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10 The Archipelago Fleet in Early Modern Sweden – New Military History in a Different Context

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The new military history has conventionally focused on the continental model of standing armies. The main emphasis has been laid on land armies, which usually were recruited from the towns or countryside of the relatively densely populated continent. Further, following the lead of Michael Roberts, the military revolution has usually been dated exclusively to the 17th century.¹ However, remarkable military reformations were already being carried out in the Swedish Realm in the 16th century, and even more revolutionary ones in the 18th century.

This chapter focuses on a military speciality, namely the Swedish archipelago fleet, a hybrid of an army and a fleet.² The archipelago fleet was not a fleet proper, but neither was it an army in boats. Because of its ambiguous nature as a military organisation as something between the army and the fleet, it was called the floating army (*corps volant*) in the 18th century.

The historians have given relatively small attention to the archipelago fleet. In Sweden and Finland, the historiography concerning the topic can be divided into the old war history and the new military history approaches. From the old school can be mentioned the massive naval history publications, *Svenska flottans historia, 1522–1634* (1890) by Axel Zettersten and *Illustrerad svensk sjökrigshistoria* by Gunnar Unger (1923). An example of a study bridging the gap between old and new military history is Oscar Nikula's *Svenska skärgårdsflottan* (1933), a history of the 18th-century archipelago fleet, which still has a central place as a groundbreaking study. However, it is strictly focused on military issues, paying little attention to the wider impacts of the militarisation.

A presentable representative of the new military history is the anthology *Skärgårdsflottan Uppbyggnad, militär användning och förankring i det svenska samhället 1700–1824* (2000), which has a deep and wide insight into the archipelago fleet and its connections to society. The most important military historian, who has also published in English, was, however, Professor Jan Glete. In his *Navies and Nations. Warship, Navies and State Building in Europe and America, 1500–1860*, Glete studied the naval forces of Sweden in European and global context. He developed the concept of the fiscal-military state and the role of naval forces in state formations.

¹ Roberts 1956; Black 1991; Parker 1996.

² Huhtamies 2013; Huhtamies 2014.

In the following pages I am going to reflect some of the central issues of the new military history to the archipelago fleet, with some emphasis on geography as an explanation.³ What kind of impact did the archipelago fleet and war have on the infrastructure and on the everyday life of the coastal areas? What was the timetable and meaning of *military revolution* in the maritime world of the Gulf of Finland? The revolutionary nature of the archipelago fleet will be dealt with from following aspects: the temporary/permanent nature of the galley fleet, the use of the galleys, the level of firepower, the meaning of *trace italienne*, the organisation of recruitment, the distance to the warzone, the level of militarisation and, lastly, its impact on society.

The focus has been divided into two periods, 1560–1660 and 1660–1760, in order to be coherent with the discussion of the timetable of the military revolution. Overall, the following will shed light on the concept of the military in early modern coastal areas of Finland.

The Use of Galleys in the 16th Century

From the earliest of times, oared ships have dominated coastal seafaring in the Gulf of Finland. The medieval duty of coastal defence, the *ledung*, a rather obscure fleet of oared small vessels with permanent peasant crews, was one of the first forms of organisation in Sweden.⁴ The special kinds of geographical conditions paved the way for a Nordic tradition of long and oared, clinker-built vessels with auxiliary sails – the best-known example is the elastic and seaworthy Viking ship.

The first archipelago fleet of galleys (*galeyder*) was founded in Sweden in the 1540s, and the peak of galley fleet was in the period of 1570–1590.⁵ In the 1590s Sweden had temporarily the fourth biggest galley fleet in the world, which, however, consisted of no more than c.30 galleys.⁶ During the 16th century, or the Vasa era, the galleys were used mainly in transporting men and ammunition to the warzone at the Karelian isthmus and Lake Ladoga area in the east. In the archipelago, no battles were carried out because the Russians did not have the means – that is, galleys – for this. The Swedish archipelago fleet consisted mainly of Mediterranean-type Renaissance galleys, long, oared vessels with Latin sails.⁷ In the 16th century the galleys were equipped with ordnance. Besides their logistic main function, they were used as floating fortresses to block the narrow and shallow passages.

³ About geography and history in Scandinavia see Mead 1981.

⁴ Line 2007.

⁵ Glete 2000.

⁶ Wolke 2006.

⁷ Glete 1976. About galleys in general see Konstam 2002 and Lane 1992.

It can be argued that European revolutionary reforms in fortifications took shape of ‘floating bastions’ in the Gulf of Finland. This outcome was at least partly determined by geography, but also by the diffusion of foreign innovations. The pioneering but still limited introduction of firepower in the archipelago vessels was thus a reflection of the continental fortification revolution (*trace italienne*).

In general, in the 16th century the level of professionalism and technology was low in shipbuilding and archipelago warfare, although Sweden had some contacts with Italian fortification engineering and shipbuilding. In the Vasa era the galleys were rapidly and fairly badly built from ‘green’ (fresh, not seasoned, non-durable wood) pine to gain lightness. Correspondingly, a whole galley fleet could be built simultaneously. It was quite usual that whole galley fleets vanished after short time, as did the big galley fleet of John III (d. 1592). The galley fleet of the 16th century can be described as temporary. It was built for ad hoc purposes often in alert situations. It cannot be considered a permanent or standing military organisation.

A Seasonal Impact on Infrastructure in the 16th Century

During the 16th century the archipelago fleet had a fairly restricted impact on society. Nevertheless, oared vessels had instrumental connections with the society. The impact of the building and maintenance of the fleet was local but substantial. One of the areas it touched most deeply was Ostrobothnia in north-west Finland, especially in the 1580s during the reign of King John III.

The war against Russia in the 1570s had showed that the Swedish Realm had an advantage in its control of the sea lines of communication, but the sailing warships were not optimised for warfare in the confined archipelagos and on rivers and lakes. In 1580, John III initiated a decentralised building programme for galleys.⁸ As an integrated part of resource extraction from peasant society, the new warships were built at several shipyards at the same time, with the intention of making use of the local labour, provisions, and timber delivered as taxes.

Between 1584 and 1587 14 galleys were completed at (probably) 10 different shipyards, most of them located in Finland. Ten or 11 more were completed between 1588 and 1590, all of which, excluding one galley built at Elfsborg, were constructed at various Finnish yards in the provinces of Nyland, Finland Proper, Satakunta and Ostrobothnia. At the same time, several small craft (*lodjor*) were built at these yards. All this was an effort to prepare for a future war with Russia, as this took

⁸ NA, Registratur, 9, f. 46. Johan III to Klaus Fleming, 8 January 1585.

place during the long truce (1583–1590) of the Russo-Swedish War of 1570–1595. When the war with Russia resumed in 1590, the total number of galleys was at least 23.⁹

Shipbuilding was a heavy burden for the Finnish coastal agrarian population. Besides the increased taxes, there were the unpopular *corvées* (tasks), which included among other things the quartering of seamen and soldiers. From the 1580s on, various kinds of additional crown taxes were levied on naval items like sailcloth, hemp and tar.¹⁰

One of the Ostrobothnia shipyards was the *Pedersöre bankstad* (Pedersöre moving yard). Not much is known about this yard, which had no exact location or specific name, but a major enterprise for building galleys was taking place at the yard in the mid-1580s.¹¹ The local bailiff ordered 480 men to take part in the logistics, and 30 of their horses were also requisitioned for work. In addition, 60 coastal peasants were employed in the actual shipbuilding. The rest of the 3,000 inhabitants in the area had to pay a tax for acquiring hemp and sailcloth and for payments to the caulkers and the cordage makers.¹² Other specific taxes were collected to acquire sails and tar and to support the fleet (*penninghjälp till flottan, pengar till tjära och segel*) or those directly for the galleys (*galeje och kalpengar*).¹³

Considering the small size of the local population, it is not surprising that the shipbuilding, the taxes, and the other burdens generated constant appeals to the king,¹⁴ albeit without any results. Although this happened some years before the Cudgel War, it indicates that the naval burdens and European naval warfare had their own impact on the later revolt of 1596–1597.¹⁵

There was another kind of impacts as well. In the 16th century, during the Vasa era, the galley was already an important instrument of governance. The king and his court travelled by waterways. A galley with hundreds of soldiers was the safest way of transporting the royal valuables and silver from the mines. The silver was used to hire foreign mercenaries. In addition to the transportations of bullion, the archipelago fleet had an important watchdog role in the economy. King Gustav Vasa, strongly influenced by his German advisors of cameralism and mercantilism, tried to prevent the illegal trading among the peasants in the archipelago. The trade of coastal peasants of Finland with

⁹ Glete 2010, pp. 369–373.

¹⁰ The bailiffs' accounts, preserved in the National Archives of Finland, show several references to levying additional taxes in the production of naval stores. They are published in *Bidrag till Finlands historia* (Hausen 1917). See also Seppälä 2009, p. 223.

¹¹ Bailiffs' accounts KA 4780:39.

¹² Åkerblom 1950, pp. 155–157.

¹³ Orrman 1986, pp. 153–160, 212–225.

¹⁴ 'Daily from all parts of the realm.' RA, Rådets handlingar och brev (1131), Rådslag och andra handlingar ang. rikets råd (B), 1569–1583 (IV), Rådslag (t). Vadstena, 19 February 1580.

¹⁵ Huhtamies 2014, pp. 610–611.

Tallinn flourished, and to prevent this the king ordered galleys to the passages in order to control the traffic.

During the age of Vasa, the recruitment of the crews to the archipelago fleet was based on variable methods. At the beginning of the 17th century, the recruitment of crews (*båtsmän*) was based on a permanent system called *ständiga båtsmanshåll*.¹⁶ This reform, which can be called revolutionary from an organisational point of view, was carried out in 1634, a half-century before the corresponding allotment system was introduced in the army in 1682. The introduction of the allotment system is well known among military historians, but its groundbreaking forerunner of 1634 much less. The recruitment was based on the use of the inhabitants of the archipelago as rowers and pilots. This access to this kind of free military labour force was a major advantage for the crown and, in general, a central reason for the use of galleys in Sweden. It saved money that could be used to hire foreign mercenaries.

Owing to the recruitment, which was extremely manpower-intensive in oared vessels, and the maintenance and infrastructural needs of the galleys, in the 16th century the fleet already had an indirect impact on society. However, this impact was temporary and seasonal because it was restricted to the sailing season. Despite this limitation, the strongholds of the archipelago fleet of the Vasa era became embryonic town-like centres. The archipelago fleet fostered, e.g., manufacturing. As an example, the logistical needs of the galleys and shipbuilding produced, e.g., the sawmill industry in the hinterlands of Helsinki.

The Turning Point: the Foundation of Russia's Baltic Fleet in the 18th Century

Despite its significance in the 16th century, during the 17th century the importance of the archipelago fleet faded and the building skills of galleys seem to be vanished as well.¹⁷ The galleys disappeared from the Gulf and the emphasis was laid on the deep-sea navy. In the 1630s and 1650s the new theatre of war was in Germany and in Denmark.

The era of archipelago war proper started at the beginning of the 18th century. The initiative came from Russia. After defeating the Turks at Azov, Czar Peter the Great founded Saint Petersburg in 1703 and established an archipelago fleet of oared vessels. A new galley fleet, the Baltic Fleet, was launched.¹⁸ The main enemy after the Turks was once again the old one, Sweden. In the Great Northern War (1700–1720) the Russians managed to penetrate into the Finnish archipelago, which

¹⁶ Höij 2000.

¹⁷ See, however, as a curiosity about the Swedish galley fleets in Germany during the Thirty Years War, Meister 1967, 479; *Från Femern och Jankow* 1948.

¹⁸ Phillip 1995.

hitherto had protected Finland as a natural barrier. In the archipelago war in the Gulf of Finland, the galleys were for the first time used operationally in sea battles.¹⁹ To archive this, the need for professionalism was high and the commanders of the Russian galleys had to be recruited abroad. The Venetian commander of the Baltic galley fleet, Ivan Botzis, had a crucial role in the operations. With his galleys, in 1712 Botzis managed to sneak into the Finnish archipelago near Helsinki and help the land forces occupy Finland. In 1714 the Russian fleet of galleys gained a comprehensive victory over the Swedes at the peninsula of Hanko at Rilax.

After the war, Sweden's Age of Greatness had permanently ended due to the substantial territorial losses – one-third of the realm – in the Baltic and in Eastern Finland. Despite the agonies of the occupation time after the war, the Great Wrath (Fin. *Isoviha*), one of the positive results of the defeat was that the defence of the eastern buffer zone of the Swedish realm, Finland, was for the first time significantly improved. In the 1720s a vast defensive programme was launched. In 1721 a newly established Commission of the Admiralty (Amiralitetskommission) launched a plan to build a galley fleet. This included, among other things, 70 new galleys.

The *Skärgårdsflotta* as a Swedish Answer to the Russian Threat

The archipelago war with galleys was a new challenge for the Swedes. As they lacked the know-how of the 'science of galleys' (*galere wetenskap*), it had to be gained abroad. In the 1720s, commissions of officers were sent to the Mediterranean, their mission being to find information on galleys and galley warfare. Swedish officers spent years in the Mediterranean. The expeditions explored the arsenals of France (Marseille, Toulon), Venice, Malta, the Vatican, the Ottoman Empire (Constantinople) and Tuscany. This kind of travelling blurred the barriers between military cooperation, espionage and plain 'tourism', which was already flourishing in places like Venice. The travelling was extremely expensive part of the war economy of 18th-century Sweden – knowledge was not free.

The experiences gained from the expeditions and the reports the commissions delivered to Admiralty in Stockholm formed the cornerstone for updating the knowledge of galley warfare in the Swedish Realm. Venetian- and Genoese-style galleys were built. The final objective was to create an archipelago fleet, now called the *skärgårdsflotta*, which could operate in the archipelago and support the land forces. The archipelago fleet was in the tactical plans supported by the navy (*flotta*). The idea was to create a defence on three levels: the army at land, the navy at open sea, and the archipelago fleet in the middle.

¹⁹ See e.g. Manninen 2007; *Journal du Général J. Keith* 1887.

The firepower of the archipelago fleet increased during the 18th century. Besides the galleys, the archipelago fleet consisted of new kinds of oared vessels with substantial firepower: archipelago frigates, which were hybrids of galleys and men-of-war, mortar sloops, cannon prams and cannon sloops and dinghies.²⁰ The increase, use and development of firepower were revolutionary. With the archipelago frigates, board cannons were introduced in archipelago warfare.

Besides the fact that a galley with narrow draft (less than two metres) could be easily adapted to the geographical conditions in the Gulf, there were several other reasons that promoted it. It was fairly easy and cheap to manufacture from pine. For the cost of a single ship of the line it was possible to equip a small fleet of galleys. The galley was light and could be even hauled over land through hauling passages (*drager*).

A Revolutionary Impact on Infrastructure in the 18th-Century

In the 18th century the archipelago fleet had a direct impact on society. The recruitment of the archipelago fleet – and the fleet of the open seas, as well – was reorganised and developed. There were three kinds of ‘boatmen’ (*båtsmen*) in the archipelago fleet: *rotebåtsman* (permanent crews with cottages), *volontärer* (recruited) and *enrolleringskarlarna* (enlisted). In general, the recruitment was not based on force but on negotiations and reciprocity. For example, the system of *enrolleringskarlarna* was based on financial contribution, protection (from conscriptions) and rights (e.g. mercantile) for the peasant responsible for delivering the *båtsmän* to the crown. The crews served for half a year, the sailing season, after which they were released. The *rotebåtsmän* lived in small cottages (*torp*) on the coast as a reserve of free men.

It is not at all impossible, that the recruitment was backed up by the fact that the crown could link it with the tradition of the duty of coastal defence for peasants, the roots of which stretched all the way back to the medieval *ledning*. Practical reasons fostered the willingness to serve too: in the 18th century the coasts were the primary enemy targets. In the bargaining processes of the recruitment, the crown ‘sold’ protection to the coastal population, which for its part was motivated to take part to the defence. Furthermore, the recruitment was announced in the church with supporting spiritual and national uplifting.

Even more important was the impact on infrastructure.²¹ The galleys, with only a short radius of action, needed supply bases, above all food and water for the men, who were the ‘engine’ of the galleys. The main naval base was initially in Stockholm, but in the 18th century it was too far away

²⁰ Berg 2000.

²¹ Gustafsson et al. 2011; <http://blogs.helsinki.fi/sveaborg-project/suomeksi>.

from the eastern Gulf of Finland. The Russian galleys could sail in hours from Saint Petersburg to Helsinki, but it took at least a month for the Swedish squadrons to reach Helsinki from Stockholm, depending, of course, on the wind conditions.

This was the reason for the founding of Fortress Sveaborg in front of Helsinki in 1748, and its smaller sister fortress Svartholma some 140 km east. The architecture of the ‘Gibraltar of the North’, as it was ambitiously called, was influenced by Vauban and was a derivative of *trace italienne*. Sveaborg was the new *place d’armes* and the main stronghold for the archipelago fleet. The fortress included a high-tech dry dock with wind-powered pumping installations for the galleys. Also, the archipelago fleet was in transition. In the 1760s after the experiences gained in the Pomeranian War, ship designer F. H. af Chapman began to design new types of vessels, archipelago frigates and cannon sloops and dinghies, which replaced the galleys as main element in the fleet.²²

The construction works of Sveaborg were the biggest and most expensive project in the 18th-century Swedish Realm. The building process gave an enormous economic, innovative and militarising incentive and impact on local economy. In order to aid the supply of timber to the construction works of the fortress, a Swedish variant of enclosure and privatisation of land (*storskift*) was launched. Most of the advocates of the *storskift* were officers of Sveaborg or merchantmen closely linked to the fortress. New building and stonemasonry techniques from the mining industry were introduced in Sveaborg and to the surroundings in Helsinki. Sveaborg, with its thousands of soldiers, workers and inhabitants (c.6,000), formed a twin town with smaller Helsinki (2,000 inhabitants). The new-born twin town became a creative milieu and an innovative centre, and a kind of centre of higher technical learning in Finland. Social innovations, such as Freemasonry, clubs, cafes and theatre, spread to Helsinki via Sveaborg. The construction works as an engine of economy paved way to the growth of Helsinki, which in the 1812 became the capital of an autonomous Finland. In the 19th century, during Russian rule, Helsinki was strongly militarised.

Archipelago Fleet and the Timing of the Military Revolution in Sweden

According to Michael Roberts the (Swedish) military revolution occurred in the period 1560–1660 and especially during the reign of Gustavus Adolphus. The period of 1660–1760 was, according to him, less important. This timetable does not, however, fit for the Swedish military revolution in a broader view. In the 16th century Vasas had already allocated substantial amounts of resources to

²² Harris 1989.

the galley fleet. Despite the investments, the fleet was an ad hoc fleet for temporary purposes. It can be argued that the main enemy of the 16th-century galley fleet was rotting.

In the Vasa era, some embryonic technical improvements were introduced. The galleys were equipped with ordnance and old fortifications were partly modernised according to new European (Italian) standards. Tactically, however, not much was done. The galleys were mainly used for logistic purposes, that is, for transporting. No extra training was needed because no actual battles with galleys were fought. The archipelago fleet of the 16th century had a fairly light and seasonal impact on society, whereas the impact of the land army was stronger and more than seasonal. To sum up, in the 16th century the archipelago fleet was not, despite large investments and some technical innovations in artillery and fortification, an accelerator of a military revolution.

Aspect/period	1560–1660	1660–1760
The fleet	ad hoc/temporary	permanent
The use of galleys (tactics)	logistic	logistic/operational
<i>Trace italienne</i>	supplementary	dominant
Firepower (cannons)	seminal	diffused and increased
Professionalism/technology	low/craftsmanship	high/scientific
Recruitment	ad hoc/semi-permanent	permanent
Warzone	far	near
Militarisation	temporary/concentrated	nationwide
Impact on society	indirect/local/seasonal	direct/nationwide

Table 10.1 Archipelago fleet and aspects of military revolution.

However, the changes in naval warfare in the 18th century can be described as revolutionary, which supports the periodisation of Jeremy Black.²³ The variables are described in the scheme above. In general, the scale of transformation was much larger and even revolutionary in the 18th century. A major turning point was the founding of Saint Petersburg in 1703. The archipelago became a warzone and the enemy was much nearer. A permanent Swedish archipelago fleet was established and organised in the 1720s. Even more important were the construction works in 1748 for the fortifications and strongholds – Sveaborg and Svartholm, to mention the two most important – for the needs of the archipelago fleet. At this point we can talk about the dominant and expensive role

²³ Black 1991, p. 93.

of *trace italienne* in the Gulf. In general, the society was deeply militarised. Helsinki became the new important military town. The *trace italienne* in the Gulf did not, however, lead to sieges of extensive duration.²⁴

In addition, the rate of professionalism was much higher in the 18th century than in the Vasa era. The crews had to master difficult manoeuvring in battles. As an indication of professionalism, the first books and considerations (e.g. on signals and tactics) on galley warfare were published in Swedish.²⁵ The archipelago war had reached a scientific level.

Conclusion

The connection of geography and military history, or even history in general, has been close in a remote country like the Swedish Realm, a land with poor traffic networks. The passages in the Gulf of Finland were already the crucial communication lines by the Viking age. The wars of the early modern period were struggle for these passages. The land forces could not move without the support of the floating army. Owing to the geographical factors, the 'limitation of change' for a profound military change (Jeremy Black) were larger in the archipelago.²⁶

The impact of the archipelago on the civil population in the 16th century was seasonal and local but substantial. The peasant population was obliged to take part in the logistics of the *bankstads* (shipyards) where the galleys were built. The situation and burdens of the peasants in Ostrobothnia were similar with the case of Venetian Republic presented in Giulio Ongaro's study.²⁷ In the 16th century there were no private contractors involved in galley building in Sweden. The building was organised at the local level by the bailiffs and governors.

Both Russia and Sweden had archipelago fleets in the 18th century. They both needed technology and expertise from the Mediterranean. The waterways also had a role in this process. The innovations in galley technology diffused to Russia by moving technology from the Mediterranean to the Baltic. Russia even hired Venetian commanders in the Gulf of Finland. Unlike Peter the Great's Russia, Sweden could not afford to hire a complete crew of galley officers, purchase ready-made or semi-fabricated crafts, or lure craftsmen from abroad. Besides, it did not have the geographical advantage of using rivers as a means of transporting naval innovations from the Mediterranean.

²⁴ Parker 1996, pp. 10–13.

²⁵ Nikula 1933, pp. 108–109, 246–247.

²⁶ Black 1991, p. 35.

²⁷ Ongaro 2017.

France, an ally of the Swedes, also had its role in the power relations connected to oared vessels. The analogies in galley development in the Mediterranean and the Gulf of Finland are worth noting. Whereas the galley fleet of France was reduced in the Mediterranean in the 1720s and 1730s, in the Baltic this was the period when galley fleets were established – with the help of French money. The French stopped using galleys in the Mediterranean but started to finance the Swedish galley fleet. The focus of French naval power policy moved to the Baltic, against Russia. Furthermore, the scrapping of French galleys, and the founding of the fortress Sveaborg, which was also financed ‘with several barrels of gold’ by France, took place in the same year, 1748, while in 1749 a major construction project of 20 new galleys was launched. To sum up, France did not quit its power policy concerning galleys. It founded a new fleet, behind the scenes, in the Gulf of Finland.

I have focused on the archipelago fleet in order to answer to the question of what the meaning of the military was in the early modern Swedish Realm. Despite the disasters and agonies of the war, the build-up of military installations in the coast was an engine of growth. Further, the oared fleets enabled the crown to govern remote places like the archipelago. By founding the *skärgårdsflotta* in the 1720s, with, e.g., charting and organising a pilot and salvaging network, the crown succeeded in getting a firm grip on these peripheral areas hitherto out of the control of the state. However, the oared fleets could not operate without help of the coastal people. Galleys with thousands of men needed pilots and logistic support from the inhabitants. The transformations within the archipelago fleet and the military installations connected to it were revolutionary in the period 1660–1760.

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