

The Beginning Stage of the Japanese Colonization of Hokkaido (1869-1919)

Sergey Viktorovich Tkachev¹

Sergey Vasilyevich Ryazantsev²

Natalia Nikolaevna Tkacheva¹

¹Far Eastern Federal University

²Institute of Social and Political Research of the Russian Academy of Sciences, 32A, Leninsky prospect, Moscow

Doi:10.5901/mjss.2015.v6n6s3p269

Abstract

The issue of Hokkaido colonization is among insufficiently studied ones, and, in our opinion, it is undeserved. Moreover, this indifference is observed not only among foreign researchers. There is also some neglect of this topic on the part of Japanese historians. This topic was a little bit away from the main subject of historical study of Hokkaido, and the Ainu anthropology became this subject for a number of reasons. The term "colonization" is rarely used in Japan to describe the situation on the island during the Meiji period (1852-1912). The Hokkaido Historical Museum exposition in Sapporo, devoted to this stage, is called «Progression of Colonization» in English, and is translated nearly as "The Virgin Lands Campaign" from Japanese.

Keywords: historical museum, anthropology, Hokkaido, Japanese historians.

1. Introduction

It is a very characteristic difference. Besides, the museum staff members have mentioned that the information about these events is not included in Japanese history school textbooks. Of course, the local history museums on Hokkaido (Sapporo, Asahikawa, Obihiro Hakodate), which we have managed to visit, have large sections, devoted to this topic, but we need to repeat that the local scientific community pays much more attention to relations with the Ainu people and their culture, which is certainly very specific. We have noticed only one significant surge of interest in our topic, connected with the 100th anniversary of the Hokkaido colonization, and the works of such enthusiasts as Seki Hideshi and Kuwabara Masato (Periods of Meiji and Taisho, 1978 & Seki, et al, 2006), without which it would be very difficult to do in our research. Among modern scholars, we should mention Professor Hirai Sugo from the University of Tokushima, whose works are focused on the statistical analysis of the Hokkaido development (Hirai, 2006) and are largely close to our work. In general, we can agree with the following conclusion of K.G. Vinogradov: "The Japanese works involve useful information about almost any aspect of life on Hokkaido in the period that we are interested in. However, there is no generalizations which could help "to put" Hokkaido in the context of Japanese history of XIX-XX centuries, as well as in the worldwide historical problems. It seems that it is because of "modesty", peculiar to most of Japanese historians dealing with local histories: it is enough to collect good facts and make a narrative. As a result, more and more information appears, but the clarity on a number of key issues related to the history of social and economic Hokkaido development does not appear» (Vinogradov, 2005, p.12).

The same situation has developed in foreign historiography. The American historians were partly interested in the Hokkaido development, but rather more in the biographical context. The fact is that to colonize the island, the Japanese government invited a group of experts from the United States, headed by Horace Capron, the Minister of Agriculture in the government of U. Grant. In the Development Department⁶, established in July 1869 as the central governing body of the island (Morgun, 1992, p.33), 45 of 62 invited foreign employees were Americans (Foreign pioneers, 1968, p.19), and their lives especially attract attention of American researchers.

Another reason is a search for analogies between the colonization of the United States and Japan, and in particular, a search for a "frontier". Although, in our opinion, this approach is hardly correct. Among well-known works, we can mention the biographical review of Fujita Fumiko (Fujita, 1994), devoted to the Americans who were involved in the development of Hokkaido, and the work of Anne Irish (Irish, 2009), who briefly described the history of the island from an American point of view and drew attention to the fact that the Japanese like to talk about Hokkaido as about the "frontier", "Japanese Wild West" and "Japanese Alaska" (Irish, 2009, p.12).

The Russian historiography also rarely appeals to the topic of Hokkaido colonization. This interest had existed before 1917 and had been reflected in the meaningful publications (e.g. in works of D.Pozdneev (Pozdneev, 1906 & Pozdneev, 1909) and the General Staff Colonel N.Boguslavskii (Boguslavskii, 1904); we also can find very useful comments in the works of L.Bolkhovitinov (Bolkhovitinov, 1996, p. 352-370), although they relate to the methods of Japanese colonization on the mainland), and it was explained by the military and political reasons and the attempt to understand a sudden "rise" of Japan. Next time the native experts have very rarely returned to this topic. We can recall the theses of G.V. Ozherel'eva (Ozherel'eva, 1989) and K.G. Vinogradov (Vinogradov, 2005), a small comparative research of S. Tkachev (Tkachev, 2012) and some of general works on the history of Hokkaido (Krushanov, 1988 & Morgun, 1992).

In this work, we will mainly talk about the farming agricultural colonization as the most widespread and significant one in the development of this region. Studies in this field usually have a descriptive character, and pay their attention to the analysis of regulatory documents and the quantitative results of resettlement. We, however, tried to consider the existed statistical materials in more detail and study the territorial distribution of migrants. In practice, this field still remains terra incognita. The reason is that the wide opportunities for up-to-date processing of data, including the geo-information analysis, were unavailable to researchers earlier.

Moreover, the role of landscapes during the study of colonization processes is usually neglected. This reduces the number of researches. At the same time, this aspect is extremely significant for Hokkaido. The reason is that the system of settlements on Hokkaido has a cluster character, and clusters are formed mainly according to landscapes. The boundaries between them are defined by hills, but not because of their inaccessibility (the mountains on the island are not very high, and the passes are not a great problem for road building), there is a difficulty in farming. Therefore, now we can observe a sharp differentiation in the specializations of different regions of Hokkaido (National Agricultural Research Center): subprefectures of Soya, Kushiro and Nemuro almost completely specialize in milk production, Tokachi and Abashiri specialize in farming, the production of potatoes and sugar beet, Ishikari and Sokachev specialize in rice cultivation, etc.

2. Method and Scope of the Study

The term "colonization", from our point of view, has no negative connotations. It is necessary to distinguish it from the term "colonialism", which describes the policy in relation to other subjects of policies, especially to the international one. At the same time, the social part of colonization process usually comes to the notion of "resettlement", or "migration". Following this perspective, it is difficult to understand the way how migrants "discover" a new territory. Focusing on the study of demographic characteristics, on causes of migration and the motives for resettlement, we can forget about the political backgrounds of this movement, but they are extremely important in our case. Furthermore, the term "colonization" has a more expressed territorial characteristic. It means that while analyzing a "migration", we can just consider the movement of the population at a particular time in a particular region; and while analyzing the "colonization", we can not do without involving in the research the areal distribution of the population and, what is even more interesting, without involving the landscape distribution.

Why is it interesting? The matter is that the Russian historiography studies these processes almost only in terms of socio-political paradigms, and the landscape stays beyond the study, that, in our opinion, makes researches very similar and, what is more, does not give the complete understanding of the process.

To study the issue of colonization and its logic in the most general form, the case of Hokkaido is extremely promising. It is almost the best in terms of two aspects: firstly, this colonization was almost "closed" geographically, that means that it limited itself to the island territory and had no opportunity for widespread outside (the exception is a small quantity of movement to the south of Sakhalin and the Kuril Islands), and secondly, it had been realized, almost without exceptions, by the forces of one nation. On the practical side, it was the most "pure experiment" among current colonizations. At the same time, we should mention one distinctive feature of this process, which "smears" the purity of the picture. It is an existence of a powerful Japanese enclave on Hokkaido before the main part of the colonization process had begun: about 100 thousand of Japanese people have lived on the island in recent years of the Tokugawa shogunate, mainly in the south on the Oshima peninsula, near the Matsumae clan cities secured by fortifications (however, most Japanese came home, on Honshu island, in winter (Foreign pioneers, 1968, p.18).

First of all, it is necessary to say a few words about the chronological and geographical frames of our study. We consider the period of 1870-1919 and rely, first of all, on availability of data, because the data of this period were collected by Seki Hideshi, and their reliability is undoubted. Besides, H. Seki himself noted this period not by chance, and our findings prove that the first "surge" of Hokkaido colonization had been gradually calming down by the middle of the

Taisho era. In addition, it is a period of modernization: since 1868 the Meiji era had started, and since 1870 the active stage of the Japanese colonization of Hokkaido had begun.

Geographically, we have limited this colonization case only with the territory of Hokkaido island, not included Sakhalin and the Kuril Islands, because their nationality had changed several times, that means that the flows of colonization "had mixed", and it increases possible statistical errors.

Our study is specific because we have refused to consider this process only as a "resettlement", which, in fact, involves the analysis of changes in only one characteristic, that is a number of migrants. From our point of view, it is only one side of the coin. We wondered what describes our process better: the number of migrants or their geographical distribution. If we are talking about the "colonization" of a particular region, it is necessary to consider both these characteristics as a whole. To say which one is more important, it is impossible. It is clear that migrants first have to come to a new place, and then to develop this territory. A migrant has a potential for development of new territories, and the success of colonization depends on its realization. The potential also depends on a number of migrants, but that is the territorial distribution, which determines the quality of colonization.

The analysis of geographical distribution of settlements and creation of new farming settlement in particular is very important to understand the colonization process. Numbers of migrants and new settlements are not always correlated with each other. These characteristics describe different components of the colonization process. The spread of new settlements rather characterizes the "conquer" of new territories, and the number of migrants describes the "development" of these territories. Of course, to have a territory settled, migrants are needed, but, as we will show below, a surge of new settlements often took place in the period when not too many migrants arrived. Perhaps, it is so, because different settlers (from different places, of different social and economic status and who used different household tactics) could have come in different periods. It is difficult to distinguish these features, but possible.

However, even if we assume that during the whole colonization period the same groups of migrants had arrived, even in that case, there would be no guarantee that their territorial distribution had been correlated with their number. It does not matter where, in America, Siberia, South-Ussuri region, or on Hokkaido, new settlers had to choose a place to settle. They had to choose between a new, potentially more profitable place, but more risky in terms of farming and development, and a place already settled, where they could have join other settlers, that is, of course, safer and not so hard, but promises fewer benefits in the future. If we think of it, we can expect that the first kind of place will be chosen by a few men with many women and children in their families and those, who decided to move because they did not want to die of hunger in their native territory. And strong families, who had money, adult sons and a desire to strengthen its position can take the risk and try to develop virgin lands. However, we should not forget that the existed settlements can be promising for new settlers, and only when the potential of the existed settlements is exhausted, the strong men will start to develop new settlements.

We mention this most significant methodological principle due to the fact that it is universal, and it is necessary to pay more attention to it if we are going to consider the theory of "colonization". This approach is productive because it allows not only to look at the historical colonizations in a new way, but also to predict the future ones and to prepare and develop them more carefully. Meanwhile, describing various colonization movements, researchers tend to divide these processes into periods, according to events of the national character.

For example, today there are several periods of the colonization process in the Russian Far East, the region which is geographically close to Hokkaido (the campaign was conducted by the Russian Empire almost at the same time). According to Yu.N.Osipov and V.T. Tyutyunnikov, "There are several points of view on this important issue. The first point of view concerns the migration movement, based on the laws and government regulations with a corresponding division into chronological periods and categories of the resettled farmers. The second point of view is that the migration movement is divided into three types according to transportation methods: overland (1858-1882), sea (1883-1901) and railway (1901-1917). The third point of view says that the migration movement is divided into two major periods before the revolution of 1905 and after it. And the fourth point of view involves the movement of farmers according to the economic cycles of Russia» (Osipov, 2007). We can notice that all these periods are based on reasons of the national level. It seems that the same situation has developed in the history of Hokkaido. Traditionally, the periods are based on the reign of Emperors, or on the change in the system government of the island, or on the change in the ways of stimulating migration. These are also periods, which are based on the reasons of the national level. We try to show a new way of Hokkaido colonization division into periods. We will not pay too much attention to the analysis of the sources and methods of their verification. We will just mention that the quality of the statistical material of Hokkaido is very high. Moreover, we have also not found the changes in methods of collecting material for the period that we are interested in (the changes concerned only the acceptance of Arab figures instead of hieroglyphic ones during the Taisho period). The material is included in a number of statistical books and monographs. In this paper, we used modern and historical

cartographic sources. The maps of soil and Hokkaido topography were taken from the ArcGISDesktop 9.3⁹ package. The data concerning the spread of settlements were taken from the well-prepared, but difficult to analyze in practice, map of H. Seki (Periods of Meiji and Taisho, 1978 p.140-141). The data provided by the Japan Meteorological Agency (Japan Meteorological Agency) are fully presented, but with the addition of time, when the modern system of collecting meteorological data began to be used.

3. Results

Three groups of migrants, who had different motives for resettlement and different functions at the first stage, played the main role in the settlement of Hokkaido.

3.1 The ex-samurai

The modern Hokkaido colonization began in 1870 with the exile on new territories ex-samurai, who were the rivals of the Emperor Meiji during the restoration. The resettlement occurred with entire clans; their land in homeland was withdrawn, but they had enough financial and technical means to settle down in a new place. This exile, which had been gradually reducing, ended in 1893.

The ex-samurai created 27 settlements (Figure 1). 16 of them were created from the clans of Tohoku, 5 – from the Chugoku clan, 3 – from the Chubu clan, 2 – from the Shikoku clan, and 1 – from the Kyushu clan. The largest number of settlements appeared in the ex-samurai prefecture of Miyagi (11) and the Tohoku region. It is noticeable that the number of ex-samurai on Hokkaido had been increasing during two surges with a period of 12-14 years. As the second surge was formed by samurai from more southern prefectures, we can assume that its reasons lie in political relations.

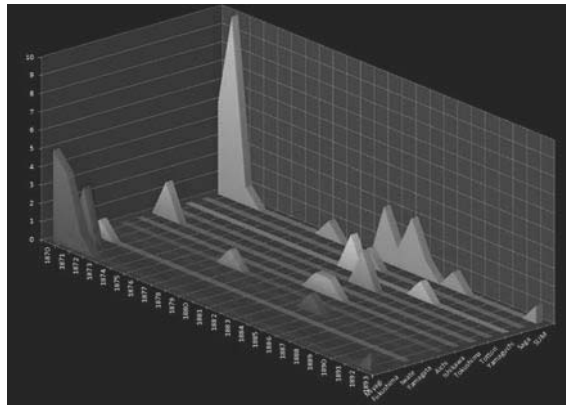


Figure 1 – Number of settlements developed on Hokkaido by former samurai from different prefectures of Japan (1870-1893).

According to the geographical distribution of ex-samurai settlements (Figure 2), we can conclude that they chose a place for their settlements on Hokkaido quite freely. Most of them (21) were located on the coast and, in general, they followed the same logic as the farming settlements at the first stage of Hokkaido settlement, which will be described later. If ex-samurai had not managed to settle on the seacoast, they moved deep into the island, not farther than 40 km. The main number of these settlements, which were created in 1870-1871 (after the Boshin war), were located near the sea (within 4 km). The exception is the ex-samurai settlements in the valley of the Ishikari River (1880-1890s), which tended to the roads. In any case, the former samurai always chose the fertile lands in valleys with alluvial soils. It seems that the only condition for their settlement at the beginning stage (1870-1871) was a distance from the main administrative centers. At the same time, we found no preferences connected with the place where this group of settlers had come from.

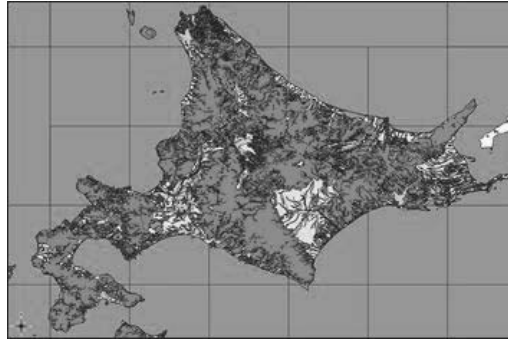


Figure 2 – Ex-Samurais' settlements on Hokkaido on a map of the landscapes.

3.2 Tondenkhei

Soldiers-colonists' settlements (tondenkhei) have occurred on Hokkaido in 1875 and were formed till 1899 inclusive. In all during this period they have founded 38 settlements (Figure 3). Their distribution across the island was apparently dictated, first of all, by military reasons. So, 24 tondenkhei settlements in the Ishikari valley were mainly extending from the estuary to its sources being located on the border of its left, the lowest area of the valley. By way of them the main road passed. The peasant settlements formed more recently have also started arising on this road, leaving a place close with the river to farms. These farms and peasant settlements were arising practically at the same time (1892-1894), but farms were down in more productive, but also on the lowlands more risky in case of floods.

Apparently, such scheme must allow to control the main communications of the island and to provide the formation of a rear battalion in a closed district of the Asahikawa city. Moreover, some areas close with the estuary of the island's bays, which were convenient for landing of the troops, were protected.

The schedule of the settlements formation shows that tondenkhei had a systematic policy in this issue. The first tondenkhei's settlements (near the Ishikari estuary) have occurred close with ex-Samurais's settlements - at the distance about 8 km (Figure 4). It is difficult to say about what were pyky in the forefront –attempts to control the loyalty of the former Samurais or a possibility of the use of their fighting experience.

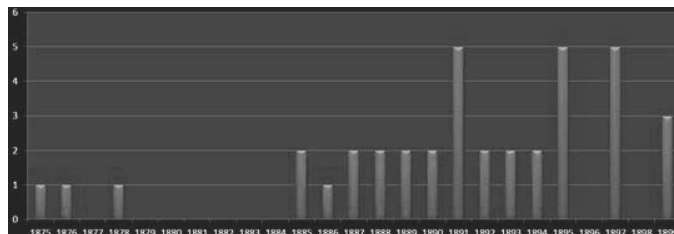


Figure 3 – A number of the settlements on Hokkaido formed by the tondenkhei.

It is characteristic that tondenkhei's settlements (unlike ex-Samurais' settlements) were the centers around which the peasant settlements had been gradually occurring. It means that they were peculiar catalysts of the territory development ensuring safety, proximity of administration and the local sales market of the agricultural production. This scheme seems to be logical and more productive than in a case with Cossacks in the Southern Ussuri Krai in the Russian Far East. Here Cossacks have been occupying the area along the border (so-called the Area of the Ussurian Cossack army) and this territory was available to developing only by Cossacks. The peasants-immigrants could receive here the ground, having just entered the Cossack estate, and the persons interested it were not so many. This approach finds an internal contradiction.

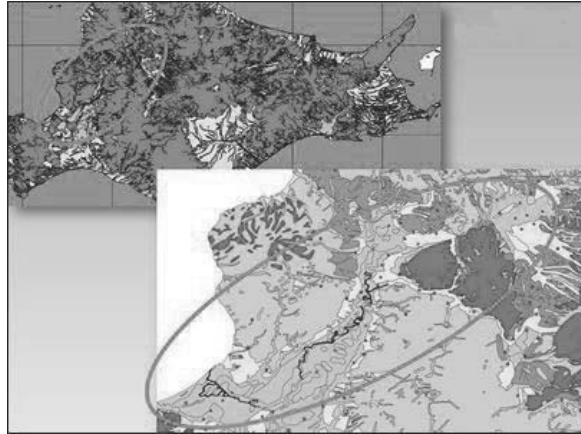


Figure 4 – Settlements of tondenkhy Ishikari in the valley (red points on the lower card).

As Cossacks, as a rule, scornfully treated the rural work, but thus they had extremely large family plots of the ground, the land rent in this area has blossomed. But only Korean and Chinese peasants were the tenants, therefore a boundary function of the Cossacks was considerably leveled by this circumstance.

3.3 *Hokkaido peasants*

The first settlements of peasants-colonists have occurred on Hokkaido in 1871. Analyzing the eographical distribution of settlements and their increasing quantity, it is possible to point out the following three periods of the peasant settling of Hokkaido.

3.3.1 *1st stage: 1871-1886.*

Settlements extend along the southern and the western coast. The distance to the sea does not exceed 40 km (the farm on Tokachigava) (Figure 5). In all 17 peasant settlements including the farms were formed. It was the most difficult period of the island development: communications are still formed, there is no clear idea about the district climate and the hydrological regime, a possibility of these or those crops cultivation. At the same time there was an opportunity to choose the most suitable place. It is characteristic that the first settlers' flow consists of peasants from the southern Japanese provinces (Kyushu, Shikoku & Chugoku). The first three peasant settlements were founded in 1871 by migrants from the prefectures of Nagasaki, Kumamoto and Saga. Then after the eight-year break the settlement of migrants from Tokushima and then, in 3 years, the settlement of migrants from Ehime, Yamaguchi, Hiroshima were occurred. In 1883 one settlement was formed by the natives of the Aichi prefecture, but it only emphasizes the picture.

As the meteorological Hiroshima station in 1881, 1885 and 1886 (Figure 6) say that in the region there were extremely cold for this district winters (January-March): the average monthly temperatures were lower than a norm approximately by 2.5 degrees that is a lot of. However, perhaps, extremely rainy May, June or July mostly influenced the decision-making concerning the resettlement. Such situation was observed in 1881, 1884 and 1885 when the monthly rainfall exceeded the long-term level more than double. (It was especially sensitive for the weak farms which representatives, by the way, at the first stage of colonization of Hokkaido present the majority (Morgun, 1992, p. 35) For comparison: the largest number of Hokkaido colonization was founded by the migrants from the provinces neighboring to Hiroshima in 1882 (8), in 1883 - 1, 1884 - 4, 1885-2.

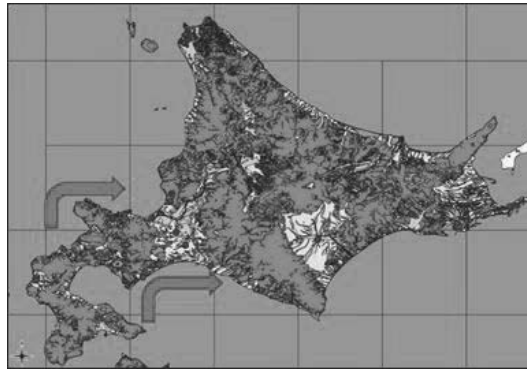


Figure 5 – The peasant settlements on Hokkaido formed in 1871-86.

It is necessary to consider that from the moment of natural cataclysm which has influenced the decision-making on the resettlement the foundation of a new settlement in a Japanese case demands one or two years.

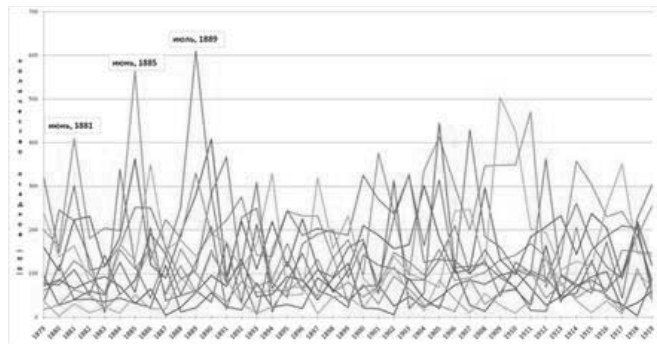


Figure 6 – The rainfall amount according to the oldest Japanese meteorological station data (Hiroshima) 1879-1919.

However, there is one more moment. Slightly later in the Southern Ussuri Krai and more later in Manchuria in the colonization policy at a certain stage there was the same tendency, namely – the peasants move to the North from the most remote (as a rule, overpopulated) southern (warm in the climatic plan) provinces. And it is made like a jump, through the territories which are empty or occupied with other people. Thus, new settlers get less familiar landscapes, *переход* adaptation is going more difficult, but the implementation of the colonization project considers as an important thing that it is more difficult of these immigrants to return, their homeland is too far, and psychologically they are more ready to be fixed on a new place.

3.3.2 2nd stage: 1887-1900

It is, perhaps, the most successful period for new settlements formation. The distribution goes generally along the river valleys (Ishikari & Tokachikava), and also along the northern coast (the western and northeast part) (Figure 7).

In this period the peasants of Japan are in the resettlement joins. 136 country settlements were formed. However, there are enough unoccupied territories to choose convenient lands. During this period there is the most noticeable aspiration to occupy the wide river valleys and estuaries of the coastal rivers characteristic for Japanese agricultural tradition.

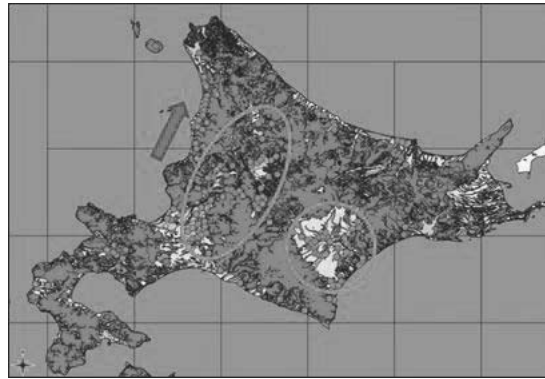


Figure 7 – The peasant settlements on Hokkaido formed in 1887-1900.

Only in 1893 there was the first peasant settlement of the migrants from Tokhoku. During the next years they have been gradually starting dominating in the migrants' flow but the first 23 years of the colonization were practically (except for ex-Samurais) without them.

An interesting, perhaps, typical situation was developed in the Tokachigava's valley (Figure 8). Settling of this area, which is nowadays one of the most developed agricultural regions of Hokkaido, has been occurring in the following way. Originally there is the farm close with the present Obihiro (today the central city of the area) in 1883 in the river's valley on its crossing with the inflow. Then at the beginning of the 1890th settlements of the business firms and the villages (1892 - from the prefectures of Toyama and Fukui) have been occurring lower with the current along the river, a prison have been occurring about 4 km lower with the current in 1895. After this date the peasant settlements generally extend over Tokachigava's upper courses and on its inflows at distance, as a rule, not exceeding 18 km from the main current. Then, after 1900, on a circle at distance in 24-30 km from Obihiro new settlements are formed. It is possible to say that the area development happens by accurately expressed concentric circles with the administrative center which is approximately coinciding with the geographical one. It is characteristic that till 1900 settlements occupy inundated areas with fertile alluvial gray soils, after them there are low terraces with fertile dark volcanic soils (andosols - kuroboku). That means that the area has been forming, on one hand, subject to the interests of those, who came the first, and on the other hand, subject to logistics reasons.

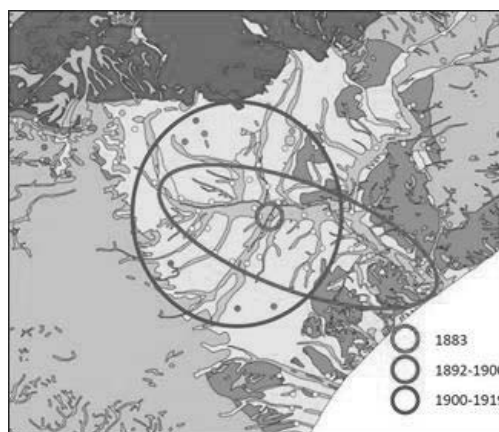


Figure 8 – The peasant settlements in the Tokachigava's valley.

In general, it is possible to say that during this period the best territories suitable for the land use on Hokkaido were occupied.

3.3.3 3rd stage: 1901-1919

During this period there is a settling of the remained lands (or on the periphery of old settlements). Thus, the colonization gained a mass character.

The bulk of settlements of this period is concentrated on the east part of Hokkaido (Figure 9).

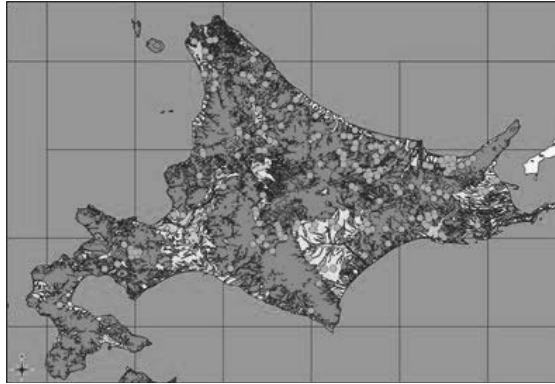


Figure 9 – The peasant settlements on Hokkaido formed in 1901-1919.

It is remarkable that this area is the most cold and dry on Hokkaido (Figures 10-11).

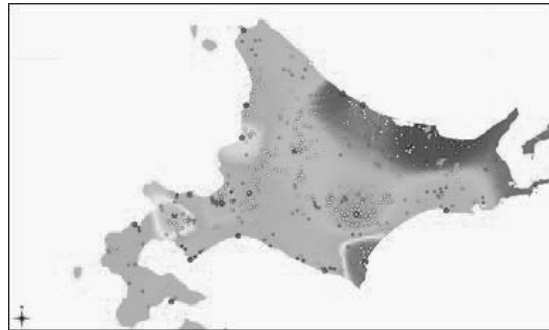


Figure 10 – An average annual amount of the rainfall on Hokkaido (the color is more blue, the land is dryer).



Figure 11 – Average annual summer temperature on Hokkaido (the color is more blue, the temperature is colder).

In comparison with the previous stages of settling at this time the moving has been giving a disperse character. It is extremely difficult to define landscape preferences of the migrants. In fact, empty or just unoccupied by the previous cohorts of immigrants territories become populated or there is the resettlement to already existing communities. Despite the improved quality of communications, the reduction of resettlement risks, that allows to move to more numerous and economically weaker families, conditions for the successful resettlement to new lands at this stage sharply worsen.

At last, it should be noted that during this period a sharp surge in migration from the Tohoku region close with Hokkaido is observed.

4. General Comments

The main part of migrants during the studied period has arrived to Hokkaido from the Tohoku region. However, as this region has joined in the process of colonization after the other, its representatives have been taking less participation in new settlements creation. Figure 12 shows that new settlements formation by the natives from Chubu, Shikoku and, partly, from Chugoku have enough high correlation with each other. New settlements formation by the natives from Tohoku follows its own logic.

It is characteristic that catastrophic earthquakes and tsunami, apparently, do not cause the strengthened migration from the most affected areas. So, after the Mino-Owari earthquake (1891) from which the prefecture of Gifu was generally suffered, from it the considerable going out of the migrants was not observed, but it has amplified from the next prefecture of Fukui. After the earthquake and the Meiji-Sanriku tsunami (1896) from which the Ivata prefecture was generally suffered, from it there also was no considerable outcome of the migrants (as well as from everything to Tohoku).

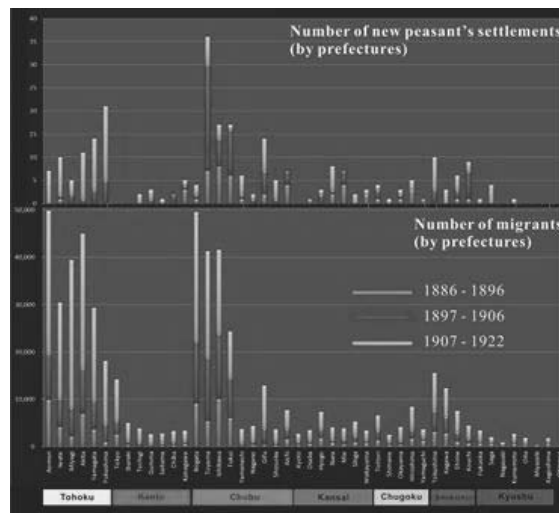


Figure 12 – Dynamics of the peasant settling of Hokkaido. The scheme is made on the basis of the Periods of Meiji and Taisho, 1978, river 140-141.

From the Figure 12 the following is also visible:

1. The most considerable part of the migration to Hokkaido were the prefectures of the northwest of Japan (Tohoku), and it is quite logical as this region is the closest to the island;
2. The mass resettlement from Tohoku was observed only at the last stage of colonization that can be explained with the lower degree of deficiency of land resources in this region.
3. A steady trend to the high migratory activity of inhabitants of the Chubu region during the whole colonization period (especially the Niigata, Toyama, Isikava and Fukui prefectures).
4. The high colonization activity was shown by the natives of a small prefecture Toyama (for today from 47 prefectures of Japan it is the 33 on the area and the 38 on population). It is possible to call with confidence the migrants from Toyama "pioneers" in the settling of Hokkaido. This activity is apparently connected not only

with deficiency of the ground in Toyama, but also with the extremely risky conditions of agriculture in the field (at the high quality of a crop the regular floods were here observed often destroying this crop).

It is very difficult to reveal the rules of the compact settling of Hokkaido by the representatives of different prefectures that is explained by the high level of homogeneity of the population of Japan. However, in the most general case it is possible to say that the immigrants of one province preferred for their settling one region of Hokkaido, and the natives of one prefecture have been lodging nearby with each other.

But this expedient rule works for the large agricultural areas. In a case when the small cut-up landscapes are occupied, this rule is leveled.

5. Conclusion

Our research shows that the mathematical methods use of statistical data processing, the GIS-analysis, the comparison of processes can give the new historical information that will allow verifying traditional sources and more deeply to understand the studied phenomena.

Here, in our opinion, there is a possibility of more adequate assessment of various colonization streams, than it was before. It is possible to hope that it through the wide-ranging comparative studies will lead to the general colonization formation. In particular, a comparison of colonization of Hokkaido by Japanese, the Southern Ussuri Krai by Russians and Manchuria by Chinese looks logical. These streams were not only are close geographically and almost synchronous, they were initiated by the state and were carried out under its control. It is a serious difference from, for example, the frontier colonization of America, Australia or Siberia. At the same time today the frontier colonization looks a little archaically and can be hardly allowed by the sovereign states in the territory.

As it was already mentioned, we concentrated our attention on two characteristics of the colonization process – a number of migrants and also on quantity and spatial distribution of new settlements. First of all, in case of the Southern Ussuri Krai and Hokkaido, and then they were compared.

The results were, in many respects, unexpected (Figures 13-14). All processes took place independently from each other, and the organizers of these actions were practically not interested in the experience of each other, the crossing of processes has naturally happened only during the Russian-Japanese war of 1904-05. Besides, the culturological distance between our countries is very essential. However, the received results make us thinking about the existence of certain general natural rules during the colonization, the features low-dependent on concrete national, and, more likely, from the period of the country political development, first of all, from the economic strategy of the migrants' cohorts, various on time.

Concrete results speak about the following:

1. The development process of Hokkaido (the foundation of new settlements) took place approximately twice quicker than in case of the Southern Ussuri Krai that is connected, first of all, with a basic difference between the distances of going out and entry of the resettlement.
2. The schedule of new settlements foundation on Hokkaido from 1871 to 1897 (26 years) by a form practically coincides with the schedule describing the same indicator in the Southern Ussuri Krai from 1858 to 1907 (49 years). Having removed indicators of three years from research data, when the resettlement to the Southern Ussuri Krai was forbidden in connection with the war (1904-06), the results have showed high values of correlation ($R^2 = 0,831$). Of course, it is difficult to assume that one of the processes directly influenced another, however it is possible to speak about the existence of certain general rules or conditions of colonization or colonization behavior.
3. The high correlation confirms that ($R^2 = 0,726$) between a number of the settlers on Hokkaido and in the Southern Ussuri Krai.
4. Curves of a number of migrants have a big dependence from "external events (natural and social indignations, government and transport decisions), than curve emergence of new settlements.

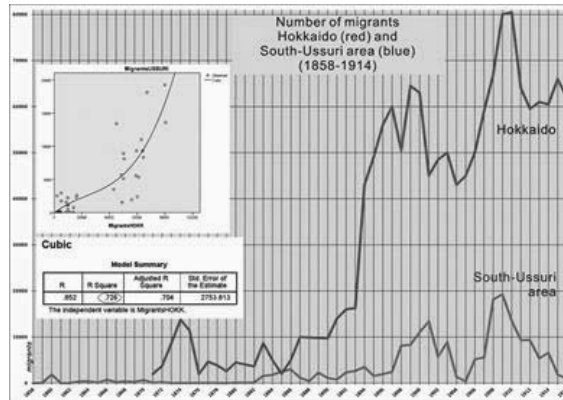


Figure 13 – A number of colonists on Hokkaido and in the Southern Ussuri Krai (1858-1914). The scheme was made according to the Periods of Meiji and Taisho, 1978 (Obzory Primorskoj oblasti, 1892 - 1916), (Korovin, 1923 & Kabuzan, 1973).

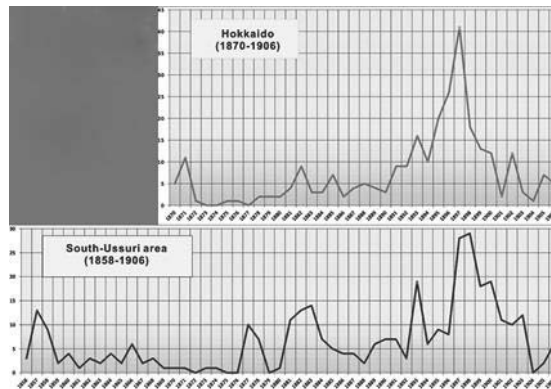


Figure 14 – The organization of new settlements on Hokkaido and in the Southern Ussuri Krai till 1906. The scheme was made according to the Periods of Meiji and Taisho, 1978 (Obzory Primorskoj oblasti, 1892 - 1916), (Korovin, 1923 & Kabuzan, 1973).

At the same time the above-mentioned colonization processes taking place in East Asia have a row surprising similarities with each other. For example, the obligatory presence on new lands (at the initial stage) colonists with the mixed paramilitary and semi-agricultural status (Cossacks in the Southern Ussuri Krai, tondenkhei and ex-Samurais on Hokkaido, the boundary guard and military settlements in Manchuria). Moreover, the general dynamics of new settlements formation and a number of the migrants is very similar. And it allows to speak about a certain general (supranational) periodization of colonization processes and also to look for the general reasons of this phenomenon, the methods of settling and adaptation of migrants on a new place.

In modern conditions, when ecological and social processes on a global scale lead to mass interstate and cross-border migrations, the issue will gradually move from the academic to practical level, and an interest in the experience of historical colonizations will tend to increase.

6. Acknowledgement

This article was prepared with the support of The Japan Foundation, the project 'Japanese and Russian Experience in Development of New Lands in the Era of Modernization ...

References

- Periods of Meiji and Taisho in graphics (1978) Part 5. Hokkaido. (meiji taisho zushi 5 hokkaido), Chikuma Shobo, Tokyo.
- Hirai, S. (2006) The method of development and resettlement to Hokkaido in modern times (kindai hokkaidō no kaihatsu to imin no sōshutsu kōzō). Sapporo : Sapporo Daigaku Keizai Gakubu Fuzoku Chiiki Keizai Kenkyūjo, Booklet No.6.
- Vinogradov, K. (2005) Istorii Hokkaido v XVII - XX vv.: Opyt regional'nogo issledovaniia/ dissertatsiia na soiskanie uchenoi stepeni kandidata istoricheskikh nauk, Moscow.
- Hokkaido: istoriia i sovremennost' ed. by Morgun Z.F. (1992) Vladivostok: Dal'nevostochnoe otdelenie Rossiiskoi akademii nauk.
- Foreign pioneers. A short history of the contribution of foreigners to the development of Hokkaido (ed. Suzuki J.). 1968. Hokkaido prefectural government, Nakanishi Phototype and Printing Co., Ltd.
- Fujita, F. (1994) American Pioneers and the Japanese Frontier: American Experts in Nineteenth-Century Japan (Contributions in Asian Studies). Praeger, Greenwood Publishing.
- Irish, A. (2009) Hokkaido. A History of ethnic transition and development on Japan's Northern Island. McFarland & Company, Inc., Publishers North Carolina, USA.
- Pozdneev, D. (1909) Materialy po istorii Severnoi Iaponii i ee otnoshenii k materiku Azii i Rossii. Iokogama, Vol. 1. Dannie geograficheskie i etnograficheskie.
- Pozdneev, D. (1906) Iaponiia. Geograficheskoi-statisticheskii sbornik. Vladivostok.
- Boguslavskii, N. (1904) Iaponiia. Voenno-geograficheskoe i statisticheskoe obozrenie. Sankt-Peterburg.
- Bolkhovitinov, L. (1996) Kolonizatsiia Dal'nego Vostoka // Russkii razliv: al'manakh / Fond "Mir L'va Gumileva" - Moscow: DI DIK Tanais - (Arabeski istorii) (Mir L'va Gumileva). Issues 3-4, Vol. 2. pp. 352-370.
- Ozhereleva, G. (1989) Istorii formirovaniia derevni na Hokkaido (1869-1945 gg.)/ avtoreferat na soiskanie uchenoi stepeni kandidata istoricheskikh nauk, Moscow.
- Hokkaido (1988) Istoricheskii ocherk razvitiia (XVII-1917) ed. by Krushanov A.I. Vladivostok: Dal'nevostochnoe otdelenie Akademii nauk SSSR.
- National Agricultural Research Center for Hokkaido Region - http://cryo.naro.affrc.go.jp/index_e/noukenyouranE0702.htm
- Osipov, Iu. (2007) O periodizatsii pereseleniia krest'ian na Dal'nii Vostok Rossii (1855-1917 gg.): istoriografiia voprosa - http://reosamp.pf/sources/nat_econ/agriculture/agriculture-x=19.php
- Report on colonization (1983) Part 2. Kaitakushi jigyo houkaku dai 2 kan, Sapporo: Hokkaido shuppan kikaku senta.
- Fukui, T. (1971) History of Hokkaido for 100 years (hokkaido yusei hyakunen shi shiryō). Toyoracho (Hokkaido): Sanonbungakukai.
- Kadokawa (1987) Great Dictionary of toponyms in Japan (kadokawa nihon chimei daijiten), Kadokawa Shoten, Tokyo.
- The new chronology of Hokkaido's history (1989) Shin hokkaido shi nenpyō, Sapporo-shi : Hokkaido Shuppan Kikaku Senta.
- Seki, H. & Kuwabara, M. et al. (2006) History of Hokkaido (hokkaido no rekishi), Sapporo, Hokkaido shinbun sha.
- Japan Meteorological Agency. Tables of Monthly Climate Statistics <http://www.data.jma.go.jp/obd/stats/data/en/smp/index.html>
- Obzory Primorskoi oblasti za 1891, 1892, 1894, 1895, 1896, 1897, 1899, 1900, 1901, 1902, 1905, 1906, 1910, 1911, 1912, 1913, 1914 goda. Prilozheniia k vsepoddanneishemu otchetu. Vladivostok: Tipografiia Primorskogo oblastnogo pravleniia, 1892 - 1916.
- Kabuzan, V. (1973) Kak zaseliatsiia Dal'nii Vostok (vtoraia polovina XVII – nachalo XX veka). Khabarovsk.
- Tkachev, S. (2010) Modernisation in Ussury Region (mid. XIX - beg. XX centuries): History, Methodology and Sources of Research. In the: Studies of Landscape History on East Asian Inland Seas: Research Institute for Humanity and Nature, Kyoto, Japan. pp. 23-32.
- Korovin, A. (1923) Ocherk zaseleniia Primor'ia. Primor'e, ego priroda i khoziaistvo. Sbornik statei, sostavlennii nauchno-prosvetitel'skoi sektiiei Primorskogo gubernskogo vystavochnogo biuro. Khabarovsk. pp.156-173.
- Tkachev, S. (2012) Colonization Hokkaido and South Ussury area: A comparative research // Atlas of Historical Landscape (Japan and East Asian Inland Seas). NEOMAP Project, Research Institute for Humanity and Nature, Kyoto, Japan, 2012. pp.130-133.