	3
Larvig	2	Tønning	1
Langesund	1	Gothenburg	10
Legelandlist	6	Gotland	2
Merdø	7	Marstrand	10
Sandefjord	1	Stockholm	6
Stavanger	10	Sweden	1

Table. 5. 21. Scandinavian sailors registered by Hendrick Rosa in the period 1664-1667, shown in numbers and by place of origin. GAS. Archief van de Notarissen ter Standplaats Amsterdam. Hendrich Rosa 1664-1668.

11 men or one third of all Norwegian seamen coming from here. Now, for the first time, we see Kristiansand represented, and what later became Mandal, Østerrisør, has the largest number of seamen among all Scandinavian seamen.[588] However, the old timber export areas in East Norway continue to be well represented with 14 men. Among the sailors from the duchies, we find none of the easternmost port cities represented, but the Wadden Sea coast is now strongly represented by 24 men. The collective term 'Holstein' with six men, makes it impossible to pinpoint their origin, but on the other hand we see sailors from Fanø for the first time, just as the later known maritime sites of Ballum, Graudiep and Föhr are present. Thus, it seems that the maritime core areas of Southwest Norway and the Wadden Sea coast are now appearing, with sailors from these areas taking a larger part in the international maritime labour market in the Netherlands. Among the Swedish seamen, Stockholm is the best represented city, whereas Gothenburg and Marstrand have only three men present each. It is noteworthy that neither here in 1673 nor in the years before are there seamen from Karlskrona and Karlshamn present, which is probably due to the fact that the Swedish navy first moved to Karlskrona in 1683.[589]

Danish recruitments of sailors in Amsterdam during the Scanian War

In a previous survey of the Danish recruitment of seamen in Amsterdam during the Scanian War 869 Scandinavian sailors were registered out of a total force of 2210 who were recruited for Danish naval service. Scandinavians accounted for 39.3 percent of all recruited sailors; 915 or 41.4 percent were Dutch seamen; 11.4 percent were Germans; 2.6 percent English;

588 Sogner 2012, 35.

589 Ekström, Müller & Nilson 2016, 36.

Fig. 5.33. The *Gouden Leeuw* at the Battle of the Texel, 21 August 1673, by Willem van de Velde (II), 1687. The National Maritime Museum – The Royal Museums Greenwich. BHC0315.

1673	Numbers		Numbers
Copenhagen	1	Ballum	4
Bergen	6	Ditmarsken	5
Christiania	3	Fanø	2
Kristiansand	1	Föhr	2
Langesund	4	Graudiep	3
Larvig	1	Holstein	6
Merdø	2	Husum	1
Moss	1	Højer	4
Østerrisør	8	Ribe	2
Stavanger	2	Tønder	1
Svinesund	3	Gothenburg	1
Trondhjem	2	Marstrand	2
		Stockholm	6

Table 5.22. Scandinavian sailors on the crew list of the Gouden Leeuw in 1673, shown in numbers and by place of origin. Amsterdam Scheepvaartmuseum HS-0821(a).

and then a restgroup of 3.2 percent were registered, for whom a place of origin could not be determined.[590] In this survey, the two maritime core areas – the Wadden Sea coast and Southwest Norway – are also apparent, with the Wadden Sea seamen constituting 19.5 percent of all Scandinavian seamen recruited by the Danish Admiralty and Southwest Norway with 21.4 percent. At a more general level the distribution was thus: the duchies constituted 25.4 percent, Norway 49.2 percent, Denmark 6.8 percent and Sweden 19.8 percent.[591]However, it should be noted that there were still many seamen from Marstrand and the formerly Danish part of Bohuslen present, and if these numbers were removed from the Swedish figures, the Swedish seamen would constitute only 7.6 percent of all Scandinavian seamen. This is not so peculiar, since Sweden was at war with Denmark-Norway, and yet 13 sailors from

590 Christensen 2014, 13, 20.
591 Christensen 2014, 22, 23, 26.

Stockholm and 8 from Gothenburg were recruited to serve aboard Danish ships, a fact that throws into question the seafarers' perception of nationality and affiliation.[592]

From the Wadden Sea coast were found 64 men from Tønder and Höjer, 25 from Ribe, 26 from Ditmarsken, and now Föhr was represented with eight men. There were also six men from Ballum, five from Tønning, four from Sylt, three from Graudiep and 13 others from smaller locations.[593] Interestingly, the Wadden Sea Islands and the Halligs are almost absent in the survey, and the vast majority of sailors from the area came from the mainland, suggesting that it was easier for the Danish authorities to conscript sailors to the navy from here. Another reason, of course, is that the islanders did not choose to serve in the Royal Danish Navy, but found more lucrative work in the Dutch merchant navy; however, in light of the surveys of the notaries in Amsterdam, the conclusion may also be that people from the Wadden Sea islands and the Halligs had not yet been established in Dutch shipping at this time.

Of course, it is obvious that the sailors recruited by the Amsterdam notaries and the sailors who were recruited for the Royal Danish Navy during the Scanian War cannot immediately be compared to the sailors from the Waterschout Archive. The 17th-century sailors recorded here were recruited by the major employers: VOC, WIC, the Amsterdam Admiralty and the Royal Danish Navy, while the sailors in the Waterschout Archive from the years 1772, 1780 and 1787 sailed with ordinary civil merchant ships from Amsterdam. What is important here, however, is the mere presence of the Scandinavian seamen in Amsterdam, showing that from at least 1639 Scandinavian sailors were active on the maritime labour market in this city. Although the registered sailors were recruited by the major employers, it is surely reasonable to assume that there were other Scandinavian sailors who took a berth on ordinary merchantmen in the civil Dutch shipping industry at this time.

5.6.1 Conclusion on Scandinavian seamen in the 17th and 18th centuries

By comparing the results of the survey of the 17th-century Scandinavian sailors in Amsterdam with the survey of the 1772, 1780, and 1787 muster rolls in the Waterschout Archive and converting the results into percentages, a picture appears of the development of the composition of Scandinavian sailors who were active on the international Amsterdam maritime labour market in the 17th and 18th centuries. Of course, some of the studies are based on very small numbers and must therefore be viewed with great caution. However, with the figures for the Danish recruitment in Amsterdam during the Scanian War and the figures from the Waterschout Archive survey, there is a solid basis for concluding on the origins of the Scandinavian sailors who were active in Amsterdam. In relation to the survey of sailors in the Waterschout Archive, it is striking that the Norwegian proportions in the 17th century were far greater than we see for the years around 1780, and this probably indicates that the Dutch timber trade to Norway was very large in the mid-17th century, and Norwegian seamen therefore had a very easy way of joining the international maritime labour market in the Netherlands.[594] Conversely, it is just as clear that the proportion of seamen from the Wadden Sea area was smaller in the

592 Christensen 2014, 29.
593 Christensen 2014, 22.
594 van Royen 1997, 45.

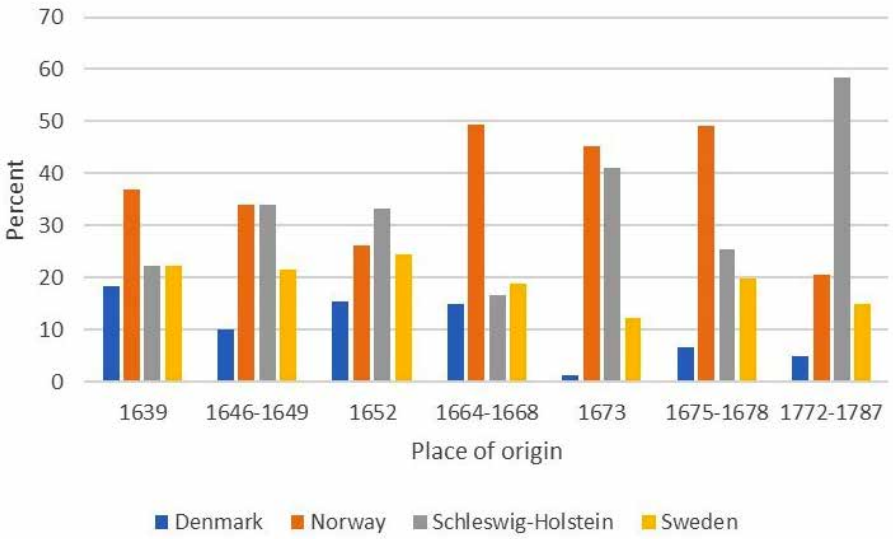


Fig. 5.34. Scandinavian sailors in Amsterdam in the 17th and 18th centuries, shown in percentages for Denmark, Norway, the duchies and present-day Sweden. For the period 1772-1787 (Waterschout survey) an average of the three years examined is shown. Hendrich Schaef 1639, 1646-1649 and 1652. Hendrich Rosa 1664-1668. Amsterdam Scheepvaartmuseum HS-0821(a). Christensen 2014.

17th century than it was in the 18th, and that they had not in the 17th century yet really joined the maritime traffic from Amsterdam.

In a small study of the child birth patterns of the halligs *Amrum* and *Hooge*, Martin Rheinheimer points out that the vast majority of children born in the mid- and late-18th-century were born between August and November every year, with a peak in September, which indicates that conception took place well before most men left the islands in March. This time of year, coincides with the departure of the whaling fleet and the first Archangelsk fleet in April. Conversely, the study also shows that this pattern of births was not nearly as pronounced in the 17th and first parts of the 18th century, which indicates that the seamen did not at this stage participate in seasonal labour migration to the Netherlands, but presumably worked in local fishing and shipping.[595] Conditions changed during the 18th century, so that in around 1780 we find a very large proportion of seafarers from the Wadden Sea area in Dutch shipping, while the Norwegian seamen no longer went to the Netherlands to such an extent. But how many sailors from the realms of the Danish king actually participated in Dutch shipping?

Assuming that the number of Scandinavian sailors in Amsterdam shipping in 1772 expresses a general level, before the Fourth Anglo-Dutch War fundamentally changed conditions, the number of Scandinavian sailors in the merchant fleet of Amsterdam in the second half of the 18th century of was about 1800 men. To this should be added a number of sailors who sailed on the warships of Amsterdam's Admiralty. For 1780, 430 Scandinavian sailors were found serving on the Amsterdam warships, and to estimate the peacetime level of 1772, this number can be set to about 300 men, giving about 2100 Scandinavian

595 Rheinheimer 2017a, 10-12.

sailors in the shipping from Amsterdam in 1772. In 1772 Swedish seamen had a share of 17.5 percent of all Scandinavian seamen, and if you subtract this proportion from the 2100 men, you end up with about 1700 seamen from the Danish realms. As previously described, it has been estimated that there were about 60,000 seamen employed in Dutch shipping in the years around 1780,[596] and my survey 'All nations in the spring of 1780' shows that the total number of seamen sailing from Amsterdam that year was about 12500 men, which is about a fifth of the 60,000 men. Therefore, do the 1700 sailors from the realms of the Danish king make up a fifth (8500 men) of all the sailors from these realms who sailed in Dutch shipping in 1780? Hardly.

Amsterdam was the centre for Norwegian migration to the Netherlands in the 17th and 18th centuries, but there was also Norwegian immigration to other Dutch cities. The Norwegian historian, Oddleif Hodne, estimated that Amsterdam received two-thirds of the Norwegian migration and that the remaining one-third went to the larger cities in the northern Netherlands.[597] As the vast majority of male Norwegian migrants were seamen,[598] and as seamen from the other Scandinavian areas followed the example of the Norwegian seamen, it is not unlikely that the 1700 seamen from the Danish realms in Amsterdam shipping made up two-thirds of all seamen from the realms of the Danish king, which is about 2500 men. In the survey 'All nations in the spring of 1780' Dutch seamen constituted 35 percent of all recorded men, leaving a proportion of foreign seamen of 65 percent. However, it has been estimated that the proportion of foreign sailors in the total Dutch shipping around 1780 was 50 percent, with 65 percent for Amsterdam then being too high. The previously proposed 8500 men, estimated as one-fifth of the 60,000 seamen who worked in Dutch shipping in 1780, are therefore probably about 15 percent too much, leaving an estimate of about 7400 seamen from the realms of the Danish king in Dutch shipping in 1780. We thus have two estimates: one of about 2,500 men and the other of about 7400 sailors from Denmark, Norway and the duchies who worked on Dutch ships in 1780, and the closest we can come to the real number is an average of these two estimates. I will therefore assume that just under 5,000 sailors from the realms of the Danish king worked in the international maritime labour market in the Netherlands in around 1780.

However, the proportion of foreign seamen in Dutch shipping did not account for 50 percent throughout the two centuries studied. In 1750 it was about 42 percent, in 1700 about 31 percent, and in 1650 around 25 percent,[599] so we have to assume that the total number of sailors from the realms of the Danish king who worked in Dutch shipping was also less in the period before 1780. Around 1750 it may thus have been about 4,500 men, in 1700 about 3400 men and in 1650 about half the 1780 level; somewhere around 2500 men. This assessment of the number of sailors from the realms of the Danish king who participated in Dutch shipping is new compared to previous assumptions. Thus, my estimate of about 3400 seamen from the Danish conglomerate state for the years around 1700 are an estimate that is more than twice the size of the approximately 1230 Danish, Norwegian and Schleswig-Holstein seamen that van Royen assumes sailed on Dutch ships at this time. His figures are derived from legal statements from sailors to public notaries

596 van Lottum 2007, 132.
597 Sogner 2012, 30.
598 van Lottum 2007, 147.
599 van Lottum 2007, 136.

in the largest Dutch shipping cities, where he assumed that the seamen who made these statements, were representative of the Scandinavian participation in Dutch shipping.[600] In *Dansk Søfartshistorie* (Danish Maritime History), Degn estimates on the basis of figures from the VOC that throughout the 17th century there were 3000-4000 Danish and Norwegian sailors sailing with the VOC, which equals about 35 men a year. However, he offers no indication of how many Danish-Norwegian sailors participated in ordinary Dutch shipping.[601] By comparison, Norwegian Sindre Aarbog estimates that about 17,000 Norwegian sailors sailed with the VOC in the period from 1602 to 1794, which equals 88 men a year, but he too does not mention participation in ordinary Dutch shipping.[602]

How many sailors out of the estimated 2500 may have served in Dutch shipping in 1650 and then returned to their home country is difficult to say for sure, but a qualified bid would be 750 to 1000 men in 1650, 2500 men in 1700, 3500 men in 1750 and the aforementioned 5000 men in 1780, and it is these seamen who, after being part of the practice communities on board Dutch ships, were able to return home and through new practice communities on Danish-Norwegian ships pass on Dutch maritime knowledge and experience.

5.7 Conclusion

The above studies have shown that in the first half of 1780, the Scandinavian seamen in the Waterschout Archive constituted 24.5 percent or 1540 men of the total 6286 seamen registered, which is probably a proportion that also applies to the Scandinavian seamen in the three fully surveyed years 1772, 1780 and 1787. A total of 1870 Scandinavian seamen were recorded in 1772, 2404 in 1780 and 1305 in 1787. Sailors from southwest Jutland and the Schleswig-Holstein Wadden Sea coast made up by far the largest group among all Scandinavian sailors, with an average proportion of 48 percent for the three years surveyed. The second largest group of Scandinavian sailors were sailors from Southwest Norway, from Karmøy to Kristiansand, who had an average share over the three years of 11.9 percent, but thus accounted for just under a quarter of the number of Wadden Sea sailors. After this came seamen from the present-day Sweden and Finland with an average proportion of 7.6 percent followed by seamen from the Scanian peninsula with 5.1 percent. It is noteworthy that over the three years examined sailors from inland Danish waters had a share of 3.2 percent only. In the 17th century, the picture was different, with the proportion of Norwegian seamen being far bigger than in the 18th century, and at the same time only a slow beginning for the maritime core area in southwestern Norway. Wadden Sea sailors were far less dominant in the 17th century, and seamen from the Wadden Islands were few, which is why the maritime communities on the mainland were home for most Wadden Sea sailors to Amsterdam. Not until well into the 18th century did sailors from the islands begin to take significant part in Amsterdam shipping.

Among the Scandinavian seamen common sailors were by far the largest group, constituting in 1772, 1780 and 1787 an average of 56.6 percent of all registered seamen; but petty officers were also recorded among them; shipwrights, sailmakers, and boatswains as well as the few who reached the rank of mate on Dutch ships. Among the boatswains, just

600 van Royen 1987, 116.
601 Degn 1997, 156.
602 Aarsbog 2003.

over 50 percent came from the Wadden Sea coast and from Southwest Norway and among the mates, the Wadden Sea sailors held a dominant position; on average over the three years 62.6 percent of all Scandinavians of this rank were from this region. The size of the Scandinavian sailors' wages was set according to position on board and fluctuated over the three years examined according to the international economic conditions. The group of mates generally earned the most, but the small group of specksnuyders from the whalers could fetch the largest wage of about 70 guilders a month. The wage for the common sailor in 1772 was 15.8 guilders, in 1780 24.6 guilders and in 1787 16.9 guilders, whereas there is no information available on the wage for captains and whaling commanders.

Scandinavian sailors took part in all branches of Dutch shipping, and in this study 172 different destinations were recorded around the world. Most sailed in the Atlantic trade to the Dutch possessions in South America or in the West Indies, and the second largest group sailed in the Baltic trade, which, compared to the slave trade, the East India trade, and the Atlantic, Spanish and Mediterranean trades, was far less risky, and where the wages were also decent. Scandinavian seamen accounted for 16 percent of all seamen in this trade, but West German and Dutch seamen had a share of 22 percent and dominated this lucrative and safe trade. Among the Scandinavian seamen, sailors from Southwest Jutland and the Wadden Sea coast had an average share of 63.3 percent in the Baltic trade, and were also quite numerous in other relatively safe and lucrative shipping areas (such as the Archangelsk trade), and it seems that these sailors had conquered shares that far exceeded the size of the group compared to the remaining Scandinavian seamen. The same can be said to a lesser extent of the sailors from Southwest Norway, who also had relatively large proportions in the lucrative trades. We also find other groups of sailors who had to sail in more unsafe and less profitable trades. These were mostly Swedish seamen from the Scanian peninsula and from Sweden and Finland, who were overrepresented in the Atlantic and the East India trades, as well as on the warships of the Admiralty of Amsterdam. Thus, a picture of two maritime core areas appears: the Wadden Sea area and to a lesser extent Southwest Norway, both in terms of numbers but also in terms of skills, dominated the Scandinavian sailor population in the Amsterdam merchant navy.

On board the large Dutch ships engaged in the Archangelsk, Mediterranean, Atlantic, North African trades, on the whaling boats and warships, and to a lesser extent in the Baltic, Spanish, and French trades, Scandinavian sailors became familiar with the maritime work and life on board, which were different from that on board the small vessels in the Scandinavian domestic trade. By participating in the practice communities aboard such ships, the Scandinavian seamen adopted the characteristics that constituted such communities: the manners, language, working methods, objects, values and views. These so-called artefacts were brought home to the local maritime community and became a part of it.

6

The networks of Scandinavian sailors aboard and ashore

As I have demonstrated, a significant labour migration from Scandinavia to the Netherlands existed in the 17th – but especially in the 18th century. On board Dutch ships, Scandinavian seamen participated in maritime practice communities where they acquired Dutch maritime knowledge and practice, but such a process took time and it was essential for the Scandinavian seamen to participate in the right maritime practice communities. Therefore it is necessary to determine just how long the different sea voyages took, in order to establish if this was enough time for a learning process to take place and likewise it is important to establish whether or not the Scandinavian sailors were integrated in the right maritime practice communities, in order to learn the necessary skills and knowledge to make a difference at home. In the previous chapter this was partly proven by showing that Scandinavian sailors participated in all the different Dutch trades, especially the long voyages on large squareriggers. But what happened when the sailors went ashore? Did they pick up maritime knowledge and skills on land too? To find out, one must ask the following questions:

How long did it take to sail from Amsterdam to Archangel, Lisbon or Riga on a cargo ship in the latter part of the 18th century, with whom did the Scandinavian seamen sail on such journeys, how long did they spend ashore in Amsterdam between journeys, and where did they live? These questions can be answered by analysing the muster rolls of sailors found in the Waterschout Archive of 1772, 1780 and 1787.

6.1 Duration of the passages and time spent ashore

For each of the years surveyed, there were seamen who appeared more than once per year. In 1772, there were 132 men, in 1780 about 235 and in 1787 only 26, which must be related to changing sailing patterns for the seamen. After having completed a voyage, the men stayed in Amsterdam for a time and then went out again. Thus, we can follow some of them, not just on one journey, but on two or even three, when looking at the short trips. For example, the mate Booy Pietersz from Langenes shipped out on 15 March 1780 with *De Goede Verwagting* commanded by Broer Hendriks to Svelvik in Norway. On 13 May of the same year they sailed again with the same ship to Norway, this time to Drammen, which is also the destination of the third voyage which began on 13 July, and finally *De Goede Verwagting* departed one last time to Drammen on 1 September 1780. With such information it is possible to calculate an average time for a trip to certain destinations,

which can give a sense of how long the seamen were actually at sea, and thus how long they were at sea as part of the maritime practice community on board. In such a calculation, of course, some uncertain factors must be taken into account, which means that the results will only be approximate: How long did loading and unloading take, and how long did the seaman spend ashore before taking a new berth?

However, by studying Jens Jacob Eschel's account of his life at sea, it is possible to uncover the aforementioned information about time at sea, as he often gives exact dates of departure and arrival from and to various ports. Thus, as a common sailor, he left aboard the frigate *De jonk Vrauwe Johanne* on 24 August 1779 from Texel to Smyrna (present-day Izmir in Turkey) and arrived there on 30 November the same year; a total of 99 days later. At other times he even gives information on the duration of loading and unloading: on 20 April 1778 he sailed from Ostend to Hamina in Finland on the three-masted hooker, *De Vrauw Margaretha*, arriving in early June. The ship was in ballast, so the cargo, which consisted of boards, was taken in directly, and on the 20th of the same month the ship departed again for Ostend; so, the loading took about 3 weeks. On other occasions, the time spent in port was somewhat shorter, *e.g.* when *de Vrauw Margaretha* departed from Oostende to Drammen in Norway in August and loaded wooden beams in just five days before the return voyage began.

By analysing the information from Eschel's diary, it has been possible to get an idea of how long the voyages to the various destinations could take: sailing from Amsterdam or Ostend to the Baltic ports took an average of 35 days, which also included the return journey. Sailing from Amsterdam or Cuxhaven to Cadiz took an average of 31 days, whereas the voyage from Amsterdam to Turkey or Italy and back took a little longer; an average of 90 days for each of the trips out and home.[603] The winds in Northern Europe are often strong and westerly and made some voyages long and arduous, whereas the transatlantic voyages were often astonishingly fast due to the regional weather systems: for example, on 19 December 1780, Eschels sailed with the fast brig *De Amsterdamsche Post* from Texel to the Caribbean island of Grenada in just 46 days, and when he later became captain, he made the journey from the Elbe to Charlotte Amalia on St. Thomas in the same time. However, the periods spent in port during his two stays at the Caribbean destinations were rather long and averaged 124 days, which may well be a coincidence, as things went a little faster in Charleston, South Carolina, where Eschels experienced 58 and 71 days in port respectively.[604] This information, together with distances in nautical miles between the ports of departure and arrival, makes it possible to calculate the average speed of the voyages reported by Eschels, and it is quite astonishing how slow the cargo ships of the day actually sailed. Thus, the average speed of travel to the Baltic was 1.7 knots, to and from Cadiz in Spain it was 2.7 knots, to and from the Mediterranean it was 2.1 knots and to and from Arkhangelsk it was 3 knots. The voyages to and from destinations in the West Indies or North America were slightly faster: from Europe and out, an average of 4.4 knots and on the return voyage, an average of 3.1 knots.

Taking the above information about time in port, the duration of loading and unloading and the speed of the ships into account, it is possible with caution to calculate how long the voyages lasted, by combining the durations with distance in nautical miles

603 Eschels 1966, 80, 81, 83, 87, 90, 103, 180, 181, 199.

604 Eschels 1966, 80, 81, 83, 87, 90, 103, 108, 126, 146, 164, 173, 180, 181, 199, 220, 224.

to the destinations. A voyage from Amsterdam to Riga, where the distance in nautical miles is 1204 nautical miles around Skagen and through the Danish belts, would ideally take about 29 days, so a complete voyage to Riga and back with loading and unloading may have taken about 80 days or approx. two and a half months. We know from Eschel's diary that his journey to Smyrna had a long duration, as they also undertook shorter voyages between ports in the Mediterranean, so his total journey from Amsterdam to the Mediterranean and back took a year and 53 days.[605] With an average sailing time of each voyage from Amsterdam to the Mediterranean and back of 90 days, such a journey would thus take 180 days, to which must be added time in port and possible small trips in the Mediterranean. Voyages to and from Spain and Portugal's west coast ports would have taken about a month at sea, adding time in port.

The longest voyages must have been the voyages across the Atlantic because of the great distances. The traditional sailing route from Amsterdam with the wind down to the Canary Islands and from there across the Atlantic to Curacao is 6135 nautical miles, and with an average speed of 4.4 knots such a voyage may have taken 58 days on average. The distance to St. Eustacius is roughly the same and to Surinam slightly shorter: 5811 nautical miles, which on average would mean a sea voyage of about 55 days. If the duration of loading and unloading experienced by Eschels in the West Indies, Charleston and St. Thomas was normal, you may then add an average for these voyages of 84 days. The return voyages to Amsterdam took longer than sailing to these destinations, as the sailing ships of the time had to follow the prevailing winds and therefore sail north from the Caribbean to catch the Gulf Stream and the West Wind Belt at the same latitude as Bermuda and then steer east again. Thus, the distance from Curacao over Bermuda to Amsterdam is 5627 nautical miles, which with an average speed of 3.1 knots gives a crossing time of 75 days, which also applies to a sea voyage from St. Eustacius to Amsterdam.

As Suriname is located a little further south than the Dutch Caribbean islands, the distance from Bermuda to Amsterdam is 6143 nautical miles. Thus, with an average speed of 3.1 knots, such a voyage took about 82 days. It is therefore not unreasonable to assume that a voyage on a ship from Amsterdam to Suriname and back would take about 220 days or almost three-quarters of a year, and a voyage from Amsterdam and to Curacao or St. Eustacius and back would take 217 days. By comparing these figures with figures from my findings in the Waterschout Archive, it is thus possible to get an idea not only of how long the voyage to and from a destination would have taken and how long the time in port would have been, but also of how long the sailors spent ashore in Amsterdam before signing on for a new voyage.

6.1.1 The time in Amsterdam

Using the data registered for 210 Scandinavian seamen in the Waterschout Archive for two or more journeys in the same year, it is thus possible to find the duration of voyages to different destinations.

With information about the average speed, the distance between Amsterdam and the destination in question and the time spent in port, one can, as previously shown, calculate a total sailing time for the seamen, but also how long they stayed in Amsterdam before the next journey began. From Amsterdam to Archangelsk there are 1964 nautical miles, and

605 Eschels 1966, 90, 103.

Trades	Average duration in days
Archangelsk	178
Western Spain	151
Western France	128
The mediterranian	156
The Baltic	101.3
Norway	62
Britain	92.7
North Africa	214
The West Indies	243
South America	161.5

Table 6.1. Average duration of the different trades. GAS, waterschoutarchive 1772, 1780 and 1787.

with an average speed of 3 knots, the time at sea would be 27 days, which is also the case for the return journey. How long unloading and loading took at Archangel is difficult to say, but Eschels experienced that it took 92 days for the cargo of tar to be transported down the Dvina to Archangelsk. However, the task of loading took just nine days, so what length of time spent in Amsterdam does this information give the sailors? With a loading time of 92 days and two sea voyages of 27 days, you end up with a total time for a voyage to Archangelsk of 146 days. If you subtract this from 178 days – the average time for this type of voyage shown above – the sailors would have stayed ashore for well over a month. Of course, this stay would be much longer if a ship did not have to wait for the cargo, but could take it on immediately after arrival. By making the same estimates for the other destinations, an average length of stay in days in Amsterdam for the different trades has been found.

The loading time for the trades to Western Spain and West France is estimated to be 52 days, which is the period Eschels spent unloading and loading in Cadiz in 1783.[606] The loading time in the Baltic trade is calculated to be 19 days, which Eschels experienced in Hamina[607] and the speed is set to the previously calculated 1.7 knots, which is also used for the trade to Norway, where the loading time is calculated on the basis of Eschels' experience in Drammen in 1778.[608] The average speed in the trade to Britain is also set to 1.7 knots; I have used the Cadiz loading time, because cargo for Britain as for Cadiz was most often general cargo. The speed of the voyages to North Africa is estimated to be equal to the 2.7 knots for the Spanish trade, and the time spent at the destination is set at 50 days, which Eschels experienced in 1784 when loading wheat in Algiers.[609] The total duration of voyages previously mentioned for the West Indies and South America trades has been used.

There is obviously a great deal of uncertainty in these calculations, as the figures for the Mediterranean and South American trades (minus 76 and minus 58.6 days respectively) show, but conversely it does not seem unreasonable to assume that the Scandinavian seamen stayed somewhere between one and two months ashore in Amsterdam on average between trips. This period was spent in the majority of cases in so-called seamen's inns, which will be the next topic.

606 Eschels 1966, 180.
607 Eschels 1966, 80.
608 Eschels 1966, 81.
609 Eschels 1966, 191.

Trades	Days in Amsterdam
Archangelsk	32
Western Spain	65
Western France	60
The Mediterranean	0
The Baltic	33.3
Norway	32
Britain	30.3
North Africa	120
The West Indies	26
South America	0

Table 6.2. The stay in Amsterdam in days for the different trades, calculated from information for the 210 Scandinavian sailors who did two or more voyages in a single year. The results of the calculations for the Mediterranean and the South American trades were negative. GAS, waterschoutarchive 1772, 1780 and 1787.

6.2 The networks of the Scandinavian sailors on board and ashore

As mentioned in the chapter on push/pull factors, the American scholar Leslie Page Moch has pointed out that the migration waves of early modernity centred on human relations and functioned in a space of regional culture: 'It was a manifestation of family systems, social connections and regional solidarities.[610] Or seen with the eyes of Jean Lave and Etienne Wegner, practice communities in migration were based on family, personal networks and regional identity. It is therefore obvious to assume that the Scandinavian seamen also organised themselves aboard and ashore according to these principles, and that such networks/practice communities influenced their choice of ship and accommodation in Amsterdam.

6.2.1 Sailors' inns

Based on my findings in the Waterschout Archive, it is possible to discover where and with whom the Scandinavian sailors lived when they stayed in Amsterdam between voyages, and as mentioned earlier, we can assume that this period was usually between one and two months. In the muster rolls of the Waterschout was noted the person who could guarantee that the sailor would actually be on board when the ship left the port, and this person was often the sailor's landlord; in Dutch, 'Slaapbaz', who at the same time acted as an intermediary between the seamen and the skipper who wanted to take them on. The 'Slaapbaz' had information about departing ships and which skippers were looking for crew members, and he then presented 'his' sailors` to the skipper in question. If an agreement was reached, the seaman was listed on the ship's muster roll and an advance of typically one month was paid, which allowed the seaman to pay his host.[611]

The sailor's debt to his landlord consisted of payment for food and lodging. In the 17th century, ship's officers were able to enjoy a comfortable stay in a guesthouse for three to five guilders a week, while the common seaman had to settle for a simple sleeping place and a humble diet for seven to fifteen stuivers a week.[612] In addition to this, he needed

610 Moch 1992, 16.
611 Hell 2017, 161.
612 Hell 2017, 178.

Fig. 6.1. Interior from an Inn, by Anthonie van den Bos, 1778 – 1838. Rijksmuseum. RP-P-BI- 2925.

tobacco, clothing, etc. for the coming voyage, which he also bought from his slaapbaaz. In 1771, such a group of slaapbazen referred to their trade as: 'Providing food and lodgings and equipment for seamen and supplying wine, tobacco and other necessities for the voyage and the payment of advances to them' (my translation).[613] Some of the slaapbazen were notorious for cheating the sailors. This was especially true for those who recruited sailors to the VOC. Like must hosts, they used runners, who intercepted newcomers to the city and persuaded them to stay in their particular inn. These newcomers were typically without a lot of funds, therefore quickly building up debt to the host when eating and drinking on credit. Fooled like this, these guests were kept under lock and key in the inn until the departure of the next VOC ship, when they were surrendered to the company, and the landlord would scoop up the advance money as compensation for the debt of the guests.

In 1780 there were about 200 sailors' inns in Amsterdam's port district, and of course there were also nice places among them: in 1778, every time she was in the city, the first mate Harmanus Kikkert had his wife Aagje live with him in Miss Tinks's guesthouse on the corner of Hasselaersteeg and Texel Kade, and in 1756, the hostess Liesbeth Potter in Zwarte Bijlsteeg looked after the common sailor Boele Pieters, who had fallen ill during a winter storm and wrote home to his wife that she did not have to worry about her husband. Many sailors had a homely and confidential relationship with their slaapbaaz. Bruijn tells of a sailor who appointed his host as heir, and another who made the host the guardian of his children.[614] In addition to offering food and lodging, a slaapbaaz could also help sailors navigate the

613 Hell, Maarten. Amsterdam City Archives, Archive nr. 5061 (Judicial Archives), inv. nr. 719, rekest nr. 6.
614 Bruijn 2016, 31, 32, 35.

big city, act as an interpreter between them and a foreign skipper, and otherwise prepare them for their duties on board.[615] The inn could also serve as a post office, and a friendly host forwarded mail, if the sailor's ship, lay waiting for fair wind under Texel, or he could act as an intermediary when sailors wanted to sell exotica brought from distant lands. This could be tea, porcelain, turtle shells, Spanish embroidery, live monkeys, parrots and ostrich eggs, and the host would sell these through his own connections and trade relations.[616] A slaapbaaz was probably often the centre of a type of practice community based on the everyday life of sailors ashore in Amsterdam. This practice community was made up of veterans, old clients who had stayed with him many times and knew the routines of the inn, neighbourhoods, local gossip, slang and language, and young, newly arrived sailors who, as peripheral legitimate participants in these practice communities through observing veterans and attending the daily routines, slowly incorporated the characteristics of the community. An objectification was also constructed in these sailors' inns. This was a manifestation of this particular community of practice: the distinctive character of the inn with its nooks and crannies, slang and intimate knowledge of the place and the neighbourhood, the special manners in the inn and in the community, as well as objects that mattered; for example, the aforementioned exotica that the sailors had brought from distant destinations.[617]

6.2.2 The conditions in the inns

Usually richly decorated signs hung from the facade with the name of the inn and perhaps an allegory of this, telling of the excellence of the place.[618] The actual layout of an inn is documented in the settlements of bankruptcies in 1787, when a number of slaapbazen were ruined in the absence of guests: Michiel Lippe and his wife Catharina Smising ran a sailor's inn in Ridderstraat in the eastern port area of Amsterdam, and in the inventory, we can read that in the front room they had a counter with wash basins and beer mugs and a chessboard for entertainment. In an adjoining room were two tables and four chairs, and from a buffet in the corner, guests helped themselves to coffee, and the open fireplace allowed for cooking. In a small side room, guests could sleep in a bed or on a bench. From another inn, where the landlord and his wife also went bankrupt in 1787, we know that in the front room there were beer mugs and glasses, but also curtains, two paintings, and a cage with five canary birds, two ostrich eggs and a chessboard, and also the sailors' coffins. In an adjoining room there were chairs and a gaming table, an alcove with damask curtains, a walnut cupboard and a full set of chocolate cups, bowls, a milk jug and a punch bowl. In the back room, guests slept on three beds. Elsewhere, conditions were somewhat more primitive, with dormitories with sailors' hammocks and with very simple catering. However, the German VOC sailor Georg Naporra was very pleased with the conditions in the inn *Bucht van Embden*, where he lived in 1752. Here were good beds and the food was plentiful: breakfast consisted of coffee and wheat bread with cheese, and at lunch two courses were served with beer, just as you could enjoy a cup of tea in the afternoon. In the evening, the menu consisted of fish with vegetable stew with boiled eggs and wheat bread on the side, and cold or warm whole milk as a beverage.[619]

615 Hell 2017, 162.
616 Hell 2017, 162, 163.
617 Lave & Wenger 2003, 53.
618 Lennep, J van & J. Ter Gouw 1868.
619 Hell 2017, 162, 164.

Fig. 6.2. Streetsign for the inn *D'Haringbuys.* Rijksmuseum, SK-C-1582.

6.2.3 The location of the Scandinavian sailors' inns

Out of the 2404 Scandinavian sailors registered in 1780 in the Waterschout Archive, 1821 were associated with a 'Slaapbaz'. 1403 of these also lived in a sailors' inn with a name, so that in these cases we know both the 'slaapbaz' and the name of the inn, as well as the address of the place. 178 inns with Scandinavian sailors have been registered, all of which were located close to the harbour along the entire Amsterdam waterfront. West of Damrak there were 47 inns, between Damrak and Gelderse Kade there were another 48 and from Gelderse Kade and east we find the last 81 inns.

The inns of the Scandinavian sailors were located very close together: in Zeedijk there were 19 inns, in Ridderstraat there were 25, in Jonkerstraat 16 and in Recht Boomsloot there were 12 inns. In Rapenburg there were also 10 inns. Erika Kuijpers has shown that a consequence of the chain migration to Amsterdam was that migrants from a given area settled in the same neighbourhoods in the city. The urban expansion to the east in 1658, which created the artificial islands of Rapenburg, Kattenburg and Oostenburg, coincided with the first major wave of migration from Scandinavia, which resulted in this group being particularly strongly represented here. The characteristic of Rapenburg was that it was cheap to live here, which also applied to other neighbourhoods close to the harbour,

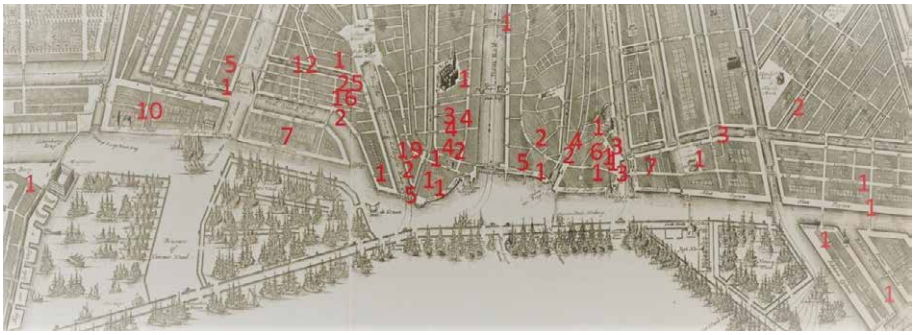


Fig. 6.3. Map of the Amsterdam port area with the number of Scandinavian sailors' inns for each street. Note that south is up in the map. GAS, waterschoutarchive 1772, 1780 and 1787.

Fig. 6.4. Ridderstraat in 1902. Foto by Jacob Olie, 1834 – 1905. Amsterdam Stadsarchief. 10019A000336.

such as the inner city around Oude- and Nieuwe Zijde, the Lastage district and Uilenburg.[620] It is therefore not strange that we find most of the inns where the Scandinavian sailors lived in the eastern part of the harbour. With such a short distance between the individual inns, one must assume that in these streets there was a great deal of knowledge of what was going on and who lived where, and there must undoubtedly have been contacts

620 Kuijpers 2005, 173.

Fig. 6.5. Map of the Amsterdam port area with the number of Dutch sailors' inns for each street. Note that south is up in the map. GAS, waterschoutarchive 1772, 1780 and 1787.

among the seafarers themselves and between the seafarers and residents in the area. All these people in such a port district were also part of a practice community.

6.2.4 The location of the Dutch sailors' inns

By using information from the survey of all sailors from the first half of 1780, it is also possible to find out where some of the Dutch sailors lived in Amsterdam. For 770 of the registered Dutch sailors a person was registered as guarantor for the sailor and I presume his was also the seaman's residence in Amsterdam. The map below shows the location of the Dutch seafarers' residence in the city.

It is immediately evident that the Dutch sailors were not as closely linked to the harbour area as their Scandinavian colleagues, with some of them having addresses that were further inland. Especially interesting are the 10 addresses in the Kromelleboogsteeg just behind the Town Hall, which consisted of among others the inns *Swarte Pard, Eyland Schermanderkog* and *Coofmans Welvaren.* The fact that sailors also lived some distance away from the waterfront is also documented with the addresses in Kapelsteeg close to Rokin, where we find the inn *Zeemans Welwaaren,* in addition to *Witte Swan, Wapen van Makkum and Orangewoudt*. The Dutch sailors can also be linked to the Jordan area, where we find only 2 inns visited by Scandinavian sailors. Here we find 15 addresses, including 5 in Angeliergracht; including the inns *Prince Enginius*, *De Hoop* and 5 in Angelierstraat with the inns *Cromhout, Meslars Bas, and Molehoogberg*.

In contrast to the Scandinavian seamen who lived in especially the eastern and central parts of the port area, the Dutch sailors seem to have preferred inns in the central and western parts of the port. In the centre just east across Damrak, we find a concentration of addresses, with the already known area of Zeedijk with 11 addresses (the inns *Groenlandse Vissery, Sweed en Deens Flag, De son en de Maan, Swedish Kronen and Stadt Flensburg*), 3 in Warmoesstraat with the inn *King van Candiah*, and Engelsesteeg with eight addresses (the inns *Stad Koningsberg, Stad Munster, Wapen van Vriesland, Westerstroom and 5 Matrosen*).

6.2.5 Networks based on origin or personal relations

Of the 169 registered sailors' inns in 1780 that were visited by Scandinavian sailors, 75 or 42.6 percent were named after a location in Denmark-Norway and the duchies, such as: *Stad Balm, Domkerk van Bergen, Casteel van Waarberg* and *Domkerk van Christianzand,* and it seems that these place names reflect the core areas from which the Scandinavian sailors came. This also applies to the survey in 1772, where we find, for example, *Stad Tondren, Riesemoor and Graaf van der Rip*, and for the survey in 1787, with inns with references to exact locations, for example; *Stad Arendal, Kerk van Ryp and Stad Sunderborg.* Seven inns with regional names have also been registered, for example: *Wapen van Holstyn, Wapen van Norwegen* and 9.5 percent of all inns had names referring to nationality: *Sweedse Vlag*, *Dense Welvard*, *Engelse Vlag*, *Deense en Hollandse Vlag* and *Sweedse en Deense Vlag*. It seems obvious that the intention of the names was to attract sailors from the respective nations or locations, and it also seems that this was sometimes what happened. For example, 25 men from Föhr and two from Nordmarsh lived in Arnold Wiegman's *Yland Feur en Zilt* on Zeedyk, although the host himself came from Bremen;[621] in *Stad Emmerlif* 17 out of the 33 guests came from Emmerlev (south of modern-day Esbjerg); and in *Noordse Boer* 28 of the 30 guests were Norwegians. Thus, in 35 or 46 percent of the 75 inns that had geographical names, more than half of the guests came from the same hometown or originated from the same larger regional area.

Conversely, the Dutch historian Maarten Hell has shown that the name of the inn did not necessarily mean that this was a place only for sailors from that area, but that it was the origin of the landlord that mattered. Thus, in the guestlist from *Gekroond Bergen Norwegen* from 1660 Maarten Hell did not find Norwegian seamen, but many Scots and Englishmen, which was probably related to the fact that the host was Robert Moody from the Orkney Islands, while not many Frenchmen lived in the *Schild van Frankrijk* on Zeedijk, but instead sailors from Ostend, Nieuwport, Hamburg and Sweden.[622] This phenomenon can also be found among the sailors in the Waterschout Archive, for example with Dirk Ostroom (obviously a Swede), who lived in Swartebylsteeg in an unnamed inn, and where 11 of his 12 guests in 1780 came from Sweden or with Booy Carstensz Plet in *Gekronde/ Danish Lars*, a man from Emmerlev who in 1780 had three guests, all from Emmerlev.[623] In some cases, however, there was a connection between the name of the inn and the origin of the landlord. For example, Casper Nielsens in *Frederikshaven* in Oude Schipperstrat, where three men from Frederikshavn (Northern Jutland) had settled, and where the marriage register in Amsterdam reveals that Casper Nielsen actually came from here[624] or at Christoffel Michielz in *Casteel van Bornholm* in Haantje Hoek, who according to the marriage register originated from Bornholm and as a 30-year-old married the widow of a man from that Baltic Island.[625]

---

621 https://archief.amsterdam/indexen/ondertrouwregisters_1565-1811/zoek/query.nl.pl?i1=1&a1=Wiegman&x=20&z=a#A23142000118. 28/1 2019.

622 Hell 2017, 159.

623 SAA. Ondertrouwregisters 1565 -1811. 1775.

624 https://archief.amsterdam/indexen/ondertrouwregisters_1565-1811/zoek/query.nl.pl?i1=1&a1=Nielsen&x=20&z=a#A26302000019. 28/1 2019.

625 SAA. Ondertrouwregisters 1565 -1811. 1760.

6.2.6 Social Network Analysis

In order to get a better understanding of the social relations that may have existed between the Scandinavian seamen, a so-called Social Network Analysis (SNA) of data from the survey in the Waterschout Archive has been carried out; more specifically the data entered in Excel about Scandinavian seamen, found in the Waterschout Archive for the years 1772, 1780 and 1787. The questions asked are: Who lived with whom, and who sailed with whom? By whom is understood, sailors from a known location found in the Waterschout Archive, *e.g.* Ballum, Bergen or Karlskrona. Graph theory, which is a mathematical method that studies pair-relationship between objects or entities, uses two rows of such objects as variables (the pairs), and then counts the number of times a variable shares a relationship with another variable. For each variable that exists, the number of relationships with the other variables is shown. This can best be illustrated by a graph where the individual variables are represented by a point (a node) and their relationships with lines (edges). For the question 'Who lived with whom?' the variable 'host' (the hosts with whom the sailors lived in Amsterdam) and the variable 'place of origin' (the registered place of origin of the sailors), and for the question 'who sailed with whom?' 'place of origin' is used as the one variable and 'ships' (the registered voyages which the seamen undertook) as the other. The resulting graphs provide a clear answer to the questions asked, which could not be answered by reviewing the large amounts of data, and thus help to provide a better insight into the social relations of the Scandinavian sailors.

6.2.7 With whom did the sailors live in Amsterdam?

The graph shows the relationship between the variable's 'origin' and 'host'. Here, each place of origin is represented by name and a coloured dot (node), and these relationships with seamen with another origin are marked by a line (edge) representing 10 or more such relationships. Seamen from a given location with many edges thus lived with many seamen from many other locations, and those with few edges stayed more among people from their own place of origin. As can be seen, Ballum with 13 edges has many relationships, which is also the case for Tønder – 12 edges, Lister – 11 edges (Lista from group 8), Copenhagen – 10 edges, and Stockholm – 9 edges, while Lindeness with two edges had few relationships, which was the case also for Egernsund – two edges, Bornholm – two edges, Flensburg – two edges and Skærbæk – three edges. The average number of edges is 6.2, and oddly enough we find seamen from Föhr, Drammen, Kristiansand, Kalmar, Höjer and Gothenburg (six edges) with approximately that number of relations.

It is reasonable to assume that sailors who lived in inns with sailors from many other locations had stronger networks across the group of Scandinavian seamen and thus were part of practice communities where regional affiliation was not so important, while the groups of sailors who lived in more isolated communities were not similarly exposed to the influence of sailors from other parts of Scandinavia. The sailors who had a number of relations close to the average, on the one hand, had some contact with seamen from elsewhere, but at the same time to a certain extent also kept among their own kind. These practice communities must have been based more on local or regional common features.

It is not surprising that in the group with many relations we find Ballum and Tønder, locations which contributed large groups of seamen from southwest Jutland and the Wadden Sea, but at the same time we see that Föhr, from which the largest contingency of sailors came, only has an average number of relations, despite being so well represented.

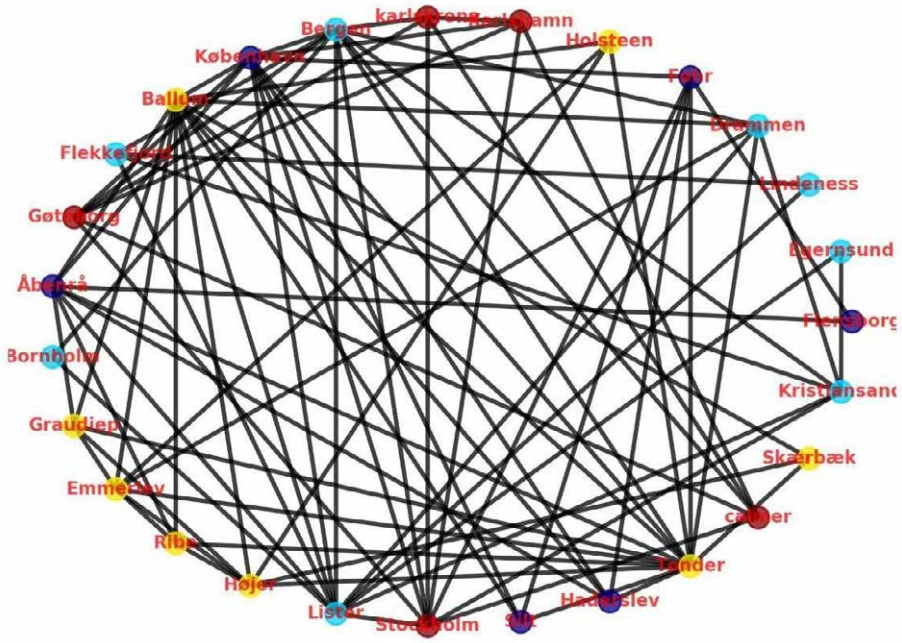


Fig. 6.6. Graph showing which sailors lived with whom in the sailors' inns in Amsterdam. The colour of the nodes has no significance. Developed with the help of Kristoffer Laigaard Nielbo. GAS, waterschoutarchive 1772, 1780 and 1787.

The answer to this must be that some of the Föhr sailors had a great interface to other sailors, while others were part of a very strong local community of practice where they kept to themselves. In the group with many relationships we also find sailors from the big cities of Copenhagen and Stockholm. Is this because these 'city sailors' were used to socialising with many different kinds of people? Conversely, it is striking that in the group of sailors who kept more to themselves, we find sailors from Lindeness and Egernsund, although other sailors from Southwest Norway (group 8; the sailors from Lista) are in the group with many relations.

Is this due to local conditions? And why is it that the sailors from Flensburg also kept to themselves, even though this city was at this time among the most important maritime cities in the Danish conglomerate state, with contacts to the whole world? Perhaps the explanation for why sailors from certain locations did not interact much with other Scandinavian seamen was that they were participants in practice communities where the bonds to a particular location were a crucial characteristic, which in Amsterdam resulted in a number of inns with strong relationships with that same location. The reason why seamen from Ballum and Föhr in the sailors' inns in Amsterdam had so many relationships must be that their numbers were so great, that they had to find places to live that were not directly oriented toward their home. For example, 30 men stayed in Jan Jantzens inn *Gekroonede Dens Houf* in Boomsloot in 1780: two were from Sweden and the rest a mixture from Denmark, Norway and the Wadden Sea, while in 1780 Amon Sweerus Cores of *De Haan en Swaan* in Brandewynssteeg had 13 guests, eight of whom came from the Wadden Sea, two from Norway and three from the rest of Denmark.

Thus, there are many examples in the Waterschout Archive of sailors from a particular area, large or small, gathering in special inns, and the reason must have been that they came to hear of these places via their network from home, from their locally based community of practice, or that the host himself came from the same location and was part of that local practice community. However, there were also many inns where the clientele was more mixed, although there was often an overweight of seamen from a particular area. There must therefore have also been practice communities where local affiliation was not so important. However, the trend is clear: preferably, people lived with people from their home town or region if possible.

6.2.8 With whom did they sail?

In the survey of Scandinavian seamen in the Waterschout Archive for 1780, the voyages on which the sailors embarked are divided into two groups: a group in which the Scandinavian sailors were primarily from a specific region, and a group in which the composition of the Scandinavian sailors was mixed. Of the first, 183 voyages were found and of the second 293.

If we look at the 183 voyages where the composition of the Scandinavian sailors (and thus not all sailors on board) was relatively uniform, there were eight journeys where more than 75 percent of the Scandinavian sailors were Norwegians, one voyage where there was a mixed Norwegian/Swedish crew, two voyages where the crew came from the Sound (group 5) and two voyages where the crew came from 'Holstyn', which as previously mentioned can mean both Schleswig and Holstein. On the rest, *i.e.* 170 voyages, more than 75 percent of the Scandinavian seamen came from the Wadden Sea area (group 1), a clear indication that sailors from this area tended to stick together more often than others, and that their locally founded practice community was very strong. When we consider the eight voyages with a strong Norwegian crew, this seems to be a trend, even if the material here is small. Of the 35 Norwegian seamen, 24 or 86 percent came from southwest Norway (group 8), eight of them from Egernsund and seven from Lista.

In the 170 journeys where more than 75 percent of the Scandinavian sailors came from the Wadden Sea (group 1), the composition of most crews is a mixture of sailors from different locations in the area. But there are also voyages where a single place stands out, especially Föhr, where 23 ships were manned almost exclusively with sailors from here. Thus, on 3 May 1780, *D'Juffvrouw Elisabeth* departed from Amsterdam to Memel (present-day Klaipeda in Lithuania) commanded by Nanning Teunis Visser with a crew of 11 men, all of whom came from Föhr, and 2 days later, on 5 May, *De Goede Saak* departed for Archangelsk with six men of the 11-man crew coming from Föhr, and one from Höjer and one from Ballum. But sailors from other Wadden Sea locations could also sail together. For example, on board *D'Vrihyt*, where five out of eight men came from Sylt, on *D'Johanna Suzanna*, where four out of five Wadden Sea sailors came from Ballum, or on *De drie Gesusters*, where four out of five sailors came from Oland.

6.2.9 Skippers' network

For some of these voyages, the common denominator of a group of sailors appears to be the skipper. In the case of *D'Vrihyt*, it turns out that skipper Thys Hansz also came from Sylt, and aboard *D'Hersteller* three crew members came from Föhr and two from Sylt with the skipper Symon Booysen Smit, presumably also from Sylt, according to the

website 'Skippere.dk' (a combination of data from the Copenhagen skipper's guild, the Copenhagen Waterschout Register, the diary of the director of the Copenhagen skipper's guild, the Sound Toll Register, citizenship protocols, etc.), which mentions a Boy Boysen Smit and a Peter Boysen Smit, both from Sylt.[626] A quick review of the 170 voyages with predominantly Wadden Sea crew, results in 44 skippers whose names sound unmistakably of Wadden Sea origin: Haye Broers, Fedde Paulsen, Mattys Hansen, Brothers Hendriks de Jong, Pieter Nicolaaasen, Nanning Nanningsz and more.

583 sailors are registered in the Waterschout Archive for 1780 without a guarantor and therefore without an inn or an address in Amsterdam. The skipper in question must have relied on these sailors to such a degree that they did not need a guarantor, and the reason for this may well have been that they knew each other from home and hence could rely on each other. For 50 of the 583 men, we are told that they were hired 'Anboord' and not through a broker or slaapbaaz ashore. It is likely that these sailors were already on board from a previous voyage, but since the rule in Dutch shipping was that a recruitment was for one voyage only, these sailors had to be registered in the muster roll as recruited in the city.[627] A good example is the ship *Amalia Christiana* commanded by Captain Christian Janssen Jordt, who on 3 November 1780 recruited ten men who had clearly been on board from Copenhagen, because three of them claimed to come from this city, two from Dragør, four from Lolland and one from Møen. The next voyage for *Amalia Christiana* was to Copenhagen under the Danish flag. Another example is *De Drie Susters*, also under the Danish flag, which was going to Lisbon. Here eight men were recruited, and of these three came from Copenhagen, one from Dragør, three from 'Seeland', one from Föhr and one from Ballum. There is a total of four vessels in this category.

Therefore, some sailors found a berth without the use of a slaapbaaz. For example, the mate Andries Andriesen from 'Holstyn' who on 29 August 1780 signed onto the *King David* for a voyage to Curacao or the boatswain Govert Adriansen from Lista in Norway, who on 8 June of that year signed onto *De Vigelantie* for a voyage to Barcelona. The vast majority of sailors in this category, however, must have had the aforementioned acquaintance with the skipper from home or at least felt a special attachment to him based on a common regional background, and it is obvious to say that they belonged to the same practice community based on a common origin. This is especially true for the Wadden Sea sailors. Of the 583 seamen without slaapbaaz, 448 came from the Wadden Sea area, and of these, 321 came more specifically from the Wadden Islands: Oland – 30 men, Fanø – 4, Föhr – 132 men, Gröde – 16, Hooge – 66, Langeness – 23, Nordmarsch – 16, Sylt – 29 and Rømø – 5 men. The names of the skippers are clearly characteristic of this area: Banke Hansen on *De Vrouw Maria Margaretha* with three men from Föhr and three from Hooge on board, Tade Volkertsz on *D'Vriendschap* with seven crew members from Gröde, Fedde Paulsen on *Steenberg* with five crew members from 'Holstien', and Broer Hendriks on *De Goede verwagting* with eight crew members from Hooge.

The characteristic of these skippers was that they mainly sailed on what might be called 'near coastal voyages`. In other words, relatively short voyages to Britain, the Netherlands, Norway, Denmark and the Baltic States. Thus, Banke Hansen was to sail to Aalborg, Tade Volkertsz to Tememel (present Klaipeda in Lithuania), and both Fedde Paulsen and Broer

626 http://skippere.dk/index.php?site=action. 28/1 2019.
627 Bruijn 2016, 32.

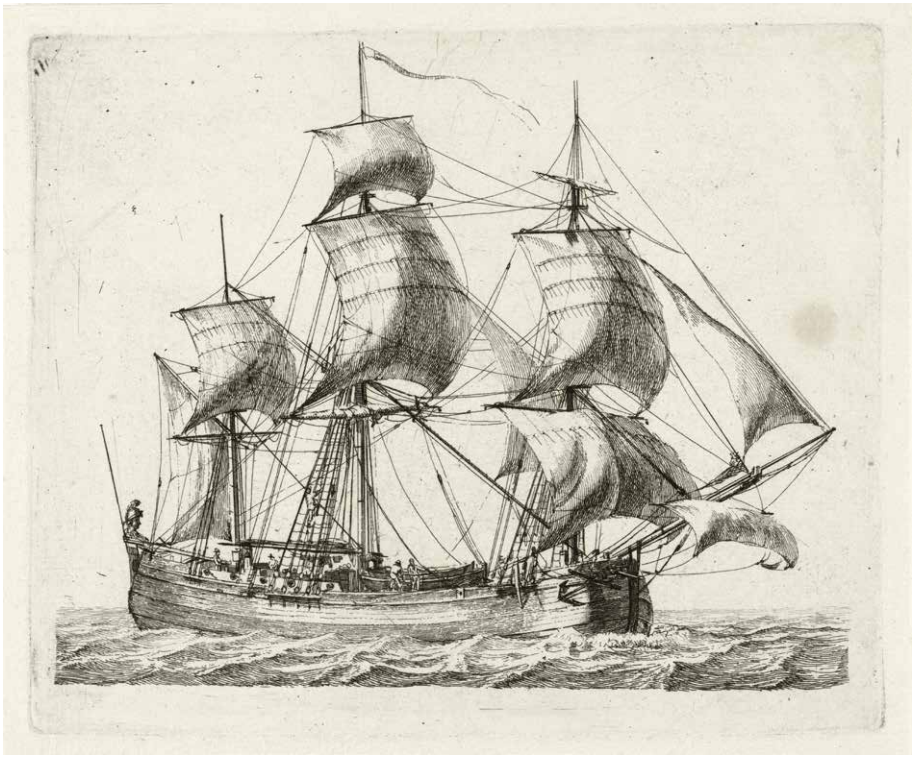


Fig. 6.7. A three-masted ship with the wind in the sails, by Gerrit Groenewegen, 1789. Rijksmuseum. RP-P-OB-55-956.

Hendriks were to sail to Drammen in Norway. Out of the 583 seamen without a slaapbaz, 347 or 60 percent thus sailed in near coastal areas, which for the 448 seamen from the Wadden Sea area, was about 67 percent. Thus, it seems that the sailors from the Wadden Sea, through their membership of local practice communities, had the opportunity to sail with a skipper they knew from home and therefore did not have to participate in the competition on the maritime labour market in Amsterdam. Presumably, during the winter, wages were agreed on and the men could go directly aboard the vessel in Amsterdam, unless the entire crew was actually travelling together from their home base.

If you look at the 236 sailors without a slaapbaz from the Wadden Sea area who did not sail on near coastal voyages, you find a group engaged in European shipping, primarily to the Mediterranean countries and the Iberian Peninsula. The group makes up about half of the 236 men, *i.e.* 108 men or 45 percent. The typical destinations were: Livorno, Cadiz, Lisbon and Genoa. In this group, however, we also find sailors who probably knew their skipper. For example: Ikke Bondje, who took the *Minerva* under Danish colours to Cadiz with two sailors from Sylt and one from Föhr on board, Nanning Jansze who sailed with *De Ridder* to Lisbon with two men from Amrum, and Nicolaas Roelffs who sailed *Elisabeth Chatrina* first to Memel and then to Livorno with six men, four of whom came from Föhr. A small group of the Wadden Sea sailors signed on for long voyages: 81 men or 34 percent of the 236 men sailed to the Dutch possessions in South America and the Caribbean, just as there was a single sailor who sailed on a slave ship to West Africa. In these international

trades, there are at least 29 sailors from the Wadden Sea who must have known each other: *Snelle Seylder* commanded by Captain Pieter Hansen Leeuw was bond for Suriname, and on 20 May he took on five men from Sylt out of a crew of seven. Three of these were respectively the first and second mates and the boatswain; Pieter Hansen Leeuw himself also came from Sylt according to the Sound Toll Registers.[628]

The same pattern can be seen on *D'Geertruy Margaretha* commanded by Captain Meyndert Reynderts, who on 2 June 1780 took on four sailors from Sylt and one from Föhr for a trip to Curacao. Here we also see that the first and second mates and, in this case, the junior shipwright came from Sylt, while his senior came from Föhr. The crew consisted of a total of 11 men. Another example is the *Veel Sigt* bound for Curacao and commanded by Captain Cornelis Pieters. On 4 September, out of a crew of 13 men, he enlisted four men from Föhr; the first and second mates, the boatswain and a sailor respectively.

A special group of Wadden Sea sailors sailed on whalers out of Amsterdam and among the aforementioned 236 deepwater sailors we also find them: the best example is the whaler *Jan Joachim* commanded by Captain Adriaan Adriaansz Nannings. On 4 April 1780, he enlisted 15 sailors from Föhr and two from Dagebüll out of a crew of 27 men. Among the Föhr sailors we find the first mate, the third mate, the important specksnuyder and his assistant, the three harpooners and the cook and his helper. These people were traditionally recruited during the winter and many had probably been sailing together for many years.

6.2.10 Networks based on the sailors' inns

As shown earlier, there were sailors' inns in Amsterdam whose clientele mainly came from a particular area, and since their host, the slaapbaaz, also acted as a job agent, it is likely that his guests also sailed together. This phenomenon has been found among the 183 journeys with Scandinavian crews primarily from a particular region; on *Het Wapen van Hindelopen* commanded by Nolke Lammers, there were a total of ten crew members, three of whom came from Föhr, and their common denominator was the in *Yland Veur en Zilt* on Zeedijk. On board the *Handels Lust* commanded by Jan Hendrik de Ruge, there was a crew of seven, with two men from Ringkøbing, both of whom had stayed in the inn *Deense Welvard* in Ridderstraat. And on *De Eendragt* commanded by Dirk de Ruyter, two out of eight crew members came from Amrum and had stayed in the inn *Fortuyn* on Zeedijk.

Turning to the aforementioned 293 voyages in 1780, where the composition of the Scandinavian sailors was mixed (mentioned in the section 'With whom did they sail?'), the connection to a common inn seems to be the unifying factor, such as in the case of *Juffvrouw Clara en Lurentia* commanded by Hendrik Havinga on a trip to Curacao. Here four sailors came from Stockholm, and they had all lived in the *Sweedse Vlag* in Hasselarsteeg, owned by Jonas Malm. Often sailors from a special area travelled together in pairs. An example is the case of Teunis Roelofsz and Gabriel Jacobsen, who came from Lista in Southwest Norway and on 27 June 1780 signed on for a voyage to Lisbon on *De vrouw Anna Anthonella Helena* commanded by Jan de Boer. These two sailors had lived at *Gekronde Hoff van Denmark* in Ridderstraat. Or Abraham and Hans Holgersen from Lindeness (brothers?), who on 20 May 1780 signed on to the aforementioned *Snelle Seylder* commanded by Pieter Hansen Leuw, and who had lived at *Vergulde Morgenstar* in

628 http://skippere.dk/index.php?site=relation5&&var=1034. 28/1 2019.

Ridderstraat. In other cases, it seems that the hosts in the same street worked together to provide crew members for a voyage.

In the case of the ship *Oude Naaden*, which left for Curacao in May 1780, seven of the 14 Scandinavian seamen had lived in Boomsloot, but in five different inns, and when in August the *Neptheunis* also departed for Curacao, four of the six Scandinavian sailors came from inns in Ridderstraat: two men stayed with Christian Pietersz in *Voerteyn* and two others with Magiel Mulder in *Gekronde Hoff van Denmark*. Finally, we have *De Vrienden*, which departed for St. Eustacius in June 1780 and where three of the five Scandinavian sailors had stayed in Foelidwarstraat, but in three different inns.

6.2.11 With whom did they sail based on SNA-analysis

Social Networks Analysis can help provide a visual perspective on which sailors sailed with whom, regardless of the community of practice they shared; whether they came on board from the same inn, knew the skipper or were chosen by the skipper because they shared a regional background with him. The graph shows the origin of the sailors marked with a coloured dot (node) and their relationships to the sailors of other origins, which are marked with a line (edge). In this case, an edge represents 20 or more such relationships.

The top scorer among the Scandinavian seamen are obviously the seamen from Föhr, with 26 such edges and who thus sailed with almost all the other sites (28 in total). The second most represented place is Stockholm with 17 edges and then Lister (Lista) with 16 edges, Emmerlev with nine edges, Grådyb, Karlshamn and Bergen with eight edges, and Kristiansand with seven edges. In the middle group around the average relation of 5.8 we find Sylt, Höjer, and Gothenburg with 6 edges and Haderslev and Kalmar with five edges. Among seamen with few relationships, we find in the bottom the sailors from the halligs: Oland, Hooge, Gröde and Langeness, all of which have only one edge (between 20 and 40 relations) to Föhr and thus only sailed with seamen from their own hallig or with seamen from Föhr. The same goes for the sailors from Ribe and Skærbæk. The seamen from these places must have been members of a very strong, locally based community of practice, which only opened up for contact with Föhr seamen. The exception that confirms the rule is the sailors from Karlskrona, who also had just one relation, but who came from a completely different area. They only sailed with sailors from Stockholm or from home, which is unusual among Swedish sailors. Does this represent the contours of a practice community based on affiliation with the Swedish Royal Navy, as both Karlskrona and Stockholm were Swedish naval bases?[629]

In the group of sailors who had more than one, but under 5.8 relationships, we find Flensburg and Flekkefjord with 2 edges, Tønder and Copenhagen with 3 edges and Egernsund and Aalborg with 4 edges. In the case of the Flensburg sailors, it is interesting that, in addition to sailing with each other, they only sailed with sailors from Föhr and Stockholm and thus not sailors from Norway, Copenhagen or the rest of Denmark, while the sailors from Flekkefjord sailed with sailors from Lista (and thus with sailors from their own group) and again with sailors from Föhr, but not with sailors from other parts of Norway, Denmark and Sweden. For the Flensburg seafarers, we see the same tendency to singularity in their choice of shipmates. Here, as in the other cases, it seems that these networks/practice communities were quite closed and directed in a particular direction, whereas in the case of Tønder and Copenhagen we see a spread in the participation

629 Linderoth 2018, 76.

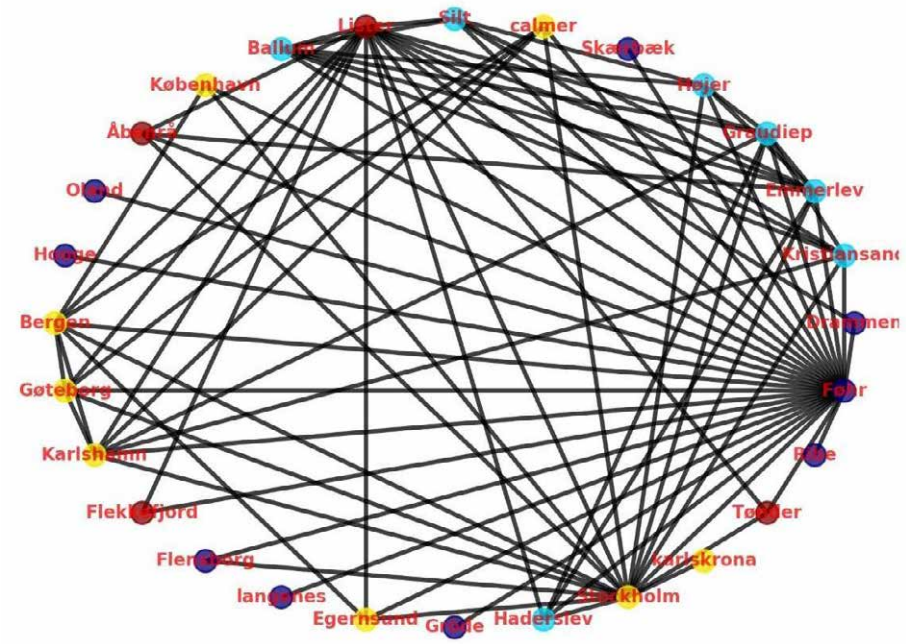


Fig. 6.8. Graph showing which Scandinavian sailors sailed with whom in Amsterdam shipping. The colour of the nodes has no importance. Developed with the help of Kristoffer Laigaard Nielbo. GAS, waterschoutarchive 1772, 1780 and 1787.

on board with other Scandinavian sailors. The sailors from Tønder sailed with seamen from Stockholm, Lista and Föhr and were therefore quite open to contact with others, while the sailors from Copenhagen sailed together with sailors from the large maritime communities Bergen, Stockholm and Föhr.

The Aalborg sailors sailed together with colleagues from Lista on the other side of the Skagerrak and with sailors from Emmerlev, Föhr and Stockholm, and sailors from Egernsund sailed with sailors from Bergen and Lista, Stockholm and Föhr. The sailors from Kalmar and Drammen had only one relation to Denmark or the Duchies (Föhr), while the remaining relationships were to sailors from Norway or Sweden. In other words, it seems that there were some practice communities that included different sailors from some locations, but excluded others. If contact with the Föhr seafarers is taken out of the equation in the case of Kalmar, Drammen, Flensburg, Flekkefjord, Ribe, Skærbæk and the halligs, we see a number of maritime communities whose members either only sailed with their own or with their own and then sailors from a single other place, which indicates highly closed networks/ exclusive practice communities. Here the Föhr sailors were the only openings to the broader Scandinavian maritime community. Conversely, with places with many relationships (Föhr, Stockholm, Lista, Emmerlev, Grådyb, Karlshamn, Bergen and Kristiansand) we see very large and open networks (inclusive practice communities), where impulses from many places could exert influence. These locations must therefore be considered important in the spread of Dutch maritime culture.

6.2.12 Dutch and German sailors

Since my research in the Waterschout Archive for the three years has been aimed at Scandinavian sailors, it is not possible from these results to analyse which other nationalities they sailed with. However, I have also registered all sailors who shipped out of Amsterdam in the first half of 1780 and in this survey, it is possible to see with whom the Scandinavian sailors sailed when not everyone in the crew was from Scandinavia. In total, for the first half of 1780, 6286 sailors were registered, of which Dutch seamen accounted for 35 percent and seamen from the West German coast for 34 percent; so it is these two large groups of sailors that the Scandinavian seamen probably sailed together with besides sailing with people from home.[630] By examining 609 ship departures recorded in the first half of 1780, it turns out that the vast majority had Dutch sailors on board; usually the mate and the highest ranking petty officers. This phenomenon can be observed with 561 or 92 percent of the 609 departures, showing that in most cases, the Scandinavian sailors had contact with Dutch seamen. On 20 ships (3.3 percent of all departures) the crew was exclusively from the Danish conglomerate state. On 15 other ships (2.5 percent of all departures), the crew consisted of Germans only and on 53 ships (8.7 percent of all departures) the crew was a mixture of Scandinavians and Germans, but no Dutchmen.

There is nothing to suggest that these characteristics of Amsterdam shipping in the first half of 1780 should be exclusive for just this period and one can therefore assume that this was the norm. So, it seems that it was common for ships from Amsterdam to have a Dutch core crew consisting of the skipper, the mate and the main petty officers; these people would have been the veterans of the Dutch maritime practice communities that existed. In this context, the Scandinavian seamen were initially peripheral-legitimate participants and through participation in the practice community's activities (working on board the ship), they gradually acquired the distinctive character of the Dutch maritime practice community, just as they added features to this. The result of this process was that everyone in the practice community slowly changed identity and acquired physical, linguistic, symbolic and social artefacts that characterised the practice community; in this case Dutch maritime technology, knowledge, language and everyday practice.

6.3 Conclusion on Scandinavian sailors' network in the shipping industry of Amsterdam

Through analysis of the autobiography of the Wadden sea sailor, Jens Jacob Eschels, together with analysis of the sailpattern of Scandinavian sailors found in the my Waterschout research it has been possible to calculate average ships speed in various Amsterdam traderutes and from this make an educated guess on the time the sailors spend aboard the ships and the time spent ashore in Amsterdam. It has thus been estemated that there was a large variety in shipboard time in the different trades and that average time spent ashore for the Scandinavian sailors was between one and two months, before embarking on another voyage.

In 1780 there was approximately 200 inns in Amsterdam and through the aforementioned Waterschout reseach I have been able to find Scandinavian sailors in 169 of them. In these sailor`s inns the men could live and relax between voages, but also form important links with fellow sailors, not only from home, but also with sailors from other parts of Scandinavia, as it has turn out, that the Scandinavian sailors mostly kept to themselfs in Amsterdam.

630 GAS: 38 Waterschout. 1-152 Monsterrollen of zeebrieven17471852. 1780 januari-april, 1780 mei-juli.

It has become clear that the Scandinavian sailors benefited from an extensive network of local or regional background when seeking a berth or a place to live in Amsterdam, and it is through these networks that it was possible for them to enter the practice communities based on Dutch maritime practice. When finding an inn, the Scandinavian sailor used the membership of his local practice community based on personal contacts, and it was especially in the eastern part of Amsterdam's port area that such Scandinavian sailors' inns existed. On the other hand, it seems that the Dutch sailors tended to avoid the eastern part of the Amsterdam portarea and stayed in inns in the central or Western part.

The landlord or `slaapbaz`as he was called in Dutch was often a former sailor himself, or his inn was preferred by sailors from a particular location. It was most often the host who secured a berth on a ship for the sailor, and he was therefore a key player in the practice communities that bridged the gap between the home area and international Dutch shipping. Some sailors stayed at inns where the clientele was composed of men from across Scandinavia, which was the case for sailors from Föhr, Stockholm and Lister in Norway and this indicates that there was a mix of Dutch maritime knowledge, technology and practice with maritime traditions from all over Scandinavia. In other cases, the clientele came from a particular local or regional area (the small islands (halligs) of the Waddeen sea area), which is why the practice communities that prevailed here must have been even more marked by the Dutch in the absence of other Scandinavians.

As mentioned above, it was the innkeeper who in most cases found a ship for the Scandinavian sailor, but in 1780 out of a total of 2404 sailors, 583 men was found, who did not have any affiliation with such a person. These sailors most likely knew their skipper and 76 percent of them came not surprisingly from the Wadden sea area in Sleswig-Holstein. However, the vast majority of Scandinavian sailors (over 75 percent) sailed on ships, where the core crew was Dutch, consisting of skipper, mate and one or two petty officers. It was these individuals who formed the centre of the on-board practice community, and through participation in this, the Scandinavian seamen slowly changed their identity and adopted the Dutch maritime way of life, language, knowledge and experience.

7

Conclusion

In the introduction to this dissertation, I asked a number of questions about the contacts between the Netherlands and the realms of the Danish king in the early modern period, which can be summarised in an overall question: *'Did a transfer of maritime technology, knowledge and practice take place from the Netherlands to the realms of the Danish king in the early modern period? How did this transfer take place, and what consequences did it have for the development of the shipping industry in the Danish conglomerate state?'*

To the first part of the question, the answer is a resounding yes! Alone the presence of Dutch maritime words in the Danish language is proof of this. In the introduction, I explained how a modern day Dutch sailor understood modern Danish maritime terms, and in the maritime dictionary of the Leiden schoolmaster Wigardus a'Winschooten from 1681, I found 744 words out of a total of 4000 Dutch maritime words (or words that have a connection to the maritime world), which are also found in the Scandinavian maritime vocabulary.[631] The Danish historian, Ole Mortensøn, stated that there are more than 1000 nautical expressions in Danish that originate in the Dutch language, and although he does not further explain whether some of these may have originated in the Hanseatic era, his argument for the extensive spread of Dutch in the 17th century is important, when he points out that Dutch was so common in Denmark-Norway that the ordinance of the navy sailloft at Bremerholm in Copenhagen from 17 March 1623 was written in Dutch.[632] The sections on language and identity show how Scandinavian sailors and shipbuilders had to learn Dutch in order to become part of various Dutch maritime practice communities through participation and one of the ways in which this could happen was to learn to speak the Dutch maritime language. Therefore, I presume that Dutch, perhaps a kind of hybrid Dutch with Nordic elements, was spoken as a specialised language on board the large Scandinavian sailing ships in the 17th and 18th centuries, in the same way as German was the craftsman's and soldier's professional language during this period.

631 Beelen, Biesheuvel & van der Sijs 2011, 11.
632 Mortensøn 1995, 52.

7.1 How did the maritime communities in the Danish conglomerate state incorporate Dutch maritime technology, knowledge and practice?

In this dissertation, four main areas have been highlighted:

7.1.1 Dutch experts recruited to the realms of the Danish king

It appears that King John already recruited Dutch shipbuilders to strengthen his navy in the 15th century, but it is during the reign of Frederik II that this policy was seriously developed, so that during his reign the Danish-Norwegian navy was modernised and established a tradition of Dutch shipbuilding at the naval yard, the Holmen. Although Christian IV preferred English and Scottish master shipbuilders, during his reign there was still a Dutch influence in naval shipbuilding, but it is during the reign of Christian V that Dutch shipbuilders, equipage masters and shipwrights exerted their biggest influence. The new Dutch construction methods were spread from Holmen to the rest of the realm through the annual conscription of shipwrights from the provinces, and the results can be seen in the development of the merchant fleets in the Danish conglomerate state.

By the end of the 16th century, most Danish merchant vessels were quite small, sailing only on domestic voyages and to Norway or the German cities on the southern shores of the Baltic Sea. The larger cities had some contact with the Netherlands, but otherwise no foreign trade of their own. However, it is during this same period that Frederik II recruited shipbuilders in the Netherlands, and over the following decades the number and size of vessels in the Danish-Norwegian merchant fleet grew, which cannot be a coincidence. The wars in the middle of the 17th century meant a serious decline in the Danish merchant fleet, falling from 11,666 tonnes in 1639 to 4,450 tonnes in 1670, after which the size of the merchant fleet slowly rose to reach 13,300 tonnes in 1696. At the time some shipping to the North Atlantic possessions existed and also to French and Portuguese ports, as well as some expeditions to the West Indies and to Asia. This expansion in the total shipping of the realms of the Danish king coincides with the Danish authorities' recruitment of shipbuilders, navigators, naval officers and ordinary seamen in the Netherlands from about 1660. In order to build and staff the many new ships, the supply of know-how and practical experience from the Netherlands thus laid the foundations for the expansion of the foreign trade of the realms, but also for the establishment of colonies in Asia, Africa and the Caribbean, which enabled the Danish conglomerate state to take part in the highly lucrative triangle trade.

In the Danish-Norwegian navy, Dutch navigators and naval officers were recruited very early on to introduce the latest advances in navigation and ship technology, and in the second half of the 17th century about half of the navy's officers were of Dutch origin, who with their professionalism and experience contributed to the Danish naval victories during the Scanian War, but from which private shipowners also must have benefited. In addition to shipbuilders, navigators and naval officers recruited in the Netherlands in the 17th century, ordinary sailors who were experienced in handling the rigging of the large three-masted full-rigged vessels were recruited in the Netherlands. The seamanship needed to build, operate and maintain these complicated structures of wood, sail and ropes was quite different from what was required to sail as a crewmember on a small vessel in the near coastal trade where the few sails were controlled from the deck. In order to gain the necessary knowledge and experience to be able to work aboard a three-masted

square-rigged ship, the seaman had to participate for many years in the maritime practice communities that existed aboard, and through participation in them, first as a legitimate peripheral participant and later as a veteran, acquire the practice community's total sum of knowledge and experience. As the Royal Danish Navy in the 17th century expanded it was therefore necessary to recruit such experienced sailors from the large maritime labour market which existed in the maritime provinces of the Netherlands.

7.1.2 Import of Dutch maritime technology and culture

During the 15th and 16th centuries, a number of new types of vessels and rigs were developed in the Netherlands, which were superior to those previously used and therefore more profitable to use, and in the same period these types began to emerge in Scandinavia: the bojert, the fluyt, the pinas, the smack, the galjoot, the hooker and the jagt became common in Scandinavia and slowly replaced the old types, the 'skuder' and 'krejerter'. At the same time sail- and rigging types connected to the new vessels were imported: the smack/spritsail, the gaff sail and the stay sails, which made it possible to sail far closer to the wind, thus make travelling over water more efficient in favour of a faster journey. Similarly, in the provinces of Zeeland and Holland, a division of the sail area on the square sail-rig was developed, so that more sails could be put on each mast, thus producing full-rigged vessels, as we know them today.

The incorporation of such improved vessel and rig types made the Danish-Norwegian navy and the merchant fleets of the realms of the Danish king competitive in an international context. The new types came to Scandinavia either via purchases by royal or private shipowners in the Netherlands, or by summoning Dutch shipbuilders to build them in the Danish conglomerate state for local interests. It was not just ship- and rigging types that were sourced from the Netherlands, but also the very latest in navigational aids, so that ships from the realms of the Danish king could participate in international shipping. Dutch cartography and navigation methods were developed during the 16th century and these new charts, sailing instructions, instruments and navigation methods quickly became popular. In 1568, a chart was published in Danish, parts of which were taken from an older Dutch work, and over the next centuries Dutch sailing manuals and charts became standard in the shipping industry of the Danish conglomerate state, as likewise navigation instruments had to be imported from the Netherlands.

Lave and Wegner would say about ships, charts and navigational instruments that they are physical artefacts; historical traces of the practice community's negotiation and coordination of opinion about the recognised activities of the practice community and that they are manifestations of the maritime practice communities over time.[633] The actual design of the objects is considered by them to be a result of the knowledge of the practice community, which is thus encoded in the physical artefact. Therefore, Dutch maritime objects are especially typical of Dutch maritime practice, and applying them is also to take over this practice's heritage, knowledge and history. 'Understanding practice technology is not just a matter of learning how to use tools; it is a way of connecting to the practice's history and participating more directly in its cultural life'.[634] Therefore, the Dutch vessels mentioned above, and the charts and navigation instruments must be regarded as particularly identity-bearing for Dutch maritime practice in Scandinavia.

633 Lave & Wenger 2003, 53.
634 Lave & Wenger 2003, 86.

7.1.3 Scandinavian sailors aboard Dutch ships in the 17th and 18th centuries

Dutch experts greatly influenced the transfer of Dutch technology, knowledge and practice in the 16th and 17th centuries to the realms of the Danish king, and the import of Dutch maritime technology also influenced this movement. However, we must also imagine that, as the Dutch shipping industry expanded during the 17th century, there were more and more ordinary people from the Danish conglomerate state who chose to go to the Netherlands and take part in this industry. Many were already sailors, while others began their careers as novices on a Dutch ship, and here they learned a craft that could not be learned on a school bench, but had to be acquired through participation in on-board activities. Lave and Wegner's theory of learning through participation in practice communities, first as a peripheral legitimate participant and later as a veteran, is central to understanding this process and also why the knowledge needed to handle a rig on an ocean-going full-rigged ship could not be acquired in smaller, inshore vessels where the rigging was handled from the deck.

You had to work on the big ships for a long time to master this craft, and Scandinavian sailors who sailed on Dutch ocean-going ships had the opportunity to acquire this knowledge and experience, unlike their colleagues at home, who were employed in domestic shipping between the different ports of the Danish conglomerate state. Scandinavian sailors participated in all the branches of the worldwide Dutch shipping industry where, especially on long journeys with large full-rigged vessels, they were able to learn the craft of the experienced seaman.

In this dissertation it has been documented that there were sailors from the realms of the Danish king in Amsterdam as early as 1639 looking for a berth, and that in the 18th century a large number of Scandinavian sailors went to the Netherlands to work there for a few years and then returned home with the aforementioned maritime knowledge and experience. The number of these sailors grew over the century, and the interesting thing is that most of these did not come from the inner Danish coastal waters, but from periphery areas in Norway and Denmark and the duchies, respectively. Sailors along the entire Norwegian coast travelled to the Netherlands, and in the 17th century it seems that it was mainly from here that the Scandinavian contingency on board the Dutch ships originated. At the same time, there was a strong participation of seamen from the Wadden Sea area, extending from the Bay of Ho in the north to the mouth of the Elbe in the south, and in the 1600s the proportion of this participation in the Dutch maritime labour market was about the same as the Norwegian one. As Norwegian ships began to take part in international shipping during the latter half of the 17th century and the first half of the 18th, a large proportion of Norwegian seamen chose to sail on national ships, which is why their numbers dropped aboard Dutch ships. As the seafaring population along the Wadden Sea coast did not have access to local shipping, their share in especially the shipping out of Amsterdam rose correspondingly, so that in around 1780, where this dissertation has its main focus, just under half of all Scandinavian seamen in the Dutch shipping industry came from this area. At this time, the Norwegian share was around 20% and the rest came from Sweden and Denmark.

In Norway, the strongest link to the Dutch shipping industry in around 1780 was the area in Southwest Norway from Stavanger to Kristiansand, from which just over 10% of all Scandinavian seamen came. Thus there were two distinct areas in the Danish conglomerate state which had close maritime contacts to the Netherlands: primarily the Wadden Sea area and then Southwest Norway and it is from these two areas that

Dutch maritime practice, knowledge and experience found their way to the rest of the maritime communities in the Danish conglomerate state. As the importance of the Royal Danish Navy as a political instrument grew, the recruitment of trained seamen with experience in large square-rigged ships was central, and here the labour migration of the two maritime core areas to the Netherlands came to play an important role. Particularly during the last decades of the 18th century, when the Danish conglomerate state was part of various alliances, the navy's ability to convoy merchant ships was important, as was the importance of the navy as a political lever, and this situation could hardly have arisen if not for the availability of the aforementioned professional deep-sea sailors.

7.1.4 The networks employed by Scandinavian seamen to secure a berth on a ship or a bed in an inn.

The Scandinavian sailors benefited from an extensive network of local or regional background when seeking a berth or a place to live in Amsterdam, and it is through these networks that it was possible for them to enter the practice communities based on Dutch maritime practice. When finding an inn, the Scandinavian sailor used the membership of his local practice community based on personal contacts, and it was especially in the eastern part of Amsterdam's port area that such Scandinavian sailors' inns existed. The host was often a former sailor himself, or his inn was preferred by sailors from a particular location. It was most often the host who secured a berth on a ship for the sailor, and he was therefore a key player in the practice communities that bridged the gap between the home area and international Dutch shipping. Some sailors stayed at inns where the clientele was composed of men from across Scandinavia, and this indicates that there was a mix of Dutch maritime knowledge, technology and practice with maritime traditions from all over Scandinavia. In other cases, the clientele came from a particular local or regional area, which is why the practice communities that prevailed here must have been even more marked by the Dutch in the absence of other Scandinavians.

As mentioned above, it was the innkeeper who in most cases found a ship for the Scandinavian sailor, and aboard the ship the sailor met a Dutch core crew consisting of skipper, mate and one or two petty officers. It was these individuals who formed the centre of the on-board practice community, and through participation in this, the Scandinavian seamen slowly changed their identity and adopted the Dutch maritime way of life, language, knowledge and experience. Some sailors preferred to sail with people from their own location, and this is especially evident for sailors from the Wadden Sea coast; Föhr, Oland, Hooge, Gröde, Langeness and Ribe and Skærbæk on the mainland. On the other hand, there were also Scandinavian sailors who to a much higher degree mixed with other Scandinavians on board Dutch ships. This applies to sailors from Lista, Stockholm, Emmerlev, Grådyb, Karlshamn, Bergen and Kristiansand.

7.2 Recruitment from the maritime core areas to Copenhagen

It has been established that during the 17th and 18th centuries a significant transfer of Dutch maritime technology, knowledge and practice took place to the realms of the Danish king and that there were, in addition to the Royal Danish Navy and its yards, in particular two maritime core areas that were the beneficiaries of this transfer: South and Southwest Norway and the Wadden Sea coast from Ho Bay to the mouth of the Elbe. How did Dutch maritime technology, knowledge and practice move on from here and to the maritime centre of the Danish conglomerate state?

7.2.1 The recruitment of the Royal Danish Navy

From the reign of Christian IV there are indications that the enlisting of sailors to the navy was more extensive in Norway than it was in Denmark. The king himself was aware of the consequences of this when he wrote to his Council of Ministers in January 1631: 'Det er rigets råd bekendt med hvad besværlighed man bringer sjøfolket til veje når flåden skal udrustes, og at kongeriget Norge ved sjøkanten fast ganske er øde formedelst den udskrivning som årligt skjer' (The High Council is aware of how difficult it is to find sailors for the navy and that in the kingdom of Norway, the coast areas are quite deserted due to the annual conscription). In around 1640 about 500 men were enlisted.[635] Later, in connection with the Danish-Swedish wars (1658-1660), conscription in Norway rose, so that in February and September 1659 a total of 3500 Norwegian seamen were shipped to Copenhagen.[636]

The authorities were aware of the importance of keeping check on the seamen, who went abroad and gained valuable experience, and in connection with the Second Anglo-Dutch War, a proclamation was issued prohibiting the shipowners to transport sailors and soldiers out of the kingdom, and in the years immediately following the ban, it was repeated, and here sailors from Rømø, Sylt and Föhr were explicitly mentioned.[637] During the Scanian War, in 1678, 11,480 men were needed for the 77 larger vessels in the navy, and out of these 7,694 were boatmen (sailors). The enlisted Danish seamen made up only a small part of the total contingent, the majority of which came from the duchies and from Norway. During the Second Anglo-Dutch War, about 1,000 men were annually conscripted from Norway, and during the last year of the Scanian War a conscription list existed totalling 655 men: Bergen 120 men, Christiania 80 men, Trondhjem 70 men, Christiansand 46 men, Skien 30 men, Stavanger 30 men, Fredrikstad 34 men, Halden 20 men, Tønsberg 10 men, and Larvik 10 men. It is interesting to see that Southwest Norway had not yet become significant in the maritime context.

Due to the complicated political conditions in the duchies, it was more difficult to establish actual conscription districts, but in 1676 about 500 boatmen were enlisted here, and in 1679 the fixed figure for the area was 394 seamen. This conscription from the duchies had already proven not to be sufficient to man the navy, so in 1676 regular recruitment of seamen was also carried out in Jutland and Schleswig and in the following year throughout Denmark. For political and military reasons, naval conscription was also carried out in 1680, 1682, 1686, 1689 and the year 1700, and during all these campaigns, sailors from Norway and the duchies were mobilised in almost all cases.[638]

In order to ensure a satisfactory supply of personnel to the navy, in 1704 an enrolment system was introduced, in which able and ordinary sailors and landsmen were listed in the muster rolls and had to report for duty in Copenhagen in case of war. The enrolees were given freedom for other military service, for duty work and for all personal taxes, monopoly on the service in the merchant fleets and preferential rights when renting vacant farms. In addition, they were given the free rights of fishermen and to do small-scale shipping along the coasts. The enrolled seamen were obliged to return from the

635 Rian 1996, 308.
636 Sogner 1994, 72.
637 Degn, Ole. Erik Gøbel. 153
638 Rafner 1996, 147, 148, 152, 153.

merchant ships as soon as required, and they then received half pay until they reported for duty in Copenhagen, after which the pay was normal. The Norwegian coastlines were divided into six districts, from which the following numbers of sailors were listed in the rolls: Frederikshald to Christiania: 993, Brageness (north of Drammen) to Brevik: 1700, Kragerø to Kristiansand: 2199, Stavanger: 1457, Bergen: 1038 and Trondheim: 877. In addition, 4620 men were enrolled in Denmark and Schleswig. The total number of men in the naval muster rolls was around 13,000 men.[639]

When war broke out in August 1709 (the Great Nordic War), Southwest Norway immediately felt the consequences of the new system, because 450 men were sent to the navy in Copenhagen, and a month later the actual mobilisation order came, mobilising all enlisted seamen. Later, the Norwegian sailor, Niels Trosner, wrote that southwestern Norway continued to be used as a recruiting area for the fleet. In 1711: 'at der er nu sådan en udskrivning i Stavangers len, at de tager ud i fra år og til år, og de tager bønder ud af deres gårde, som har boet i 22 år på sin gård, nogle til søes, og nogle til lands'[640] (that there is now such a forced conscription in Stavanger's county that they take farmers out of their farms, who have lived there for 22 years, some seafarers, and some farmers). And in 1712: 'her var og kommen breve fra Lister len til vort skib indeholdende, at der er god tid på korn og grøde, men alle folkene var udtagene, som havde patent i fra 18 år til 50 år gammel'[641] (Letters from Lister county have also arrived on board our ship saying that there is plenty of cereals on the fields, but that all the men on the muster rolls from 18 to 50 years were enlisted). In addition, Trosner mentions large enrolments from Bergen, Kristiansand and Trondheim.[642] The Norwegian scholar, Søvli Sogner, estimated that at least in the town of Stavanger in 1706 the naval muster rolls included almost all seamen, with 268 men being registered that year,[643] and so with all the evidence presented here, it is plausible that almost all seafarers from Norway were enlisted for service during the long war.

The system of muster rolls had not worked satisfactorily during the Great Nordic War and was abolished by the Marine Commission's report in 1726. However, it was reintroduced in 1739 in a slightly different version and used for the remainder of the period under review.[644] Already in 1735, an enlisting system had been attempted in Schleswig, which, however, met strong opposition in the maritime communities on the Wadden Sea, and when the new Schleswig regulation came in 1741, it had a special regulation for the Wadden Islands, which allowed the seamen to choose from amongst themselves the annual number of men enrolled.[645] In 1770-71, 369 sailors were registered for Kristiansand enrolment district, of which 68 men were commissioned for service: 47 men on the warship *Seyeren*, 19 men on *Sophia Magdalena*, 2 men on *Prinds Fredrik* and 8 men on the Asian Company's trade frigate *Tranquebar*.[646] The naval enrolment from

639 Berg & Melien 2017, Vol 1, 22.
640 Bjerg & Melien 2017, Vol I, 308.
641 Bjerg & Melien 2017, Vol II, 240.
642 Bjerg & Melien 2017, Vol I, 97, 223.
643 Sogner 1994, 82.
644 Bjerg 2010, 86.
645 Beck 1999, 113.
646 RA. 519. Søindrullering. Norske distrikter.

Schleswig and thus from the Wadden Sea area was also large, since in 1781 966 were enrolled from Schleswig, but from Zealand only 427.[647]

The Royal Danish Navy not only needed many ordinary sailors, but also skilled navigators, and thus Martin Rheinheimer and Jacob Seerup have uncovered how the navy from 1743 to about the end of the 1760s hired 'Holsteinian' navigators to be in charge of the navigation of the ships of the navy. From 1743 onwards most of them came from the Møgeltønder area, and from about 1760 all navigators from the duchies came from here. Of the 33 permanent navigators recruited from 1744 to 1795, 20 came from the Tønder region, and another five came from northeast Schleswig. In the Tønder area 13 navigators came from the parish of Emmerlev, from Ballum parish came four men and one from the nearby Døstrup parish. This recruitment of navigators from the Wadden Sea area was probably much older, but until 1743 the permanent naval navigators had to reside in Copenhagen, which is why their birthplaces are unknown.[648]

7.2.2 The recruitment of other parties

Sailors from the Wadden Sea area not only sailed on the ships of the Royal Danish Navy, but also took part in the merchant traffic from Copenhagen. Thus, between 1749 and 1839, 8964 sailors from Sylt, Amrum, Föhr and the halligs of Hooge, Oland, Langeness, Nordmarsch, Gröde and Habel embarked on ships from Copenhagen, and out of these 2276 sailed as captains. Quite a considerable part, which would have been supplemented with seamen from the mainland maritime communities in the area. Traces of these can be found when looking at skippers and sailors who sailed on ships from Copenhagen or gained citizenship in Copenhagen from 1747 to 1800.

Of course, there are not many, but these skippers and mates were just the tip of the iceberg, the ones who could afford a citizen letter in Copenhagen. There must have been many more common sailors from the Wadden Sea area sailing from Copenhagen, and thus Brock and van Lottum, in their survey of crews on Copenhagen ships captured by the English in the years 1701 to 1714 and 1776 to 1803, have shown that among these sailors there was a large number of sailors from the Wadden Sea area.[649] As can be seen, sailors from Sylt (Sild) were very strongly represented among the skippers and sailors who were granted citizenship in Copenhagen, and Martin Rheinheimer has also shown that Copenhagen shipping was a specialty for the sailors from this island.[650] In 1733 the Icelandic Company gained a monopoly on the shipping to Iceland, and subsequently recruited sailors from Sylt to man the ships.[651] Another example of the Wadden Sea sailors' involvement in maritime transport from Copenhagen is the Icelandic fishing expeditions by sailors from Rømø. When the authorities focused on the Iceland fishing opportunities, the Royal Greenlandic, Icelandic, Finnish and Faroese Trade Companies especially recruited sailors from Rømø. Peder Jensen Mandø from Rømø became 'Commander of the Fisheries under Iceland' in 1775 and from 1783 there is a crewlist from his hand, comprised of 20 skippers, 11 navigators, 15 sailors and ship's cooks, three shipswrights

647 RA. 517. Søindrullering. Danske og slesvigske distrikter.
648 Rheinheimer & Seerup 2010, 143-151.
649 Brock & van Lottum 2016, 6.
650 Rheinheimer 2016a, 222.
651 Feldbæk 1997, 34.

	Citizenship	Not Citizenship
Amrum	11	
Ballum	29	18
Emmerlev	6	2
Föhr	62	24
Mandø	7	2
Rømø	39	11
Sild	147	35
Tønder	6	2

Table 7. 1. Skippers or mates from the Wadden Sea area who took up citizenship in Copenhagen or sailed on ships from Copenhagen in the period from 1747 to 1800. Source: http://skippere.dk. 7/3 2019.

and 20 ship's boys, all from Rømø.[652] Another example is Jens Jacob Eschels, who in the spring of 1776 became first mate on *Grev Bernsdorff*, one of eight ships equipped to go whaling for Danish interests and where all commanders and some sailors came from the Wadden Sea island of Föhr.[653]

7.3 The share of migrant sailors in the shipping industry of the Danish conglomerate state

I have previously estimated that in around 1650 there were somewhere between 750-1000 seamen from the Danish conglomerate state who went to the Netherlands for a shorter or longer period and then returned home. In about 1700 this figure may have been about 2500 men, in 1750 about 3500 men and in about 1780 approx. 5000 men. What percentage of the crews of the merchant fleets from the different parts of the Danish conglomerate state was made up by these seamen? Various researchers have tried to estimate the size of both the merchant fleets of each region and the total merchant fleet of the Danish conglomerate state, as well as the number of seamen working on these ships. By putting together these results and trying to close gaps where there are no indications, I have managed to make an estimate of how many seamen there were in the realms of the Danish king and how large the proportion of migrant sailors to the Netherlands was in the merchant fleets of the Danish conglomerate state.

Thus, I estimate that in around 1650 there were just under 9000 sailors in the realms of the Danish king, of whom about 1000 men had sailed on Dutch ships. In around 1700 there were approx. 13,400 sailors in Denmark-Norway and the duchies, of whom 2500 men had sailed on Dutch ships. A consequence of the Great Nordic War was a decline of the merchant fleets of the realms, so that by 1750 it was crewed by under 10,000 sailors, of which 3500 had been in the Netherlands. In the years around 1780, the total number of

652 Kelm 1999, 114.
653 Eschels 1966, 63.

	Lasts Dk	Crew	Lasts Sl/H	Crew	Lasts N	Crew	Lasts total	Crew total	Migrant sailors	Percent
1639	21000	5833	7410	2058	19760	3187	48170	11078		
1648	17000	4722	6000	1666	16000	2580	39000	8968	1000	11.2
1670	7521	2989	4027	1119	10586	1707	22134	5815		
1680	7187	1996	2988	830	16844	2716	27019	5542		
1688	12236	3399	4683	1300	14779	2384	31698	7083		
1696	23799	6500	9246	2568	40319	6503	73364	15571		
1699	17003	4723	9246	2568	37735	6086	64984	13377	2500	18.7
1707	13851	3847	7479	2077	30619	4938	51950	10862		
1720	9250	2803	4995	1513	20442	3297	34687	7613		
1731	12742	3185	6880	1720	28159	4541	47781	9446		
1746	13000	3250	7020	1755	28730	4638	48750	9643	3500	36.3
1760	17700	3540	12734	2546	30000	2744	60434	8830		
1767	22000	4400	15160	3032	25394	4100	62553	12289		
1776	21820	4364	18117	3623	24306	4861	64243	12848		
1782	36366	5865	30195	6040	40380	8076	106941	19981	5000	25
1787	40730	8146	33818	6763	46170	9235	120717	24144		

Table 7. 2. The size of the merchant fleet and the number of seamen distributed among Denmark, the duchies and Norway in the period 1639-1787, compared with the estimated number of seamen from the Danish conglomerate state who returned home after service on Dutch ships. Barfod 1967, 139, 150, 151. Bugge 1923, 558-559, samt bilag: XXVIII, XXX, XXXV. Degn & Gøbel 1997, 48. Feldbæk 1997 14, 27. One last is the equivalent of 1.8 net registertons.

sailors in the realms of the Danish king was about 20,000 men, of whom 5,000 had sailed in the Dutch shipping industry.[654]

Thus, it seems that somewhere between 11 and 36 percent of the sailors in Denmark, Norway and the duchies of the 17th and 18th centuries gained their maritime knowledge, experience and practice from a shorter or longer stay on board Dutch ships, which was a major reason why the Danish-Norwegian seaborne foreign trade could be expanded and that the Royal Danish Navy could sufficiently man its ships.

654 There are only precise figures on the size of the merchant fleets and the number of seamen for a few years. For the year 1696 Barfod indicates the number of crewmembers of ships from Denmark and Norway and the size of the two regions' shipping tonnage and also the total tonnage in lasts for the realms of the Danish king. From this the ratio of crewsize compared to size of ship can be deduced, expressed by number of lasts per man, which can then be used to calculate the size of the maritime population for the other regions and for other years. For the years 1670, 1680, 1688, 1696 and 1699, Barfod indicates the size of each area's commercial fleets in commercial lasts and a total tonnage for the merchant fleet of the Danish conglomerate state. Ole Degn notes the size of the Danish merchant fleet in lasts for the years 1707 and 1731 and Feldbæk does the same for the years 1720, 1746 and 1760. Bugge indicates some very useful figures for Norway, based on figures provided by the official, Ole Mallings, from the late 1780s, but also for the whole of the Danish conglomerate state. For the year 1782 he specifies the size of the merchant fleets of Denmark, Norway and the Duchies, but also the total number of seamen employed here, and also the number of Norwegian seamen from the same year. Also, for the year 1787 he presents figures for the size of the Norwegian merchant fleet and for the total number of Norwegian seamen. Using the information thus collected, it has been possible to calculate the missing figures for different regional merchant fleets and for the number of seamen sailing in them, which has resulted in an estimated size of the total merchant fleet of the Danish conglomerate state and the total number of seamen serving in the fleet.

7.4 In a larger perspective

In his important work *The Modern World-System* Immanuel Wallerstein describes how in the period 1625-1675 the United Provinces had absolute economic hegemony in world trade and was a leader in agricultural, textile and industrial production and was the leading maritime nation in the world.[655] As late as 1728, author Daniel Defoe described the Dutch as 'The Carryers of the World, the Middle Persons in Trade, the Factors and Brokers of Europe'.[656] Culturally, Dutch culture was also hegemonic and served as a model for other core areas and for peripheral areas – among which Wallerstein includes the realms of the Danish king.[657] He characterises Denmark-Norway's economic role as peripheral, with the economy being oriented around the export of low-wage products;[658] in Denmark and in the duchies grain and cattle and in the case of Norway primarily timber. This situation corresponds to the economic conditions of many third world countries today, and it is worth remembering Hans Christian Johansen's words that in relation to the Netherlands this peripheral situation for the Danish conglomerate state meant that foreign experts tried to exploit the conditions of the Danish conglomerate state, while unskilled labour migrated to the Netherlands and took over some of the low-paying jobs.[659]

With this economic and social centre-periphery situation in mind and considering how Dutch maritime language, technology and practice prevailed in maritime centres, in particular Norway and the Wadden Sea coast, it is natural to wonder whether the Scandinavian sailors who migrated to the Netherlands to find a berth, experienced a closer cultural and identity affiliation to, say, Amsterdam than they did to Copenhagen? It seems to me that the Scandinavian seamen apparently travelled back and forth from the Netherlands, more or less as it suited them. Although the Danish authorities tried to stop them with different bans and later on by restricting their freedom of movement through the regulations on maritime enrolment, these measures had little effect on the decisions and movement patterns of these ordinary people. The Scandinavian seamen, therefore, do not seem to have felt particularly bound to concepts such as nation, king and country, concepts that would become much more important during the 19th century. For example, after his ship *Jonge Abraham* was seized by the English in 1781, the seaman Christian Schultz told the English authorities that he had been born in Königsberg and was therefore the subject of the Prussian king, but that he now, having lived for 11 years in Amsterdam, considered himself a subject of the Prince of Orange. [660] With him, there was no deep national feeling or princely loyalty, and there is no reason to believe that the Scandinavian sailors perceived things any differently.

On the other hand, local or regional affiliation, as shown in Chapter 6, guided the Scandinavian sailors' decisions about where to live in Amsterdam and to a certain extent with whom they sailed, and it is probably here that one must search for the sailors' own understanding of belonging and identity. Thus, the importance of state borders and central authorities for these seamen is dissolved, and so I´m not writing national history but transnational. We`re thus dealing with a phenomenon that belongs to the *local* but

655 Wallerstein 1980, 39, 42, 44.
656 Wallerstein 1980, 46.
657 Wallerstein 1980, 65.
658 Wallerstein 1980, 221.
659 Johansen 1996, 206, 197.
660 van Lottum 2007, 141.

also the *global* through the participation of the seafarers in the international Dutch maritime labour market, and in which the idea of nationality is not of great importance. The Scandinavian seamen participated in many different practice communities: in the family, in the local community and in the international Dutch shipping industry. They also participated in communities of practice as subjects in the realms of the Danish king, where their participation was centred around various obligations to the regime and, in return, individual rights and benefits. With their labour migration to the Netherlands, it seems that this affiliation, at least in parts of the seamen's lives, wasn't important as they went undeterred despite the authorities' ban.

It was common for the Scandinavian sailors who worked on Dutch ships to take a Dutch name and learn to speak Dutch aboard ships from the Netherlands. At the same time, there are examples of Danish-Norwegian sailors aboard warships in the Royal Danish Navy who labelled themselves 'Jan Hagel', the archetypal Dutch sailor, which indicates that they may have experienced themselves as part of an international Dutch maritime practice community. Isn't all this a strong indication that there was in fact a class of international professional seamen who were orientated towards the Netherlands and who possessed knowledge and experience different from what their colleagues in the inshore trades had? These Scandinavian sailors found themselves in a so-called 'epistemic' community; a transnational social space where different cultures and practices in this grey area were mixed together and new 'hybridized' forms emerged.[661] These sailors were not subdued people who like automatons 'took over' the Dutch maritime practices, instead they made independent choices based on economic opportunities, social circumstances and human relationships, and through equal participation in the described maritime practice communities they learned to master different maritime practices and gained knowledge and experience that was directly applicable and useful and which they included in their native maritime culture and practices.

This dissertation is thus an example of history that goes beyond narrow national boundaries and points out that already in the 17th and 18th centuries ordinary people moved much further away and in far greater numbers than previously thought, and that there were links between communities, cultures and societies that were transnational and gave the people involved a worldview and a horizon of knowledge far greater than hitherto assumed. Scandinavian historians would be well advised in the coming years to turn towards this phenomenon and continue to uncover our common transnational history.

661 Sørensen 2009, 469.

8

Sources and Literature

8.1 Unpublished sources

8.1.1 Gemeente Amsterdam Stadsarchief (GAS)

5075: Archief van de Notarissen ter Standplaats Amsterdam.

54. Hendrik Schaef. 1310- 1330 Minuutacten van transporten van soldaten en bootsgezellen:
  – 1636 Januari 1-1636 november 29; zonder index.1636.
  – 1639 Januari 3-1664 december; zonder index.1647-1649.
  – 1652 Maart 28-1653 Maart 25; zonder index.1652-1653.

134. Hendrich Rosa. 3139-3140 Minuutacten van transporten van personen in dienst van de Admiraliteit. Alles zonder index.1660-1677:
  – 3140A 1664 Mei 26-668 April 10.
  – 3140B 1668 Februari 10-1677 Mei 26.

Ondertrouwregisters 1565-1811.

38. Waterschout. 1-152Monsterrollen of zeebrieven 1747-1852.
  – 41772 januari-juni.
  – 51772 juli-december.
  – 181780 januari-april.
  – 191780 mei-juli.
  – 321787 februari-april.
  – 331787 mei-juli.
  – 341787 augustus-december.

8.1.2 Het Scheepvaartmuseum Amsterdam (Scheepvaartmuseum)

Alphabeth van s'lants Schip van Oorloge den Gouden Leiuw, 1673. HS -0821 (a) Commandert van Admirald Cornelis Tromp vor de Collegie van Admiralditeyt von Amsterdam.

8.1.3 Nationaal Archief, Den Haag (Nationaal Archief)

Archieven der Admiraliteitscollegees

– Nr. 2108 Admiral Piet Heyn 1778.
– Nr. 2109 Hollandt 1778.
– Nr. 2110 Boreas Beverwyk 1778.
– Nr. 2111 Boreas 1778.
– Nr. 2115 Amsterdam 1779.
– Nr. 2115A Argo 1779.
– Nr. 2116 Swieten 1779.
– Nr. 2117 Waakzaamheyd 1779.
– Nr. 2118 Mars, Batavier 1779, 1780.
– Nr. 2119 Swaluw 1779.
– Nr. 2120 Alaram 1779.
– Nr. 2121 P. Rojaal, Amsterdam 1779, 1780.
– Nr. 2122 Valk 1779.
– Nr. 2123 Nassau 1779.
– Nr. 2126 Princes Louisa 1780.
– Nr. 2127 Erf. Prins, Hollandt 1780, 1781.
– Nr. 2128 Mars 1780.
– Nr. 2129 Adm. De Ruyter 1780.
– Nr. 2130 Nassau Weilburgh 1780.
– Nr. 2131 Adm. General 1780.
– Nr. 2132 Erf Prins, Amphitrite, Utrecht 1780, 1781.

8.1.4 Rigsarkivet i København (The Royal Danish Archives) (RA)

Borgerskabsprotokol (1683-1865). Københavns kommune, Rådstueskriverens kontor.

– 1749-1784. Pakke M. 12006.
– 1785-1795. Pakke M. 12006.
– 1796-1804. Pakke M. 12007.

Generalkommissariatet (søetaten), Eskadreskriverne

– *Afregningsbog over de udi Holland antagne månedstjenere (1675-1679).* 34-. (AF).
– *Alphabet Paa Admiralitets og Amsterdamske Maanets Thienere Anno 1683* (1683-1683) 516 (ALFABET).
– Månedstjenere antagne udi Holland (1675-*1677)* 28-. (MA).
– *Bremerholm, Hollandske og Holstenske Månedstjenere*. 'Bog ofver de udi Holstein Anno 1678 antagne Söfolck under Hr. Admiral Jens Rodstehns Esquadre' (1678-1678) 30 (UD).-
– Nr. 1812-1813 (fortegnelse over skibe i Danmark og hertugdømmerne 1676-1679).

Kongehuset. Frederik 3. (1662-1663)

– Breve og beretninger om Kronprinsens udenlandsrejse m.m. Folioreg. 101.

Københavns Skipperlav og- forening. Register til Eksaminationsprotokollerne

Eksaminationsprotokol, m. Reg.

– 1774-1793. Bog 14.

– 1794-1823. Bog 15.

Søkrigskancelliet (Søetaten) Mønsterskriveren ved søfolket (søetaten) 1670-1809

– Registerbøger over kaptajners og løjtnanters kostpenge m.m. 1670-1677.

517. Søindrulleringen (Søetaten)

– 1779-1806. Indrulleringsbøger for danske og slesvigske distrikter. Slesvig 1770-1782. 2.

– 1779 – 1803. Indrulleringsbøger for norske distrikter. Christianssand 1770-1771. 22.

Tyske kancelli. Udenrigske afdeling. Nederlandene

– Akter og dokumenter vedrørende det politiske forhold til Nederlandene. 1604-1621.

Instrukser, Pas og andre Akter vedrørende dr. Jonas Charisius's Sendelse til Nederlandene, for at få Købmænd og Haandværkere til at nedsætte sig her i Danmark. 1607 10. Januar-10 Sept. 1607-1684.

– Forskellige gesandtskabsregnskaber. Dr. Jonas Charisius 1607-1608 m.m.

– Special Del. Nederlandene. 1556, 1560-1625.

Breve, til dels med bilag, fra statholder Vilhelm I af Oranien, hans enke Louise de Coligny, statholder Morits af Oranien til Christian III, Frederik II, Christian IV, samt formynderregeringen.

Breve fra Vilhelm af Oranien til kong Frederik II, 156-.

Waterskouten i København (1747-1871) Waterschoutsprotokol (Forhyrings Protokol)

– 1778-1781. Bog 7.

8.2 Internet resources

https://archief.amsterdam/inventarissen/inventaris/38.nl.html. 2/4 2018.

http://www.alleamsterdamseakten.nl/notarissen/. 2/4 2018.

https://archief.amsterdam/indexen/ondertrouwregisters_1565-1811/zoek. 12/9 2018.

http://denstoredanske.dk. 2/11 2018.

http://dietrich.soundtoll.nl. 18/9 2018.

https://www.niebuell.de/Unsere-Stadt/Geschichte/Zeittafel. 25/10 2018.

http://oldenburgbusiness.net. 18/9 2018.

https://ordnet.dk. 25/2 2019.

http://skippere.dk/index.php?site=action. 28/1 2019.

8.3 Literature and published sources

Abildtrup, Maria 1989: *Abildtrup Nedergaard 1487 -1987; en slægt med rod i 900-tallet.* Eget Forlag 1989.

Akveld, L. M., Hart, S. & Hoboken, W. J. (red) 1977: *Maritieme Geschiedenis der Nederland. Zeventiende eeuw, van 1585 tot ca, 1680. Deel 2.* Bussum 1977.

Arvidson, Håkan & Tove Elisabeth Kruse 1999: *Europa 1300-1600.* Roskilde 1999.

Asmussen, Benjamin 2018: *Networks and Faces between Copenhagen and Canton, 1730-1840.* PhD-Afhandling fra CBS. København 2018.

Auer, Jens 2008: *Fregat and Snau: Small Cruisers in the Danish navy 1650-1750.* PhD-Afhandling, SDU 2008.

Barfod, Jørgen H. 1967: *Danmark-Norges Handelsflåde 1650-1700.* Kronborg 1967.

– 1990: *Flådens fødsel.* Marinehistorisk Selskabs skrift nr. 22.Kbh. 1990.

– 1995: *Christian 3.s flåde.* Marinehistorisk Selskabs skrift nr. 25 Kbh. 1995.

– 1997: *Niels Juels Flåde.* Marinehistorisk Selskabs skrift nr. 27. Kbh. 1997.

Barbour, Violet 1930: 'Dutch and English Merchant Shipping in the Seventeenth Century' I *The Economic History Review,* Vol 2. No. 2 (Jan 1930), S. 261-290.

Beck, Hedvig 1999: *Mandø i 1700-tallet*. Fiskeri- og Søfartsmuseets Studieserie 12, Esbjerg 1999.

Beelen, Hans, Ingrid Biesheuvel & Nicoline van der Sijs 2011: *Seeman; Maritiem woordenboek van Wigardus a'Winschooten.* Zutphen 2011.

Bellamy, Martin 1997: *Danish Naval Administration and Shipbuilding in the Reign of Christian IV (1596-1649).* PhD-Afhandling. University of Glasgow 1997.

Bes, Lennart, Edda Frankot & Hanno Brand 2007: *Baltic Connections. Archival Guide to the Maritime Relations of the Countries around the Baltic Sea (Including the Netherlands) 1450-1800.* Volume 1. Leiden 2007.

Bjerg, Hans Christian 2010: *Dansk orlogshistorie 1510-2010.* København 2010.

Bjerg, Christian og Tor Jørgen Melien (red) 2017: *For Kongen og Flåten. Matros Trosners Dagbok 1710-1714.* Vol. 1 & Vol. 2. Oslo 2017.

Blekinge Museum 2015: 21: *Gribshunden (1495) Skeppsvrak ved Stora Eköen, Ronneby, Blekinge.* Marinarkeologisk undersökning 2013- 2015. MARIS Södertörns högskola/ Blekinge Museum 2015.

Bochove, Christiaan van 2008. *The Economic Consquences of the Dutch. Economic Integration around the North Sea, 1500-1800.* Amsterdam 2008.

Bohn, Robert (red) 1999: *Nordfriesische Seefahrer in der frühen Neuzeit.* Nordfriesische Qellen und Studien. Vol 1. Amsterdam 1999.

Boon, Piet 1996: *Bouwers van de Zee: Zeevarenden van het Westfriese platteland, c. 1680-1720.* Den Haag 1996.

Borvik, Rune, Marja_liisa Petrelius Grue, & Khalil Olsen Holmen 2015: 'Paléhaven 1, Oslos første dokumenterte kravellbygde vrak.' I *Norsk Maritimt Museum Årbok 2014.* Oslo 2015.

Bricka, C. F. 1887a: *Dansk Biografisk Lexikon tillige omfattende Norge for Tidsrummet 1537-1814.* Vols. 1-19 København 1887-1905.

– 1887b: *Kancelliets Brevbøger vedrørende Danmarks Indre forhold.* 1556-1560. Vol 2. Rigsarkivet. Kbh. 1887.

Broeze, F. J. A., Bruijn, J. R. & Gaaestra, F. S. 1977: *Maritieme Geschiedenis der Nederland. Achttiende eeuw en eerste helft negentiende eeuw, van ca. 1680 tot 1870. Deel 3.* Bussum 1977.

Bruijn, Jaap R. 2011: *The Dutch Navy of the Seventeenth and Eigtheenth Centuries.* Research in Maritime History No. 45. St. John's, Newfoundland 2011.

– 2016 *Zeegang; Zeevarend Nederland in de achttiende eeuw.* Zutphen. 2016.

Bugge, Alexander m.fl. 1923: *Den Norske Sjøfarts Historie; Fra De Ældste Tider til Vore Dage.* Vol. 1. Kristiania 1923.

Bygholm, Henrik 1983: *Skuder og skippere i Klitmøller; blade af skudefartens historie.* Thy 1983.

Casalilla, Bartolomè Yun 2007: 'Localism', global history and transnational history. A reflection from the historian of early modern Europe.' I *HISTORISK TIDSKRIFT* Stockholm 127:4• 2007. S.659-678.

Christensen, Aksel E. 1941: *Dutch Trade to the Baltic About 1600. Studies in the Sound Toll Registers and Dutch Shipping Records.* København 1941.

Christensen, Asger Nørlund 2014: 'Flådens udlandsmobilisering: Rekruttering af skandinaviske søfolk i Amsterdam under Skånske Krig' i Michael H Clemmesen (red.) *Fra Krig og Fred* Dansk Militærhistorisk Kommissions Tidsskrift (2014) 1. S. 11-57.

Christensen, William 1929: *Repertorium Diplomaticum Regni Danici Mediævalis*. 2. Række, bind 2. (1467-1478) København 1929.

Damgaard, Ellen, Mette Guldberg & Poul Holm 1998: *A North Sea Region: West Jutland and the World, II.* Esbjerg, 1998.

Damsteegt, B. C. 2001: *Nieuwe Spiegel Der Zeevaart; Beknopte Historische Atlas van de Europese Kusten met de Oude Nederlandse Namen.* Amsterdam 2001.

Davids, Karel & Jan Lucassen 1995: *A Miracle Mirrored: The Dutch Republic in European Perspective.* Cambridge 1995.

Davids, Karel 2008: *The Rise and Decline of Dutch Technological Leadership. Technology, Economy and Culture in the Netherlands, 1350-1800.* Vols. 1 and 2. Leiden. Boston 2008.

Degn, Ole & Erik Gøbel 1997: *Dansk Søfarts Historie* Vol 2. *1588-1720. Skuder og kompagnier.* København 1997.

Degn, Ole 2005: Kancelliets Brevbøger i Uddrag. 1660 indtil 18. oktober. Afslutning. Kbh. 2005.

Dekker, P. 1968: *De laatste bloeiperiode van de nederlandse arctische walvis- en robbevangst 1761-1775.* Zaltbommel 1968.

Dyrvik, Ståle mfl. 1979: *Norsk økonomisk historie, 1500-1970. Vol 1. 1500-1850.* Bergen 1979.

Daae, Ludvig 1880: *Nordmænds Udvandringer til Holland og England i nyere tid.* Kristiania 1880.

– 1886 'Hollandske Ordsprog om Norge og Nordmænd' i *Historisk tidsskrift 1886 2rk, 5 bind.* S. 140-143.

Dahlerup, Troels 2003: *Gyldendals og Politikens Danmarkshistorie. Bind 6. De fire stænder 1400-1500.* København 2003.

Dancy, Jeremiah R. 2012: *British Naval Manpower during the French Revolutionary Wars 1793-1802.* Unpublished PhD thesis. University of Oxford, 2012.

Ekström, Simon, Leos Müller & Tomas Nilson (red) 2016: *Sjövägen till Sverige. Från 1500-tallet til våra dagar.* Stockholm 2016.

Eschels, Jens Jacob 1966: *Das abenteuerliche Leben des Jens Jacob Eschels aus Nieblum auf Föhr als Walfänger, Matrose, Kapitän und zuletzt als Reeder und Tabaksfabrikant in Altona von ihm selbst erzählt.* Udgiv et af Dr. Ulla Leippe. Flensborg 1966.

Fabricius, Knud. L. L. Hammerich & Vilh. Lorenzen 1945: *Holland Danmark* Vol I og II. København 1945.

Feldbæk, Ole 1997: *Dansk Søfarts Historie* 1997. Vol 3. *1720-1814. Storhandelens Tid.* København 1997.

– 1998. *Danmark-Norge 1380-1814. Nærhed og adskillelse 1720-1814.* Universitetsforlaget 1998.

Gaastra, Femme S. 2003: *The Dutch East India Company: Expansion and Decline.* Leiden 2003.

Frercksen, Paul 1973: 'Aus den Lebenserinnerungen des Grönlandfahrers und Schiffers Paul Frercksen.' Udgivet af Friedrich Paulsen (1905) I *Nordfriesisches Jahrbuch 1973.* S. 95-132.

Garde, H. G. 1832. *Efterretninger om den danske og norske Søemagt.* Vol I. København 1832.

– 1883: *Efterretninger om den danske og norske Søemagt.* Vol II. København 1833.

– 1861: *Den dansk-norske Sømagts Historie 1535-1700.* København 1861.

Gelder, Roelof van 1997: *Het Oost Indisch avontuur; Duitsers in dienst van de VOC*. Nijmegen 1997.
Gijsbers, Wilma 1999: *Kapitale ossen. De international handel in slachtwee in Noord-west-Europa (1300-1750).* Hilversum 1999.
Glete, Jan 2010: *Swedish Naval Administration, 1521-1721: Resource Flows and Organisational Capabilites.* Leiden 2010. 2007.
Godal, Jon Bojer 2007: 'Hjelper omgrepet handlingsboren kunnskap oss til framtid for handverket?' i Maihaugens Årbok 2007, Festskrift Jon Bojer Godal 70 år. Lillehammer 2007.
Groeneweger, G. 1789: *Versameling van Vier en tachtig Stuk Hollandsche Schepen Geteekend en in Koper Gebragt.* Rotterdam 1789.
Grove-Stephensen, F. S. 1980: 'Sønderborg skibes fart 1734' i *Nordslesvigske Museer, Årbog for museerne i Sønderjyllands amt.* 1980. S. 69-79.
Grue, Marja-Liisa Petrelius 2010: *Dutch Influence on Early Scandinavian Carvel-constructed Ships.* Esbjerg 2010.
Guldberg, Mette 1997: 'Hollandsfarere – Risbøl'erne i Hjerting'. *Sjæk'len 1996. Årbog for Fiskeri- Og Søfartsmuseeet, Saltvandsakvariet i Esbjerg.* Esbjerg 1997 S. 9-17.
– 2014a: 'Fartøjer i det nordlige Vadehav'. I Morten Hahn-Petersen *Sjæk´len 2013; Årbog for Fiskeri- Og Søfartsmuseeet, Saltvandsakvariet i Esbjerg.* Esbjerg 2014. S. 29-41.
– 2014b: 'Købmanden, Skipperne og Hollandsfarten; Varer fra Holland til Jylland i 1700-tallet.' I *Kulturstudier* 2014.
Guldberg, Mette og Elsemarie Dam-Jensen 2017: 'Skibstrafikken ved Tønder toldsted 1713' i *Sjæk'len.* Årbog *for fiskeri- og søfartsmuseet 2016.* Esbjerg 2017. S. 92-106.
Guldberg, Mette, Poul Holm & Per Kristian Madsen 1993: *Facing the North Sea: West Jutland and the World.* Fiskeri- og Søfartsmuseets studieserie, nr. 2. Esbjerg 1993.
Hallema, A. 1941: *Cornelis Maartenszoon Tromp 1629-1691.* 'S -Gravenhage. 1941.
Hammar, AnnaSara 2015: 'How to transform peasants into seamen: The manning of the Swedish navy and a double-faced maritime culture.' In *The International Journal of Maritime History.* 2015 Vol 27. S. 696-707.
Hansson, Jim 2016: *Regalskeppen 'Solen' och 'Victoria'skiner igen.* Sjöhistoriska Museet Arkeologisk Rapport 2016:8. Stockholm 2016.
Harboe, C. L. L. 1979: *Dansk Marine-Ordbog.* 1839. Nyoptryk: Høst&Søn 1979.
Hart, Simon 1976. *Geschrift en Getal.* Dordrecht 1976.
Harland, John 1984: *Seamanship in the Age of Sail: An Account of the Shiphandling of the Sailing Man-of-war 1600-1860, Based on Contemporary Sources.* London 1984.
Hell, Maarten 2017: *De Amsterdamse herberg (1450-1800) Geestrijk centrum van het openbare leven.* Nijmegen 2017.
Heeres, W. G. (Red) 1988: *From Dunkirk to Danzig. Shipping and Trade in the North Sea and the Baltic, 1350-1850.* Hilversum 1988.
Henningsen, Henning 1953: *Dagbog fra En Ost Indiefart 1672-75 af J. P. Cortemünde.* Søhistoriske Skrifter v. Handels- og Søfartsmuseet på Kronborg. 1953.
Henningsen, Lars N. 2005: 'Flensborgs søfart' i *Historisk Samfund for Sønderjylland*' Åbenrå 2005. S. 84-91.
Hodne, Kåre Oddleif 1976: *Fra Agder til Amsterdam. En studie av norsk emigrasjon til Nederland i tiden ca. 1625-1800.* Speciale i historie. Oslo 1976.
Hoofts, P. C. 1843: *Nederlandsche Historien.* Vol I. Groningen 1843.

Huun, Birger 1930: *Bergenske Skibslister 1777-1806.* Bergen 1930.
Israel, Jonathan I. 1989: *Dutch Primacy in World Trade, 1585-1740.* Oxford 1989.
Jensen, Frede P. 1993: 'Frederik II og truslen fra de katolske magter. LINJER I DANSK UDENRIGSOG SIKKERHEDSPOLITIK 1571-88. I *Historisk Tidsskrift, Bind 16. række, 2 (1993).* S. 234-278.
Jensen, Jens Kusk 1971: *Haandbog I Praktisk Sømandsskab*. Uforandret, fotografisk optryk af 4. udgaven 1924. Foreningen til Søfartens Fremme. Kbh. 1971.
Johansen, Hans Chr. 1996: 'Danish-Dutch Economic Relations in the Late Eighteenth Century.' I C. A. Davids mfl. *Kapitaal, ondernemerschap en beleid; Studies over economie en politiek in Nederland, Europa en Azie'van 1500 tot heden.* Amsterdam 1996. S. 197- 211.
– 2002: *Danish Population History: 1600-1939*. Odense 2002.
Kelm, Bert 1999: *Rømø et vesterhavspræget samfund.* Vol I. Historisk Samfund for Sønderjylland. 78. Aabenraa 1999.
Kelsall, Phillip 2007: *Crisis and Change. The Development of Dutch-Danish Maritime Trade 1639-1755.* PhD-Afhandling. Århus 2007.
Klem, Knud 1943: 'Den Danske Ostindie- og Kinahandel.' i Årbog for Handels- og Søfartsmuseet på Kronborg 1943. S.72-102.
Koefoed, Georg Albrecht 1993: *Forsøg til en Dansk Søe Ord-Bog med Beskrivelse paa hver Ord og deres Benævning i det Frandske og Engelske Sprog.* Handels- og Søfartsmuseet på Kronborg. Søhistoriske Skrifter nr. 17. København 1993.
Kristensen, H. K. 1974: 'Skibsfart fra Ribe-Varde-Blåvandshuk- området i gammel tid.' I *Fra Ribe Amt,* Varde. Vol. 18-3 1974, S. 363-403. Vol. 20-1 1976, S. 69-134 og Vol 20-2 1977, S. 386-455.
Kühn, Hans Joachim 1999: *Gestrandet bei Uelvesbüll; Wrackarchäologie in Nordfriesland.* Husum 1999.
Kuijpers, Erika 2005: *Migrantenstad; Immigratie en sociale verhoudingen in 17e-eeuws Amsterdam.* Hilversum 2005.
Lauring, Kåre 1988: 'Marchelis Michielsz Boschouver- imperiebygger eller svindler.' I Årbog for Handels- og Søfartsmuseet på Kronborg. 1988. S. 71-114.
Laursen, Bodil Busk 1981: 'Koffardikaptajnens indkøb'. I *Mark og Montre*. Ølgod Museum 1981. S. 15-23.
Laursen, L. 1893: *Kancelliets Brevbøger vedrørende Danmarks Indre forhold*. 1561-1565. Vol. 3. Rigsarkivet. Khb. 1893.
– 1898: 1571-1575. Vol. 5. Kbh. 1898.
– 1900: 1576-1579. Vol. 6. Kbh. 1900.
– 1903: 1580-1583. Vol. 7. Kbh. 1903.
– 1906: 1584-1588. Vol. 8. Kbh. 1906.
– 1915: 1603-1608. Vol. 12. Kbh. 1915.
– 1925: 1624-1626. Vol. 16. Kbh. 1925.
Lave, Jean & Etienne Wenger 2003: *Situeret Læring- og Andre Tekster.* Kbh. 2003.
Lemée, Christian P. P. 2006: *The Renaissance Shipwrecks from Christianshavn. An Archaeological and Architectural Study of Large Carvel Vessels in Danish Waters, 1580-1640.* Roskilde 2006.
Lennep, J. van & J. Ter Gouw 1868: *De uithangteekens, in verband met geschiedenis en volksleven beschouwd.* Amsterdam 1868.

Lind, H. D. 1889: *Kong Kristian den fjerde og hans mænd på Bremerholm.* København 1889.
– 1896: *Kong Frederik Den Tredjes Sømagt; Det dansk-Norske Søvœrns Historie 1648-1670.* Odense 1896.
– 1902: *Fra Kong Frederik den Andens Tid: Bidrag til dansk-norske Sømagts Historie 1559-1588.* København 1902.
Linderoth, Andreas 2018: '*Örlogsstaden Karlskrona 1996*-2004' i *Örlogsstäder – innovationer, varv och vrak.* Karlskrona 2018. S. 75-89.
Lottum, Jelle van 2007: *Across the North Sea. The Impact on the Dutch Republic on International Labour Migration, ca. 1550-1850.* Amsterdam 2007.
– 2011 With Jan Lucassen & Lee Heerma van Voss. 'Sailors, National and International Labour Markets and National Identity,1600-1850'. I Richard Unger (red.) *Shipping and Economic Growth 1350-1800* Leiden & Boston 2011. S. 309-352.
– 2016 With Aske Laursen Brock. 'Rural to Urban Migration in Eighteenth Century Scandinavia. Evidence from the Maritime Sector.' MEMS working paper nr. 3. University of Kent 2016.
– 2017 With Alexander Klein. *The Determinants of International Migration in Early Modern Europe: Evidence from the Maritime Sector, c. 1700-1800.* School of Economics Discussion Papers, University of Kent. 2017.
Lucassen, Jan 1987: *Migrant Labour Force in Europe 1600-1900.* London 1987.
– 2007: *Wages and Currency: Global Comparisons from Antiquity to the Twentieth Century.* Berlin 2007.
Løyland, Margit 2012: *Hollendertida i Norge 1550-1750*. Oslo 2012.
Maarleveld, Thijs J. 1994: 'Double Dutch Solutions in Flush-Planked Shipbuilding: Continuity and Adaptations at the Start of Moderne History.' I *Crossroads in Ancient Shipbuilding: Proceedings of the Sixth International Symposium on Boat and Ship Archaeology Roskilde 1991*. Oxford 1994. S. 153-163.
Maihaugen 2007: *Festskrift: Jon Bojer Godal 70 år: Norsk handverksutvikling -NHU 20 år.* Maihaugens årbok 2007. Lillehammer 2007.
Manøe Hansen S. L. & Bodil Busk Laursen 1981: 'Kaptajn Jens Sørensen Strellev 1733-1817'. I *Mark og Montre*. Ølgod Museum 1981. S. 5-13.
Marquard, E. 1932: *Kancelliets Brevbøger vedrørende Danmarks Indre forhold. 1630-1632*. Vol. 18. Kbh. 1932.
– 1936: 1633-34. Vol. 19. Kbh. 1936.
Moch, Leslie Page 1992: *Moving Europeans: Migration in Western Europe since 1650.* Indianapolis 1992.
Mortensøn, Ole 1995: *Renœssancens Fartøjer. -Sejlads og søfart i Danmark 1550-1650.* Rudkøbing 1995.
– 2012: 'Da skuderne fór' i *M/S Museet for Søfarts Årbog. Vol 71*. Helsingør 2012. S.7-32.
Mykland, Knut 1977: 'Gjennom nødsår og krig 1648-1720, vol 7.' i Knut Mykland (red), *Norges økonomiske historie,* Oslo 1977.
Møller, Anders Monrad 1996: 'Københavns handelsflåde i 1719 – en forsøgsvis kildekonfrontation samt noget om skib og skude.' I *Søfart, politik, identitet. Tilegnet Ole Feldbæk.* Handels- & Søfartsmuseet på Kronborg, Søhistoriske Skrifter XlX. København 1996.
Nielsen, Oluf 1855: *Kjøbenhavns Historie og Beskrivelse IV. Kjøbenhavn i Aarene 1536-1660.* København 1885.
Olechnowitz, Karl-Friedrich 1960: *Der SCIFFBAU DER HANSISCHEN SPÄTZEIT. Eine untersuchung zur Sozial- und Wirtschaftsgeschicte der Hanse.* Weimar 1960.

Olesen, Claus Rohden & Thorbjørn Thaarup 2012: *Nederlandsk i Norden; Den nederlandske teknologis indflydelse på renæssancens maritime Skandinavien.* Maritim kontakt 35. København 2012.

Parmentier, Jan 1985: 'Voogel Phoenix´s rejse til Bantam 1677-1679. 'I *Årbog for Handels- og Søfartsmuseet på Kronborg.* 1985. S. 114- 141.

– 1989: 'Søfolk og supercargoer fra Oostende i Dansk Asiatisk Kompagnies tjeneste 1730-1747.' I *Årbog for Handels- og Søfartsmuseet på Kronborg.* 1989. S.142-173.

Paulsen, Friedrich 1973: 'Aus den Lebenserinnerungen des Grönlandfahrers und Schiffers Paul Frercksen.' I *Nordfriesisches Jahrbuch.* 1973. S. 95-132.

Probst, Niels M. 1994: 'The Introduction of Flushed-Planked Skin in Northern Europe – and the Elsinore Wreck.' In *Crossroads in Ancient Shipbuilding: Proceedings of the Sixth International Symposium on Boat and Ship Archaeology Roskilde 1991.* Oxford 1994. S.143-152.

– 1996*: Christian 4.s.Flåde. Marinehistoriske Skrifter nr. 29.* København 1996.

Rafner, Claus 1996: 'Flådeudskrivningerne under den ældre enevælde. Bidrag til det sømilitære udskrivningsvæsens historie.' i Hans Jeppesen m.fl. *Søfart, politik, identitet. Tilegnet Ole Feldbæk.* Handels- & Søfartsmuseet på Kronborg, Søhistoriske Skrifter XlX. 1996.

Rediker, Marcus 1987: *Between the Devil and the Deep Blue Sea: Merchant Seamen, Pirates and the Anglo-American Maritime World, 1700-1750.* Cambridge 1987.

Rheinheimer, Martin 2001: *Der Fremde Sohn; Hark Oluf's Wiederkehr aus der Sklaverei.* Neümünster 2001.

– 2010: Rheinheimer & Jacob Seerup. 'Die "holsteinischen" Steuermänner. Ein maritimes Netzwerk in der dänischen Kriegsflotte des 18. Jahrhunderts.' I Rheinheimer *Mensch und Meer in der Geschichte Schleswig-Holsteins und Süddänemarks.* Neumünster 2010. S. 139-156.

– 2011: 'Seefahrt und Bevölkerung auf Amrum 1694-1918.' I *Rundbrief des Arbeitskreises für Wirtschafts- und Sozial Geschichte Schleswig-Holsteins,* 105 (2011). S. 38 -53.

– 2012: 'Nordfriesische Seeleute in der Amsterdamer Handelsfahrt.' I *Zeitschrift der Gesellschaft für Schleswig-Holsteinische Geschichte*, 137 (2012). S. 31-78.

– 2014a: 'Der Anteil der Seefahrenden an der Bevölkerung im Herzogtum Schleswig 1769' I *Rundbrief des Arbeitskreises für Wirtschafts- und Sozial Geschichte Schleswig-Holsteins* 112 (2014). S. 30-39.

– 2014b: 'Die Schleswig-holsteinische Handelsflotte im Jahre 1677'. I *Rundbrief des Arbeitskreises für Wirtschafts- und Sozial geschichte Schleswig-Holsteins,* 113 (2014). S. 33-40.

– 2016a: *Die Insel und das Meer: Seefahrt und Gesellschaft auf Amrum 1700-1860.* Studien zur Wirtshafts-und Sozialgeschichte Schleswig-Holsteins. Stuttgart 2016.

– 2016b: *Ipke und Angens: Die Welt eines nordfriesischen Schiffers und seiner Frau (1787-1801).* Stuttgart 2016.

– 2017a: 'Seefahrt und Demografie auf der Hallig Hooge 1652-1774'. I *Rundbrief des Arbeitskreises für Wirtschafts- und Sozial geschichte Schleswig-Holsteins,* 119 (2017). S. 9-13.

– 2017b: 'Schiffahrt des Herzogtums Schleswig im Spiegel des Sundzolls 1634-1857.' I *Jahrbuch für Regionalgeschichte*. 35 (2017) S. 15-32.

Rian Øystein 1996: 'Norsk utenrikshandel i krigenes Europa i 1600-årene.' I *Søfart, politik, identitet. Tilegnet Ole Feldbæk.* Handels- & Søfartsmuseet på Kronborg, Søhistoriske Skrifter XlX. Kbh. 1996.

– 1997: *Danmark-Norge 1380-1814*. Vol II. Oslo 1997.

Riewerts, Erick & Roeloffs, Brar C. 1996: *Föhrer Grönlandfahrer.* Neümünster 1996.

Roeloffs, Brar C. & Wilke, Knud 2000: *Westerlandföhr und Amrum im 18. Jahrhundert.* Husum 2000.

Rohden Olesen, Claus & Thaarup, Thorbjørn 2012: *Nederlandsk I Norden: Den nederlandske teknologis indflydelse på renæssancens maritime Skandinavien*. Maritim kontakt 35. 2012.

Royen, P.C. van 1987: *Zeevarenden op de koopvaardijvloot omstreeks 1700.* Amsterdam 1987.

– 1997: Med Jaap Bruijn & Jan lucassen (red) 1997: *'Those Emblems of Hell'? European Sailors and the Maritime Labour Market, 1570-1870. Reseach in Maritime History No. 13.* St. John's Newfoundland 1997.

Röding, Johann Hinrich 1793: *Allgemeines Wörterbuch der Marine; In Allen Europœischen Seesprachen Nebst vollstændigen Erklærungen.* Hamburg, Halle 1793.

Scheel, Fredrik & Worm-Müller, Jacob S. 1935: *Den Norske Sjøfarts Historie; Fra De Ældste Tider til Vore Dage.* Vol. 2.1. Oslo 1935.

Schäfer, Dietrich (red) 1883: *Hanserecesse von 1470- 1530.* III, 2. Nr. 251. Leipzig 1883.

Sicking, Louis, Bles, Harry de & Bouvrie Eds, Erlend Des 2004: *Dutch Light in the 'Norwegian Night': Maritime Relations and Migration across the North Sea in Early Modern Times.* Hilversum 2004.

Sogner, Sølvi 1994: *Ung i Europa; Norsk ungdom over Nordsjøen til Nederland i tidlig nytid.* Oslo, 1994.

– 2012: *Og skuta lå i Amsterdam… Et glemt norsk innvandrersamfunn i Amsterdam 1621-1720*. Oslo 2012.

Steen, Sverre 1930: *Det norske folks liv og historie, 1640-1720,* Vol 5. Oslo 1930.

– 1941: *Kristiansands Historie 1641-1814.* Oslo 1941.

Stoklund, Bjarne 2018: *Læsø Land. Økologi og kultur i et øsamfund 1550-1900. Bind2: Manden og Havet.* København 2018.

Sundbo, A. 191 -1922: 'Af Varde og Hjertings Historie'. I *Fra Ribe Amt 4.* Varde. 1915-18, S. 524-563 og Vol 5. 1919-22, S. 65-107.

Sætra, Gustav 1997: 'The International Labour Market for Seamen, 1600-1900: Norway and Norwegian Participation'. I *'Those Emblems of Hell'? European Sailors and the Maritime Labour Market, 1570-1870.* van Royen, P.C, Jaap Bruijn & Jan lucassen (red) 1997. S. 173-211.

Sørensen, Nils Arne 2009: 'Oversigter. Den transnationale vending?' i *Historisk Tidsskrift.* Bind 109, hæfte 2 (2009). S. 459-472.

Tank, Roar 1923: *Tordenskiolds Matros*. Kristiania 1923.

Tirion, Isaak 1750: *Tegenwoordige Staat der Vereenigde Nederlanden; Agtste Deel, Zynde het Vervolg der Beschryving van Holland.* Amsterdam 1750.

Topsøe-Jensen, T. A. & Marquard, Emil 1935: *Officerer I Den Dansk-Norske Søetat 1660-1814 og Den Danske Søetat 1814-1932.* Vol 1 og 2. København 1935.

Trap, J. P. 1966: *Danmark. Tønder Amt*. Bind X,2. København 1966.

Unger, Richard W.1978: *Dutch Shipbuilding before 1800. Ships and Guilds.* Amsterdam 1978.

– 1997: *Ships and Shipping in the North Sea and Atlantic, 1400-1800*. Aldershot 1997.

Wallerstein, Immanuel 1980: *The Modern World-System II. Mercantilism and the Consolidation of the European World-Economy, 1600-1750.* New York 1980.

Worsøe, Hans H. 1996: *Sønderjyske arkivregistraturer. Schackenborg godsarkiv.* Aabenraa 1996.

Aarsbog, Sindre W. 2003: *Med Mars og Merkur; en analyse af norsk deltagelse i VOC baseret på skipssoldbøger 1633-1794.* Hovedopgave i historie, Trondheim 2003.

9

Abstract

This dissertation is based on the fact that many Dutch maritime words are also found in Danish and this fact has led to a further study of whether other Dutch maritime cultural phenomena, practices and traditions have found their way not only to Denmark, but to the whole of Scandinavia. It has thus been found that the Dutch maritime influence in the realm of the Danish king, particularly in the 16th, 17th and 18th centuries, was significant and characterised the development of the maritime communities in Denmark, Norway and the Duchies.

In the 16th and 17th centuries, it was primarily the import of Dutch maritime technology in the form of ships and rigging types, as well as knowledge of how to handle the new vessels and new ways of building them that was imported. This phenomenon was based primarily on the purchase of vessels in the Netherlands and the recruitment of Dutch experts: shipbuilders and ship's masters who brought new shipbuilding methods to the kingdoms and through participation in so-called practice communities with local craftsmen taught these new methods. The earliest known written testimony of the presence of Dutch shipbuilders in the Danish king's realms dates from 1488, but otherwise it seems that it is in the reigns of Frederik II and Christian V that we see the recruitment of Dutch shipbuilders and shipbuilders in great numbers, primarily for employment in the Royal Navy.

At the same time, however, we also have to imagine that private shipowners could benefit from using foreign shipbuilding experts; therefore, large parts of the merchant fleet are also likely to have been affected by the new techniques. If not through Dutch shipbuilders directly at the yard, then through local shipwrights who had learned the new methods during their annual conscription service at the royal yards.

Dutch navigation methods were probably also introduced to Scandinavia at the end of the 16th century, but it is in the reign of Christian IV that we first find evidence of Dutch navigators and seafarers recruited by the Danish crown. Dutch navigation methods made it possible to carry out long ocean voyages, which was necessary for the Danish king to be able to take part in the continent's quest for colonies in the rest of the world, but the special skills needed to safely guide a ship to the other side of the globe still required personal experience, which meant that Dutch seamen and officers were recruited for this purpose.

In the latter part of the 17th century the Danish Royal Navy faced manning problems for its large and complicated naval ships, and so the admiralty looked to the Netherlands, where deep-sea sailors with the necessary skills were to be found. In this context it has been shown that there is a fundamental difference between sailing a small vessel in

domestic traffic in near coastal waters, where the simple rig is handled from the deck, and being able to work aloft on a large full-rigged, ocean-going ship.

The latter required many years of training, knowledge and experience, which could only be obtained on board such ships, of which there were not many in the realms of the Danish king at this time. Therefore, from around 1663, many ordinary seamen and trained naval officers were recruited in the Netherlands, with the result that more than half of the officers in the fleet of Niels Juel at the Battle of Køge Bay were from the Netherlands. The ordinary sailors who worked on the decks and in the rigging and the naval officers and navigators were part of the same practice communities that constituted the social network on board. In this dissertation the theories developed by Jean Lave and Etienne Wegner on practice communities and peripheral-legitimate participation have been applied to demonstrate how ordinary sailors from the realms of the Danish king took over the knowledge, experiences, beliefs and practices of the Dutch sailors and officers through participation in practice communities and made it their own.

It is also from the middle of the 17th century that we have the first testimony of seamen from the Danish conglomerate state who participated in shipping from the Netherlands and who later returned home influenced by Dutch maritime practice; these 'hollandfarers' must also be considered when we talk about the Dutch maritime influence on Scandinavia. The phenomenon in the opposite direction, from Scandinavia to the Netherlands, grew in the latter part of the 17th century, but it is especially from the 18th century that we see an ever-increasing labour migration from the maritime communities of Scandinavia to the northern ports of the United Provinces. The driving forces behind this movement of people were poor social and economic conditions in the home countries, while in the Netherlands it was possible to find a job, even if you were unskilled, as well as a salary that was significantly better than what could be found at home.

Through the aforementioned practice communities (networks) based on family, friendships and local or regional affiliation, an immigrant from the Nordic countries could with relative certainty travel to the Netherlands and find housing and work in the new country through the same networks/practice communities. Many settled permanently in the Netherlands, but especially in the 18th century, most returned to their home country after a shorter or longer period abroad. In this dissertation the primary source of the presence of Scandinavian sailors in Dutch shipping is my findings in the Waterschout Archive in Amsterdam for the years 1772, 1780 and 1787, where approximately 5500 Scandinavian sailors have been found and, in addition to this, several findings have been made in notarial archives and other sources on the recruitment of Scandinavian seamen in Amsterdam in the 17th century. Thus, it is possible to get rare insight into the lives of ordinary people (in this case sailors) in the early modern period, and even to derive some general traits from the lives and movements of these people.

In this way it was found that Scandinavian seafarers accounted for about 25 percent of all sailors who sailed on ships from Amsterdam in the years around 1780 and that among these sailors there were two special maritime core areas from which most Scandinavian seafarers came. The most significant is the area along the coast of Southwest Jutland and the west coast of Schleswig and Holstein, the Wadden Sea coast, from which a total of 48.3 percent of Scandinavian seafarers originated. Thus, this area must be considered the primary area for the introduction of Dutch maritime practices and technology into the realms of the Danish king in the 18th century. The second largest number of Scandinavian

sailors came from Southwest Norway, more precisely from Karmøy to Kristiansand, but these men only accounted for about a quarter of the number of Wadden Sea seafarers; nonetheless, they must also be considered an important contribution when added up with the rest of the Norwegian maritime communities. Norwegian sailors totalled 20.7 percent of all Scandinavian seafarers, sailors from Sweden and Finland accounted for 7.6 percent of Scandinavian seafarers, while those from the Scanian peninsula accounted for 5 percent.

In comparison to these figures, it is surprising that sailors from inland Danish waters accounted for only a bit over 3 percent, which reveals that this area did not have much contact with the international Dutch maritime labour market, but was oriented towards domestic shipping and shipping from Copenhagen. In the 17th century, the distribution between the Wadden Sea area and the coastal areas of Norway was markedly different, as the number of sailors from the Wadden Sea area was about the same as their Norwegian counterparts, just as the number of sailors from the Wadden Sea islands was much smaller than in the 18th century. The importance of Norway for the introduction of Dutch maritime knowledge, technology and practice was thus of greater importance in the 17th century. About 56 percent of the registered Scandinavian sailors in the Waterschout Archive were ordinary sailors, after which came the group of maritime craftsmen and experts, such as ship's masters, sailmakers, boatswains and coopers. Navigators (mates of the ship) accounted for just under 10 percent of the Scandinavian seafarers and among them there was a predominance of sailors from the Wadden Sea area, which also applied to the boatswains. This phenomenon indicates that the Wadden Sea area sailors were the most skilled and experienced seamen in the Danish conglomerate state in the 18th century.

The Scandinavian seafarers participated in all parts of Dutch shipping, but most of them sailed in the runs across the Atlantic Ocean to South America and the Caribbean and in the grain trade to the Baltics. In the lucrative trades (the grain trade, whaling and the trade to Arkhangelsk), the sailors from the Wadden Sea area far outnumbered the other Scandinavians, while sailors from Southwest Norway were also represented here to a lesser degree. In contrast, it seems that sailors from the Scanian peninsula and from Sweden and Finland were to be found in trades with higher risks and with lower pay. Thus, the two maritime core areas, the Wadden Sea and Southwestern Norway, took precedence. Sailing on Dutch deep-sea vessels, Scandinavian seafarers became acquainted with the most sophisticated types of vessels and rigging and acquired the new technologies and practices through participation in the practice communities that existed aboard. As previously mentioned, this cannot be said to be the same in Danish-Norwegian domestic shipping. The absence of seafarers from the inner Danish waters in the maritime Dutch labour market meant that the Royal Danish Navy and private shipowners had to rely on sailors from the previously mentioned maritime core areas to man their large full-rigged vessels.

Local or regional identity was important for the Scandinavian seafarers' choice of residence in Amsterdam. There were over 200 sailors' inns in or near the harbour area, and especially in the eastern part many of these had, in one way or another, connections with cities or regions in Scandinavia, either through the host's own background or simply due to the fact that sailors from a given area favoured a particular inn. In these inns, practice communities were established based on the shared local or regional background, but also on Dutch maritime culture, which the inns were an integral part of, and here new sailors could gradually be introduced to Dutch maritime language, practice and experience, as peripheral-legitimate participants in these practice communities.

Sailors from some locations in Scandinavia tended to keep among themselves, while others were more involved in the larger group of Scandinavian seamen, which means that there must have been a common Scandinavian-Dutch maritime practice community. It was to a large extent the innkeeper who secured jobs on board ships for his guests and, in some cases, these guests came from a certain location while in others they were a more mixed group of Scandinavian sailors; this fact is also reflected in the composition of the ship's crews on Dutch ships. Almost all ships departing from Amsterdam had a core crew usually consisting of the skipper, the mate, the boatswain and the carpenter, all of whom were Dutch, so the Scandinavian seamen had to learn to understand the Dutch language. However, there was a small group of Scandinavian sailors who reached the ranks of skipper or mate and here we find sailors who were hired directly by their landsmen without the innkeeper as a go-between; in these cases, shared local or regional identity was essential in this relationship.

The Scandinavian sailors who participated in the Dutch maritime labour market in the 18th century were an integral part of Dutch shipping, while retaining their connections to home, and along with the Dutch shipbuilders, navigators, naval officers and ordinary seafarers who were recruited to serve in the realms of the Danish king, they were the carriers of Dutch maritime practice, technology and knowledge, which had a great influence on the development of shipping and seafaring in the Danish conglomerate state.

MARITIME CONNECTIONS ACROSS THE NORTH SEA

Why are so many nautical words in Danish the same as in Dutch? Who taught the shipwrights in the Royal Danish Shipyard in Copenhagen to build carvel planked ships? How did the first Danish ships find their way to the riches of the East Indies? These questions and many more are meet in this Ph.D. dissertation, which circles around the maritime relationships between especially the seaward provinces of the Netherlands and the Scandinavian countries. In the early renaissance Dutch maritime technology was imported by the Danish king, who recruited craftsmen and bough ships in the Netherlands and later on the Royal Danish Navy was profoundly influenced by Dutch master shipbuilders and naval officers. But it was not only maritime experts and mariners who travelled to the North, but also ordinary Scandinavian sailors, who migrated the other way and took a part in Dutch shipping to all parts of the world. This labour migration has been known amongst Dutch scholars for some time, but is almost unknow in Scandinavian historical circles.

For the first time data from the Amsterdam City archive has made it possible to get closer to the individual sailors, who hailed from the coastal districts of Norway, the Southwest coast of Denmark and for a lesser part the West coast of Sweden and their participation in the Dutch shipping industry has been analyzed showing, that they learned important maritime skills onboard. Coming back to Scandinavia these sailors were the backbone of the navies and merchant fleets of the Scandinavian countries especially in the eighteenth century.

This study of maritime labour migration will be of interest for scholars of maritime-, migration and technology history but also for anyone, who likes to read about the life's and work of ordinary sailors in the 17th and 18th centuries.

sidestonepress

ISBN: 978-90-8890-986-3

9 789088 909863 >