

Hans Chr. Johansen: Danish Sailors, 1570-1870

In the field of maritime research many books and articles have been written on single topics in Danish Maritime History. However, when it comes to complete works, not a single complete work has appeared since 1919, apart from »Dansk Søfartshistorie« (Danish Maritime History) in seven volumes which is being published at the present time.

The previous literature has covered almost every subject in Danish maritime history, but one subject which perhaps has been slightly neglected is the sailors themselves.

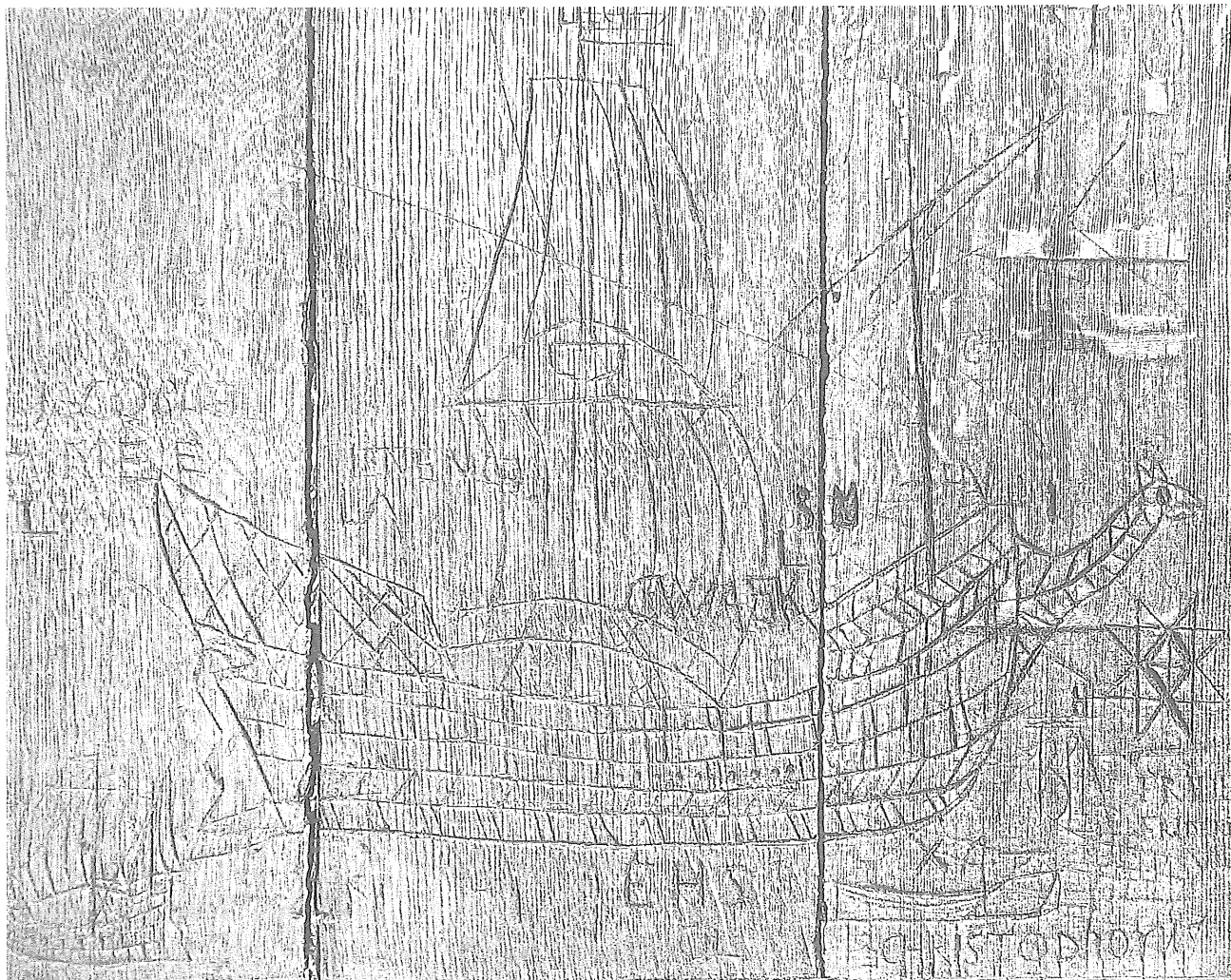
This article, which the DMM yearbook has borrowed from the International Journal of Maritime History, is reproduced here in English in its original form, but with a Danish summary. In it Professor Hans Chr. Johansen attempts to shed some light on the subject of the Danish sailor. Three different years, 1676, 1787 and 1871 have been selected for a review of the sources, and on the basis of these the crews of the Danish merchant navy and the Royal Danish Navy are examined with regard to where they came from, where they sailed, and not least how many of them there were.

Over the 300 years covered by this survey, the Danish realm went from being a major power in the northern Europe to a new status as one of the smallest countries in Euro-

pe. In the late sixteenth century the Danish king ruled present-day Denmark, Norway, southern and western Sweden, Germany north of Hamburg and Lubeck, and the islands in the northern Atlantic – Greenland, Iceland, and the Faroes. A series of political disasters led to the loss of the Swedish provinces in the mid-seventeenth century, Norway in 1814, and the German provinces in 1864.

These changes had a deep impact on Danish maritime history and in some cases make it difficult to analyze long-run tendencies, especially when dealing with the navy, which always has had its main base in Copenhagen despite having to protect the whole realm; its tasks in the early period obviously differed decisively from those of the nineteenth century. Moreover, the maritime traditions of the various provinces have been very different: some have a coastal population, while others have almost no connection to the sea.

To get as homogeneous an area as possible for the entire period, we will deal only with Denmark proper, i.e., the area north of the Kongeå, which was Danish after 1864. This gives a natural delimitation as far as the merchant marine and the fishing fleet are concerned, whereas there is a break regarding the navy in 1813, because the



The old choir stalls still stand in Sæby Church. They are from around 1500, and in them choir boys and others who were bored during the church services have carved between 30 and 40 engravings of ships. Taken together these choir stalls comprise a gallery of the different types of ships from 1500 up into the 18th century. The example chosen here is a ship with its square sail on the main mast. After this was engraved the service probably ended and that is why the foremast was never finished, and why the ship is missing its mizzen mast and bowsprit. (Photo: DMM)

I Sæby Kirke står stadig kirkens gamle korstole. De er fra omkring 1500, og i dem har kordrenge og andre, der kedet sig under gudstjenesten, skåret mellem 30 og 40 skibsristninger. Set samlet er disse korstole da også blevet et galleri over skibstyper fra 1500 – og op i 1700-årene. Det her valgte er et skib med råsejl på stormasten. Derefter har gudstjenesten sandsynligvis været forbi, og derfor blev fokkemasten aldrig skåret færdigt, ligesom skibet forblev uden mesanmast og bowsprit. (Foto: H&S)

loss of Norway meant that it was reduced to a much smaller size.

Danish Maritime History: A Research Review

The only comprehensive Danish maritime history which also covers deep-sea fishing and whaling was published in 1919.¹ It was rather heterogeneous with regard to topics treated: while some chapters were based on new research, others were more popular and impressionistic. The main emphasis was on maritime trades, but some chapters dealt with ship construction, navigation, lights and buoys services, and marine insurance. The labour market for sailors, their lives at sea, and their careers were on the other hand only treated cursorily.

Later books dealing with longer periods of Danish maritime history are mainly short surveys and do not add much to our understanding of shipping, trades, or recruitment of crews.² At present, however, funding has been secured to write a seven-volume Danish maritime history based on new research. Publication is planned for 1996-1999. The project covers both ships, trades, maritime economics, and the lives of the sailors, but so far no results are available for the sixteenth to nineteenth centuries.

The literature on shorter periods is much more valuable, especially for the eighteenth century. The merchant navies of the provincial maritime communities from 1700 to 1864 have been analyzed by Anders Monrad Møller. The chartered companies – primarily the Asiatic Company – have been studied by Aage Rasch, P.P. Sveistrup and Erik Gøbel. The importance for the merchant marine of Danish neutrality

during the great European wars has been stressed by Ole Feldbæk, and there are also biographies of the most important eighteenth-century shipowners. For earlier periods, the sources for late seventeenth-century maritime history have been examined by Jørgen Barfod and the early years of whaling have been analyzed by Sune Dalgård.³

In general the central themes in these contributions, and in a large number of shorter articles, are routes and cargoes, types of ships, and political aspects of Danish participation in international shipping; the sailors and their lives have been allotted little room. Danish naval history has mainly concentrated on strategic aspects and naval campaigns, but some of the major histories of the navy also provide lists of ships, their armour and officers, size of the crews, and enlistment systems for conscripted personnel.⁴

Ships and Crew Sizes

The number of vessels in the merchant marine, deep-sea fishery and whaling is not known until sometime in the seventeenth century, but the number of Danish ships registered in the Sound when passing Elsinore increased sharply from the late 1560s. Although this mainly reflects voyages from Copenhagen and Elsinore, there are also other indicators, such as the number of Danish ships calling at Amsterdam, which seem to point at an increase. Most of the vessels, however, were rather small, and the majority seem to have been coasters.

From the mid-seventeenth century we have more detailed data about the number

of ships and their tonnage, although the early figures most likely have some deficiencies due to missing ports in some years. There were also varying practices with regard to the longer limit of sizes included in the statistics. A sample of these figures is

shown in table 1, which underscores the position of Copenhagen as the largest seafaring community from at least the mid-seventeenth century.

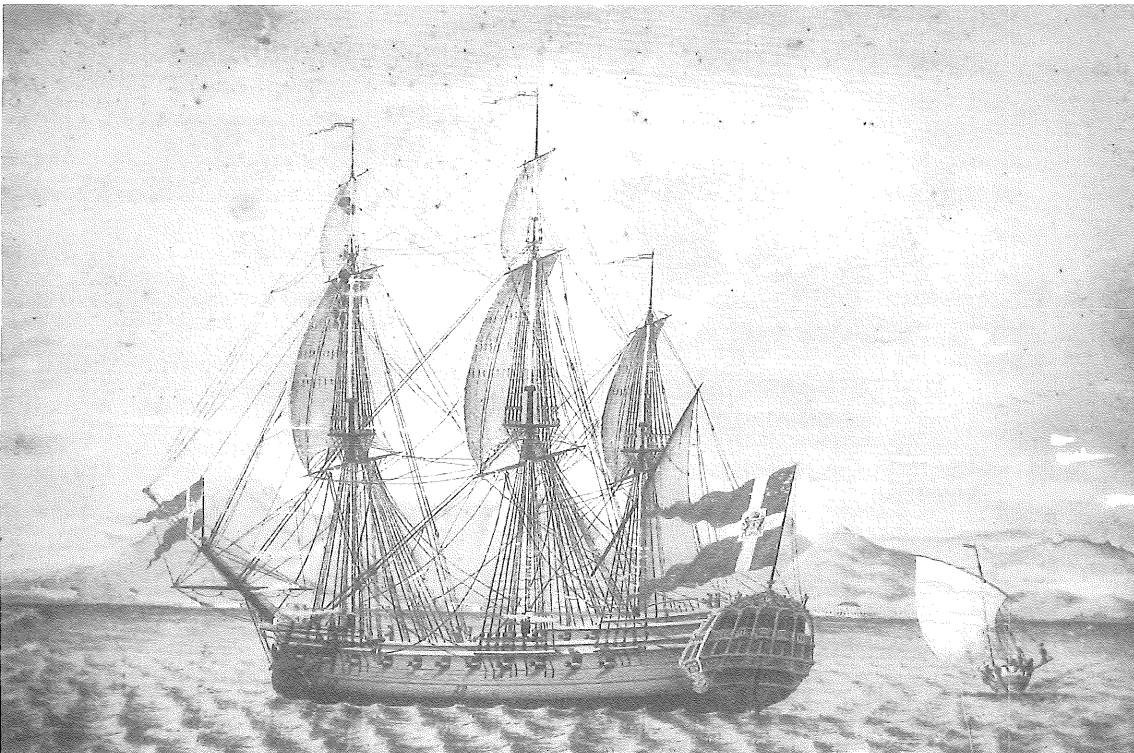
The general picture is of long-term growth, but there were some serious set-

Table 1
Danish Merchant Marine, 1639-1871

Year	Copenhagen		Provincial Towns		Denmark	
	No. of ships	1000 kml.	No. of ships	1000 kml.	No. of ships	1000 kml.
1639	135	6	484	15	619	21
1656		8		7		15
1670					772	8
1680		3		5	615	8
1688					828	12
1696					1249	24
1699		10		7	1005	17
1746	116	5	469	6	585	11
1777	182	10	623	7	805	17
1787	331	26	681	9	1012	35
1807		29		16		45
1832	302	16	1324	16	1626	32
1847	280	15	1636	27	1916	42
1860	336	21	2434	48	2770	69
1871	370	49	2735	182	3105	231

Note: Until 1867 Danish ships were measured in commercial lasts (kml.), in principle equal to Dutch lasts, although there were frequent changes in the method of computation, which means that tonnages are not completely compatible. From 1868 tonnage was measured in net register tons; one last was equal to about two tons. See Anders Monrad Møller, *Skibsmålingen i Danmark 1632-1867, Handels- og Søfartsmuseets Årbog* (1974), 16-47. The 1871 data are thus in net register tonnages.

Sources: Ole Degn, unpublished material; Jørgen H.P. Barfod, *Danmark-Norges handelsflåde 1650-1700* (Elsinore, 1967); Anders Monrad Møller, *Fra galeoth til galease* (Esbjerg, 1981); Møller, *Jagt og skonnert* (Copenhagen, 1988); and Danish official statistics.



DRONNING SOPHIA MAGDALENE, a frigate built in 1761-62 for Asiatisk Kompagni. The ship, which was designed by the manufacturer K. Krabbe, was built at the company's own shipyard on Christianshavn. The DRONNING SOPHIA MAGDALENE with its 330 lasts was one of the largest ships in the merchant fleet, and during the years 1762 to 1774 it made a total of six voyages from Copenhagen to Canton and back. (Photo: DMM)

DRONNING SOPHIA MAGDALENE, fregat bygget 1761-62 til Asiatisk Kompagni. Skibet der var konstrueret af fabriksmester K. Krabbe blev bygget på kompaniets eget værft på Christianshavn. DRONNING SOPHIA MAGDALENE var med sine 330 læster blandt handelsflådens største skibe, og det udførte i årene 1762 til 1774 i alt seks returrejser mellem København og Canton. (Foto: H&S)

backs, mainly due to wars. The first occurred in 1657-1660, when Denmark suffered a decisive defeat in two consecutive wars with Sweden and only secured its future existence through assistance from the Dutch navy when Copenhagen was under siege. A second, equally serious conflict,

was the Great Northern War (1700-1721). During the remainder of the eighteenth century Denmark was neutral in the great European wars; this fact, combined with an active maritime policy and the general expansion of the world economy, provided the context for the growth of the merchant

marine, especially in the second half of the century.

It was not until 1807 that the kingdom became embroiled in the Revolutionary and Napoleonic wars – on the French side – and had many ships seized by the British navy. The nineteenth century – after 1814 – was characterized at first by slow growth, but after the mid-1820s it became rather steady.

In order to get a more detailed impression of the merchant marine and the size of the seafaring population, three years have been selected for a more thorough examination. The first is 1676, chosen because there are registration lists for all customs districts for this or a proximate year.⁵ Total Danish tonnage in that year was close to 10,000 lasts, half of which used Copenhagen as a home port. The second largest district was Aarhus, but its tonnage was only about one-tenth that of Copenhagen. In most provincial ports there were only boats and small craft for coastal traffic, local fisheries, or ferries between the numerous islands and to and from Jutland. Only nineteen districts out of forty-nine had any vessels of twenty lasts or above, and the ten of 100 lasts or more were all from Copenhagen. Several of the largest vessels had been built as so-called »defence ships«, constructed so that they could easily be converted into naval vessels; shipowners were obliged to place them at the navy's disposal in case of war. The types of rig are not known for all craft, but among the larger ones were *galiots*, *caryers* and *skibe*.

The men in the merchant service totalled

about 6,500 in 1696, when the tonnage was 24,000 lasts, or on average 3.7 lasts per man.⁶ The smallest craft had crews of two to four men and the largest six to twelve, which means that there were economies of scale, but the information is too scattered to allow more detailed calculations.

From the late eighteenth century, 1787 has been selected for an analysis in order to exploit the database created at the University of Odense which contains for all Danish ships information about size and crew, type of ship, and the voyages in 1787 – as far as the several sources used provide this information.

The size and geographic distribution are shown in table 2. Total tonnage was now 46,000 lasts, of which almost three-fourths was owned by Copenhagen shipowners, among them several chartered companies, the largest being the Baltic and Guinean Company, with thirty-eight ships and a tonnage of 4,300 lasts. But the most famous was the East Asiatic Company (*Asiatisk Kompagni*) established in 1732. It owned ten ships with a total tonnage of 3,400 lasts, including the Danish fleet's largest vessels. The total tonnage of the various companies was about 13,000 lasts, or nearly one-third of the entire merchant marine. Moreover, nearly all the other large vessels were owned in the capital. The only craft with a tonnage above 100 lasts in the provinces was a 109-last frigate from Svendborg.

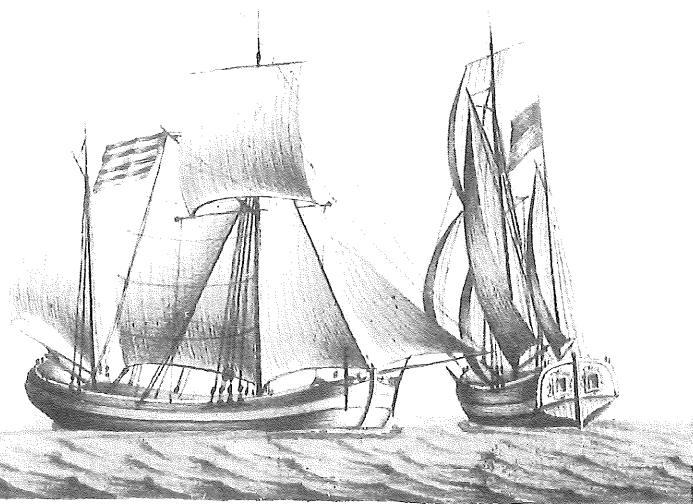
Close to twenty different types of vessels were mentioned in the registration lists. Among those of 100 lasts or more the dominant type was the frigate, but there was also a significant group called »ships«

From 50 to 100 lasts most were brigs, but there were also many snows and brigantines. Among the smaller vessels from twenty to fifty lasts the *galeas* (ketch) was most common, followed by hookers and brigs, and in the smallest category there were many sloops (*jagter* and *chalupper*).

The registration lists and some other sources also mention the size of the crew, but the practice differed dramatically from one source to another. In some cases, for example, masters and mates were excluded, and general muster rolls, such as those used in a later section, suggest that crews were slightly larger than would be judged

from the registration lists. According to the latter, the total number of seamen, which includes those in whaling and the deep-sea fishery, was close to 7,000; when masters and mates are included, there were probably between 7,500 and 8,000. This is about six lasts per man, which is a significant decline in crew size compared to the late seventeenth century. This average, however, masks some substantial differences between various voyage patterns. For ordinary merchantmen in European waters and in direct traffic with the West Indian colonies, the average was about nine lasts per man, slightly higher for the smallest craft and down to seven to eight lasts per man for ships above about 140 lasts. Surprisingly, there were no economies of scale in this type of manning.

But there were some important deviations from this general pattern. The vessels used for whaling, seal hunting and fishing in Arctic waters had much larger crews: on average, they were about 100 lasts and carried about thirty-nine men, which gives 2.6



En Gallioth og Gallias.

A »Gallioth and Gallias« drawing from the sketchbook: »Samling af Alle slags Skibe – Fartøyer Joller og Baade« (A Collection of All Types of Ships – Vessels, Dinghies and Boats) by the brothers and ship's officers A. H. Stibolt (1739-1821) and H. H. Stibolt (1735-1793). The publishing date of the book is uncertain but it is probably from about 1760. (Photo: DMM)

En »Gallioth og Gallias« tegning fra de to brødre og søofficerer A. H. Stibolt (1739-1821) og H. H. Stibolts (1735-1793) skitsebog: »Samling af Alle slags Skibe – Fartøyer Joller og Baade. Bogens datering er usikker, men den er formentlig fra omkring 1760. (Foto: H&S)

Table 2
Danish Merchant Navy, 1787 (Ships of 5 lasts or more)

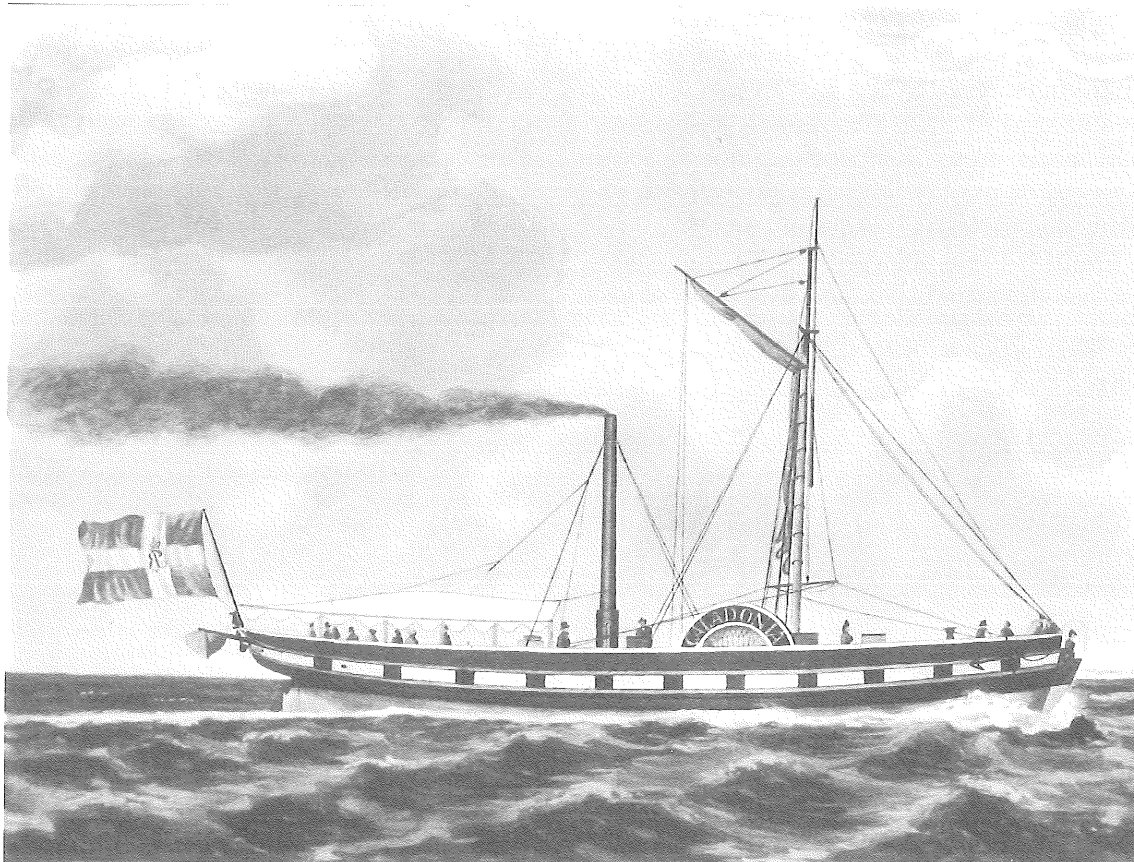
Home Port	5-19 Lasts		20-49 Lasts		50-99 Lasts		100 Lasts and over	
	No. of ships	1000 kml.	No. of ships	1000 kml.	No. of ships	1000 kml.	No. of ships	1000 kml.
Copenhagen	34	0.4	161	5.8	115	8.2	128	19.3
Provinces,	552	6.5	182	5.0	14	0.9	1	0.1
Of which:								
Dragør	17	0.3	67	1.8	1	0.1	-	-
Aalborg	33	0.4	23	0.6	3	0.2	-	-

Sources: University of Odense, Database. See also Hans Chr. Johansen. Scandinavian Shipping in the Late Eighteenth Century in a European Perspective, *Economic History Review*, XLV (1992), 479-493.

Table 3
The Danish Merchant Navy 1871 (Ships of 4 net register tons or more)

Home Port	4-49 nrt.		50-99 nrt.		100-299 nrt.		300 nrt. and over	
	No. of ships	1000 nrt.	No. of ships	1000 nrt.	No. of ships	1000 nrt.	No. of ships	1000 nrt.
Copenhagen	133	2.2	68	5.0	143	26.4	36	15.9
Provinces,	1513	26.4	384	29.0	427	63.2	31	13.4
of which:								
Svendborg	103	2.0	43	3.2	62	9.3	4	1.4
Marstal	176	4.3	57	4.2	18	2.7	-	-
Fanø	44	0.7	48	3.7	66	9.6	1	0.3

Source: Denmark, *Statistisk Tabelværk*



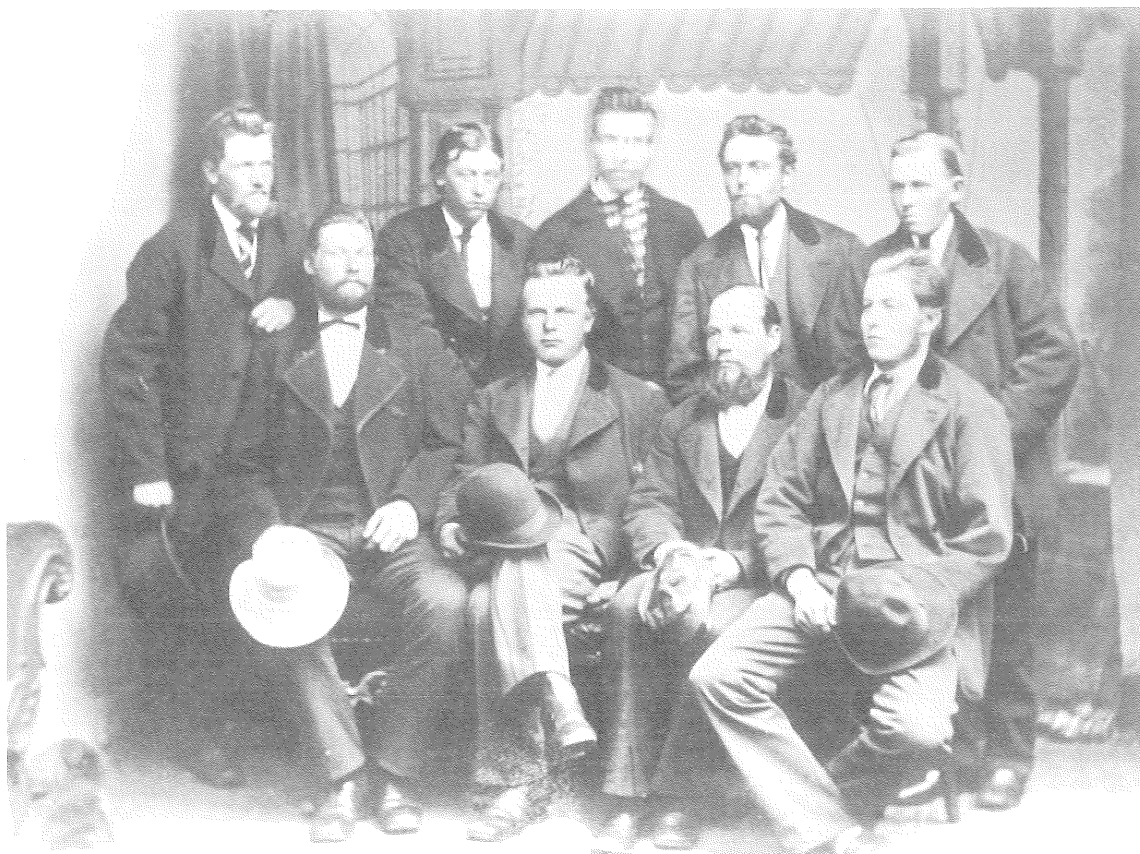
H/S CALEDONIA: The first steamer in the Danish merchant fleet, built in 1817 at John Wood and Co. in Glasgow for James Watt Jr. in London. It was sold in 1819 to a prosecutor called Steen Andersen Bille in Copenhagen and he put the ship into service on the Copenhagen – Kiel route as well as pleasure cruises along the coast of the Sound. In 1822 the ship was sold to a big merchant called Lauritz Nicolai Hvidt, who had the ship in service until 1834. In 1843 it was sent to the breaker's yard in Copenhagen. (Photo: DMM)

H/S CALEDONIA: Det første dampskib i den danske handelsflåde, bygget 1817 hos John Wood & Co i Glasgow til James Watt Jr. i London. Solgt 1819 til auditeur Steen Andersen Bille i København, der satte skibet ind på ruten mellem København og Kiel samt lystture ned langs kysten af Øresund. 1822 blev skibet solgt til grosserer Lauritz Nicolai Hvidt, der havde skibet i fart indtil 1834. 1843 ophugget i København. (Foto: H&S)

lasts per man. Many of the sailors were probably used not as seafarers but as fishermen or hunters. Ships in the East Indian, Chinese and West African/West Indian trades also had larger crews than normal: two to four lasts per man. The larger crews were most likely due to defence requirements.

The third year selected is 1871, the earliest year for which detailed lists of all ships

exist in printed form. Table 3 shows that Copenhagen still was the dominant home for the merchant marine, with more than one-fourth of total tonnage. As well, most of the biggest shipowners lived in the capital, among them the first steamship companies, which over the next few decades would dominate Danish shipping in most trades.



Crew members from the bark JONAS RISTING of Copenhagen, photographed in Liverpool in 1876. (Photo: DMM)

Besætningsmedlemmer fra bark JONAS RISTING af København fotograferet i Liverpool 1876. (Foto: H&S)

The first Danish steamer was bought in Scotland in 1819, but for a long time such vessels were used only for coastal passenger traffic. In 1871 there were still only ninety-one steamships in the merchant marine, comprising less than ten percent of total tonnage. The largest steamship owner was the United Steamship Company (DFDS), established in 1866 through a merger of several smaller firms. DFDS took over most of the regular shipping routes in the coastal traffic and on routes to and from other north European countries. Many of these steamers were combined passenger and freight vessels.

Most sailing vessels were under 200 tons. There were more than twenty different types, but most over two hundred tons were barques, while under that threshold brigs, schooners, and sloops predominated.

While the published registration lists from 1871 give no indication of the size of crews, an estimate of total manning of the 2735 vessels in table 3 can be made from samples in the *mønstringsruller* used later in this essay. If they are representative of the total merchant marine, the crew requirement must have been about 10,000 men or about nine lasts per man, which is almost the same as 100 years earlier in the general freight trade. But there probably was a small decline in crews per last for sailing vessels, since steamers carried larger than average crews because of the engineers and stokers needed for the engines.

By 1871 the fishery was in many places an independent trade, but only fishermen in larger vessels are included in the figures above. The 1870 census had a group called

»living from the sea;« in this category were 14,140 persons, probably including a few thousand fishermen, some pilots and other minor groups.

In order to evaluate the importance of the sea for the Danish population over the three hundred years covered in this survey, we must also include the personnel on warships. The navy is normally regarded as having its origin in 1509, when the first ships exclusively for naval purposes were built. By the late sixteenth century there were twenty-two ships equipped with 624 guns, but a major expansion occurred under King Christian IV (1588-1648), when the navy reached a strength of nearly sixty ships and 4000-5000 men. In 1615 the *Holmens faste stok*, a permanent corps used as sailors on naval ships and workers in the naval shipyard in Copenhagen, was established. In the beginning the corps comprised about 1500 men, but grew gradually. The rest of the crews were conscripted from various regions of the realm, probably from among sailors in the merchant marine.

From 1648 to 1807 the most important naval vessels were ships-of-the-line and frigates. Table 4 shows for some sample years the size of the navy and its crew. The figures, however, seldom depict the effective force at sea. Even in wartime only part of the navy was fitted out for operations, and in the long peace between 1720 and 1807, the larger vessels would sail at periodic intervals as guard ships in coastal waters, to convoy the merchant marine in European wars, or to train young cadets. The ship-of-

the-line DELMENHORST, for example, which belonged to the navy from 1735 to 1777, sailed in only nine years, and even then the sailing season spanned only a few months. There were only two longer voyages: to Algiers in 1746 and Lisbon in 1759-1760. The result of this practice was that the *Holmens faste stok*, which grew to about 7000 men in the late eighteenth century, was able to man most ships. Conscription took place solely in a few special years and only involved 1000 or perhaps 2000 men out of the 17,000 which in principle could be drafted. About 6000 were from Denmark proper, a significant proportion of the total manning of the merchant marine.

After the British attack on Copenhagen in 1807, most of the navy was conquered and incorporated into the Royal Navy, and with

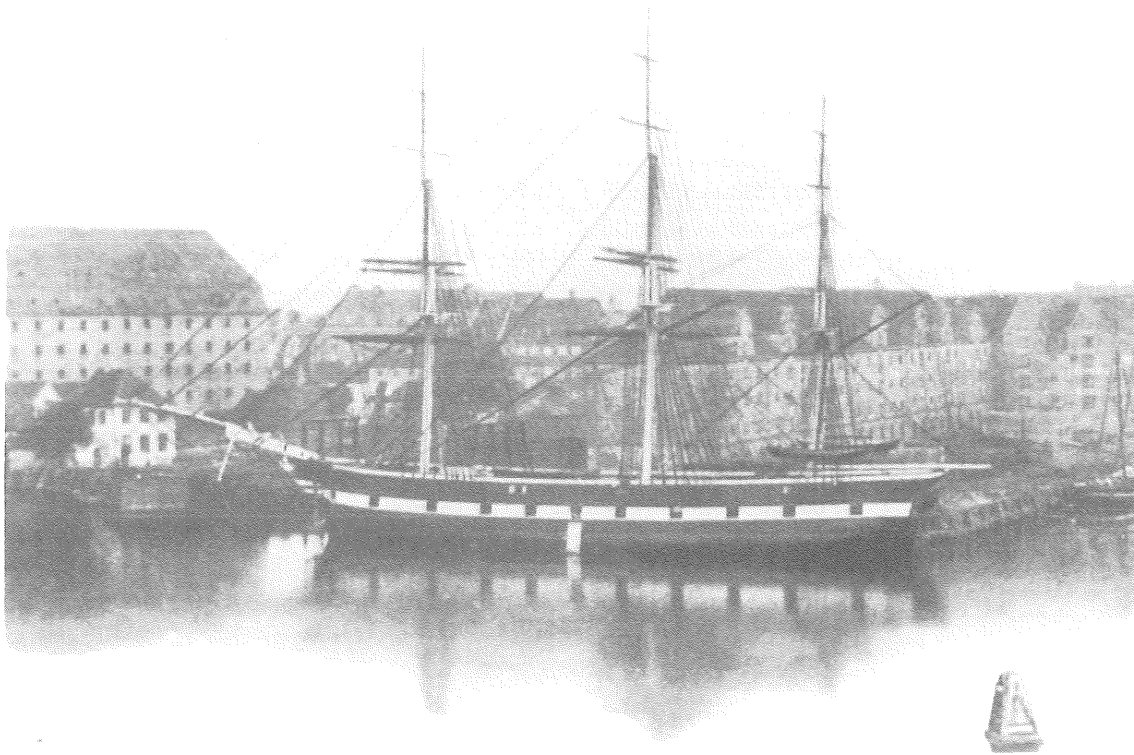
the loss of Norway there was no need for a naval force of the same size. The plans for reconstruction therefore included only six ships-of-the-line, eight frigates and eight corvettes with a force of about 7000 men. At the same time the permanent stok was reduced to about 3000. Even this more modest goal was not achieved until about 1840 and there was little active sailing in the interim. In the 1840s the first naval steamships were built. By 1871 the navy had thirty-three ships, including eight armoured vessels, one ship-of-the-line, four frigates and three corvettes, all propelled by steam.

Based on the information in this section it is possible to make a rough estimate of the total number of Danes who earned their living from the sea. In order to avoid double-counting we must take into consi-

Table 4
The Larger Ships of the Danish Navy, 1674-1807

Year	Ships-of-the-Line	Frigates	Guns	Total Crew Size (000 men)
1674	21	12	1662	9
1700	33	9	2778	17
1709	41	11	3008	21
1720	24	12	2172	15
1746	29	13	2580	19
1780	33	18	2602	23
1807	20	17	1972	19

Sources: H.G. Garde: *Efterretninger om den danske og norske sømagt* (4 vols., Copenhagen, 1832); R. Steen Steensen (ed.), *Flåden gennem 450 år* (Copenhagen, 1970); and Halfdan Barfoed: *Vor flåde i fortid og nutid* (2 vols., Copenhagen, 1941).



HAVFRUEN: a frigate of 945 g.r.t. built in 1822-25 for the Danish Navy. It left naval service and was sold to the merchant house of Puggaard and Co. in Copenhagen, which bought a total of six retired frigates and corvettes from the Danish Navy during the years 1852 to 1864. In 1882 HAVFRUEN was sold to a Swedish shipping company, and was the same year wrecked at Griffin Cove in Canada. The crew were all rescued. (Photo: DMM)

HAVFRUEN: fregat på 945 brt. bygget 1822-25 til Orlogsmarinen. Det udgik af flåden og blev solgt til handelshuset Puggaard & Co i København, der i årene 1852-64 købte i alt seks udrangerede fregatter og korvetter fra Orlogsflåden. 1882 blev HAVFRUEN solgt til et rederi i Sverige, og samme år forliste det ved Griffin Cove i Canada. Besætningen blev reddet i land. (Foto: H&S)

deration that most naval conscripts came from the merchant marine. Bearing this in mind, it seems most likely that about 10,000 Danes derived their livelihoods directly from the sea in the seventeenth

century, increasing to about 15,000 in the late eighteenth century, and perhaps to a few more in the nineteenth century. Compared to the number of males between fifteen and sixty-four, this represents between

two and four percent of the labour force. While the direct effect on employment has been marginal, there have been important linkages to commerce, shipbuilding, and other branches of manufacturing.

Voyage Patterns of the Merchant Marine

Most late sixteenth-century Danish merchant ships were small and used in coastal traffic. According to the Sound Toll lists, however, there were also voyages to northern Germany and Norway, and the larger towns had some connections with the Netherlands. Seldom were more distant places visited, and most voyages to the North Atlantic islands seem in this early period to have been made by Norwegians, especially from Bergen.

By the late seventeenth century this pattern had changed, but the shift almost exclusively involved Copenhagen. Most voyages by provincial craft were limited to the Baltic, Norway and the North Sea close to Denmark. Only on rare occasions did a Danish vessel visit more remote ports. But for Copenhagen the situation was different. There was now a significant traffic to and from the North Atlantic Islands. Some Copenhagen vessels annually called at French and Portuguese ports, and there were occasional overseas voyages to the first Danish colonies and trading posts in Asia, the Guinea coast, and the West Indian island of St. Thomas, which was acquired in 1672.

This difference became even more marked in the second half of the eighteenth century, by which time there are better sources for voyage patterns. The relatively

small provincial ships were still engaged in coastal voyages, the important Danish-Norwegian trade, and trips to the nearest Baltic ports. As well, the maritime communities along the North Sea coast continued an earlier tradition of regular connections to Hamburg and Amsterdam. Most local traffic was engaged in supplying the capital with foodstuffs and firewood. In the Danish-Norwegian trade, Denmark exported rye, barley, malt and meat, and imported timber, iron and fish. Between 1733 and 1788 there were special privileges that discriminated against foreign imports. From the Baltic came flax and hemp, and in years of poor domestic harvests, rye and wheat as well.

The smallest Copenhagen vessels followed the same pattern as the provincial craft, but from the 1740s an active policy to promote the construction of larger ships and to gain access to new markets began to cause change. Among the measures adopted were a 1742 ordinance which required imports to be shipped directly from the country of origin; treaties with the North African states to curb the actions of corsairs; the founding of new colonies; the establishment of a net of consuls in southern European ports; and the paying of premiums for whaling and deep-sea fishing off the coasts of Iceland and Greenland. The neutrality policy between 1720 and 1807 also conferred a number of benefits. These opportunities were exploited by Copenhagen merchants and statesubsidized chartered companies (see table 5).

Table 5
Destination of Voyages for Copenhagen Ships, 1787

Destination of Voyages	5-49 lasts		50+ lasts	
	No. of Ships	1000 Lasts	No. of Ships	1000 Lasts
Denmark and the Duchies	55	1.4	5	0.4
Norway	23	0.7	4	0.3
Baltic Ports	37	1.1	10	2.0
North Sea Ports	12	0.4	1	0.1
France and the Mediterranean	22	0.8	43	4.0
North Atlantic	49	1.9	46	3.8
West Indies	3	0.1	62	7.4
Far East	-	-	26	6.3
Laid-up	19	0.7	57	5.7

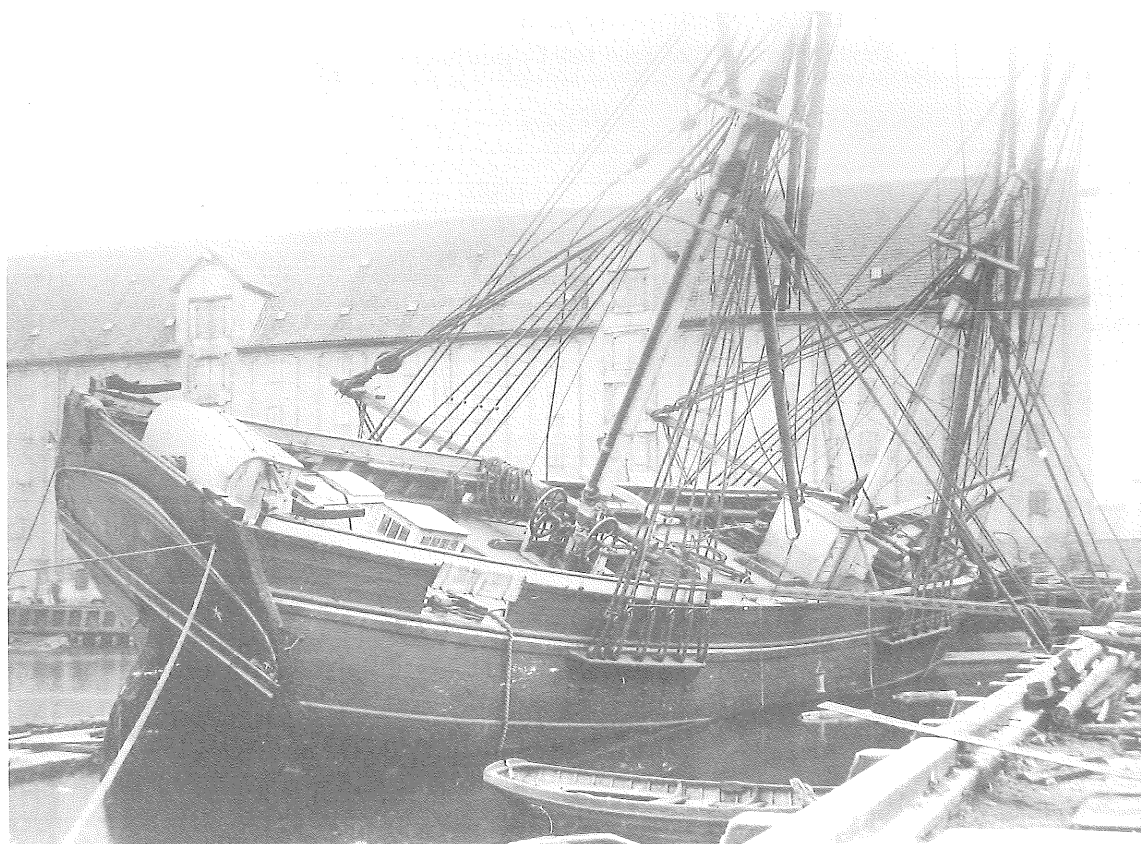
Note: Ships used on more than one route are included on the route on which it sailed the most during the year.

Source: University of Odense, Database.

Most important was the navigation to the three Danish islands in the West Indies, which sent sugar to refineries in the mother country that was partly re-exported to the Baltic. The Asiatic Company had a monopoly on Danish trade with China, but from 1772 the India trade was open to other Danish shipowners. Voyages to the Mediterranean were part of a larger pattern: vessels would normally go to a port in the Baltic in late summer for cargoes of flax, timber or grain, which were carried to France, Portugal or Spain, where the ships would spend the winter sailing between Lisbon and the Mediterranean, returning to Denmark in the spring with salt, fruit or

wine.⁷ During European wars the pattern was dominated by long-distance voyages.

But North Atlantic and Arctic waters were also important. There were supplies to be sent to the Faroes, Iceland and Greenland, and return cargoes from these areas, but there were also fishing, sealing and whaling. The first expedition to Spitsbergen for whales was made in 1615, but for most of the seventeenth century the annual number of ships averaged fewer than five. In the late eighteenth century this trade grew in importance. Twenty-nine vessels returned to Copenhagen in 1787 with blubber, but only seventeen had sufficient crews to have caught the whales themself-



HVALFISKEN: a brig of about 180 tons, built in Kalmar in 1801 for the Royal Greenland Trading Company in Copenhagen. The ship, which is photographed here during keelhauling in the harbour basin at Grønlands Handels Plads on Christianshavn, was in Greenland service up until 1899. In the following years HVALFISKEN was used as a school ship in Frederiksholms Kanal, from 1902 to 1915 it was a club ship for the Copenhagen Amateur Sailing Club, after which it was used for a number of years by Svendborg Sailors' High School as a school ship. In 1936 HVALFISKEN was refitted as a floating workshop, and the following year it was sold to the breaker's yard. (Photo: DMM)

HVALFISKEN: brig på ca. 180 tons, bygget i Kalmar 1801 til Den kongelige grønlandske Handel i København. Skibet, der her er fotograferet under kølhaling i havnebassinet på Grønlands Handels Plads på Christianshavn, var i fart på Grønland frem til 1899. I årene efter blev HVALFISKEN brugt som skoleskib i Frederiksholms Kanal. 1902-15 var det klubskib for Københavns Amatørsejlkлуб, hvorefter det i en årrække var skoleskib for Svendborg Sømandshøjskole. I 1936 blev HVALFISKEN bygget om til værktøjspram, og året efter blev det solgt til ophugning. (Foto: H&S)

ves; the remainder probably picked up cargoes at a shorebased whaling station in Greenland. For Copenhagen whalers the normal pattern was to leave Denmark in March and return in August.

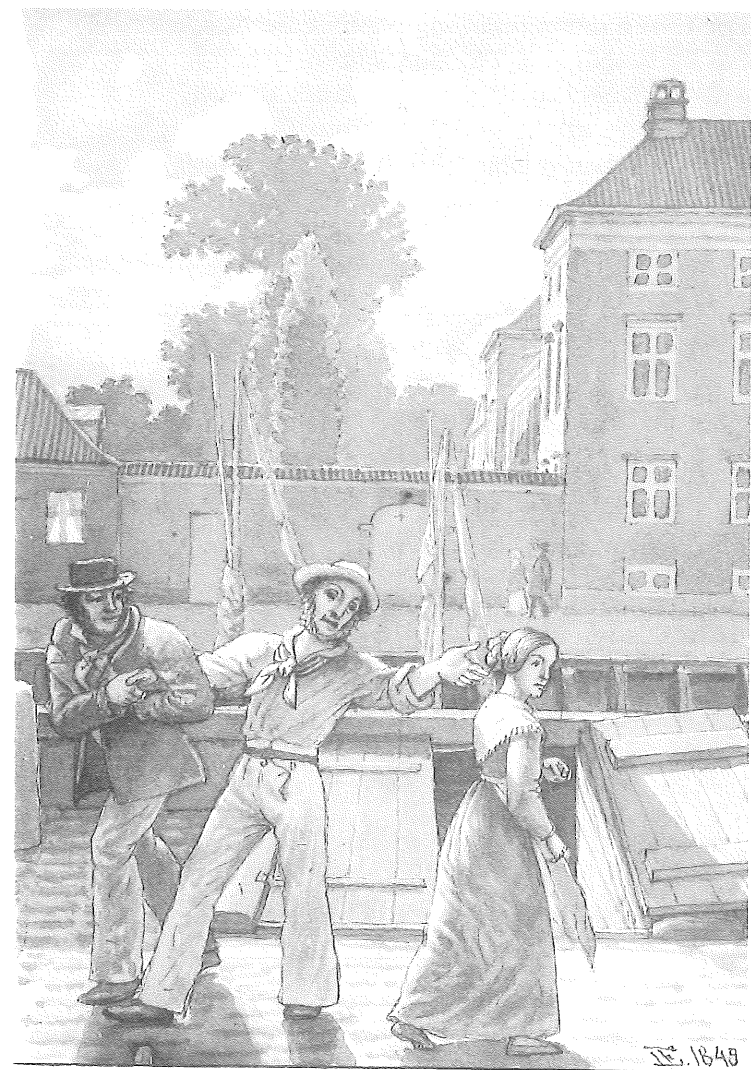
During the nineteenth century, provincial craft extended their activities and the differences between provincial and Copenhagen sailing vessels narrowed. While grain transports to Britain and trade with northern Europe remained its backbone, consular reports also mention many calls in South America, primarily at Rio de Janeiro and Buenos Aires, and East Asia, where Hong Kong was the most visited port. The West Indies, on the other hand, were of lesser importance, although Denmark retained the Virgin Islands until 1917.

Who Were the Sailors?

Lists with personal details about crews in the merchant navy do not exist for large numbers of vessels until the eighteenth century, but the scattered evidence from earlier periods indicates that the small craft in the Baltic and North Sea used men recruited mainly from areas near their home ports. Only Copenhagen vessels needed a somewhat larger recruitment area, and in the seventeenth century several Dutch masters gained burghership in the capital. This pattern continued into the eighteenth century. Most shipowners lived in towns and the seamen were drawn from the town itself and the neighbouring rural parishes. In some cases they were related to the shipowner or master.

Sailor on shore leave in Nyhavn. Pen-and-ink etching by C.W. Eckersberg 1848. (Foto: DMM)

Sømand på landlov i Nyhavn. Tuschradering af C. W. Eckersberg 1848. (Foto: H&S)



But in those areas where there were many vessels, the local population was often too small and recruitment took place over a wider zone. In 1798 some ships from Dragør, close to Copenhagen, recruited more than half their sailors from nearby southern Sweden, and a few other foreigners can also be found on these vessels. In Elsinore there were examples of larger ships with sailors from Memel and other Baltic ports. The masters and mates on provincial craft, on the other hand nearly always came from the home port.⁸ It should be noted, however, that 1798 was a year of European wars and the neutral Danish fleet was in particular demand. In peacetime, the need for foreigners was almost certainly smaller.

For Copenhagen ships we have lists with

information on crews in the late eighteenth century. When a ship cleared the capital it had to be registered by the waterschout, an officer of the conscription system. His ledgers contain the name, position on board, and normally also the birthplace, age, and wage for each crew member.

For 1787 a ten-percent sample of these lists has been analyzed. The distribution of birthplaces is shown in table 6. Danes dominated, with about one-third from Copenhagen and another third from the provinces – a large proportion came from the island of Bornholm in the Baltic. Only a few were foreigners. The same is true if we look at ships going to the West Indies or Asia. Only in war years, when such voyages increased dramatically, was there a need to

Table 6
Birthplaces of Crew on a Sample of Copenhagen Ships, 1787

Birthplace	Masters	Mates	Others	Total
Copenhagen	19	16	37	72
Rest of Denmark	1	6	65	72
Norway	1	-	30	31
Duchies	-	2	20	22
From the navy	-	1	7	8
Abroad	-	-	4	4

Notes: Sailors belonging to the navy could, especially in peacetime, get special permission to join the merchant marine to obtain practical training. Two of the »others« from abroad were from Sweden and one from Danzig; there was also »a negro..«

Source: Provincial Archives, Copenhagen, *Waterschoutens Arkiv*, 1787.



Morten Mathiesen, a Fanø skipper from Sønderho portrayed here with his octant in his hand. In the background is Mathiesen's ship the sloop ELLEN CATHRINE of Sønderho. Painting by J. Wennink 1806. (Photo: DMM)

Fanøskipper Morten Mathiesen fra Sønderho portrætteret med sin oktant i hånden. I baggrunden ses Mathiesens skib, sluppen ELLEN CATHERINE af Sønderho. Maleri af J. Wennink 1806. (Foto: H&S)

recruit foreigners, most of whom came from Sweden and various German ports.⁹

The names of the seamen might be another indication of nationality. There is a significant proportion with Dutch names, such as Jacob Roelofs, Dreves Jansen, Adrian Dirks and Jan Jansen Theis, but it is most likely that they were descendants of earlier immigrants. In 1521 a group of Dutch farmers from Marken moved to Store Magleby, about five miles southeast of Copenhagen, to grow vegetables. Population growth was rapid and several families later settled in nearby Dragør, which in 1787 was the largest shipping community outside Copenhagen (see table 2). Nearly all the sailors with Dutch names seem to come from this community or Copenhagen, which also had a group of second- or third-generation Dutch immigrants. An analysis of all Danish masters in 1787 also reveals a few with British names – Thomas Price, James Wemyss, Joseph Greenway, and Alexander MacIntosh. They commanded ships going to India and may have been recruited because of specific knowledge of routes or places in that region.

The age distribution of the sailors is very special. About threefourths were under thirty and nearly none, except a few masters, were over forty. Even if there was a significant mortality rate, this must have meant that life at sea in a Copenhagen vessel was not a lifetime job. It must have been normal for sailors to switch to a land-based occupation some time in their thirties, unless they continued to serve on foreign or provincial ships. No investigations, however, have been conducted into the types of

jobs to which they turned. It is also unknown whether the same pattern characterized the men on provincial ships.

The information in the *waterschout's* lists about wages is rather heterogeneous. For longer voyages it is given as wages per three months, whereas for shorter ones it may have been for one or two months, but also in several cases for »half of the wages for the voyage.« In those cases where the wages can be converted into yearly amounts, a master received from 240 to 288 *rixdollars* – higher on ships to East India – a mate 120 to 192 *rixdollars*, an ordinary sailor sixty and a boy twentyfour to fortyeight *rixdollars*.¹⁰ To this should be added the value of food and accommodation on board. But it must also be remembered that the sailing season for many seamen was only from March until November or December, which means that yearly income should perhaps

be reduced by one-fourth. As a comparison, an unskilled worker in the towns at the time earned about fifty *rixdollars* per year and a small handicraft master perhaps 100 to 150 *rixdollars*.

In 1871 crew lists (*mønstringsruller*), containing the same type of information as the *waterschout's* lists, were completed for all vessels leaving Danish ports, and most have survived. A sample has been selected from Copenhagen and the provincial district of Svendborg. In Svendborg local sailors dominated: about eighty-eight percent were born in the town, neighbouring parishes on the island of Funen, or on the many smaller islands south of Funen, especially Thurø and Tåsinge. Another eleven percent were from other places in Denmark, and only two sailors were foreigners, one from Halmstad in Sweden, and one from Stavanger in Norway.¹¹

Table 7
Birthplaces of Crew on a Sample of Copenhagen Vessels, 1871

Birthplace	No. of sailors
Copenhagen	22
Rest of Denmark	104
Norway	5
Sweden	7
Schleswig	20
Other Foreign Places	1

Source: Provincial Archives, Copenhagen, Mønstringskontoret i København. Skibsbemandingslister, 1871.

The Copenhagen pattern (see table 7) shows a wider recruitment area, but Danes were still by far the largest group. Most foreigners were from Schleswig, which after 1864 was Prussian, but it is most likely that they were recruited from the large Danish-speaking minority in the former duchy.

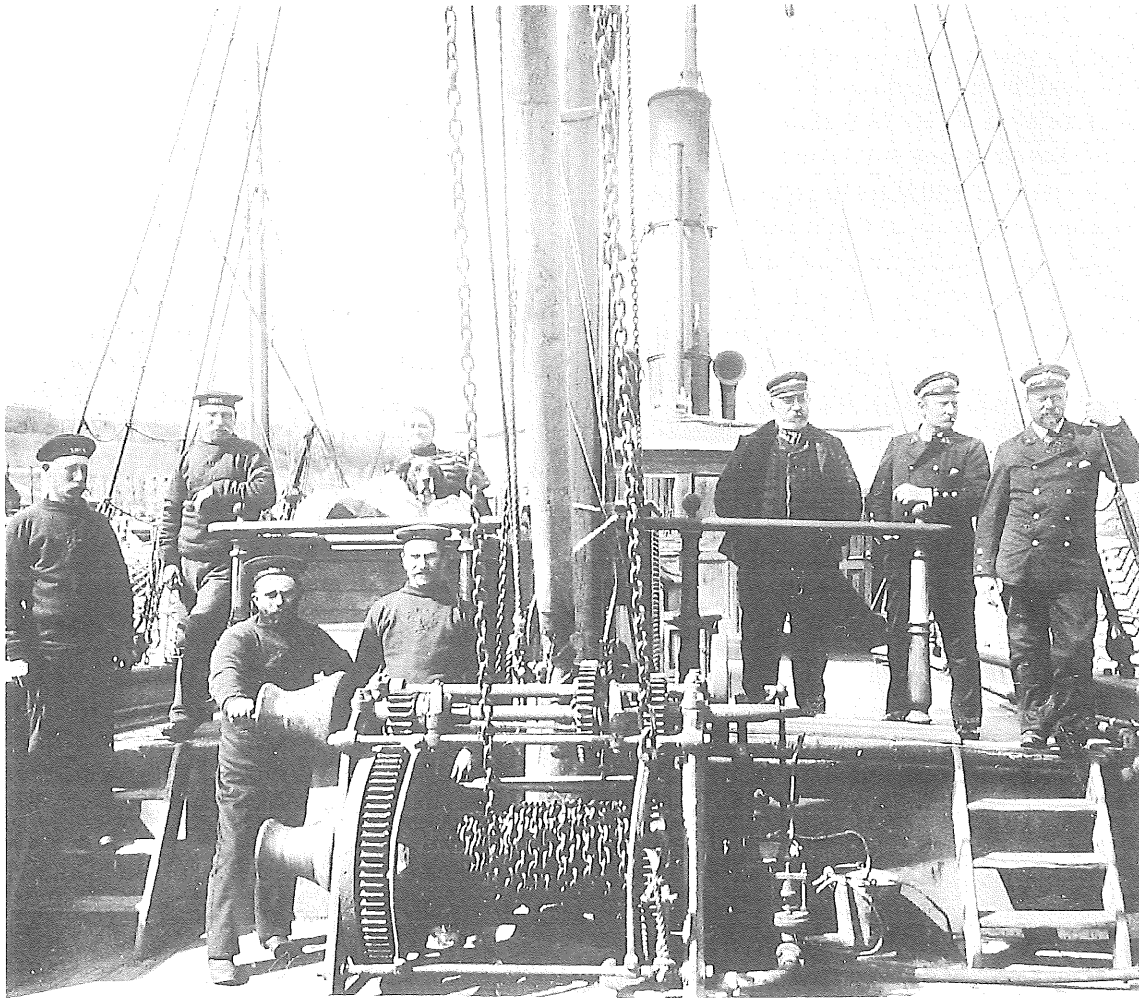
The age distribution for sailors in 1871 does not include data on masters. For other crew members it again shows a very young population. This was especially true for Svendborg, where eighty percent were below thirty years of age and only two percent were forty or above. Many in this region began a career at sea immediately after their confirmation, normally when they were fourteen or fifteen. Some seem to have switched to Copenhagen or foreign ships later in their lives, but many who survived the first ten or fifteen years at sea must have found jobs ashore. It is perhaps also significant that the few older sailors on Svendborg craft all served on the small steam ferries that connected the town with the nearby islands. Copenhagen sailors were on average older. While the twenty to twenty-nine-year age group still provided forty percent of the crew, excluding masters, about twenty percent were forty years or older. The latter group was concentrated on the few steamers in the sample.

In 1871 there was almost no difference in wages paid to Copenhagen or provincial sailors. The *mønstringsruller* normally reported weekly amounts. Converted into annual figures, this showed that mates earned 300-360 *rixdollars*; able seamen were paid 216-252 *rixdollars*; and younger crew were

given 144-216 *rixdollars*.¹² For comparison, workers in Copenhagen earned about 400 *rixdollars* a year, but they of course had to pay for their own food and accommodation, which consumed a substantial part of their budget. On the larger vessels, the sailing season was now longer than a century earlier.

When the first whalers were fitted out in the sixteenth century, the lack of experienced Danes led to the employment of both Dutch and Basque specialists. Their numbers decreased over time, but even in the eighteenth century there were crew whose surnames may have been Dutch. There was also a trend toward hiring Danes, especially from the North Sea island of Rømø, which geographically was south of the 1864 border but was formerly a Danish enclave in the Duchies. In the eighteenth century some whalers were fitted out on this island, and many local seamen were recruited as »commanders« of Dutch and Hamburg whalers.

As far as the navy is concerned, there was a permanent group of officers, as well as sailors and conscripts. The latter were especially prominent in wartime and were recruited principally from the coastal regions of Denmark, Schleswig and Norway, or from those who were merchant mariners in peacetime. The ordinary sailors among Holmens *faste stok* were predominantly of Danish or Norwegian origin, and since it was common for sons to follow in their fathers' footsteps, an increasing number of this segment of the crew was born in Copenhagen, even if the earlier generation had



The crew aboard the DFDS steamer S/S YDUN of 151 g.r.t., built in Scotland in 1859 for Petersen Brothers in Randers. In 1870 the ship together with the Petersen Brothers' firm passed into the ownership of DFDS, who put the ship into service on the routes between Copenhagen, Zealand, Funen and Jutland. In 1901 the S/S YDUN was sold to A/S Em. Z. Svitzer's Bjergnings-Entreprise (Salvage Enterprise) in Copenhagen, who refitted the ship as a lighter. It was sold to the breaker's yard in 1911. (Photo from 1896, DMM)

Besætningen ombord i DFDS damper S/S YDUN på 151 brt. bygget i Skotland i 1859 til Brødrene Petersen i Randers. 1870 gik skibet sammen med Brødrene Petersen ind i DFDS, der satte skibet ind på ruterne mellem København, Sjælland, Fyn og Jylland. 1901 blev S/S YDUN solgt til A/S Em. Z. Svitzers Bjergnings-Entreprise København, der ombyggede skibet til lægter. Solgt til ophugning 1911. (Foto fra 1896. H&S)

Table 8
Birthplaces of a Ten-Percent Sample of Danish Naval Officers (Percent)

Birthplace	Birth Year		
	Before 1680	1680-1780	1781-1850
Denmark	19	82	92
Norway	19	8	-
Schleswig-Holstein	6	8	5
Netherlands	3	1	-
Other Foreign Places	8	1	3
Unknown, but Danish-			
Norwegian Name	31	-	-
Other Unknown	14	-	-
Total	100	100	100

Source: Th. A. Topsøe-Jensen and Emil Marquard, *Officerer i den dansk-norske søetat 1660-1814 og den danske søetat 1814-1932* (2 vols., Copenhagen, 1935).

migrated to the capital from Norway. In an early period, primarily during the Great Northern War, there were also examples of recruitment abroad, mainly in Germany, but the exact number of foreigners among the naval seamen is unknown.

We have better knowledge of the origins of the officers because of published biographies. Based on a ten-percent sample from these (see table 8), we can see that in the early period of Danish naval history there was some recruitment abroad, especially in the Netherlands. But by the eighteenth century it was a national navy, a fact also stressed by contemporaries. One symptom of this was that while the language of com-

mand in the army remained German for quite a long time, the navy always used Danish.

Danish Sailors on Foreign Vessels

There are no sources that allow us to estimate at any time the total number of Danes sailing on foreign craft. Instead, we must limit ourselves to fragmentary evidence which on occasion can provide some hints about tendencies, about the foreign merchant marines which used Danish manpower, and about the destinies of these migrants.

As long as the large Danish realm existed, and despite the existence of local recruitment districts, there were always some sea-

men who joined vessels belonging to other parts of the kingdom. Danes in this way became sailors on Norwegian and Schleswig-Holstein ships. There were close relations between Odense in Denmark and Bergen in Norway in the late eighteenth century, characterized both by common ownership of vessels and sailors who moved from one town to the other.¹³ Over shorter distances there were also close ties between northern Jutland and southern Norway; between the island of Ærø in the Duchies and neighbouring south Funen; and between south Jutland and some of the important shipping communities in the northern part of Schleswig. In this way even before 1814 there was a common labour market for the three main parts of the kingdom, with Bergen and Flensburg the most attractive places for Danish sailors.

Migration over longer distances was mainly to the most important seafaring nations. In an early phase the Netherlands was most attractive. While it is not known when this exodus began, by the midseventeenth century there were significant Danish communities in Amsterdam and other Dutch maritime towns.

The majority of these Danes were sailors and women who worked as servants. Around 1700 it has been estimated that more than half the foreign sailors on Dutch ships who signed protests in Dutch ports came from the Danish realm and that eleven percent were Danish.¹⁴ In 1725 the total number of Danish and Norwegian sailors in the Dutch merchant, whaling and VOC fleets was between 8000 and 9000.¹⁵ Many were probably from western Jutland,

where parish registers often contained nicknames such as »Hollander« or »East-indiaman.« In the early eighteenth century there were many examples in the conscription lists of »living in Holland« or »has gone to Holland to earn his bread and living.«¹⁶ The main reason for this migration was probably the lure of higher wages on Dutch ships and a higher standard of living in Dutch towns. There are examples of Danes returning with substantial savings compared to their more sedentary contemporaries.

In the nineteenth century it was increasingly the US merchant marine which became the main foreign employer for Danish sailors who left home. Among shipowners there were complaints about young sailors who deserted in American ports, and the conscription rolls in Danish ports regularly mentioned that the conscript had joined an American ship. Again, higher wages may have been an incentive, but at least after 1865 desertion could also be an inexpensive means of permanent emigration.

Naval personnel were also allowed to join foreign warships in peacetime to get practical training. Many of the first-generation admirals and other high-ranking officers received part of their training in the Dutch navy, and there were also Danish sailors on both British and French ships during the Napoleonic wars. On the other hand, there have also been periods when Danish naval officers served as advisers to foreign navies. This was the case in Russia in the early eighteenth century and in the Siamese navy more than 100 years later.

Conclusion: Danes at Sea

Seafaring has normally been considered an important occupation in Danish history. Although the number of sailors never reached large dimensions compared to agriculture or later to secondary trades, there is no doubt that this generalization is true. – The long coastline and many islands made ships necessary to connect and defend the various parts of the kingdom at a time when land transport was difficult and bridges had yet to be constructed.

The examples in this article demonstrate that Danish ships and Danish sailors not only sailed in domestic waters but took part

in a larger international division of work. Indeed, in certain periods they played a role in wider European and overseas trades, and in various maritime labour markets.

This essay originally appeared in Paul C. van Royen, Jaap R. Bruijn and Jan Lucassen (eds.), »Those Emblems of Hell?« European Sailors and the Maritime Labour Market, 1570-1870. Research in Maritime History No. 13. St. John's NF: International Maritime Economic History Association, 1997, pp. 233-252. It is reprinted here with the kind permission of the International Maritime Economic History Association.

Noter

- ¹ Bering Liisberg (ed.), *Danmarks søfart og søhandel fra de ældste tider til vore dage* (2 vols., Copenhagen, 1919).
- ² C. Rise Hansen (ed.), *Den danske skibsfart gennem tiderne* (Copenhagen, 1941); Knud Klem, *De danskes vej, rids af dansk søhistorie* (Copenhagen, 1941); and L.E. Grandjean and Ernst Mentze (eds.), *Danmark og havet* (2 vols., Copenhagen, 1946).
- ³ Anders Monrad Møller, *Fra galeoth til galease* (Esbjerg, 1981); Møller, *Jagt og skonnert* (Copenhagen, 1988); Aage Rasch and P.P. Sveistrup, *Asiatisk Kompagni 1772-92* (Copenhagen, 1948); Rasch, *Niels Ryberg 1725-1804* (Århus, 1964); Erik Gøbel, »Danske oversøiske handelskompagnier i det 17. og 18. Århundrede«, *Fortid og Nutid* (1980), 533-569; Ole Feldbæk, *India Trade under the Danish Flag 1772-1808* (Odense, 1969); Feldbæk, *Dansk neutralitetspolitik under krigen 1778-1783* (Copenhagen, 1971);

- J. Werner, *En dansk storkøbmand* (Copenhagen, 1927);
- Jørgen H.P. Barfod, *Danmark-Norges handelsflåde 1650-1700* (Elsinore, 1967); and Sune Dalgård, *Dansk-Norsk Hvalfangst 1615-1660* (Copenhagen, 1962).
- ⁴ H. G. Garde, *Efterretninger om den danske og norske sømagt* (4 vols., Copenhagen, 1832); R. Steen Steensen (ed.), *Flåden gennem 450 år* (Copenhagen, 1970); and Halfdan Barfoed, *Vor flåde i fortid og nutid* (2 vols., Copenhagen, 1941).
- ⁵ See the appendix tables in Barfod, *Danmark-Norges handelsflåde*.
- ⁶ *Ibid.*, 139.
- ⁷ Hans Chr. Johansen, »Danish Shipping Services as a Link between the Mediterranean and the Baltic 1750-1850«, in Lewis R. Fischer and Helge W. Nordvik (eds.), *Shipping and Trade 1750-1950: Essays in International Maritime Economic History* (Pontefract, 1990), 15-24.
- ⁸ Møller, *Fra galeoth*, 166-167.

- ⁹ Anders Monrad Møller, »Måneden drejer – om søfolk til den københavnske handelsflåde 1777-87, in *Oderint, dum metuant* (Copenhagen, 1992), 21-26; and Erik Gøbel, »*Asiatisk Kompagnis kinafart 1732-1833*« (Unpublished monograph, 1978), 105-107.
- ¹⁰ The Danish *rixdollar* courant of the late eighteenth century had a value of approximately 0.17 British pounds.
- ¹¹ Provincial Archives, Odense, 5. udskrivningskreds arkiv, *mønstringsrulle* for Svendborg, 1871.
- ¹² The convertible *bankrixdollar*, used until 1874, had a value of 0.11 British pounds.
- ¹³ Hans Chr. Johansen, *Næring og Bystyre, Odense 1700-1789* (Odense, 1983), 170.
- ¹⁴ P. C. van Royen, »Foreigners Aboard the Dutch Merchant Marine Around 1700,« in W. G. Heeres, et al. (eds.), *From Dunkirk to Danzig. Shipping and Trade in the North Sea and the Baltic 1350-1850* (Hilversum, 1988), 396.
- ¹⁵ *Holland Danmark* (Copenhagen, 1945), 1T, 441; and Carl Steenstrup, »Scandinavians in Asian Waters in the 17th Century,« *Acta Orientalia*, XLIII (1982), 69-83.
- ¹⁶ *Holland Danmark*, 221 ff.

Danske søfolk, 1570-1870

Resumé

I oktober 1994 blev der i Haag i Holland afholdt et seminar, hvor en række søfartshistorikere analyserede det europæiske arbejdsmarked for søfolk i perioden fra slutningen af det 16. til slutningen af det 19. århundrede. Hovedformålet var at få en oversigt over forholdene specielt i de nordeuropæiske lande.

Som baggrund for diskussionerne havde en række forskere skrevet artikler om hvert af de implicerede lande, hvor der blev gjort rede for udviklingen i handels- og orlogsflådens størrelse, for de anvendte skibstyper, besætningernes størrelse og rekruttering og desuden for lønforholdene og for beskæftigelse på tværs af landegrænserne.

Det danske bidrag til seminaret, der her gengives, gennemgår væksten af den danske handelsflåde fra at omfatte godt 600 skibe i 1639 med en samlet tonnage på ca. 21.000 kommercelæster til omkring fem gange så mange skibe med en over fem gange så stor tonnage i 1871. Der gøres rede for de vigtigste skibsformer, for Københavns sti-

gende betydning som hjemsted for handelsflåden og for de farvande, der blev besejlet af danske skibe. Det vises desuden, at antallet af søfolk steg mindre hurtigt end tonnagen, således at der har været betydelige produktivetsgevinster i løbet af perioden, måske de største i løbet af det 18. århundrede, medens sammenligninger i det 19. århundrede er vanskeligere, fordi indførelsen af damp betød flere søfolk om bord, men til gengæld hurtigere sejlads, således at produktivetsforbedringen især viste sig gennem en større transporteret mængde pr. besætningsmedlem.

På samme måde vises orlogsflådens vækst frem til 1807 og den efterfølgende tilpasning til Danmarks mere beskedne rolle på det europæiske landkort efter tabet af Norge.

Det anvendte materiale gør det sandsynligt, at omkring 10.000 mennesker fik deres udkomme fra dansk søfart i det 17. århundrede, og at dette tal var langsomt stigende i de følgende århundreder, så det muligvis har været på omkring 15.000 i det 19. århundrede. En del af disse søfolk har dog

været udlændinge, men til gengæld har der været danskere, der har taget hyre om bord på udenlandske, især hollandske skibe. Ved seminaret i Haag blev der foretaget nogle sammenligninger mellem lønniveauerne i de forskellige landes handelsflåder i det 18. århundrede, og de viste klart, at hyrerne da var højest på de hollandske skibe og blev lavere i andre lande, jo fjernere de lå fra Holland. Disse lønforskelle har utvivlsomt virket som en magnet på unge skandinaver og forklarer, at der f.eks. i 1725 var mellem 8.000 og 9.000 dan-

skere og nordmænd beskæftiget i den hollandske handelsflåde. I en senere tid virkede amerikanske skibe af samme grund tiltrækkende på danske søfolk.

Samlet betød skibsfarten kun lidt som arbejdssted for hele den danske arbejdsstyrke, men skibsfartens rolle i det danske samfund har alligevel været væsentlig, fordi den bandt landets forskellige dele sammen og gav afledet beskæftigelse til mange i land.