

Vadim F. Starkov

RUSSIAN SITES ON SPITSBERGEN AND THE PROBLEM OF CHRONOLOGY

Abstract

Archaeological research conducted on Spitsbergen has yielded new data which makes it possible to view the history of this Arctic region on a principally new level. The most complex aspect of these studies is the problem of the development of a chronological scale of the Spitsbergen finds. The age of Russian settlements was established on the base of a complex method of dating for which dendrochronology proved to be fundamental.

Vadim F. Starkov, Institute of Archaeology, Academy of Sciences of the USSR, ul. Dm. Uljanova 19, 117036 Moskva, USSR.

Archaeological studies on Spitsbergen, conducted systematically since 1955, have brought to new and exceptionally rich data on the history of the opening up of this archipelago. Archaeological materials not only augmented the scarce information preserved in written sources which are few in number and controversial, but became a major base for source-studies dealing with practically all main aspects of the corresponding history. These materials provide an insight into this problem on a new and higher level.

It is precisely this fact that explains the current attempts to obtain more specific information on various aspects of the history of Spitsbergen including its periodization and the problem of the discovery of the archipelago – and not "national and patriotic interests" as S.E. Albrethsen and T.B. Arlov asserted in their article "The discovery of Svalbard – a problem reconsidered" printed in this volume.

This publication came as a response to my article "Russian Arctic seafaring and the problem of the discovery of Spitsbergen" printed in FA III. S.E. Albrethsen and T.B. Arlov made a number of critical comments on my proposed system of chronology of the Russian sites on Spitsbergen with the conclusion that there were no reasons for dating some of them back to the 16th century.

Before we turn our attention to the essence of the problem, it might be well to point out one evident contradiction in the formulation of the

basic point in question. On the one hand they stress that if the sites excavated by the Soviet archaeologists can be dated to the 16th century scholars will indeed have to rewrite the early history of Spitsbergen and to revise the problem of its discovery, while on the other hand they correctly note that as far back as the end of the 19th century there existed a hypothesis according to which the Russians had come to Spitsbergen in the pre-Barentsz epoch. The latter notion in itself is testimony to the fact that this idea is an old rather than a new one. The materials obtained by the Soviet archaeological expedition do not provide a basis for any "new approach" to the history of Spitsbergen, but only enrich this history with new data.

The foundation for the chronology proposed by us is formed by a complex method of research based on the utilization of data provided by various disciplines which complement each other and thus make the basic dendrochronological datings more reliable. Besides dendrochronology the employed data included the results of epigraphical analysis, materials of direct datings (coins and inscriptions with dates) and geomorphological observations (used for establishing relative chronology).

The article "Russian Arctic seafaring and the problem of the discovery of Spitsbergen" dealt with the problem of the territorial distribution of the Russian sites definitely enough even if the account was rather concise, and there is no need

to dwell upon it once more. We shall emphasize only that the article gives no hint that "topographic data can be used to date buildings" (meaning the establishing of an absolute date). The idea proposed in the article suggests that the differing positions of the sites relative to sea level makes it possible to outline their *relative* chronology. The territorial location of the monuments and their absolute dating enabled us to reach the conclusion that all settlements of the 18th century were situated on the levels of the first sea terraces, while the earlier ones were on the lower sections of the shore unfit for the construction of dwellings from the point of view of modern geography.

It is another matter that this phenomenon is still to be explained, as I have already pointed out (Starkov, Korjakin, Savjalov, 1983), but it exists and cannot be ignored if we are going to operate with objective data.

Epigraphy too plays only an auxiliary role in establishing the age of the researched sites. The number of Russian inscriptions carved on wooden, bone and leather objects found on Spitsbergen is rather large — over 20. Despite the fact that their information potential differs (some of them are mere initials) the importance of these finds is hard to overestimate when it comes to defining the level of spiritual culture of Russian pomors in the 16–18th centuries. Their role is more modest when we consider these inscriptions as the dating material. The evolution of handwriting was not rapid enough (which is especially true for the conditions of the Russian North) to form a base for any strict definition of the age of these inscriptions. Nevertheless, epigraphy can play a positive part as an element confirming an absolute date.

Four inscriptions were found in a house near the river Stabbelva. Two of them are the initials "ГНК" and "ЛТ", while one represents a name "ГАЛАХА КАБАЧЕВ". The fourth inscription is a text carved on a roughly made dipper of local production. According to a number of specific features of this handwriting, paleographers suggested that the inscriptions were made in the late 16th — early 17th century. The dendrochronological dating of this site is 1558. The date of an inscription "ПРЕСТАВИСЯ МИРИНИНН ОТ ГОРОДА" found at the base of a cultural stratum of house 1 of the Gravsjöen settlement where the lower construction horizon has dendrochronological datings of 1548 and 1592, is likewise established within a rather wide chronological range.

The text found at the settlement at Van-

Mydenbukta deserves special attention due to the dates 1593 and 1594 preserved in it (Fig. 1).

The inscription is carved on the surface of an object (30×8 cm.) the function of which is not clear. Some letters are badly preserved and therefore the text cannot be read in full. The inscription is written in large letters in the so-called Russian "poluustav" handwriting. The surviving text reads: "БГѦ... РѦ ПѦ ПО ВАЛѦ
▲ ПѦ... ПО РѦ... Г...Ѧ МИРѦИНѦ ІХТѦОАѦ..."
The date was marked three times: РѦ РѦ and РѦ. The misgivings expressed by my opponents about my "mistake" in taking the numbers 1593 and 1594 as the corresponding dates are therefore without grounds there are no numbers in the text. Figures were expressed in Russian mediaeval inscriptions as letters with titles marked over them (~).

In this case they are translated as 101 and 102. It was common in the Russian writing practice of the 16–17th centuries to omit the number of millenniums (i.e., 7,000) when the year was denoted, so that only hundreds, tens, and single numbers remained. Thus, the numbers 101 and 102 are to be read as 7101 and 7102, i.e., the years 1593 and 1594.

The surviving part of the inscription can be read as follows: "Бору. . . 1594 тут во зали (ве). . . 1593. . . во 1593 г. у Мирейн и ктоде. . ." ¹ It is a pity, that some of the text is missing, but both the dates and the context ("here in the bay") as well as the name of the author (Mirein) make it a very important historical source. Unfortunately, the logs of the construction where the inscription was found are decayed from the outside and the peripheral rings are badly preserved. This caused difficulties in wood dating, and the date of cutting could be determined only approximately as the 1580s. In general this date correlates effectively with those given in the text.

Dendrochronology is the basic method by which the Russian constructions on Spitsbergen are dated. Examination of the Spitsbergen timber was conducted at the Laboratory of natural scientific methods of the Institute of Archaeology of the Academy of the Sciences of the USSR which has a good base of standards for the

¹ Paleographical studies were conducted at the Institute of Archaeology of the Academy of the Sciences of the USSR by Prof. T. V. Nikolaeva, and at the State Historic Museum of the USSR by Dr. L. M. Kostiukhina. The text can be translated as follows: "To God. . . 1594 here in the bay. . . 1593. . . in the year 1593 Mirein and those. . ."



Fig. 1. Wooden object with an inscription from the settlement at Van-Mydenbukta.

North and North-West of Europe. Between 1978 and 1986 eighty-one samples of wood from the well-preserved remains of building constructions were examined. We can refer to the article of N.B. Chernikh (Chernikh, 1987) where the methods of dendro studies are described in detail. Here it should be noted that the wood samples from Spitsbergen formed the basis for constructing a dendrochronological scale for a

period of 536 years (1246–1782). As background material the graphs of annual growth for the period from the 15th to 19th centuries in the North and North-West of Europe were used. The graphs were plotted on the data of trunks of many years standing from existing forests, wood from constructions of the 16–19th centuries, and wood from the cultural layers of the 16–17th centuries of the Old Russian towns. It

should be especially emphasized that the Cx values (an index of similarity of variability of annual growth) calculated for synchronous curves for the period between 1460 and 1580 and thus relating to the sites and finds of the 16th century amount to 50–69 per cent, which points to a sufficient reliability for this index.

It should also be pointed out that the dates mentioned in the article "Russian Arctic seafaring and the problem of the discovery of Spitsbergen" are not the dates of construction but those for the year of felling, i.e., they related to the year when the tree was felled, and not the year when the house was built. In this respect I shall pay attention to the question raised by my opponents with respect to the period of time between the dendro-date (which fixes the year when the tree was felled) and the time when the corresponding house was erected on Spitsbergen. According to them, this interval was both long and inevitable if two considerations are taken into account: 1) drift-wood, considerable amounts of which litter the beaches of Spitsbergen nowadays, could be used for housebuilding; 2) old constructions could be transported to the archipelago. As a result, S.E. Albrethsen and T.V. Arlov while being sure that "dendrochronology is a very accurate method of dating wood" continue to support the old conception according to which the Russians came to the archipelago very late (not earlier than in the beginning of the 18th century).

One more contradiction is easily detected in this thesis. If one agrees that dendrochronology is an accurate method of dating wood, one also has to acknowledge that among the examined samples of wood there are some dating back to the 16th century. How can they be related to the constructions from the early 18th century? It is impossible to suggest that wood could be used 150 years after the tree had been felled. One either has to accept that dendrochronology can provide no accurate data on Spitsbergen sites or to admit that the above interval was shorter. Large-scale research conducted in the towns of Old Rus' have proved that the time-gap between these two episodes was not long. The fact that freshly cut timber was used in construction for which it was stockpiled and prepared has been established long ago by the excavations at Novgorod (Chernikh, 1972: 95). Some interesting data relating to this problem was found during the excavations at Mangazeya, a town which existed in the Arctic region of Siberia in the 17th century. The latest construction date of Pomor Tazov, the 16th century predecessor of

Mangazeya, is the year 1598. Eight years later the town of Mangazeya was erected at the same place. Excavations conducted at this site showed that the builders of the new town totally ignored the well preserved wood of the dismantled structures (Belov, Ovsjannikov, Starkov, 1980).

The type of the Spitsbergen constructions also testifies against the concept according to which old houses were brought to the archipelago from the Pomor settlements on the continent.

The "Pomorie" region of the 16–17th centuries was known for the so-called North Russian type of dwellings erected with high ground floors (Ethnographia. . . , 1987: 246). "They were distinguished for their size and for the concentration of auxiliary structures near the living quarters (Aschepkov, 1950: 22). Most of the Pomor houses were built with high ground floors, "the occasions when houses were built without ground floors were very rare". Thus, the typical Pomor dwelling which had survived without any considerable changes up to the 19th century (Aschepkov, 1950: 19) was a large household where the living quarters stood wall-to-wall with structures of various functional use. The houses had ground floors; i.e. they were two-storied.

The Spitsbergen houses are represented by another type of dwelling. Typologically they are akin to the North Russian dwellings but unlike the aforesaid Pomor houses on the continent they were built without ground floors straight on the surface of the ground. This special type of the North Russian hunter's hut was characteristic not only of Spitsbergen as remains of such dwellings have also been found on the Taimur Peninsula (Okladnikov, 1951) and in the town of Tazov. Naturally, the houses which *were not* built in the Pomor settlements could not be disassembled and transported to some other location. Special log huts were made for this purpose, as testified by written sources.

In March of the year 1764, some of the experienced pilots and trappers from the region of Pomorie were summoned to the Admiralty in St Petersburg in connection with the scheduled expedition of V. Ia. Tshičagov; all these Pomors were well acquainted with the situation on Spitsbergen. Their testimonies prove that practically no driftwood could be found on this archipelago at that time. Amos Kornilov, a well known Pomor pilot who had made 10 voyages to Spitsbergen and spent three winters there made special emphasis of the fact that he had lived there in a hut which he had brought himself and used firewood likewise brought from the continent because of the lack of any wood on Spits-

bergen. The same was stated by the rest of the pilots (Perevalov, 1949: 242).

The well known book of Le Rua "The adventures of four Russian sailors carried to the Island of Spitsbergen by a storm" in which the words of certain pomors who had spent 6 years (from 1743 on) were taken down, reads: ". . .the inhabitants of Mezen' once decided to spend a winter on this island, and for this purpose they took from the town some *timber prepared for the construction of a hut* and brought it there on board their ship" (Le Rua, 1975: 23). M.V. Lomonosov, a Pomor by origin, was well acquainted with the basic elements of the Pomors' trapping and fishing activities. He wrote: "Our Northern Russians can easily spend winter. . .in houses build especially ("*narochno*" – V.S.) for this purpose" (Perevalov, 1949: 147).

Thus, historical documents unequivocally testify to the fact that one of the decisive factors of the Pomors' hunting practices on Spitsbergen consisted in the transportation of the specially half-finished frameworks of houses. This excludes any possibility of any substantial interval between the moment of tree-felling and that of the house-building.

Drift-wood was practically absent during the period under consideration, and every document quoted here corroborates this conclusion. . . "No wood can be obtained on Grumant" (Le Rua, 1975: 54). There exists a suggestion that in order to satisfy the needs for repair and partly for construction materials, the Pomors used the hulls of old vessels brought to Spitsbergen to be disassembled there. A large number of planks taken from the ships' structures and used for flooring in most of the excavated dwellings points among other things to the validity of this assumption.

The only argument worthy of attention which is used by the opponents of the thesis of the early Russian presence on Spitsbergen, is an assertion (first made by A. Heintz (Heintz, 1966)) that West European literature on whalers contains no data on Russian fishermen and trappers. At present this fact is hard to explain. It may reflect a certain decay of Russian activity in the archipelago in the 17th century as well as the discrepancy between the hunting territories of the whalers on the one hand and the Russian walrus hunters on the other. It can not be excluded that large wooden crosses easily observed from the sea were not erected by the Pomors on Spitsbergen in the 16–17th centuries (our expedition has found no such crosses so far). In any case, stating the fact that the known

literature on whalers does not mention any Russians hunters on Spitsbergen cannot prove their absence on this archipelago in the 16–17th centuries.

In conclusion I feel myself obliged to concentrate on Note 32 where the authors refer to one of my theses and find it "a bit confusing". The matter in question is my suggestion that the 16th century finds are not the oldest on Spitsbergen. Of course, this idea is nothing but a supposition based on the fact that the examined remains of Russian settlements of the 16th century reflect a sufficiently high level of organization of the local hunting industry. My point is that a rather long period of time was necessary in order to achieve such results.

Further in this note S.E. Albrethsen and T.B. Arlov write that they cannot see how the distribution of the 16th century stations along the west coast of Spitsbergen should indicate that older ones are found elsewhere. I cannot see it either and that is why I have never written anything concerning this matter.

REFERENCES

- Aschepkov E. A. 1950. Ащепков Е. А. *Русское деревянное зодчество*. М.
- Belov M. I., Ovsjannikov O. V., Starkov V. F. 1980. Белов М. И., Овсянников О. В., Старков В. Ф. *Мангазея*. Мангазейский морской ход. Л.: Гидрометеиздат.
- Bernshtam T. A. 1983. Бернштам Т. А. *Русская народная культура Поморья в XIX-начале XX в.* М.: Наука.
- Chernikh N.V. 1972. Черных Н. Б. Дендрохронология средневековых памятников Восточной Европы. – В кн.: *Проблемы абсолютного датирования археологии*. М.: Наука: 93–112.
- Chernikh N.V. 1987. Черных Н. Б. Некоторые итоги дендрохронологического изучения дерева построек с архиелага Шпицберген. – В кн.: *XIV Sympozjum Polarne. Aktualne problemy badawcze w Arktyce i Antarktyce*. Referaty, komunikaty, sprawozdania, komentarze do posterów. Lublin: 252–259.
- Ethnographia. . . 1987. *Этнография восточных славян. Очерки традиционной культуры* (редактор К. В. Чистов). М.: Наука.
- Heintz A. 1964. Russian opinion about the discovery of Spitsbergen. – In: *Norsk Polarinstitut, Årbok 1964*. Oslo: 93–118.
- Le Rua P.-L. 1975. Ле Руа П.-Л. *Приключения четырех российских матросов, к острову Шпицбергену бурю принесенных*. Изд. 4. М.: Мысль.
- Okladnikov A.P. 1951. Окладников А. П. Археологические находки на острове фаддея и на берегу залива Симса. – В кн.: *Исторический*

памятник русского арктического мореплавания XVII века. Л.: Главсевморпуть: 7–40.
Perevalov V.A. 1949. Первалов В. А. *Ломоносов и Арктика*. М.-Л.: Главсевморпуть.

Starkov V. F., Korjakin V. S., Savjalov V. I. 1983. Старков В. Ф., Корякин В. С., Завьялов В. И. Русские поселения XVI в. на Шпицбергене. – *Вестник Академии наук СССР*, No 12; 109–113.