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Monasteries and the maritime history of the Russian North from the 16th century to the early 18th century

Les monastères et l'histoire maritime de la Russie du Nord du XVI^e siècle au début du XVIII^e siècle

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Monasteries and the maritime history of the Russian North from the 16th century to the early 18th century

Anastasia Bogomazova and Margarita Dadykina

Abstract

The article examines the process of maritimization of the Russian state through the formation and functioning of fleets of the rich monasteries in the Early Modern Russian North: Solovetsky, Anthonievo-Siysky, Krestny Onezhsky and others. The authors analyze qualitative and quantitative characteristics of the fleets of the northern monasteries (the types of vessels used in the economy of the monasteries, the number of ships belonging to the monasteries, and the dynamics of change). They stress the importance of sea vessels in the life of northern monasteries, the intensity of their use, the mobility, the role of specific types of vessels in the economy of monasteries and their services.

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Keywords

Russian North, maritimity, Russian monastery, monastery fleet

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Résumé

L'article examine le processus de maritimisation de l'État russe à travers la formation et le fonctionnement des flottes des riches monastères du Nord au début de la période moderne : Solovetsky, Anthonievo-Siysky, Krestny Onezhsky et autres. Les autrices analysent les caractéristiques qualitatives et quantitatives des flottes des monastères (types de navires utilisés dans l'économie des monastères, nombre de navires appartenant aux monastères et dynamique du changement). Elles soulignent l'importance des navires dans la vie des monastères nordiques, l'intensité de leur utilisation, la mobilité, le rôle des types spécifiques de navires dans l'économie des monastères et leurs services.

Mots-clés

Russie du Nord, maritimité, monastère russe, flotte de monastère

The historical literature predominantly considers Pre-Petrine Russia as a purely continental country with some potential of becoming maritime in the future. Importantly, those works consider the very notion of being maritime almost exclusively through the military perspective. This is true both for the international and Russian historical literature. Indeed,

“ Russian history has its own tradition of scholarship on the relationship of Russians and the sea, although the tradition could be reinvigorated by new perspectives that focus on the different groups involved in this relationship and less passive constructions of the environment¹.

1. Kraikovski, 2015, p. 40-43.

Meanwhile, the sea clearly was important for Russian history long before Peter the Great. As early as the end of the xvth century the young Moscow State annexed Novgorod, which had strong connection with the Baltic, White and Barents Seas, and incorporated the vast area known as the Russian North. Through these territories the Moscow state did the first step towards positioning the country as a maritime country strongly connected by the sea both economically and culturally.

The Russian North is a vast territory that stretches from the town of Vologda in the south to the Barents Sea in the north, with the White Sea as the core space and the great rivers of the Dvina and the Onega as links to central Russia. It has gradually been colonized by Slavs and then Russians since at least the xith or xiith centuries. Initially the area was incorporated into the Novgorod Republic, and then, in the xvth century, into Muscovy (since the middle of the xviith century, the Russian state). By the xviith century the Russian North was quite a specific part of the Russian state with a strong local identity and culture². The climate of the Russian North is harsh, with minimum possibilities for plough agriculture. Therefore, the industries dealing with the sea, such as marine mammals hunting, fishing, or the salt-cooking industry became alternatives for the people living in the area. The territory provided several major resources for the economic development of both monasteries and rural settlements. The abundance of underground brine and fuel timber became the basis for the salt producing industry³. Marine mammals from the White Sea and the Arctic Ocean provided skins and blubber. Fish deserves some special attention. The rivers and the sea were rich with fish, including prized species like salmon and cod. The local economy included salmon fisheries, with Atlantic salmon being caught by weirs during spawning migrations and seasonal fishing expeditions to the Barents Sea coast of the Kola peninsula for cod and halibut⁴.

In a word, the region was good for industry and trade and by the late xvith century it had become one of Russia's most developed regions, incorporating the port of Archangelsk the major gateway for Russian commerce with Europe. We need to mention that the White Sea has a « severe

2. Lajus, 2011.

3. Kraikovski, 2002.

4. Kraikovski, 2015 ; Dadykina, Kraikovski, 2019

character » as the Pomors (the population of the White Sea coast) used to say. Navigation in the White Sea starts in June and ends in October with the freezing of sea water. In addition, from the end of August, severe storms are frequent at sea and navigation becomes dangerous. In the xvth-xviith centuries, therefore, the transportation of goods and in general maritime mobility were carried out predominantly along the coast⁵.

Monasteries, with their ambitions and possibilities (through religion and economic power), became the main creators of the Russian North economy. Through the complicated system of formal and informal communications the monks controlled vast networks of heterogeneous actors, including those involved in maritime activities. Monastic expansion in the Russian North started in the late xivth century when Sergius of Radonezh founded the Trinity monastery to the north-east of Moscow, which soon became a model for Russian monasteries for centuries to come⁶. His vision included a search for hardships, which monks had to overcome in the name of God, as an inextricable part of the monastic spiritual experience on the path to the ideal Christian life and, eventually, the salvation of soul. With its harsh climate, poor population and enormous forests, the Russian North seemed the perfect place for such a religious escape from the world. As a result, Saint-Sergius of Radonezh's disciples began moving northwards, generation after generation, founding monasteries further and further from the center of Russia. This process is known in Russian history as the monastic colonization of the Russian North. In this paper we will consider maritime aspects of monastic colonization through the history of the greatest friary in the Russian North – the Solovetsky monastery. Then we will compare this case with several other Northern Russian monasteries.

The Solovetsky monastery as the maritime center of the Russian North

Founded on the islands in the south-western part of the White Sea in the first half of the xvth century, the Solovetsky monastery became, by the end of the xvith century, not just the spiritual center of the Russian North, but also an organizer of the defense of the northern lands, a representative

5. Dadykina *et al.*, 2017.

6. Miller, 2010.

of power on the distant shores of the White Sea, as well as an important economic center for the development of these lands (Fig. 1). Through centuries it remained one of the most powerful, rich and artistically impressive spiritual, administrative, economic and cultural centers of the Russian North⁷. After the monastery was established, the community exerted multifaceted control over the area, including the technological management of the surrounding environment. The hegumen (head of monastery) Philip (Kolychev), who later became Metropolitan of Moscow and was canonized by the Russian Orthodox church as Saint-Philip, initiated the rebuilding of the monastic complex as a powerful fortress, the construction the canal system and other parts of the monastery infrastructure which created the sea-oriented and sea-connected landscape⁸.



Fig. 1 – View of the Solovetsky Monastery from the West (« The Tsar’s pier »)

Early xxth century postcard

From the personal collection of A. Bogomazova

Therefore, the Solovetsky monastery became the only maritime monastery in the literal sense of the term, since it was surrounded by the sea on all

7. Kraikovski, Lajus, 2021, p. 46-48.

8. Kraikovski et al., 2018

sides, standing « in the middle of the sea on the island », as the inventory of the xviiith century indicates. This monastery was built on the Solovetskie Islands⁹:

“ An archipelago of six large and more than a hundred small islands, it is situated in the White Sea about fifty kilometers from the mainland and 165 kilometers south of the Arctic Circle. Its climate is milder than that in the interior of the Russian North due to the influence of the sea. The monastery received numerous economic and taxation privileges and developed a sophisticated infrastructure, including a transportation network and industrial facilities controlled by the monks on the islands and in the large coastal areas. In the seventeenth century, the church dominated the regional salt market and governed the rich fishing grounds along the coasts of the White Sea and its rivers.

42 The maritime services and enterprises (fishing, hunting, salt-making) became an integral part of the monastery maritime economy. Some of those grounds were situated in the areas known for the exclusive productivity of valuable fish, predominantly salmon. For instance, based on the Solovetsky monastery archives, Alexander Savich identified several fishing grounds owned by the monastery along the productive Vyg River. The monks operated a number of weirs on the Vyg River and at the mouth of the Soroka River. Soon after the founding of Solovetsky monastery, the monks began paying particular attention to the quite abundant Varzuga fisheries¹⁰. During the entire next century, the monastic authorities used a variety of strategies and methods to gain possession of the area. The monastic management system, surprisingly efficient for early modern Russia, became one of the most important advantages used by the monks during this expansion.

The structure of the monastic community was more or less uniform in all Russia, including those in the North. The head of the monastery was the hegumen, later archimandrite, and the council of elders, which included the cellarer and the treasurer. Offices formed the basis of monastic administrations, both central and local, called Service (*Sluzhba*). *Sluzhby* situated

9. Kraikovski, Lajus, 2021, p. 39. For details, see Ivanov, 2007; Savich, 1927 ; Lajus et al, 2005; Lajus et al., 2001; Kraikovski, Dadykina et al., 2020.

10. Savich, 1927; Filin, 2002.

in the main monastic building were responsible for particular branches of monastic economy, like, for example, the drying service (*Sushilennaia Sluzhba*) in the Solovetsky monastery responsible for provision. The local monastic *Sluzhba* controlled all of the monastery's activities in a particular area, including contacts with the local state administration and peasants. « Thus, the *Sluzhba* was the bedrock of monastic fisheries management, and it aimed first of all to control the people involved in the industry, to ensure a productive catch, and to manage the process of fish catching and processing¹¹ ». All the monks were obliged to work as part of their monastic duty, therefore following the uniform regulations and the strategies developed by the monastic authorities. This system of management fully applied to the maritime activities. In the xviith century the Solovetsky monastery had a well-developed infrastructure that supported the activities of the monastic fleet and included a special *Karbas* Service, as well as berthing and coastal structures (docks, barns for storing ships and equipment) in the monastery itself and in its mainland services and industries. The condition of ships was maintained, they were tarred and repaired. If a boat did not fall into a storm and was not broken, it could serve, as befits a wooden ship, for 10, 15, or even 20 years¹².

Geography determined the development of maritime transportation in the monastery. Indeed, all the monastic possessions can be divided into three geographic regions¹³. The first group included estates « located along the White Sea coast or near it » (estates in the Dvinsky and Kola districts, as well as Liametskaia, Purnemskaia, Nizhmozerskaia and the Kushretskaia *volosts* of the Kargopol district). The second ranged « estates, quite remote from the White Sea, but at the same time located along the channels of the main Pomor rivers, the Northern Dvina and Onega » (Pol'skoe village, Piial'skoe *usol'ye*, Pertemskoe village, Vladychenskoe village, Kargopol district, as well as estates in the Ustyug district). The third group consisted of estates located in the central districts (in Bezhetsk and Moscow). We will pay particular attention to the monastic estates belonging to the first two groups. By location, the possessions of the Solovetsky monastery, belonging to the first group, can be divided into four smaller groups: the grounds on the shores of the Dvinskaia *guba* (bay); the banks of the Onezhskaia *guba*;

11. Kraikovski, Dadykina et al., 2020.

12. Bogomazova, 2015.

13. Bogdanova, 2013.

the Karelian coast of the central part of the White Sea basin; the banks of the Kandalakshskaia *guba*. From the second group, we will be interested in fisheries on the Onega River (Piial'skoe, Vladychenskoe, Firsovskoe and Pol'skoe *usol'ye*) remote from the seacoast.

1. For monks, both individually and as a community, the creation of the new form of space with the markers of God's presence, what we may label as the holy space, constituted the core of their life¹⁴. As Ellen Arnold notes, the holy space knew no clear division between the spheres of natural, human and divine¹⁵. The slughtness of this universe allowed monks to negotiate with nature through practices in which God spoke on its behalf. The idea of Transfiguration as a transformation of wild landscape into the holy space became therefore decisive for all the monastic activities and in full measure can be seen in the interaction of the monastery with the marine space through shipping and shipbuilding. Like any important matter, the start of the boat construction or the opening the fishing season, was always accompanied by a prayer service, which indicated the presence of God. It was served by especially invited priests who received not only payment, but also refreshments. *Kalachs* (special Russian sweet bread) were endowed by sea-workers supporting the ritual. The same ceremony happened during navigation: its beginning was sanctified by a prayer. Upon returning home, the hired sea-workers were given out *kalachi*. In the correspondence of the different service's elders and the authorities of the monastery we must meet the indication of God's permission (« as God wills¹⁶ »).

The patron saint of sea travelers was St. Nicholas; on the seacoast and on the islands, both monks and peasants built numerous chapels dedicated to him. The Solovetsky monastery's founding fathers Zosima and Herman were also known as the patrons of marine crafts. Icons depicting them in the XVIIIth century were necessarily taken on board¹⁷. Thus, the saints became part of the religious spiritual space, included into the concept of maritime life.

14. Arnold, 2013.

15. Arnold, 2013, p. 27; Dadykina 2016.

16. Dadykina, 2019.

17. Laushkin, 2007.

The fleet of the Solovetsky monastery: structure and formation

The fleet quite predictably became the main instrument of incorporation of maritime practices into the routine monastic life. The study of the monastery's fleet is an important part of the research of the monastery's maritime economy, which also included the coastal infrastructure and a number of industries fully or partially associated with the sea. The monastery built, acquired, stored, repaired sea-going vessels, and used them for transport and trade purposes. A special *Karbas* Service, according to late XVIIth century data, was responsible for the storage and maintenance of the monastic ships. The monastery had a number of equipped vessels, both on the islands and on the mainland. The formation of the Solovetsky fleet took place at the end of the XVth-XVIth centuries, with the heyday in the first half of the XVIIth century.

The types of vessels that the Solovetsky monastery used in its economy are impressively various. *Lodia* was the largest one and had the biggest carrying capacity. Depending on their size, the sources mention large and small *lodias*. For instance, the *lodia* named *dvinianka* in 1695 was approx. 20 m long, and approx. 7.1 m wide. The ratio of the length of this boat to its width was therefore 2.8. *Lodia* could have a deck. Also, on the *lodia* there could be a covered cabin. The boats of the Solovetsky monastery mentioned in the documents normally carried one mast and one sail, although two-masted boats were known in the Russian North since at least the 1620s. The carrying capacity of the boats of the Solovetsky monastery fluctuated between 1800 and 2400 *poods* (29.5-39.31 tons)¹⁸, the carrying capacity of some boats reached 2700 *poods* or even more (over 44 tons). The length of the sail of the Solovetsky boats at the beginning of the XVIIth century, was 8 to 8.5 *sazhen* (approx. 14 to 18 m)¹⁹.

The length of the canvas used for the manufacture of the sail in 1638-1639 was 800 linear cubits, and the area of the canvas, respectively, was 194.4 to 203.04 m². The carrying capacity of the boat of the Kozhzhemskoe *usol'ye*, for which such a sail was sewn, was at least 2600 *poods*. The main purpose of the boats was transport and cargo transportation.

18. The pood is 16,38 kg.

19. The *sazhen* is 1,5 to 2,2 m.

Soima was the second largest type of vessels. In terms of size, among them were large, small and semi-*soimas* vessels. The length of the *soima* in 1612 could be from 12.35 to 15.12 m, the depth of the side 12 planks; the length of the smaller *soimas* was from 10.58 to 12.96 m, the depth of the side 10 planks. Sources mention opened *soimas*, as well as *soimas* covered with roofs. The documents of the Solovetsky monastery mention *soimas* with only one sail. The length of the canvas used to make sail for the large *soima* in the 1657 was 54 m, and the area of the fabric was about 24.3-25.38 m². The carrying capacity of the *soima* of the Solovetsky monastery averaged about 10 tons. The main purpose of the *soima* was to connect the mainland grounds with the monastery and among themselves, to transport small loads. *Soimas* were also used in fishing.

The vessels named *karbas* were in fact a vast group of small sailing and rowing vessels. *Karbases* could be large and small, the height of their side ranged from 2 to 7 planks, the documents of the Solovetsky monastery mention *karbases* with a side height of 2-6 planks. In the xviith century the majority of *karbases* were opened though some could be covered or had decks. The sail of a large covered *karbas* in its size (fabric area 42.8 m²) and in price exceeded the sail of a large *soima*. The carrying capacity of *karbas* of the Solovetsky monastery of the xvith-xviith centuries cannot be determined. The main purpose of the *karbas* was to connect the mainland grounds with the monastery and between themselves; they were also used in hunting and fishing expeditions. *Karbases* with large cabins were used to transport people.

Another type of small vessel was *shniaka*. *Shniakas* mentioned in the documents of the Solovetsky monastery had one sail. They were cheaper than *karbases*. In the xviith century, as well as in the xixth and early xxth centuries, *shniakas* were mainly used in the Murmansk fishing industry. Additionally, the monastery had special river vessels named *doshchaniki* (plank vessels) and used them for cargo transportation from the Kholmogory to Vologda towns. Sometimes *doshchaniki* were used for the coastal stripe from one service to another.

However, we can question to what extent this variety of names reflected the functional purposes of every particular type of vessels, or the features of its design. Indeed, the weak differentiation of concepts within one category (social structure, household utensils, etc.) was a characteristic

feature of medieval thinking and vocabulary and the case of the traditional culture of the Russian North is very demonstrative in that regard. In the early modern period we can see a gradual unification and consolidation of typological units within certain categories that describe different spheres of human life. This observation is important in relation to the development of typologies of ships. In the XVIIIth century the system of names and types of battleships was established almost everywhere, but before that time different countries and regions had their own nomenclature of ship names²⁰. Therefore, we argue, the names of vessels in the sources of the Solovetsky monastery reflect rather local tradition than any sort of strict technical regulations.

The number and types of sea-going vessels belonging to the Solovetsky monastery can be counted on the base of register books, but river vessels were not taken into account in these documents. Additionally, the monastic records used to divide the ships into two groups. The first one consisted of the vessels that were recorded as a property of the monastery itself while the second one included those that were listed under control of the salt producing services. For example, in 1613, 8 *lodias* were mentioned in the monastery's allotment book, and at that time there are at least 14 *lodias* in its salt services, that is, almost twice as many as in the fleet controlled by the central authorities of the monastery itself.

According to the earliest surviving inventory of the Solovetsky monastery²¹, compiled in 1514 when the former hegumen Euthymius transferred his authority to priest Gelasius and the cathedral elders, the monastery had four boats (*lodias*) with full equipment. The inventory also mentions *karbas* sails, although the document says nothing about *karbases*. According to the allotment book of the monastic property in 1549, the monastery has « four *lodias* with all supplies, with anchors and sails, and fifteen large and small *karbases*²² ».

The number of sea-going vessels of the Solovetsky monastery increased gradually until the 1630s-1640s. Thus, in 1514 the monastery had 4 large

20. Starkey, Thór, Heidbrink, 2009.

21. Inventory of the Solovetsky monastery in the 1514, *Opisi Solovetskogo monastyria XVI veka*, 2003, p. 36

22. Inventory of the Solovetsky monastery in the 1549, *Opisi Solovetskogo monastyria XVI veka*, 2003, p. 51, 85, 167

sea vessels (*lodias*), in 1549 4 *lodias* and 15 *karbases*. In 1570, there were 7 *lodias* and 15 *karbases*, in 1597-1613 8 boats and 20 *karbases*, in 1613 8 boats and 30 *karbases*. As we can see, in the xvith century and in the first decade of the xviith century the number of large sea vessels belonging to the monastery itself increased very slowly (from 4 *lodias* in 1514 to 8 in 1613). We see a sharp increase only between 1549 and 1570: the number of large cargo ships increased from 4 to 7 *lodias*, that is, almost doubled. This increase falls on the time when Philip was a hegumen and can be explained by his efforts, as the general development of the monastic economy at that time was a result of his transformations. A slow increase in the number of *lodias* on Solovetskie Islands at the end of the xvith century and the beginning of the xviith century can be explained by the fact that in the xvith century the monastic economy on the mainland appeared, and in the last third of the xvith century new salt-making industries were created (Fig. 2)²³.

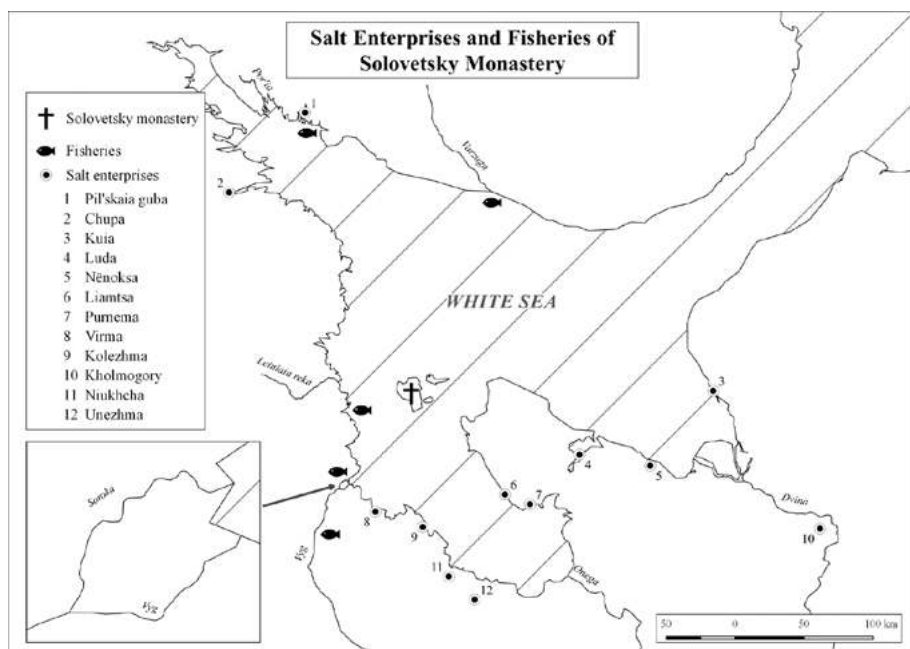


Fig. 2. - Salt Enterprises and Fisheries of Solovetsky Monastery

Designer: Artyom Husak

23. For more details see: Frantsuzova, 2017.

The monastery supported this expansion with new *lodias*, both purchased and received as donation²⁴.

The heyday of the Solovetsky monastery fleet dates back to the 1630s-1640s: in 1632-1640, the monastery possessed 23 *lodias*, 13 *soimas* and 40 *karbases*²⁵; in 1645, 20 *lodias*, 10 *soimas* and 40 *karbases*. In total, in the Solovetsky monastery itself in 1632-1640 there were 76 ships. Noticeably, we may suppose that the available sources do not provide the complete data, and therefore the real monastic fleet could have been even bigger. The question arises as to whether all the monastery ships were accounted for in the diversion books. It is known that the monastery had *soimas* and *shniakas* at the end of the xvith century and at the beginning of the xviith century²⁶. In 1610-1611, in the settlement of Sumskoï ostrog, the carpenter Tikhon made two new *soimas* by order of the monastery. In the same year, the monastery sold one old *soima*²⁷. In the same 1610-1611, ten rubles were sent from the monastery to Keret' with elder Sofron on the *soima*²⁸. However, in the inventories of the monastic property, the *soimas* begin to be taken into account only from 1632, and the *shniakas*, from 1697 (for the first time the *shniaka* was named in the diversion book of the *Karbas* Service of the Solovetsky monastery). Perhaps they were not in the monastery in the years when the descriptions of the monastery property were carried out. The second explanation might assume that *soimas* could be counted together with *lodias*: so in the later transfer book of the *karbas* service in 1697 and the inventory of the monastery in 1705, one *soima* was counted among the *lodias*.

The number of ships decreased sharply by 1676. Probably those were the consequences of the Solovetsky uprising of 1667-1676. The monastery rejected religious reform by patriarch Nikon, was besieged by the governmental forces, captured and devastated²⁹. Of course, this played an important role in the crisis of the monastic economy, including the decrease of

24. SPb II RAS. Coll I. 2. f. 128. l. 115; f. 130. l. 111; f. 137. l. 186. RGADA. f. 1201. Inv. 1. f. 40. l. 197 and f. 236.

25. SPb II RAS. Coll I. 2. f. 141. l. 213.

26. Prihodo-raskhodnye knigi Soloveckogo monastyrya. 1571-1600 gg., p. 254, 265, 454 – 455, 462.

27. RGADA. Coll. 1201. Inv. 1. f. 217. l. 205 rev.; l. 81.

28. RGADA. Coll. 1201. Inv. 1. f. 217. l. 99.

29. Bak et al. (ed.), 1984, p. 208.

the fleet. However, already in the 1660s, we see that the number of *lodias* in the monastery economy was decreasing, therefore, the siege was probably just the last blow and the decline had deeper causes.

By the end of the xviith century, the number of ships belonging to the monastery increased to the level of the heyday of the 1630s-1640s. In 1697, the monastery had 18 *lodias*, 5 *soimas*, 39 *karbases* and various fishing vessels, and one *shniaka*. At the beginning of the xviiith century again, there was a drop in the number of monastic ships: 11 *lodias*, 3 *soimas*, 20 *karbases*. Additionally, the document mentions two small transportation boats used for the needs of the head of the Solovetsky monastic community. As in 1651, he received the rank of archimandrite, the highest possible rank for the monastic hegumen in the Russian Orthodox Church³⁰, these two vessels were known as the Archimandrite boats.

Sea-going ships were based not only in the monastery itself, but also in its many coastal services, in salt and fishing industries. By the second half of the xviith century, we see that the nomenclature of vessels in the documents becomes more complete. In addition, the sources of that time included for each vessel the specification on how and where exactly it was used be that fishing, marine animal hunting, salt transportation for this or that service. According to the description of the Solovetsky monastery, compiled by Prince V.A. Volkonsky and clerk Almaz Chistoï, after the suppression of the Solovetsky uprising in June 1676, the monastery had six boats (with fishing gear), eight spring-fishing *karbases*³¹, two fishing boats with ship's gear, four seals with fishing gear and two fishing *karbases*³². In the inventory of 1676 for the first time it is stipulated that not only sea vessels are taken into account, which are at the moment in the monastery on the island, but also those who have gone « on the way »: « There are six *lodias* of the Solovetsky monastery. And one of them is in the Sumskoï ostrog, the other at the Onega estuary³³. »

The story of *shniaka* as the type of vessel used in the monastic economy deserves special attention. *Shniaka* was first mentioned in the transfer

30. Mouravieff, 1842, p. 187.

31. Spring fishing, this is what the Pomors call the spring fishing for sea animals and cod in the Northern Ocean and the White Sea.

32. RGADA. Coll. 1201. Inv. 1. f. 555. l. 5916592.

33. RGADA. Coll. 1201. Inv. 1. f. 555. l. 591.

book of the *Karbas* Service in 1697. However, the monastery definitely had *shniakas* in both the xvith and the first half of the xviith century. In 1584, the monks sold « a *shniaka* and a sail to a Kargopol dweller, and they took 13 altyn 2 dengas (70 kopecks) for all ». In 1608-1609, a Murman *shniaka* was bought in the Sumskoï ostrog for 20 kopecks. In 1616, the monastery « sold the old *shniaka* » for 98 kopecks³⁴. Nevertheless, the mention of them in the monastery documents for the xvith and xviith centuries are rare.

Table 1. The number of ships of the Solovetsky monastery in the xvith-early xviiith centuries

Year	Lodia	Soimaa	Karbas	Other vessels	Total
1514	4	no information			4
1549	4	no information	15		19
1570	7		15		22
1582	end of inventory is lost				
1597	8	no information	20		28
1604	8	no information	20		28
1613	8	no information	30		38
1632	23	13	40		76
1637	end of inventory is lost				
1640	23	13	40		76
1645	20	10	40		70
1676	6	2	14 (8 spring-fishing + 4 seal + 2 fishing)		24
1697	18 (in place 15 + 3 "on the way")	5	7	32 (1 - <i>shniaka</i>)	62
1705	11	3	20	2 boats of the Archimandrite	36

34. Accounts Books of Solovetski monastery, p. 254; RGADA. Coll.1201. Inv. 1. f. 217. p. 121; f. 15. p. 33.

The dynamics of change in the number of ships belonging to the Solovetsky monastery is presented in table 1. By the end of the XVIIth century the number of sea vessels belonging to the monastery increased, however the level of the heyday of the 1630s-1640s was never surpassed. And by the 1700s, there was again a drop in the number of monastery ships³⁵.

Sea vessels in the services of Solovetsky monastery

As it was mentioned above, the sea ships existed not only in the monastery itself, but also in its many coastal services, in the salt industries, in fishing. The sources have not been preserved equally well in all services. For some of them like that of Nenoksa, many accounts and transfer books were preserved, allowing us to trace the presence of ships (at least *lodias*) in the salt services for several decades. For others, the income and expense books for the period under consideration were lost. In the accounting books of the salt services, one can find references to cases of receiving boats from the monastery or their purchase, repair, or using the vessels for the delivery of the produced salt to the major market in the settlement of Kholmogory. Transfer books, compiled when the service was assigned to a new clerk, mention the whole range of vessels used in a particular place.

Since at least the 1590s, almost all the Solovetsky monastery's services that already existed on the White Sea coast had at least one *lodia*. We do not have information for an earlier period. Opening a new service, or reviving the old one, the monastery immediately or soon endowed it with *lodia*. No data was found on the presence of a *lodia* in Kekhta, Shueretskoe *usol'e*, as well as in salt services located on the Onega River and its tributaries, as well as in the Kuseretskoe *usol'ye*.

When *lodias* were given out to the salt services from the monastery, the vessels arrived at the « place of registration » fully equipped with food supplies and goods necessary for everyday life onboard. When needed, the *lodia* was replaced by sending another one from the monastery, new or used. The new boats, of course, served longer, if no trouble happened to them at sea. Usually, there was one *lodia* in the service although in the

35. Bogomazova, 2015 ; Kopytova, 2012.

second half of the century, in several services their transfer and census books note two large ships at once: the old and the new.

Salt boats were an integral part of the fleet of the Solovetsky monastery. Speaking about the size of the fleet of the Solovetsky monastery in the XVIth-XVIIth centuries in general, one should bear in mind not only the vessels named in the inventories of the monastery, but also the vessels that were in its coastal part of possessions. Moreover, in the first 15 years of the XVIIth century most of the large cargo ships, *lodias*, were located in the salt services. So, in 1613 in the monastery itself there were eight *lodias* and, probably, at least 14 more *lodias* in its salt fields (one each in Kuia, Nenoksa, Luda, Liamtsa, Purnema, Unezhma, Niukcha, Virma, Letniaia reka (river), Kolezhma, Por'ia *guba*, Pil'skaia *guba* and Chupa). That is, the salt services *lodias* accounted for about 64 % or two-thirds of the total monastery fleet. By 1632, the number of monastery *lodias* proper increased to 23 and exceeded the number of salt services *lodias*³⁶.

Karbases were found in all services, even in small ones and those remote from the sea coast, from two to 36. Thus, to the number of *karbases* indicated in the inventories of the Solovetsky monastery, one can safely add 20-40 *karbases* found in the services (if counted one at a time, two per service, actually more). In the XVIIth century *doshchaniki* (plank boats) were only in Nenoksa and only there were used to deliver salt to Kholmogory. Being river vessels, they could go out to sea, just like sea vessels entered the mouths of large rivers (Northern Dvina River, Onega River). It can be assumed that this type of vessels could have been used precisely in Nenoksa because it is located closer than other salt services to the mouth of the Northern Dvina and Kholmogory, therefore, the way there by sea was shorter. In addition, it is likely that the inhabitants of these particular places sewed planks boats and went to them.

In some salt services, there were *soimas* (for example, in Liamtsa, Kolezhma, Kem', Chupa, Piiala; possibly in Kuia) and since 1640-1660s *shniakas* appeared in Virma, near the Kandalakshskaia *guba*: the Chernaja (Black) River, as well as in Vladychno. In Pil'skaia *guba* *shniakas* were used for at least twenty years, from 1648 to 1671. In Unezhma, the Murman *shniaka* is named in the 1699 diversion book, it was bought by elder Sadoff until September 25th, 1699.

36. Bogomazova, 2017.

Purchase and use of sea vessels in the monastic economy

The main sources of replenishment of the monastery fleet were the purchase of ships, building them upon commission, and contributions as a donation. The boats were bought mainly in Onega, *soimas* and *karbases* also on the western coast of the White Sea in the settlements of the monastery patrimony, where fishing industries were developed. At the end of the 1670s, more than half of the *lodias* for the monastery were bought by the elders of the Piiäl'skoe *usol'e*, located on the river Onega. The main region where the *lodias* were built were the settlements in the lower reaches of the river Onega. The contributions accounted for about a third of all ships possessed by the monastery. Just as in the case of the purchase, the residents of the Onega *volosts* donated *lodias*, while the *soimas* and *karbases* came from the residents of the western part of the White Sea.

54 — Almost every year the monastery purchased from 1 to 5 *lodias*, and received some more *lodias* with contributions. The *lodias* acquired by the monastery not only expanded the monastery fleet, but also served to replace the old or lost *lodias* and maintain the monastery fleet at a certain level. One can imagine the actual need for the new vessels based on the fact that during its heyday the monastery every year had at least 35-38 *lodias* on the move.

The boats served mainly for the delivery of bread and goods from Kholmogory (bought in Vologda and in Kholmogory) to the Solovetsky monastery, and from there on the trades, as well as for sending salt, boiled in the monastery salt industrial complexes, to Kholmogory. There, the salt was transferred to river vessels (built of planks) and transported to Vologda, where one of the largest salt markets was located. The loading capacity of a boat in the xviith century was 30-40 tons on average (sometimes up to 45 tons). *Soimas* and *karbases* served for communication between the monastery and its mainland services and industries, *soimas* could also carry small loads (up to 10 tons). *Soimas* and various kinds of *karbases* were used in the fields, and hummock *karbases* made it possible to move « along the hummocks » and to maintain communication between the monastery and the trades in early spring and late autumn.

The monastery rarely sold its own ships. During the 1570s-1670s, we found only five cases of sale of *lodias* in the monastic income and expense

books, while the monastery sold small vessels more often. Since there are no cases of sale of ships in the income and expense books of the salt services, it can be assumed that such operations were not typical for them, although they could independently purchase the necessary ships.

Composition of the fleet of other monasteries of the Russian North

Sea vessels in the XVIth-XVIIth centuries were used not only in the Solovetsky monastery, but also in other monasteries on the shores of the White Sea. For instance, in 1586, the Archangel Michael monastery situated in Arkhangelsk town bought a *lodia*. In the Nikolo-Korelsky monastery and its possessions in 1603, there were 3 *lodias*, 1 *soima*, 2 *shniakas*, 24 *karbas*, 2 pavoška boats and 8 boats³⁷. In 1677, in the Krestny Onezhsky monastery and its possessions there were at least one boat, 18 *karbas* and fishing ships, 3 barges³⁸.

If we compare the number of ships in the Nikolo-Korelsky monastery in 1603 and in the Solovetsky monastery in 1604 (tables 2 and 3), there were more sea-going ships in the Solovetsky monastery itself than in the Nikolo-Korelsky. Yet, if we talk about the total number of ships, both in monasteries and in their industries, Nikolo-Korelsky had more vessels. However, ships in the monastic services are noted in the inventory of the Nikolo-Korelsky monastery but not in the inventory of the Solovetsky monastery. Therefore, our estimation is rather problematic. Approximately, relying on the data of neighboring years, it is possible to calculate only the number of *lodias* in the Solovetsky patrimony. And this figure surpasses the number of *lodias* of the Nikolo-Korelsky monastery³⁹, both if we compare the *lodias* in the monasteries themselves, and in the estates. In 1704, the Kholmogory Archbishop's house had at least one *lodia* and a lodge *karbas*, and the Trifono-Pechengsky monastery had two *soimas*, a *karbas* for each *soima*, 10 « industrial ships » (used in the fields) and 9 « industrial ships, tons of small ones that the family has for fishing⁴⁰ ».

37. Bryzgalov, Yasinski, 2009, p. 3-4.

38. RGADA. Coll. 1195. Inv. 1. f. 274. l. 81-81 rev., 89 rev., 98 rev., 101 rev., 109, 112 rev., 125.

39. GAAO (State archive of Arkhangesk region). Coll. i-191 (Nikolo-Korelsky monastery). Inv. 1. f. 9. l. 59-59 rev., 61 ob., 64 rev.-65, 70 rev.-71.

40. RGADA. Coll. 26 (Rank XXVI. « State institutions and duties in the reign of Peter I »). Collection of the State Archives of the Russian Empire). Inv. 1. Book. 60. Part 1. l. 28 rev.-29, 53.

Table 2. Sea vessels of the Nikolo-Korelsky monastery in 1603

Nikolo-Korelsky monastery and services	Vessels
monastery itself	7 boats, 11 <i>karbases</i> , 1 shnyak, 1 <i>soimaa</i> , 1 small <i>lodia</i>
Nenoksa	1 <i>lodia</i> with a sail and anchors and with all the tackle of the boat, 2 <i>karbases</i> of the <i>lodia</i> , a salt boat (<i>pavosok</i>).
Una	1 <i>lodia</i> with an anchor and a sail, and with all the tackle of a boat", 4 <i>karbases</i> , 1 boat, 1 salt boat.
Varzuga	7 <i>karbases</i> , murman shnyaka, <i>lodia</i> for fishing

Table 3. Comparison of the number of ships in the Solovetsky and Nikolo-Korelsky monasteries at the beginning of the XVIIth century

Sea vessels	Solovetsky monastery, 1604	Nikolo-Korelsky monastery, 1603
<i>Lodias</i>	8 in monastery itself + 8 in the services	1 in monastery + 3 in the services
<i>Soimas</i>	0 in monastery + ? in services	1
<i>Karbases</i>	20 + ? in services	11 + 13 in services
Boats	0 in monastery + ? in services	7 + 1 in Una
Shyakas	0 in monastery + ? in services	1 + 1 in Varzuga

In the economic life of the Kandalakshsky monastery, founded in the XVIth century in the south of the Kola Peninsula, salt production and fisheries played an important role. Both were associated with the sea. For the management of the maritime economy, which was not as extensive as that of other large northern monasteries of the XVIth and XVIIth centuries, the monastery needed sea vessels.

Already the scribe book of Alaĭ Ivanovich Mikhalkov, 1607-1608 to 1610-1611⁴¹, the earliest known cadaster description of this area, contains

41. Vypiska iz piscovoĭ knigi Alaĭia Mihalkova, 1890, p. 460.

indications that the monastery has its own vessels. So, behind the monastery « on the other side of the sea » there was a monastery barn, where the ship's tackle was kept. Also, the scribe book of Alaï Mikhalkov gives information from the previous (not extant) scribal book – Vasily Agalin and Stepan Sobolev's clerk in 1574-1575, which mentions « the shelter of the monastery *lodia* ». Consequently, the monastery in the last quarter of the XVIth century had boats, but we do not know the details.

At the end of the XVIIth century, *lodias*, *shniakas*, fishing vessels and *karbases* were donated to the Kandalakshsky monastery. According to the supplementary book of the Kandalakshsky monastery in the 1560s, the monastery received about 68 ships (in whole or in shares) as contributions. According to the inventory of 1705, there were 2 dilapidated *lodias* and 10 *karbases*, in 1710, a *soima* and 2 small fishing *karbases* on the Kolvitskoe Lake. In 1713, the monastery acquired 2 *soimas*. In 1727, the inventory of the monastery included a *soima* with tackle and 5 small dilapidated *karbases*. In 1729, a dilapidated boat with dilapidated tackle and a new ship « on the Murmansk » (on the Murmansk coast of the Barents Sea, where fishing was carried out), bought in 1729 by the elder monk Pakhomii. In later inventories of the monastery property (1742-1761), the vessels are not mentioned⁴².

The « non maritime » monasteries, located inland, but possessing industries on the shores of the White Sea, had in their maritime domains the vessels necessary to support the activities of these industries. So, for example, in 1682, in the Luda *usol'e* of the Trinity-Sergius monastery there was a *lodia*: in September of this year, the Luda clerk elder left it for safekeeping in the Archangel Michael monastery⁴³. The Spaso-Prilutsky monastery was also one of those who needed vessels, and could create an efficient communications system. In addition to the main body of land situated around Vologda, in its possession were salt enterprises in Sol Vychegodskaia, Tot'ma and the farthest – on the White Sea coast in Una. The monastery received the lion's share of its budget revenues from the salt trade, which included both the resale of the purchased cheap salt in Kholmogory and the production of their own salt enterprises. Three of them, as well as the stores and offices in Kholmogory and Vologda can be considered as

42. Vkladnaia kniga Kandalakshskogo Prechistenskogo monastyria 1562/63-1687 gg., 2013.

43. GAAO. Coll. i-57 (Mikhailo-Arkhangelsky monastery). Inv. 2. f. 304. l. 1.

« places », territories with « tamed nature ». The problem for the monastery was to link these small « mastered » areas, far removed from each other. The role of the thread was played by the Northern river system – the path from the Vologda by the Sukhona River then to the Dvina River and into the White Sea⁴⁴. These river path would become one of the main ways connecting the inner regions of the Russian State with the sea and Ocean (the largest Russian Volga River led only to the inner sea, the Caspian, and could not open the way into the Ocean).

Conclusion

The processes of economic development of the Russian North as a territory directly connected with the sea played an important role in the formation of the maritime nature of the Russian State in the early modern Time. The main actors in this process were the peasant populations of the Russian North and monasteries, the latter fulfilling the function of management and organization. The economy of the northern monasteries, due to the peculiarities of the climate and natural environment, turned out to be closely related to a variety of practices, to one degree or another, focused on interaction with the sea.

The Solovetsky monastery, the most maritime of all Russian northern monasteries, managed by the xviith century to build such an economic system, which best reflected the process of maritimization through adaptation to natural conditions and transformation of the landscape, the creation of an infrastructure closely connected with the sea, maritime economy (fishing, salt production, hunting for sea animals, transportation of goods and products) and religious practices (the cult of Saint Nicholas, rituals, chapels and churches on the coast of the White and Barents Seas as part of the maritime religious space). The monastery maritime infrastructure consisted not only of the fleet itself, it combined mooring and onshore facilities (harbor, jetties, ships storage and equipment barns).

A necessary tool that made possible the development of these practices was the formation of the monastery fleet, which entailed the establishment of relations with shipbuilders, the creation of a system for providing various parts of the monastery economy with the required number of sea vessels. The

44. Dadykina, 2016, 2019.

increase in the number of vessels and the expansion of their nomenclature is an important marker of the decisive role performed by the northern monasteries in the long-term process of formation of the Russian maritime tradition.

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