NAVAL POWER AND CONTROL OF THE SEA IN THE BALTIC IN THE SIXTEENTH CENTURY

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Why did the two Nordic kingdoms of Denmark-Norway and Sweden become important naval powers in the sixteenth century? And why did the sea power of the German Hanse that had dominated the Baltic for hundreds of years evaporate in this century? Which incentives stimulated Nordic rulers to buy and build specialised warships, arm them with modern heavy guns and create the infrastructures with dockyards, seamen, officers and skilled artisans which were necessary to make naval forces operationally useful? Was it urgent requirements during wars or ambitious long-term policies that were decisive?[1]

The transformation of the political power structure in the Baltic region in the first half of the sixteenth century was rapid and radical. In the late Middle Ages, the Baltic had been a part of Europe where power had been strongly connected with trade and the control of markets. The importance of the Hanse is the most obvious example. The role of territorial states in Baltic power politics had been limited in comparison to the resources of the societies. The Nordic and Polish-Lithuanian kings, the north German princes and the Teutonic Orders which controlled Estonia, Livonia, Courland and Prussia had had limited possibilities to mobilise the resources of their territories. With large merchantmen and concentrated financial resources, autonomous cities and mercantile interests could exercise a political influence out of proportion to their resources in an area where maritime lines of communication were very important for bulk trade, trade in valuable commodities and the transfer of military resources between strategically important areas.

The development of two centralised Nordic territorial states with permanent navies changed this situation radically. Denmark-Norway and Sweden not only gained full and undisputed control of their own territories but also began to pursue imperial policies in the Baltic region, actions that were based on their increasing superiority at sea. In the seventeenth century, these ambitions culminated in a Swedish–Danish struggle about hegemony in the Baltic and the creation of a Swedish empire. From the fifteenth century the Danish kings also

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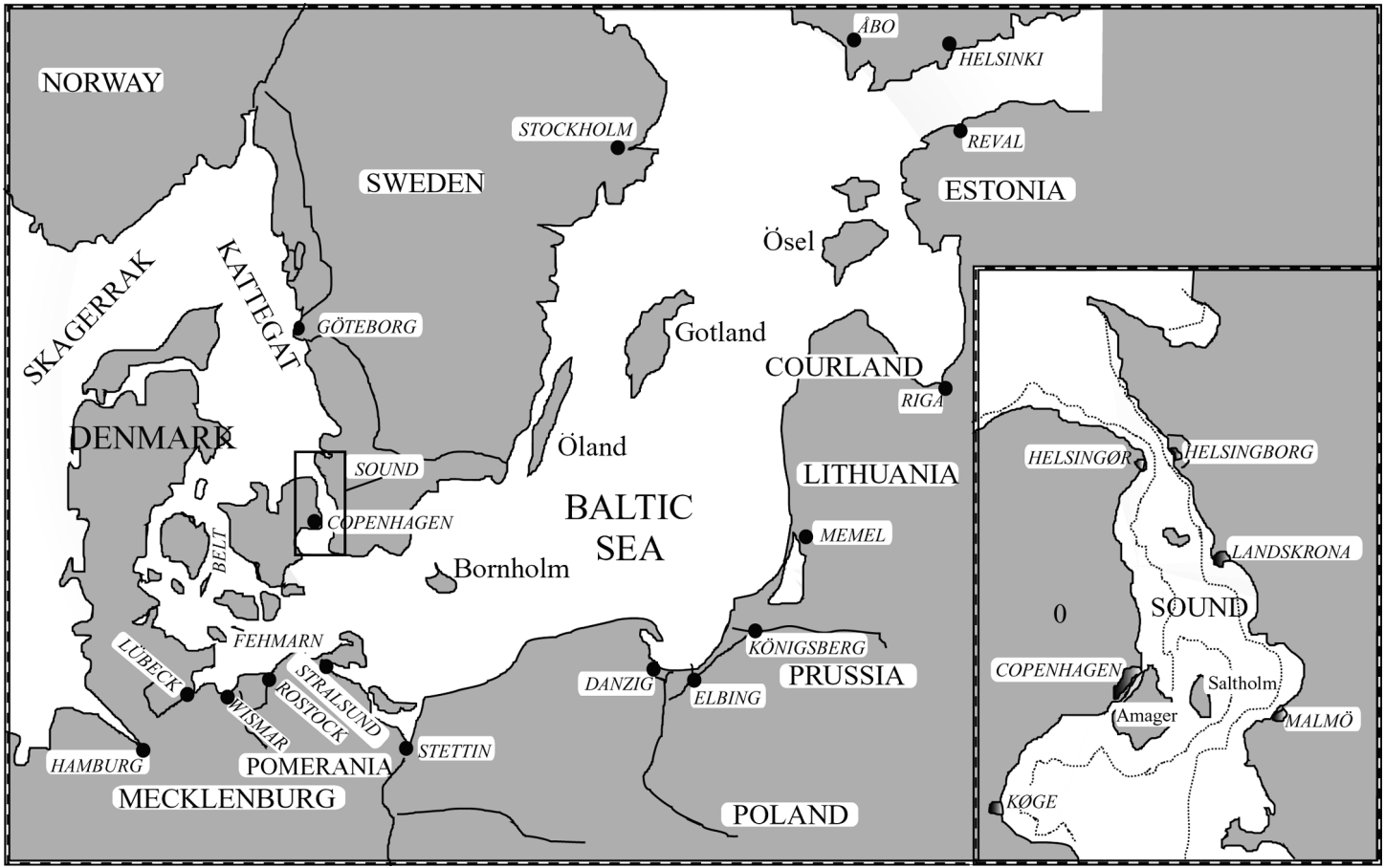
1 For a detailed bibliography, see J. Glete, *Warfare at Sea, 1500–1650: Maritime Conflicts and the Transformation of Europe* (London, 2000), 112–130.



Map 1. The Baltic Region

used their position at the Sound to raise custom duties on foreign shipping. From the mid-sixteenth century the Swedish kings began to show an interest in raising similar customs in the northern and eastern Baltic, a policy that during the Thirty Years War was extended to the southern Baltic. The purpose that legitimated these duties was that they were used to finance protection of shipping through the Baltic. But the origins of the two Nordic navies had nothing to do with expansionism outside their own territories and only indirectly with trade protection. The driving force was primarily state building efforts by ambitious rulers who used innovations in gunnery and shipbuilding to create new instruments of power. Their main ambition was to gain control over Nordic territories but these territories were to a very large extent connected with each other and with the rest of Europe by sea. Control of the sea lines of communication made it possible to transfer military power from one area to another, to sustain fortresses and cities under siege and to enforce or break trade blockades. Control of the sea also meant control of the supply routes between the Nordic territories and the cities and territories in other parts of the Baltic. In the late Middle Ages, alliances between mercantile cities and territorial rulers around the Baltic and various contesting factions in the Nordic countries had been important in power struggles over Nordic territories. With efficient naval power, rulers in the Nordic countries might cut off contacts between their territories and the rest of Europe, thus facilitating the stabilisation of their domestic power.

The importance of control of the sea for maritime cities and mercantile interests is easy to understand and its role for the Baltic Hanse city does not need any explanation. But why were the Nordic states both vulnerable to and dependent on sea power? Geography is the obvious answer but the military and political implications of sixteenth-century Nordic geography and national borders need some explanation. Denmark was composed of Jutland, the south-western tip of the Scandinavian peninsula (the provinces of Skåne, Halland and Blekinge which since 1645/58 have been Swedish) and the large islands between these two peninsulas: Själland (Zealand) and Fyn. The island of Gotland also belonged to Denmark. This geographical configuration made the Danish kingdom dependent on sea lines of communication. Denmark was also strategically situated at the straits, which connected the Baltic Sea with the North Sea, a position that might be exploited in European politics if Denmark developed as a naval power. The population of Norway lived in scattered settlements and towns along the coast. This mountainous country was easy to defend against land attacks from Sweden but, as the sea often was the only practical connection between the inhabited areas, Norway could be controlled from the sea. In early modern Europe, Denmark and Norway were the countries that were most dependent on the sea for their survival in wartime. If an enemy gained control of the sea the land forces could not be concentrated and the enemy could defeat these forces when they were separated.[2] Sweden in the sixteenth century was

2 Great Britain is dependent on sea power but as England, Scotland and Wales form one large and populous island, Britain does not rely on the sea to concentrate its domestic

composed of most of what today is Sweden, except its southern part and the west coast which belonged to Denmark and Norway. Only the estuary of the Göta älv (where Gothenburg is situated today) provided Sweden with a western port. Finland was an integrated part of the Swedish kingdom. Sweden was more continental than Denmark and Norway but it was also vulnerable to sea power. The sea connected Sweden and Finland and nearly all important towns were accessible from the sea. In contrast, the land frontiers with Denmark, Norway and Russia were covered with deep forests with few roads. It was difficult to launch large-scale attacks on land in both directions. War experiences showed that a power that controlled the Baltic Sea could blockade Sweden, invade it from the sea and maintain garrisons in strategic towns along the coast. Much of Sweden's foreign trade was dependent on shipping and in a war with Denmark-Norway only the sea remained as a connection with the rest of Europe.

Geography made control of the sea into one precondition for effective control of the territories that made up the three Nordic kingdoms. The other precondition for territorial control was cooperation from the local elites. The Nordic kingdoms were fairly typical of medieval European societies with only a rudimentary central administration, elected kings,[3] strong aristocratic councils and a Church in which aristocratic families had great influence. Sweden and to an even greater extent Norway were, however, special as large parts of the countries had no local nobility. In these areas, the elites were peasants and to some extent burghers and priests. In earlier periods, peasant communities along the coasts had provided the early Nordic states with a militia type of force at sea with small oared warships, the *leding* (Danish), *ledung* (Swedish) or *leidang* (Norwegian). Already before the fifteenth century these forces had become obsolete and the duty to serve was largely replaced with taxes. Nordic sea power, in this century, mainly consisted of ships provided by kings, aristocrats, bishops and cities. Most of these were small and inferior to the numerous large merchantmen the German trading cities could arm in wartime. Denmark with its rich aristocrats, more urbanised economy and royal customs duties on foreign shipping in the Sound was the Nordic country best situated to act as a sea power of this type. Up to the 1520s this is visible in the attempts to create a Nordic union based on Danish sea power. From that decade, Swedish territorial resources were mobilised and organised for the creation of effective sea power, a development that changed the power structure within the Nordic countries.

From the late fourteenth century the three Nordic kingdoms formed a union. It was effective up to 1448 but from then it began to disintegrate, primarily because of different ambitions and strategies among the elite groups. The Danish aristocracy preferred to elect kings from the German Oldenburg dynasty

resources for defence. Denmark and Norway formed a state that could be cut into isolated sections by superior sea power.

[3] Constitutionally Norway was a hereditary monarchy but from the fifteenth century the king chosen by the Danish Council became in practice the king in Norway too. Norway was formally integrated with Denmark into one kingdom in 1536. The Oldenburg kings were also hereditary dukes in Holstein, a part of the German Empire.

while the Swedish Council was split into factions that either supported the Oldenburgs or preferred to rule Sweden on their own, with or without a nominal king. In the last decades of the fifteenth century the Oldenburg Hans (1481–1513) methodically accumulated power to himself in Denmark and Norway. He was one of the creators of the European new monarchies – stronger and more centralised states where the rulers claimed a monopoly of violence. He was also one of the pioneers in creating permanent sailing navies as instruments of state power. In 1497 King Hans was able to take control of Sweden with a combination of armed force on land and sea and negotiations with the Swedish Council. But soon after, in 1501, a faction of the Swedish aristocracy rebelled against him.

The final phase of disintegration of the Nordic union began. That process also saw the birth of two permanent navies. After 1501, Hans retained control over the Baltic Sea with his navy, which he used for a trade blockade of Sweden as well as support of Swedish castles in his possession and attacks on Swedish towns and coasts. It was in the decades around 1500 that the Danish-Norwegian navy developed into a strong and permanent force armed with heavy guns. In the early decades of the sixteenth century king Hans built a few of the largest warships in the world: *Engelen* (built *c.*1509–10) and *Maria* (*c.*1512–14).[4] The most important driving force behind this major effort to create a navy was the power struggle over Sweden. The ships owned by the king were still supplemented by privately owned ships during major operations but Danish and Norwegian sea power increasingly became dominated by ships, guns and men directly controlled by the ruler. The customs paid by the rapidly increasing foreign shipping in the Sound went to the royal treasury and the king could use the money to maintain a navy of his own. This royal navy was also common to both Denmark and Norway, an important step towards an organisational merger of state power within the Nordic union.

Swedish naval power up to 1520 was of a much smaller magnitude and could not offer serious resistance in the northern Baltic. A small but concentrated force might sometimes successfully attack single Danish cruisers but it could not break the blockade. Some of the Swedish aristocrats who ruled the country and controlled the crown domains and the major seaside castles owned ships but these forces could only be regarded as the embryo of a navy. Sweden mainly fought the war with the peasant militia, a force that was fairly efficient in territorial defence. The resources to build and maintain a substantial navy were not available as Sweden lacked shipping and the central government was financially weak. But it was not only Sweden that was hit by the Danish blockade. In 1509

4 Their size was probably around 1500 to 2000 tonnes displacement, N. M. Probst, 'Hovedskibet Maria 1514–1525. Ett rekonstruktionsforsög', *Marinehistorisk tidsskrift*, 23, no. 2, 1990. *Engelen* was loaned to Christian II's brother-in-law Charles (V) as his flagship when he sailed to his new kingdoms in Spain in 1517. The great ship made an impression in Spain but it was accidentally burnt at Santander in 1518, C. Fernandez Duro, *Armada espanola*, vol. I (Madrid, 1895, 1972), 123–6.

Lübeck went to war against Denmark, followed by the smaller Hanse cities of Rostock, Wismar and Stralsund. They were dissatisfied with the king's policy of reducing their trading privileges in Denmark and Norway and supporting Dutch trade with the Baltic. They were also hurt by the Danish blockade of Sweden, which was one of their key areas for trade.

The German Hanse cities were soon to prove that the old rulers of the Baltic Sea were still powerful. Lübeck sent a fleet to Stockholm, which broke the Danish blockade on trade, and during 1510–11 Denmark's and Lübeck's fleets operated against each other. The Danish fleet could no longer support the Oldenburg strongholds in Sweden and in 1510 the Swedes retook the castle in Kalmar and the island of Öland. During 1511 the Danish and Lübeck fleets fought a major fleet action, mainly with guns, off Bornholm. It ended with a draw but soon after Lübeck's fleet was able to destroy much of a large Dutch convoy that the Danish fleet in vain sought to protect. The naval operations in this war were attempts to gain control of the sea lines of communication for strategic purposes. When peace was concluded in 1512 king Hans had to give up the attempt to reconquer Sweden, but the Hanse had to cease the attempts to exclude the Dutch from the Baltic. Danish sea power kept the Sound open while Hanse sea power had forced the Danes out of Sweden. King Hans's son, Christian II (1513–23), developed his father's policy with radical ideas. He hoped to gain Sweden, create a centralised-union monarchy, found a trading company based in Copenhagen and Stockholm in order to control trade between the Baltic and Western Europe and eliminate the Hanse as a strong economic and political power. Christian married a sister of Charles V, king of Spain, German emperor and ruler of the Netherlands, a dynastic alliance that also created bonds of interest between Denmark and the rising mercantile centre in Western Europe. A strong navy with large ships armed with heavy guns and an increased Sound toll were cornerstones of this policy of maritime empire-building. In the early 1520s Christian had a royal navy of at least thirty ships. The size of many of these ships is only vaguely known but the total displacement was probably somewhere between 7000 and 10,000 tons. It was one of Europe's largest sailing navies.[5]

Christian II used his fleet to make amphibious attacks against Stockholm in 1517 and 1518 but his army was defeated on land. During the winter of 1520 a large Danish mercenary army was able to penetrate central Sweden, and during the summer Christian arrived at Stockholm with his main fleet in order to take control of the country. Sweden had to accept him as king but the army was too

[5] The English royal navy in 1520 was of about 14,000 tons, while the French navy was of around 10,000 to 15,000 tons of sailing warships and a small galley force of around 2000 tons. It is impossible even to guess at the size of the important Portuguese navy. Spain had at this time only a small galley force while Venice had a galley navy of around 25,000 tons. The Ottoman navy may have been of the same magnitude. Jan Glete, *Warfare at Sea*, 188–9.

expensive to maintain and already in 1521 rebellious Swedes under the young aristocrat Gustav Vasa were in control of most of the country. With his navy, Christian could keep Stockholm and other fortified coastal places and he could blockade Sweden and deny it import of essential products such as salt. The king could also regain control over Finland with sea-borne forces. Again, the essentially maritime character of Danish power became visible. Gustav Vasa realised that he had to acquire armed force at sea which could break the blockade and isolate the towns under Christian's control. Otherwise the rebellion might be suppressed. In 1522 Gustav Vasa bought a fleet of at least eleven armed merchantmen in Lübeck and Stralsund, a force that also brought mercenary soldiers and weapons to Sweden. Lübeck merchants with interest in the Swedish trade provided the necessary credits to the Swedish rebels in the hope that they would be paid from future taxes and by trading privileges. Lübeck and other Hanse cities soon joined Sweden and the allied fleets began to assert control over the Baltic. In late 1522 they stopped a Danish attempt to supply Stockholm with provisions for the winter. It might have been expected that the main Danish fleet would attempt to bring aid to Stockholm the following spring. Surprisingly, it was instead used to bring Christian II to the Netherlands. His regime in Denmark had become increasingly insecure and in early 1523 the Danish nobility sided with Lübeck under the leadership of his uncle Frederik (I) who was elected king of Denmark. In 1523 Gustav Vasa was elected king of Sweden. The war continued against Christian II's forces and the allied Hanse and (largely German-manned) Swedish fleets could blockade Stockholm, Copenhagen and other fortified towns into surrender. German mercantile sea power had proved decisive in the Nordic power struggle. Lübeck could reassert its position as the leading Baltic entrepôt by new trade privileges in the Nordic countries as rewards for its financial, naval and military help to the two victors.

The positions of both Frederik and Gustav as rulers were initially insecure. Christian II was expected to launch a counter-attack from the Netherlands with the help of his Habsburg relatives. In the Baltic, his admiral Sören Norby fought a skilful rearguard action on land and at sea until 1526. There were also domestic oppositions in the Nordic countries. Gustav again decided on a bold policy to strengthen his position. One cornerstone in this was a Lutheran reformation of the Church in 1527, which gave him control of extensive economic resources. He used these to build large warships armed with heavy guns and to employ a small but professional army. The largest unit of his navy was the great ship *Stora Kravelen* (possibly around 1700 tons) built around 1530. These forces were controlled by the king, not by nobles or peasant communities, and they were politically and militarily suitable for rapid strikes against domestic and foreign enemies or alliances between them. Frederik I had similar ambitions in Denmark but his position was weaker. He never gained full control over Norway and the navy did not recover from its near destruction during the civil war. A few major ships of which *Michael* (probably around 1000–1500 tons) was the largest were however owned by the king in the early 1530s.

Christian II did finally sail to Norway with a Habsburg-sponsored army in

1531, but he was met by resistance from Sweden on land and by a Danish-Lübeck fleet and was finally taken prisoner. When Frederik I died in 1533, the councils of Denmark and Norway did not wish to elect his eldest son Duke Christian (III) of Holstein as king, partly because he was a Lutheran. In 1534 a civil war started in Denmark. Lübeck intervened on the side of Duke Christian's enemies and they took control of Copenhagen and the Danish royal fleet. This was part of a radical programme where the old Hanse city tried to close the Sound to the Dutch and regain favourable trading privileges in Scandinavia.

King Gustav of Sweden had by 1533 broken with his old allies in Lübeck and he regarded developments in Denmark as a serious threat to his own regime. He had many opponents in his own country and if Lübeck was successful in Denmark that city might infiltrate Sweden too. He chose to support Christian III in the Danish civil war and used his new armed forces for mobile and offensive warfare of a type which Swedish rulers had been unable to undertake for generations. The army intervened in eastern Denmark and in spring 1535 his new fleet was sent to the southern Baltic. It joined ships sent by Prussia and Christian III, although most of these were small vessels or armed merchantmen. A major part of the Swedish army sailed with this fleet. The allies first drove away Lübeck's main fleet (including the largest Danish ships) at Bornholm in a gunfire battle on 9 June, and then destroyed or captured another enemy fleet which controlled the Danish straits. The allies were now in control of the sea lines of communication in the Baltic, the island of Själland (Zealand) could be invaded and the allied army and fleet surrounded Copenhagen and Malmö. Lübeck was forced to conclude peace and its role as a power on the same level as the two Nordic kingdoms with ambitions to intervene in their domestic politics was finished. With control of the sea, Christian III could gain full control over Denmark and enforce a Lutheran reformation as well as a more centralised form of government. During 1536 he sent a fleet with an army to Norway, which brought that country and its church under his control. A Habsburg attempt to send a fleet of Dutch armed merchantmen to Denmark or Norway in order to support his opponents and liberate Christian II failed. Dutch mercantile interests were reluctant to start a conflict with the power that controlled the Sound and the Danish-Norwegian navy had by 1536 again reached such strength that it was a powerful deterrent force.

The end of the great power struggle did not mean that the two Scandinavian kingdoms which had emerged out of the union reduced their navies. On the contrary they strengthened them with several new warships built in the late 1530s and the 1540s. As permanent navies were something new and unusual in Europe this was a sign that organised Nordic sea power had become a part of a new type of state. It was a state in which the kings controlled armed forces of their own in order to protect the country and enforce a monopoly of violence. In Denmark-Norway the navy and the artillery (largely intended for the navy) were the only permanent armed forces while the Vasa kings in Sweden also created a militia army under their control. From 1540 Sweden began to create a substan-

tial galley fleet that by 1560 had twenty-six large and small units.[6] This was partly due to its usefulness in archipelagos but it may also have reflected lessons of war with sailing warships that still had rather limited capability.[7] The existence of a Swedish army made it possible to use soldiers as oarsmen and the galleys also gave the new army an amphibious capability.

Why did the Scandinavian kings expend so much effort and money on their navies in a period of peace? The explanation must be sought in their experiences from the long period of struggle for control over territories. Both the Oldenburg and Vasa rulers had seen that naval power might be of decisive importance in such power struggles. Their use of such power had been of fundamental importance for their success and they must have realised that they had to own modern gun-armed warships if this success was to be lasting. With such warships, Nordic rulers had gained considerable political leverage against potential competitors, a leverage that had not existed before the late fifteenth century. First, kings became efficient protectors of their territories against sea-borne invasions and blockades that might cut off the supply of essential products, such as salt. This made it easier for them to raise taxes to pay for this protection. Second, the numerous domestic opponents to the rulers could no longer easily communicate with groups on the other side of the Baltic who wished to interfere in Nordic politics in order to promote trade or dynastic interests. Control of the Baltic Sea with royal warships was thus an important precondition for undisturbed state formation and centralisation of power in Denmark-Norway and Sweden. The central political role of the two royal navies is visible in the fact that the ships, the guns and the dockyard facilities were concentrated in the capital cities and located as close to royal castles as possible. From 1536 to 1544 both kings were on their guard against Habsburg attempts to bring Christian II or his relatives back to power.[8] Both were usurpers and both had also taken the fateful step of breaking relations with the Catholic Church in order to gain control of the economic and political power of the Church. They were aware that those foreign enemies and internal opponents to their regimes might use any sign of weakness as in invitation to reverse the decisions reached by 1536. They were also suspicious of each other but the threat from the Habsburgs forced Sweden and Denmark-Norway to form an alliance in 1541. The royal navies were useful for the maintenance of internal security, the upkeep of law and order on the sea and as deterrents against foreign powers. Both kings sent out their

6 Most of these were of a smaller type than the normal Mediterranean *galea* with three men to each oar. They were probably comparable to the Mediterranean *galeota* type with two men to each oar, J. Glete, 'Svenska örlogsfartyg 1521–1560', *Forum Navale*, nos 30–31 (1976–77).

7 On experiences with galleys and sailing warships in western Europe up to 1560, see Glete, *Warfare at Sea*, 137–44. See also N. A. M. Rodger, 'The Development of Broadside Gunnery, 1450–1650', *Mariner's Mirror*, 82 (1996), 301–24.

8 On Swedish trade and foreign policy see S. Lundkvist, *Gustav Vasa och Europa: Svensk handels- och utrikespolitik, 1534–1557* (Uppsala, 1960). On Nordic foreign policy see G. Landberg, *De nordiska rikena under Brömsebroförbundet* (Uppsala, 1925), maritime and naval aspects, 72–89.

small ships to be on guard against foreign threats, suppress piracy, protect trade to their own ports and enforce trade regulations. Especially Denmark began to assert a conscious *dominium* policy in which the Danish king asserted that the southern Baltic Sea, the Kattegat and Skagerrak, were Danish streams in which he had a monopoly of violence at sea. This *dominium* meant that Danish warships should protect foreign ships, which had to pay for this protection, when they passed the Sound.

Both navies also had to fight short wars in this period. The unsettled relations with the Habsburgs caused both Nordic states to ally themselves with France. When France and the Habsburg powers went to war in 1542 Denmark-Norway became actively involved. The Sound was closed to Habsburg, that is mainly Dutch, shipping and Danish, French and Scottish ships cruised in the North Sea searching for merchantmen from the Netherlands and Spain. In 1543 the Danish fleet was concentrated for an assault on Walcheren, the centre of Dutch sea power. Unexpectedly severe summer gales brought that attempt to an end. In 1544 Christian III and Charles V made peace and in practice Sweden also ceased to be a potential Habsburg enemy when the Habsburgs accepted that Christian II was no longer king in the three Nordic realms. All major European powers had now accepted the two Nordic kingdoms, their new regimes and their break with the Catholic Church. Their ability to effectively manifest their strength and determination at sea had been important in this process of stabilisation and international recognition. Sweden gradually turned its interest eastward to the security problems along the border with Russia, the increasing trade passing through the Gulf of Finland and the growing political crisis in the eastern Baltic, for centuries ruled by the Teutonic Order of Knights. This area provided both risks and opportunities and for more than a century it would remain a tempting area for ambitious Swedish empire-builders in search of territories and the diversion of the rich Russian trade to Swedish-controlled ports.[9] The result was first that these territories were consolidated into a Swedish empire that in the early eighteenth century was to be conquered by Russia. The beginning was more inconspicuous. Swedish warships began to patrol the Gulf of Finland and King Gustav tried to use them to favour trade through his ports, Viborg (Viipuri) and Helsingfors (Helsinki). The latter town was founded in 1550 as a rival to the old entrepôt, Reval (Tallinn), in Estonia.

During 1554/55 Gustav had to face a rising crisis along the Russian border and in 1555 he mobilised the army and the galley fleet and sent them to Finland. After a failed attempt to take a Russian fortress at the river Neva with an amphibious attack the Swedish forces were used defensively until peace was concluded in 1557. The war was inconclusive, but Sweden's new armed forces

9 A. Attman, *The Struggle for Baltic Markets: Powers in Conflict, 1558–1618* (Gothenburg, 1979); S. Troebst, *Handelskontrolle, Derivation, Eindämmerung: Schwedische Moskaupolitik, 1617–1661* (Wiesbaden, 1997). There is a long scholarly debate about the ultimate motives for Swedish imperial expansion. Here it is enough to say that both territorial expansion and the control of trade were motives.

had shown mobility and a degree of readiness that may have encouraged the young Vasa princes, Erik and Johan, both future kings, to think in terms of imperial expansion in the East, even against opponents with inherently much larger resources.[10]

In 1558 Russia took the important port of Narva in eastern Estonia. Denmark took control of the large island of Ösel (Saaremaa) and some territories in western Estonia, thus extending its maritime empire close to the Gulf of Finland and the Bay of Riga, two main outlets for Russian and Lithuanian trade. In 1561 Poland-Lithuania became protector of Livonia and Sweden of most of Estonia. Sweden immediately began to use naval power to regulate trade in the Gulf of Finland in the interest of the Crown of Sweden and its new subjects in the city of Reval (Tallinn). Swedish warships blockaded Narva, an action that severely hit the interests of Lübeck, which still controlled much of the trade in valuable commodities in the Baltic. In a few years four powers had appeared as protectors of the territories and cities which up to then had been controlled or protected by the Teutonic Order. In the power vacuum left when the Order dissolved, the territorial states took control and began to levy taxes and customs in order to pay for the protection.

The new protection-sellers immediately ran into a conflict over how the market for protection should be shared. Denmark and Poland became allied against Sweden in Estonia and Denmark also formed an alliance with Lübeck in order to secure trade against Swedish interference. Furthermore, Denmark and Sweden began to raise old disputes from the union period. Russia and Sweden attempted to maintain an uneasy friendship based on a common antagonism against Poland. In this situation control of the Baltic Sea became an issue of decisive importance. The trade which flowed through the Baltic – naval stores, Russian luxury products and Polish grain to the west, cloth, wine, salt and various manufactured products from Western Europe to the east – was very valuable in proportion to the resources of the sparsely populated countries of northern Europe. It was tempting to profit from this trade by selling protection, in the form of taxes and custom duties, for trade or shipping. Traditionally, the autonomous Hanse cities had organised trade, shipping and protection on their own, a mercantile sea power strategy centred on large armed merchantmen. But in the Baltic, protection of sea-borne trade was now ultimately dependent on organised Nordic naval power.

Furthermore, Danish and Swedish imperial aspirations in the eastern Baltic required naval power in order to secure military communications across the sea. From 1558 the Swedish navy was rapidly strengthened by a programme of new construction of large warships and mass production of efficient but expensive copper guns. Domestic resources of timber, copper and high-quality iron and many years of peacetime hoarding of silver made this programme feasible. From

[10] A detailed study of this war is A. Viljanti, *Gustav Vasa ryska krig, 1554–1557*, 2 vols (Stockholm, 1957).

1560 to 1563 no less than seven ships from about 600 to 1800 tons as well as several smaller warships were launched. The new king, Erik XIV (1560–8), followed an offensive maritime strategy aiming at control over the Baltic Sea. Denmark-Norway under its new king Frederik II (1559–88) also increased its navy and the old system where small ships were armed by cities was largely replaced by taxes that could support a centralised royal navy. This state, which lacked domestic resources of copper, was less well provided with modern copper artillery. From 1563 to 1570 Sweden fought a major war with Denmark-Norway and Lübeck at sea and with Denmark-Norway and Poland-Lithuania on land.[11] The Nordic Seven Years War was the first modern war at sea in Europe where sailing gun-armed battle fleets repeatedly fought for command of the sea. From 1563 to 1566 no less than seven major battles were fought.

Contrary to what happened in earlier wars in the Baltic the main fleets were no longer used for power-projection operations. The fleets were no longer sent to Stockholm or Copenhagen with a major army in order to assault the city from both land and sea. The size of the armies had increased to tens of thousands, which made it impossible to concentrate a main army on a fleet. Furthermore, the principal armament of the navies was now guns, not infantry weapons, and this made it impossible to gain command of the sea with only a superior army on board the ships of a fleet. Gun-armed fleets had to gain command before an army could be sent to a decisive area of operation or a fleet could provide an advancing army with logistical support.

These preconditions were never fulfilled in this war. The Danish army did once, in the winter of 1567–8, advance far into Sweden but at that time the Danish-Lübeck fleet was too diminished to provide logistical support and to enforce a blockade that might have decided the war. On the other hand, Swedish success at sea could not be used for an invasion of Denmark as the Swedish army was too occupied with defensive warfare along the border between Sweden and Denmark-Norway. This army was never able to penetrate deep into Skåne where it might have joined with the navy in attacks on the centre of Danish power around the Sound. Furthermore, in earlier wars maritime power projection against the enemy capital had been co-ordinated with political contacts with opposition groups within the elite. Such contacts were no longer possible, a sign that the two Nordic kingdoms definitely had become politically separated.

Two concentrated battle fleets at sea were the main forces that fought the war. Lübeck sent its main fleet to join the Danish-Norwegian fleet, and the allies were under the command of a Danish admiral. The two opposing fleets had to a

[11] The latest study of this war is F. P. Jensen, *Danmarks konflikt med Sverige, 1563–1570* (Copenhagen, 1982). On the war in the eastern Baltic, see S. Arnell, *Bidrag till belysning av den baltiska fronten under det nordiska sjuårskriget 1563–1570* (Stockholm, 1977). For more details about the naval operations and the literature about these, see Glete, *Warfare at Sea*, 120–4.

large extent the same strategic aims. They intended to enforce a blockade on the enemy, secure trade to their own ports, destroy enemy trade and protect the sea-lanes, which were essential for communication within the states. The Swedish fleet also raised customs from neutral shipping and sold licences to trade. Both fleets raided coasts and cooperated with the army in some types of operations. Lübeck was the power that had the largest merchant fleet to protect, but as the city now fought as a junior partner to Denmark-Norway it was no longer able to direct its fleet in the interest of its trade. The allied battle fleet never seriously attempted to break the Swedish blockade of Narva, which would have been desirable for Lübeck. Primarily this fleet fought for control of the southern Baltic Sea, a Danish interest that Lübeck could support. The Swedish fleet fought in order to maintain essential Swedish trade with neutral ports in northern Germany, to destroy Lübeck's trade and to damage Denmark and its *dominium* in the southern Baltic as much as possible.

The war started with an encounter at sea in spring 1563. A Danish fleet demanded that a Swedish fleet should pay respect to the Danish king. This was refused and in the battle, the First Battle of Bornholm on 30 May, the Danish flagship and two other ships were captured. Denmark-Norway and Lübeck formed a large fleet mainly composed of armed merchantmen, which sailed to the northern Baltic in the autumn. The Swedish fleet attempted to fight it in a battle on 11 September but had to withdraw to the archipelago around Stockholm. Early the following year an increased Swedish fleet sailed southward with orders to break the blockade. This ended with a Swedish defeat in the first battle of Öland on 30–1 May 1564. The Swedish fleet was, however, quickly sent to sea again and had the fortune of finding and capturing a richly laden Lübeck convoy which was sailing in the belief that the sea was secured for the allies. From 11 to 15 August the two fleets fought a stand-off gunfire battle, the Second Battle of Öland, which ended with the Danish fleet losing three ships, which by mistake had sailed into the Swedish fleet during the night.

In spring 1565 an expanded Swedish fleet was able to take control of the southern Baltic Sea and destroy an allied cruiser squadron. The allied fleet made two attempts to force the Swedes to leave the area. The first battle, at Bukow on 4 June, was a draw, and the second, the Second Battle of Bornholm on 7 July, was a hard-fought Swedish victory. In the following year, the Swedish fleet again took control of the Baltic. The allied powers had strengthened their fleets and in the Third Battle of Öland on 26 July 1566 they again attempted to defeat the Swedish fleet. This action ended in a draw but soon after a large part of the allied fleet was destroyed in a sudden summer gale off Visby. This ended the struggle for command of the Baltic, although it was only in 1567 and 1570 that the Swedish fleet was sent out in full strength in order to assert command of the sea. Both sides were by now exhausted by the war efforts and Sweden went through a political crisis and a brief civil war in 1567–8 when Johan III (1568–92) deposed his brother Erik XIV. Erik had been an energetic and innovative organiser of the war efforts and his naval policy was highly successful but his mental stability was gradually undermined until he lost control of domestic

politics. Peace was concluded in late 1570. Denmark gained some real advantages out of the peace but Lübeck only gained advantages on paper. After the peace was concluded Sweden continued to harass Lübeck shipping in the Gulf of Finland and Denmark had lost interest in supporting its former ally. Danish imperial ambitions in the eastern Baltic ceased when it became obvious that they meant war with Russia. Sweden on the other hand chose to fight Russia in a war that lasted until 1595.

During the northern Seven Years War the Swedes and the allied fleet originally attempted to fight with widely different tactics. The allies attempted to board the Swedish ships and fight with infantry weapons. The Swedish fleet with its high proportion of purpose-built warships manoeuvred to avoid that and fought with guns, mainly modern copper guns that could be fired with large powder charges. The Danish fleet was mainly armed with wrought-iron breech-loaders, which could only be fired with small powder-charges and had less effect on major ships. During the war the allies gradually renewed their armament, the Danes especially by purchase of English cast-iron guns, which were the only guns that could be acquired quickly. The contending navies also made large investments in purpose-built warships, even ships of about 2000 tons displacement or more. During the 1560s they grew to be the largest sailing fleets in Europe and they were visible proof that sailing warships were viable instruments of modern sea power. In the same period, the Mediterranean galley fleets reached their apogee as fighting forces.

During the last battle in 1566 both fleets deliberately fought with guns. By then, experience from several battles had shown that gunfire could prevent boarding and even sink ships and that purpose-built warships were far superior to armed merchantmen due to their armament, speed, weatherliness and ability to resist gunfire. Tactically the navies developed new ideas. From 1564 the Danish-Lübeck fleet was divided into groups of three ships, one large and two smaller. The fleet was intended to form a wedge when it attacked from a windward position and line ahead for mutual support when it was attacked in a leeward position. The Swedish fleet also used three-ship formations but here the tactical idea seems to have been that the major ships should form line abreast or line ahead, each with two smaller ships in a second line, ready to support the major units when they became engaged with the enemy.

Technology, tactics and practical implementation of theories and lessons from earlier battles interacted as never before since the introduction of gunpowder in warfare between sailing ships. The least dramatic, but probably very important, lessons were logistical and organisational. Both sides had attempted to keep their fleets at sea from spring to autumn. Earlier naval operations had often been concentrated in confined waters such as the Danish straits and the Swedish archipelago where the role of the weather in the outcome was much smaller. The new type of naval operations required large-scale preparations during the winter and a well-planned supply of food and spare parts during operations that lasted seven to eight months. Ships damaged in combat and by heavy weather had to be repaired quickly and seamen and soldiers had to be

found continuously to replace losses. Many officers were initially inexperienced in sea service and they had to learn how to solve these problems on a routine basis without immediately returning to the main bases in Stockholm, Copenhagen and Lübeck, which often were at a distance from the critical area of operation.

The interaction between state formation, technology and naval and military organisation was also obvious. It was an initial Swedish advantage in modern gunnery and purpose-built warships that enabled that country to break the blockade which otherwise might have caused an early defeat. As the allies must have had an advantage in the number of experienced seamen – Lübeck was still a major shipping city – the Swedish advantage in technology was even more important as it neutralised this inferiority. The fact that Sweden, the power with the least developed maritime economy, was able to resist and defeat an alliance of the two powers which since the fifteenth century had fought over naval hegemony in the Baltic shows that the organisational power of the state had become decisive in naval warfare.

The development of Nordic naval power and the growth of two centralised territorial states in northern Europe were two sides of the same coin. Gun-armed purpose-built warships were a new technology that gave the kings a new instrument of power against various threats to their position. Such ships could cut the lines of communication between external and internal enemies, break blockades, project military power and protect trade. The new technology gave a plausible argument for the development of permanent royal navies, which had to be supported by increased taxes, custom duties and the accumulated wealth of the church. Warships armed with guns gave rulers a new political leverage both within their own countries and in the Baltic. Copenhagen and Stockholm turned into centres of empires or potential empires.

Why were the Hanse cities, still the leading shipping and trading centres in the Baltic, unable to respond? The decline of armed merchantmen as potential warships is one technical explanation that must be taken seriously. It was not the whole explanation, however. The cities had always been small compared to the territorial states. They had, however, had strong incentives to fight in order to protect and promote the trade they lived on. The territorial rulers on the southern and eastern sides of the Baltic were much less dependent on the sea than the Nordic rulers and they showed little interest in developing sea power. When the Nordic states began to assert control and even a *dominium maris Baltici*, German and Polish territorial interests hardly responded with a naval policy of their own.

The Hanse cities were not interested in an increased dependence on their nominal territorial lords and did not ask them for help at sea. No German or Polish state-building of the Nordic type occurred and the cities were usually relatively satisfied with a situation where the Nordic fleets guaranteed law and order in the Baltic. Only Lübeck, the informal capital of the Hanse, tried to resist, but its strength was too limited to stem the rising wave of Nordic state formation. The Baltic became a normally peaceful sea where foreign ships

could sail unharmed and unarmed as long as they paid for the protection enforced by the Nordic kings.

Table I. The structure of the Nordic navies, 1530–70

	1530	1540	1550	1560	1565	1570
Denmark-Norway						
Sailing warships						
1501–2200	–	–	–	–	–	2
1001–1500	1	1	2	1	2	–
501–1000	1	3	3	3	6	7
100–500	2	8/10	8/10	20	23	22
Total	4	12/14	13/15	24	31	31
Galleys 100 and above	–	–	–	–	1	4/5
Sweden						
Sailing warships						
1501–2200	1	1	1	–	–	1
1001–1500	–	–	–	2	2	3
501–1000	1	3	2	3	8	10
100–500	5	11	9	14	38	28
Total	7	15	12	19	48	42
Galleys 100 and above	–	2	17	21	9	1

Number of warships, divided in size groups. The size is displacement in tons, calculated by the author. Warships smaller than 100 tons, transports and royal merchantmen are not included. The figures are approximate, especially for Denmark-Norway 1530–50. Sources: J. Glete, *Navies and Nations*, 607, and information about the Danish-Norwegian navy from Niels M. Probst.

Table II. The size of the Nordic and English navies

	1520	1530	1540	1550	1560	1565	1570
Denmark-Norway	7/10	2/3	5/7	6/8	8	13	16
Sweden	1	3/4	7	7	9	18	21
England	14	7	7	17	14	15	14

Total displacement of the navies in thousand tons

Sources: J. Glete, *Navies and Nations*, 549, 607; J. Glete, *Warfare at Sea*, 188–9 and information from Niels M. Probst