

Stephen Burrough at ‘Cola River’: a reconsideration

Tora Hultgreen

Tromsø University Museum, 9037 Tromsø, Norway (tora@tmu.uit.no)

Jens Petter Nielsen

History Department, University of Tromsø, 9037 Tromsø (jenspn@sv.uit.no)

Received October 2004

ABSTRACT. Stephen Burrough’s voyage on board *Serchethrift* to northern Russia and Novaya Zemlya in 1556 is a standard reference point in general surveys of polar exploration. Unfortunately, for centuries its route in Russian waters has been garbled, due to a too literal reading of the term ‘Cola River,’ used by Burrough as the name of the first harbour he sought in Russia. Where was Burrough’s Cola River? Determining its location is not at all as simple as it seems. More than a hundred years ago a Russian historian maintained most emphatically that this was not the Kola River (Reka Kola), which empties at Kola town, not far from present-day Murmansk, but Kuloy River (Reka Kuloy) in the Bay of Mezen, on the eastern coast of the White Sea. This article examines this question, which is significant because where Cola River is placed on the map clearly has repercussions for how the information contained in Burrough’s travel account should be interpreted.

Contents

Introduction	97
The standard retelling of Burrough’s voyage	98
A fallacious reading	99
Kuloy instead of Cola?	100
The high tides in the White Sea	101
Burrough’s voyage in the summer of 1557	101
Conclusion	101
References	101

Introduction

In 1553 Sebastian Cabot and a number of London merchants launched what has been called ‘the first English voyage of Arctic exploration’ (Vaughan 1994: 56), under Sir Hugh Willoughby. The intent of the expedition was to open a sea route along the northern coasts of Eurasia to the Far East, through which the wealth of India and China could flow from the Pacific to the Atlantic. The Willoughby expedition was a failure, but at the same time a brilliant success: out of three ships, two fared ill, whilst the third, *Edward Bonaventure* under Richard Chancellor, ‘discovered’ the White Sea. Thereby started the events that led to the establishment of the Russia Company and a lucrative trade with Muscovy (Willan 1956: 1–18). This may have diverted attention away from the original goal, but not for long. The search for a northern sea route to China was resumed in 1556, when the pinnace *Serchethrift* was sent into Russian waters under the command of Stephen Burrough, who a few years earlier had taken part in the Willoughby expedition.

The name of Burrough’s ship is rendered here as it appeared in the first edition of Richard Hakluyt’s *The principall navigations voyages and discoveries of the English nation* (1589; facsimile edition 1965). The master’s surname was transcribed by Hakluyt as Burrowe, Borrrough, and Burrough, but since the last-mentioned name appears most frequently, it is used here.

Burrough’s expedition became one of the great voyages in the history of polar exploration, even if *Serchethrift*, too, failed in her mission. The voyage is notable for having produced the first descriptions of the Nenets, or Samoyedes, and their culture (Hakluyt 1926: I, 347–348, 354–356). In older polar literature it was customary also to ascribe Burrough the honour of having ‘discovered’ Novaya Zemlya, which he did not, since he was ‘on a guided tour’ with Russian hunters, who showed him the way. (Burrough was not the only polar explorer who had this kind of assistance: another example was Samuel Hearne, some 200 years later, in the Canadian Arctic (Vaughan 1994: 120–122)). Novaya Zemlya had been discovered by Russians no later than the end of the fourteenth century, and probably by the Nenets even earlier (Tolkachev 1996: 9–11). However, Burrough and his crew may have been the first western Europeans to sight this island, which they were told contained ‘the highest mountaine in the worlde’ (Hakluyt 1926: I, 346).

The intention was for *Serchethrift* to proceed to the estuary of the Ob’, but Ostrov Vaygach, Novaya Zemlya, and the entrance to the Kara Sea were the farthest points reached (Fig. 1). After several attempts to penetrate into the Kara Sea were unsuccessful due to ice and contrary winds, Burrough turned back as it was late in the autumn and headed for the White Sea and Kholmogory, where *Serchethrift* wintered. The next summer Burrough wanted to resume his explorations toward the Ob’, but instead was asked by the Muscovy Company to search along the Murman coast for three of their vessels that had gone missing. Having fulfilled this mission, Burrough returned to Kholmogory before, during the summer of 1557, heading back to England.

The most important result of this voyage was not geographical discovery but the evidence of the amazing extent of Russian activities in the Arctic seas as early as the middle of the sixteenth century. The English observed numerous Russian vessels heading for hunting grounds to catch salmon, walrus, and seals in the Pechora River and

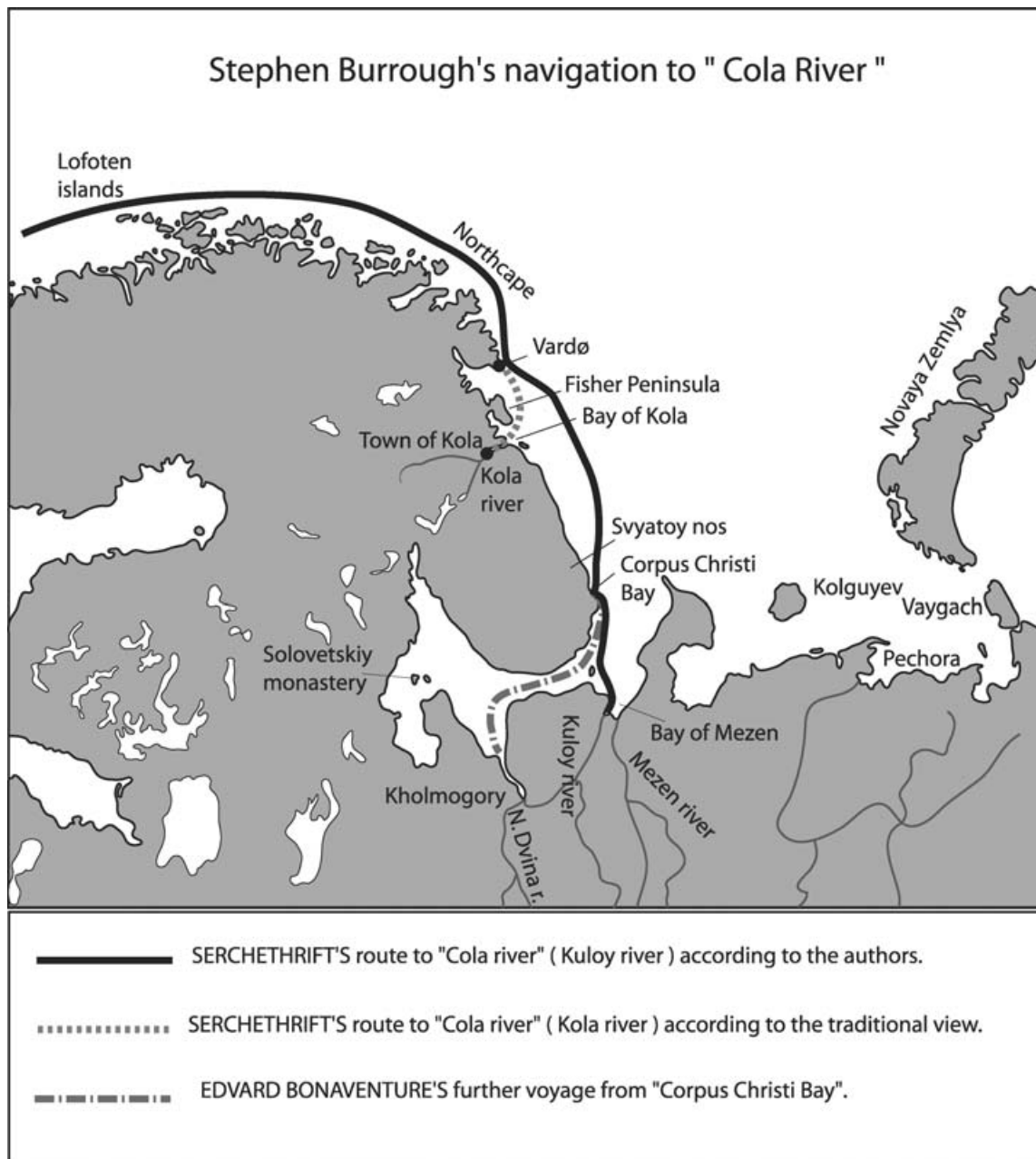


Fig. 1. Stephen Burrough's navigation to 'Cola River.'

along the coasts of Novaya Zemlya. Burrough testified to the good quality of their ships, having already become acquainted with some of these people during the first sojourn of *Serchethrift* in Russia, at the 'Cola River,' where they anchored for 12 days for repairs. Here the English met a flotilla of Russian *lodias*, heading for the north to hunt sea mammals. It is apparent that the implications of these observations for the overall picture of early Russian penetration into the Arctic and the distribution of population in the vast expanses of northern Russia depend on where on the map this enigmatic Cola River was located.

The standard retelling of Burrough's voyage

In western polar literature, the question of where the Cola River was located has not seemed problematical. One of the curses of the study of polar history has been that secondary sources have frequently been accepted as if they were primary ones, and the errors from them repeated as if they were accurate. In this case it has been taken for granted that Burrough's Cola River was in fact Kola River, which empties into the Kola Bay (Kol'skiy Zaliv), an inlet from the northern coast of the Kola Peninsula (Kol'skiy Poluostrov) (see, for instance Hamel 1854:

144–150; Nordenskiöld 1880–81: 208; Markham 1921: 63–64; Baker 1931: 120; Stefansson 1947: 421; von Adelun 1960: 209–210; Neatby 1973: 14–19; Vaughan 1994: 58; Holland 1994: 17). The following is what has, for 150 years, been the standard recapitulation of the navigation of *Serchethrift* to its first Russian harbour.

Serchethrift left Gravesend at the end of April 1556, together with *Edward Bonaventure* (which was probably headed for Kholmogory). On the instigation of the Muscovy Company, Burrough himself was to be aboard *Edward Bonaventure* on the first part of the voyage. He knew the ship well, since in 1553 he had been master of it under Richard Chancellor. On 23 May the two ships rounded North Cape under the midnight sun (according to Burrough, in 1553 he had been the first to name this promontory), and soon afterwards Burrough took charge of *Serchethrift*. The two ships parted in a place that Burrough called 'Corpus Christi Bay,' *Edward Bonaventure*, according to some accounts, putting in to Vardö and *Serchethrift* continuing eastward (see, for example, Ortzen 1975: 17). There was a thick mist as this happened, so both ships fired a gun in salute. *Serchethrift* sailed in a south-southeastly direction, passing 'Cross Island,' the headland 'Good Fortune,' the headland 'Look Out,' and Saint Edmond's Point, before, on 9 June, anchoring at 'Cola River,' which was in the vicinity of 'Cola town.'

The Russian historian Yu. V. Gautier, who in the 1930s translated Burrough's account into Russian, explained that all the localities mentioned in the account are situated on the Fisher Peninsula (Rybachiy Poluostrov) or between this peninsula and the Kola fjord (*Angliyskiye puteshestvenniki* [...] 1937: 100n). However, he also indicated that the English names, such as Corpus Christi Bay, Cross Island, and Good Fortune, were conceived by Burrough, as there was no way of finding out the Russian names. Thus it is practically impossible to retrace the exact route of *Serchethrift* and to know how Burrough reached his Cola River.

According to Burrough's journal, *Serchethrift* was not alone during the 12 days it anchored at Cola River:

Thursday [June 11] at 6 of the clocke in the morning there came aboard of us one of the Russe Lodiaes, rowing with twenty oares, and there were foure and twenty men in her. The master of the boate presented me with a great loafe of bread, and sixe ringes of bread, which they call Colaches, and foure dryed pikes, and a pecke of fine oatemeale, and I gave unto the Master of the boate, a combe, and a small glasse: and he declared unto me, that he was bound to Pechora, and after that, I made them to drinke, the tide being somewhat broken, they gently departed. The Masters name was Pheoder [Fyodor]. (Hakluyt 1926: I, 337–338)

A week later many other boats approached *Serchethrift*.

As we roade in this river, we sawe daily comming downe the riuer many of their Lodias, and they that had least, had foure and twentie in them, and at the last they grewe to thirtie saile of them: and amongst the rest,

there was one of them whose name was Gabriel, who shewed me very much friendshipp, and he declared unto me, that all they were bound to Pechora, a fishing for Salmons, and Morses [walruses]: insomuch that hee shewed mee by demonstrations, that with a faire winde wee had seven or eight dayes sailing to the River Pechora, so that I was glad for their company. This Gabriel promised to give mee warning of shoales, as hee did indeede. (Hakluyt 1926: I, 338)

And then, on June 22, *Serchethrift* left Cola River together with all the Russian boats, heading eastward, first to the Bay of Mezen (Mezenskiy Zaliv) on the east coast of the White Sea, and thence northward to Vaygach and Novaya Zemlya. Burrough complained that *Serchethrift* was lagging behind the fast *lodias*, but Gabriel kept his promise and waited for them so that he could pilot them through the dangerous waters of the Bay of Mezen.

A fallacious reading

So what is wrong with this account of the initial navigation of *Serchethrift* into Russian waters? Since the 1820s various writers have pointed to some strange circumstances concerning its stay at Cola River between 9 and 22 June 1556. Fyodor Litke, the Russian naval officer who was later president of the Russian Academy of Sciences, in 1828 pointed to the curious fact that Burrough determined the latitude of the Cola River to be 65°48' north, vastly too far south if this was the Kola Bay. He assumed that this was a 'misprint' (*Druckfehler*), since Burrough was known as a brilliant navigator. According to Litke, Burrough must have meant to write 68°48', which would have been relatively accurate, since the town of Kola is situated at 68°51' (Litke 1828: 17; 1835: 13n). Fifty years later this explanation was accepted by Adolf Erik Nordenskiöld, who wrote about Burrough's voyage. He assumed that 65°48' was either a slip of the pen or a misprint (Nordenskiöld 1880–81: 209n).

But if one looks more closely into the question, clearly the answer is more complex than that. The main problem is that Burrough's information about the Kola River and Kola town (allegedly the earliest mention of Kola town in historical sources) is not in accord with what is known about the place from other sixteenth-century sources. Firstly, the great number of vessels and hunters Burrough met here (30 ships, each with at least 24 men, that is, 720 men as a minimum) is not compatible with the dimensions of Kola town. Nine years later, in 1565, Simon van Salingen, the Danish king's envoy, found only three homesteads there, and this was the only permanent settlement in the area (Filippov 1901: 307–308; Ushakov 1997: I, 77–78).

It is possible, however, that these hunters were Pomor fishermen from the western and northern coast of the White Sea, who in the first half of the sixteenth century started to go northwards each spring to fish for cod off the Murman coast. They crossed the Kola Peninsula while

the snow was still crusted and returned in the early autumn. However, their number according to Burrough was probably too high considering that the Murman fisheries in the 1550s still had modest proportions. In addition, the Russians Burrough met there were obviously not fishermen heading for the Murman coast, but sea-mammal hunters, setting out for the Pechora and Novaya Zemlya. Since Burrough visited Cola River between 9 and 22 June, at a time when the ice in the White Sea had melted, there was no reason for the Pomors to choose Kola Bay as their point of departure for overseas hunting. It would have been much easier to sail their *lodias* to Pechora directly from their home settlements, without having a very fatiguing and costly journey across the whole of the Kola Peninsula to reach Kola Bay.

If this was the case, the hunters whom Burrough met must have been of the local population, which, on the other hand, is hard to believe since the population of the town of Kola would then have needed to be much larger. Secondly, if Burrough's Cola River was the Kola River, sea-mammal hunting would have been a very important industry in Kola town. However, sealing and walrus-hunting are not mentioned among the industries in Kola town in the sixteenth century. A *pistsovaya kniga* or census book from 1574, reporting on the economic life in the area and how the different trades were taxed, mentioned cod and halibut fisheries, hunting of Greenland sharks, and pearl fishing in the Kola and Tuloma rivers. There was no reference to the products of hunting sea mammals (Ushakov 1997: I, 85–88). Likewise, the late I.F. Ushakov, a Murmansk-based historian and specialist on the early history of the Kola Peninsula made no mention of hunting sea mammals as a source of income in the sixteenth and seventeenth century, neither for the permanent population of Kola town, nor for the seasonal fishermen or the merchants of the Pomor coast, who equipped them (Ushakov 1997; compare Ushakov 1972). The inhabitants of the town of Kola enjoyed nearby cod fisheries and numerous other resources, and there was no reason why they, in the town's initial phase, should engage in hunting sea mammals, far away from the settlement.

Kuloy instead of Cola?

So how could Stephen Burrough, or Hakluyt (if it was a misprint) be so wrong? Or were they wrong at all? In 1901, the Russian historian A.M. Filippov suggested that the determination of the latitude in Burrough's journal was in fact correct (Burrough did not give the longitude), and that it was necessary to search for Cola River farther to the south and east. Filippov did so — and he found the Kuloy River in Mezen Bay, on the eastern coast of the White Sea, which is situated at 65°51' (Filippov 1901: 307–308). He also pointed to the fact that because of shallowness, the Kola River could hardly have been navigable for big *lodias* with 20 oars, whereas Kuloy River is a wide watercourse with a deep estuary. If Filippov had had access to Burrough's original account he would also have known that Burrough, the first time he mentioned the

place, actually called it 'Colaye River,' before changing to Cola River. And the only time he mentioned the town he called it 'the towne of Colay' (Hakluyt 1965: I, 315). (Unfortunately, in the Everyman's Library edition of 1926 (I, 337), these 'inconsistencies' have been removed in accordance with the conventional view of Burrough's voyage.)

Filippov's theory, which seemingly solved the contradictions in Burrough's account, remained, it seems, unknown to his western colleagues, and it failed to convince most Russian — and later Soviet — polar historians, who during the twentieth century continued to write about Burrough's visit to Kola Bay on the Kola Peninsula (see, for example, Vize 1948: 15; Belov 1956: 52, 75–77, 212; Pasetkiy 1980: 13–14). One exception was P.I. Bashmakov, a 'follower of Filippov' among early Soviet polar historians (Bashmakov 1922: 27). Admittedly, there was a weak point in Filippov's theory: it is highly doubtful that *Serchethrift* could have reached the Bay of Mezen in only two days, starting out from the coast of Finnmark (Corpus Christi Bay). However, in the authors' view, there was plenty of time for carrying out this voyage. The earliest accounts indicated — and this mistake has been repeated ever since — that the place where *Serchethrift* and *Edward Bonaventure* parted, named Corpus Christi Bay by Burrough, was, in fact, situated on the Norwegian coast east of North Cape. That being the case, the duration of the navigation seems reasonable.

Earlier authors, however, paid no attention to the large time span in Burrough's logbook between 23 May (when North Cape was passed) and 7 June (the departure from Corpus Christi Bay), which is unaccounted for. This is a gap of two weeks, and, we speculate, when *Serchethrift* reached Russian waters. During this period the two ships visited Vardø, where Burrough left *Edward Bonaventure* and resumed the command of *Serchethrift* (Hakluyt 1926: 334), but it is not known when this happened. Under normal circumstances the distance between North Cape and Vardø could be covered in one or two days (for example, the embassy of Sir Dudley Digges in 1618, on its way to Archangel, used less than two days to sail from North Cape to Vardø (Konovalov 1952: 132)). That leaves 12 days for the distance from Vardø to Cola River, which is more than enough to reach Kuloy and Mezen. It is known, for instance, that Antony Jenkinson, on his first voyage to northern Russia in 1557, needed seven days from Vardø to Svyatoy Nos, not far from the easternmost extremity of the Kola Peninsula (Ortzen 1975: 17). So it is much more likely that Corpus Christi Bay was somewhere in this area, rather than in the vicinity of Vardø. This also seems to be confirmed by Burrough himself in his account of the voyage from Kholmogory to Vardø in 1557; he mentioned Corpus Christi Point (which formed the entrance to Corpus Christi Bay from the east, compare Hakluyt 1926: I, 336), some distance to the east of 'Sotinoz' (Svyatoy Nos): 'two leagues to the southwards of Corpus Christi point is the uttermost land'

(Hakluyt 1926: I, 371). That means that Christi Corpus Bay was situated close to the estuary of River Ponoy (Reka Ponoy) and the easternmost point of the Kola Peninsula. And it was all the more natural that the two ships should have parted here, in the White Sea mouth, since *Edward Bonaventure* most probably had a course for Dvina and Kholmogory (not for Vardø, where she had already been), whereas *Serchethrift* was bound for the Ob', and therefore chose an easterly course.

The high tides in the White Sea

The departure was 7 June, and the next day *Serchethrift* anchored among the shoals near the southern coast of the Bay of Mezen. From here she continued south-southeast through dangerous waters. Burrough is, in his description of the entry to the Cola River (which *Serchethrift* reached on 9 June) particularly worried about the high tides and the problems they created for the ship, and Mezen is an area with extremely high tides. In addition, the fact that in Corpus Christi Bay *Serchethrift* experienced a rise in the water above the high-tide level (Hakluyt 1926: I, 336), indicates that this was the White Sea, where wind can cause such a sudden rise in the water level, due to the shallowness of the sea (Chesnokov 1989). At Mys Abramovskiy on the southern coast of the Bay of Mezen the spring tide reaches 7.1 m, the highest in the White Sea. According to the geographer K. Chesnokov, the high tide in Kola Bay is approximately one-half of that experienced by Burrough while approaching Cola River (Chesnokov 1989). In 1989 Chesnokov, in an article in the newspaper *Moryak Severa*, took up Filippov's idea, and (more or less convincingly) identified the places named by Burrough with localities along the approach to Kuloy. He identified Cross Island with Ostrov Morzhovets, Look Out with Mys Abramovskiy, and Saint Edmond's Point with Mys Perechnyy. Moreover, he proposed that the 'towne of Colay' mentioned by Burrough was the fishing village Kuloy, which, as Burrough wrote, 'is not far from the rivuers mouth' (Hakluyt 1965: 315; Chesnokov 1989). It was Burrough's friend Gabriel, a native of the town, who told him about this place, and it is possible that Burrough never sighted it himself.

Burrough's voyage in the summer of 1557

The final evidence that Burrough never visited Kola Bay is his voyage in 1557 from Kholmogory, where he had wintered, to Vardø to search for three ships belonging to the Muscovy Company, *Bona Speranza*, *Bona Confidentia*, and *Philip and Mary*, from which there had been no tidings since 1556. Burrough described his voyage westwards along the Murman coast, via the island Kildin — and farther on to the Rybachiy Poluostrov and Tsypanovok on its eastern side, and Kegor, or Vayda Guba, on its western side, where every summer there was a large Sami market. Nowhere in his account did Burrough mention that he had any previous knowledge of this area (Hakluyt 1926: I, 367–377).

Kildin, for example, is situated at the entrance to Kola Bay, but while passing this island Burrough did not mention the bay (Hakluyt 1926: I, 374). Of course, since the weather was misty on his first voyage, he could have missed Kildin. However, it is clear in his detailed account of his stay at the Kegor market, that he had no previous knowledge of Kola River or Kola town. In Kegor he had conversations with Sami and Karelians, with Dutch merchants, and with the Russian bailiff Vasiliy Fyodorovich about the prospects for the English trading at this market. In this connection he was informed by the Russian bailiff that a little more than 20 leagues to the south of Kegor was the Cola River, which abounded in salmon, a lucrative merchandise for the Muscovy Company (Hakluyt 1926: I, 376). The existence of such a river would not have been a novelty to Burrough if, only a year earlier, he had stayed at its mouth for 12 days.

Conclusion

The authors believe it is clear that Stephen Burrough never visited Kola Bay or Kola River, but went instead to the River Kuloy, which empties into the Bay of Mezen. This is also the opinion of the staff of the Mezen historical-regional museum (V.I. Drannikov, senior research fellow, personal communication, 27 January 2001). This indicates that Simon van Salingen's description from 1565 should be considered the earliest written description of the Russian settlement at the Kola River, and this is clearly more in tune with other contemporary sources. Kuloy, on the other hand, is situated in an area where Arctic hunting, according to other sources, was already, in the sixteenth and seventeenth centuries, a main occupation for the inhabitants, who were among the first Russian pioneers of Arctic seafaring. The reinterpretation of Stephen Burrough's account buttresses the judgement that Mezen and the White Sea littoral, not the Kola Peninsula, was the point of departure for the early Russian exploitation of the Pechora River and Novaya Zemlya, and later for the Russian discovery of Spitsbergen.

References

- Adelun, F. von. 1960. *Kritisch-literärische Übersicht der Reisenden in Russland bis 1700*. Amsterdam: Nico Israel.
- Angliyskiye puteshestvenniki v Moskovskom gosudarstve v XVI veke. *Inostrannye puteshestvenniki o Rossii* [English travellers in the Muscovy state in the 16th century. Foreign travellers about Russia]. 1937. Leningrad: OGIZ.
- Baker, J.N.L. 1931. *A history of geographical discovery and exploration*. London: George G. Harrap & Co.
- Bashmakov, P.I. (compiler). 1922. Pervyye russkiye issledovatelye Novoy Zemli [The first Russian explorers of Novaya Zemlya]. *Zapiski po Gidrografii. Prilozheniya* 45: 1–111.
- Belov, M.I. 1956. *Istoriya otkrytiya i osvoyeniya severnogo morskogo puti* [History of the discovery and opening

- up of the Northern Sea Route]. Leningrad: Morskoy Transport.
- Chesnokov, K. 1989. Byl li Stiven Barrou v Kolskom zalive? [Was Stephen Burrough in the Bay of Kola?] *Moryak Severa* 6 December 1989.
- Filippov, A.M. 1901. Russkie v Laplandii v 16 veke (soobshchenie Simona Van Salingena) [Russians in Lapland in the 16th century (Simon von Salingen's communication)]. *Literaturnyy vestnik* 1 (3): 307–308.
- Hakluyt, R. (editor). 1926. *The principall navigations voiages and discoveries of the English nation*. 2 vols. London: Everyman's Library (originally published London, 1589).
- Hakluyt, R. (editor). 1965. *The principall navigations voiages and discoveries of the English nation*. 2 vols. London: Hakluyt Society (photolithographic facsimile; originally published London, 1589).
- Hamel, J. 1854. *England and Russia, comprising the voyages of John Tradescant the elder, Sir Hugh Willoughby, Richard Chancellor, Nelson, and others to the White Sea*. London: Bentley.
- Holland, C. 1994. *Arctic exploration and development, c. 500 B.C. to 1915: an encyclopedia*. New York: Garland Publishing.
- Konovalov, S. 1952. Two documents concerning Anglo–Russian relations in the early seventeenth century. *Oxford Slavonic Papers* 2: 128–144.
- Litke, F. 1828. *Chetyrekhkratnoye puteshestviye v Severnyy Ledovityy Okean na voyennom brige 'Novaya Zemlya'* [Four year journey to the Arctic Ocean in the naval brig 'Novaya Zemlya']. 2 vols. St Petersburg: v Morskoy tip.
- Litke, F. 1835. *Viermalige Reise durch das nördliche Eismeer auf der Brigg Nowaja Semlja in den Jahren 1821 bis 1824*. Berlin.
- Markham, C.R. 1921. *The lands of silence: a history of Arctic and Antarctic exploration*. Cambridge: Cambridge University Press.
- Neatby, L.H. 1973. *Discovery in Russian and Siberian waters*. Athens: Ohio University Press.
- Nordenskiöld, A.E. 1880–81. *Vegas färd kring Asien och Europa, jemte en historisk återblick på föregående resor längs gamla världens nordkust*. Stockholm: F. & G. Beijers Förlag.
- Ortzen, L. 1975. *Famous Arctic adventures*. London: Barker.
- Pasetskiy, V.M. 1980. *Pervootkryvateli Novoy Zemli* [The discoverers of Novaya Zemlya]. Moskva: Nauka.
- Stefansson, V. 1947. *Great adventures and explorations: from the earliest times to the present, as told by the explorers themselves*. New York: The Dail Press.
- Tolkahev, V.F. (editor). 1996. *Terra incognita Arktiki* [Terra incognita of the Arctic]. Arkhangel'sk: Izdatel'stvo Pomorskogo Universiteta.
- Ushakov, I.F. 1972. *Kolskaya Zemlya* [The Kola land]. Murmansk: Murmanskoye Knizhnoye Izdatel'stvo.
- Ushakov, I.F. 1997. *Izbrannyye proizvedeniya v trekh tomakh* [Selected works in three volumes]. Volume 1. Murmansk: Murmanskoye Knizhnoye Izdatel'stvo.
- Vaughan, R. 1994. *The Arctic: a history*. Stroud: Sutton.
- Vize, V.Yu. 1948. *Morya sovetskoy Arktiki* [Seas of the Soviet Arctic]. Moskva-Leningrad: Izdatel'stvo Glavsevmorputi.
- Willan, T.S. 1956. *The early history of the Russia Company 1553–1603*. Manchester: Manchester University Press.