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## THE DISCOVERY OF SVALBARD - A PROBLEM RECONSIDERED

#### Abstract

In a comment to an article by the Soviet archaeologist V.F. Starkov in FA III 1986, the authors review the various opinions about the discovery of Svalbard (Spitsbergen) and their scientific foundation. Up to recent times evidence of visits to Svalbard prior to Barentsz' in 1596 is inconclusive. Russian archaeological material may introduce new evidence, but its interpretation involves serious methodological problems.

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## INTRODUCTION

From time to time the problem of the discovery of Svalbard (Spitsbergen) is considered in scientific and not-so-scientific literature. National and patriotic interests are closely tied up with this question and it is against this background we must view the fiery debate in the first two or three decades of our century. 1 Nowadays Willem Barentsz' discovery on the 17th of June 1596 is generally acknowledged among historians in the West as the first proven visit to Svalbard. In Russia and the Soviet Union, however, a strong tradition about White Sea "pomory" hunting and wintering on Spitsbergen long before Barentsz has prevailed ever since the late 19th century.2 Since 1978 an archaeological expedition from the renowned Academy of Sciences of the USSR has worked on Svalbard to find proof of this Russian hypothesis, and it is such evidence that Mr. Starkov presents in his article in Fennoscandia archaeologica.3 As far as we know, it is the first time that results from the Soviet excavations have been published in a scientific periodical in the West.4 For this reason, and because the Soviet material - if correct - should lead to a rewriting of Svalbard's history, we find it interesting to reconsider the problem again and comment upon some aspects of method and interpretation. Unfortunately space does not permit a lengthy discussion.5

# FOUR HYPOTHESES - THREE TRADITIONS

Up to now four different hypotheses about the first discovery of Svalbard have been put forward. In chronological order they argue respectively that:

- Svalbard had a Stone Age settlement around 3.000 BC (the "Stone Age hypothesis").
- Svalbard was discovered by Norse sailors, possibly late 12th or early 13th century (the "Viking hypothesis").
- Svalbard was discovered and/or exploited by Russian pomors from the early 16th century on, possibly earlier (the "Pomor hypothesis").
- 4. Svalbard was discovered for the first time by Willem Barentsz and his crew in 1596 (the "Barentsz hypothesis").

Among these four explanations only the latter three have gained the status of historical traditions in some countries. We shall, however, look briefly at all four of them and then return to the Russian archaeological material in particular.

## THE STONE AGE HYPOTHESIS

The first flint "tools" were found on Spitsbergen already at the end of the 19th century. In 1949

the idea that a Stone Age settlement should be searched for in the Isfjorden-area was put forward by the Swedish archaeologist Hans Christiansson on the basis of a few and rather dubious finds. In 1955 he led a Scandinavian archaeological expedition together with Povl Simonsen and excavated a site at Russekeila near Grønfjorden. Numerous flint artifacts were found, some 20 of which were identified as "certainly" manmade and differing from the flints imported by Russian trappers. Later, in 1967, the German archaeologist H.W. Hansen added to the material, so that it now consists of 110 artifacts of which at least 45 have been classified as "tools".

The interpretation of the flint finds is complicated by the fact that local, eroded flint is abundant and the artifacts seem to lack traces of wear and tear. Nor has a dwelling or even a wasteheap yet been discovered. It must be fair to say that the Stone Age hypothesis by and large has been rejected by other Scandinavian archaeologists.<sup>7</sup>

## SVALBARD FOUND IN 1194?

In 1831 the Norwegian geologist B.M. Keilhau was the first to connect information about the mysterious "Svalbard" in old Norse sagas with the archipelago then known as Spitsbergen.8 His ideas were later supported by other leading Norwegian scientists such as Gustav Storm and Fridtiof Nansen.9 In 1888 Storm discovered the short, cryptic message "Svalbard found" under the year 1194 in six Icelandic annals. 10 Sailing directions from the mid-13th century, stating that there are "4 days of sailing to Svalbard in the far North of the Sea", were also claimed as evidence of early Norse visits to Svalbard. 11 The hypothesis gained popular support, especially among "polar activists" in Norway, and even received a kind of official recognition through the choice of Svalbard as the proper name for the archipelago by the Norwegian parliament in 1925.

However probable the Viking hypothesis may be, or tempting to the patriotic spirit, it lacks absolute proof in the form of material remains on Svalbard or yet undiscovered written sources which could confirm the scanty information we have.

#### THE POMOR HYPOTHESIS

As we have already noted the opinion that Russian pomors of the White Sea region visited Svalbard long before Barentsz was presented already at the turn of the century.12 Soviet scholars and writers have continued the tradition and added to it by continually finding new pieces of information. The material has been presented in works by Belov, Ivanov, Stavnicer, Obručev and others. 13 We cannot go into detail here with regard to the substance of the sources in question. Some of them are also treated in short by Mr. Starkov himself in the article referred to. 14 We merely note that they fall into three main categories: Firstly, the oral tradition about the forefathers of Anton Starostin having sailed to "Grumant" since before the founding of the Solovetskij monastry (c. 1425). Secondly, some 16th century letters and documents connecting Russians with a "Grønland", Gruland" or "Grumant". Thirdly, various cartographical sources have been interpreted to support the hypothesis.15

None of these sources deserve to be called conclusive evidence, a fact also recognized by Mr. Starkov. <sup>16</sup> As is the case with the old Norse material, they are dependant upon a correct interpretation of place-names, namely the identification of "Greenland" in its various forms as Spitsbergen. There are many reasons, both historical and methodological, *not* to do this, but we cannot elaborate here.

#### **BARENTSZ' DISCOVERY 1596**

The discovery of Bear Island and Spitsbergen by Willem Barentsz, Jacob Heemskerk and Jan Cornelisz Rijp on their voyage in 1596 has never been contested. Indeed it is documented beyond any doubt. <sup>17</sup> In the present context it is only proper to call it a "hypothesis" in the sense that it claims Barentsz to be the very *first* visitor to Svalbard. Whatever degree of *probability* the other hypotheses may assume, it stands undisputed that the discovery in 1596 is an established historical fact.

## THE RUSSIAN ARCHAEOLOGICAL MATERIAL

In a well-known article from 1964, Anatol Heintz concludes that only "careful archaeological investigations" can solve the problem of the first discovery and exploitation of Svalbard. <sup>18</sup> It is not difficult to agree with him. Mr. Starkov claims to have found 6 sites on Spitsbergen which can be dated to the 16th century, the ol-

dest has been dated 1545. If his datings are correct, the early history of Svalbard will indeed have to be rewritten, at least in the West where historians have tended to be sceptical towards the Pomor hypothesis. But is the Russian evidence conclusive?

In order to establish the date of the sites on Spitsbergen the Soviet scientists have used four different methods: Topography data, paleography, dendrochronology and direct dating. In this particular case all of the methods may be subjected to a methodical critique. Because Starkov's article is only a short review of the main results and not a documented monography, some of our critical comments will doubtless be unjustified. We do not wish to be critical for the sake of criticizing, but would like to have a constructive discussion about theoretical and practical problems involved in dating sites on Svalbard. Let us therefore look more closely at the four methods.

## TOPOGRAPHY DATA

According to Starkov some the of 16th century houses are built on an ancient strandflat ("beach plain") 50-110 metres from the shore, whereas some 16th and 17th century remains can be found on today's beach itself. This is an illogical place to build a house, he states, as the tide frequently would reach the buildings. He therefore concludes that the landscape must have changed since their construction, more specifically through local lowering of the land on the west coast of Spitsbergen in the late 17th century. 19

We have two comments on this: Firstly, the lowering of land due to so-called "clod tectonics" is disputed and not generally accepted among geologists. Possible movements would anyway be limited and difficult to prove. Exact dating would be a matter of pure speculation. 20 Secondly, Starkov's argument here seems somewhat circular: Is it the buildings that date the supposed land-lowering or the other way around? It is not clear to us how Starkov thinks topography data can be used to date the buildings, which he obviously wants to do.

## **DIRECT DATINGS**

Starkov has found a number of inscriptions and coins in the dwellings, especially in some of the younger ones (18th century). But more interest-

ing are two inscriptions of the numbers "1593" and "1594" on a "wooden object" in the site at Van Muyden-bukta, dated by other methods to the 1580s. They are regrettably not depicted in Mr. Starkov's article, but he claims they are dates.<sup>22</sup> One obvious objection is, of course, that such an inscription in itself does not tell anything about where or even when it was done. Another problem, which cannot be solved on the basis of Starkov's article, is that the numbers "1593" and "1594" hardly are (Russian) dates, since Russia according to our knowledge used the Byzantine chronology until Peter the Great's reform in 1700,<sup>23</sup> and consequently we would expect the years 1593 and 1594 to read 7101 and 7102 in Russian. Of course, Mr. Starkov may have undertaken the "translation" to Christian chronology, but all the same the inscriptions are complicated to use as historical sources.

#### PALEOGRAPHY DATA

Paleographical dating was done on one inscription in the Gravsjøen site (dendro-date 1578) and on four inscriptions in the Stabbelva site (dendro-date 1557), all dated to the 16th century and confirmed by dendrochronology.24 We have no reason to doubt the competence of the paleographers, but since the article does not bring further documentation we are bound to put forward some critical remarks: Obviously, inscriptions in wood are more difficult to date than for instance hand-written documents. Consequently the margin for error must be great. One must also presuppose that the inscriptions have been compared with completely parallel and dated material from the White Sea region. Since the pomors lived in the periphery of the Russian culture area it is reasonable to anticipate a slower development of writing and archaic elements in lettering compared to Central Russia.25 As mentioned above, one should also from a methodical point of view be generally careful with the use of inscriptions as a means of dating a whole site. The possibility of import and re-use of timber, wood and building materials is another complicating factor.

## DENDROCHRONOLOGY

Under ideal conditions and when the relevant reference series are at hand, dendrochronology is a very accurate method of dating wood. It is therefore not the least surprising that Starkov puts considerable weight on this technique. Nevertheless a few methodical problems occur here too. Dendrochronology determines at best in what year the tree is cut. In order to date a construction or a building one has to prove or make problable that it was built with recently (i.e. the same year) cut timber. That is why Starkov has to say:

Most probably there was no significant chronological interval between the wood-cutting and house-building at Spitsbergen where the wood prepared on the mainland was transported.<sup>26</sup>

This can hardly be proved, of course, but is it probable?

According to Starkov the houses are too big for local drift-wood to have been used.27 Having seen quite a number of drift-wood beaches on Svalbard with considerable amounts of large timber we find this argument a bit odd, and on Russian excavation sites we have also observed lots of wooden chips and cut-offs, probably resulting from housebuilding.28 This could however quite easily be determined with a reasonable degree of certainty by way of dendrochronological analysis: In most dwelling remains on Svalbard the sills (the bottom logs) of the house's four walls are usually reasonably well preserved.<sup>29</sup> By taking samples from all four sills one would be able to determine whether they were originally cut at the same time. If so it is reasonable to exclude the drift-wood explanation, since the statistical chance of finding on a beach four logs cut in the same year by random is very small.30 One would hence have established that the house was brought to Svalbard and assembled there, but of course not whether it was an old house or built especially for the trip.

We are a bit surprised that the possibility of re-use of timber — which certainly was wide-spread elsewhere — is excluded. Is it not likely that the Russian trappers — if indeed they did not use abundant local drift-wood — disassembled an existing house on the mainland and brought with them, instead of building a completely new one for assembly on Svalbard? The point we wish to make is that we cannot possibly know for sure what was done in each case and consequently dendrochronology is not a more reliable method of dating the various sites on Svalbard than other techniques.

## CONCLUSION

When did the pomors come to Svalbard, then? Historians in the West have objected to the hypothesis of permanent Russian presence in the 16th and 17th centuries primarily because there is no mention of them or their conspicuous landmarks - the large wooden crosses - in the contemporary whaling literature or on the many maps existing from that period. It seems neither Russian trappers nor remains of earlier activity has been observed, in spite of the fact that the whalers had an intimate and detailed knowledge of Svalbard's geography, at least by mid-17th century. Starkov accounts for this lack of reports about Russians by stating that the pomors' activity was at a low level ("a certain decay") in this period.31 And, we have to add, the remains of previous activity in the 16th century - houses, crosses, boats and so on - must have been gone or at least not been visible to the later visitors. Is this very likely? Starkov even suggests that the 16th century finds are not the oldest Russian remains on Svalbard, but does not develop the argument very far.32

We do not find it improbable that Russian trappers established themselves on Svalbard earlier than has been supposed up to now (early 18th century). We also believe that only thorough archaeological research can deliver a definite answer to this most interesting question. Soviet archaeologists have put a massive effort into solving the problem and they have no doubt a unique material at hand. It is of course both impossible and unwise to either confirm or reject their preliminary results without having examined the material and the research data. We are therefore looking forward to the emergence of a documented report on their important work and to being able to examine and test the data.

Having said this we would nevertheless point out that the results in the way they are presented by Mr. Starkov's article do not allow definite conclusions to be drawn about Russian presence on Spitsbergen in the 16th century. In our opinion the interpretation of the finds are tied up with so many unsolved theoretical and methodical problems that one is forced to be critical until more evidence is put forward. At the present time we prefer to look at these results as new pieces in a large puzzle still unfinished.

An analysis of these questions and their influence in the historical literature about Svalbard can be found in T.B. Arlov: Svalbard 1596-1650 i historiografisk

lys, (candidate thesis) Trondheim 1985, chap. 4.4. See for instance V. Tichomirov: Iz prošlogo. Russkie promysly na Grumante (Spicbergene), Russkoe sudochodstvo, juni 1898, St. Petersburg; A.M. Filippov: K bibliografii o Spicbergene, Literaturnyj vestnik, t I, kn 4, Moskva 1901. Also Arlov, op.cit., passim.

<sup>3</sup> V.F. Starkov: Russian Arctic Seafaring and the Problem of the Discovery of Spitsbergen, Fennoscandia archaeologica, III, 1986, Helsinki 1986, p.

67 ff.

<sup>4</sup> Parts of the material may already be known to slavists through the article in Russian by V.F. Starkov and O.V. Ovsjannikov: K voprosu ob otkrytii i chozjajstvennom osvoenii archipelaga Spicbergen, Skandinavskij Sbornik (Skrifter om Skandinavien), XXIX, Tallin 1985, p. 115-22.

A more detailed article in Norwegian is published by T.B. Arlov: Nytt lys på Svalbards oppdagelse?, Heimen, 2-1987, Universitetsforlaget 1987.

H. Christiansson og P. Simonsen: Stone Age Finds from Spitsbergen, Acta Borealia, B. Humaniora, nr 11, Tromsø museum 1970.

K. Odner: Norwegian Archaeological Review vol

5/2 1972 p. 38-40.

B.M. Keilhau: Reise i Øst - og Vest-Finmarken, samt til Beeren-Eiland og Spitsbergen i Aarene 1827

og 1828, Chra. 1831, s 225-26.

G. Storm: Ginnungagap, Arkiv for nordisk filologi, VI, Lund 1890; F. Nansen: Nord i takeheimen, Kra. 1911, p. 409-15. Nansen believes that a land called "Svalbard" was found in AD 1194 and that this land in all probability was Spitsbergen.

G. Storm (ed.): Islandske Annaler indtil 1578, issued by Det norske historiske Kildeskriftfond, Chra. 1888, passim. The form "Svalbards fundr" is found in Ann. Reseniani, Henrik Høyer's annals, Ann. regii, the annals of the Flatey-book and in Ann. breviores (Oddverja), whereas "Svalbardi fundinn" is written in Skalholt's annals.

For the first time proposed in Grønlands Historiske Mindesmærker, (GHM) I-III, issued by the Kgl. nordiske Oldskrift-Selskab, Copenhagen 1838-45. Nansen, op.cit., however finds these directions in the Landnamabok too inaccurate and unreliable.

See note 2 above. Another work in the pre-revolutionary period which should be added is A.F. Šidlovskij: Spicbergen v russkoj istorii i literature, St.

Petersburg 1912.

13 M.I. Belov: Arktičeskoe moreplavanie s drevnejších vremën do serediny XIX veka, Istorija otkrytija i osvoenija severnogo morskogo puti, t I, Moskva 1956, p. 66, see ibid. n 1; I.M. Ivanov: Spicbergen, Moskva 1935, p. 10-11; M. Stavnicer: Russkie na Moskva-Leningrad 1948; Spicbergene, S.V. Obrucev: Russkie pomory na Špicbergene v XV veke i čto napisal o nich v 1493 g. njurnbergskij vrač, Moskva 1964. A summary and a critical analysis of Russian opinion on the problem is given by A. Heintz: Russian opinion about the discovery of Spitsbergen, Norsk Polarinstitutt, Arbok 1964, Oslo 1966, p. 99-100.

Starkov, "Russian Arctic seafaring. . .", p. 67-68. For a more thorough presentation, see Heintz, op. cit. and the works by Arlov referred above.

16 Starkov, ibid.

Barentsz' original logbook has been lost, but historiographers believe that the exerpts published in Hessel Gerritsz: Histoire du Pays nommé Spitsberghe, Amsterdam 1613, are authentic. Gerrit de Veers Waerachtige Beschrywinghe van drie Seylaghien. . . was published in Amsterdam 1598, but is evaluated as a less trustworthy source. The map from Barentsz' voyage was published posthumously in Amsterdam 1598. See Arlov, op.cit., chap. 3.1.2 og 3.2.4.

Heintz, op.cit., p. 117.

Ibid., p. 69

For this information we are grateful to geologist Otto Salvigsen at the Norwegian Polar Institute. Salvigsen is himself sceptical towards this hypothesis of land-lowering on the west coast of Spitsbergen.

See also, W. Blake: Russian Settlement and Land Rise in Nordaustlandet Spitsbergen. Arctic vol. 14/2 1961 p. 101 ff and H. Christiansson: The Russian Settlement at Russekeila and Land Rise in Vest-

spitsbergen, Arctic vol. 14/2 1961 p. 112 ff.

21 In Starkov's words, ibid., p. 70, the "order of the position confirms that the supposed lowering of land have taken place at the end of the 17th century". The use of the word "confirms" in this context indicates that the buildings - dated by other methods - are used to date the land-lowering.

New Catholic Encyclopedia, III, New York 1967, o. 675.

<sup>24</sup> Ibid. The date 1667 in the text with regard to Stabb-

elva must be a misprint for 1557.

- <sup>25</sup> In an article by the Norwegian historian Håkon Stang, wherein he refers to the work of the Soviet ethnographer Tat'jana Bernštam, a number of archaisms in the pomors' way of life are pointed out. See: Murmaner, pomorer og folkesettingen av Nord-Russland, Historisk tidsskrift, 3/1980, p. 313-14. It would not be unreasonable to suppose that letter forms and handwriting were among the archaisms.
- Starkov, op.cit., p. 72. 27

Ibid.

This was for instance the case in a site at Trygghamna excavated by Soviet archaeologists in

Often even more of the walls are preserved. Needless to say one must be sure that the piece of timber is whole, preferably with the bark still on, and not planed in any way that could disturb the analysis of the complete radius of the trunk. It is otherwise impossible to give an exact year of cutting.

We are indebted to the dendrochronology experts professor Ulf Hafsten and senior lecturer Terje Thun of the University of Trondheim for information about the methods used in dating of wood.

Starkov, op.cit., p. 72.

Ibid. Starkov's argument for this conclusion is a bit confusing, but he seems to believe that it is accounted for by the permanent character of the houses, their distribution on Spitsbergen and the "high level of trade" which required a sufficient knowledge of the archipelago. With regard to house structures this could just as well be explained by the pomors using their acquired experience from Northern Russia and Novaja Zemlja when they established themselves on Svalbard, the conditions being rather similar. Hence may also the "high level of

trade" be explained. We cannot see how the distribution of eventual 16th century stations along the west coast of Spitsbergen should indicate that older ones are found elsewhere. The localization of a hunting station is first an foremost dependent on

the natural conditions at hand: a good harbour, sufficient territory for game, a drift-wood beach, bird-cliffs, fresch-water and so on. The number of places on Svalbard fulfilling all these criteria are limited, and many of them are indeed on the west coast.