INDIGENOUS PEOPLES IN RUSSIA

ANALYSIS
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Abstract:
This article analyzes a new political phenomenon in modern Russia: the growing assertiveness of indigenous peoples in the context of the accelerated industrial development of the Arctic. At the center of the study is the political rise of the “Voice of the Tundra” protest community and its leader Eiko Serotetto.

Rural Protest
Events in the Yamal tundra during the periods of 2013–2016 and 2018 were unprecedented in the life of the indigenous peoples of the Russian Arctic.¹ The mass protest group “Voice of the Tundra,” organized according to network principles, entered the political arena.² Among the distinctive features of this organization is that its leader is not a well-educated urban activist (as is often the case) but a young, private reindeer herder from the tundra named Eiko Serotetto. A second distinguishing feature is that mobilization of the members of the group is carried out through the Vkontakte social network. Thus Voice of the Arctic is an unusual example of a rural protest group that uses social media to communicate with its public.

In exploring the political aspect of this phenomenon, the main questions this article asks are: what changes in Russian politics and in the indigenous sphere are hidden behind this phenomenon? Does this project promote the broader goals of indigenous development in Russia, or can it be considered only as an isolated protest episode?

The Expanding Yamal Indigenous People and the Challenges of the Last Decade
Among the Arctic territories of Russia, the Yamal-Nenets Autonomous Okrug (YNAO) has a special place. For the last ten years, Yamal has been at the center of large-scale gas and transportation projects. Effectively, the okrug is a new energy center for Russia.

However, YNAO is unique in that it is the only region of Russia’s Far North where the indigenous population (mostly Nenets) has preserved the nomadic way of life, where in the post-Soviet decades the reindeer population has doubled, and where the indigenous youth is returning back to the tundra. As a result of these processes, between 2003 and 2019, the number of private reindeer-herding enterprises in the region has almost doubled (from 2,669 to 4,749) and the number of the nomadic population grew from 13,300 to 16,300 people.

As a result of these processes, the number of reindeer has been growing in the region for many years, with Yamal leading not only Russia, but also the world. These facts show that the appearance of reindeer herds that are too large for the land where they live is driven by the economic interests of nomadic Nenets herders. For the tundra Nenets, reindeer represent the equivalent for city dwellers of property, a house, food, transportation, investment, and a bank account.

The question arises: if there is demographic growth among the Nenets, if the number of reindeer herders and the reindeer population is expanding, and if there is a revival of national culture and family traditions, then why is the Voice of the Tundra group protesting?

The following important point must be emphasized here: during the study period, two interconnected crisis themes came together: the lack of land for expanding reindeer herding and the decline of indigenous leadership. As for the land, the accelerated industrial development of the Yamal tundra has led to the withdrawal of reindeer pasture and hunting ground land from the sphere of traditional uses, land that the natives of the North had considered their ancestral possessions for centuries. Thus, the giant Yamal LNG project occupies 6% of the land where reindeer pastures used to be. These processes have created a new problem in Yamal: land scarcity and increased competition for this valuable resource. According to Ural and Yamal reindeer herders, the biggest problem they will face in the near future

¹ This article draws on the author’s field research materials (interviews, focus groups, local media), collected during the period 2018–9, in the course of field research in the Yamal-Nenets Autonomous Okrug. The empirical part of this work was carried out in the framework of a Kennan Institute Alumni Program Field Research Project entitled “The Rising Voice of the Northern Indigenous People in the Context of the Growing Pressure of Russian Nationalism.” The author thanks the Kennan Institute for grant support to carry out the field study. The author is also grateful to Prof. Masahiro Tokunaga, who organized a month-long research internship for him at Kansai University in Osaka, Japan, where the analytical part of the work was done.

² https://vk.com/golos_tundry
is the lack of pastures, which are being withdrawn for industrial needs. Thus, the double pressure on the tundra (from the increased reindeer herd, and from oil and gas enterprises) led to the depletion of the land and the lack of space for the reindeer to roam.

These processes took place against the background of national-level Russian political processes aimed at “closing” the indigenous problem. “Closure” is not the most appropriate term, but it is useful in signifying the process of tight control imposed by the Russian authorities not only on the organizations and leaders of the indigenous peoples, but on the issues related to indigenous populations in general. In practice, this closure resulted in the reorganization of the Association of Indigenous Peoples of the North, Siberia and the Far East (RAIPON), a leading umbrella organization defending the rights of indigenous peoples. The state suspended the work of RAIPON from November 2012 until March 2013, when the group held its 7th Congress. At this meeting, the state imposed a scandalous change of leadership and redirected the course of the organization. According to many eyewitnesses and participants in this event, the congress resembled a special forces operation to impose a change of leadership on the association. As a result, the previous president of the association Sergei Haryuchi, who was loyal to the Russian authorities, was replaced. Additionally, two vice-presidents of the association, the brothers Rodion and Pavel Sulyandziga, were removed from their posts. The latter was persecuted by the Russian authorities and was forced to emigrate to the United States in 2017. The final result of this event was the seizure of RAIPON by the pro-Kremlin political party United Russia. Grigorii Ledkov, a member of the State Duma from United Russia, was elected president of the association at the Congress.

As a result of the rapid changes in 2012–2019, two growing worlds claiming land and resources collided in the tundra: the industrial world of the energy complex and the world of nomadic Nenets. This clash turned out to be dramatic, carrying considerable conflict potential. In this environment, there was no leader among the indigenous capable of defending the interests of the tundra nomads. The situation was exacerbated by natural and economic cataclysms, which hit the nomadic reindeer herders in the winter of 2013–2014, when a deep frost led to about 90,000 deaths among the reindeer. In the summer of 2016, the record-breaking heat wave in the area, coupled with an excess of reindeer, led to an anthrax epidemic. In the Spring of 2018, a cold spring followed by ice led to a new drop off in the number of reindeer. Unfortunately, despite these extreme tests, the authorities did not discuss these problems with reindeer herders. Moreover, the district authorities have repeatedly reported on their plans to reduce the number of reindeer—the basis of the existence of the tundra Nenets. Such news aroused even greater concern in aboriginal circles.

These developments changed the minds of indigenous peoples, leading them to reassess the key issues facing aboriginal communities. If about 10 years ago the main problems for nomadic Nenets were: 1) the growth of alcoholism; 2) domestic conflicts between oil and gas company employees and reindeer herders; 3) Unemployment, coupled with a lack of vocational training, today the perception of problems facing indigenous communities has completely changed. The problems that currently worry the Nenets include: 1) the shortage of land for the growing herd of animals due to the oil and gas enterprises taking over the ancestral territories; 2) the feeling that “the people should have their own voice, and we must have effective leaders who speak the position of the people to the face of power” (as one focus group participant noted); and 3) preserving language, culture and ethnic identity.

Thus, the shortage of land and the lack of leaders who could defend the interests of the indigenous population became the prerequisites for the appearance of the protest group the Voice of the Tundra.

What Does the “Voice of Tundra” Say?
What Does Eiko Serotetto Want?

The “Voice of the Tundra” public activity began in October 2016 following the outbreak of anthrax in Yamal. That is when the public started talking about indigenous issues. The movement was based on the politicization of environmental and indigenous problems.

What was characteristic for this group and what did Eiko Serotetto want? At the base of the movement’s activ-

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3 The author’s interview with reindeer herders on the “Payut” factor of the Ural district of YNAO, 27.10.2018; The author’s interview with Timur Akcharin, executive director of the Yamal Reindeer Herders Union, Salekhard, 24.10.2018; The author’s interview with Michael Hotetto, leader of the Shedebs reindeer herders’ community. Salekhard. 23.10.2018.

4 See: Vlasova O.Y. United Russia against the indigenous small peoples of the North, Siberia and the Far East/ Youth Public Chamber. 2013, 7 April/ http://www.mdpalata.ru/opinions/_Edinaya_Rossiya_Against_korennykh_malochislennykh_Nations_Severe_sibiri_i_dalnego_vostoka); Author Interview with Galina Haryuchi, the head of the Arctic Research Center on October 30, 2018, in Salekhard.

ity was the politicization of the ecological and indigenous problems. In October 2016, Eiko Serotetto posted in the global platform Change.org a petition addressed to Russian President Vladimir Putin entitled “Save the House of Nenets.” It argued for preserving the environment of the Nenets, not to reduce the number of reindeer, and warned against violating the rights of the indigenous peoples. It said that reducing the number of reindeer was beneficial to the gas industry (“nomads and their reindeer are the last obstacle for major oil and gas companies”). Going forward, the Voice of the Tundra public activists highlighted the devastating impact on indigenous communities resulting from the oil and gas corporations working in the Arctic. Among the most opposition-oriented of Serotetto’s slogans was “Don’t buy Russian gas and oil. They are mined through the destruction of entire nations.”

Over time, as it transformed, the Voice of the Tundra project promoted not only the goals of indigenous development, but also broader social objectives. The range of problems discussed stretched from environmental issues to the plight of the indigenous peoples of the North, from corruption to the decline of medicine, from forest fires in Siberia and Yakutia in the summer of 2019 to Moscow street protests that same summer.

In early 2018, Serotetto entered into a political alliance with the Communist Party (KPRF). For the KPRF, experiencing a shortage of charismatic leaders among its ranks, Serotetto was a real find. In this alliance, he first became a lead campaigner for Pavel Grudinin, Putin’s main opponent in the 2018 presidential elections. Then Serotetto announced that he would run as a candidate for the regional parliament (Legislative Assembly of the YNAO) from the Communist Party in 2018. The “red” indigenous candidate explained to voters why he wanted to become an MP: “I am concerned about the poverty and insecurity of the Yamal indigenous people, the decline in reindeer numbers and fish resources. I’m concerned about the conservation of the tundra. This is our home, we must preserve it for future generations.”

However, not all indigenous supported Serotetto and numerous electoral falsifications led to his loss in the parliamentary elections. He conceded to his tribesman, Nenets Stepan Vanuyto, who represented the pro-Kremli ruling party United Russia and benefitted from its powerful administrative resources.

However, no less interesting here is another story. Yamal political technologist Kirill Istomin believes that the alliance of indigenous peoples and Communists is unnatural. He argues that attempts by the Soviet government to pressure the indigenous ended with the “Yamal uprising” of 1943 resulting in a bloody fight. On this basis, Istomin predicted that simple reindeer herders are unlikely to support the representative of the Communist Party, because the indigenous people have a good memory and they have not forgotten the events of those years. In my view, the idea that the indigenous people oppose the Soviet government and the Communists is absolutely superficial and untrue.

As for the Russian Arctic, the transition to market relations in the 1990s not only was difficult socially, but also left a heavy legacy with the indigenous people. Serotetto himself, in an interview with the YamalPRO news service, stressed that “those who remember how the indigenous peoples of Yamal lived under Soviet rule in the USSR, when reindeer herders had state farms and benefitted from planned farming, note that it was much better then compared to today.”

As for the problems of indigenous development on a global scale, modern discourse, mainly on the left, has consolidated the political presence of indigenous people in the public sphere. Leftist programs are more compatible with indigenous requirements because they speak not only of “cultural rights” but of access to resources.

**Conclusions**

We can draw two conclusions from this study. First, the Voice of the Tundra movement cannot be seen as a one-off protest episode. Instead, it represents the more large-scale problem of indigenous development in Russia: the transformation of indigenous society in the face of the uncertain prospects of nomadic reindeer herders.

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6 https://vk.com/golos_tundry
8 Eiko Serotetto explained to voters why he was going to the deputies/PRO. 2018. August 2 http://www.yamalpro.ru/2018/08/02/eyko-serotetto-obyashal-izbiratelyam-Zachem-As-v-deputaty/
in Yamal against the background of the atmosphere of accelerated industrial development of the region and the crisis within the indigenous leadership.

Second, by “closing” the indigenous theme, the Russian authorities tried to implement a semantic simplification of the Arctic—reducing it to a simple resource: a source of minerals, work, tourism, entertainment-type hunting and fishing. After the forced reorganization of RAIPON and the removal of its most prominent leaders, the Russian authorities assumed that they had “closed” the indigenous theme. And when in Moscow many thought that everything was under control, a protest appeared from the “bottom”—from the indigenous communities, who nominated from their midst new leaders and created the group “Voice of the Tundra.” This is a new force, a fundamentally different political phenomenon for modern Russia. Young leaders living in the tundra took advantage of universal (network) communications, forming a qualitatively different level of self-organization. New leaders and a new political force have rediscovered the indigenous problem and placed it in the public spotlight.

About the Author
Dr. Arbahan Magomedov is a visiting professor at the Russian State Humanities University (RGSU).

Figure 1: Yamal-Nenets Autonomous Okrug

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By Vera Kuklina, The George Washington University and the V.B. Sochava Institute of Geography, Siberian Branch of the Russian Academy of Sciences

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Abstract:
Many remote regions currently experiencing economic development are going through reindustrialization. However, the impact of previous industrial projects on current ones is not well documented. Using the example of the Evenki community in the Kazachinsko-Lenskii raion of Irkutsk Oblast, this article discusses the cumulative impact of the Baikal-Amur Mainline, Power of Siberia gas pipeline, and multiple forestry companies. We document encounters of Evenki with industrial projects in their settlements and along several pathways: traditional subsistence trails and tracks, the railroad infrastructure, geological clear-cuts, and forest roads. The analysis and observations are based on materials gathered during summer 2019 field work, which included interviews with local leaders, hunters and fishers, travelling by different transportation modes, and participating in local subsistence activities.

Indigenous Encounters with Remote Infrastructure
Few areas untouched by human exploration and development persist in the world today. However, to the extent that they exist, these places remain remote, less accessible and, as such, less affected by fragmented infrastructural development. In addition, in remote Arctic and Subarctic territories many transportation pathways have a seasonal character, alternating between river water in the summer and winter and ice roads in the winter. Settlements in these areas often lack alternative kinds of transportation (Zamyatina 2019) or alternative economies (Eilmsteiner-Saxinger et al, 2016). While the negative impact of industrial development in remote regions is well documented, the impact of reindustrialization is less frequently discussed. Meanwhile, many remote sites of current economic development are regions of reindustrialization.

This article focuses on the Evenki, indigenous people in the Kazachinsko-Lenskii raion of Irkutsk Oblast, who live in the extreme North. Their traditional lands are now the site of the planned Power of Siberia gas pipeline construction. The Kovytinskoe gas condensate deposit is expected to become the main supplier of gas that will be transported to China in the future. An agreement between Gazprom and the China National Petroleum Corporation (CNPC) on construction of the Power of Siberia gas pipeline was signed at 2014 presidential summit and ranks as the biggest gas transportation network in the Russian East (Gazprom, 2019). The deposit was discovered by geologists in 1987 (Gazprom Kovytinskoe, 2019), following the construction of the main part of another large infrastructural project, the Baikal-Amur Mainline railway. In addition, extensive logging and a growing number of forest fires have significantly affected local livelihoods.

The data for the analysis consists of field studies (interviews and participant observations) in the village of Vershina Khandy, its summer camp, and the Zhigalovo–Okunaiskii and Magistralny–Vershina Khandy roads, conducted in summer 2019, as well as public environmental impact assessment materials for the Kovytinskoe gas deposit (FREKOM, 2013), and municipal reports. Evenki encounter these industrial projects in their settlements and along several pathways: traditional subsistence trails and tracks, the railroad infrastructure, geological clear-cuts, and forest roads. Below I briefly describe these places and pathways.

Local Communities
Evenki, indigenous Tungus-speaking people, settled key parts of Irkutsk Oblast thousands of years ago. In the 1930s the Evenki community consisted of 9–12 camps, with from 4 to 30 members in each. In 2002 there were about 71 Evenki in the raion, with 48 people in the Vershina Khandy village located on the territory of traditional land use (FREKOM, 2002). In 2017 a local Evenki leader estimated that the current population of Evenki in the area was around 70 people, of which only six lived in the village permanently (Viatkina 2017). Official population estimates for Vershina Khandy do not exist in Russia’s municipal and statistical reports. While shrinking population is a common problem for many rural communities around the world, the Evenki community faces an even more difficult situation due to its traditional dependence on the local environment, whose wildlife population, Siberian pine nut trees, and berries and herbs provided local food supplies and reliable sources of income.

Fifty seven kilometers from the current location of Vershina Khandy is Kazachinskoe, a village founded by
Cossacks in 1776 on the Kirenga river with a population of 2609 in 2018 (Irkstat, 2019). Numerous interethnic marriages between residents of these two villages led some Evenks to move to Kazachinskoje. These mixed families now frequently make use of the Evenki traditional land.

The population of Kazachinsko-Lenskii raion, where these two settlements are located, increased from 4400 in 1970 to 19,000 in 1979 and peaked at 29,400 in 1989 due to the Baikal-Amur Mainline construction. Magistralny (population 6296 in 2018) is the BAM settlement now closest (thirty nine kilometers) to Vershina Khandy. In 2018 about 16,700 people were registered in the raion, down considerably from the 1989 peak due to migration out-flow. Some of the Evenki and Cossacks who had long lived in the region moved to the BAM settlements and found employment there that went beyond their traditional subsistence activities.

Traditional Roads for Subsistence Activities

Evenki traditionally used reindeer for riding and transporting goods. With their livelihood centered around the reindeer herds, the Evenki maintained a nomadic life and migrated in the taiga forest subsisting by hunting, fishing, and gathering. The first documented land-use disputes between Evenki and Russians occurred in 1823 (Ragulina, 2000). In the 1920–1930s, documents show that the Evenki complained about the small sizes of their hunting plots and the poaching and predatory behavior of neighboring Russian and Buryat hunters. About the same period, they lost their reindeer and began to subsist on hunting, fishing and gathering only.

According to Milana Ragulina (2000), the Evenki had a strong attachment to the land not only through subsistence activities, but by spiritual rituals and sacred places. Traditions of land use were preserved during the Soviet period and in 1990 the Evenki “Khandinskaia neighbor territorial obshchina” was organized. This community group was the first in the region to whom the Irkutsk regional government granted territory for traditional land use. This Evenki territory of 299,067 hectares is located within the boundaries of the Kovyktinski gas condensate deposit exploration tract. In 2009 the new Federal Law “On hunting” delegated responsibility for control and monitoring of wildlife to the land users, in this case—the obshchina. While for many other obshchinas such responsibility became unmanageable, the Khand Evenki have been able to keep their lands mostly thanks to compensation paid by extractive companies.

Baikal-Amur Mainline

Construction of the BAM is known as the “last large Soviet industrial project” and an example of the state moving large masses of people voluntarily. During the Soviet era, millions of young Komsomolsy moved to the region and built dozens of settlements, hundreds of bridges, and 4300 kilometers of railways. As in many other parts of the world, traditional activities have come into conflict with infrastructural development: newcomers poached game, which almost went extinct during BAM construction. Few Evenks and old settlers could work on the project due to a lack of qualifications and the high supply of migrant labor. Nevertheless, proximity to the railroad has allowed Evenki and old settlers to sell their products in the BAM settlements as well as to passengers on the passing trains. For the forest companies, proximity to the railroad is also crucial for transportation of products, which are mostly timber, but also include wood pellets.

Geophysical Line-Clearings

Although the local Evenks blazed their trails and paths long before the arrival of geological parties, these prospectors were the first to deploy technology that changed the local environment. Geophysical line-clearings are easily recognizable from satellite imagery as they form straight lines stretching over long distances. The first line-clearings for oil and gas exploration were done in 1980 (FREKOM, 2002) after the beginning of the BAM construction. Construction of the BAM and the location of the line-clearings define current forestry development while the pipeline construction made necessary modernization of the Zhigalovo-Okunayski regional road. Baikal-Amur Mainline service roads and cuts were used by forest companies first for logging, then, for wood transportation. The roads are useful because they are generally straight regardless of the local terrain.

Forest Roads

As part of the forest industry, forest roads are regulated by Russia’s Rules of Design and Construction (SP 288.1325800.2016). According to regulations, these roads are not designated for public use and general vehicles. However, the absence of fences or gates allows people to drive on them almost without restrictions. When private forest companies rent specific forest areas, they can and often do construct checkpoints. In addition, during crises, such as forest fires, individuals who enter the forest without special permission, can be fined.

The state Forest Service, Russian companies Rusforest and Kirenskles, and the Chinese company Eurasia operate in the Evenki’s areas of traditional land use. According to the obshchina leader, only Rusforest pays them compensation (16,000 rubles plus wood supply annually) and hires local residents to work at the checkpoint in the summer.
Road to Vershina Khandy

Officially, Vershina Khandy does not have any roads connecting it with other settlements or large public roads. The existing road is not maintained by the local municipality. To get to the village, local residents used parts of the forest road currently rented by RusForest. The road is closed to the public in the summer, but the residents of the village are allowed to use it. However, the forest road ends about 15 kilometers from the village. During the BAM construction, the locals asked a bulldozer driver to make a track to the village. When the driver tried to oblige, he discovered that a bog about 8 kilometers from the village blocked further road clearing efforts. While in the winter the bog freezes and it is possible to drive across the ice, in the summer, the residents have to walk across the inhospitable terrain. In 2017, after long negotiations, obshchina residents received compensation from Gazprom in the sum of 5.5 million rubles that allowed them to pay rent for the territories of traditional land use (initially Evenki had access to their traditional lands for free, but since 2009 the must pay rent like other land users), and buy transportation vehicles, such as snow mobiles and swamp buggies.

Gas Exploration and Transportation Infrastructure

The main elements of current gas infrastructure include regional road construction and geophysical line clearings used to determine if there are subsurface gas deposits. Gazprom Dobycha is the company responsible for carrying out these tasks. It plans to build 14 bridges and construct 80 kilometers of gravel road (Dorogu, 2019) as part of the program to develop the Kovyktsinskoie gas condensate deposit in the areas where the Evenki live. The road leads from the BAM railway to the Gazprom shift-worker camp, allowing for the movement of vehicles at regular speed, while on the rest of the road, not covered by construction (about 160 km to Zhigalovo) speed is around 20 kilometers an hour due to bumps and potholes in the summer. During the winter, when these obstacles are covered by snow, traffic increases. The geophysical line clearings in some areas reach a density of every 150 to 300 meters, so the whole territory looks like a plaid design in satellite images. Most of the work is conducted by sub-contractors, so Gazprom Dobycha does not take responsibility for any environmental damage caused by their activities. For the local Evenki, therefore, it is difficult to prove which company or individual caused disruptions.

The Overall Impact of Infrastructural Development on Local Communities and the Environment

According to local observations, there is a strong relationship between infrastructural development and environmental degradation that in turn leads to the loss of traditional cultures of land use. After geophysical line clearings were made in 2018, Evenki hunters found piles of wood on forest tracks and Khanda river sites where the timber had been cut. In addition, forest fragmentation led to changes in the way the winds blow and migration routes for caribou and other animals. While sometimes infrastructural objects serve as barriers for forest fires, more often the vehicles and people travelling through the land cause those fires. Increased accessibility of the river and lakes attracts fishermen from neighboring settlements and raions in the winter. Hunters sometimes see more than 20 cars belonging to fishermen daily and occasionally hear gun shots that they relate to poaching. With recreational fishermen and construction workers, hunters observe an increase in thefts from their hunting huts.

While local Evenki have experienced numerous infrastructural expansions, until now they have been able to regain some level of control over their traditional territories. However, the cumulative impact of multiple forest fires, continuing logging activities, and gas exploration have degraded biological resources to the extent that many Evenki must give up their traditions. As a result, we are witnessing the loss of unique ecological knowledge and a culture that takes seriously human-natural relations.

About the Author:

Dr. Vera Kuklina is a Research Professor at the Geography Department, George Washington University and Senior Research Associate at the V.B. Sochava Institute of Geography of the Siberian Branch of Russian Academy of Sciences. Her research interests include urbanization of indigenous people, traditional land use, socio-ecological systems, and cultural geographies of infrastructure and remoteness.

References:


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Figure 1: Russian Railway Mainlines, the “Power of Siberia” Pipeline Project, and Irkutsk Oblast

Figure 2: The Area around the Kovyktinskoie Gas Deposit
