OUTLINE OF THE HISTORY OF RUSSIAN CARTOGRAPHY

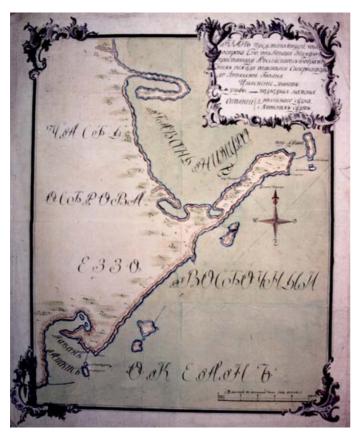


Figure 35. Map Showing Part of Esso Island

the island Matsumae [Hokkaido] and spent more than a month there (July 4 - August 11, 1793). Members of the mission compiled a detailed description of Hokkaido and maps of the places they visited. One of them is: The Map Showing Part of Esso Island [Hokkaido], Beginning from Nimuro [correctly, Nemuro] Harbor - Anchorage of Russian [ship]...(Figure 35).⁷² In addition to materials from its original surveys, the expedition obtained Japanese maps which were used to draw maps of the regions Russians had not yet visited. Such is the next illustration (Figure 36), which is a copy of a Japanese map with Russian place names



Figure 36. Map of Matmai Island [Hokkaido]

^{72 &}quot;Plan, predstavlyayushchii chast' ostrova Esso, ot gavani Nimuro pristanishcha Rossiiskogo, s izobrazheniem opastnostei Severnago guka ot Atkisskoi gavani": RGVIA, f.451, op.1, no. 30.



Figure 37. General Map of the Japanese State

added.⁷³ General geographic results of the Laksman-Lovtsov expedition are shown by the general chart: *The Merkator Chart, Picturing Part of the Russian Empire and the Chinese State, and Places Known as the Kurile and Japanese Islands...*⁷⁴

These mapping works initiated intensive Russian activities in collecting Japanese maps and surveying Japan's coasts in the nineteenth century - a phenomenon which needs to be studied further. At the beginning of the century, however, Russian maps of Japan were compiled mainly on the basis of Japanese sources. For example, *The General Map, Showing Japanese Islands and Neighboring Countries..., Copied from the Japanese File in Irkutsk by Baron Frederiks in 1809;*⁷⁵ and *The General Map of the Japanese State, Divided into Sixty-Six Provinces,* compiled on the basis of a printed Japanese map in 1810 by Lieutenant Colonel A.I. Khatov, the then leading map maker of the General Staff of the Russian Army (Figure 37).⁷⁶ Obviously, these maps could be compiled due to the sec-

^{73 &}quot;Plan, predstavlyayushchii ostrov Matmai, Karazhskoi i nekotorye malye ostrova": RGVIA, f.451, op.1, no. 32.

^{74 &}quot;Merkatorskaya karta, izobrazhayushchaya chast' Rossiiskoi imperii i Kitaiskogo gosudarstva, a takzhe mest izvestnykh kak Kuril'skie i Yaponskie ostrova": RGVIA, Fond VUA, nos.23769, 23770, 23783.

^{75 &}quot;General'naya karta, izobrazhayushchaya polozhenie Yaponskikh ostrovov i sosedstvennykh s nimi derzhav, kak-to: chasti Rossiiskoi imperii; bol'shei chasti Mongol'skikh narodov; i mnogikh ostrovov na yugu lezhashchikh. S Yaponskogo dela skopirovana v Irkutske 1809 goda. Kopiroval kolonnovozhatyi Baron Frederiks": RGVIA, f.451, op.1, no. 27.

^{76 &}quot;General'naya karta Yaponskogo gosudarstva, razdelennago na 66 Gubernii. S pechatnoi podlinnoi karty Yaponii kopiroval Kvartirmeisterskoi chasti Podpolkovnik Khatov. 1810 goda": RGVIA, f.451, op.1, no. 28.

ond (after Laksman) Russian mission to Japan under N.P. Rezanov in the "Nadezhda" (Captain I.F. Kruzens-htern) during the first Russian voyage around the world in 1804-05. N.P. Rezanov could not conclude a treaty with Japan despite his six-month stay in Japan, but the geographic results of his expedition were significant. Russian Navy officers surveyed many parts of the coasts of Japan and obtained examples of Japanese printed and manuscript maps. An example of the original survey materials of this expedition is The Plan of Eight Small Isles off the Eastern Coast of Matmai [Hokkaido] (Figure 38).⁷⁷

Northern Coasts of Eastern Siberia

Even after the Second Kamchatka Expedition, Russians continued to pay attention to Eastern Siberia and the Arctic coasts. It might be useful to introduce here a story of geographic exploration⁷⁸ con-

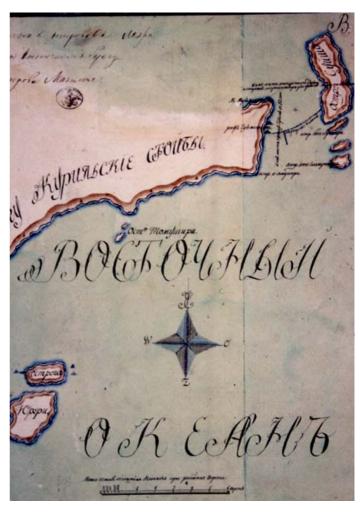


Figure 38. Plan of Eight Small Isles

nected with a map, demonstrating Russians' enthusiasm for these far "outskirts" of the Empire: *Map Based on a Secret Expedition from the Nizhnekolymsk Fortress up to the Krestovka River, and from There to the Five Bear Islands* [Medvezh'i ostrova], 1769, compiled by Ivan Leont'ev, Ivan Lysov, and Aleksei Pushkarev (Figure 39).⁷⁹

^{77 &}quot;Plan malykh vos'mi ostrovov, lezhashchikh po Vostochnomu beregu Matmaya": RGVIA, f.451, op.1, no. 31.

⁷⁸ For details see: M.I. Belov, *Arkticheskoe moreplavanie s drevneishikh vremen do serediny XIX veka. Istoria otkrytiya i osvoeniya Severnogo morskogo puti*, tom 1 (Moscow, 1956), pp. 410 and 415; A. Chernikov, "Iz istorii izucheniya Arktiki," *Arkhiv istorii nauki i tekhniki.* vyp.9 (Moscow-Leningrad, 1936); V.I. Grekov, *Ocherki iz istorii russkikh geograficheskikh issledovanii v* 1725-1765 gg. (Moscow, 1960), pp. 196-203.

^{79 &}quot;Karta sochinennaya sekretnomu voyazhu ot Nizhnekolymskoi kreposti do rechki Krestovki, a ot onoi v more pyati Medvezh'im ostrovam 1769 goda": RGVIA, f.349, op.45, No. 2357. Size: 67×55 cm. Drawn on paper with ink and water colors. Scale 100 versts to one inch. The original map (RGADA, f.192, Karta Irkutskoi gubernii, no. 11) was published in: Yefimov, *Atlas...* (no. 133). There is at least one more copy of this map (RGVIA, f.846, op.16, no. 23405) and some originals by the same authors dated 1771.

Promyshlennik Yurii Vyatka and his company tried to lead a fleet from the mouth of the Lena River up to the Kolyma River. But a storm pushed them to the north, and they happened to become the first Russians to find a n d land Krestovskii Island (the most Western one of the Bear Islands) in 1655. In 1720, Ivan Vilegin and Grigorii Sankin traveled from the mouth of the Chukoch'e River



Figure 39. Map Based on a Secret Expedition...

(to the west of Kolyma) to the north-east, and reached one of the Bear Islands. The next was Fedor Amosov, who had been to Krestovskii Island in 1724 and had seen two other Bear Islands to the east. In 1756, Cossack F.S. Tatarinov, with the baptized native (Yukagir) Yefim Fedotov, son of Konovalov, visited five of the Bear Islands and gave a short description of these in his report in 1762. Many of these voyages were motivated by the desire to find a "Great Land" rumored to lay to the north of the mouths of the Lena and Kolyma. The search for new lands intensified especially after Stepan Andreev's sensational report about the discovery of a very large island or mainland in this area.⁸⁰

The Commander of Okhotsk Port, Colonel F.N. Plenisner, ordered three subaltern officers in charge of geodesy to survey the whole Bear Islands and put them on maps, and to try "to look (from the fifth island) for the American Mainland with forests, and stay on it..."⁸¹ This last remark shows that the hypothetical land to the north of the Bear Islands was believed to be a part of North America. During 1769-71, these geodesists went on three highly secret expedi-

⁸⁰ About "the Land of Andreev," see: M.I. Belov, "Sushchestvovala li 'Zemlya Andreeva'?" *Izvestiya Vsesoyuznogo geograficheskogo obshchestva*, LXXXIV:5 (Leningrad, 1952), pp. 458-477. Early travelers, as well as the authors of *The Map Based on the Secret Expedition...*, found animals and traces of earlier human occupation such as dwellings and forts on the Bear Islands. One such fort is pictured on this map.

⁸¹ Cited by N.N. Zubov and K.S. Badigin, *Razgadka tainy zemli Andreeva* (Moscow, 1953), p. 119.

tions from the Nizhnekolymskii fortress, and one of the results of these expeditions is *The Map Based on a Secret Expedition...* The high quality of these geodesists' work was confirmed in the nineteenth century by Baron Ferdinand Petrovich Vrangel, a famous Russian polar researcher, who said that "their survey was so accurate in topology and distances that we did not find any major discrepancies in 1821." Vrangel believed that these expeditions had left few doubts about the mythical character of the "Great Land" north of the Bear Is-

Figure 40. Map of the Newly Discovered Land in the Icy Sea

lands.⁸² On the other hand, the search for mysterious lands in the Polar Ocean between the Lena and Kolyma continued well into the nineteenth century.

The exploration of the sea coast and islands off northern Siberia in the early nineteenth century was prompted by the Russian fur traders' discovery of the islands comprising the New Siberian Archipelago: Faddeevskii Island in 1805, New Siberian Island in 1806, the Islands of Vasil'evskii and Semenovskii in 1815, to name but a few. Another factor stimulating the northern expeditions was a tale of myste-

rious "northern lands," which were called "the Land of Sannikov" and believed to be located north of the mouth of the Kolyma River. In 1808-10, during an expedition led by M.M. Gedenshtrem and P. Pshenitsyn (aimed at exploring the New Siberian Islands, the islands of Faddeevskii and Kotel'nii and the strait between these), the first chart was compiled. It depicted the whole New Siberian Islands of Faddeevskii and Kotel'nii and the strait between these), the first chart was compiled.

⁸² F.P. Vrangel, *Puteshestvie po severnym beregam Sibiri i po Ledovitomu okeanu* (Moscow, 1948), pp. 81, 83. See also: D.M. Lebedev, V.A. Esakov, *Russkie geograficheskie otkrytiya i issledovaniya s drevnikh vremen do 1917 goda* (Moscow, 1971), pp. 116-117, 222-223 and 265-267.

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rian Archipelago and also the mainland coast between the mouths of the Yana and Kolyma Rivers. One of the important results of this expedition was *The Map of the Newly Discovered Land in the Icy Sea* (Figure 40).⁸³ This expedition also produced the first detailed geographic description of these islands.⁸⁴ Yakov Sannikov participated in this expedition, as an experienced polar explorer. In 1800, he described Stolbovoi Island, and in 1805 Faddeevskii Island.

The map in Figure 40 demonstrates that, at least by the time of its compilation (1809), "the Land of Sannikov" had been discovered and surveyed by the expedition crew. It is plotted on the map with details and bears the inscription "Zemlya, otkrytaya meshchaninom Sannikovym [the Land discovered by Sannikov, Esq.]."

In the 1820s, these regions were visited by the Yana Expedition (1820-24) headed by P.F. Anzhu, and the Kolyma Expedition (1821-24) headed by F.P. Vrangel, which continued the program initiated by the Gedenshtrem Expedition. Having surveyed the coast from the Lena River to the Bering Strait, these expeditions discovered only a few more small islands in the New Siberian Archipelago and off the mainland coast. Therefore, the main achievement of these expeditions was the compilation of a more accurate chart of the entire mainland coast of the Arctic Ocean from the Olenek River to Kolyushinskaya Bay, and also charts of New Siberia, Lyakhovskie, and Bear Islands. These charts were based on 115 points with astronomically defined geographic coordinates. In the eastern section of Vrangel's chart there is an island indicated on the basis of information supplied by natives and provided with an inscription: "mountains are visible from the Cape of Yakan in summer time." This island was also depicted on charts of the atlases of I.F. Kruzenshtern (1826) and G.A. Sarychev (1826). In 1867, this island was discovered by George-Washington de Long and named "Wrangel" in honor of the remarkable Russian polar explorer.85

^{83 &}quot;Karta novootkrytym zemlyam na Ledovitom more, 1809": RGVIA, f.846, op.16, No. 23419. Size: 79×58 cm. Drawn on paper with ink and water colors. This original by M.M. Gedenshtrem has not been published, yet it is an important monument in the history of charting the polar coasts by Russians in the early nineteenth century.

⁸⁴ See: Belov, *Arkticheskoe...*, p. 500. The materials obtained from this expedition were published by Count Spasskii in *Sibirskii vestnik* 17-20 (1822), 2 (1823), and also in M.M. Gedenshtrem, *Otkryvki o Sibiri* (St. Petersburg, 1830).

⁸⁵ Aleksei Postnikov, *Russia in Maps: A History of the Geographical Study and Cartography of the Country* (Moscow, 1996), pp. 106-107. Although the mythology of "mysterious lands" in the eighteenth and nineteenth centuries stimulated research in the polar regions, there are no islands in the places where they were once proved by qualified geodesists to be. A plausible explanation for this is that the "lands" were huge ice fields with high icebergs or islands composed of ice and sands; in either case they did not survive to this day due to winds, waves, or changes of temperature.

6. Conclusion

This outline of the history of Russian cartography has illuminated how vividly geographic maps reflected specific features of the development of the country. The present centralized management of cartography, as is the case with many aspects of social, economic, and political life in Russia, has deep historical roots. Since early years, Russian cartography has been under the highly centralized control of the government and various official bodies. This situation has remained unchanged despite the significant advances in cartographic methods and accuracy of maps. Although some private cartography firms (e.g. those owned by Kipriyanov and Il'in) published maps, the overwhelming majority of maps and other cartographic materials were made by government organizations (the Senate, the Academy of Sciences, the General Staff, the Board of the Admiralty, the Department of Land Surveys, and others). In effect, no private topographic work worth mentioning was permitted by the authorities. In addition to its centralized organizational structure, Russian cartography had, until recently, another feature typical of totalitarian regimes: drastic restrictions imposed on the compilation, publication and usage of large-scale maps. As a result, most topographic maps were designated as confidential documents available only to authorized persons. Not only maps but also the methods used in map-making were classified. This has damaged Russian cartography significantly and led to the following situation:

- (1) More often than not, Russian maps for "public consumption" did not give an accurate picture of the geographic knowledge of the time when they were published. This is true not only of maps made by private firms but also by the Military Topographical Depot of the General Staff.
- (2) Most large-scale maps made in Russia, as well as various instructions, tables of map symbols, etc., were never published. They were kept in manuscript form in secret stocks of the state archives. As a result, many technical and even theoretical projects and studies were classified and unknown to the Russian academic community and the public, let alone foreign geographers and cartographers.
- (3) Due to such secrecy, the history of Russian cartography in the eighteenth and nineteenth centuries has been a sealed book, and only recently have Russian scholars begun to turn its pages, relying upon on deep archival research.