12. Historical ecology of indigenous people in Amur region

15992 - Use of Aerial Photographs taken by Corona Satellites in an Ethnographic Survey: Amur Region in the Russian Far East

Presentation type: Oral presentation

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Corona is a series of American spy satellites, and they were employed to watch both the Soviet Union and China during the Cold War. Aerial photographs taken by the satellites were state secrets until 1992, but now anybody can access these photographs from USGS. These monochromatic films had a high spatial resolution of 7.5m while later versions had 2.75m and 1.8m.

As part of our project, we planned to use these photographs in our ethnographic survey of indigenous people. We obtained 42 images from USGS and georeferenced them with GIS software. Some towns and villages in the Amur Region such as Ulika-Natsional'noye, Ulika-Pavlovka, and Kondon are visible in these films. We added a coordinate grid and GPS tracking logs - the latter composed during a previous survey - to these photographs and printed them out.

During the survey we used the images together with GPS receivers for localization. The pictures were quite useful for our survey because there were few detailed maps available for the kind of research we conducted. Moreover we could make use of the pictures to easily gain much information from information providers. Furthermore, we input transcripts of interviews into our laptop computers and had discussions about the data using GIS software.

After survey completion, we analyzed land cover and land use of old aerial photographs with GIS software. We created detailed maps on GIS software based on the ground truth from the previous survey. We also counted the number of buildings, calculated the area of fields and created a network indicating roads and rails. Additionally, we tracked changes in land cover and land use from 1964 to 1972 using these photographs.

These maps and photographs will become fundamental resources for further research. Investigations based on these objective resources strongly support ethnographic studies. Using these resources, researchers can begin with detailed plans before starting a survey itself, and are easier able to interact with information providers. With geographical analysis as basis, we can set up a hypothesis and examine subsistence and economics of indigenous people in the respective research areas.
The world-system methodology can be applied to the systems of any order – from the global system of the present to the mini-systems of hunters-gatherers. The world-system relations are formed by four networks: bulk goods networks (BGN), prestige goods networks (PGN), political and military networks (PMN), information networks (IN). In this paper will discuss the different types of networks among the prehistorical and traditional peoples of Northern Primorye region in Ussuri valley region: the basins of Iman and Bikin rivers. More than 199 archaeological sites of different periods and places of camps and villages of traditional cultures were discovered there in the heart of the forest. The IN contributed to development of trade contacts, expansion of religions and different knowledge, development of technological exchanges between different civilizations. In Ussuri forest area it contributed to the circulation of economical innovations – fishing (Neolithic), primitive agriculture and domestication (Bronze age), metallurgy (Bronze and early Iron age), agriculture (Iron Age). The Neolithic peoples engaged in hunting, gathering and fishing. The catch of passing salmon was of great importance for this period. They had periodical contacts and exchange with populations of Amur river basin and central and maritime areas of Primorye region. In the Iron Age and this region was included into the sphere of the influence of the Chinese periphery early states. Archaeologically the results of formation of political and military networks reflected in the formation of complexity in settlement pattern, fortification, and PGN. In the mediaeval period there lived the Heishui Mohe of the Amur River and population of Pokrovka culture. It was pre-state complex society and periphery of Jurchen Empire. In this period, different non-bulk goods trade and different PMN, PGN, and IN with regional empires were established. After Mongolian conquest these networks were broken. Only to Tyr cliff Ming dynasty expeditions in 1413 and 1433 were the effort of constitution of PMN in North-Eastern remote areas. The Udehe people are studied best of all, the Russians got acquainted to them 150 years ago. Territories of their settlements included diverse complex of hunting, fishing and gathering resources. This people had seasonal trade network with remote administrative units of the Qing dynasty. PMN and PGN don’t play the significant role through simple political organization of local population. This situation was changed in the period of industrialization, cutting woods and orientation of local hunting and fishing for the market.
Russia and China have scientific information, art and other cultural achievements on long exchange. Some aspects of this process can be traced based on the study of the Russian-Chinese caravan trade of the 18th century. In the middle 18th century, a Russian trade caravan under the control of director A. M. Vladykin brought the fundamental work "gūsai uheri ejetun bithe" from China to Russia. It was translated from Manchu language by orientalists A. L. Leont’ev and I. K. Rossokhin. In 1784, the translation was published in St. Petersburg: "The detailed description of an origin and status of the Manchu people and troops consisting in Eight Banners". Scientific works of Leont’ev and Rossokhin are studied well enough. For example, it was cleared that the translation "...description Manchu people..." contained valuable ethnographic, historical, geographical materials on the Manchus, the Chinese, and the ancestors of modern Nanai, Nivkh, Udege, and Ulchi. However, little is known about research and collecting works of participants of the caravan. Meanwhile, geodesist E. Vladykin made a description on the route of the caravan and made a map of the Priamurya on the basis of the Chinese and Manchurian sources. In general, the review of the activities of the Russian trade caravans will help to highlight the important process of collecting ethnographic and historical data on indigenous peoples of the Amur River.
15909 - Ornamented Bones of the Uilta in Sakhalin

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Traditional artifacts made of bones by the Uilta are now losing the functional and decorative implication in the present days. However, in the past, the forest hunting and sea mammal hunting gave them so many bones as raw materials that various kinds of products of this material were distributed among them. They called geometric carvings of wood or bone irg, ami. Images of simple geometric motifs seen on bone products belong to an ancient tradition. For the people of the ancient times, bones were the most commonly used materials for the manufacture of tools and household items. In the past, the influence of elements of the Evenk ornament was seen in the products of solid materials of the Uilta, e.g., incomplete concentric circles, arcs, semicircles. They are often found in the framework of children's reindeer saddles eme. When the Uilta gave up the reindeer herding, they replaced the former economic complex dependent on the reindeer to a new economic structure that is not associated with nomadism. The Uilta borrowed a bear cult and its whole range of ceremonies, ritual utensils, and so on from the Nivkhs and Ainu. A tangible acquisition, i.e., the Amur spiral ornament, was also one of the elements of this cult complex. The Uilta developed unique ornaments of a mixed type under such influence. They were often used for the ornament of women’s costumes. The Uilta accepted the ornaments for solid materials without any changes. A traditional belt with an elegant decorative buckle, which was widely seen among the Tungus-Manchu peoples and Nivkhs is also one of the items borrowed by the Uilta and spread over a new ethno-geographical environment. The spiral ornament is characteristic for plaques, and the fishnet-like openwork, which is figured in intricate outlines of elegant forms, is often used. Decorative motifs on the surface of the buckle are fully corresponding with the culture of the Lower Amur region. A bone needle case with the spiral ornament is often attached to the belt. Additionally geometric elements of ornament in the form of short and long notching aimed toward each other are often done on it. A small box made of large mammal bone (elk or reindeer) is also hung from the belt. The box is decorated with a spiral ornament consisting of two large spirals ending at the double circle in the center A variety of bone awls with a cone-shaped point is one of the attachment items of the belt. The Uilta use it to untangle knots on belts and ropes and to dig out plant roots. One can see the spiral ornament, which shows us that it belongs to the culture of the Lower Amur region, on its handle. The ornament made on the bone items of the Uilta people belongs to the type of Amur-Sakhalin region. The Uilta took the bear cult into their traditional culture together with a complex ritual sculptures and utensils, with a huge variety of figurative making lines, and variations of spiral and braid elements.
In this paper I will discuss the selection of the life strategy of the hunter-gatherers in the Amur River basins in Russian Far East, focusing on the movement of the limiting line of farming seen in some historical documents.

In border areas between subarctic and temperate zones like the Lower Amur River basins, many people engaged in the complex productive activities consisting of the subsistence hunting, commercial hunting, fishing, gathering, agriculture, and stock farming. However, the limiting line of the agriculture or farming has often moved from south to north and visa versa, depending on the change of some conditions. Though historians and archeologists often emphasized the influence of the climate change for the selection of their life strategy, types of productive activities, and settlement patterns, I think that the political and economic conditions of their living times were more important and decisive. In this paper, I will analyze the data on the movement of the limiting line of the farming in this region from the 13th century to 20th century seen in the historical documents, and discuss what factors were decisive for the movement. From this discussion, I will clarify the adaptation and survival strategies of the people, and reevaluate their society as “hunter-gatherers” in the regional history.

The people of the Amur River basins experienced some radical changes in their political conditions since the 13th century. The first one was the conquest and rule by the Mongolian power (the Yuan dynasty in China) in the 13th century that changed the people’s life style from its basis. The second one was seen in the end of the 17th century, when the Qing dynasty got the victory in the war against Imperial Russia on the territory on the Amur River basin. After that the local people, who were organized into tribute payers, enjoyed a privileged life in the society under the rule of the Qing dynasty. The third change occurred in the late 19th century. By the agreements concluded between Qing and Russia in 1858 and 1860, the vast territory covering the areas northward from the Amur River and eastward from the Ussuri River was given to the Russian Empire. This event implies the beginning of the modern age for the local people, in which they could not but become indigenous minorities. The forth one occurred in the Russian Revolution in 1917. The socialist government encouraged them to engage in the agriculture and stock farming.

Taking such a historical process into consideration, I will analyze the historical documents on the limiting line of the farming, especially focusing on the movement of population and the distribution of some technologies, which were influenced by the political and economic conditions of each time.
The policies of the Soviet Union caused one of the most drastic examples of socio-economic development in the 20th century. During the Soviet era, however, it was difficult for anthropologists from the Western Bloc to visit and do research. Therefore, ethnographic information on those socio-economic changes was very limited. Actually, resources about the past during the Soviet era tend to be narratives gained through interviews, which are affected by personal views and experiences, and/or socio-political discourses in the archives, which are rarely free from ideology. This paper attempts to analyze the village landscapes during the Soviet era of the Nanai, who were originally regarded as indigenous foragers in the Amur region, with GIS analysis using satellite imagery. In particular, this research examines the Corona satellite images that gathered information on landscapes in the Soviet era, and compares those to the ALOS images giving information on the present landscapes. In addition, it clarifies information on past landscapes in the satellite images through oral histories based on interviews with local people conducted as part of the ethnographic research in two Nanai villages imaged by both satellites. The aim of these researches is to understand the products of subsistence activities in the Soviet era which cannot be observed directly as geographical factors on the past satellite imagery. The results of these researches lead to the conclusions that Nanai villages in the Soviet era, which were founded and managed by Kolkhoz, were not sustainable with the work force of local villagers only, and that such a situation was already difficult to sustain before the collapse of the Soviet system. On the other hand, ethnographic data shows that the daily socio-economy of Nanai villages has been sustained by fishing, hunting and so on as indigenous subsistence activities which were based on a delicate balance of relationships with outside economies until the present, even after the collapse of the Soviet Union. These findings help to clarify political and economic factors as driving forces behind subsistence activities of an indigenous forager society in the Far East Asia from the Soviet era until the present. At the same time, it examines the transition of foragers’ adaptation strategies under the Soviet Union, about which there has been very limited information. Therefore, this case study will show new perspectives for studies on hunter-gatherer society.